

INTERNATIONAL DEVELOPMENT ASSOCIATION

INTERNATIONAL MONETARY FUND

CENTRAL AFRICAN REPUBLIC

Joint World Bank-IMF Debt Sustainability Analysis

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Prepared jointly by the staffs of the International Development Association (IDA)
and the International Monetary Fund (IMF)

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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 (C.A.R.) remains at high risk of external debt distress and overall high risk of debt distress under the revised Debt Sustainability Framework (DSF), unchanged from the 2018 DSA. Solvency indicators (the present values of the external public and publicly guaranteed debt-to-GDP and debt-to-exports ratios) remain below their relevant thresholds in the baseline scenario. However, liquidity indicators (debt service-to-exports and debt service-to-revenue ratios) breach their thresholds in the baseline scenario. Further considerations support the high-risk assessment: the debt indicators are sensitive to standard stress tests; macroeconomic projections are highly uncertain in a volatile security environment; and sizeable contingent liabilities, notably related to the large stock of unaudited potential domestic arrears and the limited financial information available on state-owned enterprises, could materialize. C.A.R.'s debt sustainability is also sensitive to a deterioration of the financing mix. A tailored scenario in which grant financing (of 2 percent of GDP) is replaced by concessional external debt-financing from 2021 onwards would worsen debt sustainability considerably. This shows that the government's investment program requires grant financing, with concessional debt financing to be considered in exceptional cases.

PUBLIC DEBT COVERAGE

1. **The coverage of public sector debt is in line with the previous DSA, exhibiting some gaps.** Information is available on the central government's contractual debt obligations. 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. However, sizeable contingent liabilities could materialize: (i) the authorities shared with staff a list of potential additional domestic payment arrears, which have yet to be audited, and (ii) little information is available on the financial situation and domestic debt of state-owned enterprises (SOEs), including the three big utilities for water (SODECA), communication (SOCATEL), and energy (ENERCA). The authorities are taking specific steps to improve financial oversight of SOEs, which should lead to better debt coverage going forward. They submitted to parliament a new legal framework governing SOEs and have reorganized the Ministry of Finance. They also committed to audit the identified potential domestic arrears by end-September 2019. The debt unit is being strengthened through training and better IT systems supported by development partners.

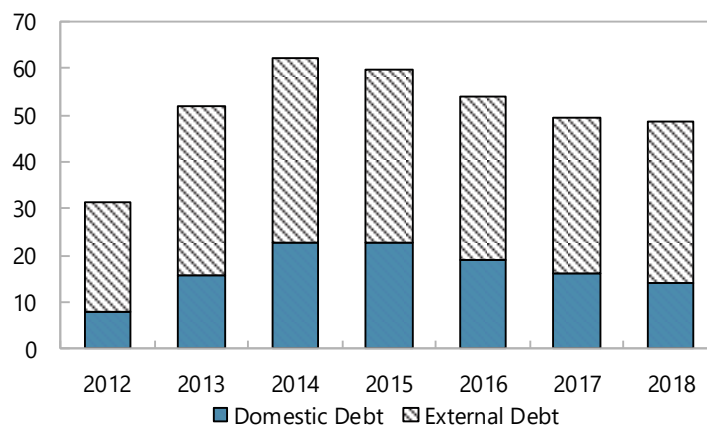
2. **The tailored test of contingent liabilities assumes a shock of 15 percent of GDP.** This significant amount reflects the uncertainty about additional domestic arrears, non-guaranteed SOE debt, and financial market risks. The shock from domestic arrears is set at 5 percent of GDP to factor in past and persisting shortcomings in the country's public expenditure management systems. The contingent liabilities shock from SOE debt is set at 5 percent of GDP to reflect heightened risks associated with non-guaranteed SOE debt and potential expenditure arrears. The financial market risk shock is kept at the minimum default value of 5 percent of GDP given the small size and depth of the financial sector in C.A.R.

Subsectors of the public sector	Sub-sectors covered		
Central government	X		
State and local government	X		
Other elements in the general government	X		
o/w: Social security fund	X		
o/w: Extra budgetary funds (EBFs)	X		
Guarantees (to other entities in the public and private sector, including to SOEs)	X		
Central bank (borrowed on behalf of the government)	X		
Non-guaranteed SOE debt	X		
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 setting
Other elements of the general government not captured above	0 percent of GDP	5	Possible domestic payment arrears not included in debt stock Limited information SOEs' financial position
SOEs' debt (guaranteed and not guaranteed by the government) 1/	2 percent of GDP	5	
PPP	35 percent of PPP stock	0	
Financial market (the default value of 5 percent of GDP is the minimum value)	5 percent of GDP	5	
Total (in percent of GDP)	15		
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. If it is already included in the government debt and risks associated with SOE 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

3. C.A.R.'s public and publicly guaranteed (PPG) debt is declining. It stood at 48.8 percent of GDP at end-2018 (down from 49.4 percent of GDP at end-2017), with external debt amounting to 34.9 percent of GDP (33.3 percent of GDP at end-2017).¹ Debt indicators deteriorated significantly in the wake of the 2013 crisis when GDP collapsed, and domestic and external arrears accumulated. Conditions have improved since, supported by economic recovery, stronger revenue mobilization, arrears clearance and limited new borrowing (Text Figure 1). Since the crisis, C.A.R. has contracted new loans from Saudi Arabia (2015 project loan for disbursements of up to US\$75 million; grant element 49.4 percent), African Development Bank (2017 budget support loan of US\$15 million, grant element 60.2 percent), BADEA (2018 project loan for disbursements of up to US\$13 million, grant element 50.2 percent), and the IMF (ECF and RCF disbursements totaling SDR 133.12 million, grant element 30.5 percent).

Text Figure 1. Central African Republic: Evolution of Public Sector Debt, 2012-18 (percent of GDP)



Sources: IMF staff estimates and country authorities

4. Pre-HIPC arrears and debt owed to multilateral creditors account for the bulk of external debt (Text Table 2). Multilateral creditors, mainly the IMF and the World Bank, hold almost half of the external debt. Bilateral debt amounts to 7.2 percent of GDP, with India, China and Congo being the main creditors. Pre-HIPC arrears are owed to Non-Paris Club creditors (Argentina, Equatorial Guinea, Iraq, Libya, and Taiwan, Province of China). The average nominal interest rate stood at 0.6 percent for external debt, reflecting the preponderance of concessional borrowing. Half of the domestic debt consists of statutory and exceptional advances from the Central Bank, which have been consolidated into one loan to be repaid from 2022 onwards, in line with regional arrangements. The remainder mainly includes officially recognized arrears amounting to 4.7 percent of GDP.

5. The composite indicator signals a weak debt-carrying capacity (Text Table 3). Institutions in C.A.R. are weakened by persistent fragility. The composite indicator, a proxy

¹ External debt is defined on a residency basis with the exception of BEAC advances, which are considered domestic debt as in the last DSA for C.A.R. Mechanically, the CFAF-denominated debt held by the BEAC would weaken the external debt sustainability indicators if they were considered external debt, but the risk from this debt is lower than foreign currency denominated debt owing to the lack of currency risk, strong institutional ties, and the relative ease of rescheduling. All outstanding T-bills are held by domestic banks and included in domestic debt.

for debt-carrying capacity, is comprised of the real growth rate, import coverage of reserves, remittances, world growth, and the World Bank's CPIA. C.A.R. has a score of 2.42, well below the floor (2.69) for medium debt-carrying capacity.

Text Table 2. Central African Republic: Composition of Public Sector Debt, 2018
(percent of GDP)

External Debt		Domestic Debt	
Total	34.9	Total	13.9
of which:		of which:	
Multilateral	14.9	Central Bank	6.4
Bilateral	7.2	Arrears	4.7
Private	3.2	Other	2.8
Pre-HIPC arrears	9.6		

Source: C.A.R. authorities and IMF Staff

Text Table 3. Central African Republic: Calculation of composite indicator and thresholds

Components	Coefficients (A)	10-year average values (B)	CI Score components (A*B) = (C)	Contribution of components
CPIA	0.385	2.471	0.95	39%
Real growth rate (in percent)	2.719	3.272	0.09	4%
Import coverage of reserves (in percent)	4.052	32.644	1.32	55%
Import coverage of reserves ² (in percent)	-3.990	10.657	-0.43	-18%
Remittances (in percent)	2.022	0.097	0.00	0%
World economic growth (in percent)	13.520	3.579	0.48	20%
CI Score			2.42	100%
CI rating			Weak	

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

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

UNDERLYING MACROECONOMIC ASSUMPTIONS

6. Macroeconomic assumptions have been updated since the 2018 DSA. The medium-term scenario is consistent with the macroeconomic framework underpinning the ECF-supported program (Text Table 4).

- Revised national accounts data led to an upward revision of the 2017 nominal GDP by 7 percent. Staff estimates that real GDP growth in 2018 was 3.8 percent and that growth in 2019 will reach 4.5 percent. Higher medium-term (2020–24) growth of 5 percent reflects the assumption of further catch-up to the pre-crisis level of GDP. In the long run (2025–39), a 3.4 percent growth is assumed—unchanged from the 2018 DSA. This implies modest per-capita GDP growth as population growth is estimated at about 2.5 percent.
- The fiscal scenario has been updated to reflect significant additional grant financing in the short term. Budget support grants in 2019–20 are expected to reach a total of 9.7 percent of GDP, significantly higher than the 4.6 percent of GDP assumed at the time of the 2018 DSA. Domestic revenues are assumed to follow a gradual upward trend, reaching 14 percent of GDP at the end of the projection period. Primary spending has been also adjusted to incorporate the revised 2019 budget, reflecting higher spending of 1 percent of GDP. In the first five years, a small primary surplus is expected amid substantial grant financing, which would then turn into a deficit of 1.2 percent of GDP over the long run as grant financing gradually declines.
- External sector variables remain broadly unchanged. The current account balance is expected to improve over time driven by a gradual decline of imports from exceptionally high post-crisis levels. The export of goods and services-to-GDP ratio is expected to decline somewhat initially as the domestic recovery outpaces export growth before rising back to about 15 percent of GDP. Current transfers are expected to decline and FDI to increase gradually from a low level. Overall, it is expected that the non-interest current account deficit will reach 3 percent of GDP in the long run.
- After increasing sharply in the short run, budget grants are assumed to decline in the long run, from an average 7.4 percent of GDP during 2019–24 to 2 percent of GDP by 2039.² The financing needs in the short run are covered by deposit withdrawals while it is assumed that 80 percent of longer-term needs would be covered through external concessional borrowing—with a gradually decreasing degree of concessionality—and the remaining 20 percent through domestic borrowing.

² This assumption is consistent with multilateral development institutions providing support in the form of a mix of grants and concessional financing. Even if C.A.R.'s risk rating was to improve, a substantial share of financing would likely be provided in the form of grants. However, to further illuminate the sensitivity of debt sustainability to financing assumptions, staff has prepared a tailored scenario which substitutes 2 percent of GDP in grant financing with concessional loans from 2021 onwards.

Text Table 4. Central African Republic: Macroeconomic Assumptions

	DSA-18		DSA-19	
	2019-23	2024-2038	2019-24	2025-2039
	average	average	average	average
	(% of GDP)		(% of GDP)	
GDP growth (percent)	5.0	3.4	4.9	3.4
GDP deflator (percent)	3.1	3.3	2.6	2.8
Non-interest current account balance	-6.0	-2.8	-4.8	-2.8
Exports	13.9	14.0	14.8	14.6
Primary balance	0.6	-1.9	0.4	-1.0
Revenues	16.6	13.3	18.2	16.6

Source: IMF staff calculations

7. The newly added realism tools do not flag significant risks around the baseline scenario. Both external and public PPG debt projections are in line with the 2018 DSA. Factors contributing to debt dynamics appear broadly in line with historical contributions. External and public PPG debt are higher than expected at the time of the 2012 DSA, which is mainly related to the impact of the 2013 crisis. Unexpected changes in external and public debt are close to the median for all LICs. The envisaged fiscal path is well in line with the historical performance and the experience in other LIC countries. It is also worth noting that, in the case of C.A.R., changes in the primary balance are not always a good indicator to gauge the impact of fiscal policy. While the primary balance is expected to improve substantially (owing to the significant increase in external grants, which will be only partly spent), fiscal policy is likely to prove expansionary (owing to the increase in spending).

8. Standardized stress tests highlight debt sustainability’s vulnerability to shocks. Default settings have been used for these tests. The contingent liability stress test is based on the quantification of contingent liabilities discussed above. The commodity price shock is not applicable. Commodity exports dominate goods exports, with a share of about 70 percent. However, C.A.R.’s significant services exports—driven by service delivery to the non-resident public sector (e.g. embassies and international organizations)—bring commodity exports below the 50 percent of goods and services export threshold.

9. A tailored scenario, assuming worse external financing terms than in the baseline, shows that room for additional borrowing is limited. C.A.R. is highly dependent on external grant financing for budget support and project implementation. Grant financing is projected to reach 11 percent of GDP in 2019, and it is assumed to decline to 6.1 percent of GDP by 2024 and 2 percent of GDP by 2039. In light of the country’s very low per-capita income, persistent fragility, and weak institutions, it is likely that development partners will continue to provide substantial parts of their support in the form of grants. However, it cannot be excluded that less grant financing than assumed will be available in the medium and long term. To simulate such a deterioration of external financing terms, staff has developed a scenario in which grant financing is reduced by 2 percent of GDP compared to the baseline from 2021 onwards, with concessional financing (grant element of 35 percent) substituting for the “lost” grants.

DEBT SUSTAINABILITY

External Debt Sustainability Analysis

10. Solvency indicators remain well below their thresholds in the baseline scenario (Figure 1). In the baseline scenario, the present values (PV) of the external PPG debt-to-GDP and debt-to-exports ratios do not breach their thresholds and decline from their initial level over the projection period. The standardized stress test of lower nominal export growth leads to a temporary breach of the PV of the external debt-to-exports ratio.³ The PV of the external debt-to-GDP ratio stays below the thresholds even under the most extreme standardized stress test (a combination of a shock to growth, the primary balance, exports, other (non-debt creating) flows, and depreciation). Setting key variables to their historical average would result in a clear upward trend of the debt ratio.

11. Liquidity indicators temporarily breach their thresholds in the baseline scenario. The external debt service-to-exports ratio breaches the threshold between 2024 and 2026, driven by a significant but temporary uptick of debt service during that period related to the end of the grace period of a loan as well as significant repayments to the Fund. The trajectory of the external debt service-to-revenue ratio is similar but only breaches its threshold in 2025 by a marginal amount. Standardized shocks to exports and growth as well as the historical scenario lead to significant and persistent breaches of the external debt service-to-exports ratio and external debt service-to-revenue ratios.

12. The tailored scenario demonstrates the vulnerability of debt sustainability to lower grant financing. Replacing 2 percent of GDP of grant financing with concessional financing from 2021 onwards would set indicators for debt sustainability on an upward trajectory. Both the PV of the external debt-to-GDP ratio and the PV of the external debt-to-exports ratio would be on an increasing trend and breach their respective thresholds within the ten-year projection period. The breaches of the external debt service-to-exports ratio and external debt service-to-revenue ratio would become more pronounced and persistent than in the baseline scenario.

Public Debt Sustainability Analysis

13. The total PPG debt indicator remains well below its benchmark in the baseline scenario (Figure 2). In addition, the PV of the debt-to-revenue ratio is declining over the projection period. The debt-service-to-revenue and grants ratio is high at the beginning of the projection period with almost 20 percent reflecting significant repayments of domestic arrears. After a significant decline, it is set to rise until 2025 reflecting the start of repayments of exceptional and statutory advances to BEAC and higher external debt service payments. A standardized shock to growth would trigger a breach of the threshold for the PV of the

³ The shock assumes nominal export growth of one standard deviation below its historical average in the second and third year of the projection period.

debt-to-GDP ratio and lead to a significant increase of the PV of the debt-to-revenue ratio.⁴ It is also worth noting that public debt indicators could worsen due to contingent liabilities. An important stock of unverified arrears may lead to additional payment obligations. Adding domestic debt to the analysis does not change the overall risk of debt distress.

CONCLUSION

14. C.A.R remains at high risk of external debt distress and overall high risk of debt distress. The solvency indicators for the external PPG debt-to-GDP and -to-exports ratios stay below their respective thresholds. However, C.A.R.'s capacity to service debt is severely constrained by its low revenue mobilization and weak export base, with the external debt service-to-export and external debt service-to-revenue ratios breaching their respective thresholds in the baseline scenario. If these breaches are temporary, a number of other considerations support the high-risk assessment. Macroeconomic projections are highly uncertain given the still volatile security environment. Standardized stress tests also underline the sensitivity of the debt indicators to assumptions. Lower export or real GDP growth would trigger a significant deterioration of debt sustainability indicators with multiple threshold breaches. A tailored scenario highlights the vulnerability of debt sustainability to a deterioration in external financing terms, underscoring the importance of grant financing. In addition, sizeable contingent liabilities, notably related to the large stock of unaudited potential domestic arrears and the limited financial information available on SOEs, could materialize.

15. The authorities broadly agreed with this assessment of debt sustainability. They shared the view that C.A.R.'s capacity to service debt is limited and are committed to mobilizing grant financing to cover their financing needs to the extent possible. At the same time, they emphasized that the outlook for debt sustainability has improved recently: overall public debt is on a declining trend and the threshold breaches of the external debt service-to-export and external debt service-to-revenue are temporary and limited in scope. They agreed that there is a need to strengthen debt monitoring, especially by broadening the coverage to SOEs and clarifying the status of unverified domestic arrears. They also intend to further strengthen their capacity to manage debt and improve transparency, including by publishing the 2018 debt report by end-July 2019.

⁴ The shock assumes real GDP growth of one standard deviation below its historical average in the second and third year of the projection period.

Table 1. Central African Republic: External Debt Sustainability Framework, Baseline Scenario, 2016–39

	Actual			Projections								Average 8/	
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2029	2039	Historical	Projections
External debt (nominal) 1/	35.1	33.3	34.9	33.2	30.5	29.5	28.3	26.3	24.9	22.5	23.5	25.4	25.9
<i>of which: public and publicly guaranteed (PPG)</i>	35.1	33.3	34.9	33.2	30.5	29.5	28.3	26.3	24.9	22.5	23.5	25.4	25.9
Change in external debt	-1.8	-1.8	1.7	-1.7	-2.8	-1.0	-1.2	-2.0	-1.4	0.4	0.1		
Identified net debt-creating flows	2.3	2.9	4.1	1.1	1.9	2.3	2.7	2.7	2.7	0.9	0.3	6.3	1.7
Non-interest current account deficit	5.0	7.7	7.8	3.6	4.6	4.8	5.1	5.0	4.9	2.8	2.7	7.5	3.8
Deficit in balance of goods and services	16.4	16.4	17.8	16.1	15.2	14.1	13.6	13.2	12.9	9.7	8.5	14.3	12.3
Exports	18.0	15.9	15.9	15.5	15.3	15.1	14.8	14.3	13.8	14.3	15.5		
Imports	34.4	32.4	33.7	31.6	30.5	29.2	28.3	27.5	26.7	24.0	24.0		
Net current transfers (negative = inflow)	-11.4	-8.8	-9.9	-12.5	-10.5	-9.2	-8.4	-8.2	-7.9	-7.4	-5.8	-6.8	-8.6
<i>of which: official</i>	-5.0	-3.2	-4.4	-7.2	-5.3	-4.1	-3.5	-3.4	-3.3	-3.9	-2.9		
Other current account flows (negative = net inflow)	0.0	0.0	-0.1	0.0	0.0	0.0	-0.1	-0.1	-0.1	0.5	0.0	-0.1	0.2
Net FDI (negative = inflow)	-0.4	-0.8	-0.8	-1.1	-1.4	-1.3	-1.2	-1.1	-1.1	-1.4	-1.9	-1.4	-1.2
Endogenous debt dynamics 2/	-2.3	-4.0	-2.9	-1.4	-1.4	-1.3	-1.2	-1.1	-1.0	-0.5	-0.5		
Contribution from nominal interest rate	0.3	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3		
Contribution from real GDP growth	-1.6	-1.4	-1.2	-1.5	-1.5	-1.4	-1.4	-1.3	-1.2	-0.7	-0.8		
Contribution from price and exchange rate changes	-1.0	-2.8	-1.9	...	...	...	...	...	...	...	...
Residual 3/	-4.2	-4.6	-2.4	-2.8	-4.7	-3.3	-3.9	-4.7	-4.2	-0.5	-0.3	-5.4	-2.8
<i>of which: exceptional financing</i>	-0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Sustainability indicators													
PV of PPG external debt-to-GDP ratio	...	...	16.7	17.0	15.8	15.5	14.9	13.9	12.8	10.9	14.6		
PV of PPG external debt-to-exports ratio	...	...	104.7	109.7	103.7	102.8	101.0	97.4	92.7	76.5	94.0		
PPG debt service-to-exports ratio	6.0	1.8	3.8	6.9	5.4	5.4	7.0	7.8	10.9	4.7	5.1		
PPG debt service-to-revenue ratio	14.6	3.7	6.8	10.8	8.1	7.8	9.6	10.2	13.4	5.5	5.6		
Gross external financing need (Million of U.S. dollars)	104.2	148.9	173.1	84.7	105.4	122.6	149.4	163.4	189.3	105.3	145.5		
Key macroeconomic assumptions													
Real GDP growth (in percent)	4.7	4.5	3.8	4.5	5.0	5.0	5.0	5.0	5.0	3.4	3.4	1.3	4.2
GDP deflator in US dollar terms (change in percent)	2.7	8.6	6.1	-0.6	3.7	3.2	3.3	3.0	4.7	2.5	2.5	1.3	3.2
Effective interest rate (percent) 4/	0.9	0.4	0.6	0.4	0.5	0.5	0.6	0.6	0.7	0.9	1.2	1.1	0.7
Growth of exports of G&S (US dollar terms, in percent)	13.8	0.3	10.2	1.1	7.2	7.0	6.0	4.6	6.4	7.0	6.8	6.0	6.4
Growth of imports of G&S (US dollar terms, in percent)	2.7	6.8	14.7	-2.7	5.0	3.9	5.1	5.1	6.7	6.0	6.0	7.6	4.3
Grant element of new public sector borrowing (in percent)	...	...	...	36.5	51.2	53.1	53.1	52.8	53.2	46.6	31.9	...	49.8
Government revenues (excluding grants, in percent of GDP)	7.4	7.8	8.9	9.9	10.1	10.4	10.7	10.9	11.2	12.1	14.0	8.1	11.1
Aid flows (in Million of US dollars) 5/	113.6	128.9	190.4	270.9	242.1	207.9	202.7	216.5	231.3	238.8	180.6		
Grant-equivalent financing (in percent of GDP) 6/	...	...	...	11.7	9.2	8.1	7.3	6.9	7.3	5.7	2.6	...	7.4
Grant-equivalent financing (in percent of external financing) 6/	...	...	...	90.5	97.4	89.4	89.1	92.6	87.5	83.6	66.8	...	88.6
Nominal GDP (Million of US dollars)	1,825	2,071	2,282	2,369	2,578	2,792	3,027	3,275	3,601	5,049	9,029		
Nominal dollar GDP growth	7.6	13.5	10.2	3.8	8.8	8.3	8.4	8.2	10.0	6.0	6.0	2.2	7.5
Memorandum items:													
PV of external debt 7/	...	...	16.7	17.0	15.8	15.5	14.9	13.9	12.8	10.9	14.6		
In percent of exports	...	...	104.7	109.7	103.7	102.8	101.0	97.4	92.7	76.5	94.0		
Total external debt service-to-exports ratio	6.0	1.8	3.8	6.9	5.4	5.4	7.0	7.8	10.9	4.7	5.1		
PV of PPG external debt (in Million of US dollars)	...	...	380.6	403.0	408.5	433.3	451.1	455.1	461.0	550.7	1316.2		
(Pvt-Pvt-1)/GDP-1 (in percent)	...	...	...	1.0	0.2	1.0	0.6	0.1	0.2	1.0	1.3		
Non-interest current account deficit that stabilizes debt ratio	6.9	9.5	6.1	5.3	7.4	5.8	6.3	6.9	6.3	2.5	2.7		

Sources: Country authorities; and staff estimates and projections.

1/ Includes both public and private sector external debt.

2/ Derived as $[r - g - p(1+g) + \epsilon\alpha(1+r)] / (1+g+p+g\alpha)$ times previous period debt ratio, with r = nominal interest rate; g = real GDP growth rate, p = growth rate of GDP deflator in U.S. dollar terms, ϵ = nominal appreciation of the local currency, and α = share of local currency-denominated external debt in total external debt.

3/ Includes valuation adjustments. For projections also includes contribution from price and exchange rate changes. High value of the residual is related to capital grants which are not captured in this presentation.

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.

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

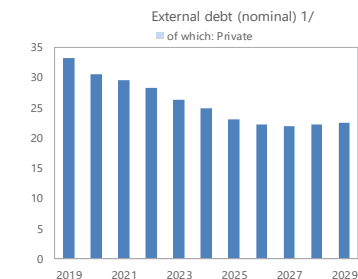
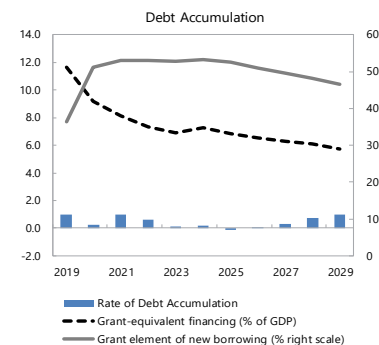
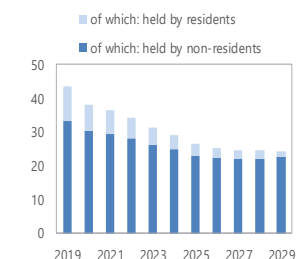
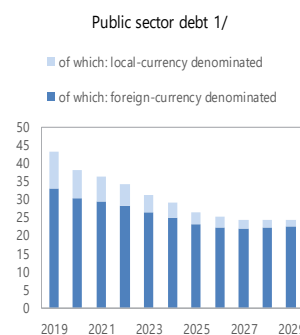


Table 2. Central African Republic: Public Sector Debt Sustainability Framework, Baseline Scenario, 2016–39
(In percent of GDP, unless otherwise indicated)

	Actual			Projections								Average 6/	
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2029	2039	Historical	Projections
Public sector debt 1/ of which: external debt	53.9	49.4	48.8	43.4	38.2	36.4	34.2	31.4	29.2	24.4	24.8	41.7	30.7
	35.1	33.3	34.9	33.2	30.5	29.5	28.3	26.3	24.9	22.5	23.5	25.4	25.9
Change in public sector debt	-5.9	-4.5	-0.6	-5.4	-5.2	-1.9	-2.2	-2.8	-2.2	0.0	0.1		
Identified debt-creating flows	-4.3	-7.9	-1.5	-5.5	-5.2	-1.9	-2.1	-2.7	-2.2	0.0	0.1	0.6	-2.2
Primary deficit	-1.6	0.7	-0.8	-2.9	-0.9	0.1	0.5	0.2	0.2	1.1	1.2	0.7	0.0
Revenue and grants	13.2	12.8	16.6	20.9	19.1	17.4	17.0	17.2	17.3	16.9	16.0	13.6	17.6
of which: grants	5.8	5.0	7.8	11.0	8.9	7.0	6.3	6.3	6.1	4.7	2.0		
Primary (noninterest) expenditure	11.6	13.5	15.9	18.0	18.1	17.5	17.5	17.5	17.5	18.0	17.2	14.3	17.6
Automatic debt dynamics	-2.7	-8.6	-0.9	-3.3	-3.0	-2.6	-2.4	-2.3	-2.4	-1.1	-1.0		
Contribution from interest rate/growth differential	-3.8	-5.2	-2.2	-3.0	-2.8	-2.4	-2.3	-2.1	-1.9	-1.0	-1.0		
of which: contribution from average real interest rate	-1.1	-2.8	-0.4	-0.9	-0.7	-0.6	-0.6	-0.5	-0.4	-0.2	-0.1		
of which: contribution from real GDP growth	-2.7	-2.3	-1.8	-2.1	-2.1	-1.8	-1.7	-1.6	-1.5	-0.8	-0.8		
Contribution from real exchange rate depreciation	1.1	-3.5	1.3	...	...	...	...	...	...	...	...
Other identified debt-creating flows	0.0	0.0	0.2	0.7	-1.2	0.7	-0.2	-0.7	0.0	0.0	0.0	0.0	-0.1
Privatization receipts (negative)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Recognition of contingent liabilities (e.g., bank recapitalization)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Debt relief (HIPC and other)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Change in deposits	...	...	0.2	0.7	-1.2	0.7	-0.2	-0.7	0.0	0.0	0.0		
Residual	-1.6	3.4	0.9	-0.3	-0.2	-0.2	-0.2	-0.2	-0.5	-0.2	-0.1	0.7	-0.3
Sustainability indicators													
PV of public debt-to-GDP ratio 2/	...	...	31.2	27.1	23.6	22.4	20.8	18.9	17.1	12.8	15.8		
PV of public debt-to-revenue and grants ratio	...	...	187.7	129.8	123.8	128.2	122.2	110.1	99.0	75.8	98.9		
Debt service-to-revenue and grants ratio 3/	14.0	9.2	18.6	19.7	14.4	8.7	11.3	12.0	14.5	9.2	7.7		
Gross financing need 4/	-0.3	1.7	2.3	1.2	1.8	1.6	2.3	2.3	2.7	2.6	2.4		
Key macroeconomic and fiscal assumptions													
Real GDP growth (in percent)	4.7	4.5	3.8	4.5	5.0	5.0	5.0	5.0	5.0	3.4	3.4	1.3	4.2
Average nominal interest rate on external debt (in percent)	0.9	0.5	0.6	0.4	0.5	0.5	0.6	0.6	0.7	0.9	1.2	1.1	0.7
Average real interest rate on domestic debt (in percent)	-2.0	-5.3	-0.6	-1.1	-0.7	-0.3	-0.3	-0.1	0.1	1.7	4.5	0.6	-0.2
Real exchange rate depreciation (in percent, + indicates depreciation)	3.2	-10.9	4.0	...	...	...	...	...	...	...	...	2.3	...
Inflation rate (GDP deflator, in percent)	3.0	6.4	1.4	2.7	2.6	2.6	2.6	2.6	2.5	2.5	2.5	3.3	3.0
Growth rate of real primary spending (deflated by GDP deflator, in percent)	-9.8	22.4	21.5	18.6	5.7	1.5	4.7	4.8	5.5	2.9	2.9	4.4	5.5
Primary deficit that stabilizes the debt-to-GDP ratio 5/	4.3	5.2	-0.2	2.5	4.2	1.9	2.7	3.0	2.4	1.2	1.1	3.1	2.2
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		

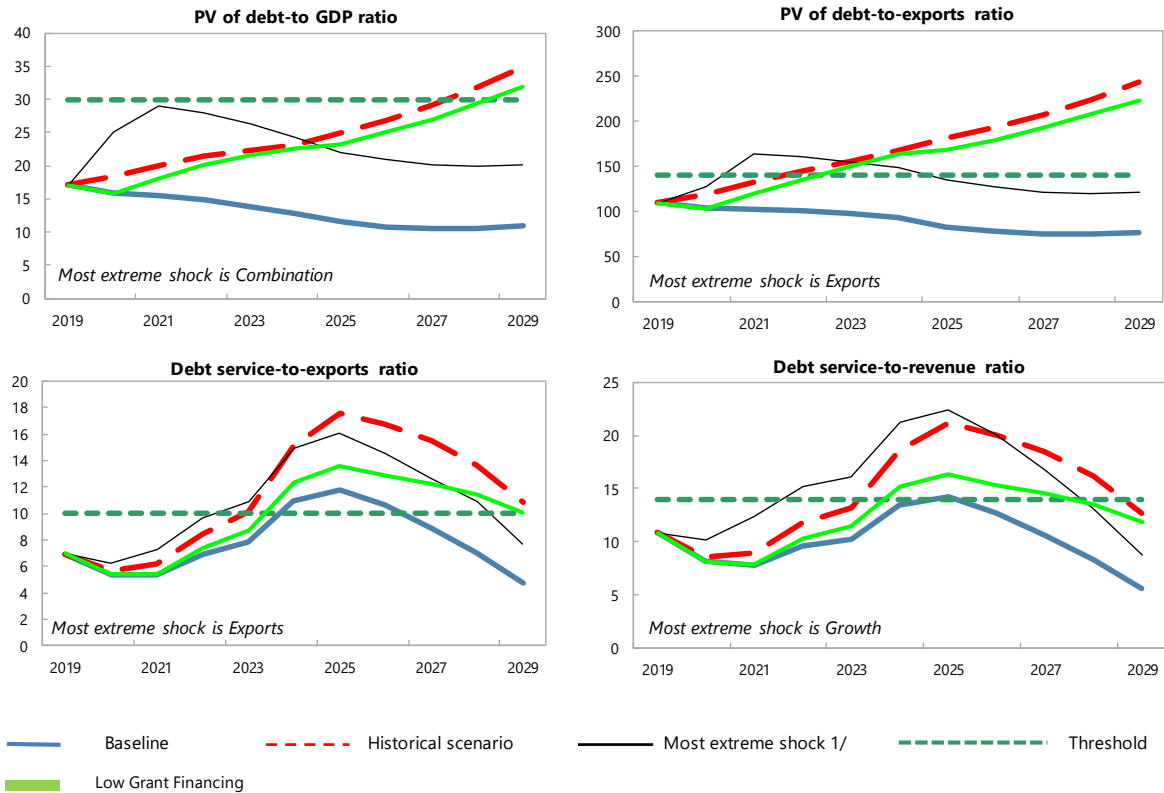
Definition of external/domestic debt	Residency-based
Is there a material difference between the two criteria?	No



Sources: Country authorities; and staff estimates and projections.

- 1/ Coverage of debt: The central, state, and local governments plus social security, central bank, 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 stabilize 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.

Figure 1. Central African Republic: Indicators of Public and Publicly Guaranteed External Debt under Alternative Scenarios, 2019–29



Customization of Default Settings		
	Size	Interactions
Standardized Tests	Yes	
Tailored Tests		
Combined CLs	Yes	
Natural Disasters	n.a.	n.a.
Commodity Prices ^{2/}	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 for 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	0.9%	0.9%
USD Discount rate	5.0%	5.0%
Avg. maturity (incl. grace period)	33	33
Avg. grace period	6	6

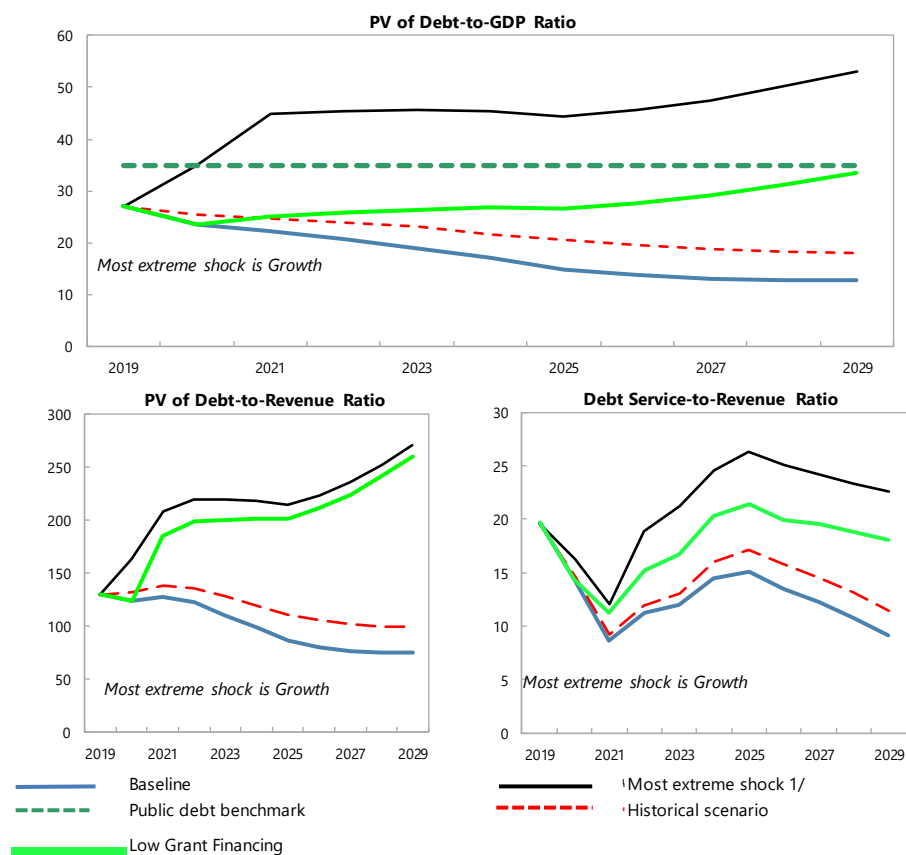
* Note: All the additional financing needs generated by the shocks under the stress tests are assumed to be covered by PPG external MLT debt in the external DSA. Default terms of marginal debt are based on baseline 10-year projections.

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 2029. Stress tests with one-off breaches are also presented (if any), while these one-off breaches are deemed away for mechanical signals. When a stress test with a one-off breach happens to be the most extreme shock even after disregarding the one-off breach, only that stress test (with a one-off breach) would be presented.

2/ The magnitude of shocks used for the commodity price shock stress test are based on the commodity prices outlook prepared by the IMF research department.

Figure 2. Central African Republic: Indicators of Public Debt Under Alternative Scenarios, 2019–29



Borrowing Assumptions for Stress Tests*	Default	User defined
Shares of marginal debt		
External PPG medium and long-term	85%	85%
Domestic medium and long-term	6%	6%
Domestic short-term	10%	10%
External MLT debt		
Avg. nominal interest rate on new borrowing in USD	0.9%	0.9%
Avg. maturity (incl. grace period)	33	33
Avg. grace period	6	6
Domestic MLT debt		
Avg. real interest rate on new borrowing	5.2%	5.2%
Avg. maturity (incl. grace period)	2	2
Avg. grace period	1	1
Domestic short-term debt		
Avg. real interest rate	1%	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 2029. 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 extreme shock even after disregarding the one-off breach, only that stress test (with a one-off breach) would be presented.

Table 3. Central African Republic: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2019-29 (percent)

	Projections										
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
PV of debt-to GDP ratio											
Baseline	17.0	15.8	15.5	14.9	13.9	12.8	11.5	10.8	10.5	10.6	10.9
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2019-2039 1/	17.0	18.3	20.1	21.4	22.3	23.2	24.9	26.8	29.0	31.7	34.8
A2. Alternative Scenario : Low Grant Financing	17.0	15.8	18.1	20.0	21.5	22.6	23.3	25.0	26.9	29.3	31.8
B. Bound Tests											
B1. Real GDP growth	17.0	19.9	24.5	23.5	22.0	20.2	18.1	17.1	16.5	16.7	17.2
B2. Primary balance	17.0	17.0	18.2	17.7	16.4	15.2	13.7	13.0	12.6	12.6	12.9
B3. Exports	17.0	17.0	18.8	18.0	16.9	15.6	14.1	13.4	13.0	12.9	13.1
B4. Other flows 2/	17.0	19.9	22.8	21.9	20.7	19.2	17.5	16.7	16.1	15.8	15.8
B5. One-time 30 percent nominal depreciation	17.0	19.9	16.2	15.5	14.4	13.2	11.7	10.9	10.5	10.8	11.4
B6. Combination of B1-B5	17.0	25.0	29.1	27.9	26.2	24.3	22.0	20.9	20.1	19.9	20.1
C. Tailored Tests											
C1. Combined contingent liabilities	17.0	21.7	22.1	21.6	20.1	18.7	17.1	16.3	15.9	15.9	16.2
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	109.7	103.7	102.8	101.0	97.4	92.7	83.3	77.7	74.6	74.7	76.5
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2019-2039 1/	109.7	119.5	132.8	144.9	156.1	167.9	180.9	193.1	207.1	224.4	243.9
A2. Alternative Scenario : Low Grant Financing	109.7	103.7	120.1	135.7	150.4	163.4	169.2	179.8	192.4	207.4	223.2
B. Bound Tests											
B1. Real GDP growth	109.7	103.7	102.8	101.0	97.4	92.7	83.3	77.7	74.6	74.7	76.5
B2. Primary balance	109.7	110.9	120.6	119.7	114.8	109.8	99.7	93.7	90.1	89.5	90.6
B3. Exports	109.7	127.9	163.3	160.4	155.5	148.7	134.9	126.7	121.6	120.0	120.8
B4. Other flows 2/	109.7	130.5	151.3	148.7	144.9	139.3	127.4	120.5	115.1	112.0	110.9
B5. One-time 30 percent nominal depreciation	109.7	103.7	85.4	83.9	80.4	76.0	67.5	62.4	59.7	60.9	63.8
B6. Combination of B1-B5	109.7	141.4	129.9	148.5	144.2	138.1	125.6	118.3	112.5	110.6	110.8
C. Tailored Tests											
C1. Combined contingent liabilities	109.7	142.3	146.3	146.0	140.9	135.5	124.0	117.4	113.4	112.7	113.7
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	6.9	5.4	5.4	7.0	7.8	10.9	11.8	10.6	8.9	7.0	4.7
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2019-2039 1/	6.9	5.7	6.2	8.5	10.2	15.1	17.5	16.7	15.5	13.6	10.8
A2. Alternative Scenario : Low Grant Financing	6.9	5.4	5.4	7.4	8.8	12.3	13.5	12.8	12.2	11.4	10.1
B. Bound Tests											
B1. Real GDP growth	6.9	5.4	5.4	7.0	7.8	10.9	11.8	10.6	8.9	7.0	4.7
B2. Primary balance	6.9	5.4	5.5	7.3	8.1	11.2	12.0	11.0	9.6	8.1	5.8
B3. Exports	6.9	6.2	7.3	9.7	10.9	14.9	16.1	14.5	12.6	10.8	7.7
B4. Other flows 2/	6.9	5.4	5.8	7.7	8.6	11.6	12.4	11.2	10.7	9.7	7.2
B5. One-time 30 percent nominal depreciation	6.9	5.4	5.4	6.7	7.6	10.6	11.5	10.4	8.7	6.0	3.8
B6. Combination of B1-B5	6.9	5.8	6.7	8.6	9.6	13.1	14.1	12.7	12.2	9.9	7.1
C. Tailored Tests											
C1. Combined contingent liabilities	6.9	5.4	6.0	7.6	8.5	11.6	12.4	11.2	9.5	7.5	5.2
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	10.8	8.1	7.8	9.6	10.2	13.4	14.2	12.7	10.6	8.3	5.5
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2019-2039 1/	10.8	8.6	8.9	11.7	13.2	18.6	21.2	20.0	18.4	16.1	12.7
A2. Alternative Scenario : Low Grant Financing	10.8	8.1	7.8	10.2	11.4	15.1	16.3	15.4	14.6	13.5	11.9
B. Bound Tests											
B1. Real GDP growth	10.8	8.1	7.8	10.2	11.4	15.1	16.3	15.4	14.6	13.5	11.9
B2. Primary balance	10.8	10.2	12.3	15.2	16.1	21.2	22.4	20.1	16.8	13.1	8.7
B3. Exports	10.8	8.1	8.0	10.0	10.6	13.8	14.5	13.1	11.4	9.6	6.8
B4. Other flows 2/	10.8	8.2	8.1	10.2	10.8	14.0	14.7	13.2	11.5	9.8	6.8
B5. One-time 30 percent nominal depreciation	10.8	8.1	8.4	10.6	11.2	14.3	15.0	13.4	12.8	11.5	8.5
B6. Combination of B1-B5	10.8	10.2	9.8	11.5	12.4	16.5	17.5	15.6	13.0	8.9	5.6
C. Tailored Tests											
C1. Combined contingent liabilities	10.8	8.1	8.7	10.6	11.1	14.2	14.9	13.4	11.3	8.9	6.1
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/ 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.

2/ Includes official and private transfers and FDI.

Table 4. Central African Republic: Sensitivity Analysis for Key Indicators of Public Debt, 2019-29
(percent)

	Projections										
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
PV of Debt-to-GDP Ratio											
Baseline	27.1	23.6	22.4	20.8	18.9	17.1	14.9	13.8	13.0	12.8	12.8
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2019-2039 1/	27	25	25	24	23	22	20	20	19	18	18
A2. Alternative Scenario : Low Grant Financing	27	24	25	26	26	27	27	28	29	31	33
B. Bound Tests											
B1. Real GDP growth	27	35	45	45	46	45	44	46	47	50	53
B2. Primary balance	27	26	26	24	22	20	18	16	16	15	15
B3. Exports	27	25	25	24	22	20	17	16	15	15	15
B4. Other flows 2/	27	28	30	28	26	24	21	20	19	18	18
B5. One-time 30 percent nominal depreciation	27	32	29	26	24	21	18	15	14	13	12
B6. Combination of B1-B5	27	27	29	27	25	24	21	20	19	18	18
C. Tailored Tests											
C1. Combined contingent liabilities	27	32	30	28	26	24	21	20	19	18	18
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.
Public debt benchmark	35	35	35	35	35	35	35	35	35	35	35
PV of Debt-to-Revenue Ratio											
Baseline	129.8	123.8	128.2	122.2	110.1	99.0	86.5	80.3	76.4	75.6	75.8
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2019-2039 1/	130	132	139	136	128	119	111	106	102	100	99
A2. Alternative Scenario : Low Grant Financing	19.666	14.4053	11.2866	15.2563	16.6601	20.342	21.4524	19.962	19.5191	18.7979	18.0228
B. Bound Tests											
B1. Real GDP growth	130	164	208	219	219	218	215	224	236	252	270
B2. Primary balance	130	135	147	140	128	116	102	96	91	90	89
B3. Exports	130	129	145	139	126	114	101	94	90	88	88
B4. Other flows 2/	130	145	170	164	149	136	122	115	110	107	105
B5. One-time 30 percent nominal depreciation	130	174	172	161	145	125	105	93	83	77	73
B6. Combination of B1-B5	130	139	155	148	136	128	114	107	103	103	103
C. Tailored Tests											
C1. Combined contingent liabilities	130	170	171	163	150	137	122	115	110	109	109
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	19.7	14.4	8.7	11.3	12.0	14.5	15.0	13.5	12.2	10.7	9.2
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2019-2039 1/	20	15	9	12	13	16	17	16	15	13	11
A2. Alternative Scenario : Low Grant Financing	19.666	14.4053	11.2866	15.2563	16.6601	20.342	21.4524	19.962	19.5191	18.7979	18.0228
B. Bound Tests											
B1. Real GDP growth	20	16	12	19	21	25	26	25	24	23	23
B2. Primary balance	20	14	11	15	14	15	15	14	13	12	10
B3. Exports	20	14	9	12	12	15	15	14	13	12	10
B4. Other flows 2/	20	14	9	12	13	15	16	14	14	13	11
B5. One-time 30 percent nominal depreciation	20	15	10	13	14	17	18	16	14	12	10
B6. Combination of B1-B5	20	15	10	14	15	18	19	17	16	14	13
C. Tailored Tests											
C1. Combined contingent liabilities	20	14	17	17	14	15	16	14	13	11	10
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.

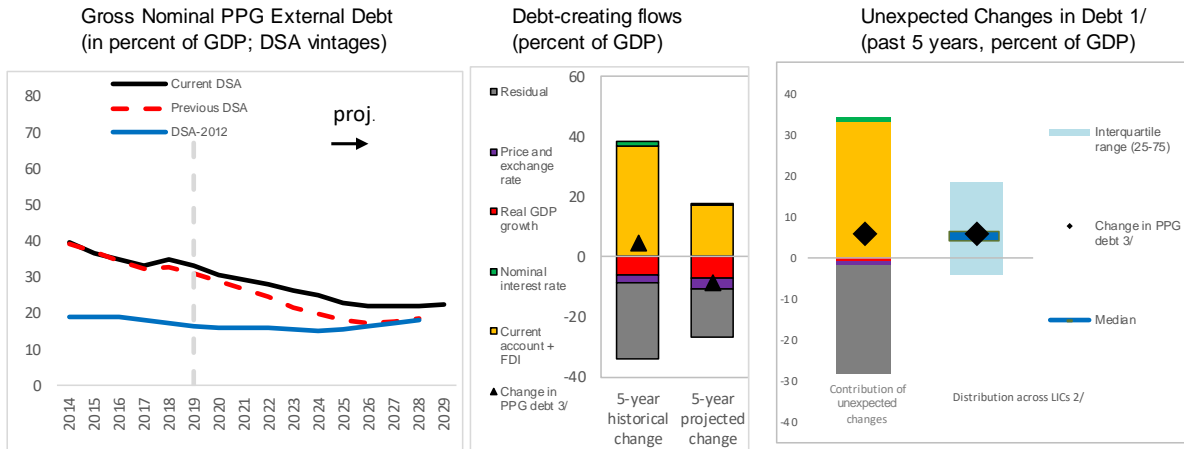
Sources: Country authorities; and staff estimates and projections.

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

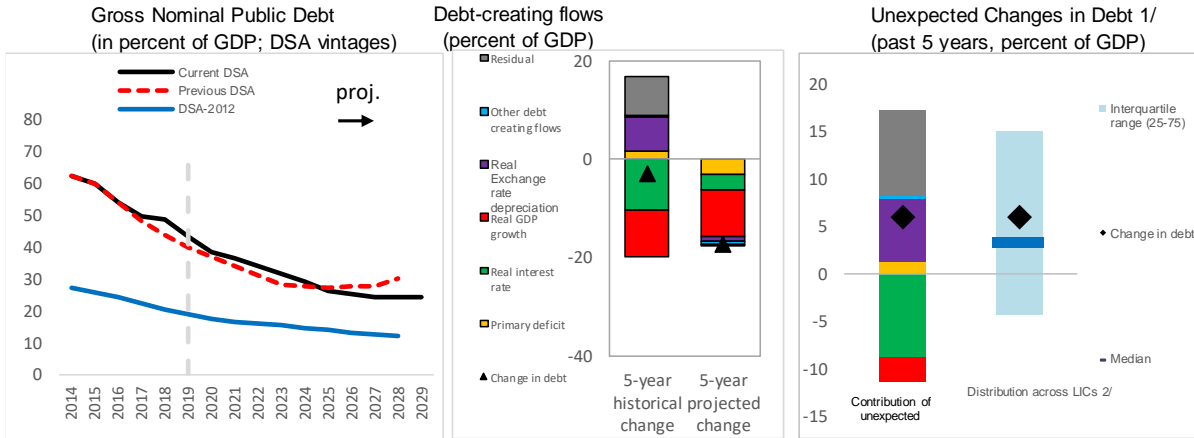
2/ Includes official and private transfers and FDI.

Figure 3. Central African Republic: Drivers of Debt Dynamics – Baseline Scenario

External Debt



Public debt



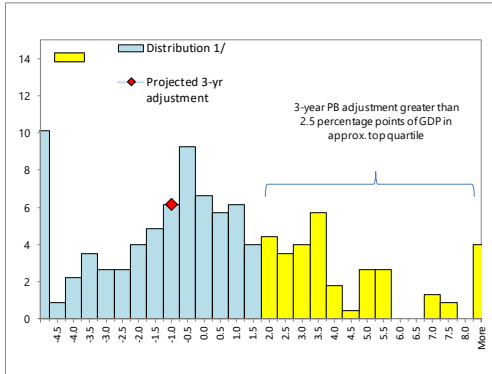
1/ Difference between anticipated and actual contributions on debt ratios.

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.

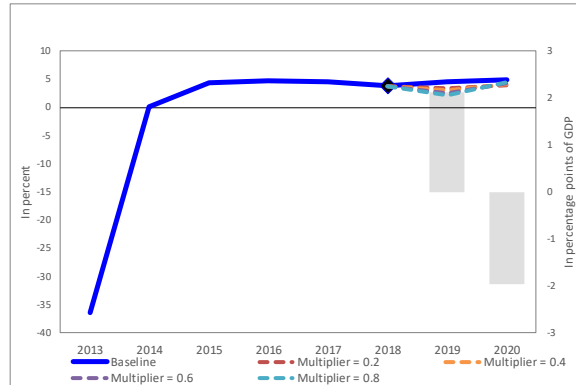
Figure 4. Central African Republic: Realism tools

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



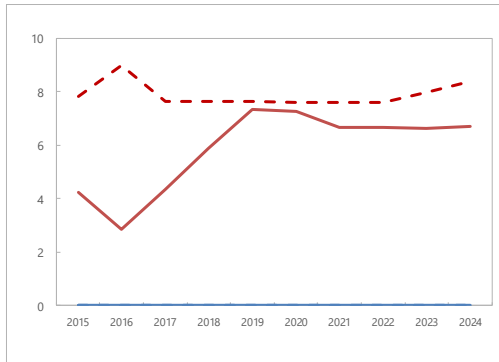
1/ Data cover Fund-supported programs for LICs (excluding emergency financing) approved since 1990. The size of 3-year adjustment from program inception is found on the horizontal axis; the percent of sample is found on the vertical axis.

Fiscal Adjustment and Possible Growth Paths 1/



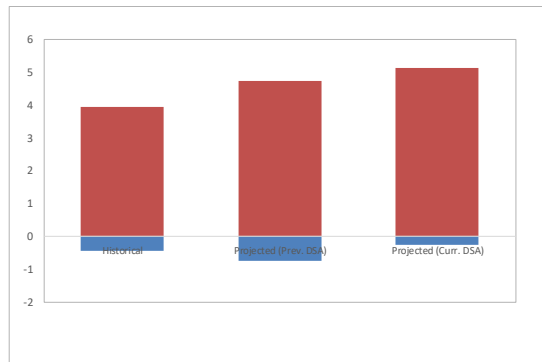
1/ Bars refer to annual projected fiscal adjustment (right-hand side scale) and lines show possible real GDP growth paths under different fiscal multipliers (left-hand side scale).

**Public and Private Investment Rates
(% of GDP)**



— Gov. Invest. - Prev. DSA — Gov. Invest. - Current DSA
- - - Priv. Invest. - Prev. DSA - - - Priv. Invest. - Current DSA

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



■ Contribution of other factors
■ Contribution of government capital