

INTERNATIONAL DEVELOPMENT ASSOCIATION

INTERNATIONAL MONETARY FUND

NIGER

Joint World Bank-IMF Debt Sustainability Analysis

October 2020

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

and the International Monetary Fund (IMF)

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Niger: Joint Bank-Fund Debt Sustainability Analysis	
Risk of external debt distress	Moderate
Overall risk of debt distress	Moderate
Granularity in the risk rating	Limited space to absorb shocks
Application of judgement	Yes

Niger’s risk of external and overall public debt distress has increased but the risk rating remains “moderate.”¹ The response to the COVID-19 pandemic required higher borrowing, but, more importantly, the shock entailed a sharp fall in exports, together with Nigeria’s decision to close its border to trade. Two debt indicators now breach their thresholds in the baseline—the PV of PPG external debt relative to exports and the PPG debt service-to-exports ratio, for two years, in 2020-21, and one year, in 2021, respectively, until the onset of crude oil exports during 2022 via a new pipeline. But the impending sharp upward revision of gold exports provides grounds not to change Niger’s debt distress rating at this point. While not yet finalized and integrated into the macroeconomic framework, customs data and independent information on the surge of artisanal gold production suggest a revision on a scale that would leave only one minor threshold breach. The DSA is otherwise predicated on the government implementing its reform program and the timetable for the start of oil exports holding. Identified weaknesses call for further strengthening debt management, reducing fiscal risks from SOEs and PPPs, prioritizing concessional borrowing, and strengthening private-sector development to support economic diversification.

¹The DSA follows the IMF and World Bank Staff Guidance Note on the Application of the Joint Fund-Bank Debt Sustainability Framework (DSF) for Low-Income Countries (LICs) (February 2018). Niger’s debt-carrying capacity remains rated “medium” with a composite indicator value of 2.94 according to the October 2019 vintage of the World Economic Outlook.

PUBLIC DEBT COVERAGE

1. The coverage of the public sector in the DSA is in line with the fiscal accounts (Text Table 1). It covers the central government but excludes local governments and the social security fund. There are no extra budgetary funds. State guarantees extended to the private and public sectors for external borrowing are included. Publicly-guaranteed private debt is limited to the guarantee issued to the China National Petroleum Company (CNPC) for a loan to finance the government's minority stake in the refinery SORAZ.² SOEs do not directly borrow from abroad, benefitting instead from on-lending by the central government, which is captured in the debt statistics at the stage where the central government borrows the funds. This includes electricity (NIGELEC), water (SPEN), and a telecom (Niger Telecom) companies, and the ABK, a public administrative entity set up for implementing the Kandadji dam project. Absent reliable data, the DSA cannot explicitly account for domestic SOE debt. The authorities are working with the World Bank to improve the availability and quality of financial information for SOEs. A new dedicated directorate general has been established in the Ministry of Finance in late 2019. External debt is generally defined on a currency basis.³

Text Table 1. Niger: Coverage of Public-Sector Debt and Design of Contingent Liability Stress Test			
Subsectors of the public sector		Sub-sectors covered	
1	Central government		X
2	State and local government		
3	Other elements in the general government		
4	o/w: Social security fund		
5	o/w: Extra budgetary funds (EBFs)		X
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 government plus extra budgetary funds, central bank, government-guaranteed debt	
		Default	Used for the analysis
2	Other elements of the general government not captured in 1.	0 percent of GDP	0.0
3	SoE's debt (guaranteed and not guaranteed by the government) 1/	2 percent of GDP	2.0
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)			7.0
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%.			

2. The contingent liability tailored stress test is calibrated to account for debt coverage gaps (Text Table 1). First, the default shock of 0 percent of GDP is kept for other elements of the general government not captured in the baseline stock of debt since: (i) the authorities indicated that the strong financial position of the social security fund (CNSS) removes material fiscal risks; (ii) the authorities confirmed the absence of extra-budgetary funds; and (iii) local governments solely contract short-term debt with the domestic banking sector, which is small in size. Second, the contingent liabilities shock from SOE debt is set at the default value of 2 percent to reflect risks associated with their domestic borrowing SOEs. Third, public-private partnerships (PPPs) signed under the new PPP law of May 2018

² CNPC extended a US\$880 million (7.0 percent of GDP) loan for the construction of SORAZ refinery in 2008, of which US\$352 million (2.8 percent of GDP) is guaranteed by the government. The outstanding stock of US\$71 million (0.9 percent of GDP) at end-December 2019 is included in the baseline stock of debt and is expected to be fully repaid by 2023.

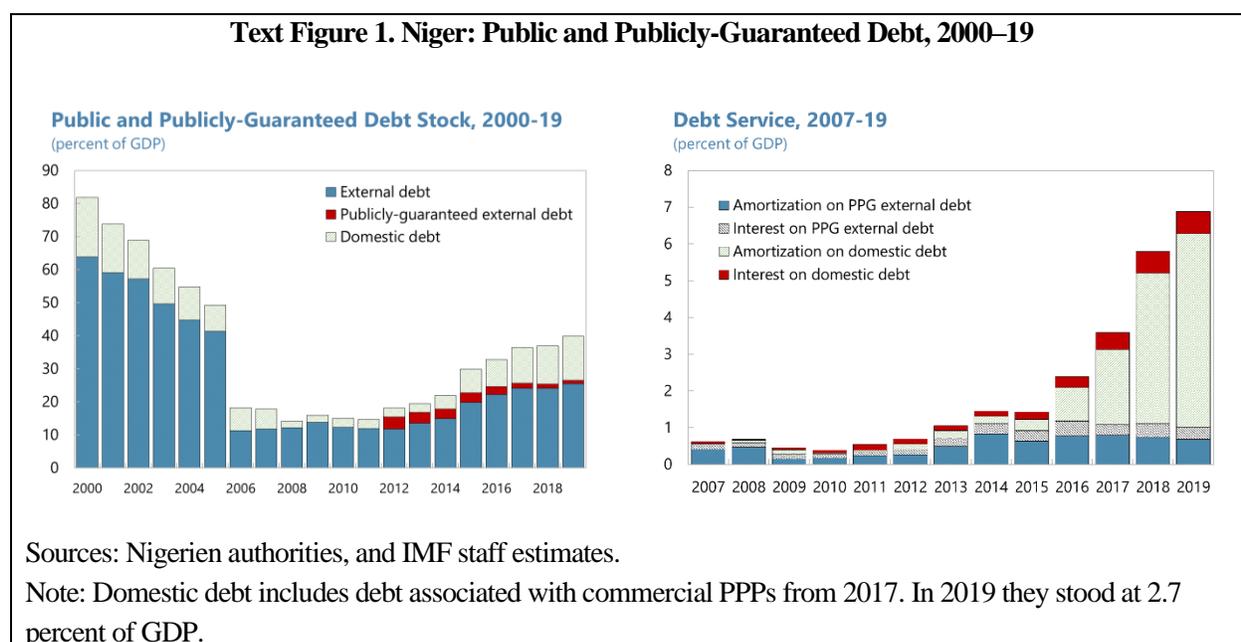
³ The only exception is the borrowing from the West African Development Bank (BOAD,) which is considered foreign debt despite being local-currency-denominated.

do not involve government financing—e.g., the recent renovation of the Niamey airport was fully privately financed in exchange for a 30-year concession to operate it. Projects under the previous PPP law are akin to installment payments and are reflected to the extent that they are implemented but yet paid. A contingent liability stress test for PPPs is hence not indicated at this time. However, going forward it will be important to guard against PPPs in which SOEs commit to future payments that they may not be able to shoulder. Fourth, considering the small size and depth of Niger’s financial sector with credit to the economy of just 12.7 percent of GDP, there is no need to go beyond the default value of 5 percent of GDP for contingent liability risk.

BACKGROUND

Evolution and Composition of Debt

3. Niger’s public and publicly guaranteed (PPG) debt stood at 39.8 percent of GDP at end-2019 (Text Figure 1). External public debt dropped from an average of 52.7 percent of GDP during 2000–05 to 11.3 percent of GDP in 2006 following the debt relief granted under the HIPC initiative. It hovered around 12–13 percent of GDP in the following years, before increasing markedly from 2015. Domestic debt had also been on a declining trend since 2000 and averaged 2.8 percent of GDP over 2008–14, before starting to rise from 2015. Debt service follows a similar pattern, with a sharp rise of domestic debt service from 2016.



4. PPG external debt makes up two-thirds of Niger’s total debt stock in 2019 (Text Table 2). Multilateral creditors represent the lion’s share of external debt, with Niger borrowing most from the World Bank (IDA) and the West African Development Bank (BOAD). The much smaller official bilateral debt is dominated by China and France (AFD). While external debt is mainly foreign-currency

denominated, exposure to exchange rate risk is relatively low given the CFAF’s peg to the euro. External debt is generally on concessional terms, with an average weighted interest rate of 1.6 percent and remaining maturity of 23 years at end-2019.

Text Table 2. Niger: Public and Publicly-Guaranteed Debt, 2017–19

	2017		2018		2019	
	CFAF billion	percent of GDP	CFAF billion	percent of GDP	CFAF billion	percent of GDP
PPG External Debt	1,668	25.7	1,808	25.3	2,007	26.5
Multilateral	1,271	19.6	1,394	19.5	1,596	21.1
of which: IMF	110	1.7	128	1.8	149	2.0
of which: World Bank	564	8.7	634	8.9	803	10.6
of which: BOAD	240	3.7	245	3.4	257	3.4
Official Bilateral	293	4.5	323	4.5	337	4.5
Paris Club (France)	54	0.8	62	0.9	76	1.0
Non-Paris Club	239	3.7	261	3.7	261	3.5
of which: China	116	1.8	119	1.7	119	1.6
Publicly-guaranteed private debt	104	1.6	92	1.3	74	1.0
Domestic debt	703	10.8	825	11.6	1004	13.3
Tbills and bonds	519	8.0	679	9.5	907	12.0
Bank loans	50	0.8	19	0.3	10	0.1
Domestic arrears	89	1.4	42	0.6	23	0.3
Other	46	0.7	84	1.2	63	0.8
Total PPG debt	2,371	36.5	2,633	36.9	3,011	39.8

Sources: Nigerien authorities, and IMF staff calculations.

5. Domestic debt consists mostly of short- and medium-term Treasury securities, predominantly held by banks domiciled in Niger or in the rest of the WAEMU. They used to be sold exclusively in regional auctions, but in 2019 Niger placed government paper worth 3.9 percent of GDP for the first time through syndication. At seven years, the tenor was much above what is achievable in auctions. As a result, the average remaining maturity of Niger’s domestic debt rose to 2.9 years. The average weighted interest rate stood at 5.7 percent in 2019.

6. The estimation and analysis of private external debt is complicated by data issues and requires further follow-up. The regional central bank (BCEAO) does not yet compile private external debt stock statistics. Efforts to gather information on the coverage and composition of private external debt will continue, with technical support from the IMF’s Statistics Department.

Macroeconomic Forecast

7. The baseline scenario is predicated on macroeconomic assumptions reflecting recent economic developments and the expected effects from the COVID-19 pandemic, as well as ongoing and new policy measures (Text Table 3). The framework assumes that pandemic leads to a sharp but temporary slowdown in economic activity in 2020, including a contraction of exports earnings and a sizeable increase in external financial assistance. The framework nevertheless assumes fiscal consolidation in line with the government’s ongoing reform program, including the goal to meet the deficit target of 3 percent of GDP of the West African Economic and Monetary Union (WAEMU) by 2023 at the latest—one year later than in the previous DSA because of a more protracted economic recovery from the pandemic. Pressures from the deteriorating security situation across the Sahel also complicate swift fiscal consolidation. The escalation of terrorist attacks in recent years necessitated an increase in security-related spending to over 3 percent of GDP and the equivalent of some 20 percent of domestic revenues. Nonetheless, a sizable bounce-back of revenues is expected for next year as the health crisis abates, the border with Nigeria is reopened to trade, and revenue measures regain traction. In 2022, Niger should benefit from important additional oil-related revenues when the export pipeline should become operational. Not all of the additional revenues are assumed to be spent, with a deficit of some 2.5 percent of GDP projected from 2023 onward. Economic growth has picked up to some 6 percent per year in recent years. Including the spike from the start of oil exports, it should average 7.4 percent annually during 2019-24s. Apart from the oil sector, the economy should also benefit from several other large projects related to stepped-up engagement of donors and foreign investors. The exchange rate peg keeps inflation well-contained throughout the projection period.

Text Table 3. Niger: Key Macroeconomic Assumptions, 2017–40

	2017-2018	2019	2020	2021	2022	2023	2024	2025	2026-2040
Real GDP growth (percent)									
DSA 2020	6.1	5.9	1.2	6.9	12.8	11.1	6.7	6.3	6.1
Previous DSA	6.0	5.8	1.0	8.1	13.2	6.2	7.0	8.1	6.0
Inflation (CPI)									
DSA 2020	1.5	-2.5	2.8	0.4	2.0	2.0	2.0	2.0	2.0
Previous DSA	1.5	-2.5	4.4	1.7	2.0	2.0	2.0	2.0	2.0
Primary fiscal balance (percent of GDP)									
DSA 2020	-2.7	-2.6	-3.4	-3.6	-1.9	-1.3	-1.3	-1.3	-1.1
Previous DSA	-2.7	-2.6	-2.5	-1.9	-1.5	-1.5	-1.5	-1.5	-1.4
Total revenue excluding grants (percent of GDP)									
DSA 2020	11.3	11.2	10.4	11.9	12.6	13.6	13.9	14.2	15.3
Previous DSA	11.3	11.2	10.2	12.2	13.2	13.5	13.8	14.1	15.2
Exports of goods and services (percent of GDP)									
DSA 2020	12.4	11.3	11.1	9.3	10.1	14.0	16.6	16.6	15.4
Previous DSA	12.1	11.7	11.2	12.6	15.9	16.3	16.8	17.2	12.1
Oil export price (US dollars per barrel)									
DSA 2020	57.5	58.3	34.4	35.7	38.8	41.4	43.7	45.8	53.9
Previous DSA	51.5	52.2	30.3	32.2	34.8	36.7	38.3	39.5	45.5
Uranium price (Thousands of CFAF per kg)									
DSA 2020	44.2	45.0	45.0	46.1	50.2	50.3	50.4	50.4	50.4
Previous DSA	44.2	45.0	45.0	46.1	50.2	50.1	50.0	46.9	46.9

Source: IMF staff calculations.

8. The continued decline in Niger’s exports since 2016 is a key factor undermining the country’s external debt sustainability. Exports dropped from 13.6 of GDP in 2016 to 11.3 percent in 2019 and are projected to recede further in 2020 and 2021 to 11.1 and 9.3 percent of GDP, respectively. This decline is mainly driven by the lower performance of uranium exports. However, uncertainties have arisen since 2018 on export figures due to the sharp increase in gold exports recorded by customs. The intensification of these exports projected by the authorities in 2020 and 2021 requires an in-depth examination and improvement of balance-of-payments statistics to be finalized. The IMF has agreed to support the authorities’ efforts to this end, through its statistics department.

9. Niger aims to keep reliance on domestic financing limited for years to come, with a view to extending maturities, reducing roll-over risk, and creating space for banks to lend to the private sector. In 2019 and 2020, the share of domestic sources in total budgetary financing has been brought down sharply from around 40 percent before. Domestic financing was close to zero last year, thanks to a surging donor support. In January 2020, the government carried out a “debt reprofiling” operation, in which it borrowed 1.9 percent of GDP commercially from abroad to repay domestic debt.⁴ With continued strong donor support on top, domestic financing is likely to remain negligible. For the next couple of years, it should remain moderate as public finances are consolidated and donors deliver on their pledges from the December 2017 donor roundtable and investors’ forum in Paris.⁵ In the very long run, donor support is assumed to gradually decline. Domestic financing would step in and eventually rise to cover slightly more than a fifth of fiscal financing needs.

10. The terms of foreign and domestic borrowing are assumed to shift over time to lower concessionality and longer maturities. For foreign debt, new disbursements are expected to be covered by external funding sources based on historical financing patterns. In the longer run, the weights of external creditors are adjusted so that external borrowing moves toward less concessional financing and toward commercial loans. For domestic borrowing, debt instruments are assumed to gradually shift from T-bills to medium- and long-term bonds. Consistent with the borrowing terms of recent government securities issuances on the regional market, the average interest rate on domestic debt is assumed at 6.25, 6.5, and 7.5 percent for bonds maturing in 1 to 3, 4 to 7 years and over 7 years, respectively. The interest rate on T-bills is set to 6 percent.

11. The DSA’s tool kit to assess the realism of the macroeconomic forecast does not raise red flags.

- **Drivers of debt dynamics** (Figure 3). The evolution of total public debt is dominated by developments of the primary fiscal deficit and real GDP growth. Compared to the past five years, projections put the contribution of growth higher and the one for the primary deficit lower. The rise of the public debt ratio is consequently arrested, and it stabilizes at around 36 percent of GDP, almost the same level as in the previous DSA. The dynamics for external

⁴ The loan was contracted in January 2020 with Deutsch Bank for a total amount of euro 225 million, of which euro 179 million have already been drawn. It was used to repay a set of five Treasury bills and one Treasury bond.

⁵ Niger obtained more funding than sought for its five-year economic and social development plan (PDES 2017–2021), with a total of US\$12.7 billion pledged by official bilateral and multilateral donors while private investors expressed a commitment of US\$10.3 billion.

public debt also show a projected improvement for the next five years compared to earlier projections in the 2015 DSA vintage and a similar pattern as in the previous DSA. In the very long run, external public debt declines to about 18.7 percent of GDP, essentially unchanged from the previous DSA. For both total and external public debt, unexpected changes in the primary deficit and the current account were chiefly responsible for past forecast errors. Their magnitude is comparable to those in other low-income countries (LICs).

- **Realism of planned fiscal adjustment** (Figure 4). The projected 3-year fiscal adjustment in the primary balance (0.3 percentage point of GDP) lies below the top quartile of the distribution of past adjustments to the primary fiscal deficit (above 2 percentage points of GDP) for a sample of LICs, signaling that the baseline assumptions are not out of line with the experience in LICs. The realism of the expected adjustment is predicated on the revenue boost from the start of crude-oil exports in 2022 and the authorities' commitment to revenue mobilization, expenditures control, and spending efficiency.
- **Consistency between fiscal adjustment and growth** (Figure 4). The projected growth path for 2020 to 2021 is in line with what fiscal multipliers would suggest, but more volatile. Due to the impact of COVID-19 pandemic growth decelerates in 2020 despite the fiscal expansion.
- **Consistency between public investment and growth** (Figure 4). The tool shows a similar share of public investment in GDP in the previous and the current DSAs. Public investment is expected to remain above 10 percent of GDP over the medium term.

Country Classification and Determination of Stress Test Scenarios

12. Niger's debt-carrying capacity remains rated "medium" according to the October 2019 vintage of the World Economic Outlook (WEO). The methodology relies on a composite indicator (CI) combining the CPIA score, external conditions as captured by global growth, and country-specific factors. Based on data from the October 2019 WEO vintage, the calculations give a CI value of 2.94, reflecting positive contributions from the CPIA (44 percent) but also international reserves (33 percent), and country and global real growth rates (6 and 16 percent, respectively) (Text Table 4). This score falls within the medium debt-carrying capacity thresholds defined as $2.69 < CI \leq 3.05$.

Components	Coefficients (A)	10-year average values (B)	CI Score components (A*B) = (C)	Contribution of components
CPIA	0.385	3.404	1.31	44%
Real growth rate (in percent)	2.719	6.412	0.17	6%
Import coverage of reserves (in percent)	4.052	38.402	1.56	53%
Import coverage of reserves ² (in percent)	-3.990	14.747	-0.59	-20%
Remittances (in percent)	2.022	0.901	0.02	1%
World economic growth (in percent)	13.520	3.499	0.47	16%
CI Score			2.94	100%
CI rating			Medium	

Source: IMF staff calculations. The CI cutoff for medium debt-carrying capacity is $2.69 < CI \leq 3.05$.

13. The debt sustainability analysis relies on six standardized stress tests and a tailored commodity price shock stress test. The standardized stress tests use the default settings. While Niger does not qualify for the market financing shock stress test, the commodity price shock stress test is relevant and helps assess the sensitivity of projected debt burden indicators to unfavorable developments in commodity export prices.⁶

DEBT SUSTAINABILITY

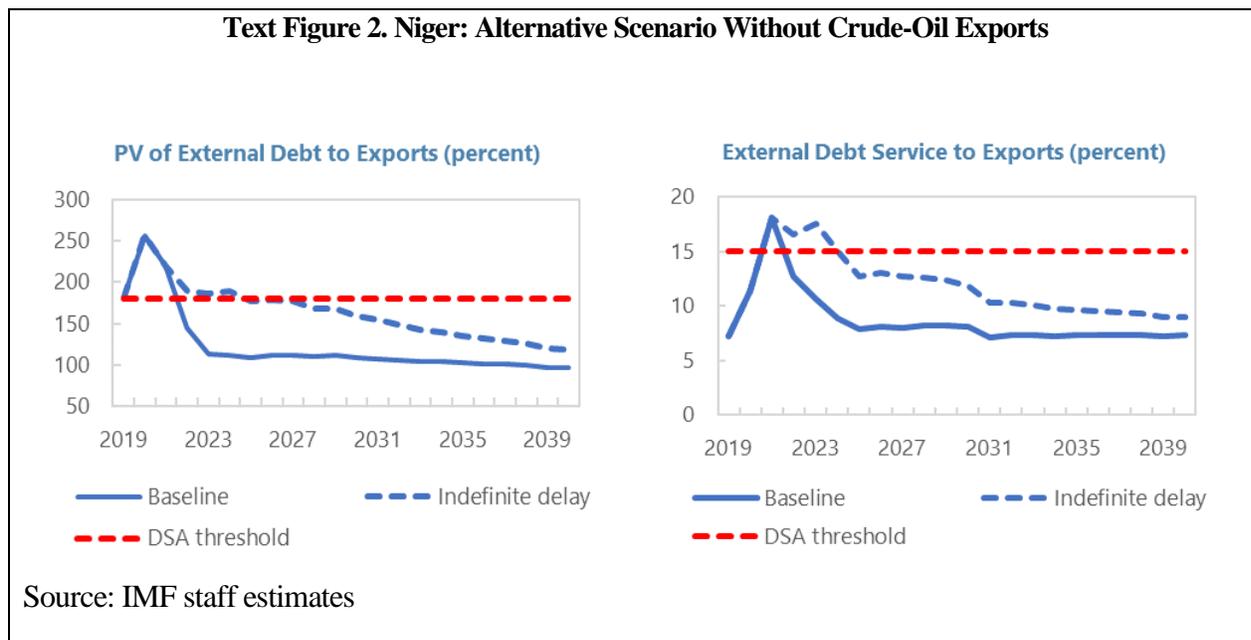
External Debt Sustainability

14. External debt is projected to fall gradually, with public and private debt both declining in the long run (Table 1). Under the baseline scenario, PPG external debt is expected to increase from 26.5 to 29.4 percent of GDP over 2019-20 owing to significant foreign borrowing to finance Niger's economic and social development agenda, assistance during the COVID-19 crisis, and the rebalancing from domestic to foreign budgetary financing. From 2021 onward, the debt ratio enters a downward trajectory to settle at 18.7 percent of GDP at the end of the projection period in 2040. Total external debt displays a similar pattern—rising from 48.4 percent of GDP in 2019 to a peak of 49.7 percent of GDP in 2020 and then steadily declining to 24.8 percent of GDP in 2040. The non-interest current account deficit remains the main driver of these dynamics. The goods and services balance is projected to deteriorate in the short term reflecting high imports related to the large projects, such as the Kandadji dam, a cement factory, a uranium mine, the oil export pipeline, and MCC-funded investments in agriculture. When they come on stream though, the current account is set to improve sharply. Once the non-interest current account deficit, net FDI, and endogenous debt dynamics are accounted for, remaining drivers of external debt dynamics, such as components of the capital account, reserves accumulation, valuation adjustments, as well as price and exchange rate changes, are subsumed into the residual.

15. Niger's two PPG external debt indicators related to exports breach their thresholds in the baseline scenario for one and two years, which would indicate high risk of external debt distress (Figure 1 and Table 3). Exports are negatively affected by the large COVID-19-related shock. As a result, export-related debt ratios deteriorate significantly for 2020-21. The PV of external debt-to-exports ratio breaches its applicable threshold for two years, in 2020-21, under the baseline. It reaches 257.3 percent in 2020, well above the threshold of 180 percent, retreats in 2021 to 219.6 percent as trade picks up again, and falls below the threshold with the onset of crude-oil exports in 2022 and the expected resumption of the Imouraren uranium project in 2025. Breaches are sustained under the export shock stress test scenario, peaking at 486 percent in 2022 under the effect of the export shock and, while declining thereafter, it remains above its prescribed threshold through the projection period. The indicator of the ratio of the PPG external debt service to exports also breaches its threshold for one year, in 2021, under the baseline scenario. Uncertainties surrounding the recover from the COVID-19 pandemic and the assumed reopening of the border with Nigeria in 2021 pose downside risks. Breaches of export-related indicators would occur for a prolonged period if the pipeline project for the export of crude-oil did not materialize

⁶ Under the debt sustainability framework, countries with commodity exports accounting for at least 50 percent of total exports of goods and services over the previous three-year period are subject to the stress test. Commodities accounted for 55.4 percent of Niger exports of goods and services over the period 2017-2019.

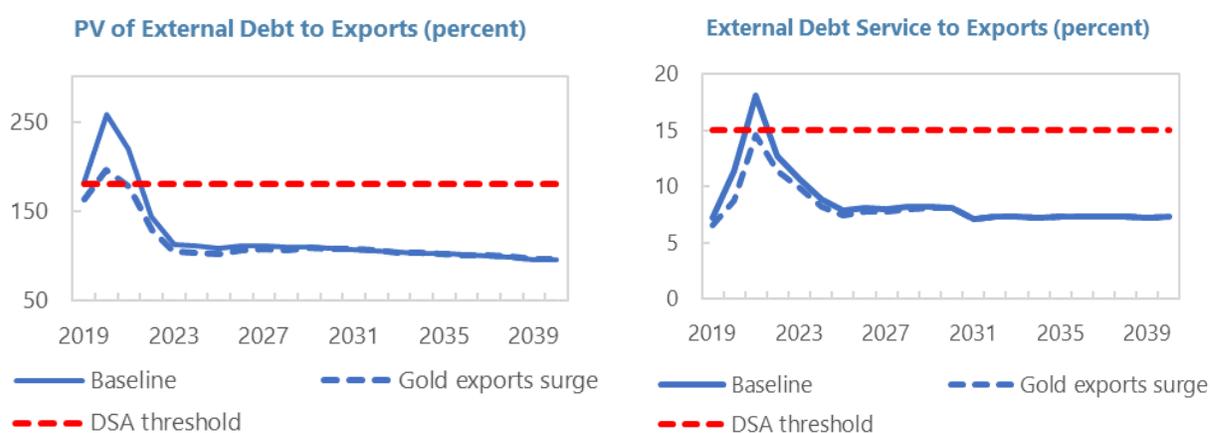
(Text Figure 2). While this is unlikely to happen with the project seemingly having reached the point-of-no-return, slippages in the timeline cannot be ruled out.



16. However, the authorities informed staff of an impending sharp upward revision of gold exports, which is grounds to hold off with reclassifying Niger into the high-risk category for debt distress. Artisanal gold production has been booming in the Burkina Faso-Mali-Niger triangle in the last few years. Independent estimates put Niger’s production at 12 tons in 2018.⁷ More recently, the structure of Niger’s gold industry has been changing with refining activity graduating from the processing for foreign clients (i.e. merchandizing) to own-account refining, trading, and shipment to abroad (i.e. exporting). The BCEAO is now in the process of reflecting this new situation in the balance-of-payments, which will entail an upward revision of exports in 2019 and higher export projections from 2020 onward. The higher export numbers are already reflected in the trade statistics based on customs data. Customs data show exports of 11.4 tons or CFAF 171 billion in the first half of 2020, compared to only CFAF 28 billion projected for all of 2020 in the balance-of-payments. While the full reconciliation of the balance-of-payments, customs data, and the rest of the macroeconomic framework remains work in progress, it is clear that it would materially improve the export-based debt distress indicators. The one relating to the PV of PPG external debt would exhibit only a small breach of the threshold in 2020 and the one relating to the PPG external public debt service would remain in moderate risk territory throughout (Text Figure 3). On this basis, it would be premature to change Niger’s debt distress rating from moderate to high risk. Authorities and staff will work closely together to finalize the revisions to the macroeconomic framework in the months ahead.

⁷ OECD, 2018, Gold at the Crossroads—Assessment of the Supply Chains of Gold Produced in Burkina Faso, Mali, and Niger.

Text Figure 3. Niger: Alternative Scenario with a Surge in Gold Exports ^{1/}



Source: IMF staff estimates

^{1/} Assumes gold exports in line with customs data in the second half of 2019 and in 2020. In subsequent years, gold exports are assumed to grow with nominal GDP until they converge in the outer years with the higher gold exports already factored into the baseline.

17. The remaining two PPG external debt indicators are below their thresholds. Indicator readings for the PV of the debt-to-GDP ratio are benign. After a small uptick to 23.9 percent of GDP in 2020, the ratio is expected to fall to a mere 13.8 percent of GDP in the very longer term. The debt service-to-revenue ratio displays a similar pattern as the debt service-to-export ratio while, in contrast, remaining significantly below its threshold in 2021. The indicator is projected to peak at 15.3 percent in 2021 and gradually decline in the outer years, reaching 6.5 percent in the long run, as in the previous DSA. Even in the absence of the G20 DSSI, the indicator would not breach its threshold in 2020, thus remaining clearly unproblematic.

Total Public Debt Sustainability

18. Public sector debt is projected to decline gradually, driven by domestic debt dynamics and supported by developments of PPG external debt (Table 2). After an increase during the pandemic to 42.1 percent of GDP in 2021, public debt is projected to decline to a low of 36 percent of GDP by 2040. This owes to fiscal consolidation from 2022, aided by higher oil revenues, and solid GDP growth that averages 6.5 percent over the projection horizon. The authorities are committed to reduce the primary deficit through improved domestic revenue mobilization, higher spending efficiency, and better expenditure control. The recent rebalancing of budget financing from domestic to external sources does not materially affect the trajectory of total public debt as interest costs including fees are similar. The benefit lies rather in the extension of maturities, which reduced roll-over risks in sometimes fickle regional markets.

19. The PV of the public debt-to-GDP ratio clears the DSA threshold in the baseline, though not in the event of an adverse commodity price shock (Figure 2 and Table 4). All debt ratios with respect to GDP have declined substantially in the wake of the national accounts' revision. At 35 percent of GDP in 2020, the PV of public debt is now far away from the DSA threshold of 55 percent of GDP. However, a commodity price shock would set debt and debt-service relative to the PV of public debt on an unsustainable path in the absence of compensating fiscal measures.⁸

Risk Rating and Vulnerabilities

20. Niger's risk of external and overall debt is rated "moderate" and debt is deemed sustainable. While the PV of PPG external debt-to-exports and the PPG debt service-to-exports ratios breach their thresholds in the baseline scenario for two years and one year, respectively, this will no longer be the case once gold exports are properly reflected in the external accounts. Niger's exports performance suffered in the wake of the COVID-19 pandemic and Nigeria's closure of its border to trade. Better export diversification is a priority. Debt remains sustainable as: (i) debt indicators stay on non-explosive trajectories and overall public debt sustainability remains solid even in the face of adverse shocks; (ii) Niger's exports are expected to rebound with the reopening of Nigeria's border to trade in 2021 and the strengthening of the export base due to the onset of crude oil exports in 2022; (iii) the liquidity risk facing the country remains low since, as a member of the WAEMU, Niger can draw on the currency union's pooled external reserves, delinking the ability to service foreign debt from exports at the national level; and (iv) Niger is expected to continue to benefit from significant financial assistance from donors over the next few years to address the daunting development, security and climate challenges it faces. It is expected that the moderate debt distress rating is confirmed once gold export data are finalized and the case further strengthened as the country recovers from the COVID-19-related slowdown and oil exports start.

21. Debt sustainability is contingent in the near term on the evolution of the COVID-19 crisis and, in the longer term, on implementation of the policy reforms build into the baseline. The authorities should therefore pay particular attention to making progress in the following areas as this helps alleviate the inherent tension between the need to borrow for development purposes on the one hand and to keep public debt on an even keel on the other hand:

- **Domestic revenue mobilization.** It is not only the linchpin for the remaining fiscal consolidation but also the funding source for future debt service. Niger's public debt relative to GDP might be rather low, but relative to domestic revenues it compares unfavorably to other WAEMU countries or Sub-Saharan Africa. Additional oil revenues should not be fully spent, thereby contributing to fiscal consolidation.
- **Fiscal risks and spending quality.** Possible mismanagement of large investments by SOEs or under PPPs have the potential to eventually add substantially to government debt. While Niger is in dire need to build up its infrastructure, proper evaluation and

⁸ The mechanics of the DSA exaggerate the adverse effect of a commodity price shock. They set the growth of primary expenditure growth to historical averages for the years 2021 and 2020, thereby cutting out the 2021 cuts in the baseline.

attention to good governance should not fall by the wayside in the rush. More generally, the government should try to make the most of limited resources by raising the efficiency of public spending, which remains low in Niger.

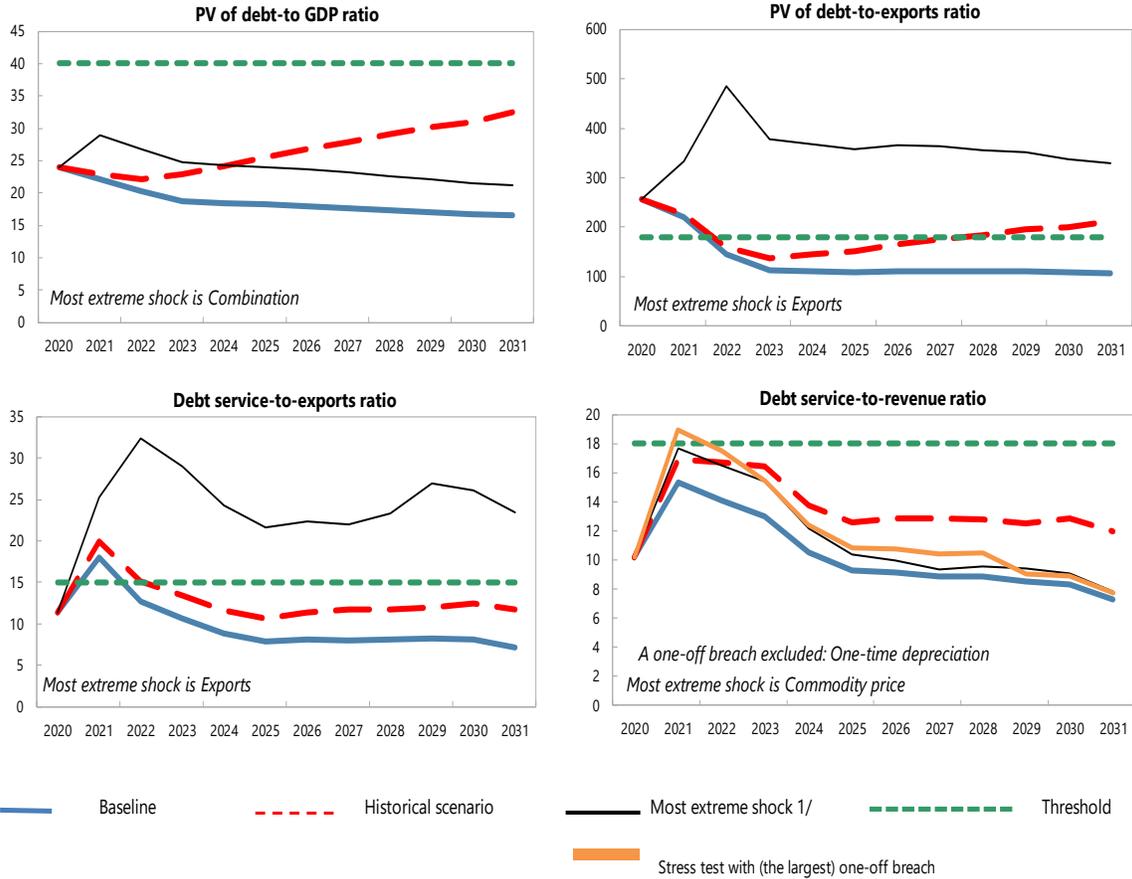
- **External borrowing.** Until better export prospects are closer and more certain, Niger should continue to prioritize external borrowing to concessional loans and seek grants.
- **Economic diversification.** A narrow economic base and a low level of economic development generally are at the root of difficulties with mobilizing revenues and securing strong sustainable growth. Developing the small formal local private sector is paramount.

Authorities' Views

22. The authorities were pleased that Niger's moderate rating for debt distress is maintained despite the dip in exports in the wake of the COVID-19 pandemic. They noted:

- Gold exports will be swiftly examined in more detail and then integrated into the Balance of Payments and the macroeconomic framework. Technical assistance from the IMF's Statistics Department would be helpful in this context.
- Despite the revision of gold exports, export diversification remains a priority. Until more progress will have been achieved on this front, external borrowing will remain prudent with an emphasis on securing concessional loans and grants.
- The policy reforms upon which the DSA projections are based will be delivered and the assumed timetable for the crude-oil export project should hold.

Figure 1. Niger: Indicators of Public and Publicly Guaranteed External Debt Under Alternative Scenarios, 2020–31



Customization of Default Settings		
	Size	Interactions
Tailored Tests		
Combined CLs	No	
Natural Disasters	n.a.	n.a.
Commodity Prices ^{2/}	No	No
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	1.8%	1.8%
USD Discount rate	5.0%	5.0%
Avg. maturity (incl. grace period)	26	26
Avg. grace period	6	6

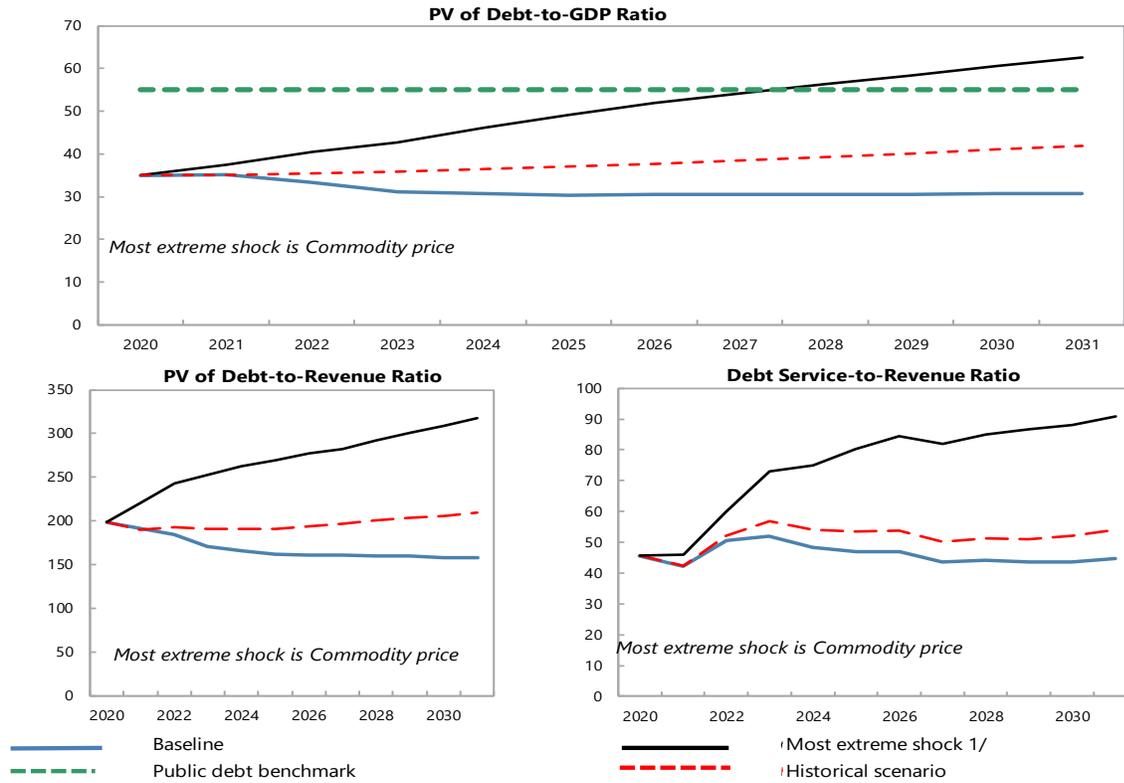
* Note: All the additional financing needs generated by the shocks under the stress tests are assumed to be covered by PPG external MLT debt in the external DSA. Default terms of marginal debt are based on baseline 10-year projections.

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. 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. Niger: Indicators of Public Debt Under Alternative Scenarios, 2020–31



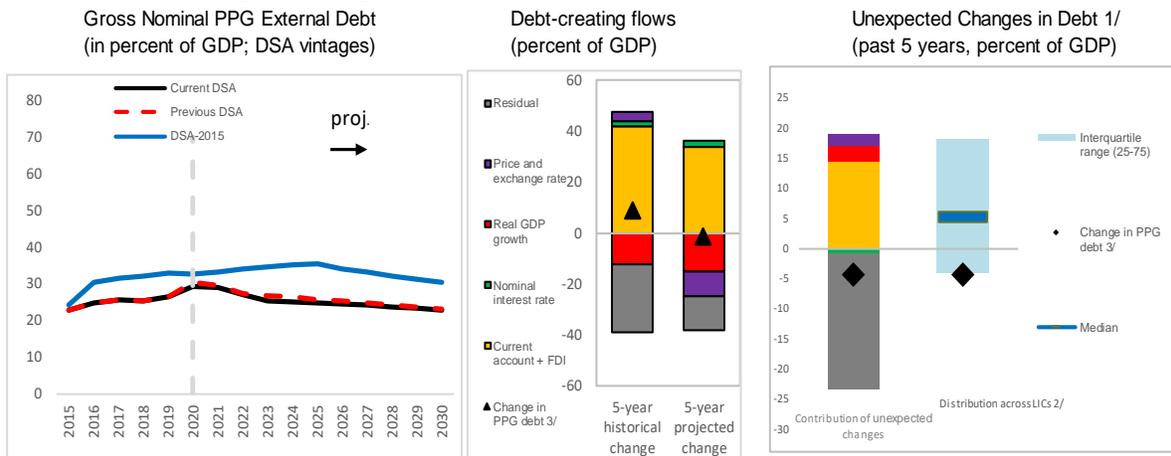
Borrowing Assumptions for Stress Tests*	Default	User defined
Shares of marginal debt		
External PPG medium and long-term	28%	28%
Domestic medium and long-term	29%	29%
Domestic short-term	43%	43%
Terms of marginal debt		
External MLT debt		
Avg. nominal interest rate on new borrowing in USD	1.8%	1.8%
Avg. maturity (incl. grace period)	26	26
Avg. grace period	6	6
Domestic MLT debt		
Avg. real interest rate on new borrowing	4.4%	4.4%
Avg. maturity (incl. grace period)	3	3
Avg. grace period	2	2
Domestic short-term debt		
Avg. real interest rate	3%	3.0%

* 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.

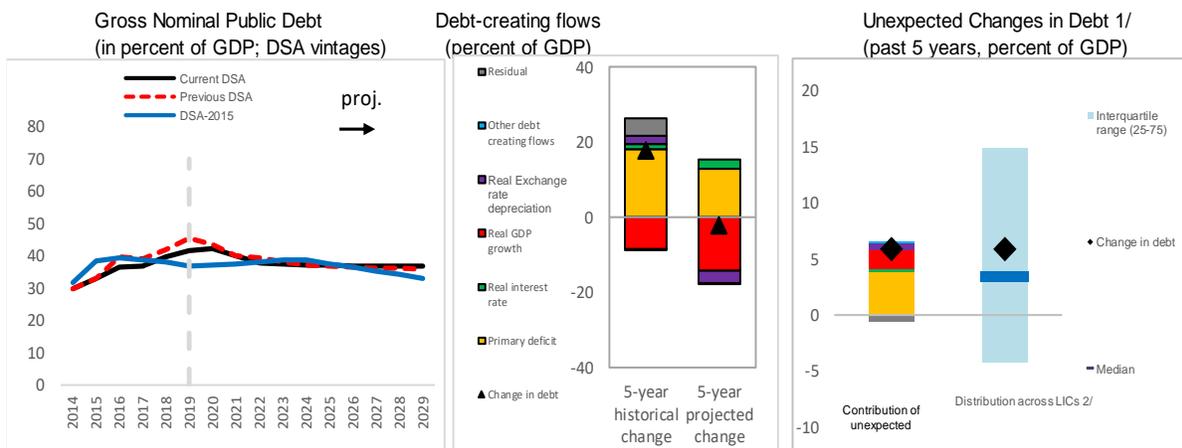
Sources: Country authorities; and staff estimates and projections.

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 extreme shock even after disregarding the one-off breach, only that stress test (with a one-off breach) would be presented.

Figure 3. Niger: Drivers of Debt Dynamics—Baseline Scenario



Public Debt



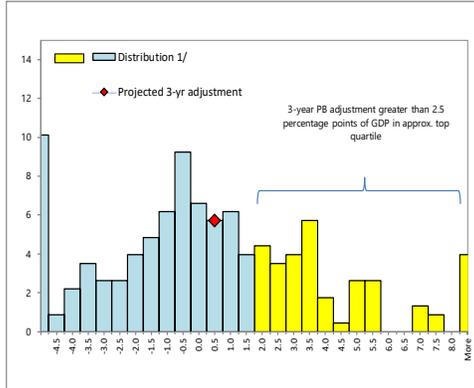
1/ Difference between anticipated and actual contributions on debt ratios.

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

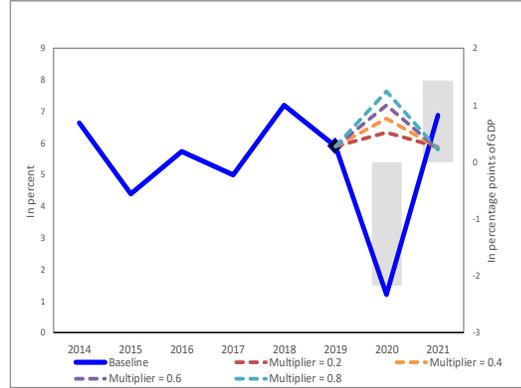
3/ Given the relatively low private external debt for average low-income countries, a ppt change in PPG external debt should be largely explained by the drivers of the external debt dynamics equation.

Figure 4. Niger: Realism Tools

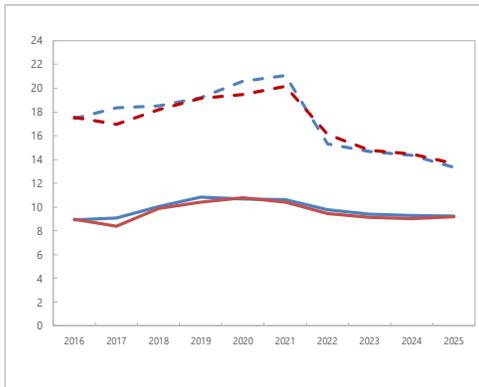
**3-Year Adjustment in Primary Balance
(Percentage points of GDP)**



Fiscal Adjustment and Possible Growth Paths 1/



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



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

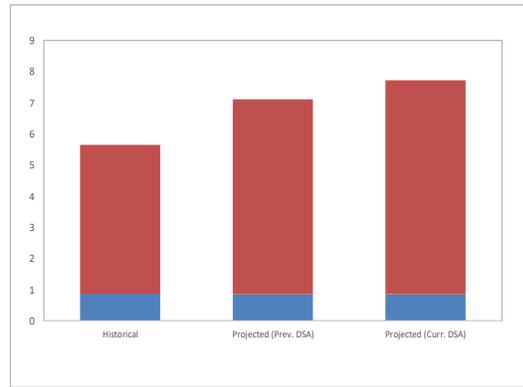
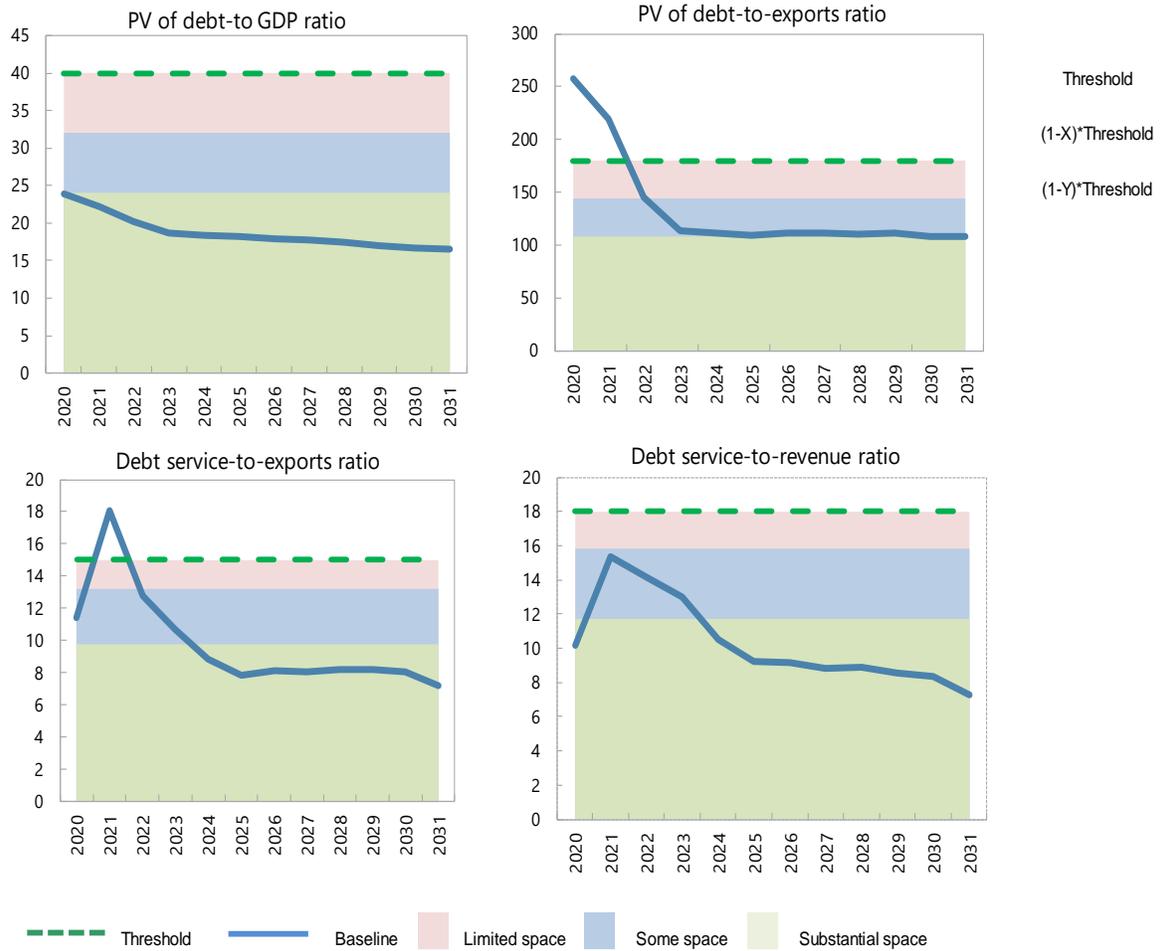


Figure 5. Niger: Qualification of the Moderate Category, 2020–31^{1/}



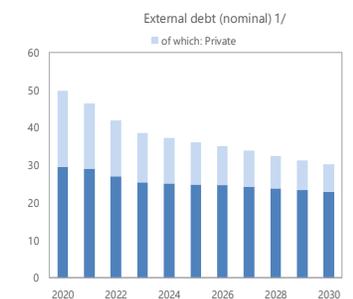
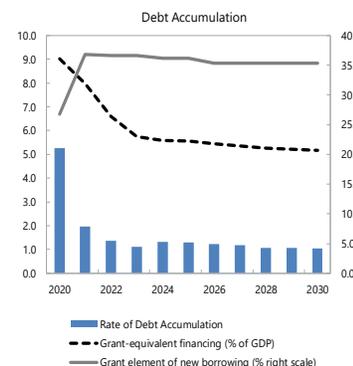
Sources: Country authorities; and staff estimates and projections.

^{1/} For the PV debt/GDP and PV debt/exports thresholds, x is 20 percent and y is 40 percent. For debt service/Exports and debt service/revenue thresholds, x is 12 percent and y is 35 percent.

Table 1. Niger: External Debt Sustainability Framework, Baseline Scenario, 2017–40
(In percent of GDP, unless otherwise indicated)

	Actual			Projections												Average 9/	
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2040	Historical	Projections
External debt (nominal) 1/	47.7	45.5	48.4	49.7	46.3	41.9	38.5	37.2	36.0	34.9	33.8	32.4	31.2	30.2	24.8	41.8	37.5
of which: public and publicly guaranteed (PPG)	25.7	25.3	26.5	29.4	28.9	26.9	25.3	25.1	24.8	24.6	24.2	23.7	23.3	22.8	18.7	19.9	25.4
Change in external debt	-0.3	-2.2	2.9	1.3	-3.4	-4.4	-3.4	-1.3	-1.2	-1.0	-1.2	-1.4	-1.2	-1.0	-0.3		
Identified net debt-creating flows	5.0	3.1	6.7	8.8	6.0	2.7	1.4	2.6	2.5	2.7	2.8	2.9	3.0	3.1	3.3	4.5	3.5
Non-interest current account deficit	11.0	12.3	11.9	12.5	15.9	10.2	6.7	5.9	5.7	5.7	5.8	5.8	6.0	6.0	6.0	13.0	7.8
Deficit in balance of goods and services	13.4	14.9	15.5	15.4	18.3	12.5	8.5	7.5	7.1	6.8	6.6	6.5	6.4	6.4	5.8	15.2	9.3
Exports	12.9	11.3	11.1	9.3	10.1	14.0	16.6	16.6	16.7	16.1	15.9	15.8	15.4	15.5	14.4		
Imports	26.3	26.2	26.7	24.7	28.4	24.6	25.1	24.1	23.8	22.9	22.5	22.3	21.8	21.9	20.1		
Net current transfers (negative = inflow)	-3.7	-3.8	-4.7	-3.8	-3.2	-3.2	-3.1	-3.1	-3.1	-3.1	-3.0	-2.9	-2.9	-2.8	-2.3	-3.3	-3.1
of which: official	-2.0	-2.0	-2.8	-2.6	-2.0	-1.8	-1.6	-1.6	-1.6	-1.6	-1.6	-1.6	-1.6	-1.6	-1.5		
Other current account flows (negative = net inflow)	1.3	1.1	1.1	0.9	0.8	0.9	1.2	1.5	1.8	2.0	2.2	2.3	2.4	2.4	2.5	1.1	1.7
Net FDI (negative = inflow)	-2.8	-3.3	-5.3	-3.6	-7.5	-3.0	-1.8	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-6.6	-2.4
Endogenous debt dynamics 2/	-3.2	-5.8	0.2	-0.1	-2.4	-4.5	-3.5	-1.8	-1.7	-1.5	-1.6	-1.4	-1.4	-1.4	-1.2		
Contribution from nominal interest rate	0.4	0.4	0.4	0.4	0.5	0.6	0.6	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.3		
Contribution from real GDP growth	-2.2	-3.0	-2.7	-0.5	-2.9	-5.1	-4.1	-2.4	-2.2	-1.9	-2.0	-1.8	-1.8	-1.7	-1.5		
Contribution from price and exchange rate changes	-1.4	-3.2	2.5	...	...	...	...	...	...	...	...	...	...	...	...
Residual 3/	-5.3	-5.3	-3.8	-7.5	-9.4	-7.2	-4.8	-3.9	-3.8	-3.7	-4.0	-4.3	-4.2	-4.2	-3.6	-2.6	-5.2
of which: exceptional financing 4/	0.0	0.0	0.0	-0.4	-0.2	0.0	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	...	...	20.2	23.9	22.1	20.2	18.7	18.4	18.2	18.0	17.7	17.4	17.1	16.7	13.8		
PV of PPG external debt-to-exports ratio	...	...	181.5	257.3	219.6	145.0	113.2	111.0	108.6	111.6	111.6	109.9	110.8	108.1	96.1		
PPG debt service-to-exports ratio	5.4	7.8	7.3	11.4	18.1	12.7	10.7	8.8	7.8	8.1	8.0	8.2	8.2	8.1	7.3		
PPG debt service-to-revenue ratio	6.7	7.3	7.2	10.2	15.3	14.1	13.0	10.5	9.3	9.1	8.8	8.9	8.5	8.3	6.5		
Gross external financing need (Million of U.S. dollars)	1047.0	1293.1	985.7	1411.6	1678.4	1723.5	1461.1	1375.0	1409.1	1498.9	1660.8	1790.8	1964.7	2132.6	4565.5		
Key macroeconomic assumptions																	
Real GDP growth (in percent)	5.0	7.2	5.9	1.2	6.9	12.8	11.1	6.7	6.3	5.8	6.1	5.9	6.0	6.0	6.4	6.2	6.8
GDP deflator in US dollar terms (change in percent)	2.9	7.2	-5.1	5.0	9.4	3.0	2.5	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	-0.1	3.1
Effective interest rate (percent) 5/	0.8	0.9	0.8	0.9	1.3	1.5	1.5	1.5	1.3	1.3	1.3	1.3	1.3	1.3	1.3	0.8	1.3
Growth of exports of G&S (US dollar terms, in percent)	16.9	0.9	-1.1	-11.0	26.8	60.8	35.1	9.2	9.4	3.9	6.6	7.8	5.2	8.7	6.5	3.4	14.8
Growth of imports of G&S (US dollar terms, in percent)	16.2	14.8	2.1	-1.5	34.2	8.4	8.1	4.7	7.1	3.7	6.5	7.0	5.8	8.4	7.1	3.7	8.4
Grant element of new public sector borrowing (in percent)	...	...	...	26.7	36.8	36.6	36.6	36.2	36.2	35.4	35.4	35.4	35.4	35.4	35.4	...	35.1
Government revenues (excluding grants, in percent of GDP)	10.5	12.1	11.2	10.4	11.9	12.6	13.6	13.9	14.2	14.3	14.4	14.6	14.8	15.0	16.1	11.5	13.6
Aid flows (in Million of US dollars) 6/	864.0	1072.2	1399.3	1384.7	1489.2	1422.3	1422.7	1505.2	1604.7	1685.4	1785.3	1888.4	2021.2	2161.6	4456.8		
Grant-equivalent financing (in percent of GDP) 7/	...	...	...	9.0	8.0	6.6	5.7	5.6	5.6	5.5	5.4	5.3	5.2	5.2	4.8	...	6.1
Grant-equivalent financing (in percent of external financing) 7/	...	...	...	64.0	76.3	76.7	75.6	75.4	77.0	77.2	77.8	78.2	78.3	78.5	80.5	...	75.9
Nominal GDP (Million of US dollars)	11,185	12,850	12,912	13,720	16,046	18,639	21,230	23,139	25,110	27,103	29,334	31,689	34,269	37,056	82,603		
Nominal dollar GDP growth	8.1	14.9	0.5	6.3	16.9	16.2	13.9	9.0	8.5	7.9	8.2	8.0	8.1	8.1	8.5	6.1	10.1
Memorandum items:																	
PV of external debt 8/	...	...	42.1	44.3	39.5	35.2	31.9	30.5	29.3	28.3	27.3	26.0	25.0	24.1	19.9		
In percent of exports	...	...	378.7	476.0	392.0	252.4	192.6	183.9	175.1	176.0	172.1	164.6	162.4	155.7	138.6		
Total external debt service-to-exports ratio	9.0	10.0	9.5	14.6	20.7	14.5	12.0	9.1	8.1	8.4	8.2	8.3	8.3	8.2	7.3		
PV of PPG external debt (in Million of US dollars)	...	...	2602.9	3283.4	3552.5	3772.4	3980.4	4261.6	4563.6	4872.5	5191.4	5507.3	5845.1	6199.2	11406.6		
(Pvt-Pvt-1)/GDPt-1 (in percent)	...	...	...	5.3	2.0	1.4	1.1	1.3	1.3	1.2	1.2	1.1	1.1	1.0	0.8		
Non-interest current account deficit that stabilizes debt ratio	11.3	14.4	9.0	11.3	19.3	14.6	10.1	7.2	7.0	6.7	7.0	7.2	7.1	7.0	6.3		

Definition of external/domestic debt	Currency-based
Is there a material difference between the two criteria?	Yes



Sources: Country authorities and staff estimates and projections.

1/ Includes both public and private sector external debt.

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

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

4/ The CCRt debt relief is reflected in the exceptional financing.

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

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

7/ 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).

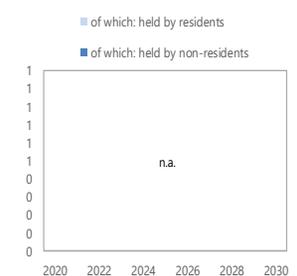
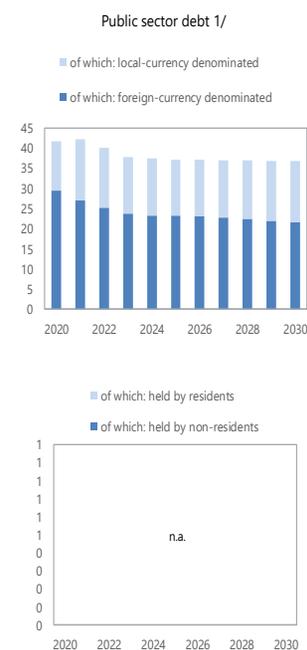
8/ Assumes that PV of private sector debt is equivalent to its face value.

9/ 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. Niger: Public Sector Debt Sustainability Framework, Baseline Scenario, 2017–40
(In percent of GDP, unless otherwise indicated)

	Actual			Projections								Average 7/	
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2030	2040	Historical	Projections
Public sector debt 1/	36.5	36.9	39.8	41.7	42.1	40.0	37.8	37.3	37.1	36.8	36.0	26.5	38.2
of which: external debt	25.7	25.3	...	29.4	28.9	26.9	25.3	25.1	24.8	22.8	18.7	19.2	25.4
Change in public sector debt	3.7	0.4	2.9	1.9	0.4	-2.1	-2.2	-0.5	-0.3	0.0	-0.1		
Identified debt-creating flows	-0.3	0.7	2.0	2.2	0.4	-2.1	-2.2	-0.5	-0.3	-0.2	-0.3	2.1	-0.3
Primary deficit	3.4	2.1	2.6	4.7	3.3	2.3	1.3	1.3	1.4	1.3	1.1	2.9	1.9
Revenue incl. grants	15.4	18.1	18.0	17.6	18.4	18.0	18.2	18.5	18.8	19.4	20.3	16.2	18.6
of which: grants	4.9	6.0	6.8	7.2	6.5	5.4	4.7	4.6	4.6	4.4	4.2		
Primary (noninterest) expenditure	18.8	20.2	20.6	22.4	21.7	20.3	19.5	19.8	20.2	20.7	21.4	19.1	20.5
Automatic debt dynamics	-3.6	-1.4	-0.6	-2.6	-2.9	-4.4	-3.5	-1.8	-1.7	-1.5	-1.4		
Contribution from interest rate/growth differential	-1.3	-2.3	-1.6	-0.1	-2.3	-4.2	-3.4	-1.8	-1.7	-1.5	-1.4		
of which: contribution from average real interest rate	0.3	0.2	0.5	0.4	0.4	0.5	0.6	0.6	0.5	0.6	0.7		
of which: contribution from real GDP growth	-1.6	-2.5	-2.1	-0.5	-2.7	-4.8	-4.0	-2.4	-2.2	-2.1	-2.2		
Contribution from real exchange rate depreciation	-2.3	0.9	1.0	...	...	...	...	...	...	...	...
Other identified debt-creating flows	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Privatization receipts (negative)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Recognition of contingent liabilities (e.g., bank recapitalization)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Debt relief (HIPC and other) 2/	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Other debt creating or reducing flow (please specify)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Residual	3.9	-0.3	0.9	-2.7	-0.6	-0.2	-0.1	0.0	0.0	0.2	0.2	0.3	-0.3
Sustainability indicators													
PV of public debt-to-GDP ratio 3/	...	...	33.6	35.0	35.2	33.2	31.2	30.6	30.4	30.7	31.1		
PV of public debt-to-revenue and grants ratio	...	...	186.4	198.6	191.1	184.2	171.0	165.6	161.9	158.3	153.1		
Debt service-to-revenue and grants ratio 4/	20.8	30.7	37.1	45.6	42.1	50.7	51.9	48.2	47.0	43.7	35.5		
Gross financing need 5/	5.8	6.7	9.2	12.8	11.1	11.4	10.8	10.2	10.2	9.8	8.3		
Key macroeconomic and fiscal assumptions													
Real GDP growth (in percent)	5.0	7.2	5.9	1.2	6.9	12.8	11.1	6.7	6.3	6.0	6.4	6.2	6.8
Average nominal interest rate on external debt (in percent)	1.4	1.6	1.3	1.5	1.8	2.2	2.2	2.1	1.7	1.7	1.7	1.4	1.8
Average real interest rate on domestic debt (in percent)	5.2	3.5	5.3	2.3	3.9	3.7	4.0	4.3	4.5	4.6	4.7	3.4	4.1
Real exchange rate depreciation (in percent, + indicates depreciation)	-10.0	4.0	4.1	...	...	...	...	...	...	...	...	2.8	...
Inflation rate (GDP deflator, in percent)	0.8	2.4	0.1	2.8	1.7	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.1
Growth of real primary spending (deflated by GDP deflator, in percent)	5.6	15.0	8.2	9.9	3.9	5.6	6.8	8.0	8.3	7.0	6.8	8.8	6.8
Primary deficit that stabilizes the debt-to-GDP ratio 6/	-0.3	1.6	-0.3	2.9	2.9	4.4	3.5	1.7	1.6	1.3	1.3	0.3	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	Currency-based
Is there a material difference between the two criteria?	Yes



Sources: Country authorities; and staff estimates and projections.

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

2/ The CCRT debt relief is included in the primary deficit.

3/ 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.

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

5/ 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.

6/ 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.

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

Table 3. Niger: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2020–31

	Projections 1/											
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
PV of debt-to-GDP ratio												
Baseline	24	22	20	19	18	18	18	18	17	17	17	17
A. Alternative Scenarios												
A1. Key variables at their historical averages in 2020-2040 2/	24	23	22	23	24	25	27	28	29	30	31	32
B. Bound Tests												
B1. Real GDP growth	24	23	24	22	22	22	22	21	21	20	20	20
B2. Primary balance	24	23	21	20	20	19	19	19	19	18	18	18
B3. Exports	24	24	28	26	25	24	24	24	23	22	21	21
B4. Other flows 3/	24	26	25	23	22	22	21	21	20	20	19	19
B6. One-time 30 percent nominal depreciation	24	27	21	20	19	19	19	19	19	18	18	18
B6. Combination of B1-B5	24	29	27	25	24	24	24	23	23	22	22	21
C. Tailored Tests												
C1. Combined contingent liabilities	24	23	22	21	20	20	20	20	20	20	19	19
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.	n.a.
C3. Commodity price	24	23	22	21	20	20	19	19	18	18	17	17
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.	n.a.
Threshold	40	40	40	40	40	40	40	40	40	40	40	40
PV of debt-to-exports ratio												
Baseline	257	220	145	113	111	109	112	112	110	111	108	108
A. Alternative Scenarios												
A1. Key variables at their historical averages in 2020-2040 2/	257	227	159	138	145	152	166	176	184	195	200	211
B. Bound Tests												
B1. Real GDP growth	257	220	145	113	111	109	112	112	110	111	108	108
B2. Primary balance	257	223	151	119	118	116	120	120	119	120	117	116
B3. Exports	257	333	486	378	368	358	365	363	355	352	337	330
B4. Other flows 3/	257	258	176	137	134	130	133	133	129	129	125	123
B6. One-time 30 percent nominal depreciation	257	220	122	96	94	93	96	96	95	97	95	96
B6. Combination of B1-B5	257	341	155	262	256	250	257	257	250	251	244	242
C. Tailored Tests												
C1. Combined contingent liabilities	257	233	157	124	124	122	126	127	126	127	124	124
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.	n.a.
C3. Commodity price	257	263	173	132	127	122	122	121	118	117	112	110
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.	n.a.
Threshold	180	180	180	180	180	180	180	180	180	180	180	180
Debt service-to-exports ratio												
Baseline	11	18	13	11	9	8	8	8	8	8	8	7
A. Alternative Scenarios												
A1. Key variables at their historical averages in 2020-2040 2/	11	20	15	13	12	11	11	12	12	12	12	12
B. Bound Tests												
B1. Real GDP growth	11	18	13	11	9	8	8	8	8	8	8	7
B2. Primary balance	11	18	13	11	9	8	8	8	8	9	9	8
B3. Exports	11	25	32	29	24	22	22	22	23	27	26	23
B4. Other flows 3/	11	18	13	11	9	8	9	9	10	10	10	9
B6. One-time 30 percent nominal depreciation	11	18	13	10	8	7	8	8	8	7	7	6
B6. Combination of B1-B5	11	24	29	24	20	17	18	18	20	19	18	16
C. Tailored Tests												
C1. Combined contingent liabilities	11	18	13	11	9	8	8	8	9	9	8	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.	n.a.
C3. Commodity price	11	21	14	12	10	9	9	9	9	9	9	8
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.	n.a.
Threshold	15	15	15	15	15	15	15	15	15	15	15	15
Debt service-to-revenue ratio												
Baseline	10	15	14	13	11	9	9	9	9	9	8	7
A. Alternative Scenarios												
A1. Key variables at their historical averages in 2020-2040 2/	10	17	17	16	14	13	13	13	13	12	13	12
B. Bound Tests												
B1. Real GDP growth	10	16	17	16	13	11	11	11	11	10	10	9
B2. Primary balance	10	15	14	13	11	9	9	9	9	9	9	8
B3. Exports	10	15	15	14	12	10	10	10	10	11	11	10
B4. Other flows 3/	10	15	15	14	11	10	10	9	10	10	10	9
B6. One-time 30 percent nominal depreciation	10	19	17	15	12	11	11	10	10	9	9	8
B6. Combination of B1-B5	10	17	18	16	13	12	12	11	12	11	11	10
C. Tailored Tests												
C1. Combined contingent liabilities	10	15	14	13	11	10	10	9	9	9	9	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.	n.a.
C3. Commodity price	10	18	17	15	12	10	10	9	10	9	9	8
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.	n.a.
Threshold	18	18	18	18	18	18	18	18	18	18	18	18

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. Niger: Sensitivity Analysis for Key Indicators of Public Debt, 2020–31

	Projections											
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
PV of Debt-to-GDP Ratio												
Baseline	35	35	33	31	31	30	30	30	31	31	31	31
A. Alternative Scenarios												
A1. Key variables at their historical averages in 2018-2038 1/	35	35	35	36	36	37	38	38	39	40	41	42
B. Bound Tests												
B1. Real GDP growth	35	37	43	42	44	45	47	49	51	53	55	57
B2. Primary balance	35	37	36	34	33	33	33	32	32	32	32	32
B3. Exports	35	37	40	38	37	36	36	36	36	35	35	35
B4. Other flows 2/	35	39	38	35	34	34	34	34	34	33	33	33
B6. One-time 30 percent nominal depreciation	35	40	36	33	31	29	28	27	26	25	25	24
B6. Combination of B1-B5	35	35	36	34	33	33	34	34	34	34	34	35
C. Tailored Tests												
C1. Combined contingent liabilities	35	42	39	36	35	35	34	34	34	34	34	34
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.	n.a.
C3. Commodity price	35	37	40	43	46	49	52	54	56	58	61	62
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.	n.a.
Public debt benchmark	55	55	55	55	55	55	55	55	55	55	55	55
PV of Debt-to-Revenue Ratio												
Baseline	199	191	184	171	166	162	161	161	160	160	158	158
A. Alternative Scenarios												
A1. Key variables at their historical averages in 2018-2038 1/	199	190	193	191	191	191	193	197	200	203	206	209
B. Bound Tests												
B1. Real GDP growth	199	200	222	220	225	230	239	248	257	264	271	278
B2. Primary balance	199	201	202	186	180	174	172	171	170	168	166	165
B3. Exports	199	201	224	207	200	194	192	190	188	185	181	178
B4. Other flows 2/	199	212	208	193	186	181	179	178	177	174	171	170
B6. One-time 30 percent nominal depreciation	199	225	206	183	170	159	152	146	141	135	130	126
B6. Combination of B1-B5	199	194	194	183	179	176	176	176	177	177	176	176
C. Tailored Tests												
C1. Combined contingent liabilities	199	225	214	198	190	184	181	180	178	176	174	172
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.	n.a.
C3. Commodity price	199	220	243	252	262	269	277	282	292	301	309	317
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.	n.a.
Debt Service-to-Revenue Ratio												
Baseline	46	42	51	52	48	47	47	44	44	44	44	45
A. Alternative Scenarios												
A1. Key variables at their historical averages in 2018-2038 1/	46	42	52	57	54	54	54	50	51	51	52	54
B. Bound Tests												
B1. Real GDP growth	46	43	59	65	65	68	71	70	74	75	77	80
B2. Primary balance	46	42	55	58	54	53	51	47	47	47	46	47
B3. Exports	46	42	51	53	49	48	48	44	45	46	46	46
B4. Other flows 2/	46	42	51	52	49	47	47	44	45	45	45	46
B6. One-time 30 percent nominal depreciation	46	42	52	52	49	47	47	43	44	43	43	43
B6. Combination of B1-B5	46	41	52	56	52	52	53	50	51	51	51	53
C. Tailored Tests												
C1. Combined contingent liabilities	46	42	67	59	60	56	53	49	49	48	47	48
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.	n.a.
C3. Commodity price	46	46	60	73	75	80	84	82	85	87	88	91
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.	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.