CENTRAL AFRICAN REPUBLIC

December 21, 2020

FIRST AND SECOND REVIEWS UNDER THE EXTENDED CREDIT FACILITY ARRANGEMENT AND REQUEST FOR WAIVERS OF NON-OBSERVANCE OF PERFORMANCE CRITERIA —DEBT SUSTAINABILITY ANALYSIS

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Prepared by the staffs of the International Monetary Fund (IMF) and the International Development Association (IDA)[1]

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 judgement	*No*

The Central African Republic (C.A.R.) remains at high risk of external debt distress and overall high risk of debt distress, unchanged from the most recent DSA.[2] Solvency indicators have deteriorated relative to the previous DSAs, and liquidity indicators breach their thresholds under the baseline scenario. Sensitivity of debt indicators to standard stress tests, increased uncertainty of the economic outlook owing to the pandemic, a volatile security environment, and sizeable contingent liabilities are all considerations supporting the high-risk assessment. Debt is projected to remain sustainable over the medium term provided that the policies and structural reforms to which the authorities committed to under the ECF arrangement continue to be implemented. Given the difficult debt situation, staff recommend that the government continues to rely heavily on grant financing, with concessional debt financing to be considered in exceptional cases.[3]

[1] This DSA has been prepared jointly by the IMF and World Bank, following the revised LIC-DSF Framework and Guidance Note (2017) in effect as of July 1, 2018.

[2] Country Report No. 20/137, April 2020.

[3] With a score of 2.42, C.A.R.'s composite indicator signals a weak debt-carrying capacity (Text Table 3).

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 (Text Table 1).

2. **Compared to the last DSA, the end-2019 debt stock has been revised downward, while some moderate contingent liabilities are likely to materialize.** The downward revision of the public debt, from 47.8 percent of GDP to 47.2 percent at end 2019, primarily reflects the latest debt restructuring from China, FIDA and Telco BG for a total of CFAF 8 billion.

3. [4] **Since then, about CFAF 6 billion in additional arrears have been identified, including about CFAF 3 billion in pensions arrears, CFAF 2 billion in salary arrears to former state agents of Bangui Municipality and the Parliament, and CFAF 1 billion in commercial arrears.**

4. **The implementation of the new legal framework governing SOEs will improve their financial oversight, which, along with other steps, should lead to better debt coverage going forward.** The implementing decrees of the new legal framework governing the functioning of public and quasi-public institutions and enterprises were adopted at the beginning of October and the debt unit continues to improve its capacity through training and better IT systems supported by development partners. Better communication between the debt unit and the Treasury should also help avoiding the recurrence of recent temporary delays in the repayment of external debt obligations.[5]

5. **The contingent liabilities stress test assumes a shock of 15 percent of GDP for its tailored portion (Text Table 1).** This significant amount reflects the uncertainty about non-guaranteed SOE debt and arrears, potential additional domestic arrears, and financial market risks. 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 is kept at the minimum default value of 5 percent of GDP given the small size and depth and relatively robust financial position of the financial sector in C.A.R.

[4] Excluding the pre-HIPC arrears, the public debt stock amounted to 37.9 percent of GDP at end-2019.

[5] The WB's SDFP supports government's effort to strengthen the governance and oversight of SOEs, including audit of SOEs' financial statements and reporting of debt.

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

	Subsectors of the public sector	Sub-sectors covered
1	Central government	X
2	State and local government	X
3	Other elements in the general government	
4	o/w: Social security fund	X
5	o/w: Extra budgetary funds (EBFs)	
6	Guarantees (to other entities in the public and private sector, including to SOEs)	X
7	Central bank (borrowed on behalf of the government)	X
8	Non-guaranteed SOE debt	

1	**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
2	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
3	SoE's debt (guaranteed and not guaranteed by the government) 1/	2	percent of GDP	5.0	Limited information on SOE's financial position
4	PPP	35	percent of PPP stock	0.0	
5	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

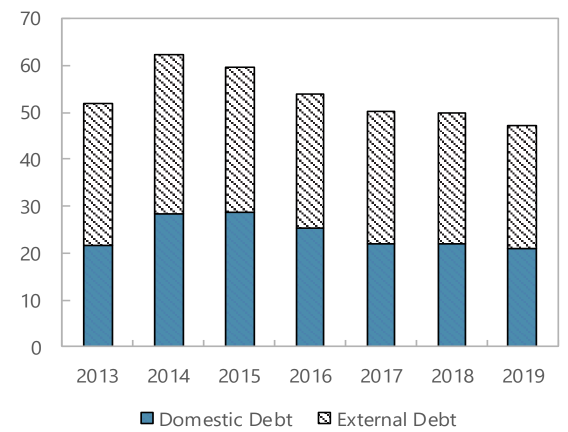
6. **C.A.R.'s public and publicly guaranteed (PPG) debt has continued to gradually decline.** (Text Figure 1). The end-2019 public debt to GDP ratio is now estimated at 47.2 percent (compared to 50 percent a year earlier), with the external debt to GDP ratio remaining steady at 36.1 percent at end 2019 (Text Figure 1).[6,7] However, the public debt to GDP ratio is now expected to slightly increase this year because of the Covid-19 pandemic, before resuming its downward trend from 2021 onwards.

[6] 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.

[7] Excluding pre-HIPC arrears, the external debt stock amounted to 26.8 percent of GDP at end-2019. Pre-HIPC arrears are owed to Non- Paris Club creditors (Argentina, Equatorial Guinea, Iraq, Libya, and Taiwan, province of China). These arrears are expected to be rescheduled on HIPC terms. Authorities are pursuing their good faith efforts in contacting those Non-Paris Club creditors.

7. The government has not contracted any new loan since the last DSA. Beside the RCF disbursement already incorporated in the DSA of April 2020, there has been no new loan contracted or disbursed this year. The disbursements have been limited to US$ 9.5 million from the existing World Bank loan pertaining to the CEMAC transportation project, which has been extended to February 2020. The authorities temporarily accumulated some external debt arrears to IFAD, which have since been repaid. They are planning to strengthen their debt management procedures to avoid the accumulation of such arrears in the future.

Text Figure 1. Central African Republic: Evolution of Public Sector Debt, 2013–19
(percent of GDP)



Sources: IMF staff estimates and country authorities

8. Pre-HIPC arrears and debt owed to multilateral creditors continue to account for the bulk of external debt. Multilateral creditors, mainly the IMF and the World Bank, hold almost half of the external debt. Since April 2020, C.A.R. has benefited from a debt service relief from the IMF under the CCRT for an initial period of 6 months that was extended for another 6 months, for a total amount of US$ 8.1 million. Bilateral debt amounts to 6.7 percent of GDP, with China, Congo, India, and Saudi Arabia being the main creditors.[8]. The average nominal interest rate stood at 0.5 percent for external debt in 2020, reflecting the preponderance of concessional borrowing. More than 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 2.9 percent of GDP.

[8] India, China, and Saudi Arabia participated in the G20 Debt Service Suspension Initiative to C.A.R., along with Kuwait for an amount of US$ 3.5 million from May to December 2020.

Text Table 2. Central African Republic: Composition of Public Sector Debt, 2019
(percent of GDP)

External Debt		Domestic debt	
Total	36.1	Total	11.1
Of which :		Of which:	
Multilateral	17.2	Central Bank	6.0
IMF	9.8	Arrears	2.9
World Bank	4.8	Other	2.2
Others	2.6		
Bilateral	6.7		
Private	2.9		
Pre-HIPC	9.3		

Source: IMF Staff calculations and country authorities

UNDERLYING MACROECONOMIC ASSUMPTIONS

9. Compared with the RCF, short-term growth projections have been revised downward, reflecting the more protracted economic impact of the pandemic. Risks are tilted to the downside, owing to a large extent to the uncertainty surrounding the pandemic.

- The current account balance is expected to deteriorate in 2020 owing to the pandemic and an increase in externally financed public investment but would improve over the medium term thanks to a gradual increase in exports.
- After increasing sharply in 2020 owing to the impact of the pandemic on doemstic revenue and additional spedning to contain it, the domestic primary deficit would decline and stabilize at 2½ percent of GDP over the medium term**.** Grant financing would gradually decline.
- After stagnating in 2020, real GDP growth is expected to recover gradually to 5 percent over the medium term

Text Table 3. Central African Republic: Macroeconomic Assumptions

	DSA-RCF		DSA-update	
	2020-25 average	2026-40 average	2020-25 average	2026-40 average
	(% of GDP)		(% of GDP)	
GDP growth (percent change)	4.2	3.6	3.9	4.3
GDP deflator (percent change)	2.8	2.7	2.4	2.5
Non-interest current account balance	-5.6	-3.0	-6.0	-3.4
Exports	14.9	15.3	14.7	15.5
Primary balance	-0.8	-1.0	-0.9	-1.0
Revenues and grants	18.2	16.5	18.5	16.6

Source: IMF Staff estimates and projections

10. There has been no major changes to the long-term macroeconomic projections since the last DSA (Text Table 2).

- External sector projections remain broadly unchanged. Current transfers are expected to decline and FDI to increase gradually from a low level. Overall, the non-interest current account deficit is expected to reach 3 percent of GDP in the long run owing to the expected increase in exports as a result of reforms geared to improving diversifications and adding value to exisitng exports.

- Domestic revenues are assumed to follow a gradual upward trend, reaching 14 percent of GDP at the end of the projection period. The improvement of domestic revenue collection in the long run is attributed to the implementation of fiscal structural benchmarks (from digitalization to legislative strengthening) and receipt of technical assistance in improving data collection and standards. The fiscal primary surplus is expected to turn into a deficit of 1 percent of GDP over the long run as grant financing gradually declines.

- After increasing sharply in the short run, budget grants are assumed to decline in the long run, from an average of 7.5 percent of GDP during 2020–25 to 2 percent of GDP by 2040. 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.

- Long-run growth projections (2026–40) have been revised slightly upward, from 3.6 percent in the previous DSA to 4.3 percent to better align them with those of comparator countries. This implies modest per-capita GDP growth as population growth is estimated at about 2.5 percent over the long term.

11. The realism tools do not flag significant risks around the baseline scenario (Figures 3 and 4). Both external PPG and public debt projections are in line with the previous DSA. Factors contributing to debt dynamics appear broadly in line with historical contributions. Unexpected changes in external debt are not far from the median for all LICs. The envisaged fiscal path is 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. Hence, owing to higher program grants, the primary balance is expected to be essentially the same in 2020 s in 2018, while fiscal policy is likely to prove more expansionary (with lower domestic revenue and significant higher spending).

Text Table 4. 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	2.524	0.97	40%
Real growth rate (in percent)	2.719	4.188	0.11	5%
Import coverage of reserves (in percent)	4.052	31.303	1.27	52%
Import coverage of reserves^2 (in percent)	-3.990	9.799	-0.39	-16%
Remittances (in percent)	2.022	0.000	0.00	0%
World economic growth (in percent)	13.520	3.499	0.47	19%
CI Score			2.44	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, Word Bank *Country Policy and Institutional Assessment*, and country authorities

DEBT SUSTAINABILITY

A. External Debt Sustainability Analysis

12. Relative to the previous DSAs, the solvency has deteriorated as the PV of external debt-to-export ratio breaches the threshold under the current baseline scenario (Figure 1). Under the baseline scenario, the present values (PV) of the and debt-to-exports ratios breach the threshold and decline from their initial level over the projection period. The PV of the external debt-to-GDP ratio remains below the threshold under the baseline scenario and would breach the thresholds for 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 both debt ratios, mainly because of the large shocks and conflicts that occurred in the past (such as the 2013 crisis).

13. Liquidity indicators of the external PPG debt breach their thresholds for about five years under the baseline scenario (Figure 1). The external debt service-to-exports ratio breaches the threshold from 2024–28, driven by a significant 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, even if the breach is of a slightly lesser magnitude. While both breaches are similar to those in the previous DSA of April 2020, they have been accentuated by the RCF disbursement when compared to those at the time of the ECF request. These breaches have also been marginally accentuated compared to the previous DSA of April 2020, because of the increase in the debt service in 2022-24 following the debt service suspension (DSSI) that was postponed to these years, and of the lower revenue in years 2024-28 due to the compound effect of lower growth rates in 2020 and 2021 compared to the RCF DSA. 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).

B. Public Debt Sustainability Analysis

The total PPG debt indicator remains well below its benchmark under 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 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 treshold for the PV of the debt-to-GDP ratio and lead to a significant increase of the PV of the debt-to-revenue ratio.[9] It is also worth noting that public debt indicators could worsen owing to contingent liabilities. 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 have deteriorated relative to the previous DSAs. C.A.R.'s capacity to service debt is severly 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 under the baseline scenario.

15. A number of other considerations support the high-risk assessment. Macroeconomic projections are highly uncertain, as a resurgence of the pandemic cannot be excluded and the security environment remains voltile. Standardized stress tests also underline the sensitivity of the debt indicators to assumptions. Lower export growth or further revisions to real GDP would trigger a significant deterioration of debt sustainability indicators with multiple threshold breaches. In addition, sizeable contingent liabilities, mostly related to the SOEs, could materialize.

16. The authorities broadly agreed with this assessment. They shared the view that C.A.R.'s capacity to service debt is limited and are committed to strengthening debt monitoring, to mobilizing domestic revenues and grant financing to cover their financing needs to the largest extent possible.

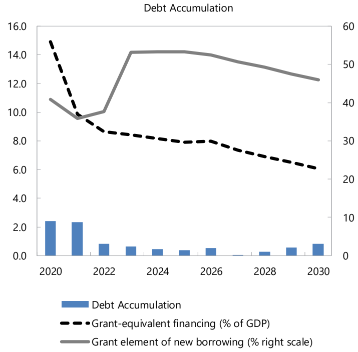
[9] The shock assumes real GDP growth of one standard deviation below its historical average in the second and third year of the projection period.

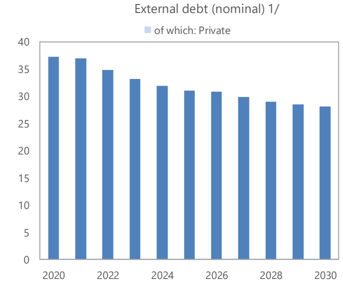
Table 1. Central African Republic: External Debt Sustainability Framework, Baseline Scenario, 2017–40

(Percent of GDP, unless otherwise indicated)

	Actual			Projections								Average 8/	
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2030	2040	Historical	Projections
External debt (nominal) 1/	**35.5**	**37.2**	**36.1**	**37.3**	**36.9**	**34.8**	**33.2**	**31.9**	**31.0**	**28.1**	**23.4**	**28.6**	**31.9**
of which: public and publicly guaranteed (PPG)	**35.5**	**37.2**	**36.1**	**37.3**	**36.9**	**34.8**	**33.2**	**31.9**	**31.0**	**28.1**	**23.4**	**28.6**	**31.9**
Change in external debt	0.4	1.8	-1.1	1.2	-0.3	-2.2	-1.6	-1.2	-0.9	-0.4	0.0		
Identified net debt-creating flows	**2.9**	**3.9**	**3.8**	**7.1**	**3.9**	**2.6**	**2.5**	**2.6**	**2.8**	**0.0**	**-0.3**	**6.0**	**2.5**
Non-interest current account deficit	**7.7**	**7.8**	**4.8**	**7.4**	**5.9**	**5.4**	**5.4**	**5.3**	**5.4**	**2.9**	**2.8**	**7.1**	**5.0**
Deficit in balance of goods and services	16.4	17.8	18.3	19.4	17.0	16.0	15.5	15.4	14.9	11.2	9.0	**15.0**	**14.5**
Exports	15.9	15.9	15.8	13.6	14.2	15.0	15.0	15.0	15.3	16.1	14.5		
Imports	32.4	33.7	34.1	33.0	31.2	31.0	30.5	30.3	30.2	27.3	23.5		
Net current transfers (negative = inflow)	-8.8	-9.9	-13.6	-12.0	-11.1	-10.5	-10.1	-9.9	-9.4	-8.1	-5.8	**-7.8**	**-9.4**
of which: official	-3.2	-4.4	-7.3	-7.4	-5.6	-5.2	-4.7	-4.2	-3.8	-3.8	-3.0		
Other current account flows (negative = net inflow)	0.0	-0.1	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.2	-0.2	-0.4	**-0.1**	**-0.1**
Net FDI (negative = inflow)	**-0.8**	**-0.8**	**-1.1**	**-0.4**	**-1.0**	**-1.3**	**-1.4**	**-1.4**	**-1.3**	**-1.9**	**-2.4**	**-1.3**	**-1.4**
Endogenous debt dynamics 2/	**-4.1**	**-3.1**	**0.2**	**0.2**	**-1.0**	**-1.5**	**-1.4**	**-1.3**	**-1.3**	**-0.9**	**-0.6**		
Contribution from nominal interest rate	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3		
Contribution from real GDP growth	-1.4	-1.2	-1.1	0.0	-1.2	-1.7	-1.6	-1.5	-1.5	-1.1	-0.9		
Contribution from price and exchange rate changes	-2.8	-2.0	1.2	...	...	...	...	...	...	...	...		
Residual 3/	**-2.5**	**-2.2**	**-5.0**	**-6.0**	**-4.2**	**-4.7**	**-4.1**	**-3.9**	**-3.7**	**-0.4**	**0.3**	**-3.2**	**-3.2**
of which: exceptional financing	0.2	0.0	0.0	-0.5	-0.4	0.0	0.0	0.0	0.0	0.0	0.0		
Sustainability indicators													
PV of PPG external debt-to-GDP ratio	**...**	**...**	**18.2**	**20.1**	**20.2**	**19.4**	**18.6**	**17.7**	**16.8**	**13.9**	**14.6**		
PV of PPG external debt-to-exports ratio	**...**	**...**	**115.2**	**147.9**	**142.3**	**129.2**	**123.9**	**118.1**	**110.0**	**86.4**	**100.2**		
PPG debt service-to-exports ratio	**1.7**	**3.9**	**3.7**	**6.6**	**6.1**	**8.1**	**8.3**	**10.8**	**12.0**	**7.6**	**5.8**		
PPG debt service-to-revenue ratio	**3.6**	**7.0**	**6.6**	**10.5**	**9.3**	**11.8**	**11.6**	**14.8**	**16.5**	**10.2**	**6.1**		
Gross external financing need (Million of U.S. dollars)	148.8	173.7	96.4	182.2	148.5	149.4	156.7	181.8	205.5	105.8	114.1		
Key macroeconomic assumptions													
Real GDP growth (in percent)	4.5	3.8	3.0	0.0	3.5	5.0	5.0	5.0	5.0	4.2	4.2	**-0.2**	**4.2**
GDP deflator in US dollar terms (change in percent)	8.6	6.0	-3.0	2.1	7.4	3.2	2.8	2.5	2.4	2.5	2.6	**2.5**	**2.9**
Effective interest rate (percent) 4/	0.4	0.5	0.4	0.5	0.5	0.5	0.5	0.6	0.7	0.8	1.2	**1.1**	**0.7**
Growth of exports of G&S (US dollar terms, in percent)	0.3	10.2	-1.3	-11.7	15.9	14.7	7.7	7.5	9.7	6.8	5.7	**6.1**	**7.7**
Growth of imports of G&S (US dollar terms, in percent)	6.8	14.6	1.0	-1.2	5.2	7.6	6.2	7.0	7.1	4.6	5.8	**7.8**	**5.1**
Grant element of new public sector borrowing (in percent)	...	...	...	40.8	35.9	37.6	53.1	53.3	53.2	46.0	33.6	**...**	**47.3**
Government revenues (excluding grants, in percent of GDP)	7.8	8.9	8.7	8.5	9.3	10.2	10.7	10.9	11.1	12.0	13.7	**8.0**	**10.8**
Aid flows (in Million of US dollars) 5/	14434.2	24576.8	9719.7	346.6	238.7	236.3	235.2	233.7	238.4	251.7	230.0		
Grant-equivalent financing (in percent of GDP) 6/	...	...	...	14.9	9.8	8.7	8.4	8.2	7.9	6.1	2.9	**...**	**8.4**
Grant-equivalent financing (in percent of external financing) 6/	...	...	...	86.3	82.8	89.2	90.2	87.5	85.2	82.0	68.0	**...**	**84.8**
Nominal GDP (Million of US dollars)	2,072	2,280	2,277	2,324	2,584	2,801	3,023	3,252	3,496	4,906	9,518		
Nominal dollar GDP growth	13.5	10.0	-0.1	2.1	11.1	8.4	7.9	7.6	7.5	6.8	6.9	**2.1**	**7.2**
Memorandum items:													
PV of external debt 7/	...	...	18.2	20.1	20.2	19.4	18.6	17.7	16.8	13.9	14.6		
In percent of exports	...	...	115.2	147.9	142.3	129.2	123.9	118.1	110.0	86.4	100.4		
Total external debt service-to-exports ratio	1.7	3.9	3.7	6.6	6.1	8.1	8.3	10.8	12.0	7.6	5.8		
PV of PPG external debt (in Million of US dollars)			413.4	468.3	522.4	543.9	561.5	575.1	587.9	681.4	1385.1		
(PVt-PVt-1)/GDPt-1 (in percent)				2.4	2.3	0.8	0.6	0.5	0.4	0.8	1.3		
Non-interest current account deficit that stabilizes debt ratio	7.3	6.0	5.9	6.2	6.3	7.6	7.0	6.6	6.3	3.2	2.7		

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 of local currency-denominated external debt in total external debt.

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.

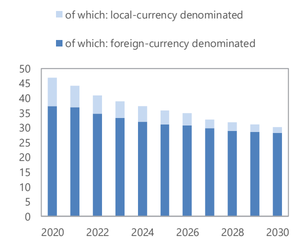
Table 2. Central African Republic: Public Sector Debt Sustainability Framework, Baseline Scenario 2017–40

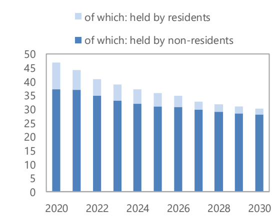
(Percent of GDP, unless otherwise indicated)

	Actual			Projections								Average 6/	
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2030	2040	Historical	Projections
Public sector debt 1/	**50.3**	**50.0**	**47.2**	**46.8**	**44.1**	**40.9**	**38.8**	**37.2**	**35.8**	**30.2**	**27.1**	**44.6**	**36.7**
of which: external debt	**35.5**	**37.2**	**36.1**	**37.3**	**36.9**	**34.8**	**33.2**	**31.9**	**31.0**	**28.1**	**23.4**	**28.6**	**31.9**
Change in public sector debt	-3.6	-0.2	-2.9	-0.4	-2.7	-3.2	-2.1	-1.7	-1.3	-0.8	0.3		
Identified debt-creating flows	**-7.9**	**0.0**	**-3.0**	**1.1**	**-2.0**	**-2.9**	**-2.0**	**-1.6**	**-1.3**	**-0.8**	**0.3**	**0.7**	**-1.2**
Primary deficit	**0.7**	**0.6**	**-1.8**	**2.1**	**1.0**	**0.1**	**0.3**	**0.8**	**1.3**	**0.9**	**1.5**	**0.8**	**0.9**
Revenue and grants	12.8	16.6	18.3	21.8	18.0	18.3	18.1	17.7	17.4	16.9	15.9	**13.9**	**17.9**
of which: grants	5.0	7.8	9.6	13.3	8.7	8.0	7.4	6.8	6.3	4.9	2.2		
Primary (noninterest) expenditure	13.5	17.2	16.6	23.9	18.9	18.3	18.3	18.6	18.7	17.8	17.5	**14.6**	**18.8**
Automatic debt dynamics	**-8.6**	**-0.8**	**-1.4**	**-0.5**	**-2.3**	**-2.8**	**-2.6**	**-2.4**	**-2.2**	**-1.6**	**-1.2**		
Contribution from interest rate/growth differential	-5.2	-2.2	-2.2	-0.5	-2.3	-2.8	-2.6	-2.4	-2.2	-1.6	-1.2		
of which: contribution from average real interest rate	-2.8	-0.3	-0.8	-0.5	-0.7	-0.7	-0.6	-0.5	-0.5	-0.4	-0.1		
of which: contribution from real GDP growth	-2.3	-1.8	-1.4	0.0	-1.6	-2.1	-2.0	-1.8	-1.8	-1.2	-1.1		
Contribution from real exchange rate depreciation	-3.5	1.3	0.9	...	...	...	...	...	...	...	...		
Other identified debt-creating flows	**0.0**	**0.2**	**0.1**	**-0.5**	**-0.6**	**-0.2**	**0.3**	**-0.1**	**-0.3**	**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 arrears	0.0	0.0	0.0	0.3	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	-0.3	-0.4	0.0	0.0	0.0	0.0	0.0	0.0		
Change in deposits	0.0	0.2	0.1	-0.5	-0.3	-0.2	0.3	-0.1	-0.3	0.0	0.0		
Residual	**4.3**	**-0.2**	**0.1**	**-1.4**	**-0.7**	**-0.2**	**-0.1**	**-0.1**	**0.0**	**0.0**	**0.0**	**1.9**	**-0.4**
Sustainability indicators													
PV of public debt-to-GDP ratio 2/	**...**	**...**	**29.4**	**29.1**	**27.3**	**25.6**	**24.3**	**22.9**	**21.7**	**16.0**	**18.2**		
PV of public debt-to-revenue and grants ratio	**...**	**...**	**160.1**	**133.7**	**152.0**	**140.1**	**134.2**	**129.5**	**124.4**	**94.6**	**114.4**		
Debt service-to-revenue and grants ratio 3/	**9.1**	**18.7**	**17.1**	**12.4**	**17.5**	**12.7**	**13.2**	**17.5**	**20.8**	**15.6**	**16.4**		
Gross financing need 4/	1.9	3.9	1.5	4.8	3.7	2.3	2.6	3.9	4.9	3.4	4.1		
Key macroeconomic and fiscal assumptions													
Real GDP growth (in percent)	4.5	3.8	3.0	0.0	3.5	5.0	5.0	5.0	5.0	4.2	4.2	**-0.2**	**4.2**
Average nominal interest rate on external debt (in percent)	0.4	0.5	0.4	0.5	0.5	0.5	0.5	0.6	0.7	0.8	1.3	**1.1**	**0.7**
Average real interest rate on domestic debt (in percent)	-5.3	-0.4	-0.7	-0.2	-0.4	0.1	0.3	0.7	1.1	3.3	5.3	**-1.9**	**1.2**
Real exchange rate depreciation (in percent, + indicates depreciation)	-10.9	4.0	2.4	...	...	...	...	...	...	...	...	**2.9**	**...**
Inflation rate (GDP deflator, in percent)	6.4	1.3	2.4	2.0	2.5	2.5	2.5	2.5	2.5	2.5	2.6	**4.5**	**2.4**
Growth of real primary spending (deflated by GDP deflator, in percent)	22.4	31.9	-0.8	44.3	-18.1	1.6	5.1	6.2	5.9	3.1	4.4	**3.1**	**5.7**
Primary deficit that stabilizes the debt-to-GDP ratio 5/	4.4	0.8	1.1	2.5	3.7	3.2	2.4	2.5	2.6	1.7	1.2	**2.1**	**2.5**
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, 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.

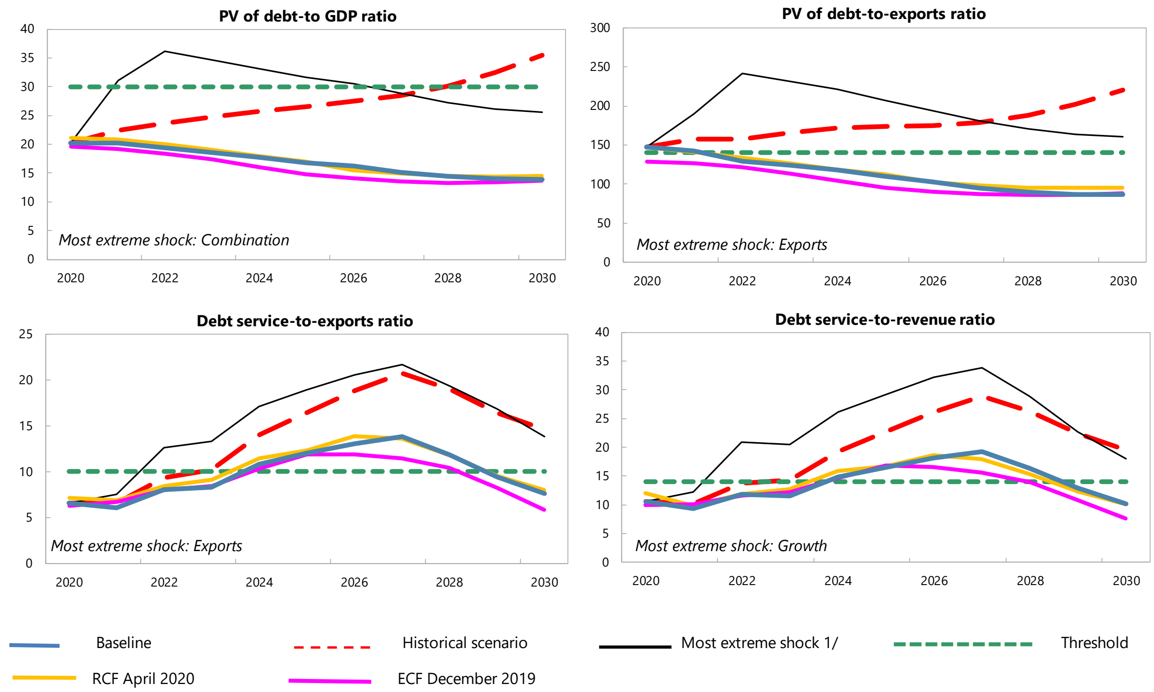
3/ Debt service is defined as the sum of interest and amortization of medium and long-term, and short-term debt.

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 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.

Figure 1. Central African Republic: Indicators of Public and Publicly Guaranteed External Debt under Alternative Scenarios, 2020–30



Customization of Default Settings	Size	Interactions
Tailored Stress		
Combined CL	Yes	
Natural disaster	n.a.	n.a.
Commodity price 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 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	0.7%	0.8%
USD Discount rate	5.0%	5.0%
Avg. maturity (incl. grace period)	30	30
Avg. grace period	6	6

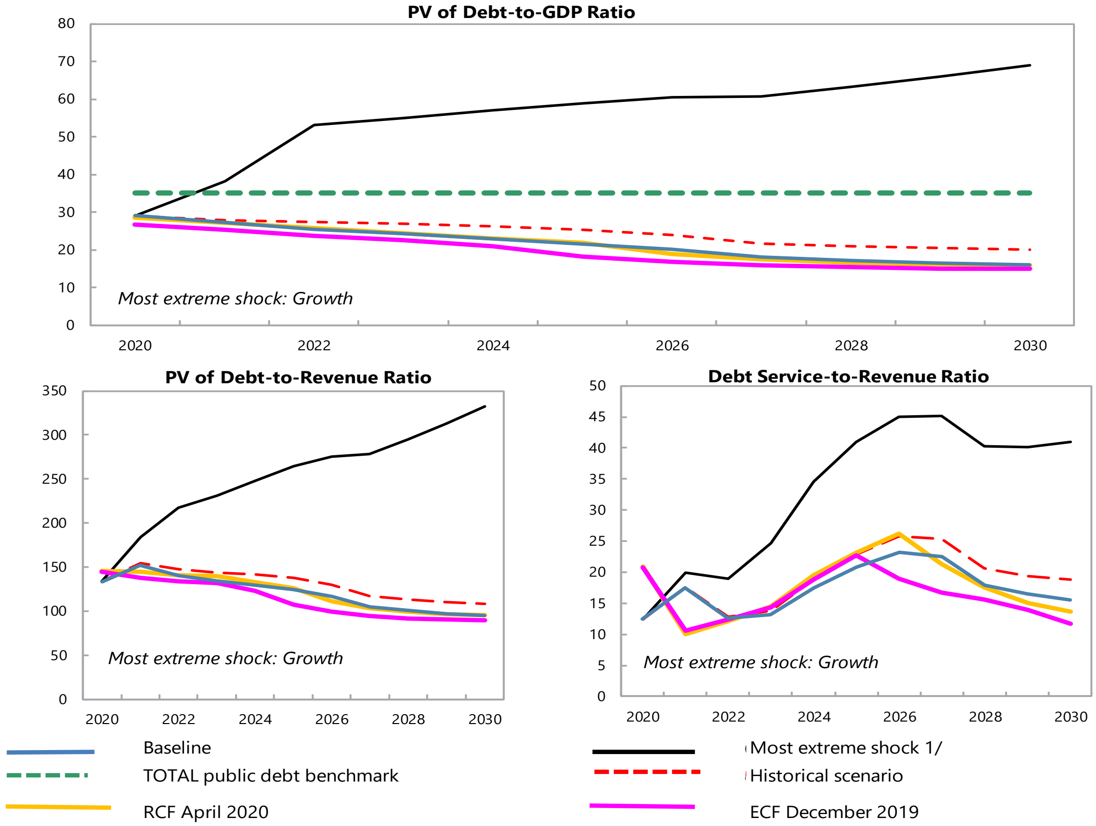
* Note: All the additional financing needs generated by the shocks under the stress tests are assumed to be covered by PPG external MLT debt in the external DSA. Default terms of marginal debt are based on baseline 10-year projections.

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 2030. 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.

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, 2020–30



Borrowing assumptions on additional financing needs resulting from the stress tests*	Default	User defined
Shares of marginal debt		
External PPG medium and long-term	76%	76%
Domestic medium and long-term	8%	8%
Domestic short-term	16%	16%
Terms of marginal debt		
External MLT debt		
Avg. nominal interest rate on new borrowing in USD	0.7%	0.8%
Avg. maturity (incl. grace period)	30	30
Avg. grace period	6	6
Domestic MLT debt		
Avg. real interest rate on new borrowing	5.8%	5.4%
Avg. maturity (incl. grace period)	2	2
Avg. grace period	1	1
Domestic short-term debt		
Avg. real interest rate	2.6%	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 2030. 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.

Table 3. Central African Republic: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2020–30

	Projections 1/										
	2020	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
PV of debt-to GDP ratio											
Baseline	20	20	19	19	18	17	16	15	14	14	14
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2020-2030 2/	20	22	24	25	26	26	27	28	**30**	**33**	**35**
A2. ECF December 2019	20	19	18	17	16	15	14	14	13	13	14
A3. RCF April 2020	21	21	20	19	18	17	16	15	15	14	15
B. Bound Tests											
B1. Real GDP growth	20	26	**34**	**33**	**31**	30	29	27	25	25	25
B2. Primary balance	20	21	21	20	20	19	18	17	16	16	15
B3. Exports	20	22	24	23	22	21	20	19	18	17	17
B4. Other flows 3/	20	24	27	26	25	24	23	22	21	20	19
B5. Depreciation	20	25	21	20	19	18	17	16	15	15	15
B6. Combination of B1-B5	20	**31**	**36**	**35**	**33**	**32**	**31**	29	27	26	26
C. Tailored Tests											
C1. Combined contingent liabilities	20	26	26	25	24	23	23	21	21	20	20
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	**148**	**142**	129	124	118	110	103	95	90	87	86
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2020-2030 2/	**148**	**157**	**157**	**165**	**172**	**173**	**175**	**178**	**188**	**202**	**221**
A2. ECF December 2019	**129**	**127**	**122**	**114**	**105**	**95**	**91**	**87**	**86**	**86**	**88**
A3. RCF April 2020	**147**	**141**	**133**	**127**	**119**	**112**	**103**	**99**	**96**	**95**	**95**
B. Bound Tests											
B1. Real GDP growth	**148**	**142**	129	124	118	110	103	95	90	87	86
B2. Primary balance	**148**	**147**	139	136	131	121	114	106	100	97	96
B3. Exports	**148**	**190**	**241**	**232**	**221**	**207**	**194**	**181**	**171**	**164**	**160**
B4. Other flows 3/	**148**	**172**	**182**	**175**	**167**	**157**	**147**	138	130	124	120
B5. Depreciation	**148**	**142**	110	106	100	93	87	80	75	74	74
B6. Combination of B1-B5	**148**	**204**	**160**	**206**	**197**	**185**	**173**	**161**	**151**	**145**	**142**
C. Tailored Tests											
C1. Combined contingent liabilities	**148**	**182**	**171**	**169**	**163**	**153**	**144**	134	128	125	123
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	7	6	8	8	**11**	**12**	**13**	**14**	**12**	9	8
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2020-2030 2/	7	7	9	**10**	**14**	**16**	**19**	**21**	**19**	**16**	**15**
A2. ECF December 2019	6	7	8	8	**10**	**12**	**12**	**11**	**10**	8	6
A3. RCF April 2020	7	7	8	9	**11**	**12**	**14**	**14**	**12**	10	8
B. Bound Tests											
B1. Real GDP growth	7	6	8	8	**11**	**12**	**13**	**14**	**12**	9	8
B2. Primary balance	7	6	8	8	**11**	**12**	**13**	**14**	**12**	**10**	8
B3. Exports	7	8	**13**	**13**	**17**	**19**	**21**	**22**	**19**	**17**	**14**
B4. Other flows 3/	7	6	8	9	**11**	**13**	**14**	**14**	**14**	**12**	**10**
B5. Depreciation	7	6	8	8	**11**	**12**	**13**	**14**	**12**	8	7
B6. Combination of B1-B5	7	7	**11**	**12**	**15**	**17**	**18**	**19**	**18**	**15**	**12**
C. Tailored Tests											
C1. Combined contingent liabilities	7	6	9	9	**11**	**13**	**14**	**14**	**12**	10	8
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	9	12	12	**15**	**17**	**18**	**19**	**16**	13	10
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2020-2030 2/	10	10	14	**14**	**19**	**23**	**26**	**29**	**26**	**22**	**20**
A2. ECF December 2019	10	10	12	12	**15**	**17**	**17**	**16**	14	11	8
A3. RCF April 2020	12	10	12	13	**16**	**17**	**19**	**18**	**15**	12	10
B. Bound Tests											
B1. Real GDP growth	10	12	**21**	**20**	**26**	**29**	**32**	**34**	**29**	**23**	**18**
B2. Primary balance	10	9	12	12	**15**	**17**	**18**	**19**	**17**	14	11
B3. Exports	10	9	12	12	**16**	**17**	**19**	**20**	**18**	**15**	12
B4. Other flows 3/	10	9	12	13	**16**	**17**	**19**	**20**	**19**	**17**	14
B5. Depreciation	10	12	**15**	14	**18**	**20**	**22**	**24**	**20**	**14**	11
B6. Combination of B1-B5	10	12	**19**	**18**	**23**	**26**	**28**	**30**	**28**	**23**	**18**
C. Tailored Tests											
C1. Combined contingent liabilities	10	9	13	12	**16**	**17**	**19**	**20**	**17**	13	11
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, 2020–30

	Projections 1/										
	2020	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
					PV of Debt-to-GDP Ratio						
Baseline	29	27	26	24	23	22	20	18	17	17	16
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2020-2030 2/	29	28	27	27	26	25	24	22	21	20	20
A2. ECF December 2019	27	25	24	23	21	18	17	16	15	15	15
A3. RCF April 2020	28	27	26	24	23	22	19	18	17	16	16
B. Bound Tests											
B1. Real GDP growth	29	**38**	**53**	**55**	**57**	**59**	**61**	**61**	**63**	**66**	**69**
B2. Primary balance	29	29	28	27	25	24	22	20	19	18	18
B3. Exports	29	29	30	28	27	25	24	22	21	20	19
B4. Other flows 3/	29	31	33	32	30	29	27	25	24	22	21
B5. Depreciation	29	33	30	27	25	22	20	16	14	13	11
B6. Combination of B1-B5	29	30	32	32	30	29	28	25	24	23	23
C. Tailored Tests											
C1. Combined contingent liabilities	29	**37**	34	32	30	29	27	25	24	23	22
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	134	152	140	134	130	124	117	105	101	97	95
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2020-2030 2/	134	154	147	144	141	138	130	117	113	110	108
A2. ECF December 2019	144	137	134	132	123	107	100	94	92	90	90
A3. RCF April 2020	146	144	141	140	133	126	111	104	99	97	95
B. Bound Tests											
B1. Real GDP growth	134	184	217	231	247	264	275	279	295	313	332
B2. Primary balance	134	161	156	148	143	138	130	117	112	108	105
B3. Exports	134	160	163	156	151	146	138	125	120	116	112
B4. Other flows 3/	134	175	183	176	171	166	157	144	138	132	127
B5. Depreciation	134	189	170	157	145	133	116	96	85	76	69
B6. Combination of B1-B5	134	164	163	164	160	156	150	137	133	129	127
C. Tailored Tests											
C1. Combined contingent liabilities	134	206	188	177	171	166	157	143	138	134	131
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	12	17	13	13	18	21	23	22	18	16	16
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2020-2030 2/	12	18	13	14	19	23	26	25	21	19	19
A2. ECF December 2019	21	11	12	14	19	23	19	17	16	14	12
A3. RCF April 2020	21	10	12	14	20	23	26	21	17	15	14
B. Bound Tests											
B1. Real GDP growth	12	20	19	25	35	41	45	45	40	40	41
B2. Primary balance	12	17	14	16	19	22	23	23	18	17	16
B3. Exports	12	17	13	14	18	21	23	23	19	18	17
B4. Other flows 3/	12	17	13	14	18	21	24	23	20	19	18
B5. Depreciation	12	18	15	15	20	24	27	27	21	19	17
B6. Combination of B1-B5	12	18	14	15	22	27	29	29	24	23	22
C. Tailored Tests											
C1. Combined contingent liabilities	12	17	26	22	21	23	24	23	19	17	16
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.

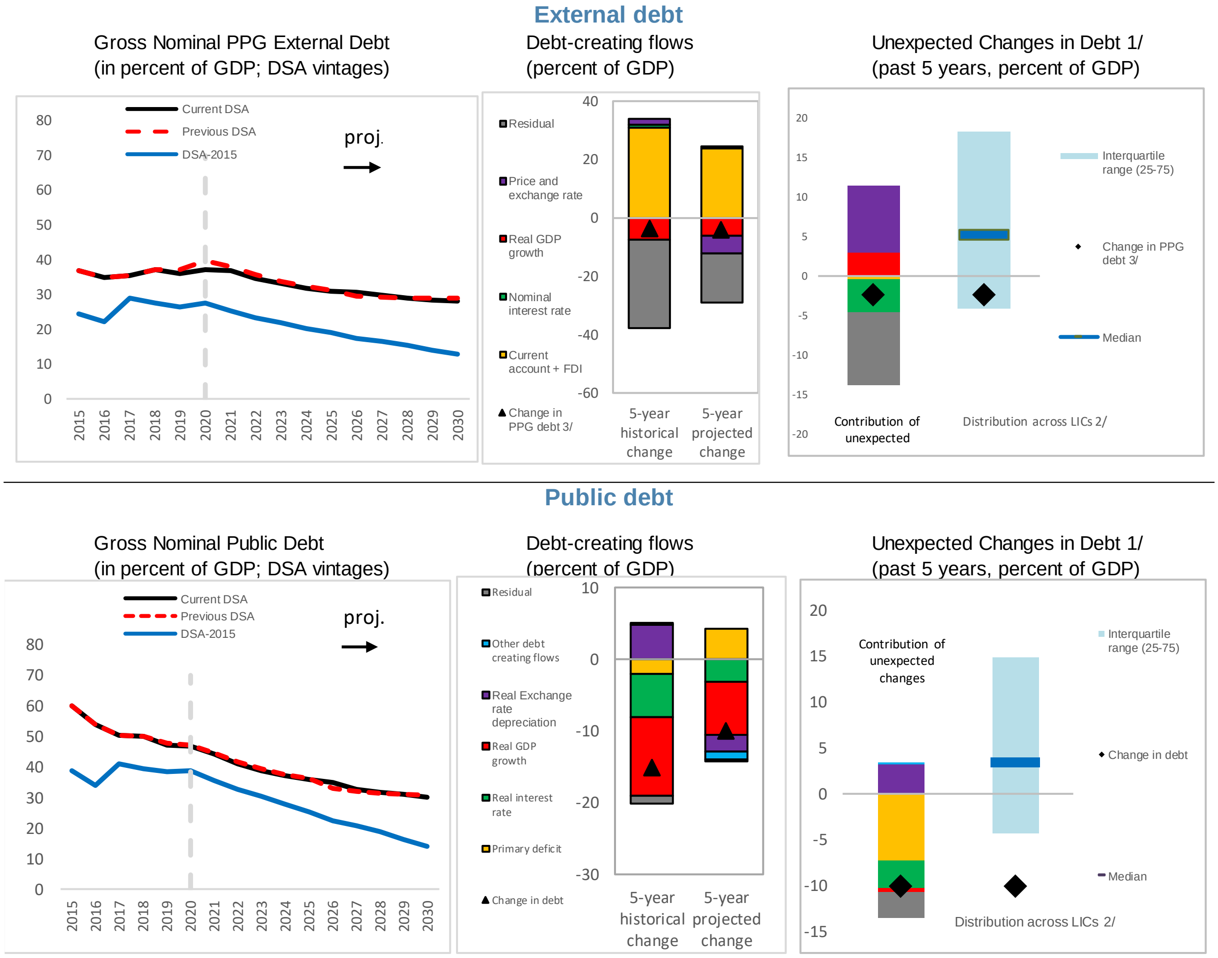
Sources: Country authorities; and staff estimates and projections.

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.

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



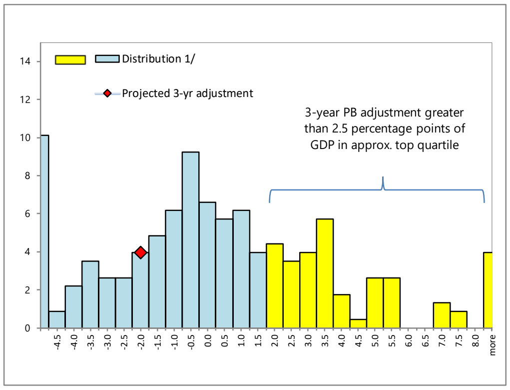
1/ Difference between anticipated and actual contributions on debt ratios.

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.

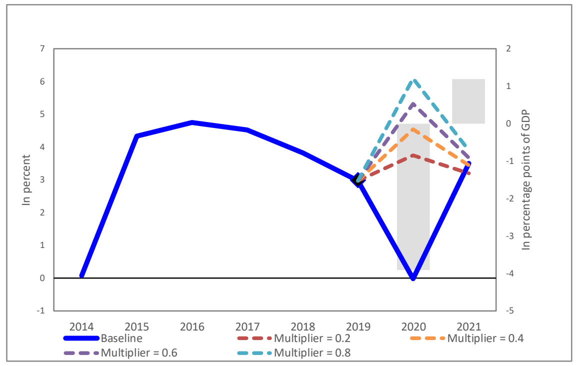
Figure 4. Central African Republic: Realism Tools

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



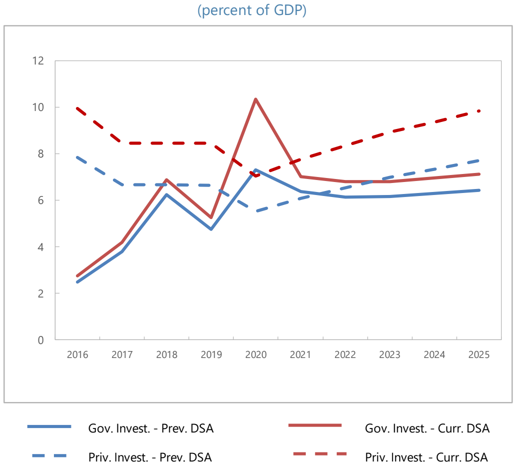
1/ Data cover Fund-supported programs for LICs (excluding emergency financing) approved since 1990. The size of 3-year adjustment from program inception is found on the horizontal axis; the percent of sample is found on the vertical axis.

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
(percent of GDP)



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