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GRENADA

JOINT WORLD BANK-IMF DEBT SUSTAINABILITY ANALYSIS

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GRENADA: JOINT BANK-FUND DEBT SUSTAINABILITY ANALYSIS[1,2]	
Risk of external debt distress	In debt distress
Overall risk of debt distress	In debt distress
Granularity in the risk rating	Sustainable
Application of judgment	No

Grenada remains in public debt distress solely due to longstanding unresolved arrears to official bilateral creditors of about US$37.6 million (3.1 percent of GDP) as of end 2022. However, public debt is assessed as sustainable reflecting favorable projected debt dynamics from substantial fiscal surpluses that are supported by the return to the fiscal rule in 2023. Public debt rose to 71.4 percent of GDP in 2020 from 58.5 percent in 2019, due to the pandemic-induced collapse in GDP. As tourism and offshore education sectors, as well as construction activity rebound, public debt resumed its pre-pandemic downward trend in 2021 and reached an estimated 64.6 percent of GDP in 2022, with a further decline expected in 2023. Going forward, continued adherence to the fiscal responsibility framework and regularization of arrears will be needed to maintain a sustainable debt trajectory and upgrade the risk rating. Even though the public debt-to-GDP ratio does not breach its threshold under the baseline scenario, the present value of the external debt-to-GDP ratio and the external debt service-to-revenue ratio marginally breach the thresholds. Public debt should be further reduced to create a buffer that will allow Grenada to better weather the extensive external shocks and natural disasters, as underscored by the stress test scenarios.

[1] The last published DSA for Grenada can be accessed here.

[2] The composite index (CI), estimated at 2.96 and based on the April 2023 World Economic Outlook (WEO) and 2021 World Bank Country Policy and Institutional Assessment (CPIA) data, indicate a medium debt carrying capacity for Grenada.

PUBLIC DEBT COVERAGE

1. **Public debt in this DSA is defined as the sum of central government debt (including arrears on principal and interest and overdue membership fees to international organizations) and government-guaranteed debt.** It does not include non-guaranteed debt of state-owned enterprises (SOEs) and limited liability companies, notably PDV Grenada's debt on account of the Petrocaribe arrangement. Based on the determination that the Government of Grenada is not responsible for the debt but only for its shares in the company, the Petrocaribe debt has not been included in the stock of central government debt.[3] Until recently, gaps and time lags in the public enterprises' reporting hampered the complete coverage of public sector debt. Substantial improvement in the comprehensiveness and timeliness of SOE debt data has been made recently, but an expansion of the perimeter to the public sector is still unfeasible because of the lack of consolidated debt data in the public sector. The authorities plan to amend the Fiscal Responsibility Act (FRA) in the second half of 2023, which will broaden the coverage of public debt to include debt of all state-owned enterprises (SOEs) and statutory bodies as well as public private partnership related liabilities (PPP).

Text Table 1. Grenada: Coverage of Public Sector Debt

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

2. **The contingent liability stress test accounts for the risks from the estimated stock of non-guaranteed SOE debt as well as ongoing PPPs and financial markets.** The stock of non-guaranteed SOE debt is substantial, estimated at 16.2 percent of GDP in 2022, and is reflected in the contingent liability stress test. The bulk of this stock (10.8 percent of GDP) is accounted for by PDV Grenada's total debt.[4] The current stock of PPP capital remains zero, and thus the related contingent liability shock is set to zero. The FRA puts a cap on PPP-related government liabilities at 5 percent of GDP.[5] Contingent liabilities from financial markets are set at the minimum value of 5 percent of GDP, which represents the average cost to the government of a financial crisis in low-income countries since 1980.[6] Estimates for other elements not covered are either zero (there is no central bank debt borrowed on behalf of the government) or need to

[3] As reported in the 2014 staff report for the approval of the ECF arrangement, PDV Grenada is a limited liability company with the government's share of 45 percent and Venezuela's PDVSA's share of 55 percent.

[4] The DSA takes a conservative approach towards the public enterprise debt. For example, a substantial "haircut" on Petrocaribe debt was granted to St. Vincent and the Grenadines in 2018. Moreover, existing debt of the central government to PDV Grenada of 2.9 percent of GDP is not subtracted from the possible contingent liability (see Text Table 3).

[5] Besides the cap on PPP-related liabilities, the FRA includes a target (at or below 55 percent of GDP) and three operational rules (i.e., primary balance at or above 3.5 percent of GDP, real primary expenditure growth at or below 2 percent per year, and wage bill at or below 9 percent of GDP), among other requirements.

[6] The assumed 5 percent of GDP of liabilities is expected to cover potential cost to the state if credit risks in credit unions continue to worsen (latest numbers suggest that credit union NPLs were 1.1 percent of GDP in 2022).

be firmed up in the context of developing a comprehensive presentation of consolidated non-financial public sector debt, which is planned to be developed by the authorities.

Text Table 2. Grenada: Contingency Liability Calibration

1	The country's coverage of public debt	The central, state, and local governments, 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	0	
3	SoE's debt (guaranteed and not guaranteed by the government) 1/	2 percent of GDP	16.2	Non-guaranteed debt stock at end-2022.
4	PPP	35 percent of PPP stock	0	PPP capital stock is zero.
5	Financial market (the default value of 5 percent of GDP is the minimum value)	5 percent of GDP	5	
	Total (2+3+4+5) (in percent of GDP)		21.2	

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%.

BACKGROUND ON DEBT

3. **External and total public debt rose sharply in 2020 but have since declined.** Prior to the pandemic, Grenada's public debt declined significantly from 94.3 percent of GDP in 2014 to 58.5 percent of GDP in 2019, on the back of solid growth averaging 4.5 percent and robust primary surpluses averaging 4.7 percent of GDP in the same period. Total external debt rose in 2020–21 driven by external public debt dynamics[7]. Public debt rose in 2020 to 71.4 percent of GDP due to the collapse in GDP but also to a smaller primary balance surplus. Public debt resumed its earlier downward trend in 2021 and reached an estimated 64.6 percent of GDP at end-2022. At the same time, the composition of debt shifted further towards external sources reflecting continued support from multilateral organizations. There were no significant changes in the average maturity of either external or domestic debt. In 2020, Grenada benefited from a deferral of debt service of US$1.4 million or 0.1 percent of GDP under the G20 Debt Service Suspension Initiative.

4. **The authorities continue to make efforts to resolve the remaining external arrears.** These arrears are a legacy from the 2014 debt restructuring, reflecting arrears to non-Paris Club holdouts, commercial creditors, and international organizations. In October 2022, the Government of Grenada reached a repayment agreement with the State of Libya on the US$5 million in debt arrears owed. Arrears of about US$37.6 million owed to non-Paris Club official bilateral creditors including Trinidad and Tobago and Algeria remain to be regularized.[8] The authorities reported progress in advancing negotiations with Trinidad and Tobago, for which high-level discussions have taken place and an escrow account was opened to deposit payments. Limited progress has been made on clearing the arrears with Algeria. Commercial arrears purport overwhelmingly to holdouts of the 2012 USD restructured bonds. The authorities continue to engage commercial creditors to reach a resolution.

[7] The external debt is defined based on a residency criterion. The share of external debt using currency criteria is about 5 percentage points lower, as a large portion of the debt held by nonresidents is in Eastern Caribbean Dollar.
[8] Arrears have increased due to the accrual of interest.

Text Table 3. Grenada: Public Sector Debt, 2019–22
(Year End, in Millions of EC Dollars)

	2019			2020			2021			2022		
		Percent of			Percent of			Percent of			Percent of	
	Stock	Total Debt	GDP	Stock	Total Debt	GDP	Stock	Total Debt	GDP	Stock	Total Debt	GDP
Public Sector debt 1/	2054.3	100.0	62.7	2149.1	100.0	76.3	2290.2	100.0	76.7	2262.5	98.8	70.0
Central government debt	1918.3	93.4	58.5	2011.8	93.6	71.4	2124.3	92.8	71.2	2086.8	91.1	64.6
Central-government guaranteed debt	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.8	0.0	0.0
Other public sector debt	136.0	6.6	4.2	137.3	6.4	4.9	164.9	7.2	5.5	174.9	7.6	5.4
External debt (A+B+C)	1476.8	71.9	45.1	1591.8	74.1	56.5	1724.8	75.3	57.8	1713.3	74.8	53.0
A. Central Government	1440.4	70.1	44.0	1554.7	72.3	55.2	1660.6	72.5	55.6	1662.6	72.6	51.4
1. Multilateral	832.8	40.5	25.4	987.8	46.0	35.1	1064.3	46.5	35.7	1111.5	48.5	34.4
2. Official bilateral	209.0	10.2	6.4	195.7	9.1	6.9	246.9	10.8	8.3	236.2	10.3	7.3
of which Paris Club	16.0	0.8	0.5	16.3	0.8	0.6	16.4	0.7	0.5	14.7	0.6	0.5
3. Commercial debt	369.1	18.0	11.3	347.8	16.2	12.3	332.1	14.5	11.1	302.4	13.2	9.4
4. Overdue membership fees	29.5	1.4	0.9	23.4	1.1	0.8	17.2	0.8	0.6	12.5	0.5	0.4
B. Central-government guaranteed	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C. SOE non-guaranteed debt 2/	36.4	1.8	1.1	37.1	1.7	1.3	64.2	2.8	2.2	50.7	2.2	1.6
Domestic debt (A+B+C)	577.5	28.1	17.6	557.3	25.9	19.8	565.4	24.7	18.9	549.2	24.0	17.0
A. Central Government	477.9	23.3	14.6	457.1	21.3	16.2	463.7	20.2	15.5	424.2	18.5	13.1
B. Central-Government guaranteed	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.8	0.0	0.0
C. SOE non-guaranteed debt 2/	99.6	4.8	3.0	100.2	4.7	3.6	100.7	4.4	3.4	124.2	5.4	3.8
Memorandum items:												
Nominal GDP	3276.4			2817.2			2985.3			3232.4		

Sources: Grenadian authorities and Fund staff estimates.
1/ Include SOE non-guaranteed debt but does not include debt of PDV Grenada.
2/ On-lent loans to public bodies are not counted as SOE debt since they are part of central government debt.

Text Table 4. Grenada: External and Domestic Arrears, 2020–22
(Year End, in Millions of U.S. Dollars, Unless Otherwise Indicated)

	2020		2021		2022	
	US$mln	% of GDP	US$mln	% of GDP	US$mln	% of GDP
Total arrears	**41.6**	**4.0**	**41.2**	**3.7**	**52.1**	**4.3**
External arrears	**41.6**	**4.0**	**41.2**	**3.7**	**52.1**	**4.3**
Multilateral	0.0	0.0	0.0	0.0	0.0	0.0
Bilateral	22.8	2.2	24.5	2.2	37.6	3.1
Paris Club	0.0	0.0	0.0	0.0	0.0	0.0
Non-Paris Club	22.8	2.2	24.5	2.2	37.6	3.1
Algeria	1.8	0.2	1.9	0.2	1.9	0.2
Libya	5.0	0.5	5.0	0.5	0.0	0.0
Trinidad and Tobago	16.0	1.5	17.6	1.6	35.7	3.0
Commercial	10.1	1.0	10.3	0.9	9.9	0.8
Unpaid contribution to organizations	8.7	0.8	6.4	0.6	4.6	0.4
Budget expenditure arrears	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Domestic debt	0.0	0.0	0.0	0.0	0.0	0.0

Sources: Grenadian authorities and staff estimates.

5. **Most portfolio characteristics of Grenada's debt continued to improve.**[9] Consistent with their debt strategy and in line with commitments from development partners, the authorities are seeking to shift towards largely concessional external debt. The average time to maturity has been stable at around 10 years for external debt. Average time to re-fixing of the external debt portfolio increases marginally to 9.9 years, and the average effective interest rate on all central government debt declined from 2.8 to 2.5 percent in 2022. As expected from the financing structure, the share of external debt held by multilateral creditors increased to 67.3 percent in 2022 from 64.7 percent in 2021. Furthermore, the government of

[9] The metrics provided in this paragraph purport exclusively to central government debt.

Grenada is committed to a non-concessional borrowing ceiling, of US$80 million, between July 1, 2022–June 30, 2023.

6. **Portfolio risks, while declining, remain.** The interest rate is subject to a moderate risk with an average time to re-fixing of 9.2 years for the entire portfolio in which 24 percent of the portfolio is subject to a change in interest rates in one year. This risk resides predominantly in the domestic portfolio in which 30.5 percent of this debt is subject to re-fixing in one year, which could lead to higher interest cost given the higher interest rate environment. Nevertheless, the re-fixing risk from the domestic portfolio is likely small given the strategy to shift to concessional financing in the next few years. The current portfolio is subject to only moderate foreign exchange risk as most of foreign currency debt is denominated in U.S. dollars to which the EC dollar is pegged.

BACKGROUND ON MACRO FORECASTS

7. **Data for 2022 came out stronger than anticipated in the 2022 Article IV.**[10] Robust construction activity and a sharper recovery in tourism led to higher-than-expected growth in 2022. Inflation surprised to the downside, as fiscal measures helped contain domestic prices. Fiscal outturns were also favorable, with stronger-than-expected revenues (import tax,[11] non-tax revenues, and grants) more than offsetting the larger spending.

Text Table 5. Grenada: Macroeconomic Assumptions
(In Percent of GDP, Unless Otherwise Indicated)

	Histrorical		Projections					
	avg. 2013-21	2022	2023	2024	2025	2026	2027	avg. 2028-42
Real GDP growth (in percent)								
2023 AIV - Current	2.3	6.4	3.9	3.8	3.5	3.2	2.7	2.8
2022 AIV - Previous			3.6	3.9	3.5	3.2	2.8	2.8
Inflation rate (GDP deflator, in percent)								
2023 AIV - Current	1.6	1.8	3.0	2.8	2.0	2.2	2.2	2.2
2022 AIV - Previous			3.3	1.8	2.0	2.2	2.2	2.2
Non-interest current account deficit /1								
2023 AIV - Current	11.1	16.0	13.5	11.7	10.8	11.0	10.6	10.9
2022 AIV - Previous			18.9	13.7	11.9	11.3	10.8	11.2
Growth of exports of G & S (USD terms, in percent)								
2023 AIV - Current	14.0	18.5	18.4	6.1	3.8	3.9	4.2	4.0
2022 AIV - Previous			22.4	16.7	8.7	4.7	5.0	4.8
Primary Balance								
2023 AIV - Current	2.5	2.6	3.6	3.6	3.6	1.6	1.3	-0.7
2022 AIV - Previous			3.5	3.8	4.2	4.3	4.2	0.0

Sources: Grenadian authorities, WB and IMF staff projections
/1 The numbers under 2023AIV incorporate a historical upward revision to the services balance.

[10] Grenada: 2022 Article IV Consultation-Press Release; Staff Report; and Statement by the Executive Director for Grenada.
[11] Higher import prices contributed to stronger import tax revenues.

8. **A continued recovery is projected for 2023, although at a slower pace amid lower global growth.** The economy is expected to continue growing into the medium term, and output is expected to almost return to its pre-pandemic level in 2023 and its potential level by 2028 (Box 1).

Box 1. Grenada: Macroeconomic Assumptions for 2023–43

Real GDP growth is projected to expand by 3.9 percent in 2023 (following a strong rebound in 2022), underpinned by a slower-paced recovery in construction and tourism. Public investment is expected to boost longer-term potential GDP and mitigate risks from natural disasters and climate change. For example, the WB regional tourism competitiveness project and the international airport expansion will increase flight capacity and contribute to the ongoing recovery of tourism. Projects such as the climate resilience water sector, smart agriculture, climate resilient cities, and those supporting an expansion of solar power generation and battery storage, are critical components of climate adaptation and mitigation. Russia's invasion of Ukraine, and the resulting increases in global commodity prices, are already posing headwinds to growth but could still create further strains, crucially depending on its length. The primary surplus is expected to rise further in 2023 to 3.6 percent of GDP (under the FRA), as public investment scales back and the recovery takes hold, sustaining revenues. Still, the economy is only expected to reach the pre-pandemic output level by 2024, supported by post-pandemic pent-up demand, a recovery of tourism related activities, and robust private investment that takes the mantle from public investment. Output is expected to gradually converge to potential by 2028 and remain around that level thereafter. The baseline includes estimated average costs of natural disasters.[1] Over the long term, potential growth is assumed at 2.8 percent. This incorporates the potential adverse impacts of natural disasters and climate change, as well as the positive impact of implementing the Disaster Resilience Strategy (DRS).[2] The DRS provides a platform for robustly identifying financing and capacity building needs and a framework for coordinated support from development partners. Increased access to donor financing is crucial for its implementation.

Inflation is expected to peak at 3.2 percent by end-2023, reflecting a slow pass-through of international prices to domestic prices following the scale-back of temporary relief measures. A few relief measures remain in place in 2023, including an exemption of VAT on selected food items and small electricity consumption, a reduction of VAT on electricity consumption from 15.0 to 7.5 percent for all consumers, a petrol tax reduction to $3.50 per gallon and a cap on liquid petroleum prices. Inflation is expected to converge back to 2 percent over the long term, anchored by the currency board arrangement under the Eastern Caribbean Central Bank (ECCB). The GDP deflator is expected to rise also by 3.0 percent in 2023.

Fiscal policy. Anchored by the FRA, Grenada's primary surplus averaged 4.7 percent of GDP between 2014–19. In the same period, solid growth and cumulated primary surpluses drove down public debt as defined in this DSA from 94.3 percent to 58.5 percent of GDP. The sharp GDP contraction in 2020 and additional spending needs reversed this trend, sending public debt to 71.4 percent of GDP in 2020. Since then, strong recovery in GDP growth in 2021–22 and the authorities' restraint on non-priority spending helped put the public debt back to the downward trend, which ended at 64.6 percent of GDP in 2022. Projections for 2023 follow roughly the Budget and thus assume a returning to the FRA, supported by the continued recovery of the tourism sector, the inflow of grant and CBI revenues[3] to finance capital expenditure, as well as tax administration and spending containment measures. The projections also incorporate the revenue impact (estimated at EC$5.5 million, annually) from the announced increase in excise on alcohol and cigarettes and higher VAT on beverages with high sugar content. These measures are expected to have insignificant contractionary impacts on growth, while bringing long-term revenue gains. Primary fiscal surpluses are expected to continue to slightly overperform the FRA's 3.5 percent of GDP floor on average through 2025 but then turn into small primary deficits as permitted by the fiscal rule and needed to fill the investment gap. The looser fiscal policy assumed after 2027 is in line with keeping a roughly stable debt-to-GDP ratio at 47 percent (well below the medium-term debt anchor).

Box 1. Grenada: Macroeconomic Assumptions for 2023–43 (Concluded)

The non-interest current account deficit is currently projected at 16.0 percent in 2022 amid strong imports and a still-recovering tourism sector. The current account deficit is expected to improve from 2023, as tourism regains its pre-pandemic levels. Over the long term, the current account deficit is likely to return to closer to its long-term historical average.

Gross reserves are expected to hover around 5 months of imports after a boost in 2021 from the SDR allocation.

Risks are tilted to the downside and uncertainty is especially high. Key risks arise from a slowdown in the global economy, especially Grenada's major source of tourists (the U.S. and U.K.). A sharp rise in import costs of construction materials could weigh on this sector, which is a key driver of economic activity. Global inflationary pressures, if persistent, could drive up borrowing costs—through their impact on advanced economies' monetary policy and further tightening of global financial conditions—and erode incomes and real growth. High inflation could also feed into higher goods and services spending and public wage bill as well as higher-than-expected VAT exemption costs, which may weaken fiscal performance. At the same time, tax collection on pricier imports could overperform. Ongoing reforms to promote renewable energy and energy efficiency can reduce Grenada's exposure to future energy price swings, while also strengthening economic competitiveness, improving the long-term balance of payments position, and reducing emissions. The prospective monetary tightening in major economies could revert the recovering trend of FDI and threaten the sustainable financing of development projects, including the DRS.

[1] The future annual fiscal cost of natural disasters is assumed at ½ percent of GDP, broadly consistent with the World Bank-modeled losses that have an estimate of 0.3 percent of GDP (The latter covers most but not all types of historical natural disasters and does not model additional potential fiscal effects from the revenue losses and intensifying climate change).

[2] The government's published document is available here.

[3] The inflow of CBI revenues is projected to decline from current high levels going forward, as Grenada stopped accepting Russian applications and other countries may tighten scrutiny on the entrance by CBI citizens.

9. Financing assumptions have been updated based on most recent data. The latest financing projections from the World Bank's International Development Association (IDA) program and existing Caribbean Development Bank (CDB) projects[12] have been incorporated, which are sufficient to cover the gross financing needs. In addition, remaining disbursements from the loan extended by the Export-Import Bank of China will take place in 2023.[13] In the long run, the government is assumed to mainly rely on concessional loans from the World Bank and CDB for external financing, with no plan to return to external bond markets in the projection period. Domestic and Regional Governments' Securities Market (RGSM) financing sources fill the financing needs that are not covered externally and are assumed to play a larger role as the market develops.[14] More specifically, DSA assumes that domestic and RGSM provide financing with short-term maturities in the near-term projection period, which gradually turn to longer-term maturities in the outer projection period.

10. Realism tools indicate that short-term growth is conservatively forecasted (Figure 4). The projected fiscal path incorporates the authorities' commitment to return to the FRA. As such, the fiscal

[12] CDB provides both credit and grant financing, and for 2024 and 2025 grants increase to about US$8 million.

[13] The loan, which is for financing infrastructure projects (such as airport and road network constructions), amounts to US$69 million, with US$36.2 million to be disbursed in 2023.

[14] See the 2021 Article IV consultation with the ECCU here.

projection lies close to the top quartile of the distribution of past adjustments of the primary fiscal deficit. The baseline growth stays below levels consistent with recent growth momentum and the impact of the fiscal adjustment. The improved fiscal outturns and growth in 2022 result in lower projected public debt to GDP ratios relative to the previous DSA in the short and medium term (Figure 3).

COUNTRY CLASSIFICATION AND DETERMINANTS OF SCENARIO STRESS TESTS

11. Grenada continues to be assessed at medium debt-carrying capacity.[15] The rating is based on the CI score, which captures the impact of the different factors through a weighted sum of the 2021 World Bank's CPIA score, the country's real GDP growth, remittances, international reserves, and world growth. Under the CI, Grenada continues to be rated as a medium performer.

Text Table 6. Grenada: Composite Indicator

Calculation of the CI Index

Components	Coefficients (A)	10-year average values (B)	CI Score components (A*B) = (C)	Contribution of components
CPIA	0.385	3.623	1.39	47%
Real growth rate (in percent)	2.719	2.683	0.07	2%
Import coverage of reserves (in percent)	4.052	44.412	1.80	61%
Import coverage of reserves^2 (in percent)	-3.990	19.724	-0.79	-27%
Remittances (in percent)	2.022	4.667	0.09	3%
World economic growth (in percent)	13.520	2.856	0.39	13%
CI Score			2.96	100%
CI rating			Medium	

Final	Classification based on current vintage	Classification based on the previous vintage	Classification based on the two previous vintage
Medium	Medium 2.96	Medium 2.97	Medium 2.98

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

12. Both external and public debt analyses consider standard-DSA alternative scenarios to this baseline as well as three tailored scenarios. A "contingency liability" shock captures risks from SOE and PDV debt. An extreme "natural disaster" scenario is calibrated based on the estimated growth impact that the 2017 hurricane Maria had on Dominica (the total damage from Maria for Dominica is similar to that of hurricane Ivan for Grenada in 2004). The fiscal response assumes an increase of expenditures by a

[15] The composite index (CI), estimated at 2.96 and based on the April 2023 WEO and 2021 World Bank CPIA data, indicate a medium debt carrying capacity for Grenada.

total of 5 percent of GDP in the two years following a hurricane or 2.5 percentage points in the first two years to cover reconstruction costs.

EXTERNAL DSA

13. External PPG debt-to-GDP ratio is projected to trace a downward path in the baseline scenario. The present value of debt-to-GDP and debt service-to-revenue ratios marginally exceeds the threshold in 2023 under the baseline scenario (Figure 1). However, these breaches are short-lived, for the year of 2023 only, and hence discounted. The downward trajectory under the baseline is predicated on the assumptions of returning to the fiscal rule constraints in 2023 and adhering to a path of debt reduction going forward. This is to be supported by improving spending efficiency and mobilizing domestic resources. For example, by enhancing tax compliance, reducing tax arrears, boosting digitalization, broadening the tax base, and increasing the equity and efficiency of the tax system.

14.- Under stress tests, thresholds are breached for all key indicators of PPG external debt under an export shock. The present value of debt-to-GDP breaches its threshold under all stress tests (Table 3). The most severe shock is the “exports” shock, due to high exposure to tourism exports. For the present value of debt-to-exports ratio, debt service-to-exports ratio, and debt service-to-revenue ratio, the exports shock is the most extreme shock as well. A large natural disaster and a contingent liabilities shock have significant effects on the debt path. A natural disaster has a protracted effect on the debt path in part due to its interaction with the growth shock (e.g., due to a high likelihood of the infrastructure damage).

15. External debt is vulnerable to risks but is assessed as sustainable. Under the exports shock all thresholds are breached. The shock is applied on top of a strong export level that has recovered from the COVID-19 shock and substantially exceeded the pre-pandemic level due to higher export prices. Therefore, staff viewed the risks to external debt sustainability as high, but sustainable given the downward path under all external debt indicators.

OVERALL RISK OF PUBLIC DEBT DISTRESS

16. The total PPG Debt-to-GDP ratio does not breach its benchmark and it is projected to gradually decline until 2029 and broadly stabilize thereafter. Nevertheless, due to the remaining unresolved arrears to official bilateral creditors, Grenada’s DSA rating remains unchanged at “in debt distress.” The key drivers of the projected decline in PPG debt-to-GDP in the next few years are sizable primary surpluses and GDP growth, as reflected in the updated macroeconomic assumptions. The PV of debt-to-GDP ratio would be below benchmark in the baseline scenario, reflecting the government’s continued improvement in saving and access to concessional financing (Figure 2). Debt is projected to stabilize below the FRA medium-term anchor of 55 percent of GDP as a cushion against large shocks, including natural disasters. Under the most extreme scenario, as implied by the growth shock, the benchmark thresholds for the PV of debt-to-GDP ratio is breached throughout the projection period. Staff notes that the design of this shock in the template is overly onerous and conservative since the collapse in tourism during 2020 had an exceptional and sizable temporary element which is not appropriately considered by the default template. The debt service-to-revenue ratio is on a downward trajectory until 2025 and stabilizes thereafter, indicating low risks for Grenada with no concerns about servicing the debt.

RISK RATING, VULNERABILITY AND RECOMMENDATIONS

17. Grenada remains in debt distress, but its public and external debt is assessed as sustainable even though risks are high. The assessment that debt is sustainable is predicated on the authorities' strong commitment to the FRA, fiscal structural reforms, and further improvement in debt management. This is also supported by the authorities' strong past record of debt reduction and the availability of liquid financial assets (e.g., SDR allocation and government deposits). The debt-to-GDP ratio rose in 2020 after a significant decline through years of fiscal consolidation anchored by the FRA, robust economic growth, and a restructuring of Grenada's public debt. Fully regularizing external arrears would help tangibly improve the DSA rating, so would a continued progress in reducing public debt, including through maintaining the FRA's rules-based framework, pursuing fiscal structural reforms, and further improving debt management capacity.

18. Risks to debt sustainability remain substantial. Grenada's debt sustainability is subject to two-sided risks. The tourism recovery is highly uncertain and could either over- or under-perform expectations. Shocks to fuel prices are an added risk to the medium-term outlook. Domestically, higher-than-expected pensions, health care-related liabilities, and the new unemployment insurance scheme (if not adequately funded) can put additional stress on public finances and a possibility of particularly large natural disasters are an ever-present risk, which can also have adverse spillovers on the tourism sector. Continued strong commitment to the fiscal responsibility framework (including through the ongoing amendment to make it simpler and more flexible), implementing pension and national insurance scheme reforms, and advancing the transition to renewable energy are needed to manage those risks. The debt dynamics are highly susceptible to growth underperformance, which could be intensified by climate change (Table 3). The risks, including those associated with the Petrocaribe contingent debt, are mitigated by continued improvement of debt reporting and monitoring. The climate-related risks are mitigated by the implementation of the DRS, as supported by the IMF, WB, and other development partners.

19. To cushion the fiscal risks from natural disasters, Grenada has significantly advanced climate resilience building and responses to other emergencies. The Government has a long history developing the legal and institutional framework for disaster risk management (DRM), which was supported by the WB's TA. Furthermore, the WB's Second Recovery and Resilience DPC, which is currently under preparation, will help Grenada build resilience to external shocks and climate change, by supporting a comprehensive DRM legislation, the accountable and efficient use of energy, and the incentives to preserve resources. Disaster risk reduction has been included in the national development planning process (e.g., National Hazard Mitigation Policy 2003 and Plan 2006), and expanded across various line ministries and sectors under a multifaceted approach (e.g., Grenada Blue Growth Coastal Master Plan, and National Adaptation Plan 2017–21). Resilience building was built into all infrastructure sectors, land, agroforestry, agriculture, fishing, food security, water, mangrove, marine, coral, health, and zone management, to mitigate the potential damages. Surveillance and evaluation procedures have also been established to detect and manage outbreaks and response mechanisms for public emergency events, including health-related shocks. However, implementation capacity remains a significant impediment. Development partners have been providing important technical and capacity assistance to Grenada to further advance this area.

20. The government is also shifting to a more proactive and layered financial response planning to disaster risk. A variety of instruments are in place to meet different liquidity and funding needs for disasters of different severity and frequency. As part of its 2015 debt restructuring, some Grenada bonds included hurricane clauses, whereby debt service on the restructured debt (mainly to 2025 private bondholders, but also to Paris Club) would be automatically re-profiled following a hurricane and in some cases other types of natural disaster. This clause could release up to EC$45 million in funds in the event of a major natural disaster (the amounts would be lower for smaller events, depending on the triggers). The World Bank Deferred Drawdown Option for Catastrophe Risks (CAT DDO) renewed in 2023 provided another layer of contingent financing in case of natural disasters. Insurance from CCRIF, the contingency fund under the National Transformation Fund, and other savings would provide additional layers of protection. Although various instruments are in place, they are not used efficiently and need to be optimized to ensure the complementarity between the various risk retention and risk transfer instruments. The Disaster Resilience Strategy and the DRM Act will help consolidate the different resources and provide the most efficient cushions against natural disasters.

21. Debt management and debt data coverage need to be further enhanced. The authorities' debt management capacity would benefit from further reform in data management and IT system enhancements and building on the Debt Management Performance Assessment (DeMPA) undertaken with the World Bank in 2018. The Ministry of Finance (MoF) plans to amend the Fiscal Responsibility Act (FRA), in the second half of 2023, to better monitor all SOEs, statutory bodies, and PPP related liabilities. Such monitoring and the quality of information has improved considerably in recent years but can further improve. For example, by improving the timeliness of SOEs' debt coverage including information on their above-the-line operations and better assessing PDV's liabilities. Furthermore, transparency around the Citizenship-by-Investment (CBI) program should be strengthened to enhance the reporting and efficiency of asset management and the capacity for asset/liability operations.

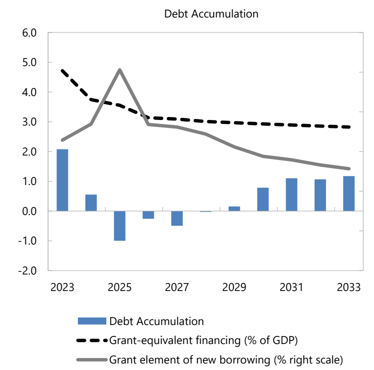
AUTHORITIES' VIEWS

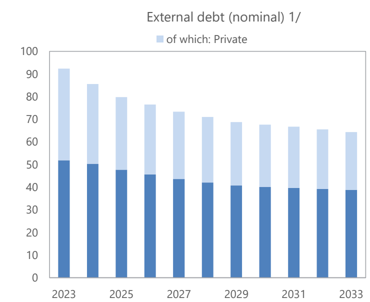
22. The authorities agreed with staff's debt sustainability assessment. They reached a repayment agreement with the State of Libya on the US$5 million in debt arrears owed. Regarding arrears to Trinidad & Tobago, they are making payments consistent with 2015 Paris Club agreement into an escrow account. The authorities underscore their commitment to regularize the remaining arrears to Trinidad and Tobago and Algeria. They committed to a return to the fiscal rules and to continue the debt reduction path. They indicated that the near-term financing needs are well covered by external funding that are already contracted and staff's financing assumptions are broadly in line with the government's Medium Term Debt Strategy.

Table 1. Grenada: External Debt Sustainability Framework—Baseline Scenario, 2020–43
(In Percent of GDP, Unless Otherwise Indicated)

	Actual			Projections								Average 9/	
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2033	2043	Historical	Projections
External debt (nominal) 1/	92.9	95.5	92.7	92.4	85.6	79.8	76.5	73.3	71.0	64.3	54.4	100.8	73.8
of which: public and publicly guaranteed (PPG)	55.2	55.4	51.4	51.9	50.3	47.7	45.6	43.6	42.0	38.8	33.2	54.8	43.6
Change in external debt	11.1	2.6	-2.8	-0.3	-6.8	-5.7	-3.3	-3.2	-2.3	-1.2	0.4		
Identified net debt-creating flows	14.9	-4.8	-4.1	0.4	-1.6	-2.7	-2.7	-3.3	-3.9	-4.2	-2.3	-4.1	-3.4
Non-interest current account deficit	14.9	11.8	16.0	13.5	11.7	10.8	11.0	10.6	10.4	10.2	13.1	11.6	10.6
Deficit in balance of goods and services	11.1	7.9	9.9	4.7	3.0	1.9	1.9	1.4	1.1	1.9	4.4	5.0	1.9
Exports	41.1	48.4	52.9	58.6	58.2	57.2	56.4	55.9	55.4	52.8	47.8		
Imports	52.2	56.3	62.8	63.3	61.2	59.1	58.3	57.3	56.6	54.6	52.2		
Net current transfers (negative = inflow)	-1.8	-2.7	-0.9	0.3	0.5	0.6	0.6	0.7	0.7	0.9	1.3	-0.4	0.7
of which: official	0.2	-1.2	-0.3	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7		
Other current account flows (negative = net inflow)	5.6	6.6	7.0	8.5	8.3	8.3	8.4	8.5	8.6	7.4	7.4	7.0	7.9
Net FDI (negative = inflow)	-14.9	-12.8	-14.1	-11.0	-11.5	-12.0	-12.5	-13.0	-13.5	-13.5	-14.8	-12.8	-12.8
Endogenous debt dynamics 2/	14.9	-3.8	-6.0	-2.2	-1.8	-1.5	-1.2	-0.8	-0.8	-0.9	-0.6		
Contribution from nominal interest rate	1.5	1.4	1.3	1.2	1.4	1.4	1.3	1.2	1.1	0.9	0.8		
Contribution from real GDP growth	13.1	-4.1	-5.6	-3.4	-3.3	-2.8	-2.4	-2.0	-1.9	-1.8	-1.4		
Contribution from price and exchange rate changes	0.2	-1.1	-1.7	...	...	...	...	...	...	...	...		
Residual 3/	-3.7	7.4	1.3	-0.7	-5.2	-3.1	-0.6	0.1	1.6	3.1	2.7	-0.7	0.8
of which: exceptional financing 4/	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Sustainability indicators													
PV of PPG external debt-to-GDP ratio	...	...	42.4	41.5	39.4	36.4	34.2	32.1	30.6	27.7	24.0		
PV of PPG external debt-to-exports ratio	...	...	80.0	70.9	67.7	63.6	60.7	57.5	55.1	52.4	50.1		
PPG debt service-to-exports ratio	16.1	12.8	6.1	9.1	7.8	7.7	7.3	7.2	6.6	5.9	8.4		
PPG debt service-to-revenue ratio	27.0	25.3	12.1	18.7	16.3	15.9	15.4	15.1	13.8	12.1	16.4		
Gross external financing need (Million of U.S. dollars)	69.8	58.2	63.1	101.4	66.3	46.2	40.0	27.0	11.1	1.5	108.9		
Key macroeconomic assumptions													
Real GDP growth (in percent)	-13.8	4.7	6.4	3.9	3.8	3.5	3.2	2.7	2.7	2.8	2.8	2.7	3.1
GDP deflator in US dollar terms (change in percent)	-0.3	1.2	1.8	3.0	2.8	2.0	2.2	2.2	2.2	2.2	2.2	1.6	2.3
Effective interest rate (percent) 5/	1.6	1.6	1.4	1.4	1.7	1.7	1.7	1.6	1.6	1.4	1.6	1.7	1.6
Growth of exports of G&S (US dollar terms, in percent)	-35.3	24.8	18.5	18.4	6.1	3.8	3.9	4.2	4.2	4.3	5.1	14.5	5.5
Growth of imports of G&S (US dollar terms, in percent)	-19.5	14.2	20.9	7.8	3.3	2.0	4.0	3.2	3.7	4.6	5.1	7.2	4.2
Grant element of new public sector borrowing (in percent)	...	...	...	32.9	36.9	50.6	36.8	36.2	34.4	25.7	16.3	...	33.4
Government revenues (excluding grants, in percent of GDP)	24.5	24.4	26.7	28.5	28.0	27.6	26.8	26.5	26.5	25.6	24.5	23.0	26.7
Aid flows (in Million of US dollars) 6/	38.2	85.2	83.1	69.6	58.3	63.5	53.6	55.1	55.4	64.5	91.4		
Grant-equivalent financing (in percent of GDP) 7/	...	...	...	4.7	3.7	3.6	3.1	3.1	3.0	2.8	2.5	...	3.2
Grant-equivalent financing (in percent of external financing) 7/	...	...	...	45.6	54.7	69.3	60.5	60.4	59.7	52.6	45.2	...	56.5
Nominal GDP (Million of US dollars)	1,043	1,106	1,197	1,281	1,368	1,444	1,524	1,601	1,681	2,152	3,537		
Nominal dollar GDP growth	-14.0	6.0	8.3	7.0	6.7	5.6	5.5	5.0	5.0	5.1	5.1	4.3	5.5
Memorandum items:													
PV of external debt 8/	...	...	83.6	82.0	74.7	68.5	65.1	61.9	59.6	53.2	45.2		
In percent of exports	...	...	158.0	140.1	128.2	119.7	115.6	110.8	107.5	100.7	94.6		
Total external debt service-to-exports ratio	16.3	12.9	6.2	9.2	8.0	7.8	7.4	7.3	6.7	6.0	8.4		
PV of PPG external debt (in Million of US dollars)			507.1	532.0	539.1	525.4	521.7	514.2	513.8	595.5	848.6		
(PVt-PVt-1)/GDPt-1 (in percent)				2.1	0.6	-1.0	-0.3	-0.5	0.0	1.2	0.3		
Non-interest current account deficit that stabilizes debt ratio	3.8	9.3	18.8	13.9	18.6	16.5	14.3	13.7	12.8	11.3	12.7		

Definition of external/domestic debt	Residency-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 - 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, the former being unusually negative in 2022-23 and thus contributing to the negative residuals.

4/ For 2020 it includes all sources of exceptional financing under the RCF. For 2021 and beyond it includes Eximbank China lending to an SOE.

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.

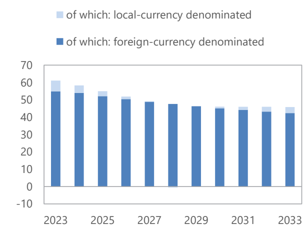
9/ Historical averages are generally derived over the past 10 years, subject to data availability, whereas projections averages are over the first year of projection and the next 10 years.

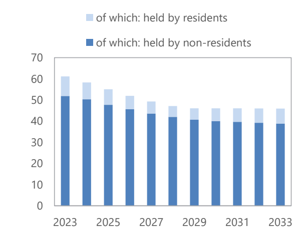
Table 2. Grenada: Public Sector Debt Sustainability Framework—Baseline Scenario, 2020–43
(In percent of GDP, Unless Otherwise Indicated)

	Actual			Projections								Average 8/	
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2033	2043	Historical	Projections
Public sector debt 1/	**71.4**	**71.0**	**64.6**	**61.1**	**58.3**	**55.0**	**51.9**	**49.3**	**47.1**	**45.9**	**45.2**	**75.6**	**50.3**
of which: external debt	**55.2**	**55.4**	**51.4**	**51.9**	**50.3**	**47.7**	**45.6**	**43.6**	**42.0**	**38.8**	**33.2**	**54.8**	**43.6**
Change in public sector debt	12.9	-0.4	-6.4	-3.4	-2.8	-3.3	-3.1	-2.7	-2.1	-0.1	-0.8		
Identified debt-creating flows	**14.1**	**-4.4**	**-6.4**	**-5.7**	**-5.5**	**-5.2**	**-3.1**	**-2.5**	**-2.1**	**-0.2**	**0.0**	**-3.5**	**-2.3**
Primary deficit	**2.6**	**-2.1**	**-2.6**	**-3.6**	**-3.6**	**-3.6**	**-1.6**	**-1.3**	**-1.0**	**1.0**	**0.6**	**-2.5**	**-0.9**
Revenue and grants	28.1	32.1	33.7	30.5	29.9	29.6	28.8	28.5	28.4	27.6	26.5	**26.9**	**28.6**
of which: grants	3.7	7.7	6.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9		
Primary (noninterest) expenditure	30.7	29.9	31.1	26.9	26.3	26.0	27.1	27.2	27.4	28.5	27.0	**24.4**	**27.7**
Automatic debt dynamics	**11.5**	**-2.2**	**-3.8**	**-2.1**	**-1.9**	**-1.7**	**-1.5**	**-1.2**	**-1.2**	**-1.2**	**-0.6**		
Contribution from interest rate/growth differential	10.3	-2.8	-3.8	-2.1	-1.9	-1.7	-1.5	-1.2	-1.2	-1.2	-0.6		
of which: contribution from average real interest rate	0.9	0.4	0.5	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.6		
of which: contribution from real GDP growth	9.3	-3.2	-4.2	-2.4	-2.2	-2.0	-1.7	-1.4	-1.3	-1.3	-1.3		
Contribution from real exchange rate depreciation	1.3	0.6	0.0	...	...	...	...	...	...	...	...		
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)	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 2/	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Residual 3/	**-1.2**	**3.9**	**0.0**	**2.3**	**2.6**	**2.0**	**0.0**	**-0.2**	**0.0**	**0.1**	**-0.8**	**0.5**	**0.7**
Sustainability indicators													
PV of public debt-to-GDP ratio 4/	**...**	**...**	**55.5**	**50.8**	**47.4**	**43.7**	**40.6**	**37.8**	**35.7**	**34.7**	**36.0**		
PV of public debt-to-revenue and grants ratio	**...**	**...**	**164.8**	**166.7**	**158.6**	**147.9**	**140.9**	**132.9**	**125.7**	**126.1**	**136.3**		
Debt service-to-revenue and grants ratio 5/	**45.1**	**37.7**	**27.8**	**28.4**	**18.3**	**16.1**	**17.9**	**16.1**	**14.9**	**18.6**	**34.9**		
Gross financing need 6/	15.3	10.0	6.8	5.1	1.9	1.2	3.5	3.3	3.3	6.1	9.8		
Key macroeconomic and fiscal assumptions													
Real GDP growth (in percent)	-13.8	4.7	6.4	3.9	3.8	3.5	3.2	2.7	2.7	2.8	2.8	**2.7**	**3.1**
Average nominal interest rate on external debt (in percent)	2.8	2.5	2.3	2.4	2.8	2.8	2.7	2.6	2.5	2.2	2.6	**3.1**	**2.5**
Average real interest rate on domestic debt (in percent)	3.5	2.0	1.5	-0.2	0.2	0.9	0.6	0.4	0.4	2.5	4.4	**2.1**	**0.9**
Real exchange rate depreciation (in percent, + indicates depreciation)	2.4	1.2	0.0	...	...	...	...	...	...	...	...	**0.2**	**...**
Inflation rate (GDP deflator, in percent)	-0.3	1.2	1.8	3.0	2.8	2.0	2.2	2.2	2.2	2.2	2.2	**1.6**	**2.3**
Growth of real primary spending (deflated by GDP deflator, in percent)	33.8	2.0	10.4	-10.1	1.7	2.3	7.7	2.9	3.7	2.2	2.2	**6.2**	**2.4**
Primary deficit that stabilizes the debt-to-GDP ratio 7/	-10.3	-1.7	3.8	-0.2	-0.7	-0.3	1.5	1.4	1.2	1.1	1.4	**-2.7**	**0.8**
PV of contingent liabilities (not included in public sector debt)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

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

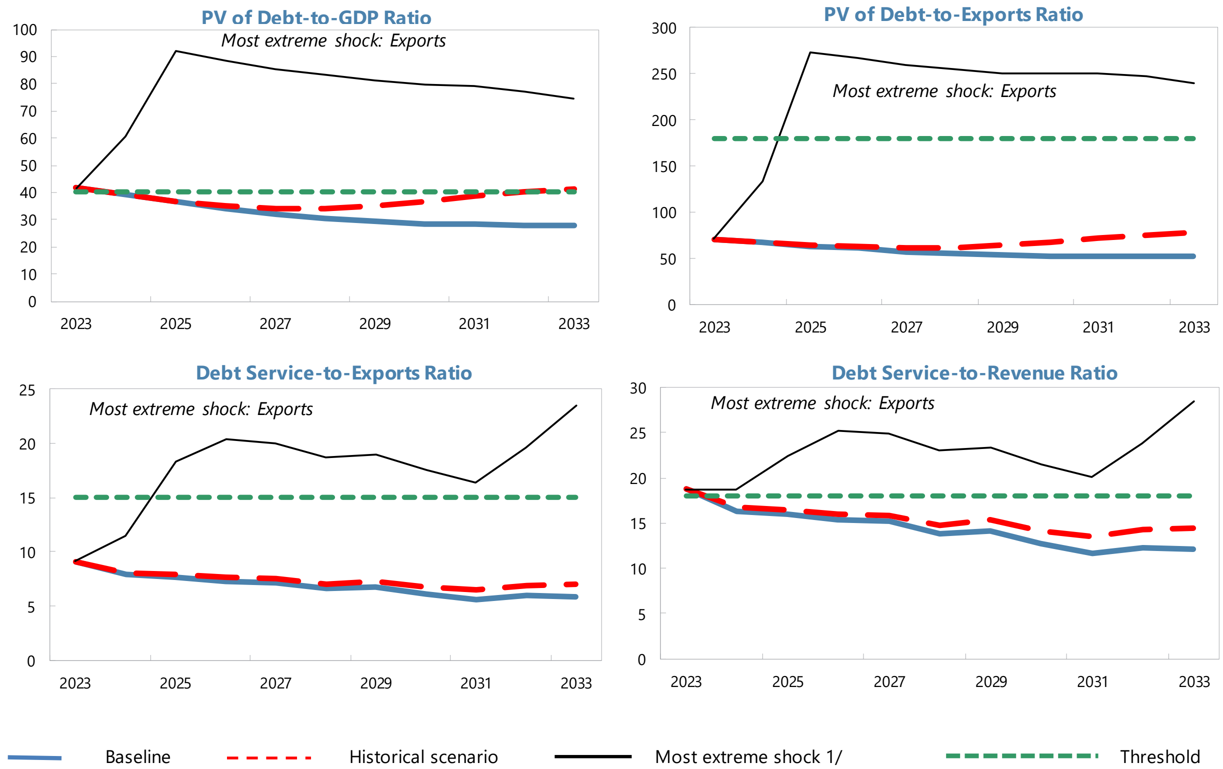
Public sector debt 1/





Sources: Country authorities; and staff estimates and projections.
1/ Coverage of debt: The central, state, and local governments, central bank, government-guaranteed debt . Definition of external debt is Residency-based.
2/ Reflects financing to SOEs from Exim Bank China and World Bank.
3/ Includes fluctuations of government bank deposits.
4/ 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.
5/ Debt service is defined as the sum of interest and amortization of medium and long-term, and short-term debt.
6/ 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.
7/ 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.
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.

Figure 1. Grenada: Indicators of Public and Publicly Guaranteed External Debt under Alternative Scenarios, 2023–33



Customization of Default Settings		
	Size	Interactions
Tailored Stress		
Combined CL	Yes	
Natural disaster	No	Yes
Commodity price	n.a.	n.a.
Market financing	n.a.	n.a.

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

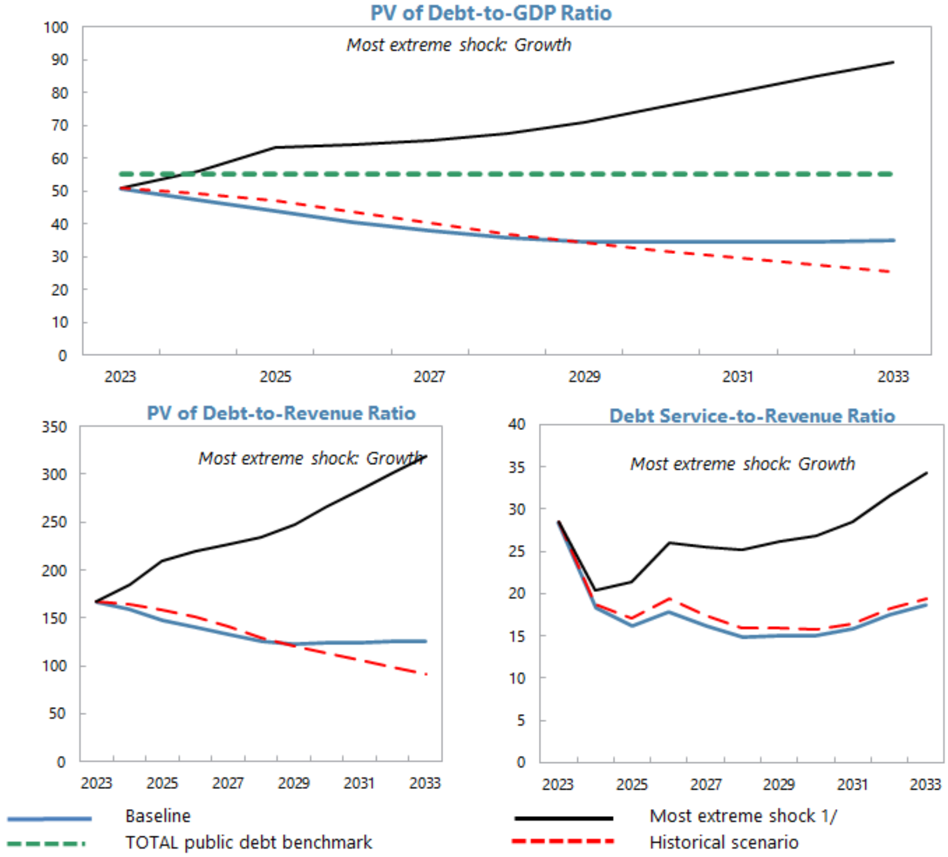
Borrowing assumptions on additional financing needs resulting from the stress tests*		
	Default	User defined
Shares of marginal debt		
External PPG MLT debt	100%	
Terms of marginal debt		
Avg. nominal interest rate on new borrowing in USD	2.5%	2.5%
USD Discount rate	5.0%	5.0%
Avg. maturity (incl. grace period)	27	27
Avg. grace period	7	7

* 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 2033. The stress test with a one-off breach is also presented (if any), while the one-off breach is deemed away for mechanical signals. When a stress test with a one-off breach happens to be the most exterme shock even after disregarding the one-off breach, only that stress test (with a one-off breach) would be presented.

Figure 2. Grenada: Indicators of Public Sector Debt under Alternative Scenarios, 2023–33



Borrowing assumptions on additional financing needs resulting from the stress tests*	Default	User defined
Shares of marginal debt		
External PPG medium and long-term	82%	82%
Domestic medium and long-term	12%	12%
Domestic short-term	3%	6%
Terms of marginal debt		
External MLT debt		
Avg. nominal interest rate on new borrowing in USD	2.5%	2.5%
Avg. maturity (incl. grace period)	27	27
Avg. grace period	7	7
Domestic MLT debt		
Avg. real interest rate on new borrowing	4.6%	4.6%
Avg. maturity (incl. grace period)	3	3
Avg. grace period	0	0
Domestic short-term debt		
Avg. real interest rate	2.5%	2.5%

* 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 2033. 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. Grenada: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2023–33
(In Percent)

	Projections 1/										
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
PV of debt-to GDP ratio											
Baseline	**42**	39	36	34	32	31	29	29	28	28	28
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2023-2033 2/	**42**	39	37	35	34	34	35	37	38	**40**	**41**
B. Bound Tests											
B1. Real GDP growth	**42**	**44**	**46**	**43**	**40**	38	37	36	35	35	35
B2. Primary balance	**42**	**42**	**42**	**41**	39	37	36	35	35	34	34
B3. Exports	**42**	**60**	**92**	**89**	**85**	**83**	**81**	**80**	**79**	**77**	**74**
B4. Other flows 3/	**42**	**42**	**42**	40	38	36	35	34	33	33	32
B5. Depreciation	**42**	**48**	**42**	39	36	35	33	32	32	31	31
B6. Combination of B1-B5	**42**	**53**	**54**	**51**	**49**	**47**	**45**	**44**	**44**	**43**	**42**
C. Tailored Tests											
C1. Combined contingent liabilities	**42**	**52**	**50**	**48**	**47**	**45**	**44**	**43**	**43**	**42**	**42**
C2. Natural disaster	**42**	**55**	**55**	**56**	**56**	**58**	**59**	**61**	**64**	**66**	**69**
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.
Threshold	40	40	40	40	40	40	40	40	40	40	40
PV of debt-to-exports ratio											
Baseline	71	68	64	61	57	55	53	53	53	52	52
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2023-2033 2/	71	68	64	62	61	61	64	68	72	75	79
B. Bound Tests											
B1. Real GDP growth	71	68	64	61	57	55	53	53	53	52	52
B2. Primary balance	71	73	74	72	69	67	65	65	65	65	64
B3. Exports	71	133	**273**	**267**	**260**	**255**	**251**	**250**	**250**	**247**	**240**
B4. Other flows 3/	71	72	73	70	67	65	63	62	62	62	61
B5. Depreciation	71	65	58	55	52	50	48	47	47	47	47
B6. Combination of B1-B5	71	97	80	109	104	101	99	98	98	96	95
C. Tailored Tests											
C1. Combined contingent liabilities	71	89	88	86	84	81	80	79	79	79	79
C2. Natural disaster	71	105	107	110	113	116	121	127	133	140	146
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.
Threshold	180	180	180	180	180	180	180	180	180	180	180
Debt service-to-exports ratio											
Baseline	9	8	8	7	7	7	7	6	6	6	6
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2023-2033 2/	9	8	8	8	8	7	7	7	6	7	7
B. Bound Tests											
B1. Real GDP growth	9	8	8	7	7	7	7	6	6	6	6
B2. Primary balance	9	8	8	8	8	7	7	6	6	7	7
B3. Exports	9	12	**18**	**20**	**20**	**19**	**19**	**18**	**16**	**20**	**24**
B4. Other flows 3/	9	8	8	8	8	7	7	6	6	6	7
B5. Depreciation	9	8	8	7	7	6	7	6	5	6	5
B6. Combination of B1-B5	9	9	12	11	11	10	10	9	9	10	10
C. Tailored Tests											
C1. Combined contingent liabilities	9	8	8	8	8	7	8	7	6	7	7
C2. Natural disaster	9	10	11	10	10	10	10	10	9	10	10
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.
Threshold	15	15	15	15	15	15	15	15	15	15	15
Debt service-to-revenue ratio											
Baseline	**19**	16	16	15	15	14	14	13	12	12	12
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2023-2033 2/	**19**	17	16	16	16	15	15	14	13	14	14
B. Bound Tests											
B1. Real GDP growth	**19**	**18**	**20**	**19**	**19**	17	18	16	15	15	15
B2. Primary balance	**19**	16	16	16	16	15	15	14	12	14	14
B3. Exports	**19**	**19**	**22**	**25**	**25**	**23**	**23**	**21**	**20**	**24**	**28**
B4. Other flows 3/	**19**	16	16	16	16	14	15	13	12	13	14
B5. Depreciation	**19**	**21**	**20**	**19**	**19**	17	17	16	14	15	14
B6. Combination of B1-B5	**19**	**18**	**20**	**20**	**19**	18	**18**	16	15	18	17
C. Tailored Tests											
C1. Combined contingent liabilities	**19**	16	17	17	17	16	16	14	13	14	14
C2. Natural disaster	**19**	16	17	17	17	16	16	15	15	15	16
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.
Threshold	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. Grenada: Sensitivity Analysis for Key Indicators of Public Debt, 2023–33
(In Percent)

	Projections 1/										
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
PV of Debt-to-GDP Ratio											
Baseline	51	47	44	41	38	36	35	35	35	35	35
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2023-2033 2/	51	49	47	44	40	37	34	32	30	27	25
B. Bound Tests											
B1. Real GDP growth	51	**56**	**63**	**64**	**66**	**68**	**71**	**76**	**80**	**85**	**89**
B2. Primary balance	51	51	51	48	45	43	41	41	41	41	41
B3. Exports	51	**61**	**79**	**76**	**73**	**70**	**69**	**69**	**68**	**67**	**65**
B4. Other flows 3/	51	50	49	46	43	41	40	40	40	40	39
B5. Depreciation	51	**58**	51	46	42	37	34	33	31	29	28
B6. Combination of B1-B5	51	50	48	44	41	38	37	37	37	38	38
C. Tailored Tests											
C1. Combined contingent liabilities	51	**64**	**59**	**56**	53	51	49	49	49	49	49
C2. Natural disaster	51	**67**	**66**	**65**	**65**	**66**	**67**	**70**	**73**	**76**	**79**
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.
TOTAL public debt benchmark	55	55	55	55	55	55	55	55	55	55	55
PV of Debt-to-Revenue Ratio											
Baseline	167	159	148	141	133	126	123	124	124	125	126
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2023-2033 2/	167	165	159	151	141	130	121	113	106	98	91
B. Bound Tests											
B1. Real GDP growth	167	185	210	219	227	234	248	266	284	301	319
B2. Primary balance	167	171	172	165	157	150	147	148	149	149	150
B3. Exports	167	204	268	263	255	247	244	245	245	243	237
B4. Other flows 3/	167	168	167	160	152	145	142	143	143	143	143
B5. Depreciation	167	194	175	162	147	133	123	117	112	106	101
B6. Combination of B1-B5	167	168	163	151	143	135	132	133	134	135	136
C. Tailored Tests											
C1. Combined contingent liabilities	167	214	201	194	186	178	175	176	177	178	179
C2. Natural disaster	167	221	220	224	226	228	236	249	261	273	285
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.
Debt Service-to-Revenue Ratio											
Baseline	28	18	16	18	16	15	15	15	16	18	19
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2023-2033 2/	28	19	17	19	17	16	16	16	16	18	19
B. Bound Tests											
B1. Real GDP growth	28	20	21	26	25	25	26	27	28	32	34
B2. Primary balance	28	18	18	21	19	17	16	16	17	19	21
B3. Exports	28	18	18	22	20	19	19	19	20	23	28
B4. Other flows 3/	28	18	16	19	17	16	16	16	16	19	20
B5. Depreciation	28	20	20	22	20	18	19	18	18	20	21
B6. Combination of B1-B5	28	18	17	20	18	16	16	16	17	19	20
C. Tailored Tests											
C1. Combined contingent liabilities	28	18	25	23	21	18	17	17	18	19	21
C2. Natural disaster	28	21	25	26	25	23	24	24	25	28	29
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.
Debt Service-to-GDP Ratio											
Baseline	8.7	5.5	4.8	5.1	4.6	4.2	4.2	4.2	4.4	4.9	5.1
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2023-2033 2/	9	6	5	6	5	5	5	4	5	5	5
B. Bound Tests											
B1. Real GDP growth	9	6	6	8	7	7	8	8	8	9	10
B2. Primary balance	9	5	5	6	5	5	5	4	5	5	6
B3. Exports	9	5	5	6	6	5	5	5	5	6	8
B4. Other flows 3/	9	5	5	5	5	4	4	4	5	5	6
B5. Depreciation	9	6	6	6	6	5	5	5	5	5	6
B6. Combination of B1-B5	9	5	5	6	5	5	5	5	5	5	6
C. Tailored Tests											
C1. Combined contingent liabilities	9	5	7	7	6	5	5	5	5	5	6
C2. Natural disaster	9	6	7	8	7	7	7	7	7	8	8
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.

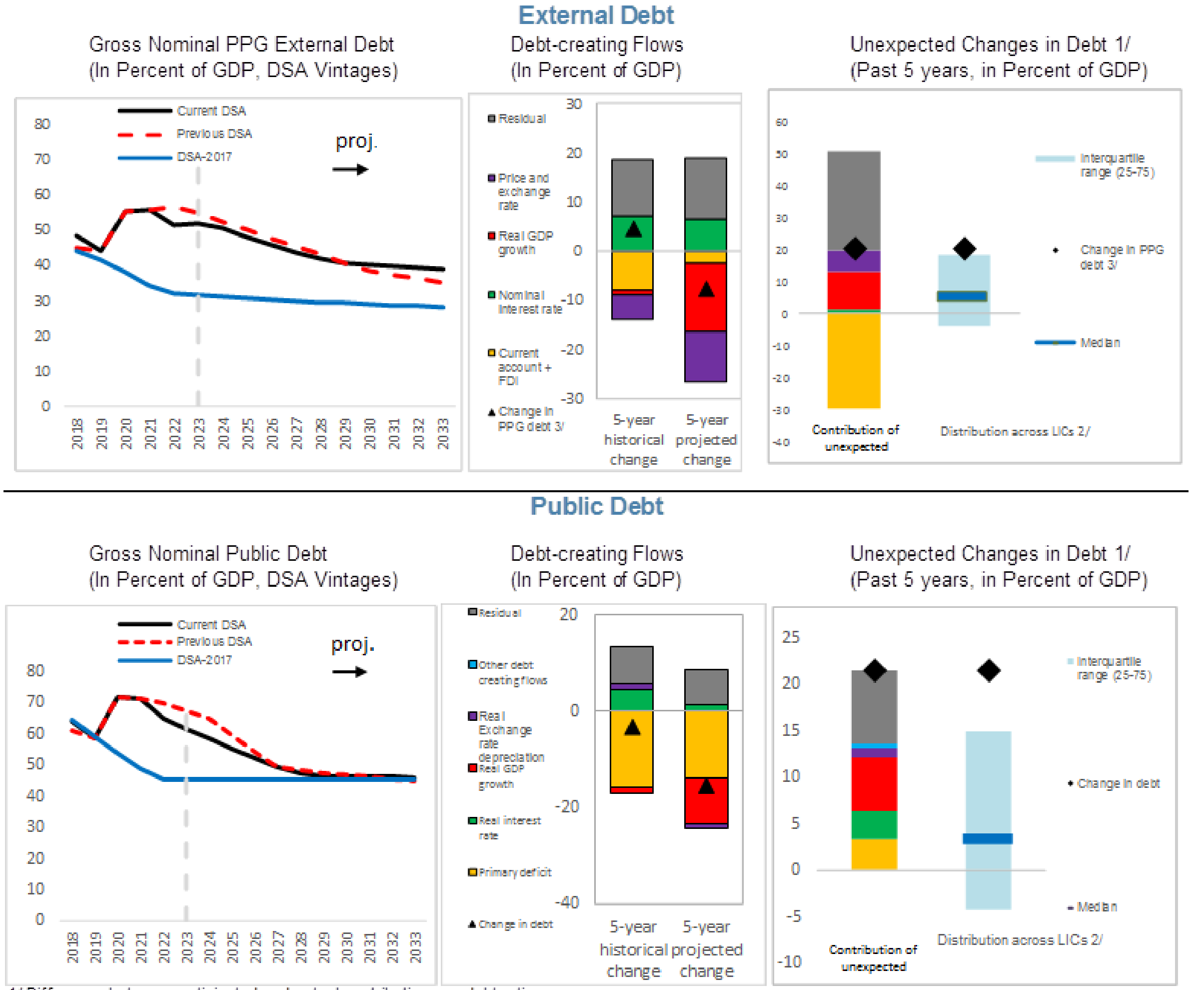
Sources: Country authorities; and staff estimates and projections.

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. Grenada: Drivers of Debt Dynamics—Baseline Scenario



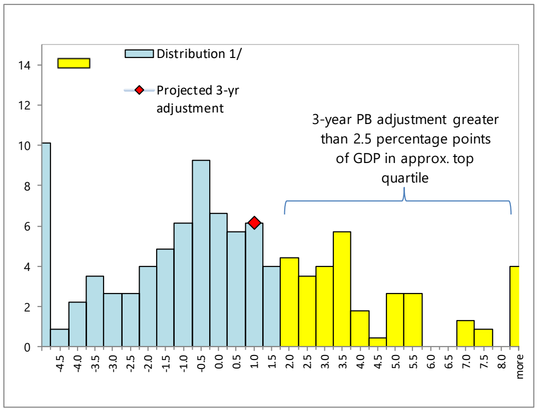
1/ Difference between anticipated and actual contributions on debt ratios.

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.

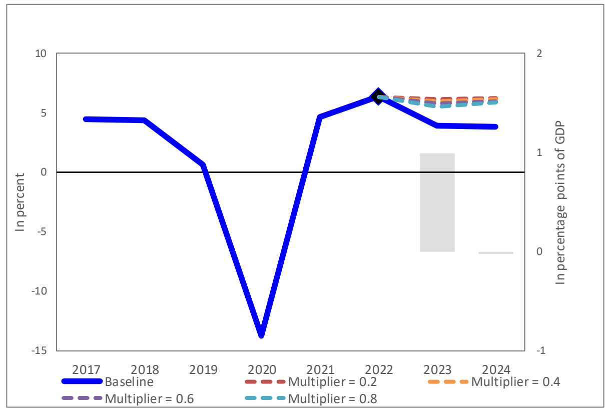
Figure 4. Grenada: Realism Tools

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



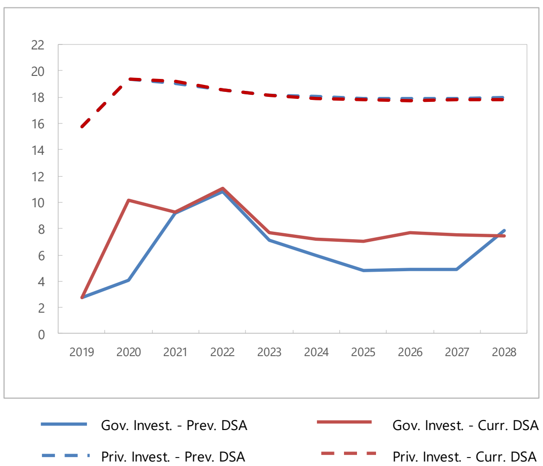
1/ Data cover Fund-supported programs for LICs (excluding emergency financing) approved since 1990. The size of 3-year adjustment from program inception is found on the horizontal axis; the percent of sample is found on the vertical axis.

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
(In Percent of GDP)



Contribution to Real GDP growth
(In Percnet, 5-year Average)