WORLD BANK GROUP

April 2023

CENTRAL AFRICAN REPUBLIC

JOINT WORLD BANK-IMF DEBT SUSTAINABILITY ANALYSIS

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CENTRAL AFRICAN REPUBLIC: 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

The Central African Republic (CAR) remains at high risk of external debt distress and overall high risk of debt distress. Public debt is projected to be sustainable, though there exist substantial liquidity risks, as shown by relevant debt indicators, stemming from possible shortfalls in donor support and domestic/regional market access. Following the expiration of the staff monitored program (SMP) in end-September 2022, the CAR has faced an increasingly difficult external environment, high uncertainty regarding financing amidst geopolitical tension and increased risks due to the uncertainties created by the introduction of the cryptocurrency law, which represented a major policy setback under the SMP, compounded by rising international food and fuel prices. Compared to the previous DSA,[1] domestic debt has increased in the absence of donor budget support. While solvency indicators for external debt are below thresholds, liquidity indicators for external debt (debt service-to-exports and debt service-to-revenue) exhibit breaches for 5 years starting in 2023, largely on account of obligations to the Fund falling due. Sensitivity of debt indicators to standard stress tests, increased macroeconomic and financing uncertainty, and sizeable contingent liabilities are all considerations supporting the high-risk assessment. This assessment is predicated on the authorities' continued prioritization of and the ability to secure grant financing for essential current spending and developmental projects.[2]

[1] The current DSA follows the revised Debt Sustainability Framework (DSF) for LICs and Guidance Note (2017) in effect as of July 1, 2018. The previous DSA, is available here.

[2] CAR's CI score based on the October 2022 World Economic Outlook (WEO) and the 2021 World Bank Country Policy Institutional Assessment (CPIA) data is 2.25, corresponding to a weak debt-carrying capacity (Text Table 3).

PUBLIC DEBT COVERAGE

1. **The coverage of public sector debt includes external and domestic contractual obligations of the central government, unchanged from the previous DSA.** State and local governments do not borrow, there are no social security funds guaranteed by the public sector, and the government has not guaranteed other debt (Text Table 1). The coverage of public sector debt exhibits some gaps, notably non-guaranteed SOE debt and supplier arrears.

2. **The implementation of the new legal framework governing SOEs would improve their financial oversight, which, along with other steps, should lead to better debt coverage going forward.** Under the World Bank Sustainable Development Financing Policy (SDFP), the government has completed and published in 2021 the audits of the three largest state-owned enterprises operating in the energy, telecommunications, and water sectors (ENERCA, SODECA, SOCATEL). The objective of the audit was to assess their financial viability, increase the transparency in contingent liabilities reporting, and clarify the status of unaudited domestic arrears.[3] The government prepared and approved a cross-debt settlement plan for these SOEs based on these recent audits.[4]

3. **The DSA includes a combined contingent liabilities stress test, which assumes a tailored shock at 15 percent of GDP aimed at capturing the public sector exposure to arrears, SOEs, and financial market shock.** This amount reflects the uncertainty about non-guaranteed SOE debt and arrears, potential additional domestic arrears, and financial market risks (Text Table 1), although CAR has started publishing detailed debt reports since the last DSA and the lastest one records CFAF 48.6 billion as debt of SOEs and CFAF 147.9 billion as arrears, by the second half of 2021. The contingent liabilities shock from SOE debt is set at 5 percent of GDP (instead of 2 percent for its default value) to reflect heightened risks associated with non-guaranteed SOE debt and potential expenditure arrears. The shock from domestic arrears is set at 5 percent of GDP to incorporate past and persisting shortcomings in the country's public expenditure management systems. The financial market risk shock has been calibrated and is kept at the default value of 5 percent of GDP, given the small size and depth of the financial sector in CAR.

[3] As per the SDFP FY23 PPA#1, the authorities plan to prepare and publish an annual report on the financial performance and fiscal risks associated with these three SOEs in order to avoid further fiscal outlays associated with weak financial performance of SOEs and improve debt management and transparency. This first annual report is expected to cover the period January-December 2021, and would provide critical information on corporate governance, internal control, and the sustainability of the companies and disclose consolidated financial, governance operational information to the public. The report is also intended to prevent recurrence of further potential arrears.

[4] The plan which covers a period from 2023 to 2025 is on hold due to significant treasury pressures with the absence of budget support from development partners owing to the lack of transparency on security expenses.

Text Table 1. Central African Republic: Coverage of Public Sector Debt and Design of the Contingent Liability Stress Test

Subsectors of the public sector	Check box
Central government	X
State and local government	X
Other elements in the general government	
o/w: Social security fund	X
o/w: Extra budgetary funds (EBFs)	
Guarantees (to other entities in the public and private sector, including to SOEs)	X
Central bank (borrowed on behalf of the government)	
Non-guaranteed SOE debt	

The country's coverage of public debt	The central, state, and local governments plus social security, central bank, government-guaranteed debt		
	Default	Used for the analysis	Reasons for deviations from the default settings
Other elements of the general government not captured in 1.	0 percent of GDP	5.0	Possible domestic payment arrears not included in debt stock
SoE's debt (guaranteed and not guaranteed by the government) 1/	2 percent of GDP	5.0	Limited information on SOE's financial position
PPP	35 percent of PPP stock	0.0	
Financial market (the default value of 5 percent of GDP is the minimum value)	5 percent of GDP	5.0	
Total (2+3+4+5) (in percent of GDP)		15.0	

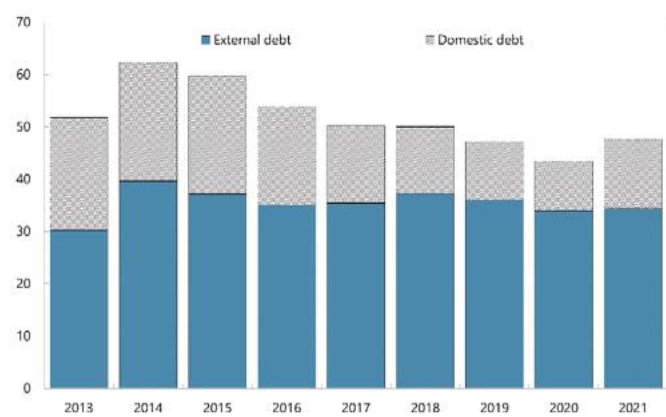
1/ The default shock of 2% of GDP will be triggered for countries whose government-guaranteed debt is not fully captured under the country's public debt definition (1.). If it is already included in the government debt (1.) and risks associated with SoE's debt not guaranteed by the government is assessed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

Source: IMF staff estimates and country authorities

BACKGROUND ON DEBT

4. **CAR's public and publicly guaranteed (PPG) debt increased in 2021, largely driven by the pick-up in domestic debt.** After being on a gradually declining trend until 2020, public sector debt increased to 47.6 percent by the end of 2021, from 43.4 percent in 2020, on account of a conjunction of negative shocks: the security crisis, the COVID-19 pandemic, and the pause in donor-financing owing to fiscal transparency concerns (Text Figure 1). It is estimated to have reached 51.9 percent of GDP by the end of 2022, out of which one-third is domestic debt.

Text Figure 1. Evolution of Public Sector Debt, 2013–21 (Percent of GDP)



Sources: IMF staff estimates and Country Authorities

5. **Most of the increase in public debt has been driven by higher domestic borrowing.** The domestic debt consisting of statutory and exceptional advances from the Bank of Central African States (BEAC) have been consolidated into one loan. In 2021, BEAC restructured the CFAF 80.5 billion debt via an extension of the grace period to 2025 (instead of 2022) and of the maturity to 20 years (from 10 years). To make up for the shortfall in budget support and to cover funding needs pending the use the SDR allocation, commercial bank borrowing on the regional market of the

CEMAC picked up significantly in 2021 (CFAF 27 billion net issuances of government securities). Domestic debt reached 13.2 percent of GDP in 2021. Given additional issuance of domestic securities and use of SDR allocation in 2022, domestic debt is estimated to have reached 17.6 percent of GDP.

6. **By May 2022, CAR had drawn down its entire 2021 SDR allocation in three tranches to support the budget.** In December 2021, as donor support was further delayed, CAR made a first draw-down of the 2021 SDR allocation of CFAF 35 billion (SDR 44.5 million), which was used to cover some recurrent expenditures (civil servant wages) and to repay part of domestic arrears. In 2022, as budget support remained undisbursed and faced with a sharp terms of trade deterioration, the CAR authorities made one more drawing in March for CFAF 20 billion (SDR 25 million) and the final one in May for the remainder of CFAF 30.5 billion (SDR 37.3 million). The SDR use in 2021 and 2022 is recorded as domestic debt and adjusted to be on present value terms.

7. **External debt is estimated to have reached 34.2 percent of GDP at the end of 2022, driven mainly by the depreciation of the CFAF.** The authorities have refrained from contracting or disbursing any new external non-concessional debt with the support by the World Bank's SDFP in line with Fund advice and SMP commitments for the authorities' commitment to zero non-concessional borrowing.[5] In particular, they have not made any drawings on the non-concessional project finance loan with the regional development bank (BDEAC) for CFAF 15 billion, signed in September 2021. In line with previous disbursement schedules, they drew a CFAF 1.22 billion tranche of a 2015 concessional project loan financed by the Saudi Development Fund. In line with these developments, the most significant adverse driver of external debt developments has been the exchange rate effect.

8. **Debt owed to multilateral creditors and pre-HIPC arrears continue to account for the bulk of external debt (See Text Table 2).** Multilateral creditors, mainly the IMF and the World Bank, hold close to 60 percent of external debt. CAR has a large stock of officially recognized pre-HIPC arrears amounting to 9 percent of GDP, that pre-date the Completion Point of the HIPC initiative with non-Paris Club creditors (Argentina, Equatorial Guinea, Iraq, Libya, and Taiwan, China). Bilateral debt amounts to around 6 percent of GDP, with India, China, Saudi Arabia, Kuwait, and Congo being the main creditors. Debt to private creditors is negligible. This debt is included in the baseline.

9. **CAR benefited from several rounds of debt relief from both bilateral creditors and the IMF.** In 2020, the CAR benefited from a debt cancellation operation granted by China for about 0.8 percent of GDP and a 90-percent principal reduction and rescheduling of the debt owed to Energoprojekt (Serbia) for about 1.7 percent of GDP. During the pandemic, under the G20's COVID-19 Debt Service Suspension Initiative (DSSI) (May 2020-December 2021), an amount of US$7

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[5] The PPA#2 of the SDFP for FY23 is as follows: To improve debt sustainability, the Government will not enter into any contractual obligations for new external public and publicly guaranteed (PPG) non-concessional debt in FY23, except if the non-concessional debt 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 (DLP).

million was rescheduled.[6] The CAR also received assistance in respect of debt service covering all payments falling due to the IMF from April 14, 2020, to April 13, 2022, under the Catastrophe Containment and Relief Trust (CCRT), for a total amount of US$18.4 million.

10. The authorities have remained current on their external debt obligations, save for small temporary technical arrears. Some small external arrears amounting to US$0.15 million were accumulated with the International Fund for Agricultura Development (IFAD) starting in December 2020 but were cleared in March 2021. This was caused by coordination challenges between the Debt Directorate and the Treasury but also by delays in fully setting up the new BEAC's software for international wires—which are now addressed thanks to the technical assistance provided by BEAC regarding the use of its new software.

Text Table 2. Central African Republic: Composition of Public Sector Debt, 2021-2023[1]
(Percent of GDP)

	Debt Stock (end of period) 2021			Debt Service					
				2021	2022	2023	2021	2022	2023
	(mil US$)	*(Percent total debt)*	*(Percent GDP)*	*(mil US$)*			*(Percent GDP)*		
Total	1175.1	100.0	47.6						
External	848.4	72.2	34.4	14.7	17.3	13.0	0.6	0.7	0.5
Multilateral creditors[2,3]	503.6	42.9	20.4	6.8	7.4	8.8	0.3	0.3	0.3
IMF	297.7	25.3	12.1	1.7	2.6	3.4	0.1	0.1	0.1
World Bank	139.4	11.9	5.6	1.7	2.6	3.4	0.1	0.1	0.1
ADB/AfDB/IADB	16.5	1.4	0.7	0.1	0.1	0.1	0.0	0.0	0.0
Other Multilaterals	50.0	4.3	2.0	3.3	2.2	1.8	0.0	0.0	0.0
o/w: FIDA	19.0	16.0	15.4	1.1	1.1	1.1	0.1	0.0	0.0
o/w: BDEAC	12.3	10.8	11.0	1.3	0.4	0.0	0.0	0.0	0.0
o/w: BADEA	10.6	8.7	8.2	0.8	0.7	0.8	0.3	0.4	0.2
Bilateral Creditors[2]	341.7	29.1	13.8	7.9	9.9	4.2	0.3	0.4	0.2
Paris Club	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
o/w: list largest two creditors									
list of additional large creditors									
Non-Paris Club	341.7	29.1	13.8	7.9	9.9	4.2	0.3	0.4	0.2
o/w: pre-HIPC arrears	212.2	18.1	8.6	0.0	0.0	0.0	0.0	0.0	0.0
o/w: India	45.0	3.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0
o/w: Saudi Arabia	32.0	2.7	1.3	0.0	0.9	1.1	0.0	0.0	0.0
o/w: Kuwait	20.8	1.8	0.8	0.0	0.1	0.1	0.0	0.0	0.0
o/w: China	17.9	1.5	0.7	0.0	2.0	2.0	0.0	0.1	0.1
o/w: Congo	9.4	0.8	0.4	6.9	6.0	0.0	0.3	0.2	0.0
Bonds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Commercial creditors	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
o/w: list largest two creditors	0.0	0.0	0.0						
list of additional large creditors									
Other international creditors	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
o/w: list largest two creditors									
list of additional large creditors									
Domestic	326.7	27.8	13.2	21.3	25.7	47.6	0.9	1.0	1.7
Held by residents, total	326.7	27.8	13.2	21.3	25.7	47.6	0.9	1.0	1.7
Held by non-residents, total	.....	.....	.....	.....	.....	.....	.....	.....	.....
T-Bills	12.9	1.1	0.5	17.1	12.0	8.2	0.7	0.5	0.3
Bonds	84.6	7.2	3.4	0.0	3.3	29.2	0.0	0.1	1.1
Loans	229.2	19.5	9.3	4.2	10.3	10.2	0.2	0.4	0.4
Memo items:									
Nominal GDP	2468						2468	2472	2723

1/ As reported by Country authorities according to their classification of creditors, including by official and commercial. Debt coverage is the same as the DSA, except for missing entities

2/ Some public debt is not shown in the table due to confidentiality clauses/capacity constraints.

3/ Multilateral creditors are simply institutions with more than one official shareholder and may not necessarily align with creditor classification under other IMF policies (e.g. Lending Into Arrears)

Source: IMF Staff calculations and country authorities

UNDERLYING MACROECONOMIC ASSUMPTIONS

11. Compared to the previous DSA, near-term risks have increased substantially due to the confluence of adverse shocks (security, health, financing, food, and terms of trade) and the passage of the crypto law. Donors have been withholding budget support since 2021 due to

[6] India, China, and Saudi Arabia participated in the G20 Debt Service Suspension Initiative to CAR, along with Kuwait.

transparency concerns related to security spending.[7] The continued standstill in budgetary support weighed on the resumption of IMF financing under the ECF arrangement and future financing owing to the lack of financing assurances and the risks of accumulating external arrears. The April 2022 crypto law— granting legal tender status to crypto assets and guaranteed convertibility— has elicited broad criticism from regional financial authorities (the central bank BEAC and the financial sector regulator COBAC), as the law ran against the rules governing the CEMAC monetary union and posed serious macroeconomic risks for both CAR and the region. The unilateral adoption of bitcoin and potentially other crypto assets as legal tender represented a major policy reversal relative to commitments under the SMP and delayed and prevented its successful completion, in addition to further damage CAR's prospects for budget support. However, as one of the prior actions for the new ECF arrangement, the law has been amended in March 2023 to repeal legal tender and convertibility status of bitcoin.

12. Against this background, CAR has increasingly faced difficulties covering its financing needs since 2021. While the SDR allocation and commercial bank borrowing have so far helped compensate for the lacking budget support, the financing outlook in the coming months has darkened as the authorities run out of fiscal buffers after exhausting the 2021 SDR allocation and with limited domestic bonds market access. Without anticipated financial support, acute financing needs are expected to emerge, likely prompting a very steep spending adjustment across the board. Such a disorderly adjustment will inflict significant hardship on the population.

13. Compared to the previous DSA, both the near-, medium-, and long-term macroeconomic projections have been revised to account for lower growth.

- **Growth**
  - Real GDP growth is estimated to have stagnated at 1.0 percent in 2021 following the combination of the COVID-19 pandemic and renewed insecurity amid post-election disputes. The economy is estimated to have slightly increased by 0.5 percent in 2022 driven by mining and forestry, but it was adversely affected by fuel shortages. In 2023, real GDP growth is projected at 2.2 percent on account of better fuel supplies and the base effect of slow growth in 2022. The downside risks to the outlook are significant. For example, a deterioration in security could disrupt economic activity and cause significant revenue and donors' financing shortfalls.
  - The medium-term growth projection (2024-27) has been revised downward to 3.6 percent against 5.0 percent in the previous DSA. This downward revision reflects the lower growth momentum owing to the non-disbursement of budget support, and the related stronger fiscal consolidation.

[7] Donors have stipulated four conditions for budget support to resume, including: detailed information about security expenditures, a commitment that sanctioned entities will not be financed from the budget or other public sources, improved mechanisms for budget transparency, and conducive security and governance conditions.

  - Long-term growth (2028-42) is projected at 3.2 percent, supported by the assumed normalization of relations with the international community, progressive restoration of security with the peace agreement, gradual redeployment of public services to the provinces, domestic arrears clearance, increase in public and private investments, and improvement in human capital and productivity thanks to steadfast implementation of reforms and ongoing investment projects.[8] The long-run growth rate has been downgraded from 4.3 percent in the previous DSA due to a realignment of the growth trajectory with the post-2013 crisis estimate of potential growth – around 2.9 percent annually. The long-term growth is assessed to be realistic given the low average per capita growth of 1.2 percent, the deterioration of the global outlook and recalibration of the long-term growth potential of CAR to more realistically anchor it in the historical performance over the past thirty years (a period over which CAR experienced negative per capita growth). The ongoing structural security crisis, with its detrimental long-term impact on productivity and growth, has been documented in the last Country Economic Memorandum published in 2022.[9]

- **Inflation**
  - Average inflation reached 5.8 percent in 2022, in line with the recent uptick in fuel and commodity prices, due to the impact of Russia's invasion of Ukraine and CAR's high dependency on commodity imports. Inflation is projected to remain relatively high in 2023 and decline gradually afterward and fall below the regional ceiling of 3 percent in 2024 as commodity import prices gradually decline.

- **Public Finances**
  - For 2021 and 2022, overlapping crises and the continued standstill in budgetary support resulted in a difficult budget situation. Most of the financing needs for 2022 are estimated to have been covered by the use of the SDR allocation, with the residual being met by the borrowing from domestic and regional markets. In 2023, the financing gap would be covered by IFIs, namely by the World Bank and the African Development Bank and the remaining financing needs are expected to be covered by borrowing from commercial banks.[10]

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[8] For instance, the World Bank approved in June 2022, a $138 million grant to improve access to electricity, strengthen the sector and promote the provision of off-grid solar systems for schools, hospitals, administrative centers, and agricultural purposes and $70 million in financing to strengthen and improve the quality of health care to more than 40 percent of the CAR population. Several projects have also been approved over the past years to boost agricultural productivity, support agribusiness, private sector development, digital governance, and the quality of education. The World Bank will use its ongoing portfolio to finance certain non-discretionary government expenditures, including wages and salaries, in critical service delivery areas.

[9] World Bank (2022) Central African Republic: Country Economic Memorandum From Fragility to Accelerated and Inclusive Growth (https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099950105022238641/p17499601c00dd03208b990cb1b523b9018).

[10] As a structural benchmark under the new ECF arrangement, authorities will set up a framework to coordinate domestic issuance and other debt management issues.

- In the medium term (2024-2027), budget support grants are expected to gradually increase to 3.0 percent in 2027, on the assumption that the government will reach agreement with the main donors to unblock their financing.[11] The fiscal primary deficit is expected to decrease relative to the previous DSA (to 0.5 percent of GDP from 0.9 percent). Between one-third and half of the financing needs is assumed to be covered by foreign concessional borrowing and the remaining two-thirds and half by domestic borrowing.

- In the long term (2028-42), domestic revenues (government revenues excluding grants) are assumed to follow a gradual upward trend, reaching 13.8 percent of GDP at the end of the projection period. The improvement of projections on domestic revenue collection is attributed to the implementation of fiscal structural reforms and technical assistance in the area of data collection and standards. The current revenue reforms to be implemented include to i) make the functions of the DGID's IT systems operational, including online registration, remote filing and remote payments; ii) review the hydrocarbon pricing formula incorporating all taxes required by law; and iii) incorporate all fees and expenses of services (minor revenue) collected by the various ministries in the Treasury Single Account (TSA). Budget support grants are assumed to decline to 0.6 of GDP, to account for the fact that IDA regular credit terms should be applied in the

Text Table 3. Central African Republic: Macroeconomic Assumption

	DSA-ECF arrangement (1st and 2nd Reviews)		The current DSA-2022 AIV and ECF request	
Percent of GDP, unless otherwise indicated	2021-26 average	2027-41 average	2023-28 average	2029-42 average
GDP growth (percent)	3.9	4.3	3.3	3.2
GDP deflator (percent)	2.4	2.5	3.4	2.5
Non-interest current account balance	-6.0	-3.4	-5.3	-6.4
Exports of goods and services	14.7	15.5	15.7	16.6
Primary balance	-0.9	-1.0	-0.5	-1.1
Revenues and grants	18.5	16.6	16.2	14.8

Source: IMF staff projections.

[11] The agreement would assume an adequate macro-framework, the presence of an IMF program, conducive security and governance conditions are in place.

projection horizon for which World Bank grant financing has not already been committed. The primary fiscal deficit is expected to decline gradually to 0.7 percent of GDP over the long run, reflecting fiscal consolidation and the implementation of other fiscal reforms. One half of the financing needs is assumed to be covered through external concessional borrowing—with a gradually decreasing degree of concessionality—and another half through domestic borrowing.

- External

  - The current account balance is expected to have deteriorated in 2021 to a 11.1 percent of GDP deficit, due mainly to the non-disbursement of donors' budget support, the security crisis, and higher import prices. In 2022, the current account is expected to have worsen further to -13.1 percent of GDP, driven mainly by a 9.4 percent drop in terms of trade (due to both fuel and food price shocks) causing imports to decline by less than the export growth weakening. Over the medium term, the current account is expected to converge to a 4.5 percent of GDP deficit, owing to the expected increase in exports as a result of reforms geared toward improving economic diversification and adding value to existing exports.

  - The SDR allocation helped generate a small balance of payment surplus in 2021. The nearly 6 percent of GDP in SDR allocation compensated for the decline in official public transfers. However, the lack of donor financing in 2022, coupled with the exhaustion of the SDR allocation and the large trade deficit, led to a balance of payments deficit of about 8.1 percent of GDP in 2022.

  - In the medium term, official current transfers are expected to resume, while FDI inflows are projected to increase moderately to about 1.5 percent of GDP. Overall, the balance of payments is projected to reach a moderate surplus of around 2.6 percent of GDP in the medium-term.

REALISM OF THE BASELINE ASSUMPTIONS

14. The drivers of debt dynamics tool show a broadly unchanged trajectory for external PPG debt and a deterioration of public debt compared with the previous DSA. The projected evolution of external debt is somewhat improved compared with the previous DSA in the medium term, but slightly more deteriorated in the outer years. The decompositions of past and projected debt creating flows for external debt are similar, while the unexpected changes in external debt over the past 5 years are close to the median relative to the distribution across LICs. While public debt is on a higher path relative to the previous DSA, this can be explained mainly by a higher contribution of unexpected primary deficits to debt accumulation compared to the past. In terms of the contribution of past forecast errors, they are above the median compared with other LICs.

15. Realism tools flag risks around the baseline scenario stemming from the growth projection, the projected fiscal consolidation, as well as the long-term private investment

outlook (Figure 4). The envisaged fiscal path in terms of the projected 3-year primary balance adjustment is in the top quartile relative to the comparison group, thus appearing relatively ambitious when compared with the experience in other LIC countries. The pick-up in growth in 2022 and 2023 appears strong given the fiscal consolidation for standard values of the fiscal multipliers. This is explained by the fact that growth is mostly driven by the private sector rebound after the fuel shock shortage is resolved, in particular driven by the primary sector (agriculture, mineral extraction). The growth/investment tool shows that in both the current and the past DSA, over time, there is a switch from public to private investment as a driver of growth, consistent with the pattern observed in countries at the same stage of development. This is consistent with the chart on the contributions to growth, which also shows that in comparison with its historical contribution, public investment is expected to play a declining role in explaining future growth, with other sources of growth more than offsetting this decline.

COUNTRY CLASSIFICATION AND STRESS TESTS

16. CAR' s debt carrying capacity is assessed as weak, unchanged from the last DSA in December 2020. The country's composite indicator (CI) is 2.25 based on the October 2022 World Economic data and 2021 CPI scores (text table 4). Under weak debt carrying capacity, the thresholds applicable to the public and publicly guaranteed external debt are 30 percent for the PV of debt-to-GDP ratio, 140 percent for the PV of debt-to-exports ratio, 10 percent for the debt service-to-exports ratio, and 14 percent for the debt service-to-revenue ratio. The benchmark for the PV of total public debt is 35 percent of GDP.

Text Table 4. Central African Republic: Calculation of Composite Indicator and Thresholds

EXTERNAL debt burden thresholds	Weak	Medium	Strong
PV of debt in % of			
Exports	140	180	240
GDP	30	40	55
Debt service in % of			
Exports	10	15	21
Revenue	14	18	23

TOTAL public debt benchmark	Weak	Medium	Strong
PV of total public debt in percent of GDP	35	55	70

Components	Coefficients (A)	10-year average values (B)	CI Score components (A*B) = (C)	Contribution of components
CPIA	0.385	2.571	0.99	44%
Real growth rate (in percent)	2.719	2.909	0.08	4%
Import coverage of reserves (in percent)	4.052	25.972	1.05	47%
Import coverage of reserves^2 (in percent)	-3.990	6.745	-0.27	-12%
Remittances (in percent)	2.022	0.075	0.00	0%
World economic growth (in percent)	13.520	2.898	0.39	17%
CI Score			2.25	100%
CI rating			Weak	

Sources: IMF staff estimates, Word Bank *Country Policy and Institutional Assessment*, and country authorities

DEBT SUSTAINABILITY

EXTERNAL DEBT SUSTAINABILITY ANALYSIS

17. Relative to the previous DSAs, external debt solvency indicators have improved (Figure 1). The present value of the external debt-to-GDP ratio is declining on a lower path than in the previous DSA and remains well below the threshold under the baseline scenario. However, it comes close to breaching the threshold for the most extreme standardized stress test (a combination of a shock to growth, the primary balance, exports, other non-debt creating flows, and exchange rate depreciation). The present value of the debt-to-exports ratios declines from close to the 140 percent threshold to well below it in the medium term. These favorable developments are due to a combination of factors: lack of the disbursements of IMF financing due to the ECF Arrangement going off-track, the bilateral and multilateral debt relief during the pandemic, as well as to the fact that some previously unidentified concessional financing has been replaced with the SDR allocation (counted as domestic debt), which have more than outweighed the impact of the CFAF depreciation. Setting key variables to their historical average would result in a clear upward trend of both debt ratios, mainly because of the large shocks and conflicts that occurred in the past (such as the 2013 crisis).

18. **While liquidity indicators of the external PPG debt breach their thresholds for 4-5 years from 2023 under the baseline scenario, there are mitigating factors**. The external debt service-to-exports and the debt-to-revenue ratios breach their respective threshold for 4 and 5 years, respectively starting in 2024 and 2023, respectively, driven by a significant uptick in debt service, primarily related to an increase in repayments to the Fund in that period (Figure 1). Breaches in both indicators after 2028 have also increased compared to the previous DSA, owing mainly to the projected disbursements under the proposed new ECF arrangement. CAR is part of CEMAC and has access to its pool of reserves (provided it has budgetary resources to purchase them), and also has access to CEMAC domestic debt market. Subject to successful ECF-supported program implementation, large repayments to the Fund, which cause high liquidity ratios, are feasible based on program financing assumptions. As expected, more significant and persistent breaches of the external debt service-to-exports ratio and the external debt service-to-revenue ratio would happen under the historical scenario and the most extreme standardized stress test (standardized shocks to exports and to growth, respectively).

PUBLIC DEBT SUSTAINABILITY ANALYSIS

19. **Driven by the surge in domestic debt, the total public debt indicators have increased compared to the previous DSA but remain below the relevant threshold (Figure 2).** The present value of the debt-to-GDP ratio is on a higher path than in the previous DSA, yet gradually declining until 2027 and broadly stabilizing thereafter. However, this forecast is predicated on conservative financing assumptions that financing gaps are to be covered by domestic debt, while renewed donor support would result in substantially more favorable dynamics. The PV of the debt-to-revenue ratio is declining until 2027, when it is set to slightly rise. The debt-service-to-revenue and grants ratio will increase to 40 percent by 2025 and remain elevated, reflecting higher external debt service payments. A standardized shock to growth would trigger a breach of the threshold for the PV of the debt-to-GDP ratio and lead to a significant increase of the PV of the debt-to-revenue ratio.[12] The worsening of the macroeconomic outlook (e.g., if donor budget support does not resume in the medium term) would exacerbate domestic arrear accumulation and aggravate risks from vulnerable SOEs. Their contingent liabilities will severely affect the budget and, ultimately debt risks.

RISK RATING AND VULNERABILITIES

20. **CAR remains at high risk of external debt distress and overall high risk of debt distress, but debt is assessed to be sustainable.** The rating is driven by the persistent breaches in the medium term of the thresholds for both the external debt service-to-export and external debt service-to-revenue ratios under the baseline scenario. This points to potential liquidity problems,

[12] The shock assumes real GDP growth of one standard deviation below its historical average in the second and third year of the projection period.

which have been accentuated since the last DSA by the continued standstill in budget support, the confluence of adverse shocks (security, health, terms of trade) and their impact on the macroframework, as well as the more recent fiscal revenue decline linked to fuel shortages. Compared to the previous DSA, the cumulative impact of these factors has been a more elevated path for total public debt, yet the PV of total public debt remains below the relevant threshold.

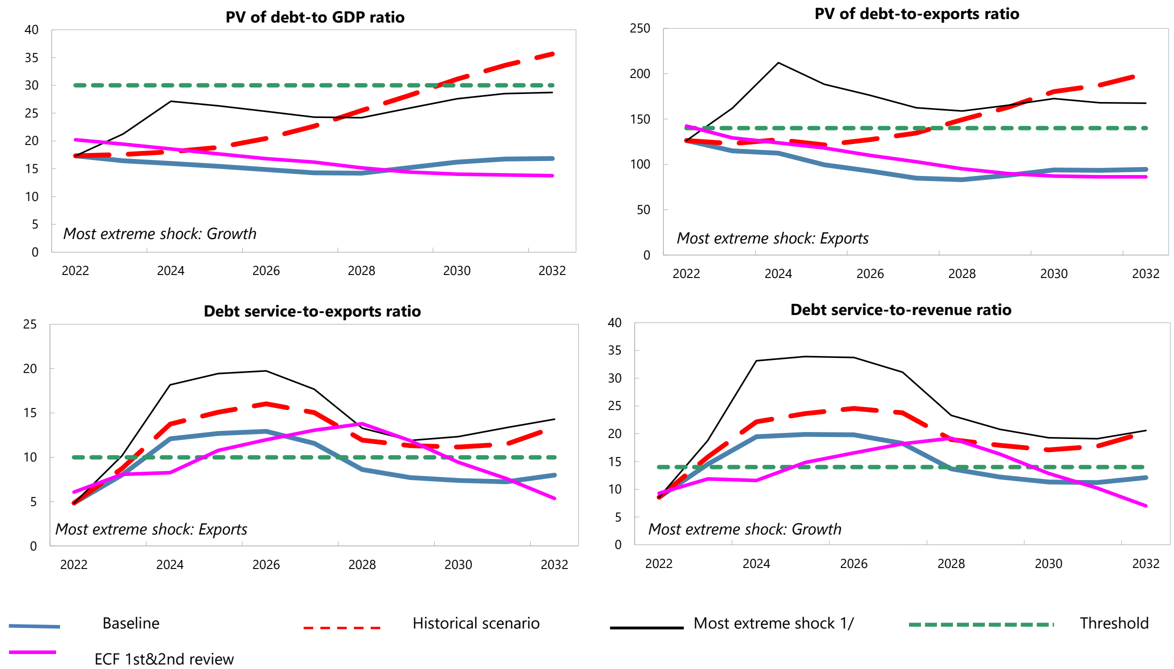
21. A few other considerations support the high-risk assessment. Macroeconomic projections are particularly uncertain in the near term, as the country is buffeted by overlapping crises and the full resumption of donor support continues to be delayed. Significant fiscal adjustment is required in 2023 amid limited external financing options. The recently passed crypto law—which provides crypto assets with a legal status alongside the official CFA franc— has elicited broad criticism from regional financial authorities and further damaged the country's reputation and prospects for immediate budget support. While the country has been increasingly tapping domestic CEMAC markets in 2021-22, where liquidity remains ample, large financing needs in 2023 can exacerbate rollover risks. Further delays in the resumption of budget support and return to a UCT-arrangement would raise the risk of disorderly fiscal adjustments, weighing on growth, potentially triggering a total loss of access to the regional market, with debt sustainability repercussions.

22. Public debt is projected to be sustainable, though there exist substantial liquidity risks, as shown by relevant debt indicators, in the absence of sufficient donor support and domestic/regional market access. The DSA underscores the urgency of fiscal measures to strengthen revenue and renewed efforts to restore relations with donors to ensure sustainability. In the short term, strong primary deficit adjustment and measures to stem revenue loss from the fuel price mechanism, support from the World Bank and the African Development Bank, as well as a disbursement under the ECF, are expected to close the 2023 financing gap. The authorities have also prepared a contingency plan for 0.75 percent of GDP (CFAF12.5 billion) of adjustment on domestic primary deficit to be implemented in the revised budget in July, should financing conditions worsen. The country still enjoys access to the liquid domestic CEMAC market, so additional domestic borrowing could be used to cover any additional gaps and the ample pool of regional foreign exchange reserves mitigates repayment risks. However, ensuring medium-term debt sustainability requires that the country reaches agreement with donors to unlock budget support and to allow the return to a UCT (Upper Credit Tranche) program. Disbursing the highly non-concessional BDEAC loan signed in 2021 would worsen external debt sustainability indicators and staff continue to advise against it.

AUTHORITIES' VIEW

23. The authorities broadly agreed with this assessment. They concur on the need to re-engage with donors to unlock budget support and return to a UCT program, while in the meantime pursuing fiscal consolidation and revenue enhancing reforms. They are also committed to strengthening their debt management capacities and they also share staff views that CAR should rely on grant financing, and seek maximum concessionality in its external financing, to ensure debt sustainability.

Figure 1. Indicators of Public and Publicly Guaranteed External Debt under Alternatives Scenarios, 2022-2032



Customization of Default Settings		
	Size	Interactions
Tailored Stress		
Combined CL	Yes	
Natural disaster	n.a.	n.a.
Commodity price	n.a.	n.a.
Market financing	n.a.	n.a.

Note: "Yes" indicates any change to the size or interactions of the default settings for the stress tests. "n.a." indicates that the stress test does not apply.

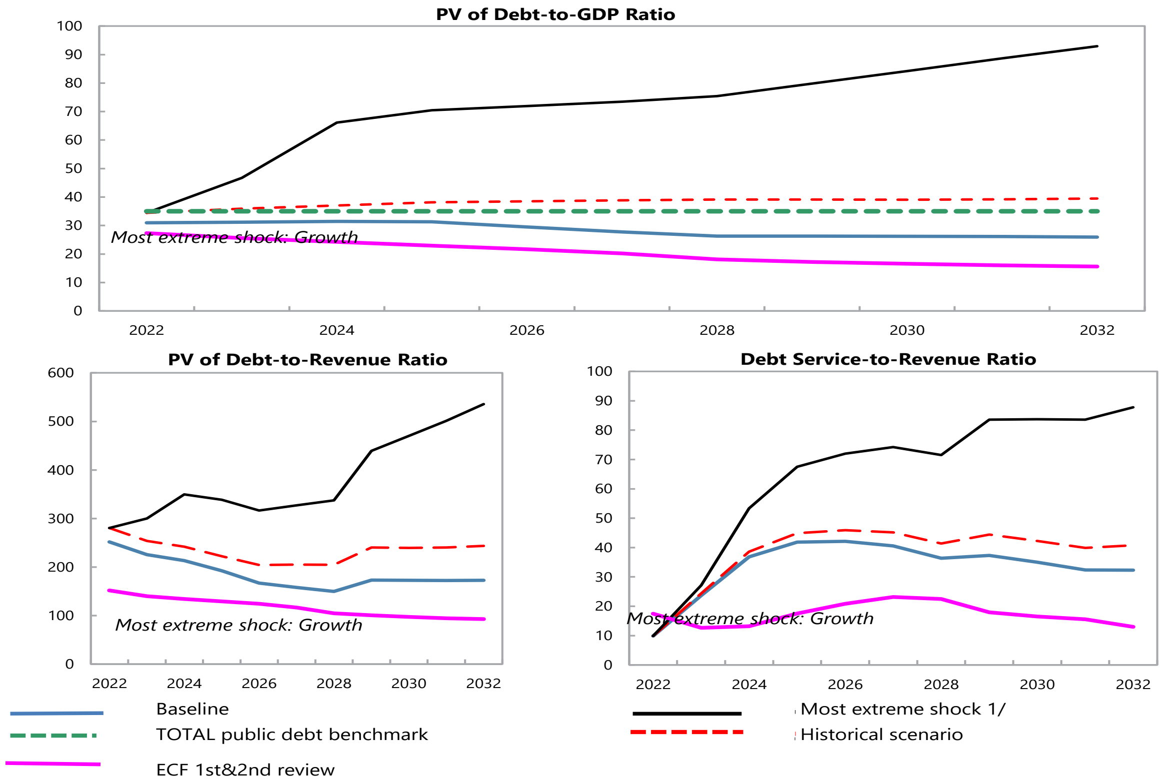
Borrowing assumptions on additional financing needs resulting from the stress tests*		
	Default	User defined
Shares of marginal debt		
External PPG MLT debt	100%	
Terms of marginal debt		
Avg. nominal interest rate on new borrowing in USD	1.0%	1.0%
USD Discount rate	5.0%	5.0%
Avg. maturity (incl. grace period)	25	25
Avg. grace period	6	6

* Note: All the additional financing needs generated by the shocks under the stress tests are assumed to be covered by PPG external MLT debt in the external DSA. Default terms of marginal debt are based on baseline 10-year projections.

Sources: Country authorities; and staff estimates and projections.

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

Figure 2. Indicators of Public Debt under Alternatives Scenarios, 2022-2032



Borrowing assumptions on additional financing needs resulting from the stress tests*	Default	User defined
Shares of marginal debt		
External PPG medium and long-term	40%	60%
Domestic medium and long-term	60%	14%
Domestic short-term	0%	26%
Terms of marginal debt		
External MLT debt		
Avg. nominal interest rate on new borrowing in USD	1.0%	1.8%
Avg. maturity (incl. grace period)	25	30
Avg. grace period	6	6
Domestic MLT debt		
Avg. real interest rate on new borrowing	4.8%	5.4%
Avg. maturity (incl. grace period)	5	2
Avg. grace period	2	1
Domestic short-term debt		
Avg. real interest rate	0.0%	2.0%

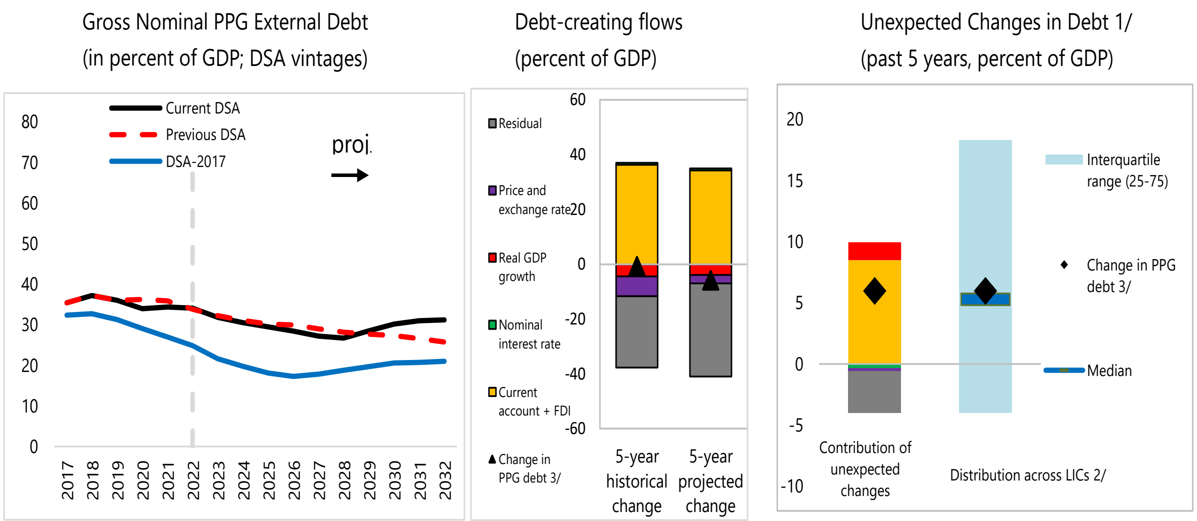
* Note: The public DSA allows for domestic financing to cover the additional financing needs generated by the shocks under the stress tests in the public DSA. Default terms of marginal debt are based on baseline 10-year projections.

Sources: Country authorities; and staff estimates and projections.

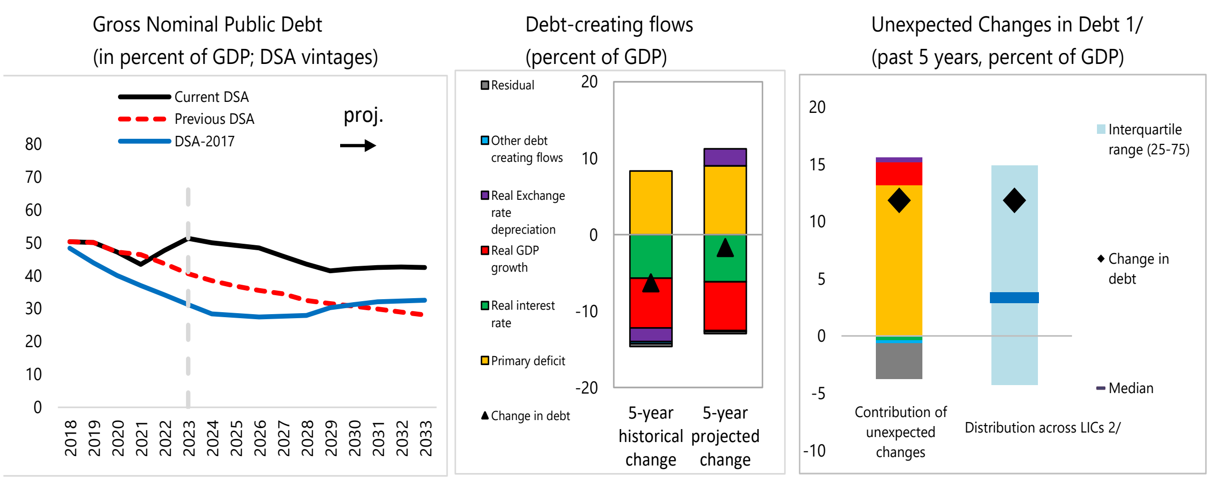
1/ The most extreme stress test is the test that yields the highest ratio in or before 2032. The stress test with a one-off breach is also presented (if any), while the one-off breach is deemed away for mechanical signals. When a stress test with a one-off breach happens to be the most exterme shock even after disregarding the one-off breach, only that stress test (with a one-off breach) would be presented.

Figure 3. Drivers of Debt Dynamics Baseline Scenario

External Debt



Public Debt



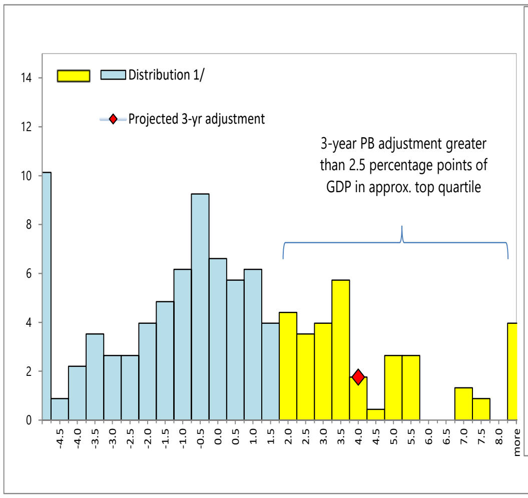
1/ Difference between anticipated and actual contributions on debt ratios.

2/ Distribution across LICs for which LIC DSAs were produced.

3/ Given the relatively low private external debt for average low-income countries, a ppt change in PPG external debt should be largely explained by the drivers of the external debt dynamics equation.

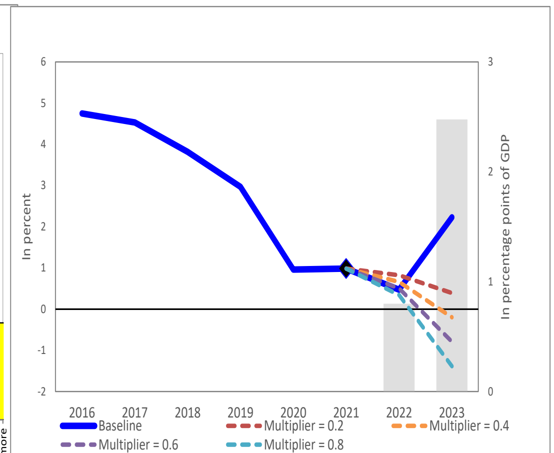
Figure 4. Realism Tools

3-Year Adjustment in Primary Balance
(Percentage points of GDP)



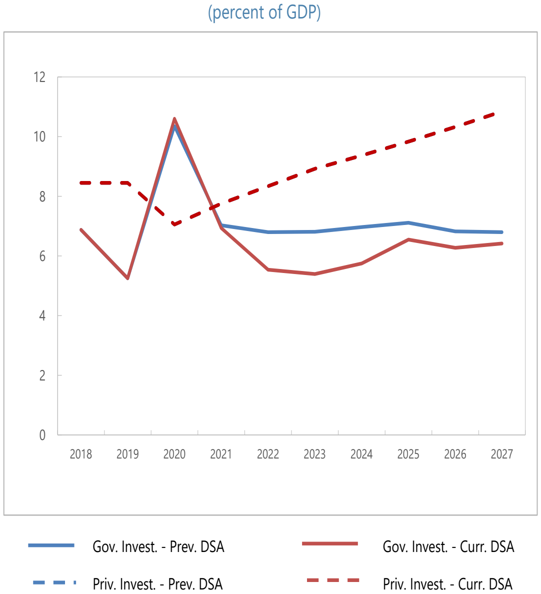
1/ Data cover Fund-supported programs for LICs (excluding emergency financing) approved since 1990. The size of 3-year adjustment from program inception is found on the horizontal axis; the percent of sample is found on the vertical axis.

Fiscal Adjustment and Possible Growth Paths 1/

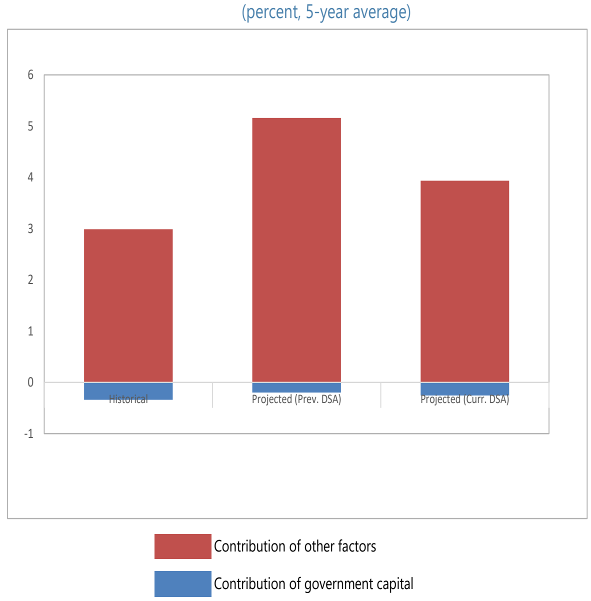


1/ Bars refer to annual projected fiscal adjustment (right-hand side scale) and lines show possible real GDP growth paths under different fiscal multipliers (left-hand side scale).

Public and Private Investment Rates
(percent of GDP)



Contribution to Real GDP growth
(percent, 5-year average)

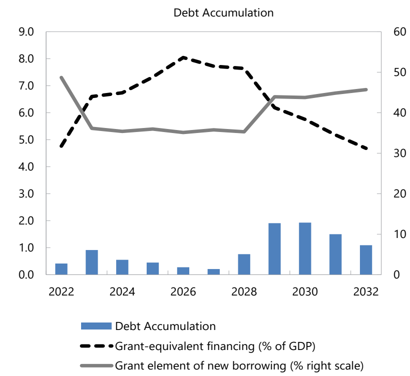


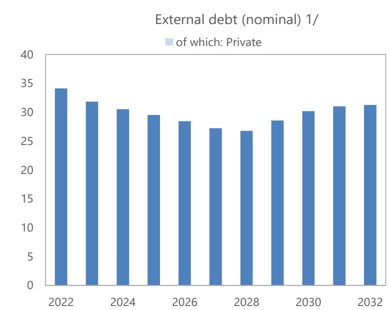
Source: IMF staff projections

Table 1. Central African Republic: External Debt Sustainability Framework, Baseline Scenario, 2019-2042
(In percent of GDP, unless otherwise indicated)

	Actual			Projections								Average 8/	
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2032	2042	Historical	Projections
External debt (nominal) 1/	**36.1**	**34.0**	**34.4**	**34.1**	**31.8**	**30.5**	**29.5**	**28.4**	**27.2**	**31.3**	**29.1**	**33.9**	**29.9**
of which: public and publicly guaranteed (PPG)	**36.1**	**34.0**	**34.4**	**34.1**	**31.8**	**30.5**	**29.5**	**28.4**	**27.2**	**31.3**	**29.1**	**33.9**	**29.9**
Change in external debt	-1.2	-2.1	0.4	-0.2	-2.3	-1.3	-1.0	-1.1	-1.2	0.2	-3.5		
Identified net debt-creating flows	**3.8**	**6.4**	**8.3**	**11.8**	**6.6**	**5.4**	**4.5**	**2.8**	**1.9**	**3.8**	**3.8**	**6.4**	**4.6**
Non-interest current account deficit	**4.8**	**8.0**	**11.0**	**12.8**	**8.5**	**7.5**	**6.7**	**5.2**	**4.4**	**6.5**	**6.8**	**7.5**	**6.9**
Deficit in balance of goods and services	18.3	19.3	18.2	20.2	17.5	16.9	16.3	15.7	14.9	15.0	12.4	**16.4**	**16.0**
Exports	15.7	14.0	13.7	13.7	14.3	14.2	15.5	16.1	16.8	17.8	15.5		
Imports	34.1	33.3	31.9	33.9	31.7	31.1	31.8	31.7	31.8	32.8	27.9		
Net current transfers (negative = inflow)	-13.6	-11.3	-7.2	-7.4	-9.1	-9.6	-9.7	-10.6	-10.6	-8.4	-5.2	**-9.0**	**-9.2**
of which: official	-7.3	-6.8	-1.9	-2.0	-3.6	-3.8	-4.0	-5.0	-5.0	-2.7	-1.4		
Other current account flows (negative = net inflow)	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.1	0.1	-0.1	-0.4	**0.0**	**0.0**
Net FDI (negative = inflow)	**-1.1**	**-0.1**	**-0.2**	**-1.0**	**-1.4**	**-1.4**	**-1.3**	**-1.4**	**-1.6**	**-2.0**	**-2.4**	**-0.9**	**-1.6**
Endogenous debt dynamics 2/	**0.2**	**-1.5**	**-2.5**	**0.0**	**-0.6**	**-0.7**	**-0.9**	**-0.9**	**-0.8**	**-0.6**	**-0.6**		
Contribution from nominal interest rate	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.4		
Contribution from real GDP growth	-1.1	-0.3	-0.3	-0.2	-0.7	-0.9	-1.1	-1.1	-1.0	-0.9	-1.0		
Contribution from price and exchange rate changes	1.1	-1.3	-2.3	...	...	...	...	...	...	...	...		
Residual 3/	**-5.0**	**-8.5**	**-7.9**	**-12.1**	**-8.9**	**-6.7**	**-5.5**	**-3.9**	**-3.1**	**-3.6**	**-7.3**	**-3.8**	**-4.9**
of which: exceptional financing	0.0	-0.5	-0.4	-0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0		
Sustainability indicators													
PV of PPG external debt-to-GDP ratio	**...**	**...**	**16.1**	**17.3**	**16.4**	**15.9**	**15.5**	**14.9**	**14.3**	**16.9**	**19.4**		
PV of PPG external debt-to-exports ratio	**...**	**...**	**117.5**	**126.3**	**115.1**	**112.5**	**99.6**	**92.6**	**84.8**	**94.6**	**125.3**		
PPG debt service-to-exports ratio	**3.7**	**3.7**	**3.5**	**4.8**	**8.0**	**12.1**	**12.7**	**12.9**	**11.6**	**8.0**	**6.7**		
PPG debt service-to-revenue ratio	**6.6**	**5.6**	**5.5**	**8.5**	**14.5**	**19.5**	**19.9**	**19.8**	**18.2**	**12.1**	**7.6**		
Gross external financing need (Million of U.S. dollars)	96.3	202.7	291.4	308.2	226.0	229.0	227.8	189.9	162.5	268.4	439.1		
Key macroeconomic assumptions													
Real GDP growth (in percent)	3.0	1.0	1.0	0.5	2.2	3.0	3.8	3.8	3.7	3.2	3.2	**-0.9**	**3.0**
GDP deflator in US dollar terms (change in percent)	-2.9	3.8	7.2	-5.2	8.6	3.4	2.2	2.0	1.9	2.5	2.5	**2.7**	**2.3**
Effective interest rate (percent) 4/	0.4	0.4	0.3	0.3	0.4	0.5	0.5	0.5	0.6	1.0	1.2	**0.7**	**0.7**
Growth of exports of G&S (US dollar terms, in percent)	-1.3	-7.1	6.1	-4.6	15.5	5.8	16.1	9.5	10.7	5.2	5.5	**2.4**	**8.0**
Growth of imports of G&S (US dollar terms, in percent)	0.9	2.5	3.7	1.2	3.8	4.4	8.4	5.7	5.7	6.0	4.1	**6.8**	**5.6**
Grant element of new public sector borrowing (in percent)	...	...	...	48.7	36.2	35.4	36.0	35.1	35.8	45.7	41.4	**...**	**40.1**
Government revenues (excluding grants, in percent of GDP)	8.7	9.2	8.8	7.8	7.9	8.8	9.9	10.5	10.7	11.8	13.8	**7.7**	**10.2**
Aid flows (in Million of US dollars) 5/	235.9	339.0	141.9	121.8	172.7	183.3	212.9	241.2	246.2	240.3	173.1		
Grant-equivalent financing (in percent of GDP) 6/	...	...	...	4.8	6.6	6.7	7.3	8.0	7.7	4.7	2.0	**...**	**6.4**
Grant-equivalent financing (in percent of external financing) 6/	...	...	...	95.0	84.8	82.2	81.7	83.3	84.3	73.8	57.1	**...**	**80.3**
Nominal GDP (Million of US dollars)	2278.4	2388.5	2584.6	2460.6	2732.9	2910.2	3087.0	3267.5	3451.8	4577.7	8040.7		
Nominal dollar GDP growth	0.0	4.8	8.2	-4.8	11.1	6.5	6.1	5.8	5.6	5.8	5.8	**1.6**	**5.4**
Memorandum items:													
PV of external debt 7/	...	...	16.1	17.3	16.4	15.9	15.5	14.9	14.3	16.9	19.4		
In percent of exports	...	...	117.5	126.3	115.1	112.5	99.6	92.6	84.8	94.6	125.3		
Total external debt service-to-exports ratio	3.7	3.7	3.5	4.8	8.0	12.1	12.7	12.9	11.6	8.0	6.7		
PV of PPG external debt (in Million of US dollars)			415.8	426.5	448.9	464.1	477.1	485.7	492.5	771.6	1561.0		
(PVt-PVt-1)/GDPt-1 (in percent)				0.4	0.9	0.6	0.4	0.3	0.2	1.1	1.4		
Non-interest current account deficit that stabilizes debt ratio	5.9	10.1	10.6	13.1	10.8	8.8	7.8	6.2	5.6	6.2	10.3		

Definition of external/domestic debt	Residency-based
Is there a material difference between the two criteria?	No





Sources: Country authorities; and staff estimates and projections.

1/ Includes both public and private sector external debt.

2/ Derived as [r - g - ρ(1+g) + Ɛα (1+r)]/(1+g+ρ+gρ) times previous period debt ratio, with r = nominal interest rate; g = real GDP growth rate, ρ = growth rate of GDP deflator in U.S. dollar terms, Ɛ=nominal appreciation of the local currency, and α= share

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.

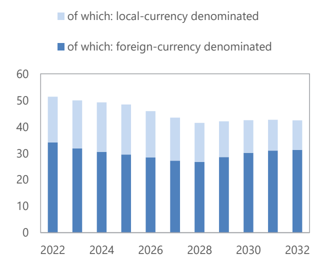
8/ Historical averages are generally derived over the past 10 years, subject to data availability, whereas projections averages are over the first year of projection and the next 10 years.

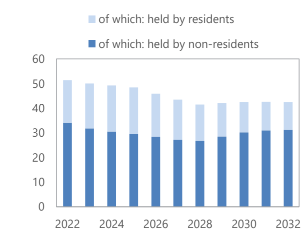
Table 2. Central African Republic: Public Sector Debt Sustainability Framework, Baseline Scenario 2019-2024, (In percent of GDP, unless otherwise indicated)

	Actual			Projections								Average 6/	
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2032	2042	Historical	Projections
Public sector debt 1/	**47.1**	**43.4**	**47.6**	**51.4**	**50.0**	**49.2**	**48.4**	**45.9**	**43.5**	**42.5**	**30.3**	**49.8**	**45.4**
of which: external debt	**36.1**	**34.0**	**34.4**	**34.1**	**31.8**	**30.5**	**29.5**	**28.4**	**27.2**	**31.3**	**29.1**	**33.9**	**29.9**
Change in public sector debt	-2.9	-3.7	4.2	3.8	-1.4	-0.8	-0.8	-2.5	-2.4	-0.2	-4.5		
Identified debt-creating flows	**-3.2**	**-1.0**	**6.4**	**2.1**	**-1.2**	**-0.8**	**-1.0**	**-2.7**	**-2.5**	**-0.1**	**-0.9**	**1.1**	**-0.6**
Primary deficit	**-1.8**	**3.1**	**5.7**	**4.9**	**2.5**	**1.7**	**0.9**	**-0.9**	**-0.8**	**1.4**	**0.7**	**1.4**	**1.4**
Revenue and grants	18.3	21.8	13.7	12.3	13.8	14.7	16.3	17.7	17.6	15.0	14.8	**14.6**	**15.5**
of which: grants	9.6	12.6	4.9	4.5	5.9	5.9	6.4	7.2	6.9	3.3	0.9		
Primary (noninterest) expenditure	16.6	24.8	19.4	17.2	16.3	16.4	17.2	16.7	16.8	16.4	15.4	**16.1**	**16.9**
Automatic debt dynamics	**-1.4**	**-4.0**	**0.9**	**-2.7**	**-3.7**	**-2.5**	**-1.9**	**-1.8**	**-1.7**	**-1.5**	**-1.5**		
Contribution from interest rate/growth differential	-2.3	-1.0	-1.6	-2.7	-3.7	-2.5	-1.9	-1.8	-1.7	-1.5	-1.5		
of which: contribution from average real interest rate	-0.8	-0.5	-1.2	-2.4	-2.6	-1.0	-0.1	0.0	-0.1	-0.2	-0.5		
of which: contribution from real GDP growth	-1.4	-0.4	-0.4	-0.2	-1.1	-1.4	-1.8	-1.8	-1.6	-1.3	-1.1		
Contribution from real exchange rate depreciation	0.9	-3.1	2.5	...	...	...	...	...	...	...	...		
Other identified debt-creating flows	**0.0**	**0.0**	**-0.2**	**-0.1**	**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	-0.2	-0.1	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	**0.3**	**-2.7**	**-2.2**	**1.6**	**-0.1**	**0.1**	**0.2**	**0.2**	**0.0**	**-0.1**	**-3.6**	**1.7**	**0.2**
Sustainability indicators													
PV of public debt-to-GDP ratio 2/	**...**	**...**	**28.4**	**30.9**	**31.2**	**31.5**	**31.3**	**29.5**	**27.8**	**26.0**	**19.4**		
PV of public debt-to-revenue and grants ratio	**...**	**...**	**208.1**	**251.7**	**225.8**	**213.5**	**192.3**	**167.0**	**158.0**	**172.7**	**131.4**		
Debt service-to-revenue and grants ratio 3/	**17.1**	**9.1**	**10.4**	**9.9**	**23.7**	**36.8**	**41.8**	**42.1**	**40.5**	**32.3**	**7.9**		
Gross financing need 4/	1.4	5.0	6.9	6.1	5.7	7.0	7.7	6.5	6.3	6.2	1.8		
Key macroeconomic and fiscal assumptions													
Real GDP growth (in percent)	3.0	1.0	1.0	0.5	2.2	3.0	3.8	3.8	3.7	3.2	3.2	**-0.9**	**3.0**
Average nominal interest rate on external debt (in percent)	0.4	0.4	0.3	0.4	0.4	0.5	0.5	0.5	0.6	1.0	1.2	**0.7**	**0.7**
Average real interest rate on domestic debt (in percent)	-0.7	-0.1	-1.7	-3.7	-3.7	0.2	2.5	2.9	2.6	2.1	-1.8	**-2.3**	**1.0**
Real exchange rate depreciation (in percent, + indicates depreciation)	2.4	-8.7	7.7	...	...	...	...	...	...	...	...	**1.6**	**...**
Inflation rate (GDP deflator, in percent)	2.4	1.9	3.3	6.4	6.7	4.1	2.5	2.4	2.4	2.5	2.5	**4.2**	**3.4**
Growth of real primary spending (deflated by GDP deflator, in percent)	-0.9	51.2	-21.0	-10.8	-3.4	3.8	8.7	0.9	4.2	0.5	4.2	**5.7**	**1.6**
Primary deficit that stabilizes the debt-to-GDP ratio 5/	1.1	6.8	1.6	1.2	3.8	2.4	1.7	1.6	1.6	1.6	5.2	**3.2**	**1.8**
PV of contingent liabilities (not included in public sector debt)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

Definition of external/domestic debt	**Residency-based**
Is there a material difference between the two criteria?	**No**

Public sector debt 1/





Sources: Country authorities; and staff estimates and projections.

1/ Coverage of debt: The central, state, and local governments plus social security, government-guaranteed debt . Definition of external debt is Residency-based.

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

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

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

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

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

Table 3. Central African Republic: Sensitivity Analysis for Key Indicators of Publicly Guaranteed External Debt, 2022-2032

	Projections 1/										
	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
PV of debt-to GDP ratio											
Baseline	17	16	16	15	15	14	14	15	16	17	17
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2022-2032 2/	17	18	18	19	20	23	25	28	**31**	**34**	**36**
B. Bound Tests											
B1. Real GDP growth	17	21	27	26	25	24	24	26	28	29	29
B2. Primary balance	17	17	18	18	18	17	17	18	19	20	20
B3. Exports	17	18	21	20	19	19	19	20	21	21	21
B4. Other flows 3/	17	19	21	21	20	20	19	20	21	21	21
B5. Depreciation	17	20	16	15	14	14	14	15	16	17	18
B6. Combination of B1-B5	17	25	27	26	25	24	24	26	27	27	27
C. Tailored Tests											
C1. Combined contingent liabilities	17	22	23	24	23	23	23	24	25	25	25
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Threshold	30	30	30	30	30	30	30	30	30	30	30
PV of debt-to-exports ratio											
Baseline	126	115	112	100	93	85	83	88	94	93	95
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2022-2032 2/	126	123	127	121	127	135	**149**	**163**	**180**	**187**	**200**
B. Bound Tests											
B1. Real GDP growth	126	115	112	100	93	85	83	88	94	93	95
B2. Primary balance	126	122	129	118	112	104	102	107	113	111	112
B3. Exports	126	**162**	**212**	**189**	**176**	**162**	**159**	**165**	**173**	**168**	**167**
B4. Other flows 3/	126	134	**151**	134	126	116	114	118	122	119	118
B5. Depreciation	126	115	89	79	73	66	65	70	76	78	80
B6. Combination of B1-B5	126	**169**	132	**154**	**143**	132	129	135	**141**	138	138
C. Tailored Tests											
C1. Combined contingent liabilities	126	**155**	**162**	**152**	**145**	136	134	138	**143**	**141**	**141**
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Threshold	140	140	140	140	140	140	140	140	140	140	140
Debt service-to-exports ratio											
Baseline	5	8	**12**	**13**	**13**	**12**	9	8	7	7	8
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2022-2032 2/	5	9	**14**	**15**	**16**	**15**	**12**	**11**	**11**	**11**	**13**
B. Bound Tests											
B1. Real GDP growth	5	8	**12**	**13**	**13**	**12**	9	8	7	7	8
B2. Primary balance	5	8	**12**	**13**	**13**	**12**	9	8	8	8	9
B3. Exports	5	**10**	**18**	**19**	**20**	**18**	**13**	**12**	**12**	**13**	**14**
B4. Other flows 3/	5	8	**12**	**13**	**13**	**12**	9	8	9	9	**10**
B5. Depreciation	5	8	**12**	**12**	**13**	**11**	8	7	7	6	7
B6. Combination of B1-B5	5	10	**16**	**17**	**17**	**15**	**12**	**10**	**12**	**11**	**12**
C. Tailored Tests											
C1. Combined contingent liabilities	5	8	**13**	**14**	**14**	**13**	10	9	9	8	9
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Threshold	10	10	10	10	10	10	10	10	10	10	10
Debt service-to-revenue ratio											
Baseline	9	**15**	**19**	**20**	**20**	**18**	14	12	11	11	12
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2022-2032 2/	9	**16**	**22**	**24**	**25**	**24**	**19**	**18**	**17**	**18**	**20**
B. Bound Tests											
B1. Real GDP growth	9	**19**	**33**	**34**	**34**	**31**	**23**	**21**	**19**	**19**	**21**
B2. Primary balance	9	**14**	**20**	**21**	**20**	**19**	**14**	13	12	13	14
B3. Exports	9	**15**	**20**	**21**	**21**	**19**	**15**	13	13	**14**	**15**
B4. Other flows 3/	9	**15**	**20**	**21**	**21**	**19**	**14**	13	13	**15**	**15**
B5. Depreciation	9	**18**	**24**	**24**	**24**	**22**	**16**	**15**	14	11	13
B6. Combination of B1-B5	9	**18**	**29**	**29**	**29**	**27**	**20**	**18**	**20**	**19**	**20**
C. Tailored Tests											
C1. Combined contingent liabilities	9	**14**	**21**	**22**	**22**	**20**	**16**	**14**	13	13	14
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Threshold	14	14	14	14	14	14	14	14	14	14	14

Sources: Country authorities; and staff estimates and projections.
1/ A bold value indicates a breach of the threshold.
2/ Variables include real GDP growth, GDP deflator (in U.S. dollar terms), non-interest current account in percent of GDP, and non-debt creating flows.
3/ Includes official and private transfers and FDI.

Table 4. Central African Republic: Sensitivity Analysis for Key Indicators of Public Debt, 2022-2032

	Projections 1/										
	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
	PV of Debt-to-GDP Ratio										
Baseline	31	31	31	31	29	28	26	26	26	26	26
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2022-2032 2/	34	**36**	**37**	**38**	**39**	**39**	**39**	**39**	**39**	**39**	**39**
B. Bound Tests											
B1. Real GDP growth	34	**47**	**66**	**70**	**72**	**73**	**75**	**80**	**84**	**89**	**93**
B2. Primary balance	34	**37**	**39**	**38**	**36**	34	32	32	32	31	31
B3. Exports	31	33	**36**	**36**	34	32	30	30	30	30	29
B4. Other flows 3/	31	34	**37**	**37**	35	33	31	31	31	31	30
B5. Depreciation	34	**38**	**37**	**35**	33	30	27	26	25	23	22
B6. Combination of B1-B5	34	**38**	**42**	**42**	**41**	**39**	**37**	**37**	**37**	**37**	**36**
C. Tailored Tests											
C1. Combined contingent liabilities	34	**46**	**45**	**44**	**42**	**40**	**38**	**37**	**37**	**37**	**36**
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
TOTAL public debt benchmark	35	35	35	35	35	35	35	35	35	35	35
	PV of Debt-to-Revenue Ratio										
Baseline	252	226	214	192	167	158	150	173	173	172	173
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2022-2032 2/	281	254	242	223	204	205	205	240	240	240	244
B. Bound Tests											
B1. Real GDP growth	281	300	350	339	317	327	337	439	470	501	536
B2. Primary balance	281	267	263	234	203	193	183	210	209	207	206
B3. Exports	252	239	243	219	191	182	173	200	199	196	195
B4. Other flows 3/	252	245	251	226	197	188	179	207	205	202	200
B5. Depreciation	281	285	259	225	190	175	161	175	166	157	151
B6. Combination of B1-B5	281	268	265	244	215	206	198	232	232	232	233
C. Tailored Tests											
C1. Combined contingent liabilities	281	336	308	272	237	225	215	247	244	242	241
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Debt Service-to-Revenue Ratio										
Baseline	10	24	37	42	42	41	36	37	35	32	32
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2022-2032 2/	10	24	39	45	46	45	41	44	42	40	41
B. Bound Tests											
B1. Real GDP growth	10	27	53	68	72	74	72	84	84	84	88
B2. Primary balance	10	24	42	50	47	44	38	39	37	34	34
B3. Exports	10	24	37	42	43	41	37	38	36	34	34
B4. Other flows 3/	10	24	37	42	43	41	37	38	36	35	35
B5. Depreciation	10	24	40	45	45	43	38	39	36	34	34
B6. Combination of B1-B5	10	24	40	48	50	50	46	49	47	45	45
C. Tailored Tests											
C1. Combined contingent liabilities	10	24	65	62	52	47	41	41	38	35	35
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Sources: Country authorities; and staff estimates and projections.

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

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

3/ Includes official and private transfers and FDI.