INTERNATIONAL MONETARY FUND

IMF Country Report No. 23/184

ANTIGUA AND BARBUDA

2022 ARTICLE IV CONSULTATION—PRESS RELEASE AND STAFF REPORT

May 2023

Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. In the context of the 2022 Article IV consultation with Antigua and Barbuda, the following documents have been released and are included in this package:

- A **Press Release**.
- The **Staff Report** prepared by a staff team of the IMF for the Executive Board's consideration on a lapse-of-time basis, following discussions that ended on October 3, 2022, with the officials of Antigua and Barbuda on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on November 10, 2022.
- An **Informational Annex** prepared by the IMF staff.

The IMF's transparency policy allows for the deletion of market-sensitive information and premature disclosure of the authorities' policy intentions in published staff reports and other documents.

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PRESS RELEASE

PR23/187

IMF Executive Board Concludes 2022 Article IV Consultation with Antigua and Barbuda

FOR IMMEDIATE RELEASE

Washington, DC – May 30, 2023: On November 30, 2022, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation[1] with Antigua and Barbuda and endorsed the staff appraisal without a meeting on a lapse-of-time basis.[2]

Antigua and Barbuda's economy is on a gradual recovery path, following a sharp contraction in real output of 20 percent in 2020 due to the COVID-19 pandemic. Growth is estimated at 5¼ percent in 2021, driven by a rebound in tourism and construction activity. Despite the surge in international energy prices, inflation was subdued in 2021 due to price controls on utilities, fuels, and public transportation. The fiscal position improved in 2021 with a narrowing of the primary deficit as pandemic-related spending was wound down and better tax administration and higher external grants bolstered revenues.

The growth momentum is expected to carry into 2022 and 2023, with real GDP projected to expand by 6 and 5½ percent respectively, supported by strong tourist arrivals, foreign direct investment in the hospitality sector, and public sector projects. However, output will return to pre-pandemic levels only by 2025 due to scarring effects of the pandemic. Inflation is forecasted to accelerate to 8½ percent in 2022, reflecting the pass-through from higher global food and fuel prices, before moderating to 4½ percent in 2023. To cushion the impact of rising living costs on the vulnerable, the government introduced targeted subsidies to the transport and fishing sectors to keep public transportation fares and seafood prices stable and removed taxes on flour to contain the rise in bread prices.

Continued fiscal consolidation efforts and the growth recovery have helped improve the fiscal position, but outturns underperformed the targets envisaged in the government's medium-term fiscal strategy, while gross financing needs and arrears to domestic and external creditors remain high. Public debt peaked at 102 percent of GDP and is projected to decline to 91 percent of GDP in 2022. The financial system remains stable, but bank credit to the private sector is weak. Risks to the outlook are tilted to the downside, primarily from further commodity price shocks, a global growth slowdown, a resurgence of COVID, and tighter global financial conditions.

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[1] Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board.

[2] The Executive Board takes decisions under its lapse-of-time procedure when the Board agrees that a proposal can be considered without convening formal discussions.

Executive Board Assessment

Antigua and Barbuda's economy is recovering but facing headwinds from multiple external shocks. The rebound is supported by tourism and construction activity, but output is expected to return gradually to pre-pandemic levels by 2025 reflecting scarring effects from the pandemic. Higher food and fuel prices are driving up inflation, eroding real incomes, and exacerbating fiscal and external imbalances. The external position in 2021 was weaker than the level implied by medium-term fundamentals and desirable policies. The outlook is subject to large downside risks, including further commodity price shocks, a global growth slowdown, tighter global financial conditions, lower citizenship-by-investment program (CIP) revenues, and natural disasters.

Near-term fiscal policy should continue to focus on protecting the vulnerable against rising living costs. It will be important to implement a clear framework for coordination between different government entities responsible for social safety net programs to ensure efficient targeting and monitoring. Sufficient resources should be allocated towards the completion and maintenance of the centralized beneficiary registry. An automatic fuel pricing mechanism, with full pass-through of international prices, should be put in place in conjunction with targeted social protection programs, allowing the government to move away from generalized, untargeted subsidies.

Fiscal consolidation is under way, but additional revenue mobilization is needed to achieve the targets of the Medium-Term Fiscal Strategy. Achieving the original primary balance targets will require limiting tax exemptions, introducing new tax measures, and containing the wage bill. A public sector employment census and skills database will be essential as part of a longer-term strategy to address the wage bill.

Securing long-term financing and preventing the accumulation of new arrears are critical in an environment of tight financial conditions. The authorities should maintain efforts to extend the maturity profile of their debt in the domestic and external markets in order to reduce rollover risks. There should be close engagement with creditors to put in place feasible strategies for clearing remaining arrears and new arrears should be avoided.

Sustained progress on structural fiscal reforms would better institutionalize fiscal discipline. To build political consensus, the MTFS and Fiscal Resilience Guidelines could be legislated by parliament. The authorities should move ahead with the operationalization of the Climate Resilience and Development Fund, Fiscal Resilience Oversight Committee, and single window system at customs. E-filing and e-payment of taxes should be put in place and the amended Finance Administration Act and Procurement Administration Act should be implemented. A performance report card system for SOEs should be introduced. A public financial management action plan should be developed based on results of the recent Public Expenditure and Financial Accountability self-assessment.

Further reforms are necessary to ensure the pension system's long-term sustainability. These include gradual increases in the contribution rate and automatic adjustments to the retirement age in line with the increase in life expectancy at retirement. Furthermore, a revamped investment strategy will help address liquidity constraints and increase longer-term returns.

Continued efforts to safeguard financial stability and strengthen AML/CFT and CIP frameworks are essential. Asset quality and provisioning buffers of financial institutions should be monitored closely. A national crisis management plan should be formulated in collaboration with the ECCB to address potential risks to the financial system. Ongoing initiatives to strengthen the AML/CFT and CIP frameworks would help protect correspondent banking relationships and strengthen the integrity of the CIP.

Improving access to credit and strengthening the workings of the labor market would support the economic recovery. It will be important to increase the role of the regional credit bureau and partial credit guarantee scheme in enhancing credit quality, accelerating the lending process, and alleviating collateral constraints of borrowers. The insolvency law should be modernized to help incentivize lending. Labor market policies should emphasize training, vocational education, and skills certification, together with job search assistance to reintegrate workers into the labor force.

Building resilience to climate shocks and accelerating the transition to renewables will boost long-term competitiveness. The government's efforts to leverage donor resources and other international financing for climate resilience projects are crucial given the large investment needs and limited fiscal space. Shifting to renewables, supported by private sector financing, would reduce energy costs and improve competitiveness.

Antigua and Barbuda: Selected Economic and Financial Indicators

Population (2021)	98,219	Adult literacy rate (2015)	99
GDP per capita (US$, 2021)	14,978	Mean years of schooling (2021)	9.3
Life expectancy at birth (years, 2021)	78.5	Human Development Index rank (2021, of 191 economies)	71
Mortality rate (under 5, per 1,000 live births, 2020)	6		

					Prel.	Projections					
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
	(Annual percentage change)										
National Income and Prices											
Real GDP	3.1	6.9	4.9	-20.2	5.3	6.0	5.6	5.4	4.0	2.7	2.7
Nominal GDP	2.2	9.4	5.1	-18.8	7.4	15.0	10.3	7.9	6.1	4.8	4.8
Consumer prices (end of period)	2.4	1.7	0.7	2.8	1.2	10.5	2.7	2.0	2.0	2.0	2.0
Consumer prices (period average)	2.4	1.2	1.4	1.1	1.6	8.5	4.5	2.4	2.0	2.0	2.0
Money and Credit											
Net foreign assets	10.9	6.2	-0.9	-4.6	18.5	5.7	4.2	4.0	2.3	1.0	0.3
Net domestic assets	-3.3	0.1	1.7	-0.6	-4.6	-1.9	6.1	4.0	3.8	3.8	4.5
Broad money (M2)	7.6	6.3	0.8	-5.2	13.9	3.9	10.3	7.9	6.1	4.8	4.8
Credit to private sector	-1.6	1.8	1.3	4.8	-4.1	0.0	5.0	5.0	5.0	5.0	5.0
	(Percent of GDP)										
Central Government											
Primary balance	-0.1	0.0	-1.2	-3.8	-1.9	-0.4	-0.9	1.5	2.0	2.1	2.1
Overall balance	-2.8	-2.5	-4.0	-6.4	-4.8	-2.7	-3.4	-1.2	-0.5	-0.4	-0.4
Total revenue and grants	20.7	19.8	18.6	20.4	20.6	20.9	20.2	21.2	20.9	20.8	20.8
Total expenditure	23.6	22.3	22.6	26.8	25.3	23.7	23.5	22.4	21.4	21.2	21.2
External Sector											
Current account balance	-8.0	-14.5	-7.5	-18.4	-15.0	-20.3	-14.1	-13.4	-12.5	-11.8	-11.4
Trade balance	-31.1	-36.1	-34.2	-29.3	-33.7	-39.8	-37.5	-37.4	-37.0	-36.8	-36.7
Nonfactor service balance	32.3	30.2	35.1	18.6	25.6	26.0	29.1	33.6	34.2	34.8	35.1
Of which: Gross tourism receipts	50.2	48.3	53.5	30.1	37.1	45.4	46.0	44.9	45.2	46.2	47.2
Overall balance	-2.4	-0.5	-4.2	-7.1	4.3	-3.9	-5.1	-1.9	-2.7	-3.4	-3.9
External public sector debt	37.5	36.7	36.5	48.1	50.5	50.0	50.1	50.0	49.6	48.6	47.1
Savings-Investment Balance	-8.0	-14.5	-7.5	-18.4	-15.0	-20.3	-14.1	-13.4	-12.5	-11.8	-11.4
Savings	15.4	22.9	27.4	12.9	23.2	19.3	22.7	24.2	24.1	24.3	24.3
Investment	23.5	37.5	34.9	31.3	38.2	39.6	36.8	37.5	36.6	36.1	35.7
Memorandum Items											
Net imputed international reserves (US$ million)	314	329	279	222	324	354	419	486	528	548	553
(Months of prospective imports)	3.3	3.3	4.5	3.1	3.1	3.3	4.0	4.4	4.6	4.5	4.2
GDP at market prices (EC$ million)	3,964	4,336	4,556	3,700	3,972	4,567	5,040	5,439	5,770	6,045	6,332
Public debt stock (EC$ million) 1/, 2/	3,654	3,803	3,702	3,754	4,066	4,179	4,317	4,367	4,384	4,370	4,355
(Percent of GDP)	92.2	87.7	81.3	101.5	102.4	91.5	85.7	80.3	76.0	72.3	68.8

Sources: Country authorities, ECCB, UN Human Development Report, World Bank, and IMF staff estimates and projections.
1/ Includes stock of principal and interest arrears, unpaid vouchers, and suppliers' credits.
2/ Includes central government guarantees of state enterprises' and statutory bodies' debt.

INTERNATIONAL MONETARY FUND

ANTIGUA AND BARBUDA

STAFF REPORT FOR THE 2022 ARTICLE IV CONSULTATION

November 10, 2022

KEY ISSUES

Context. Antigua and Barbuda's economy is on a gradual recovery path, following a sharp contraction in 2020 due to the COVID-19 pandemic. Higher food and fuel prices are adding to inflation, eroding real incomes, and exacerbating fiscal and external imbalances. The economy is projected to grow by 6 percent in 2022 supported by tourism and construction activity, but output will return to pre-pandemic levels only by 2025 due to scarring effects of the pandemic. Inflation is expected to accelerate to 8½ percent in 2022, reflecting the pass-through of global prices to the domestic economy. Continued fiscal consolidation efforts and the growth recovery are bringing down the primary deficit and debt-to-GDP ratio, but gross financing needs are high and arrears continue to be accrued. The financial system has adequate capital and liquidity buffers, with stable NPLs so far, but private sector credit growth is weak. Further commodity price shocks, a sharper-than-expected slowdown in key trading partners, a resurgence of COVID, tighter global financial conditions, lower citizenship-by-investment revenues, and the ever-present threat of natural disasters all represent material downside risks.

Policy priorities.

- Mitigating the effects of rising living costs through replacing broad-based price controls and subsidies with targeted transfers and a strengthening of the social safety net.
- Strengthening the policy framework that underpins the Medium-Term Fiscal Strategy to institutionalize fiscal discipline.
- Addressing arrears to domestic and external creditors, restoring debt sustainability, and catalyzing longer-term, concessional financing.
- Undertaking parametric reforms to the pension system to limit future fiscal liabilities and ensure a fiscally sustainable retirement plan for the elderly.
- Maintaining prudent regulation to safeguard financial stability while enhancing SMEs' access to credit.
- Adopting supply-side reforms to remove intra-regional transportation bottlenecks, improve skills development, and build climate resilience.

Approved By
Nigel Chalk (WHD) and Boileau Loko (SPR)

Discussions took place in St. John's during September 20–October 3, 2022. The mission team comprised Varapat Chensavasdijai (head), Salma Khalid, Weicheng Lian, and Manuel Rosales Torres (all WHD), and was accompanied by Kevin Woods (Eastern Caribbean Central Bank) and Ronald James (Caribbean Development Bank). The team met with Prime Minister and Finance Minister Gaston Browne, Minister of State in the Ministry of Finance Lennox Weston, Financial Secretary Whitfield Harris, and other senior government officials; the ECCB and Financial Services Regulatory Commission; representatives of the private sector; labor unions; and the opposition party. Latoya Smith (OED) attended some meetings, and Philip Jennings (OED) participated in the concluding meeting. Anahit Aghababyan and Huilin Wang (both WHD) assisted in the preparation of the report.

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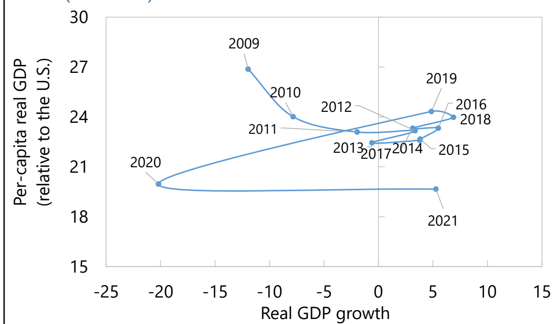
TABLES

ANNEXES

CONTEXT

1. **Over the past five years, Antigua and Barbuda has been severely hit by a series of external shocks.** Following Hurricane Irma in 2017, the economy was quickly returning to its previous growth trend when the COVID-19 pandemic dealt a major blow (largely through an abrupt halt to tourism), reducing per capita GDP in 2020 back to its 1985 level. Even as the economy recovered in 2021, real per capita income as a share of U.S. per capita income continued declining. Per capita income is expected to recover only gradually and will not reach pre-pandemic levels within the next five years, reflecting the long-term scarring effects of the pandemic (Box 1).

Growth and Income Convergence
(Percent)



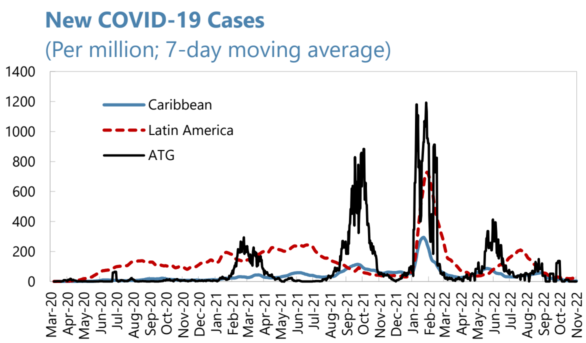
Sources: IMF World Economic Outlook and IMF staff calculations.

2. **Even as the economy bounces back from COVID, the spillover effects of Russia's invasion of Ukraine are weighing on the economy.** A pick-up in tourism and construction activity has supported the economic rebound in 2021 and the ongoing implementation of the authorities' Medium-Term Fiscal Strategy (MTFS) has helped improve the fiscal position. Nonetheless, both the public debt and gross fiscal and external financing needs are high which creates an important source of vulnerability. Moreover, the stock of domestic and external arrears is large, which limits access to official financing. The country's precarious position is now being exacerbated by a sharp increase in fuel and food prices—in large part catalzyed by the Russian invasion of Ukraine—which has pushed inflation upwards, weakened domestic demand, and is increasing the strain on the fiscal and external positions.

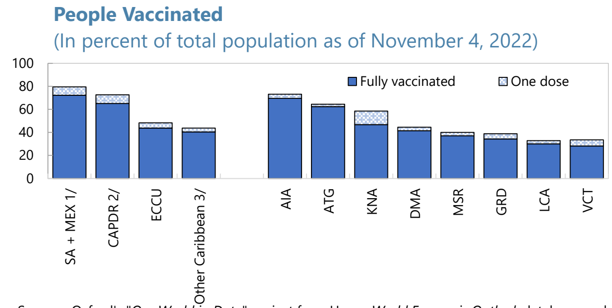
3. **Antigua and Barbuda is highly exposed to natural disasters and the effects of climate change.** The country has been frequently hit by droughts, floods, and hurricanes. The ten major disasters that occurred during 1983-2017 affected around one-quarter of the population and, on average, caused damage of 22 percent of GDP. More worrying is that both the frequency and intensity of disasters have been on an upward trend and the challenge of rising sea levels is becoming more pressing.[1]

4. **General elections are due in March 2023.** The current administration has been in power since 2014, with the Antigua and Barbuda Labour Party controlling 15 of the 17 seats in parliament. Early elections could be called sometime before March.

[1] Sea-level rise will affect at least 20 square kilometers of Antigua's land mass and approximately 15 square kilometers for Barbuda by 2060 under IPCC's Representative Concentration Pathway 4.5 (medium to low emission) scenario. This represents around 8 percent of the total land area and will imply severe damage to critical infrastructure and coastal economic activities.



Sources: Johns Hopkins database and IMF staff calculations.



Sources: Oxford's "*Our World in Data*" project from Haver, *World Economic Outlook* database, and IMF staff calculations.
1/ SA refers to South America and MEX refers to Mexico.
2/ CAPDR refers to Central America, Panama and the Dominican Republic.
3/ Other Caribbean includes BHS, BLZ, BRB, GUY, HTI, JAM, SUR and TTO.

Box 1. Antigua and Barbuda: Scarring Effects from the Pandemic

Labor market disruptions, loss of tourism capital stock, and school closures during the pandemic may contribute to long-term scarring. Some evidence of potential scarring includes:

- More than 20,000 room nights per month lost due to permanent closure of hotels.
- Learning gaps in primary and secondary schools owing to protracted school closures.
- Persistent labor market weakness in 2021 with continued year-on-year decline in total number of registered workers (2 percent) and number of employers (9 percent). Employment in the hospitality and the wholesale and retail sectors at 80 and 85 percent of 2019 levels, respectively (Annex V).

Antigua and Barbuda: Selected Employment Statistics
(Number and percent change)

				Percent change		Percent of
	2019	2020	2021	2020	2021	2019
Employment	46,748	42,598	41,919	-8.9	-1.6	89.7
Hospitality	10,347	9,071	8,236	-12.3	-9.2	79.6
Wholesale and retail	6,325	5,550	5,368	-12.3	-3.3	84.9
Self-employed	2,370	2,074	1,778	-12.5	-14.3	75.0
Employment						
Below 20	435	239	174	-45.1	-27.2	40.0
20 - 29	6,631	5,332	5,019	-19.6	-5.9	75.7
30 - 39	10,121	9,472	8,797	-6.4	-7.1	86.9
40 - 49	10,136	9,576	8,465	-5.5	-11.6	83.5
50 - 59	8,364	8,221	7,924	-1.7	-3.6	94.7
Employers	5,204	4,741	4,307	-8.9	-9.2	82.8
Hospitality	406	372	335	-8.4	-9.9	82.5
Wholesale and retail	577	578	547	0.2	-5.4	94.8
Education	124	119	108	-4.0	-9.2	87.1

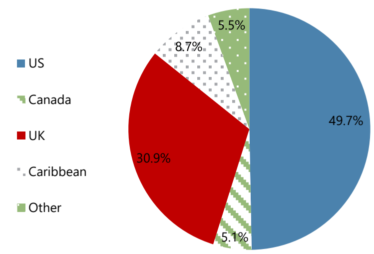
Sources: Antigua and Barbuda Social Security Board and IMF staff calculations.

- Lower average earnings across many sectors in 2021, including hospitality and self-employment.
- Self-employed and younger workers hardest hit as shown by the number of social security contributors lost.

HEADWINDS TO THE RECOVERY

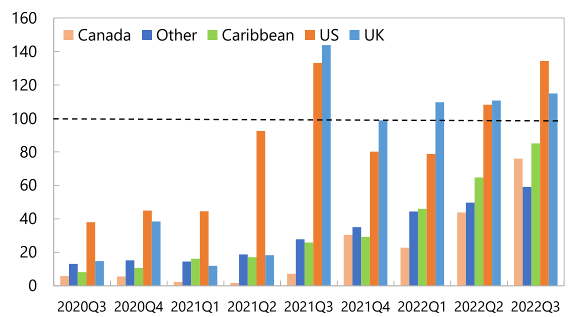
5. A recovery started to take hold in mid-2021 as COVID waned in key source countries and relatively high vaccination rates allowed for a relaxation of health restrictions and a restart of tourism. Following a decline of 20 percent in 2020, real GDP is estimated to have expanded by 5.3 percent in 2021 buoyed by a partial recovery in tourism and construction activity. Stayover arrivals for 2021 reached 56 percent of 2019 level (with relatively strong arrivals from the U.S. and U.K.). For January-September 2022, stayovers were 88 percent of pre-COVID levels and hotel occupancy rates already returned to 2019 levels in mid-2022.

Stayover Arrivals by Source Country
(In percent of total arrivals, January-September 2022)



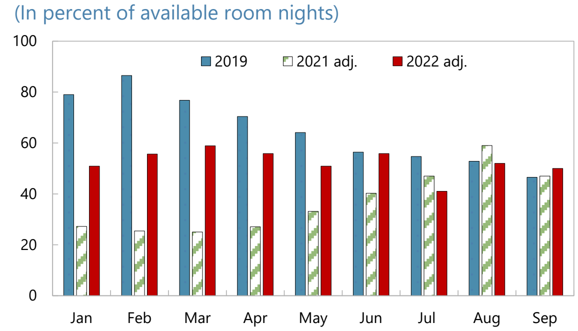
Sources: Country authorities and IMF staff calculations.

Stayover Arrivals by Country of Origin
(Percent of 2019 levels)



Sources: ECCB and IMF staff calculations.

Hotel Occupancy Rates 1/
(In percent of available room nights)

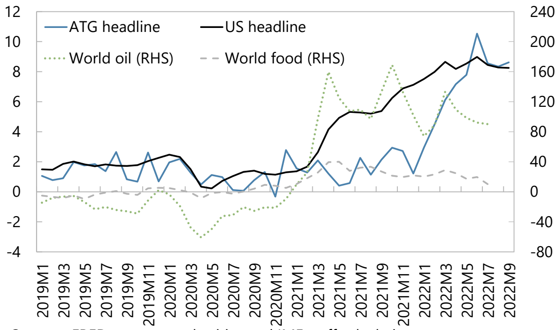


Source: Antigua and Barbuda Hotels and Tourism Association.
1/ 2021 and 2022 figures are adjusted for the number of rooms available in 2019 but not available in 2021-22 due to hotel closures.

6. Inflation pressures are building (Annex VI). Despite the surge in international energy prices, CPI inflation was only 1.2 percent at end-2021 (year-on-year) due to price controls on utilities (electricity and water), fuels (gasoline, diesel, kerosene, and LPG), and public transportation. Inflation accelerated to 8½ percent in 2022Q3 (with core inflation at 7 percent) reflecting the pass-through from higher global food and fuel prices (Box 2). The government responded by introducing targeted fuel subsidies through a gas voucher program that provides a 30 percent discount at the pump to the transport and fishing sectors (to keep public transportation fares and seafood prices stable).[2] Taxes on flour were removed in September 2022 to contain the rise in bread prices.

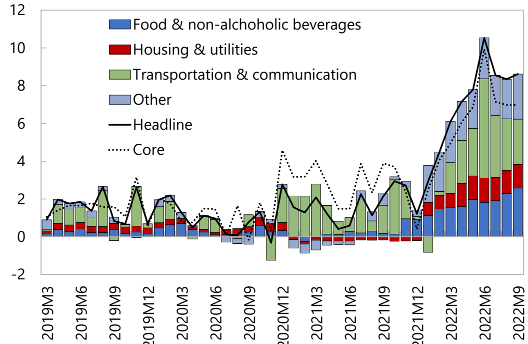
[2] The discount was 25 percent when it was introduced in March and subsequently increased to 30 percent in June. The estimated cost of the program is 0.1 percent of GDP for 2022.

Selected Inflation Indicators
(In percent, year-on-year)



Sources: FRED, country authorities and IMF staff calculations.

Contribution to Headline Inflation
(In percent, year-on-year)

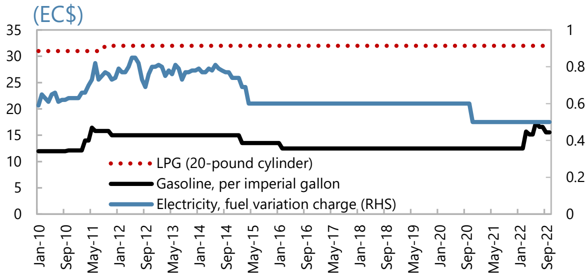


Sources: Country authorities and IMF staff calculations.

Box 2. Antigua and Barbuda: Fuel Price Pass-Through Mechanism

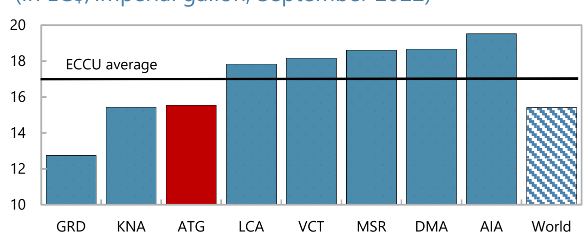
Antigua and Barbuda is an energy-importing country and energy prices are regulated by the government. Prior to March 15, 2022, fuel prices were adjusted on an ad-hoc basis despite a partial pass-through mechanism introduced in 2009. Most energy prices remained fixed since February 2016 with consumption taxes absorbing the changes in international fuel prices. More recently, though, retail gasoline prices in Antigua and Barbuda were increased (by 24 percent) and now broadly reflect international market prices.

Antigua and Barbuda: Selected Energy Prices
(EC$)



Sources: Country authorities and IMF staff calculations.

Gasoline Prices in ECCU and the World
(In EC$/imperial gallon, September 2022)



Sources: ECCB, GlobalPetrolPrices.com, and IMF staff calculations.

7. **The primary deficit narrowed by 2 percent of GDP in 2021 as pandemic-related spending was wound down and better tax administration and higher external grants bolstered revenues.** The outturn, however, fell short of the authorities' MTFS target by about 1 percent of GDP. The deficit was mainly financed by external sources (e.g., Caribbean Development Bank and a drawdown of the SDR allocation), and the government's sale to the public of 10 percent of its stake in the regional oil company.[3] Excluding the Paris Club, arrears to creditors declined by about 1¼ percent of GDP in 2021, reflecting the resolution of arrears to commercial banks, several

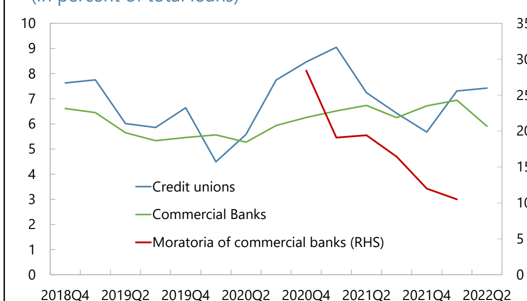
[3] Following the divestment, the government's majority shareholder position declined from 51 percent to 46 percent of the shares.

large domestic creditors, and some (non-Paris Club) external creditors.[4] Public debt peaked at 102 percent of GDP at end-2021. The tightening of global financial conditions during 2022 has delayed Antigua and Barbuda's first international bond issuance.

8. **The external position in 2021 is assessed to be weaker than the level implied by medium-term fundamentals and desirable policies.** The current account deficit narrowed to an estimated 15 percent of GDP (from 18½ percent of GDP in 2020) with higher tourism receipts more than offsetting the increase in goods imports. The deficit was mainly financed by foreign direct investment (FDI). Based on preliminary data and the EBA-Lite model, the current account gap was -2.6 percent of GDP in 2021 and the real effective exchange rate (REER) was overvalued by around 5.9 percent (Annex III). Reserve cover stood at 3.1 months of prospective imports, driven by a strong rebound in FDI inflows. In 2022, the REER has appreciated by 4 percent through September.

9. **The financial sector remains stable, but credit growth is weak.** Banks have maintained capital and liquidity ratios well above regulatory minima and remain profitable. There is a potential for nonperforming loans (NPLs) to rise following the expiration of the two-year loan moratoria at end-March 2022. Provisioning at banks reached 97.2 percent of NPLs at end-June 2022, substantially above the ECCB's minimum of 60 percent.[5] Bank credit to the private sector, however, contracted due to a combination of factors, including project delays caused by supply disruptions and shortages of skilled labor, intense competition from credit unions (especially in mortgage lending), and a wait-and-see approach taken by borrowers due to uncertainty around the economic recovery and upcoming elections. Credit unions are liquid and well-capitalized with adequate provisioning, although NPLs have risen more recently. Locally-owned banks' sovereign exposure (loans and securities) is still high, at 103 percent of Tier-1 capital in June 2022 compared with 132 percent in December 2020. The usage of the ECCB's digital currency (DCash) has been minimal since the pilot was launched in March 2021.[6] The system's outage in early 2022 had a limited impact on financial institutions and consumers. Nonetheless, merchant adoption of DCash remains a challenge.

Nonperforming Loans and Moratoria
(In percent of total loans)



Sources: ECCB, country authorities and IMF staff calculations.

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[4] Total arrears to domestic and external creditors are estimated at 19 percent of GDP as of end-2021, of which about one-third is still subject to reconciliation. Thus, the actual stock of official arrears may be overestimated.

[5] The minimum provisioning ratio introduced in January 2022 will increase in steps to 100 percent by 2024.

[6] For details on policy recommendations related to DCash, see the Informational Annex and 2022 ECCU Regional Consultation Report, IMF Country Report No. 22/253

Antigua and Barbuda: Selected Financial Soundness Indicators of the Banking Sector

(Percent)

	Dec 2017	Dec 2018	Dec 2019	Dec 2020	Mar 2021	Jun 2021	Sep 2021	Dec 2021	Mar 2022	Jun 2022
Capital adequacy ratio (CAR) 1/	36.6	36.3	39.4	34.6	35.0	27.4	28.6	32.8	30.8	32.7
Tier-1 CAR 2/	30.2	27.6	31.9	28.6	28.8	21.9	25.0	27.9	26.2	27.8
Nonperforming loans (NPLs) to total gross loans	7.9	6.4	5.3	6.3	6.5	6.7	6.3	6.7	6.9	5.9
Total provisions to NPLs	34.0	36.3	58.7	90.0	87.7	86.6	97.2	84.3	85.9	97.2
Net NPLs to capital 3/	34.0	26.5	17.3	11.7	12.6	12.5	8.9	11.3	8.4	4.8
Liquid asset to total assets	57.0	57.7	46.4	36.9	37.4	37.4	37.2	40.5	46.8	46.4
Return on assets (ROA)	1.3	1.4	1.4	0.4	0.2	1.0	0.8	0.7	0.7	0.2

Sources: Country authorities and IMF staff calculations.

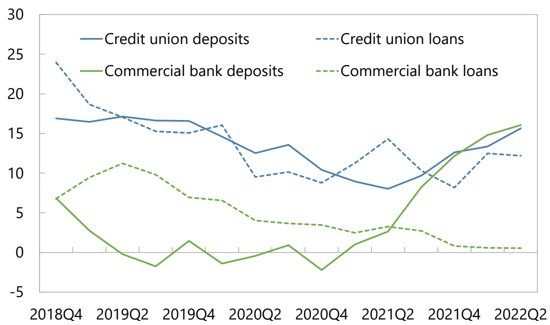
1/ Regulatory capital to risk-weighted assets

2/ Regulatory Tier 1 capital to risk-weighted assets

3/ Net NPLs = NPLs - provisions

Loan and Deposit Growth

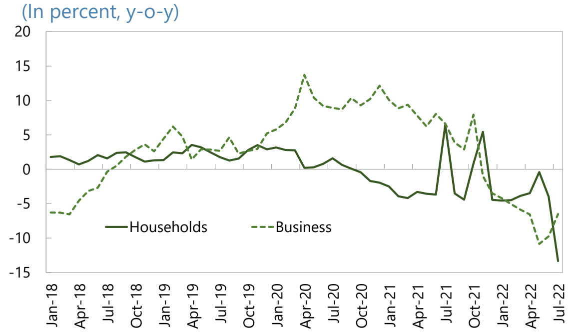
(In percent, y-o-y)



Sources: ECCB, country authorities and IMF staff calculations.

Commercial Bank Loans by Type of Borrowers

(In percent, y-o-y)



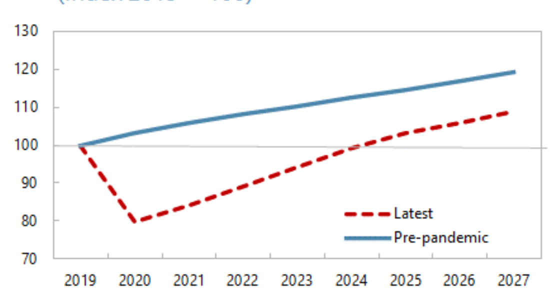
Sources: ECCB, country authorities, and IMF staff calculations.

OUTLOOK AND RISKS

10. The global implications of Russia's invasion of Ukraine and lingering effects of the pandemic present key challenges. Output is expected to return gradually to pre-pandemic levels by 2025 supported by a continued recovery in tourist arrivals, FDI-financed investments in the hospitality sector, and public sector projects. The ongoing port upgrade can strengthen Antigua and Barbuda's position as a regional transportation hub, encouraging cruise arrivals and homeporting of cruise lines. Real GDP is projected to grow at 6 and 5½ percent in 2022 and 2023, respectively. However, higher food and fuel prices are pushing up inflation and exacerbating fiscal and external imbalances. CPI inflation is forecasted to accelerate to 8½ percent in 2022 before moderating to 4½ percent in 2023. The fiscal position is expected to

Real GDP Projections

(Index 2019 = 100)



Sources: Country authorities and IMF staff calculations.

improve in 2022 but gross financing needs and the public debt-to-GDP ratio remain elevated, creating vulnerabilities for the country.

11. Risks to the outlook are tilted to the downside (Annex II)**.** Continued commodity price shocks can entrench already-high inflation and dampen demand. A growth slowdown in trading partners and/or renewed COVID-19 outbreaks and travel restrictions could stall the tourism recovery and deepen scarring effects. Delays in the implementation of the government's fiscal adjustment program will lead to higher deficits, debt, and gross financing needs. Tighter global financial conditions may put additional strain on public finances and lead to new arrears accumulation, particularly given Antigua and Barbuda's lack of access to concessional financing. A further appreciation of the U.S. dollar would weaken competitiveness through the currency peg, especially for tourism from non-U.S. source markets. On the domestic front, a decline in citizenship-by-investment program (CIP) revenues due to increased scrutiny of such programs by the EU and U.S. would hamper fiscal consolidation efforts. More frequent or intensive natural disasters due to climate change pose an ever-present risk. On the upside, a faster-than-expected recovery in tourism activity could boost growth.

Authorities' Views

12. The authorities agreed with staff's macroeconomic projections and assessment of risks. They observed the scarring effects of the pandemic on the labor market and hotel sector and noted the long-term human capital implications due to school closures. They noted that the strong recovery in tourism activity, including stayover arrivals and cruise visitors, and ongoing projects in the tourism sector, would enable the sector to return to pre-pandemic levels by 2023. However, they agreed that risks to the outlook are largely on the downside and stressed the increasing challenges of attracting foreign direct investment without providing tax concessions to compensate for growing risks to investors from the pandemic, tighter global financial conditions, and frequent natural disasters.

POLICY DISCUSSIONS

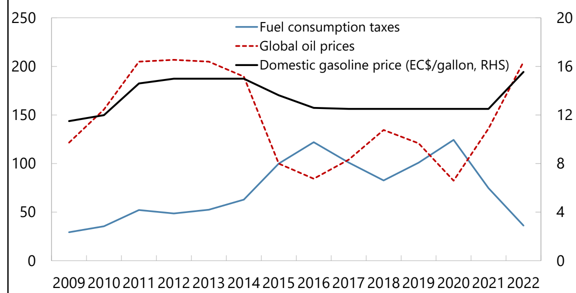
Antigua and Barbuda faces large gross fiscal and external financing needs in an environment of tightening global financial conditions and multiple external shocks (most notably to the terms of trade). The near-term policy priorities should be to improve social safety nets to protect the vulnerable, fully implement the MTFS to build fiscal buffers and bring down the public debt, and address the long-standing arrears to suppliers and bilateral creditors. There is also a pressing need to ensure the sustainability of the pension system, strengthen financial system oversight, improve competitiveness, and invest in climate resilience.

A. Returning to a Sustainable Fiscal Position

13. Near-term fiscal policy should continue to focus on prioritizing spending on social safety nets to protect the vulnerable against rising living costs. The authorities should expedite efforts to centralize and digitize information and payment systems for social transfer programs, to improve their coverage and targeting.[7] Coordination amongst government agencies implementing social transfer programs should be enhanced to ensure efficient targeting and monitoring, in line with the objectives of the Social Protection Act. A comprehensive, targeted system of social assistance—including cash transfers to lower-income households—should replace the temporary gas voucher program.

14. Continued adjustment in domestic fuel prices will help ensure that domestic demand responds to the global shift in relative prices. The government's decision to allow pass-through of international fuel prices to domestic consumers is welcome and should be maintained. Going forward, the authorities should consider adopting an automatic fuel pricing mechanism, with full pass-through of international prices, combined with targeted social protection programs for vulnerable households.

Fuel Prices and Consumption Taxes
(Index, 2015=100; EC$/gallon)

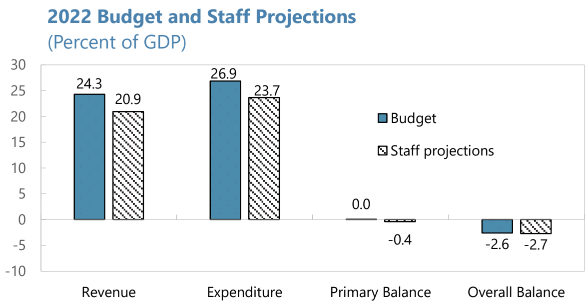


Sources: Country authorities and IMF staff calculations.

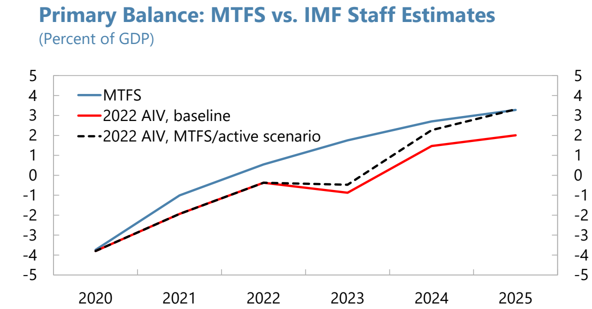
15. Achieving the government's medium-term fiscal targets will be essential to put debt on a firm downward trajectory. Fiscal consolidation is proceeding but at a slower pace than was envisaged in the original fiscal strategy published in December 2020. Tax exemptions were marginally reduced in 2021 but subsidies for fuels increased (due to the surge in global energy prices) and the introduction of the Tourism Accommodation Levy (TAL) was delayed (becoming effective in October 2021). The MTFS envisaged a primary surplus of ½ percent of GDP for 2022. However, revenue shortfalls—due to a surge in tax exemptions, subdued corporate income and property taxes amid the pandemic, and lower CIP revenues associated with sanctions stemming from Russia's invasion of Ukraine—are likely to imply a primary deficit of about ½ percent of GDP. More recently, the corporate income tax was amended to make permanent the windfall tax introduced in 2019.[8] Nonetheless, to return to the fiscal path envisaged in the MTFS will require additional measures of around 1¼ percent of GDP over the next three years.

[7] UNICEF is working with the authorities to establish a central beneficiary registry for all social programs. The authorities also intend to conduct a new country poverty assessment after the national census is completed.

[8] Currently, the windfall tax applies to banks, telecommunication, petroleum, and insurance companies.



Sources: 2022 Budget and IMF staff estimates and calculations.



Sources: Country authorities and IMF staff estimates and calculations.

16. Alternative measures to complement the MTFS should prioritize increasing revenue collection and lowering the wage bill. Tax exemptions increased from 41 percent of potential revenue in 2021 to 46 percent through August 2022 (equivalent to 4½ percent of GDP, of which discretionary exemptions accounted for 1½ percent of GDP). Tax exemptions should be limited to those specified in the legislation with clear eligibility criteria, sunset clauses, and effective monitoring and evaluation. To improve accountability and transparency, the annual cost of each tax expenditure should be published with the budget. The ABST rate for tourism activities should be harmonized to the standard 15 percent with the ABST extended to online purchases of goods and services. Excise duties could be introduced on alcohol and tobacco products. Stricter controls on the property tax are required to ensure timely payment of obligations, while property valuations for tax purposes should be updated.[9] There is also a need to contain increases in public sector real wages[10] and rely on worker attrition and redeployment to bring the wage bill below 9 percent of GDP by 2025. A public sector employment census and skills database will help inform a longer-term strategy to tackle the wage bill.

[9] The authorities are considering a waiver of unpaid property taxes for the period January 1, 2016 to December 31, 2021, provided tax obligations for 2022 are paid during January 1 and March 31, 2023.

[10] The government's plans to raise public wages to compensate for past increases in inflation would imply a 5-10 percent nominal increase over 2022-23.

Policy Reform Options to Achieve MTFS Targets

Reform Options	**Estimated Yield** (Percent of GDP)
Tax Policy	
Harmonizing the ABST rate for tourism activities (currently at 14 percent) to the standard 15 percent rate 1/	0.1
Regularly reassessing property values based on their market value for tax purposes 2/	0.1-0.3
Introducing excise taxes on alcoholic beverages and tobacco	Positive
Prohibiting waivers, discounts, or concessions with respect to the ABST	Positive
Extending the ABST to online purchases of goods and services	Positive
Applying zero-rating on the ABST only to exports with a few, narrowly focused exemptions applicable to imported and domestic supplies 3/	Positive
Tax Administration	
Strengthening tax compliance including tax auditing and risk assessment functions 4/	0.5-0.9
Enhancing e-filing and e-payment of taxes	Positive
Other	
Rationalizing transfers to SOEs and strengthening oversight of SOEs 5/	0.1-0.2
Total (cumulative over 2023-25)	**0.8-1.5**

Sources: IMF 2019 Technical Report on Antigua and Barbuda: Raising Revenue Efficiently, Effectively and Equitably, and IMF staff estimates.

1/ Reflects the contribution of tourism, construction and real estate to GDP and assumed contribution to revenue collection.

2/ Staff's estimates assume properties are undervalued by 20 percent relative to market value.

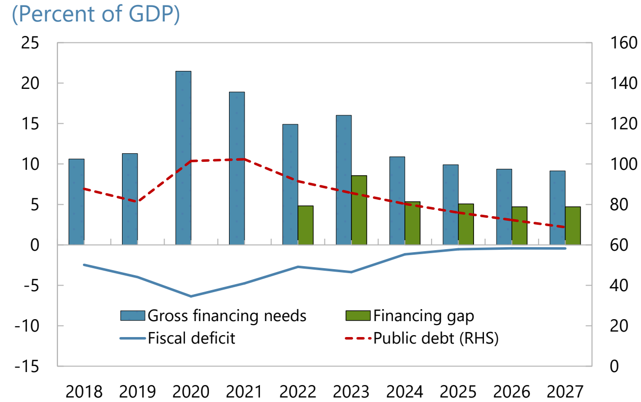
3/ Exemptions could include: the sale, transfer or lease of residential property; the supply or import of fresh produce, dairy products, and grains, among others; the rendering of margin-based financial services; the supply or import of national or foreign currency and of securities; and the rendering of qualifying religious, medical and educational services.

4/ Reflects telecom and financial sector contributions to GDP and to tax collections.

5/ Authorities' estimates.

17. **In addition to lowering the primary deficit, it will be essential to maintain efforts to secure financing with long maturity while avoiding new arrears.** Continued fiscal consolidation is expected to bring debt to under 70 percent of GDP by 2030. Even then, this would leave gross financing needs above 10 percent of GDP until 2025. Staff assesses public debt to be unsustainable due to the large outstanding stock of arrears (which are not expected to be cleared within the current projection horizon), and high gross financing needs which if not fully covered will likely lead to the accumulation of new arrears over the medium term (Annex IV). To address these vulnerabilities requires a lower fiscal deficit and new, preferably concessional, financing with long maturities. The authorities are making efforts to issue long-term securities on the domestic and external markets including a recently placed bond in the European market. They are also working with multilateral and commercial partners to issue a green bond in 2023 and

Fiscal Deficit, Public Debt, and Gross Financing Needs
(Percent of GDP)



Sources: Country authorities and IMF staff calculations.

extend the maturity profile of their commercial debt.[11] Further progress in clearing the stock of arrears—including the reconciliation and prioritization of arrears for clearance and close engagement with creditors—will help increase the credibility of the government's commitment to fiscal discipline.[12] Arrears with statutory bodies such as the Social Security Board and Medical Benefits Scheme should be resolved to help alleviate cash flow constraints at these institutions.

18. Given the vulnerabilities facing Antigua and Barbuda, it would be prudent to outline a contingency plan that could be deployed in an adverse scenario. Such a scenario could incorporate the effects of weaker growth, an inability to meet fiscal targets, and a lack of investor appetite to roll over liabilities in the regional government securities market. If these combined shocks are realized, there will be a need to implement all recommended fiscal measures more expeditiously to return to the MTFS targets, including further limiting tax exemptions and introducing new taxes. Additional efforts will be required to contain recurrent spending such as freezing public sector wages and rationalizing transfers to state-owned enterprises (SOEs). The authorities will also need to tap into more expensive external commercial financing sources to bridge any financing shortfalls.

19. Further strengthening the fiscal framework will help institutionalize fiscal discipline and build buffers against natural disasters. To build political consensus, it would be useful to have the MTFS and Fiscal Resilience Guidelines endorsed by parliament. There is a need to increase the operational capacity of the Macro-Fiscal Unit and get the Fiscal Resilience Oversight Committee (FROC) up and running before year-end. The government should approve the regulations to operationalize the Climate Resilience and Development Fund (CRDF) (funded by the TAL), enact the amended Finance Administration Act[13], develop a public financial management action plan based on the results of the Public Expenditure and Financial Accountability (PEFA) self-assessment, introduce a system to measure the financial performance of SOEs, and finalize amendments to the Procurement Administration Act and accompanying regulations. The recent operationalization of post-clearance audit and risk management at customs is welcome but the authorities should go further to put in place the single window system and extend forensic audits to other low compliance sectors. Implementing the e-filing and e-payment of taxes in the coming year will enhance revenue mobilization and reduce compliance costs.

20. Parametric reform of the pension system is essential to ensure its long-term sustainability (Annex VII)**.** Ongoing increases in the legal retirement age, the number of required work weeks, and contribution rates have helped. Despite these efforts, contributions have fallen

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[11] Collectively, the authorities' identified sources of financing are deemed sufficient for bridging the financing gap in 2022–23.

[12] In staff's baseline projections, arrears to non-Paris Club external creditors are assumed to be cleared in 2023 with proceeds from commercial bond issuances. The authorities continue to engage with the Paris Club over their long-standing arrears. However, pending an agreement for the resolution of Paris Club obligations, interest and amortization arrears are projected to continue accumulating, while arrears to domestic suppliers are reduced by 15 percent annually, in line with the authorities' arrears clearance strategy.

[13] This includes sanctions for non-compliant SOEs, internal audit functions, fiscal resilience guidelines, establishment and management of the Climate Resilience and Development Fund and emergency borrowing provisions.

below the 2017 actuarial forecasts and the overall financial position of the pension system has weakened (due to losses in wage income and employment). Additional transfers from the central government helped cover cash flows but, despite this, payments of old age pensions and other assistance were delayed. Parametric reform is needed to strengthen the sustainability of the pension system and could include (i) increasing the retirement age to 64.5 years in 2024 (it will already rise to 65 years in 2025); (ii) gradually raising contribution rates (e.g., by 0.5 percent per year up to 17 and 18 percent for public and private sector employees, respectively); and (iii) automatically adjusting the retirement age in line with the increase in life expectancy at retirement. Revisions to the pension system's investment framework should address liquidity constraints and increase longer-term returns, including by diversifying the asset holdings away from long-term domestic government bonds and real estate.

Authorities' Views

21. The authorities highlighted the contributions of their comprehensive social safety nets to protecting the living standards of their population. While they saw limited risks to food security, the authorities are concerned about the impact from global food and energy prices on domestic inflation. They plan to continue adjusting fuel prices in line with international trends, but these will be set to meet the monthly targets for consumption taxes and to cover the cost of the temporary gas voucher program. They underscored their ongoing efforts to ensure better coordination and monitoring across different government agencies responsible for social protection. They agreed on the need to move from generalized subsidies to more targeted programs such as the existing cash transfer and food voucher programs. They are making progress to develop a centralized beneficiary registry that will help enhance the targeting and coverage of social transfer programs but noted that more capacity will be needed to manage the new system once in place.

22. The authorities concurred with staff that additional measures would be required to return to the fiscal consolidation path envisaged in their Medium-Term Fiscal Strategy. They recognized the large revenue losses from tax exemptions and expressed the intention to streamline them, while being willing to consider introducing new revenue measures such as excise taxes on alcohol and tobacco products to ensure their fiscal targets are achieved. This will be facilitated by Fund technical assistance with reviewing the framework for tax exemptions and extending the sales tax to online purchases of goods and services. The authorities remain committed to containing the public sector wage bill despite planned increases in salaries to help offset rising living costs.

23. The authorities emphasized their progress in securing long-term financing and addressing arrears. They intend to allocate a portion of proceeds from forthcoming long-term bond issuances to settle arrears with domestic and external creditors. They also plan to issue the first green bond in the ECCU, which will lengthen the maturity of government debt and free up fiscal space for investments in climate resilience and renewable energy.

24. The authorities agreed that key structural fiscal reforms should be advanced as planned. The Macro-Fiscal Unit will assume the monitoring of SOEs through regular reviews of their financial operations, with a view to reduce their reliance on non-statutory transfers from the central government. The CRDF has been set up and its regulations are expected to be finalized by year-end. The PEFA self-assessment has been conducted and will help inform a comprehensive public financial management action plan. Amendments to the Finance Administration Act will be submitted for Cabinet approval by year-end, with the regulations becoming effective by 2023. Amendments to the Procurement Administration Act are under review and are expected to be completed by year-end together with the draft regulations. The authorities are committed to implementing the single window system at customs and are seeking funding to support it. They did not see the need to legislate fiscal rules but emphasized their track record of fiscal consolidation and pointed to the establishment of the fiscal resilience guidelines. They indicated that the FROC should be operationalized in early 2023.

25. The authorities agreed that further parametric reforms are necessary to ensure the pension system's long-term sustainability. While ongoing parametric reforms are improving the system's financial position, reserves are negatively impacted by shortfalls in contribution income, particularly due to the protracted effect from the pandemic on the labor market. They agreed that, once current parametric reforms are completed in 2025, further reforms should be gradual and more automatic. The authorities recognized the liquidity constraints and low returns from the current composition of reserves and plan to review the investment strategy.

B. Reinforcing the Financial System

26. The Financial Services Regulatory Commission (FSRC) should continue to exercise vigilance to safeguard financial stability. Credit unions' loan loss provisioning is currently above prudential levels. However, given their rapid mortgage lending expansion, it is important to intensify the monitoring of asset quality and ensure loan loss provisioning is consistent with fragilities in borrower's financial position and broader economic prospects. The FSRC should encourage better governance (including internal auditing) and risk management of credit unions and consider a shift to risk-weighting assets in response to their growing lending portfolio.

27. The FSRC should strengthen crisis preparedness and incentivize greater resilience of financial institutions to climate-related shocks. Enhanced collaboration with the ECCB is needed to accelerate the formulation of a national crisis management plan to contain potential system-wide risk in both banks and nonbanks in identifiable contingency scenarios. The FSRC has started collecting climate risk information from nonbanks and should leverage regional initiatives, that are being led by the ECCB, to incorporate climate risks into supervision, reporting, and regulatory frameworks, including through the stress tests for nonbanks.[14] This, in turn, would incentivize the inclusion of climate considerations into the risk management practices of financial institutions.

28. Reforms are needed to improve the access to credit. The regional credit bureau is expected to facilitate greater lending and enhance credit quality. The recently launched regional partial credit guarantee scheme for micro-, small- and medium-sized enterprises has the potential to

[14] See 2022 ECCU Regional Consultation Report, IMF Country Report No. 22/253.

alleviate collateral constraints of borrowers.[15] Bringing informal sector entrepreneurs into the business registry and simplifying documentation requirements for new startups will help expand the coverage of the scheme. Modernization of the insolvency law to facilitate out-of-court settlement and clarify creditor rights would also help incentivize lending.

29. Effective implementation of the AML/CFT framework would mitigate risks to the CIP and protect correspondent banking relationships. Significant progress has been made toward the adoption of a risk-based AML/CFT supervisory framework that is applicable to all financial institutions and designated non-financial businesses and professions (including CIP agents) as well as the provision of beneficial ownership information. The existing due diligence process for screening CIP applicants has several layers to minimize the risks. Additional measures are also being taken to strengthen the CIP legislative framework. Active communication with counterparts in the EU and U.S. and other CIPs in the region should be maintained to keep all partners abreast of these reforms and to share best practices.

Authorities' Views

30. The authorities remain committed to safeguarding financial stability and strengthening their AML/CFT and CIP frameworks. They viewed the recent uptick in NPLs of credit unions following the expiration of loan moratoria as presenting limited risks but are closely monitoring asset quality and loan loss provisioning. They highlighted structural challenges facing credit unions including a lack of internal audit function and their exclusion from the payment system. They underscored the need for better coordination with the ECCB to develop a national crisis management plan. They are in close cooperation with the ECCB in AML/CFT supervision and are addressing recommendations of the Caribbean Financial Action Task Force. They pointed to ongoing efforts to codify the comprehensive guidelines for CIP agents into legislation, which will significantly strengthen the CIP framework. They are maintaining constant contact with U.S. and EU regulators to alleviate their security concerns about the CIP.

31. The authorities agreed that reforms are essential to improve access to credit. Both the regional credit bureau and regional partial credit guarantee scheme are expected to improve firms' access to finance by enhancing credit quality, accelerating the lending process, and alleviating collateral constraints. The authorities pointed to the need to mitigate the perceived risk of lending to small businesses and are considering more loan guarantee programs to further ease their credit constraints.

C. Enhancing Competitiveness and Fostering a Green Recovery

32. The restructuring of the regional airline (LIAT) should be accelerated. LIAT is currently under administration and is operating limited services to Caribbean destinations, creating intra-regional transportation bottlenecks. The government's support for LIAT has been limited to paying

[15] See 2022 ECCU Regional Consultation Report, IMF Country Report No. 22/253. The guarantee scheme requires entrepreneurs to register their businesses, which has tax implications.

severance payments to former employees. The new company is expected to be managed by a private investor in 2023 with additional investment expected to expand LIAT's operations in the region. It will be important to conclude LIAT's reorganization and focus on improving the overall profitability of the enterprise.

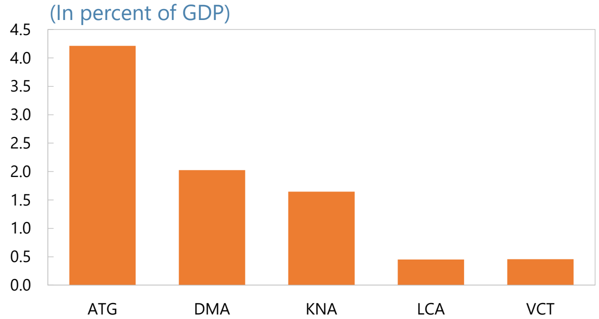
33. **Policies to revive the labor market would support the economic recovery.** The pandemic has resulted in a sizable employment decline for the self-employed and younger workers (Annex V). Formal work arrangements declined, and education outcomes worsened due to school closures. Policies should prioritize increased training, vocational education, and skills certification to address human capital deterioration. Assistance with job search would facilitate the reintegration of workers into the labor force, while support to small businesses could help reverse the decline in self-employment.

34. **Investing in climate resilience is critical.** The annual loss caused by natural disasters for Antigua and Barbuda is around 4.2 percent of GDP, significantly larger than that of an average small island state. Much of the current infrastructure stock is not resilient to natural disasters which are expected to become more intense and frequent due to climate change (Annex VIII). Based on staff's analysis, an investment in resilient infrastructure of 3 percent of GDP per annum would create a long-run output gain of up to 13 percent of GDP.[16] To reap these benefits, the authorities are actively pursuing several options. Antigua and Barbuda has built close partnerships with private climate funds and other organizations to access grant financing for climate projects.[17] The National Adaptation Plan, expected to be completed by June 2023, will help coordinate and focus donor efforts and incorporate climate resilience into the country's development strategy and budget process. The Sustainable Island Resource Framework Fund has been established to channel donor funding into environmental management and climate change actions. To enhance disaster management, the authorities are developing a risk map and an early warning system. Antigua and Barbuda is enrolled in the Caribbean Catastrophe Risk Insurance Facility (CCRIF), while the CRDF should be capitalized in a timely manner to provide resources to respond to natural disasters. More attention, though, could be paid to increasing financial resilience by shielding public finances against large contingent needs that could be caused by severe natural disasters. Finally, efforts should continue to ensure full transparency, oversight, and accountability in the use of climate financing.

[16] See Guerson (2019), "Building Ex-ante Resilience to Natural Disasters", Eastern Caribbean Currency Union, Selected Issues Paper, IMF Country Report No. 19/63. This increase in investment is aimed at upgrading 80 percent of public infrastructure to be resilient to natural disasters.

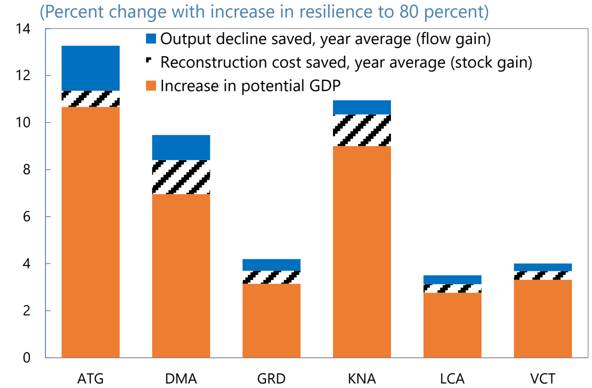
[17] Key sources of private climate financing include the Adaptation Fund, Green Climate Fund, and Global Environment Facility.

Natural Disasters Average Annual Loss[1/]
(In percent of GDP)



Source: CCRIF.
1/ Includes flooding, tropical cyclones, and earthquakes. Estimates for Grenada not available.

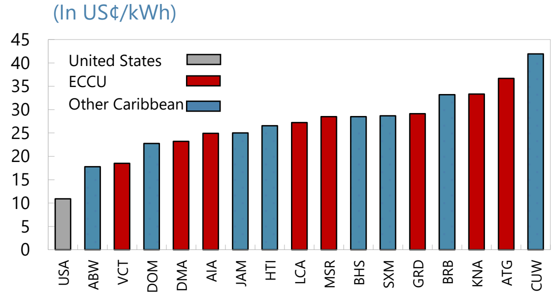
Long-term GDP Return of Investment in Resilience
(Percent change with increase in resilience to 80 percent)



Sources: Country authorities and IMF staff calculations.

35. Accelerating the shift to renewables would help insulate the country from swings in global energy prices. Antigua and Barbuda's electricity tariffs are among the highest in the Caribbean.[18] Diversifying the energy matrix—in line with the National Energy Policy—and allowing private sector participation in the renewable energy market has the potential to significantly reduce energy costs. Currently, solar generation capacity is around 15 percent of total electricity generation, substantially below the ambitious goal of having 86 percent of electricity generated from renewables by 2030. The authorities are promoting the use of renewables in schools and other public buildings and encouraging the development and inclusion of distributed renewable energy (such as rooftop solar).[19] A phased approach to the transition to renewables should be taken, with careful considerations given to the financing instruments and the implications for stranded assets in carbon-intensive generation.

Domestic Electricity Tariffs: 2021
(In US¢/kWh)



Source: Cable Co UK.

36. Tapping into new multilateral and market-based green finance could help support climate resilience. The planned issuance of a green bond will ease financing constraints and the authorities may also benefit from the World Bank's Catastrophe Deferred Drawdown Option (CAT DDO), creating access to liquidity in the event of a natural disaster. There may be scope to raise blue

[18] The average tariff includes a fixed initial payment, which does not change for electricity consumption below a certain threshold. The high electricity tariff set by the state-owned public utilities company (APUA) is partly to help absorb the costs of its water business operations.

[19] To reduce the reliance on heavy oil and diesel, APUA is entering into an agreement to purchase electricity from an LNG power plant that is now under construction. In addition, APUA has an existing purchase agreement with a power generating company.

financing from both multilaterals and NGOs, leveraging the authorities' intention to improve the sustainable use of ocean resources under their Maritime Economy Plan (Annex IX).

Authorities' Views

37. The authorities emphasized the priority placed on access to education and vocational training. They noted the necessity of maintaining transfers to the education sector to ensure that access to education is not constrained by affordability. They expressed their desire to attract more educational institutions to the country and develop high-skill sectors to absorb graduates. They also highlighted that the Antigua and Barbuda Institute for Continuing Education is currently being expanded to enhance technical and vocational training.

38. The authorities are moving ahead with their climate resilience plans. They noted the close partnership with donors to strengthen resilience to natural disasters, including through grant financing for large investment projects. They expect the National Adaptation Plan to be completed by June 2023. They are considering new insurance products for high-risk sectors such as agriculture and fishing and making advances in disaster management, including a risk map and an early warning system for natural disasters. They agreed that shifting towards renewables would lower energy costs but noted that the speed of transition should account for the fiscal implications from existing energy purchase contracts and stranded assets in the electricity sector.

D. Data Issues

39. Progress is being made to improve data quality, but further efforts are needed to update and disseminate critical information for policy and business decision-making. Data provision has some shortcomings but is broadly adequate for surveillance. Capacity development provided by the IMF and other donors are helping to develop a new Producer Price Index, compile a rental component for the Consumer Price Index, and improve national accounts and external sector statistics. The key area that requires attention is publishing timely reports on central government and SOEs' operations.

STAFF APPRAISAL

40. Antigua and Barbuda's economy is recovering but facing headwinds from multiple external shocks. The rebound is supported by tourism and construction activity, but output is expected to return gradually to pre-pandemic levels by 2025 reflecting scarring effects from the pandemic. Higher food and fuel prices are driving up inflation, eroding real incomes, and exacerbating fiscal and external imbalances. The external position in 2021 was weaker than the level implied by medium-term fundamentals and desirable policies. The outlook is subject to large downside risks, including further commodity price shocks, a global growth slowdown, tighter global financial conditions, lower citizenship-by-investment program (CIP) revenues, and natural disasters.

41. Near-term fiscal policy should continue to focus on protecting the vulnerable against rising living costs. It will be important to implement a clear framework for coordination between different government entities responsible for social safety net programs to ensure efficient targeting and monitoring. Sufficient resources should be allocated towards the completion and maintenance of the centralized beneficiary registry. An automatic fuel pricing mechanism, with full pass-through of international prices, should be put in place in conjunction with targeted social protection programs, allowing the government to move away from generalized, untargeted subsidies.

42. Fiscal consolidation is under way but additional revenue mobilization is needed to achieve the targets of the Medium-Term Fiscal Strategy. Achieving the original primary balance targets will require limiting tax exemptions, introducing new tax measures, and containing the wage bill. A public sector employment census and skills database will be essential as part of a longer-term strategy to address the wage bill.

43. Securing long-term financing and preventing the accumulation of new arrears are critical in an environment of tight financial conditions. The authorities should maintain efforts to extend the maturity profile of their debt in the domestic and external markets in order to reduce rollover risks. There should be close engagement with creditors to put in place feasible strategies for clearing remaining arrears and new arrears should be avoided.

44. Sustained progress on structural fiscal reforms would better institutionalize fiscal discipline. To build political consensus, the MTFS and Fiscal Resilience Guidelines could be legislated by parliament. The authorities should move ahead with the operationalization of the Climate Resilience and Development Fund, Fiscal Resilience Oversight Committee, and single window system at customs. E-filing and e-payment of taxes should be put in place and the amended Finance Administration Act and Procurement Administration Act should be implemented. A performance report card system for SOEs should be introduced. A public financial management action plan should be developed based on results of the recent Public Expenditure and Financial Accountability self-assessment.

45. Further reforms are necessary to ensure the pension system's long-term sustainability. These include gradual increases in the contribution rate and automatic adjustments to the retirement age in line with the increase in life expectancy at retirement. Furthermore, a revamped investment strategy will help address liquidity constraints and increase longer-term returns.

46. Continued efforts to safeguard financial stability and strengthen AML/CFT and CIP frameworks are essential. Asset quality and provisioning buffers of financial institutions should be monitored closely. A national crisis management plan should be formulated in collaboration with the ECCB to address potential risks to the financial system. Ongoing initiatives to strengthen the AML/CFT and CIP frameworks would help protect correspondent banking relationships and strengthen the integrity of the CIP.

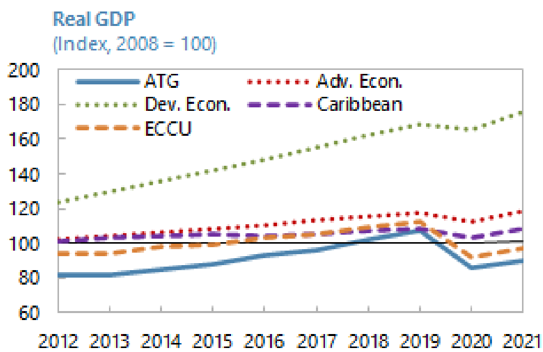
47. Improving access to credit and strengthening the workings of the labor market would support the economic recovery. It will be important to increase the role of the regional credit bureau and partial credit guarantee scheme in enhancing credit quality, accelerating the lending process, and alleviating collateral constraints of borrowers. The insolvency law should be modernized to help incentivize lending. Labor market policies should emphasize training, vocational education, and skills certification, together with job search assistance to reintegrate workers into the labor force.

48. Building resilience to climate shocks and accelerating the transition to renewables will boost long-term competitiveness. The government's efforts to leverage donor resources and other international financing for climate resilience projects are crucial given the large investment needs and limited fiscal space. Shifting to renewables, supported by private sector financing, would reduce energy costs and improve competitiveness.

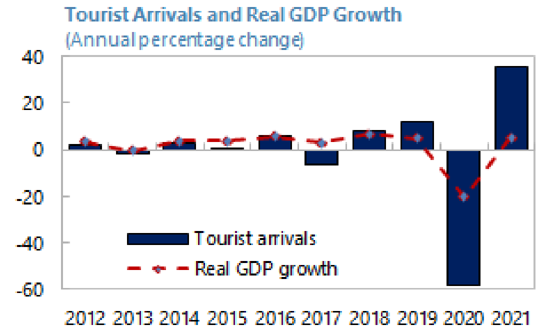
49. It is recommended that the next Article IV consultation with Antigua and Barbuda take place on the standard 12-month cycle.

Figure 1. Antigua and Barbuda: Economic Developments

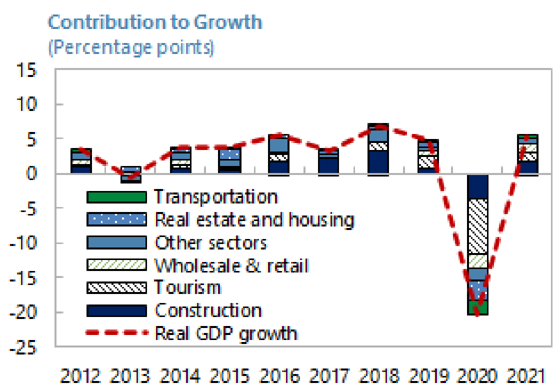
The economy is steadily recovering from the pandemic shock….



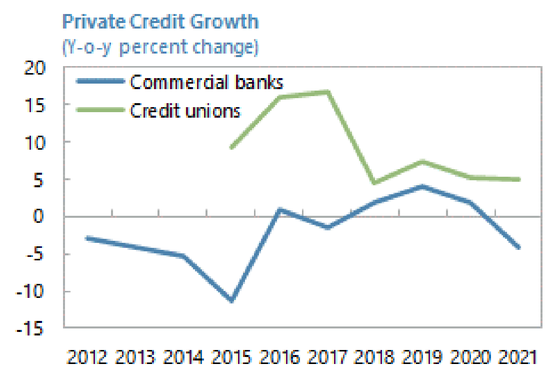
…supported by the return in tourist arrivals.



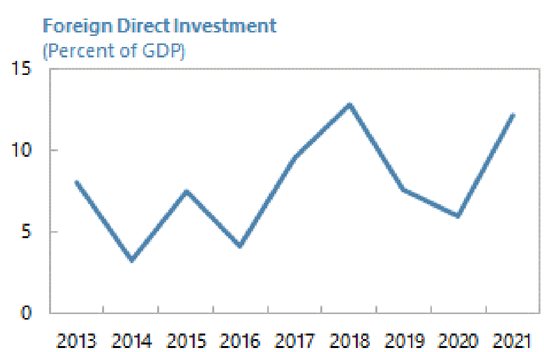
The nascent recovery is broad-based….



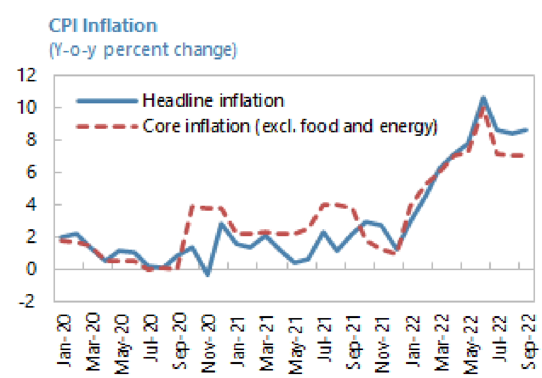
…despite credit to the private sector remaining weak.



FDI inflows, mainly to the hospitality sector, have picked up strongly.



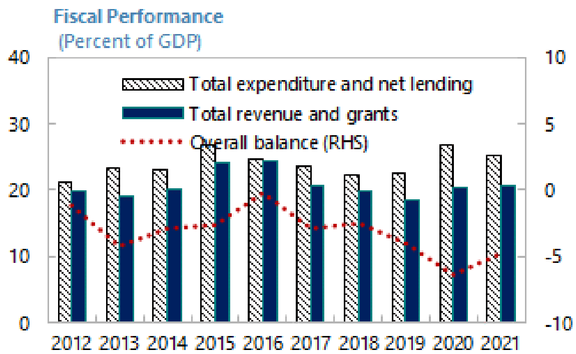
The pass-through from rising international commodity prices is raising inflation.



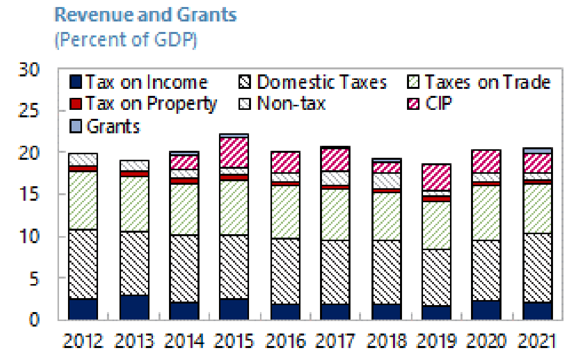
Sources: Country authorities, ECCB, and IMF staff calculations.

Figure 2. Antigua and Barbuda: Fiscal Sector Developments

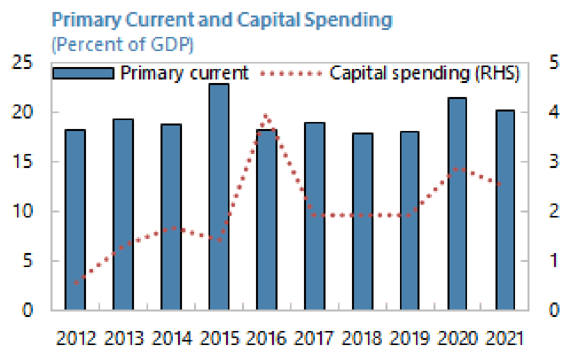
The fiscal balance improved due to both revenue and expenditure measures.



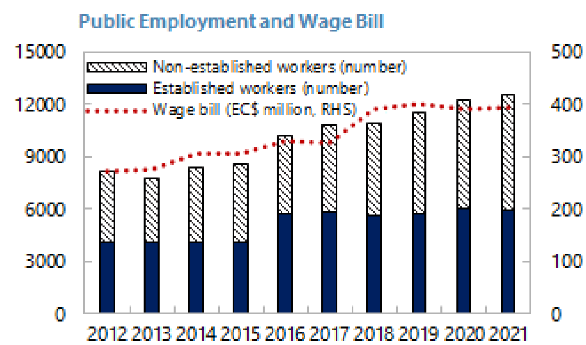
Revenues were supported by domestic taxes (VAT and stamp duties), while trade taxes and CIP inflows fell.



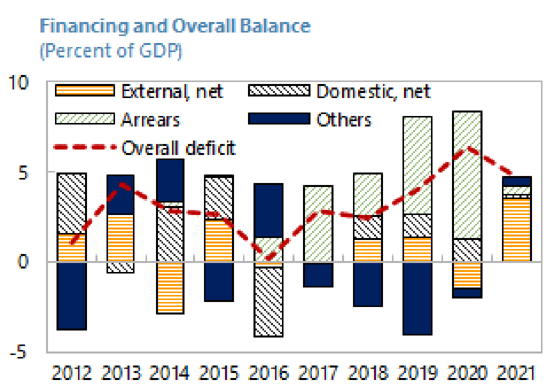
The scaling down of pandemic-related spending contributed to lower recurrent primary spending.



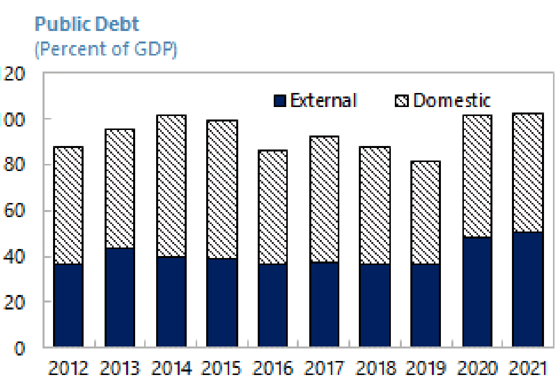
The wage bill remained stable in nominal terms owing to the real wage freeze.



The fiscal deficit in 2021 was financed mainly by external sources, including from the SDR allocation.



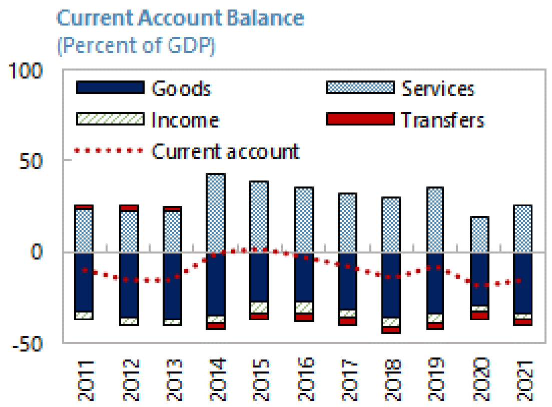
Public debt has stabilized on account of rising nominal GDP despite the fiscal balance remaining in deficit.



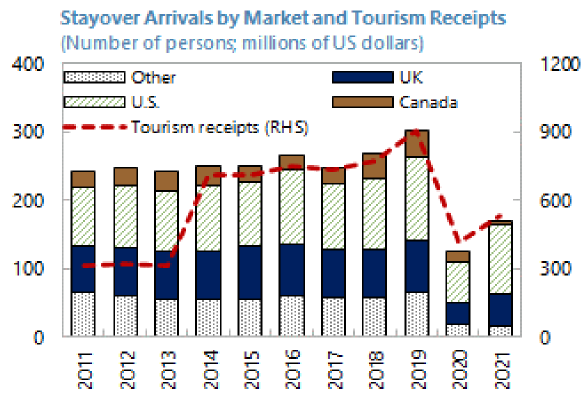
Sources: Country authorities, ECCB, and IMF staff calculations.

Figure 3. Antigua and Barbuda: External Sector Developments

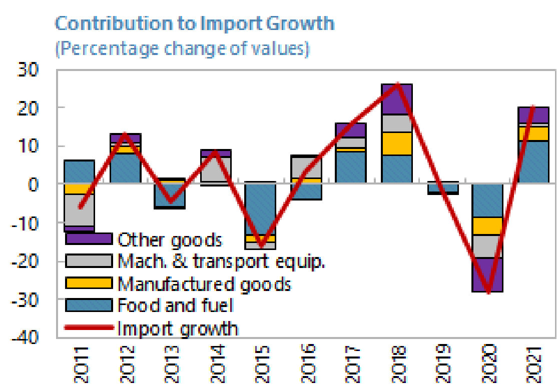
The current account deficit stabilized in 2021, with an improvement in the services balance...



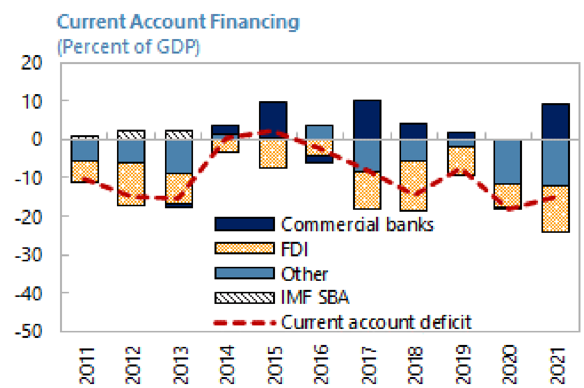
...reflecting a rebound of tourist arrivals from the trough of the pandemic.



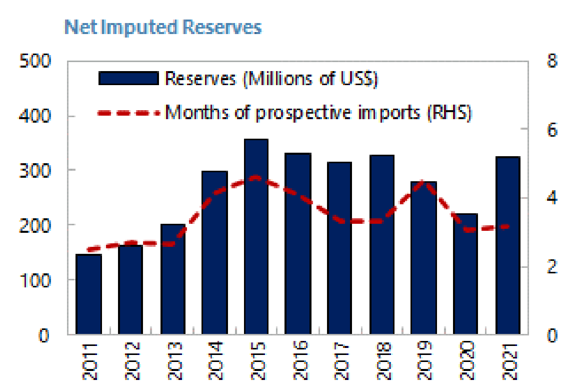
The pick-up in import growth was broad-based.



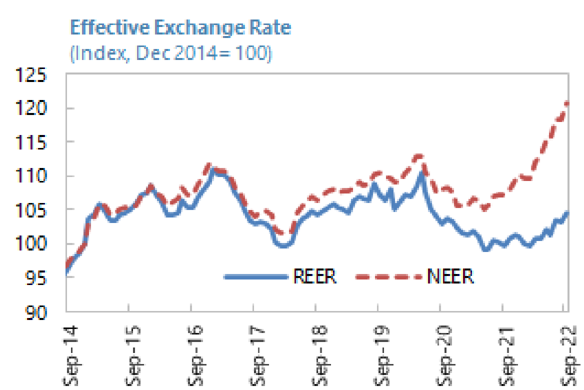
The current account deficit continued to be financed mostly by FDI.



Reserve coverage remained broadly stable.



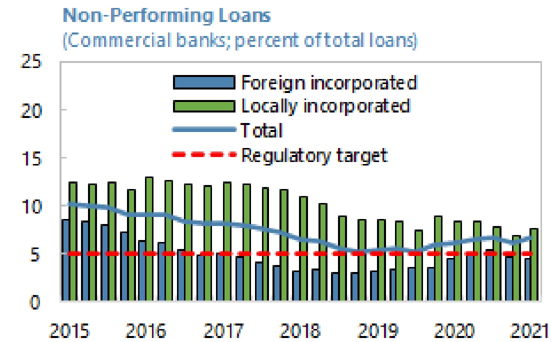
The real effective exchange rate appreciated in 2022 reflecting the stronger U.S. dollar.



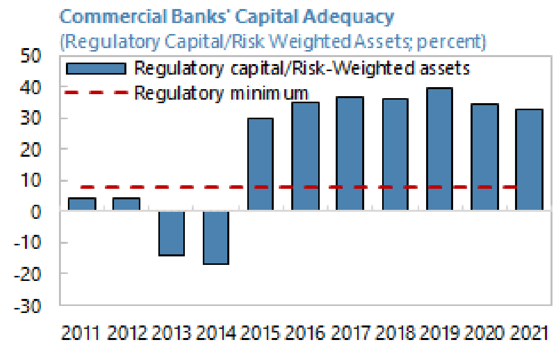
Sources: Country authorities, ECCB, and IMF staff calculations.

Figure 4. Antigua and Barbuda: Banking System Developments

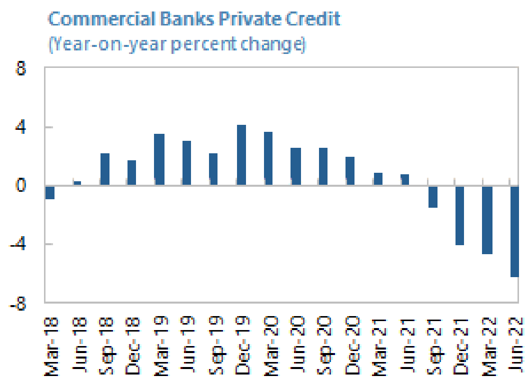
NPLs have been stable but higher than the regulatory target.



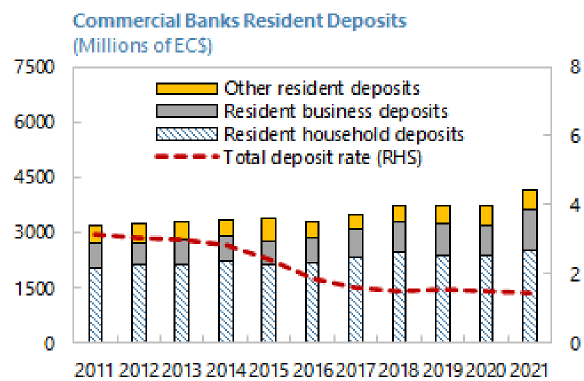
Commercial banks remain well-capitalized.



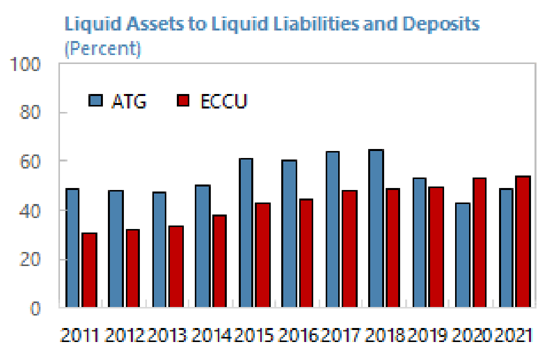
Credit to the private sector contracted recently…



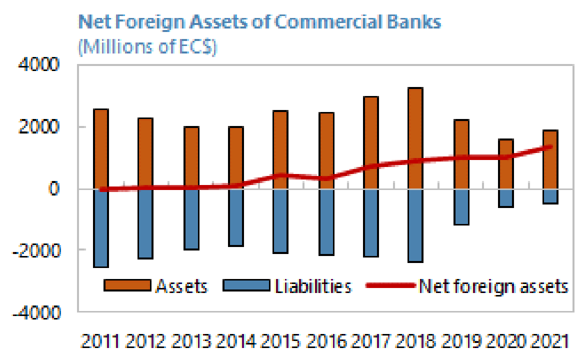
…even as deposits continued to grow.



Liquidity improved but remained below pre-pandemic levels.



Net foreign assets showed an upward trend reflecting investment in overseas assets.



Sources: Country authorities, ECCB, and IMF staff calculations.

Table 1. Antigua and Barbuda: Selected Economic and Financial Indicators

Population (2021)	98,219	Adult literacy rate (2015)	99
GDP per capita (US$, 2021)	14,978	Mean years of schooling (2021)	9.3
Life expectancy at birth (years, 2021)	78.5	Human Development Index rank	71
Mortality rate (under 5, per 1,000 live births, 2020)	6	(2021, of 191 economies)	

					Prel.	Projections					
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
	(Annual percentage change)										
National Income and Prices											
Real GDP	3.1	6.9	4.9	-20.2	5.3	6.0	5.6	5.4	4.0	2.7	2.7
Nominal GDP	2.2	9.4	5.1	-18.8	7.4	15.0	10.3	7.9	6.1	4.8	4.8
Consumer prices (end of period)	2.4	1.7	0.7	2.8	1.2	10.5	2.7	2.0	2.0	2.0	2.0
Consumer prices (period average)	2.4	1.2	1.4	1.1	1.6	8.5	4.5	2.4	2.0	2.0	2.0
Money and Credit											
Net foreign assets	10.9	6.2	-0.9	-4.6	18.5	5.7	4.2	4.0	2.3	1.0	0.3
Net domestic assets	-3.3	0.1	1.7	-0.6	-4.6	-1.9	6.1	4.0	3.8	3.8	4.5
Broad money (M2)	7.6	6.3	0.8	-5.2	13.9	3.9	10.3	7.9	6.1	4.8	4.8
Credit to private sector	-1.6	1.8	1.3	4.8	-4.1	0.0	5.0	5.0	5.0	5.0	5.0
	(Percent of GDP)										
Central Government											
Primary balance	-0.1	0.0	-1.2	-3.8	-1.9	-0.4	-0.9	1.5	2.0	2.1	2.1
Overall balance	-2.8	-2.5	-4.0	-6.4	-4.8	-2.7	-3.4	-1.2	-0.5	-0.4	-0.4
Total revenue and grants	20.7	19.8	18.6	20.4	20.6	20.9	20.2	21.2	20.9	20.8	20.8
Total expenditure	23.6	22.3	22.6	26.8	25.3	23.7	23.5	22.4	21.4	21.2	21.2
External Sector											
Current account balance	-8.0	-14.5	-7.5	-18.4	-15.0	-20.3	-14.1	-13.4	-12.5	-11.8	-11.4
Trade balance	-31.1	-36.1	-34.2	-29.3	-33.7	-39.8	-37.5	-37.4	-37.0	-36.8	-36.7
Nonfactor service balance	32.3	30.2	35.1	18.6	25.6	26.0	29.1	33.6	34.2	34.8	35.1
Of which: Gross tourism receipts	50.2	48.3	53.5	30.1	37.1	45.4	46.0	44.9	45.2	46.2	47.2
Overall balance	-2.4	-0.5	-4.2	-7.1	4.3	-3.9	-5.1	-1.9	-2.7	-3.4	-3.9
External public sector debt	37.5	36.7	36.5	48.1	50.5	50.0	50.1	50.0	49.6	48.6	47.1
Savings-Investment Balance	-8.0	-14.5	-7.5	-18.4	-15.0	-20.3	-14.1	-13.4	-12.5	-11.8	-11.4
Savings	15.4	22.9	27.4	12.9	23.2	19.3	22.7	24.2	24.1	24.3	24.3
Investment	23.5	37.5	34.9	31.3	38.2	39.6	36.8	37.5	36.6	36.1	35.7
Memorandum Items											
Net imputed international reserves (US$ million)	314	329	279	222	324	354	419	486	528	548	553
(Months of prospective imports)	3.3	3.3	4.5	3.1	3.1	3.3	4.0	4.4	4.6	4.5	4.2
GDP at market prices (EC$ million)	3,964	4,336	4,556	3,700	3,972	4,567	5,040	5,439	5,770	6,045	6,332
Public debt stock (EC$ million) 1/, 2/	3,654	3,803	3,702	3,754	4,066	4,179	4,317	4,367	4,384	4,370	4,355
(Percent of GDP)	92.2	87.7	81.3	101.5	102.4	91.5	85.7	80.3	76.0	72.3	68.8

Sources: Country authorities, ECCB, UN Human Development Report, World Bank, and IMF staff estimates and projections.

1/ Includes stock of principal and interest arrears, unpaid vouchers, and suppliers' credits.

2/ Includes central government guarantees of state enterprises' and statutory bodies' debt.

Table 2. Antigua and Barbuda: Gross Financing Needs

	2020	Prel. 2021	Projections 2022	2023	2024	2025	2026	2027
	(Millions of Eastern Caribbean dollars)							
Total Gross Financing Needs	**724**	**751**	**680**	**807**	**592**	**572**	**566**	**580**
(in percent of GDP)	20	19	15	16	11	10	9	9
Deficit Financing	**235**	**189**	**124**	**169**	**63**	**31**	**26**	**28**
Central Government External Amortization	**264**	**273**	**282**	**410**	**296**	**319**	**359**	**391**
Multilateral	20	35	38	51	52	53	56	57
Bilateral Paris Club	0	0	36	32	16	0	0	0
Bilateral non-Paris Club	7	7	51	64	51	53	53	55
Securities	245	231	158	236	96	96	96	96
Additional securities to close financing gap	0	0	0	28	81	118	154	190
Central Government Domestic Amortization	**224**	**289**	**275**	**228**	**233**	**221**	**181**	**161**
Commercial Banks	6	50	21	27	25	31	38	39
ECCB	30	78	67	22	29	30	20	25
Securities	181	144	185	175	175	157	123	97
Financing Sources	**682**	**751**	**460**	**376**	**302**	**280**	**281**	**282**
External	**279**	**412**	**277**	**190**	**162**	**154**	**153**	**153**
IMF	0	0	0	0	0	0	0	0
Caribbean Development Bank	39	99	30	25	18	18	18	18
World Bank	3	0	1	0	0	0	0	0
Abu Dhabi Fund for Development	0	1	12	19	8	0	0	0
Securities	192	238	236	96	96	96	96	96
ALBA Bank	45	0	0	16	0	0	0	0
CARICOM/IDB	0	1	0	0	0	0	0	0
SDR	0	73	0	0	0	0	0	0
Other bilateral	0	0	0	35	40	40	40	40
Domestic	**271**	**299**	**212**	**212**	**128**	**128**	**128**	**128**
Commercial banks	15	27	20	20	20	20	20	20
ECCB	122	46	17	17	17	17	17	17
Securities	134	226	175	175	91	91	91	91
Change in Arrears	**151**	**21**	**-30**	**-26**	**12**	**-2**	**0**	**0**
Domestic	178	-18	-74	-53	-16	-13	-11	0
External	85	38	45	27	28	11	11	0
Change in Deposits	**-19**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Central Government Sale/Purchase of Domestic Assets 1/	**0**	**19**	**0**	**0**	**0**	**0**	**0**	**0**
Financing Gap 2/	**...**	**...**	**220**	**431**	**290**	**292**	**284**	**298**

Sources: Country authorities and IMF staff estimates and projections.
1/ In 2021, it reflects the government's sale of 10 percent of its equity stake in the state oil company (WIOC).
2/ Financing gaps are assumed to be filled by unidentified long-term financing sources.

Table 3a. Antigua and Barbuda: Central Government Operations

(Millions of Eastern Caribbean dollars)

					Prel.	Projections					
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Total Revenue and Grants	**822**	**859**	**849**	**755**	**816**	**957**	**1,016**	**1,155**	**1,205**	**1,258**	**1,318**
Current revenue	704	756	704	651	694	806	876	1,018	1,093	1,146	1,202
Tax Revenue	**636**	**680**	**672**	**610**	**667**	**766**	**833**	**972**	**1,044**	**1,095**	**1,149**
o/w Income	**74**	**78**	**79**	**87**	**83**	**82**	**92**	**114**	**122**	**128**	**134**
o/w Domestic Production and Consumption	**298**	**330**	**306**	**264**	**331**	**420**	**453**	**510**	**547**	**573**	**600**
o/w AB Sales Tax	237	278	253	207	242	319	340	386	414	434	455
o/w Stamp duties	50	41	43	38	69	64	69	74	78	82	86
o/w International Transactions	**244**	**251**	**259**	**241**	**229**	**239**	**259**	**314**	**334**	**351**	**369**
o/w Import duties	88	97	98	82	93	110	118	142	151	158	166
o/w Revenue Recovery Charge (RRC)	75	84	80	66	74	91	98	124	131	139	146
o/w Consumption duties	64	53	64	79	48	23	26	30	32	34	35
o/w Taxes on Property	**20**	**21**	**29**	**18**	**24**	**25**	**28**	**34**	**41**	**43**	**45**
Non-Tax Revenue	**68**	**76**	**31**	**41**	**28**	**40**	**43**	**46**	**49**	**51**	**53**
Capital revenue	116	88	146	103	93	101	108	112	113	113	116
o/w CIP revenue	105	60	142	98	91	98	103	107	107	106	108
Total grants	2	16	0	0	29	50	32	25	0	0	0
Current grants	0	0	0	0	0	0	0	0	0	0	0
Capital grants 1/	2	16	0	0	29	50	32	25	0	0	0
Total Expenditure	**935**	**966**	**1,031**	**990**	**1,005**	**1,080**	**1,185**	**1,218**	**1,237**	**1,284**	**1,345**
Total primary expenditure	827	857	905	895	893	974	1,060	1,075	1,090	1,132	1,186
Current expenditure	858	883	943	883	906	949	1,011	1,043	1,065	1,104	1,156
Primary current expenditure	751	774	818	789	794	843	886	900	918	952	997
Wages and salaries	327	389	400	389	394	411	440	449	458	470	493
Employment contributions 2/	28	33	36	36	38	40	41	42	43	44	46
Goods and services, incl. utilities	134	129	152	126	130	160	170	170	173	182	190
Pensions	82	71	78	70	70	73	74	76	77	81	85
Other transfers	181	151	151	167	162	159	161	164	167	175	183
Capital expenditure and net lending	76	84	87	107	99	131	174	175	172	180	189
Interest payments	107	109	126	95	112	106	125	143	147	152	159
External	31	35	50	43	46	37	52	75	90	102	112
Domestic	76	74	75	52	65	69	73	68	57	50	48
Primary Balance	**-5**	**2**	**-56**	**-140**	**-77**	**-17**	**-44**	**80**	**116**	**126**	**132**
Overall Balance	**-113**	**-107**	**-181**	**-235**	**-189**	**-124**	**-169**	**-63**	**-31**	**-26**	**-28**
Financing	**113**	**107**	**181**	**235**	**189**	**124**	**169**	**63**	**31**	**26**	**28**
External (net)	-1	58	53	-56	139	-5	-220	-135	-165	-205	60
Disbursement	183	224	254	279	412	277	190	162	154	153	451
Amortization 3/	-184	-166	-201	-335	-273	-282	-410	-296	-319	-359	-391
Domestic (net)	1	55	65	-11	10	-62	-16	-104	-93	-53	-33
ECCB	-10	-6	1	92	-32	-50	-5	-12	-13	-3	-8
Banks (loans, net)	-31	-27	22	9	-23	-1	-7	-5	-11	-18	-19
Government securities	22	37	53	-47	82	-10	0	-84	-65	-32	-5
Issuances	138	191	164	134	226	175	175	91	91	91	91
Amortization	-117	-154	-111	-181	-144	-185	-175	-175	-157	-123	97
Others	15	49	0	-62	-18	-2	-3	-3	-4	0	0
Changes in deposits (increase -)	5	2	-10	-19	0	0	0	0	0	0	0
Change in arrears 4/	169	104	243	263	21	-30	-26	12	-2	0	0
External 3/	38	54	59	85	38	45	27	28	11	11	0
Amortization	27	44	42	70	31	41	27	26	9	9	0
Interest	11	10	17	15	8	4	0	3	2	2	0
Domestic 1/, 4/	131	50	184	178	-18	-74	-53	-16	-13	-11	0
Other (including asset sales/purchases) 5/	0	0	0	0	19	0	0	0	0	0	0
Statistical discrepancy	-57	-110	-179	40	13	0	0	0	0	0	0
Financing Gap	**...**	**...**	**...**	**...**	**...**	**220**	**431**	**290**	**292**	**284**	**298**
Memorandum Items:											
IMF financing (net)	-65	-23	0	0	0	0	0	0	0	0	0
Central government debt stock	3,113	3,261	3,257	3,261	3,509	3,651	3,803	3,866	3,898	3,923	3,950
Central government debt (incl. guarantees)	3,654	3,803	3,702	3,754	4,066	4,179	4,317	4,367	4,384	4,370	4,355
GDP at market prices	3,964	4,336	4,556	3,700	3,972	4,567	5,040	5,439	5,770	6,045	6,332

Sources: Country authorities and IMF staff estimates and projections.

1/ For 2021, it reflects EC$29 million in arrears write-off by Republic Bank of Trinidad and Tobago (RBTT).

2/ Includes contributions to social security, medical benefits, and education.

3/ Projection reflects amortization due (accrual basis).

4/ Includes interest and amortization arrears, unpaid vouchers to domestic creditors, personnel payables, and unpaid contributions. For 2021, it reflects EC$29 million in arrears write-off by RBTT.

5/ In 2021, it reflects the government's sale of 10 percent of its equity stake in WIOC.

Table 3b. Antigua and Barbuda: Central Government Operations
(Percent of GDP)

					Prel.	Projections					
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Total Revenue and Grants	**20.7**	**19.8**	**18.6**	**20.4**	**20.6**	**20.9**	**20.2**	**21.2**	**20.9**	**20.8**	**20.8**
Current revenue	17.8	17.4	15.4	17.6	17.5	17.6	17.4	18.7	18.9	19.0	19.0
Tax Revenue	**16.1**	**15.7**	**14.8**	**16.5**	**16.8**	**16.8**	**16.5**	**17.9**	**18.1**	**18.1**	**18.1**
o/w Income	**1.9**	**1.8**	**1.7**	**2.4**	**2.1**	**1.8**	**1.8**	**2.1**	**2.1**	**2.1**	**2.1**
o/w Domestic Production and Consumption	**7.5**	**7.6**	**6.7**	**7.1**	**8.3**	**9.2**	**9.0**	**9.4**	**9.5**	**9.5**	**9.5**
o/w AB Sales Tax	6.0	6.4	5.5	5.6	6.1	7.0	6.7	7.1	7.2	7.2	7.2
o/w Stamp duties	1.3	1.0	0.9	1.0	1.7	1.4	1.4	1.4	1.4	1.4	1.4
o/w International Transactions	**6.2**	**5.8**	**5.7**	**6.5**	**5.8**	**5.2**	**5.1**	**5.8**	**5.8**	**5.8**	**5.8**
o/w Import duties	2.2	2.2	2.2	2.2	2.3	2.4	2.3	2.6	2.6	2.6	2.6
o/w Revenue Recovery Charge (RRC)	1.9	1.9	1.8	1.8	1.9	2.0	1.9	2.3	2.3	2.3	2.3
o/w Consumption duties	1.6	1.2	1.4	2.1	1.2	0.5	0.5	0.6	0.6	0.6	0.6
o/w Taxes on Property	**0.5**	**0.5**	**0.6**	**0.5**	**0.6**	**0.5**	**0.6**	**0.6**	**0.7**	**0.7**	**0.7**
Non-Tax Revenue	**1.7**	**1.7**	**0.7**	**1.1**	**0.7**	**0.9**	**0.9**	**0.8**	**0.8**	**0.8**	**0.8**
Capital revenue	2.9	2.0	3.2	2.8	2.3	2.2	2.1	2.1	2.0	1.9	1.8
o/w CIP revenue	2.6	1.4	3.1	2.6	2.3	2.1	2.0	2.0	1.9	1.8	1.7
Total grants	0.1	0.4	0.0	0.0	0.7	1.1	0.6	0.5	0.0	0.0	0.0
Current grants	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capital grants 1/	0.1	0.4	0.0	0.0	0.7	1.1	0.6	0.5	0.0	0.0	0.0
Total Expenditure	**23.6**	**22.3**	**22.6**	**26.8**	**25.3**	**23.7**	**23.5**	**22.4**	**21.4**	**21.2**	**21.2**
Total primary expenditure	20.9	19.8	19.9	24.2	22.5	21.3	21.0	19.8	18.9	18.7	18.7
Current expenditure	21.7	20.4	20.7	23.9	22.8	20.8	20.1	19.2	18.5	18.3	18.3
Primary current expenditure	18.9	17.8	18.0	21.3	20.0	18.4	17.6	16.5	15.9	15.7	15.7
Wages and salaries	8.3	9.0	8.8	10.5	9.9	9.0	8.7	8.3	7.9	7.8	7.8
Employment contributions 2/	0.7	0.8	0.8	1.0	1.0	0.9	0.8	0.8	0.7	0.7	0.7
Goods and services, incl. utilities	3.4	3.0	3.3	3.4	3.3	3.5	3.4	3.1	3.0	3.0	3.0
Pensions	2.1	1.6	1.7	1.9	1.8	1.6	1.5	1.4	1.3	1.3	1.3
Other transfers	4.6	3.5	3.3	4.5	4.1	3.5	3.2	3.0	2.9	2.9	2.9
Capital expenditure and net lending	1.9	1.9	1.9	2.9	2.5	2.9	3.5	3.2	3.0	3.0	3.0
Interest payments	2.7	2.5	2.8	2.6	2.8	2.3	2.5	2.6	2.6	2.5	2.5
External	0.8	0.8	1.1	1.2	1.2	0.8	1.0	1.4	1.6	1.7	1.8
Domestic	1.9	1.7	1.7	1.4	1.6	1.5	1.5	1.2	1.0	0.8	0.8
Primary Balance	**-0.1**	**0.0**	**-1.2**	**-3.8**	**-1.9**	**-0.4**	**-0.9**	**1.5**	**2.0**	**2.1**	**2.1**
Overall Balance	**-2.8**	**-2.5**	**-4.0**	**-6.4**	**-4.8**	**-2.7**	**-3.4**	**-1.2**	**-0.5**	**-0.4**	**-0.4**
Financing	**2.8**	**2.5**	**4.0**	**6.4**	**4.8**	**2.7**	**3.4**	**1.2**	**0.5**	**0.4**	**0.4**
External (net)	0.0	1.3	1.2	-1.5	3.5	-0.1	-4.4	-2.5	-2.9	-3.4	1.0
Disbursement	4.6	5.2	5.6	7.5	10.4	6.1	3.8	3.0	2.7	2.5	7.1
Amortization 3/	-4.6	-3.8	-4.4	-9.0	-6.9	-6.2	-8.1	-5.4	-5.5	-5.9	-6.2
Domestic (net)	0.0	1.3	1.4	-0.3	0.2	-1.4	-0.3	-1.9	-1.6	-0.9	-0.5
ECCB	-0.3	-0.1	0.0	2.5	-0.8	-1.1	-0.1	-0.2	-0.2	0.0	-0.1
Banks (loans, net)	-0.8	-0.6	0.5	0.2	-0.6	0.0	-0.1	-0.1	-0.2	-0.3	-0.3
Government securities	0.6	0.9	1.2	-1.3	2.1	-0.2	0.0	-1.5	-1.1	-0.5	-0.1
Issuances	3.5	4.4	3.6	3.6	5.7	3.8	3.5	1.7	1.6	1.5	1.4
Amortization	-2.9	-3.5	-2.4	-4.9	-3.6	-4.1	-3.5	-3.2	-2.7	-2.0	1.5
Others	0.4	1.1	0.0	-1.7	-0.5	0.0	-0.1	-0.1	-0.1	0.0	0.0
Changes in deposits (increase -)	0.1	0.1	-0.2	-0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Change in arrears 4/	4.3	2.4	5.3	7.1	0.5	-0.6	-0.5	0.2	0.0	0.0	0.0
External 3/	1.0	1.2	1.3	2.3	1.0	1.0	0.5	0.5	0.2	0.2	0.0
Amortization	0.7	1.0	0.9	1.9	0.8	0.9	0.5	0.5	0.2	0.2	0.0
Interest	0.3	0.2	0.4	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.0
Domestic 1/, 4/	3.3	1.1	4.0	4.8	-0.4	-1.6	-1.1	-0.3	-0.2	-0.2	0.0
Other (including asset sales/purchases) 5/	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
Statistical discrepancy	-1.4	-2.5	-3.9	1.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Financing Gap	**...**	**...**	**...**	**...**	**...**	**4.8**	**8.6**	**5.3**	**5.1**	**4.7**	**4.7**
Memorandum Items:											
IMF financing (net)	-1.6	-0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Central government debt stock	78.5	75.2	71.5	88.1	88.3	79.9	75.5	71.1	67.6	64.9	62.4
Central government debt (incl. guarantees)	92.2	87.7	81.3	101.5	102.4	91.5	85.7	80.3	76.0	72.3	68.8

Sources: Country authorities and IMF staff estimates and projections.

1/ For 2021, it reflects EC$29 million (equal to 0.7 percent of GDP) in arrears write-off by Republic Bank of Trinidad and Tobago (RBTT).

2/ Includes contributions to social security, medical benefits, and education.

3/ Projection reflects amortization due (accrual basis).

4/ Includes interest and amortization arrears, unpaid vouchers to domestic creditors, personnel payables, and unpaid contributions. For 2021, it reflects EC$29 million (equal to 0.7 percent of GDP) in arrears write-off by RBTT.

5/ In 2021, it reflects the government's sale of 10 percent of its equity stake in WIOC.

Table 4. Antigua and Barbuda: Monetary Survey

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
						Projections					
	(Million of Eastern Caribbean Dollars)										
Net Foreign Assets	**1,576**	**1,793**	**1,759**	**1,588**	**2,240**	**2,469**	**2,645**	**2,827**	**2,941**	**2,993**	**3,008**
Antigua and Barbuda, imputed reserves	846	887	753	599	874	955	1,131	1,313	1,427	1,479	1,494
Commercial banks' net foreign assets	730	906	1,006	989	1,366	1,514	1,514	1,514	1,514	1,514	1,514
Net Domestic Assets	**1,894**	**1,896**	**1,960**	**1,937**	**1,774**	**1,699**	**1,955**	**2,137**	**2,326**	**2,524**	**2,771**
Net credit to public sector	427	430	411	564	578	557	445	429	406	390	374
Claims on central government (net) 1/	376	393	384	493	533	511	400	384	361	345	329
ECCB net credit to central government	37	60	70	136	114	64	59	48	35	35	36
Commercial banks' net credit to government	339	333	314	358	419	447	341	336	326	310	293
Net credit to other public sector	51	36	26	71	45	45	45	45	45	45	45
Credit to private sector	1,898	1,931	1,955	2,049	1,965	1,965	2,064	2,167	2,275	2,389	2,508
Other items (net)	-431	-465	-406	-677	-770	-823	-554	-458	-355	-255	-111
Monetary Liabilities (M2) 1/	**3,470**	**3,689**	**3,719**	**3,525**	**4,014**	**4,169**	**4,600**	**4,964**	**5,266**	**5,517**	**5,780**
Money (M1)	925	969	1,076	1,070	1,217	1,230	1,357	1,465	1,554	1,628	1,705
Quasi-money	2,545	2,720	2,642	2,455	2,796	2,939	3,243	3,499	3,713	3,889	4,074
	(Change in percent of M2 at beginning of period)										
Net Foreign Assets	**10.9**	**6.2**	**-0.9**	**-4.6**	**18.5**	**5.7**	**4.2**	**4.0**	**2.3**	**1.0**	**0.3**
Antigua and Barbuda, imputed reserves	-1.4	1.2	-3.6	-4.2	7.8	2.0	4.2	4.0	2.3	1.0	0.3
Commercial banks' net foreign assets	12.2	5.1	2.7	-0.5	10.7	3.7	0.0	0.0	0.0	0.0	0.0
Net Domestic Assets	**-3.3**	**0.1**	**1.7**	**-0.6**	**-4.6**	**-1.9**	**6.1**	**4.0**	**3.8**	**3.8**	**4.5**
Credit to public sector (net)	0.6	0.1	-0.5	4.1	0.4	-0.5	-2.7	-0.4	-0.5	-0.3	-0.3
Claims on central government	-0.5	0.5	-0.2	2.9	1.1	-0.5	-2.7	-0.4	-0.5	-0.3	-0.3
Credit to rest of the public sector	1.1	-0.4	-0.3	1.2	-0.7	0.0	0.0	0.0	0.0	0.0	0.0
Credit to private sector	-1.0	1.0	0.7	2.5	-2.4	0.0	2.4	2.2	2.2	2.2	2.2
Other items (net)	-2.9	-1.0	1.6	-7.3	-2.7	-1.3	6.4	2.1	2.1	1.9	2.6
	(12-month percentage change)										
Broad Money	**7.6**	**6.3**	**0.8**	**-5.2**	**13.9**	**3.9**	**10.3**	**7.9**	**6.1**	**4.8**	**4.8**
Money (M1)	17.0	4.7	11.1	-0.6	13.8	1.0	10.3	7.9	6.1	4.8	4.8
Quasi-money	4.6	6.9	-2.9	-7.1	13.9	5.1	10.3	7.9	6.1	4.8	4.8
Memorandum Items:											
Income velocity of M2	1.2	1.2	1.2	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Credit to private sector (net)	-1.6	1.8	1.3	4.8	-4.1	0.0	5.0	5.0	5.0	5.0	5.0
	(Percent of GDP)										
Credit to private sector	47.9	44.5	42.9	55.4	49.5	43.0	40.9	39.8	39.4	39.5	39.6
GDP at market prices (EC$ million)	3,964	4,336	4,556	3,700	3,972	4,567	5,040	5,439	5,770	6,045	6,332

Sources: Country authorities, ECCB, and IMF staff estimates and projections.

1/ The Eastern Caribbean Central Bank revised the methodology used in the compilation of monetary and financial Statistics in 2020 by sectoring the National Insurance Scheme and Public Nonfinancial Corporations (Group 1) within general government, resulting in changes to some aggregates including central government deposits and broad money.

Table 5. Antigua and Barbuda: Central Government Debt

	2020			2021		
		Percent of			Percent of	
	Stock	Total Debt	GDP	Stock	Total Debt	GDP
(Outstanding debt including arrears; Millions of U.S. dollars, unless noted otherwise)						
Total Central Government Debt 1/	**1,207.6**	**86.8**	**88.1**	**1,299.6**	**86.3**	**88.3**
Central Government Domestic Debt	**629.4**	**45.3**	**45.9**	**663.1**	**44.0**	**45.1**
ECCB	56.5	4.1	4.1	44.7	3.0	3.0
Bank loans	140.0	10.1	10.2	143.2	9.5	9.7
Of which: Overdraft	11.5	0.8	0.8	7.6	0.5	0.5
Debt to statutory bodies	146.1	10.5	10.7	148.6	9.9	10.1
Medical Benefits Scheme	55.6	4.0	4.1	55.6	3.7	3.8
Social Security	90.6	6.5	6.6	93.0	6.2	6.3
Government securities	206.6	14.9	15.1	252.7	16.8	17.2
Suppliers' credits and others 2/	80.2	5.8	5.9	73.9	4.9	5.0
Central Government External Debt	**578.2**	**41.6**	**42.2**	**636.5**	**42.3**	**43.3**
Multilateral	144.7	10.4	10.6	195.2	13.0	13.3
Caribbean Development Bank	139.0	10.0	10.1	163.4	10.9	11.1
EIB	1.6	0.1	0.1	0.8	0.1	0.1
World Bank	4.1	0.3	0.3	4.2	0.3	0.3
Bilateral	363.9	26.2	26.6	368.8	24.5	25.1
Paris Club	148.8	10.7	10.9	150.3	10.0	10.2
Non-Paris Club	215.1	15.5	15.7	218.4	14.5	14.8
Government securities	69.6	5.0	5.1	72.5	4.8	4.9
Government Guaranteed Domestic Debt	**102.1**	**7.3**	**7.4**	**99.7**	**6.6**	**6.8**
Government Guaranteed External Debt	**80.8**	**5.8**	**5.9**	**106.5**	**7.1**	**7.2**
Total Public Sector Debt	**1,390.5**	**100.0**	**101.5**	**1,505.8**	**100.0**	**102.4**

Sources: Country authorities and IMF staff calculations.

1/ Includes principal and interest arrears and reflects reconciliation of outstanding debt from statutory bodies.

2/ Includes vouchers for capital as well as for goods and services, and floating debt.

Table 6. Antigua and Barbuda: Balance of Payments

					Est.	Projections					
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
	(Million of US Dollars)										
Current Account	**-118.0**	**-233.7**	**-126.9**	**-251.6**	**-220.9**	**-343.6**	**-263.3**	**-269.0**	**-267.4**	**-263.4**	**-266.4**
Trade balance	-456.7	-579.8	-576.7	-402.1	-495.3	-673.6	-699.4	-753.8	-791.3	-824.3	-861.7
Exports (f.o.b.)	37.2	43.0	50.1	34.4	36.6	39.1	42.2	46.8	50.2	53.5	56.6
Imports (f.o.b.)	493.9	622.7	626.8	436.6	531.8	712.7	741.6	800.6	841.5	877.9	918.3
Non-factor services balance	474.6	484.8	592.6	255.3	376.0	439.2	544.1	677.0	730.0	778.8	823.9
Of which : Gross tourist receipts	736.7	776.0	903.6	411.8	546.1	768.0	858.4	903.6	966.8	1,034.5	1,106.9
Income (net)	-76.0	-80.2	-89.0	-43.3	-48.2	-63.4	-65.3	-134.3	-144.8	-153.6	-161.2
Of which : Interest on public sector debt	-9.8	-10.6	-8.6	-10.1	-15.4	-17.8	-20.7	-29.2	-34.7	-39.4	-42.8
Current transfers (net)	-59.9	-58.5	-53.9	-61.4	-53.4	-45.8	-42.6	-57.9	-61.4	-64.3	-67.4
Capital and Financial Account	**101.2**	**187.4**	**162.0**	**223.4**	**220.9**	**343.6**	**263.3**	**269.0**	**267.4**	**263.4**	**266.4**
Capital Account	**33.6**	**23.3**	**30.4**	**28.5**	**37.5**	**54.8**	**49.9**	**48.8**	**39.6**	**39.2**	**40.1**
Capital transfers	33.6	23.3	30.4	28.5	37.5	54.8	49.9	48.8	39.6	39.2	40.1
Financial Account	**-67.6**	**-164.1**	**-131.6**	**-194.9**	**-183.3**	**-288.8**	**-213.3**	**-220.1**	**-227.8**	**-224.3**	**-226.3**
Official flows	14.4	-23.7	-62.9	14.1	-55.8	-85.6	-89.6	-71.8	-61.6	-37.3	-30.7
Portfolio liabilities	5.3	-3.7	-18.8	9.8	-3.3	0.0	0.0	0.0	0.0	0.0	0.0
Public sector loans	9.2	-20.0	-44.1	4.3	-52.5	-85.6	-89.6	-71.8	-61.6	-37.3	-30.7
Of which: Central government	…	…	…	…	-27.3	-82.2	-88.0	-70.0	-59.8	-43.4	-36.7
Of which: Public sector corporations	…	…	…	…	-25.2	-3.5	-1.6	-1.8	-1.8	6.1	6.1
Disbursements	32.7	62.4	90.0	87.8	141.2	177.0	228.8	168.2	166.1	155.6	160.6
Amortization (-)	41.8	42.4	45.9	92.1	88.7	91.4	139.2	96.4	104.6	118.3	129.9
Non-official flows 1/	-46.7	-132.4	2.0	-112.3	-17.8	-219.0	-188.6	-217.7	-216.9	-216.3	-215.7
Foreign direct investment (net)	-139.6	-205.9	-128.3	-81.7	-178.8	-219.0	-188.6	-217.7	-216.9	-216.3	-215.7
Portfolio investment (net)	-18.4	87.0	37.6	-52.0	-1.3	0.0	0.0	0.0	0.0	0.0	0.0
Other private (net)	111.3	-13.6	92.7	21.4	162.3	0.0	0.0	0.0	0.0	0.0	0.0
Of which: Commercial banks	148.3	66.2	33.1	-7.0	136.0	0.0	0.0	0.0	0.0	0.0	0.0
Overall Balance	**-35.4**	**-7.9**	**-70.7**	**-96.9**	**63.6**	**15.8**	**64.8**	**69.3**	**50.7**	**29.4**	**20.0**
Financing	**35.4**	**7.9**	**70.7**	**96.9**	**-63.6**	**-15.8**	**-64.8**	**-69.3**	**-50.7**	**-29.4**	**-20.0**
Change in imputed international reserves (increase -) 2/	16.3	-15.0	49.6	57.2	-102.1	-30.0	-65.0	-67.4	-42.1	-19.4	-5.6
Net use of IMF resources	-24.0	-8.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Caribbean Development Bank financing (net)	28.7	11.4	-0.6	7.2	24.3	-2.4	-9.7	-12.3	-12.8	-14.1	-14.3
World Bank financing (net)	0.3	0.0	-0.1	1.0	-0.1	0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Other IFIs (net)	…	…	…	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Change in arrears	14.2	20.0	21.9	31.5	14.2	16.5	10.0	10.5	4.3	4.2	0.0
Special Drawing Rights	-0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
External Financing Gap	…	…	…	…	…	**81.6**	**159.7**	**107.5**	**108.1**	**105.4**	**110.4**
Errors and Omissions	**16.8**	**46.3**	**-35.2**	**28.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	(Percent of GDP, unless otherwise indicated)										
Memorandum items:											
Current account	-8.0	-14.5	-7.5	-18.4	-15.0	-20.3	-14.1	-13.4	-12.5	-11.8	-11.4
Of which:											
Gross tourist receipts	50.2	48.3	53.5	30.1	37.1	45.4	46.0	44.9	45.2	46.2	47.2
Export growth (annual percent change)	-25.7	15.6	16.5	-31.2	6.1	7.0	7.9	11.0	7.2	6.5	5.8
Import growth (annual percent change)	11.4	26.1	0.6	-30.3	21.8	34.0	4.0	8.0	5.1	4.3	4.6
External public sector debt service											
(in percent of exports of goods and services)	5.2	5.1	4.6	17.3	13.9	10.9	14.3	10.7	11.0	11.7	12.0
Foreign direct investment (net, percent of GDP)	9.5	12.8	7.6	6.0	12.2	12.9	10.1	10.8	10.2	9.7	9.2
Net imputed international reserves (US$ million) 2/	313.5	328.5	278.9	221.7	323.8	353.8	418.9	486.3	528.4	547.8	553.4
Net imputed international reserves (in months of prospective imports)	3.3	3.3	4.5	3.1	3.1	3.3	4.0	4.4	4.6	4.5	4.2
GDP at market prices (US$ million)	1,468	1,606	1,688	1,370	1,471	1,692	1,867	2,014	2,137	2,239	2,345

Sources: Country authorities, ECCB, and IMF staff estimates and projections.
1/ Net acquisition of assets. A positive sign means an outflow of funds.
2/ Assumes external financing gap is filled.

Annex I. Implementation of Past Fund Policy Advice

Recommendations from the 2021 Article IV Consultation	Implementation Status
Fiscal Policy	
Fully implement **Medium-Term Fiscal Strategy** by broadening tax base and containing spending. Introduce additional revenue measures to achieve fiscal targets. Secure long-term financing on favorable terms.	**Ongoing.** The Tourism Accommodation Levy was introduced, the property tax net has been expanded, and primary spending is being contained, including through cuts in public investment. However, tax exemptions have increased significantly, and fiscal targets have been missed. Efforts are ongoing to issue long-term securities on the domestic and external markets, with some success.
Develop longer-term comprehensive **public sector wage strategy**.	**Partial.** The wage bill is expected to be contained, despite planned wage increases. The public sector employment census and skills database have been delayed.
Put in place **concrete plan to clear arrears** and avoid new arrears.	**Ongoing.** Progress has been made to resolve arrears to commercial banks, several large domestic creditors, and some external creditors. The authorities have committed to reducing 15 percent of their stock of arrears to domestic suppliers annually as part of their arrears clearance strategy.
Improve **governance and efficiency of SOEs** by developing financial performance report card system and enforcing financial reporting requirements.	**Limited progress.** The report card system has not been developed. The recently established Macro-Fiscal Unit will assume the monitoring function for SOEs. Sanctions for non-compliant SOEs will be embedded in the amended Finance Administration Act.
Strengthen **public financial management (PFM) framework**, including by undertaking PEFA self-assessment.	**Ongoing.** A PEFA self-assessment has been completed, and results will inform an action plan to strengthen PFM and amend the Finance Administration Act.
Strengthen **revenue administration** by improving tax compliance and collecting tax arrears.	**Ongoing.** Post-clearance audit and risk management sections at customs are fully operational. The Inland Revenue Department is conducting forensic audits in low compliance sectors and collecting tax arrears.
Financial Sector Policy	
Closely monitor **asset quality**, facilitate **resolution of NPLs** and formalize **national crisis management plan**.	**Limited progress.** NPLs have been reduced through loan restructuring and loan loss provisioning at banks and credit unions has increased. However, there has been no progress in modernizing the insolvency law or developing a national crisis management plan.
Enhance effectiveness of **AML/CFT framework**.	**Ongoing.** A risk-based approach to AML/CFT supervision is under development in collaboration with the ECCB and FSRC. The authorities are addressing deficiencies in the AML/CFT framework with respect to the CIP and the beneficial ownership of legal persons by strengthening the legislative framework. Recent amendments to the Companies Act require that beneficial ownership information must be submitted to the company registry.

Recommendations from the 2021 Article IV Consultation	Implementation Status
Structural Reforms	
Implement **single window system at customs** and **electronic filing and payment of taxes** to help lower business transaction costs.	**Ongoing.** Progress towards operationalizing the single window system and e-filing and e-payment of taxes is ongoing. Non-intrusive detection systems have been installed at customs. Customs procedures and tariffs schedule are available online.
Develop comprehensive **climate resilience strategy** and continue investments in **renewable energy**.	**Ongoing.** The National Adaptation Plan is expected to be completed by mid-2023. A new National Energy Policy is being finalized. Close partnership with donors is facilitating the implementation of grant-financed climate adaptation projects. A risk map and an early warning system for natural disasters are being developed. The transition to renewables needs to be accelerated.
Data Issues	
Improve **quality and timeliness of data**.	**Ongoing.** Some progress has been made on the development of a new Producer Price Index, compilation of the rental component for the CPI, and improvements to the national accounts and external sector statistics. However, there is limited progress on the reporting of SOE operations.

Annex II. Risk Assessment Matrix[1]

Risks	Relative Likelihood	Expected Impact	Policy Response
Conjunctural Risks			
Intensifying spillovers from Russia's war on Ukraine. Further sanctions resulting from the war and related uncertainties exacerbate trade and financial disruptions and commodity price volatility.	High	**High.** Inflation rises, eroding income, and dampening demand.	Provide targeted transfers to the vulnerable. Expeditiously improve coverage and targeting of social safety nets. Accelerate shift to renewables.
Commodity price shocks. A combination of continuing supply disruptions (e.g., due to conflicts and export restrictions) and negative demand shocks causes recurrent commodity price volatility and social and economic instability.	High	**High.** Inflation rises, eroding income, dampening demand, and widening fiscal and trade deficits.	Provide targeted transfers to the vulnerable. Continue to pass through global prices and phase out generalized subsidies. Expeditiously improve coverage and targeting of social safety nets. Accelerate shift to renewables.
De-anchoring of inflation expectations and stagflation. Supply shocks to food and energy prices sharply increase headline inflation and pass through to core inflation, de-anchoring inflation expectations and triggering a wage-price spiral in tight labor markets. Central banks tighten monetary policy more than envisaged leading to weaker global demand.	Medium	**High.** Wage pressures intensify. Tourism recovery is stalled, worsening fiscal and external positions.	Contain increases in public real wages and rely on attrition policy. Implement structural reforms to improve competitiveness.
Abrupt global slowdown or recession leads to spillovers through trade and financial channels, and downward pressures on some commodity prices. **EMDEs.** Sharp tightening of global financial conditions combined with volatile commodity prices leads to spiking risk premia, widening of external imbalances and fiscal pressures, and debt and financial crises.	Medium High	**High.** Economic recovery is stalled, worsening fiscal and external positions. Real exchange rate appreciation given U.S. dollar peg, weakening competitiveness. Higher borrowing costs add fiscal strains.	Strengthen the fiscal framework to rebuild buffers and communicate credible medium-term fiscal plan. Implement structural reforms to improve competitiveness. Intensify monitoring of financial institutions.
Local COVID-19 outbreaks due to emergence of more contagious vaccine-resistant variants force new lockdowns or inhibit commerce, resulting in extended supply chain disruptions and slower growth.	Medium	**High.** Tourism recovery is stalled, and domestic activity disrupted, deepening scarring effects, and worsening fiscal and external positions.	Ensure adequate access to essential items, such as food and medicine. Extend targeted pandemic relief measures to support the vulnerable and prioritize health spending. Adopt credible medium-term plan to preserve fiscal sustainability.
Structural Risks			
More frequent natural disasters related to climate change deal severe damage to infrastructure and amplify supply chain disruptions and inflationary pressures, causing water and food shortages and reducing medium-term growth.	Medium	**High.** Reduce growth and worsen fiscal and external positions.	Design rule-based fiscal framework that internalizes exposure to natural disasters. Implement national adaptation plan, with investment in structural and financial resilience, and appropriate ex ante financing.

[1] The Risk Assessment Matrix (RAM) shows events that could materially alter the baseline path. The relative likelihood is the staff's subjective assessment of the risks surrounding the baseline ("low" is meant to indicate a probability below 10 percent, "medium" a probability between 10 and 30 percent, and "high" a probability between 30 and 50 percent). The RAM reflects staff views on the source of risks and overall level of concern as of the time of discussions with the authorities. Non-mutually exclusive risks may interact and materialize jointly. The conjunctural shocks and scenarios highlight risks that may materialize over a shorter horizon (between 12 to 18 months) given the current baseline. Structural risks are those that are likely to remain salient over a longer horizon.

Risks	Relative Likelihood	Expected Impact	Policy Response
Structural Risks			
Cyberattacks on critical physical or digital infrastructure (including digital currency platforms) trigger financial instability and disrupt economic activities.	**Medium**	**Low.** Payment and financial systems are disrupted, hurting confidence.	Prepare appropriate crisis management plan. Strengthen financial regulation and supervision. Pursue a prudent approach to financial innovation.
CIP program is subject to increased scrutiny and gradually phased out.	**Medium**	**Medium.** Worsen fiscal and external positions.	Enhance oversight and transparency of CIP program. Closely collaborate with EU and U.S. counterparts to address any concerns.
High NPLs and market risk in indigenous banks and non-banks trigger a confidence shock.	**Medium**	**Medium.** Financial sector instability disrupts economic activity.	Monitor asset quality and ensure adequate loan loss provisioning. Enhance regulatory and supervisory frameworks for non-banks.
Loss of correspondent banking relationships. Curtailment of cross-border financial services may intensify amid the exit of global banks.	**Medium**	**Low.** Fees of cross-border payments rise, raising business costs.	Strengthen compliance with AML/CFT and tax transparency standards.

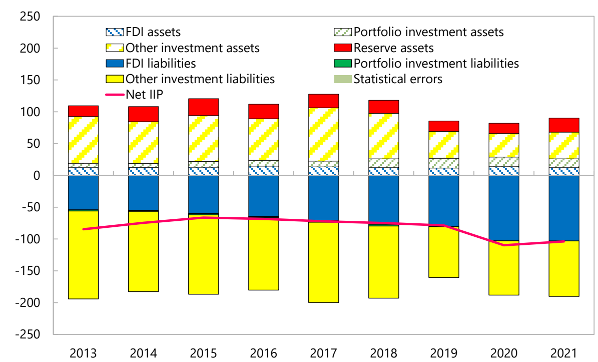
Annex III. External Sector Assessment

Overall Assessment: *Based on preliminary data and EBA-lite model results, the external position of Antigua and Barbuda in 2021 was weaker than the level implied by fundamentals and desirable policies.*
Potential Policy Responses: *Near-term policies should continue to support the recovery and limit the impact of rising living costs on the vulnerable. As the recovery takes hold, steadfast commitment to sustain fiscal consolidation efforts would be essential to ensure debt sustainability. External sustainability is not a major concern, as external liabilities are mostly attributed to FDI inflows. Structural reforms aimed at addressing intra-regional transportation bottlenecks, enhancing the labor market, and building climate resilience can help improve competitiveness and strengthen the external position.*

Foreign Assets and Liabilities: Position and Trajectory

Background. The net IIP declined relative to GDP between 2015 and 2020, a trend that was reversed in 2021, with the net IIP rising to -104 percent of GDP in 2021 from -110 percent in 2020, mainly driven by reserve assets. On the asset side, other investment, portfolio, and FDI assets were 42, 14, and 12 percent of GDP respectively in 2021. On the liability side, FDI was the largest component (103 percent of GDP), followed by other investment (87 percent of GDP). The negative IIP continued to reflect mainly large FDI liabilities.

Antigua and Barbuda: IIP Composition by Instrument
(Percent of GDP)



Sources: ECCB and IMF staff calculations.

Assessment. The large and growing FDI stock being the main driver of the net IIP substantially mitigates potential risks. The impact of Russia's invasion of Ukraine is expected to adversely affect the net IIP through temporarily larger current account deficits, but without causing a concern for external debt sustainability.

2021 (% GDP)	NIIP: -103.7	Gross Assets: 89.9	Debt Assets: 50.9	Gross Liab.: -193.7	Debt Liab.: -87.1

Current Account

Background. The current account deficit shrank from 18.4 percent of GDP in 2020 to 15 percent in 2021, reflecting the tourism recovery. Travel receipts had a strong rebound (from 49 percent of the 2019 level in 2020 to 62 percent in 2021). On the back of tourism rebound and robust FDI, imports as a share of GDP are close to the pre-pandemic level. Other current account components were broadly stable, with one exception being investment income payment, which has not recovered from its sharp contraction in 2020. The current account deficit is expected to widen again in 2022, due to Russia's invasion of Ukraine and high import costs, before declining steadily over time. Tourism receipts will return to the 2019 level only in 2024, and imports will remain buoyant due to robust FDI inflows. The trajectory of current account deficit will be sensitive to the speed of tourism recovery and progress of ongoing mega hotel projects.

Assessment. The EBA-lite CA model suggests a current account gap of -2.6 percent of GDP in 2021, implying that the current account deficit is higher than the desirable medium-term level. The model estimates a multilaterally-consistent cyclically adjusted CA norm at -5.8 percent of GDP. The CA model is preferred over the REER model and the ES model in assessing the CA gap for Antigua and Barbuda, given the better historical performance.

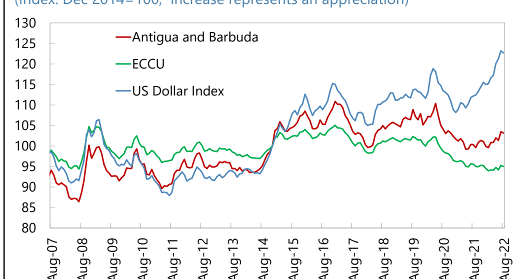
Antigua and Barbuda: EBA-lite Results, 2021

	CA Model 1/	**REER Model** 1/
	(in percent of GDP)	
CA-Actual	**-15.0**	
Cyclical contributions (from model) (-)	0.9	
COVID-19 adjustor (-) 2/	-5.4	
Additional temporary/statistical factors (-) 3/	-1.9	
Natural disasters and conflicts (-)	-0.2	
Adjusted CA	**-8.4**	
CA Norm (from model) 4/	**-5.8**	
Adjustments to the norm (-)	0.0	
Adjusted CA Norm	**-5.8**	
CA Gap	**-2.6**	**-5.4**
o/w Relative policy gap	1.2	
Elasticity	-0.44	
REER Gap (in percent)	**5.9**	**12.3**

1/ Based on the EBA-lite 3.0 methodology.
2/ Additional cyclical adjustment to account for the temporary impact of the pandemic on tourism.
3/ FDI in 2021 exceeded the pre-pandemic projection by 4.5 percent of GDP, which is estimated to increase the CA deficit by 1.9 percent of GDP.
4/ Cyclically adjusted, including multilateral consistency adjustments.

Real Exchange Rate

Real Effective Exchange Rates
(Index: Dec 2014=100; increase represents an appreciation)



Sources: FRED and IMF staff calculations.

Background. The real effective exchange rate (REER) depreciated by 3.5 percent in December 2021 relative to December 2020, driven mainly by inflation differential relative to major trading partners. The REER appreciated significantly in late 2014, comoving with the U.S. dollar, but has depreciated by 7.7 percent between 2016 and 2021.

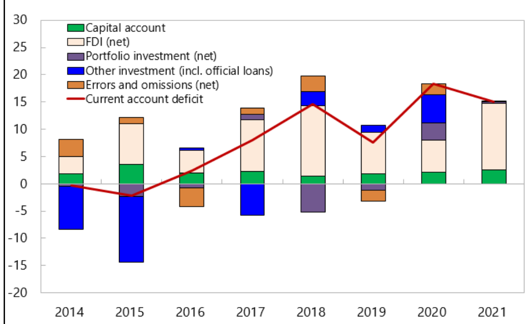
Assessment. The EBA-Lite Index-REER model suggests an overvaluation of 12.3 percent. However, it does not have sufficient granularity to capture the determinants of Antigua and Barbuda's currency fluctuations. The exchange rate gap is better evaluated based on the gap from the CA model. Based on the staff-estimated elasticity of CA to REER of -0.44, the REER is overvalued by 5.9 percent.

Capital and Financial Accounts

Background. As a small country with limited domestic resources, Antigua and Barbuda has heavily relied on FDI to develop the tourism sector.

Assessment. Financial account inflows of Antigua and Barbuda mainly consist of equity financing, especially FDI, which limits the risk of capital flow reversal in the face of tightening global financial conditions. Capital account inflows primarily derive from the Citizenship-by-Investment Program, which remains relatively small.

Current Account Deficit and Sources of Finance
(Percent of GDP)



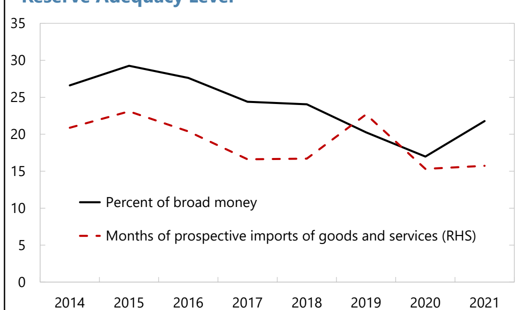
Sources: Country authorities and IMF staff calculations.

Reserves Level

Background. Net imputed international reserves rebounded significantly in 2021, on the back of tourism recovery and robust FDI inflows.[1] It was in line with the increase in imports of goods and services that are projected for the following year (i.e., the prospective imports of goods and services), resulting in a stable ratio between the two.

Assessment. Net imputed international reserves in 2021 corresponded to 3.1 months of prospective imports and 21.8 percent of broad money, compared with ECCB benchmarks of 3 months of imports and 20 percent of broad money.[2]

Reserve Adequacy Level



Sources: Country authorities and IMF staff calculations.

[1] Imputed reserves are calculated for each member country of the ECCU as the difference between the country's reserve money (currency issued in the country) and net domestic assets (net claims of the ECCB on the government and the country's commercial banks).

[2] Data gaps for short-term debt and other liabilities preclude reserve adequacy assessments based on the IMF's ARA EM metric.

Annex IV. Debt Sustainability Analysis

Following a sharp increase in the debt-to-GDP ratio during the pandemic, gradual economic recovery combined with fiscal consolidation under the authorities' Medium-Term Fiscal Strategy (MTFS) are expected to put debt on a declining path. Public debt is projected to decline to 68.6 percent of GDP by 2027 from a peak of 102.4 percent in 2021 and meet the regional debt target of 60 percent of GDP before 2035. Nevertheless, public debt is deemed to be unsustainable due to the large outstanding stock of arrears (which are not expected to be cleared within the current projection horizon), and high gross financing needs which if not fully covered will likely lead to the accumulation of new arrears over the medium term. Debt dynamics are highly vulnerable to a sharp economic downturn, a deterioration in the primary balance, and exposure to natural disasters and contingent liabilities. Further efforts to secure long-term financing, a steadfast implementation of the MTFS, and a plan to clear arrears will be required to restore debt sustainability.

Background

1. **Public sector debt peaked in 2021 as GDP growth revived post-pandemic.** Lower revenue mobilization and higher spending needs combined with an unprecedented growth shock led to public sector debt climbing to 101.5 percent of GDP in 2020. The economy is projected to have rebounded in 2021, on the back of a pick-up in tourism and construction activity. The fiscal deficit narrowed, but amortization obligations kept gross financing needs elevated. Public debt peaked at 102.4 percent of GDP with central government debt reaching 88.3 percent of GDP. Debt-to-GDP is projected to begin declining from 2022 as output recovers post-pandemic and deficit financing is further reduced in line with the projected fiscal consolidation. The authorities are expected to meet the regional debt target of 60 percent of GDP by 2035. However, gross financing needs will continue to remain elevated in the short term.

2. **External shocks to growth and price pressures have slowed progress on achieving the MTFS targets.** The authorities delayed implementation of the new Tourism Accommodation Levy and reforms to tax concessions and exemptions in order to boost economic recovery post-pandemic. Tax collection fell short of targets, but current expenditure rationalization assisted in narrowing the deficit in 2021. The authorities' policy of lowering consumption taxes on fuel to reduce the impact of soaring global prices on consumers, lower Citizenship-by-Investment Program (CIP) revenues, and higher tax exemptions will contribute to fiscal underperformance in 2022, with staff projecting a primary deficit of 0.4 percent of GDP, relative to a surplus of 0.5 percent of GDP in the MTFS.

3. **The authorities have made progress with implementing their plan for domestic and external arrears clearance.** Following an increase in arrears accumulation due to the pandemic shock, the authorities have embarked on an arrears clearance strategy. Set-offs against deposits and restructurings allowed the government to eliminate its arrears with the commercial banking sector during 2021, and securities were issued to some domestic suppliers to resolve outstanding arrears. The IMF's SDR allocation was used to resolve some external multilateral and bilateral arrears.

Progress was maintained in clearing arrears to domestic suppliers in 2022 through further securitization. Arrears to non-Paris Club external creditors are slated for clearance in 2023 with proceeds from commercial bond issuances. The authorities continue to engage with the Paris Club over their long-standing arrears. However, pending an agreement for the resolution of Paris Club obligations, interest and principal arrears to the Paris Club are projected to continue accumulating. Elevated financing needs and a projected financing gap in 2022 indicate that further arrears accumulation may occur during the current year.

4. The baseline scenario of the DSA reflects the medium-term macroeconomic projections and policies under the baseline. The baseline scenario assumes continued fiscal adjustment, but at a slower pace than the MTFS targets. Revenue is projected to underperform the MTFS targets over the medium term, driven by a steep reduction in fuel consumption taxes, persistent tax exemptions, and lower Citizenship-by-Investment Program (CIP) revenues. The baseline does not assume any repayment of Paris Club arrears, with continued arrears accumulation to Paris Club creditors. It assumes arrears clearance of 15 percent of the stock of floating debt to domestic creditors annually for the projection period, in line with the authorities' arrears clearance strategy. All arrears to Paris Club creditors and all unresolved domestic and external arrears are included in the debt stock throughout the projection horizon.

5. Financing. The baseline scenario assumes sizable financing gaps, averaging over 5 percent of GDP in the 2022-27 period. Prospective sources of identified financing during the remainder of 2022 and in 2023 include: (i) the second tranche of the Caribbean Development Bank's Program-Based Loan (US$25 million); (ii) a US$200 million, 10-year commercial Eurobond; (iii) a US$100 million, 10-year private bond; and (iv) a US$250 million, 20-year green bond. These financing sources are not included in the baseline since the proceeds of the issuances and timing of disbursement are subject to change. However, collectively, these financing sources are considered sufficient to bridge the financing gap in 2022-23. For the purpose of the DSA, financing gaps are assumed to be filled by long-term borrowing from mostly unidentified creditors (assuming 6.5 percent interest rate and 8-year maturity).[1]

Baseline Scenario and Realism of Projections (Figures 1, 2 and 3)

6. DSA debt coverage. The DSA covers central government debt and all domestic and external publicly guaranteed debt. Central government debt also includes the stock of principal and interest arrears, unpaid vouchers, and suppliers' credits. The debt dynamics in the DSA are governed by the central government fiscal accounts only due to lack of information on SOEs' financial statements.

7. Debt level. Under the baseline scenario, the public sector debt-to-GDP ratio is projected to decrease from a peak of 102.4 percent of GDP in 2021 to 68.6 percent in 2027. The decline is largely driven by strong growth dynamics, a high GDP deflator in 2022, and an improvement in the primary balance over the medium term. Growth recovery is predicated on a revival of the tourism sector

[1] The financing gap will need to be filled through new credit. Any debt restructuring during the projection period may lower gross financing needs.

which experienced severe contraction due to the pandemic. Attaining the primary surplus target hinges on steadfast implementation of the fiscal adjustment plan and continued reliance on considerable CIP revenue flows, which by nature remain unpredictable.

8. **Debt profile.** The debt profile points to risks stemming from public debt held by non-residents (Figure 1). However, the bulk of debt held by non-residents relates to multilateral and official bilateral debt, and therefore represents less risk than privately-held debt.

9. **Growth.** Post-pandemic recovery is expected to keep real GDP growth robust, averaging over 5 percent in 2022-2025, above average growth of 4.7 percent for 2016-2019. Near-term growth estimates have been revised downwards relative to previous projections to account for the impact from elevated inflation in the wake of Russia's invasion of Ukraine.

10. **Fiscal adjustment.** Staff projects a primary deficit of 0.4 percent of GDP in 2022, followed by an average primary surplus of 1.4 percent of GDP over 2023-27, supported by steady implementation of the MTFS revenue reforms. Accordingly, there will be an average reduction in the underlying primary balance during 2022-25 of 0.5 percent of GDP per annum.

11. **Financing needs.** Annual gross financing needs are projected to average 15.3 percent of GDP between 2022-23, declining below 10 percent of GDP by 2025. Although the central government budget is projected to record primary surpluses from 2024, gross financing needs will remain elevated mainly due to a high debt service burden. As shown in Table 2 (Gross Financing Needs), there will be financing gaps in the projection period which are financed in the baseline by unidentified long-term financing sources. The authorities are in various stages of securing access to several long-term instruments which will bridge the financing gap in the short term and extend the maturity profile of their debt in the short and medium term.

12. **Interest rate profile.** The average effective interest rate is around 3.5 percent in 2022-23, moderately higher than the historical average of 2.9 percent. In the medium term, the effective interest rate is assumed to trend upwards, reflecting a greater reliance on commercial borrowing relative to bilateral and multilateral financing.

13. **Forecast track record.** Projections of growth and the primary balance have exhibited significant forecast errors in recent years, owing to a large natural disaster shock in 2017 and the pandemic in 2020 (Figure 2, top panel).

14. **Realism of projected fiscal adjustment.** The baseline fiscal adjustment is reasonable, with the average 3-year adjustment in the cyclically adjusted primary balance well below the top quartile (Figure 2, bottom panel).

15. **Fan charts.** The fan charts in Figure 1 highlight the risks surrounding the baseline projections. The asymmetric fan chart shows that the debt-to-GDP ratio would be well above the projected path in case where the probability of positive shocks to the primary balance is zero.

Shocks and Stress Tests (Figures 4 and 5)

The stress tests further highlight vulnerabilities of the debt profile to various shocks. The debt profile is most vulnerable to any shocks that affect the output level, including a growth shock, natural disaster shock or contingent liability shock.

16. Growth shock. A real output growth shock of 1 standard deviation in 2022 would have a significant impact on the path of the debt-to-GDP ratio. Specifically, debt would peak at approximately 104 percent in 2024 and would then decline gradually to around 92 percent by 2027 (i.e., 22 percentage points higher than in the baseline scenario). Concurrently, gross financing needs would increase to over 18 percent of GDP in 2023 and 2024.

17. Primary balance shock. The scenario assumes a 2 percent of GDP cumulative deterioration in the primary balance, relative to the baseline scenario in 2023-24, owing to a slowdown in CIP revenues. The debt-to-GDP ratio would be relatively unaffected, but gross financing needs are elevated by an average of 0.9 percent of GDP per annum between 2023-27.

18. Interest rate shock. The stress test assumes a permanent increase of 376 basis points in the nominal interest rate starting in 2023, reflecting higher sovereign risks. Results suggest that the debt-to-GDP ratio would be relatively unaffected, but gross financing needs would be 2.1 percentage points higher by 2027.

19. Combined macro-fiscal shock. A combination of the above shocks leads to a sizeable increase in the debt-to-GDP ratio. Under this scenario, the debt ratio would peak at 108.5 percent in 2024, before declining to 101 percent in 2027. At the same time, gross financing needs would increase to 20 percent of GDP by 2024, well above the staff's baseline projection.

20. Natural disaster shock. The scenario is based on the assumptions of 5 percent lower growth in 2023 (and a smaller reduction in 2024) as well as 8 percent higher expenditure in 2023. Consequently, the debt-to-GDP ratio would be 13 percentage points higher than in the baseline scenario by 2027, with gross financing needs reaching 25 percent of GDP in 2023 and remaining elevated relative to the baseline.

21. Financial contingent liability shock. This scenario is based on a one-time increase in non-interest expenditures of 10 percent of GDP, leading to a real GDP shock of 1 standard deviation of GDP for 2 consecutive years, higher interest rates from a deterioration in the primary balance, and a decline in inflation. The debt trajectory under this scenario would reach 98 percent of GDP in 2027 (29 percentage points higher than the baseline), and gross financing needs reaching 28 percent of GDP in the year of the shock.

22. Public debt is unsustainable given the large outstanding stock of arrears (which are not expected to be cleared within the current projection horizon), and high gross financing needs which if not fully covered will likely lead to the accumulation of new arrears over the medium term. The debt-to-GDP ratio and gross financing needs decline markedly over the projection horizon. This, however, hinges on steady implementation of the fiscal adjustment plan and robust growth. Restoring debt sustainability is predicated on definitively resolving the large arrears with domestic and external creditors. Debt service obligations and arrears clearance with Paris Club creditors will further raise financing needs, which are not reflected in the DSA baseline. Securing long-term financing currently under negotiations, including the authorities' first internationally tradable bond and a green bond, will effectively extend the maturity profile of their commercial debt, greatly reducing rollover risk and medium-term gross financing needs, while creating fiscal room for green capital investments. The debt trajectory remains vulnerable to several shocks, including lower growth, reduction in CIP revenues, natural disasters, and contingent liabilities. This highlights the need for strong commitment to the fiscal consolidation plan.

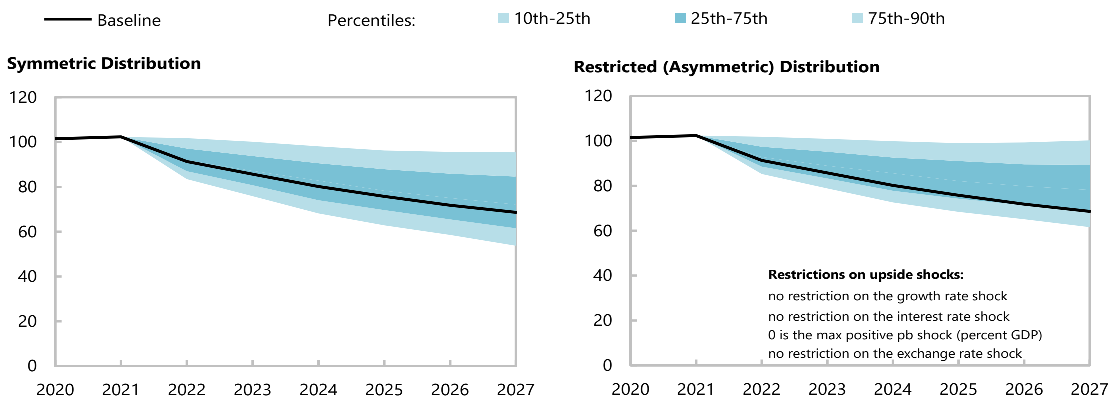
Figure 1. Antigua and Barbuda: Public DSA – Risk Assessment

Heat Map

Debt level 1/	Real GDP Growth Shock	Primary Balance Shock	Real Interest Rate Shock	Exchange Rate Shock	Contingent Liability shock
Gross financing needs 2/	Real GDP Growth Shock	Primary Balance Shock	Real Interest Rate Shock	Exchange Rate Shock	Contingent Liability Shock
Debt profile 3/	Market Perception	External Financing Requirements	Change in the Share of Short-Term Debt	Public Debt Held by Non-Residents	Foreign Currency Debt

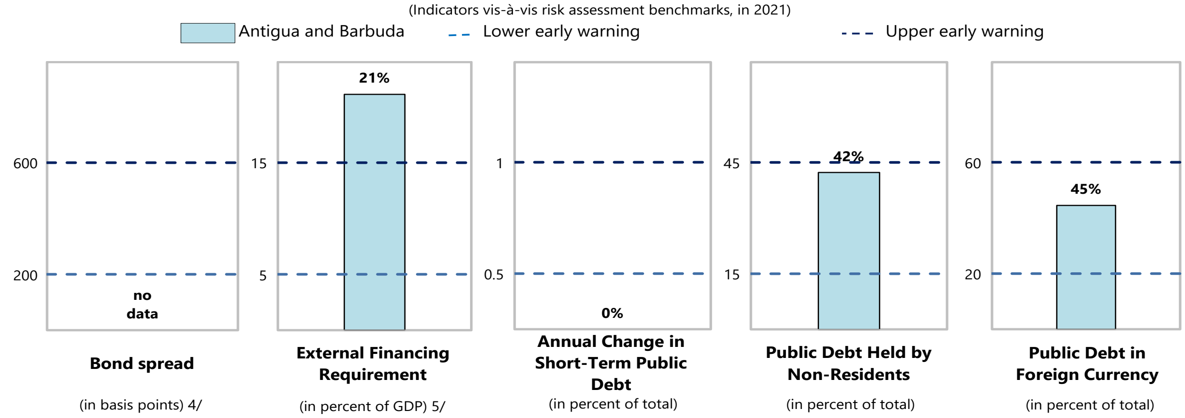
Evolution of Predictive Densities of Gross Nominal Public Debt

(in percent of GDP)



Debt Profile Vulnerabilities

(Indicators vis-à-vis risk assessment benchmarks, in 2021)



Source: IMF staff.

1/ The cell is highlighted in green if debt burden benchmark of 70% is not exceeded under the specific shock or baseline, yellow if exceeded under specific shock but not baseline, red if benchmark is exceeded under baseline, white if stress test is not relevant.

2/ The cell is highlighted in green if gross financing needs benchmark of 15% is not exceeded under the specific shock or baseline, yellow if exceeded under specific shock but not baseline, red if benchmark is exceeded under baseline, white if stress test is not relevant.

3/ The cell is highlighted in green if country value is less than the lower risk-assessment benchmark, red if country value exceeds the upper risk-assessment benchmark, yellow if country value is between the lower and upper risk-assessment benchmarks. If data are unavailable or indicator is not relevant, cell is white.

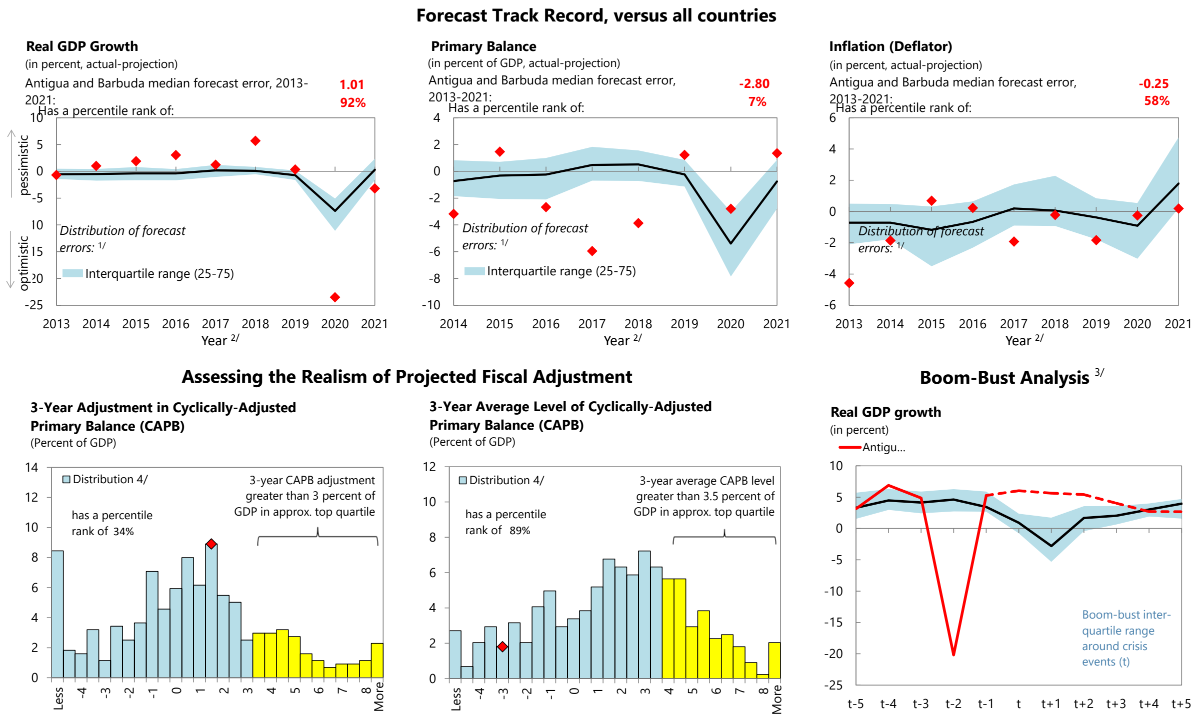
Lower and upper risk-assessment benchmarks are:

200 and 600 basis points for bond spreads; 5 and 15 percent of GDP for external financing requirement; 0.5 and 1 percent for change in the share of short-term debt; 15 and 45 percent for the public debt held by non-residents; and 20 and 60 percent for the share of foreign-currency denominated debt.

4/ Long-term bond spread over German bonds, an average over the last 3 months, 01-Apr-21 through 30-Jun-21.

5/ External financing requirement is defined as the sum of current account deficit, amortization of medium and long-term total external debt, and short-term total external debt at the end of previous period.

Figure 2. Antigua and Barbuda: Public DSA – Realism of Baseline Assumptions



Source : IMF Staff.

1/ Plotted distribution includes all countries, percentile rank refers to all countries.

2/ Projections made in the spring WEO vintage of the preceding year.

3/ Antigua and Barbuda has had a positive output gap for 3 consecutive years, 2019-2021. For Antigua and Barbuda, t corresponds to 2022; for the distribution, t corresponds to the first year of the crisis.

4/ Data cover annual obervations from 1990 to 2011 for advanced and emerging economies with debt greater than 60 percent of GDP. Percent of sample on vertical axis.

Figure 3. Antigua and Barbuda: Public DSA – Baseline Scenario

(Percent of GDP, unless otherwise indicated)

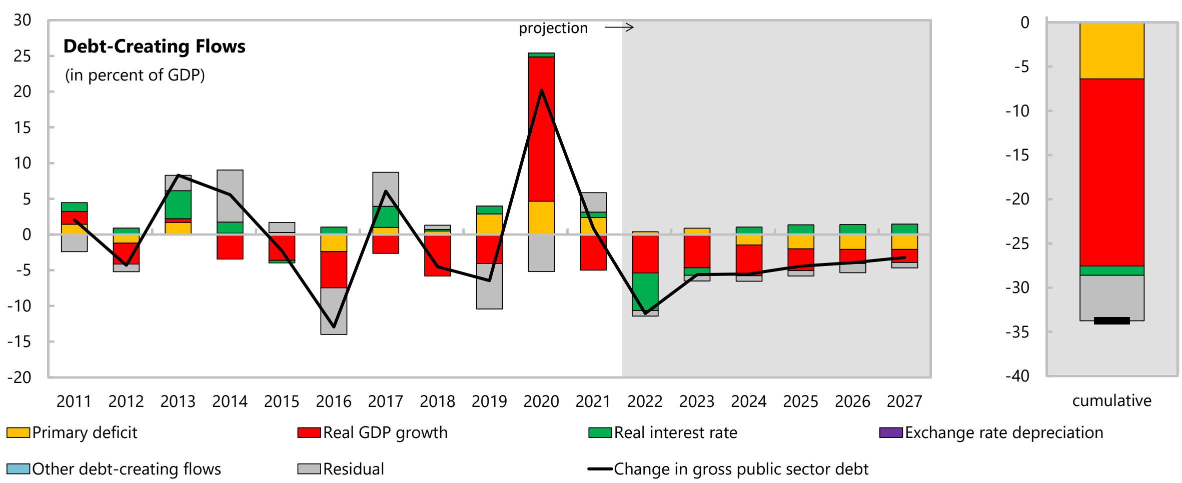
Debt, Economic and Market Indicators 1/

	Actual			Projections					
	2011-2019 2/	2020	2021	2022	2023	2024	2025	2026	2027
Nominal gross public debt	91.4	101.5	102.4	91.3	85.7	80.2	75.8	71.8	68.6
Of which: guarantees	13.2	13.3	14.0	11.6	10.5	9.7	9.2	8.7	8.3
Public gross financing needs	10.2	20.3	19.4	14.9	16.0	10.9	9.9	9.3	9.0
Real GDP growth (in percent)	3.2	-20.2	5.3	6.0	5.6	5.4	4.0	2.7	2.7
Inflation (GDP deflator, in percent)	1.2	1.7	2.0	8.5	4.5	2.4	2.0	2.0	2.0
Nominal GDP growth (in percent)	4.4	-18.8	7.4	15.0	10.3	7.9	6.1	4.8	4.8
Effective interest rate (in percent) 4/	2.9	1.9	2.9	3.0	3.4	3.8	3.9	4.0	4.2

As of June 30, 2021		
Sovereign Spreads		
EMBIG (bp) 3/		n.a.
5Y CDS (bp)		n.a.
Ratings	Foreign	Local
Moody's	n.a.	n.a.
S&Ps	n.a.	n.a.
Fitch	n.a.	n.a.

Contribution to Changes in Public Debt

	Actual			Projections							
	2011-2019	2020	2021	2022	2023	2024	2025	2026	2027	cumulative	debt-stabilizing primary balance 9/
Change in gross public sector debt	-0.9	20.2	0.9	-11.0	-5.6	-5.5	-4.4	-3.9	-3.2	-33.7	
Identified debt-creating flows	-0.9	25.4	-1.8	-10.3	-4.8	-4.7	-3.7	-2.6	-2.4	-28.6	
Primary deficit	0.5	4.7	2.4	0.4	0.9	-1.5	-2.0	-2.1	-2.1	-6.4	-0.4
Primary (noninterest) revenue and grants	20.8	20.4	20.6	20.9	20.2	21.2	20.9	20.8	20.8	124.9	
Primary (noninterest) expenditure	21.3	25.1	22.9	21.3	21.0	19.8	18.9	18.7	18.7	118.5	
Automatic debt dynamics 5/	-1.4	20.7	-4.2	-10.6	-5.7	-3.3	-1.7	-0.6	-0.4	-22.2	
Interest rate/growth differential 6/	-1.4	20.7	-4.2	-10.6	-5.7	-3.3	-1.7	-0.6	-0.4	-22.2	
Of which: real interest rate	1.4	0.5	0.7	-5.3	-1.0	1.0	1.4	1.4	1.5	-1.1	
Of which: real GDP growth	-2.8	20.2	-5.0	-5.4	-4.7	-4.3	-3.0	-2.0	-1.8	-21.2	
Exchange rate depreciation 7/	0.0	0.0	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	
Residual, including asset changes 8/	0.0	-5.2	2.7	-0.8	-0.8	-0.8	-0.7	-1.3	-0.8	-5.1	



Source: IMF staff.

1/ Public sector is defined as central government and includes public guarantees, defined as guaranteed debt held by SOEs included in debt stock.

2/ Based on available data.

3/ Long-term bond spread over German bonds.

4/ Defined as interest payments divided by debt stock (excluding guarantees) at the end of previous year.

5/ Derived as [(r - π(1+g) - g + ae(1+r)]/(1+g+π+gπ)) times previous period debt ratio, with r = interest rate; π = growth rate of GDP deflator; g = real GDP growth rate; a = share of foreign-currency denominated debt; and e = nominal exchange rate depreciation (measured by increase in local currency value of U.S. dollar).

6/ The real interest rate contribution is derived from the numerator in footnote 5 as r - π (1+g) and the real growth contribution as -g.

7/ The exchange rate contribution is derived from the numerator in footnote 5 as ae(1+r).

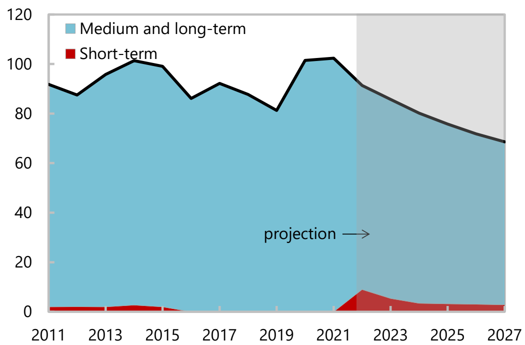
8/ Includes changes in the stock of guarantees, asset changes, and interest revenues (if any). For projections, includes exchange rate changes during the projection period.

9/ Assumes that key variables (real GDP growth, real interest rate, and other identified debt-creating flows) remain at the level of the last projection year.

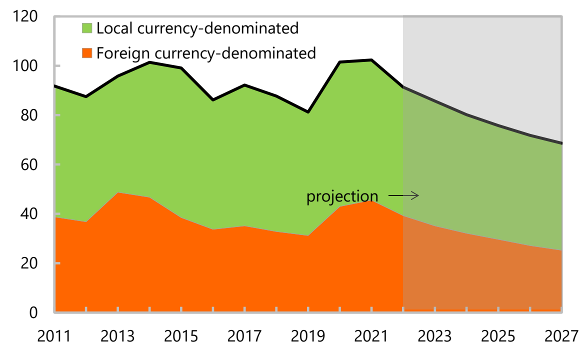
Figure 4. Antigua and Barbuda: Public DSA – Composition of Public Debt and Alternative Scenarios

Composition of Public Debt

By Maturity
(in percent of GDP)



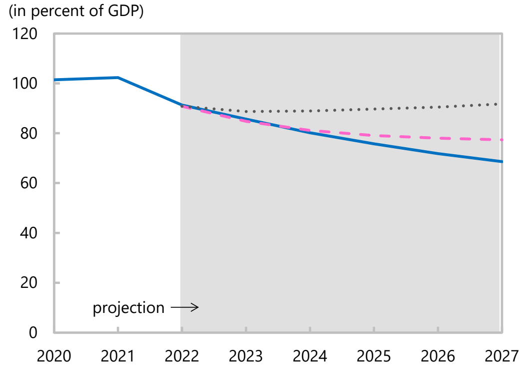
By Currency
(in percent of GDP)



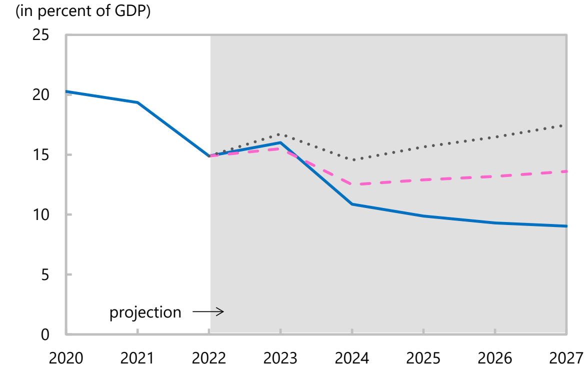
Alternative Scenarios

Baseline Historical Constant Primary Balance

Gross Nominal Public Debt
(in percent of GDP)



Public Gross Financing Needs
(in percent of GDP)



Underlying Assumptions
(in percent)

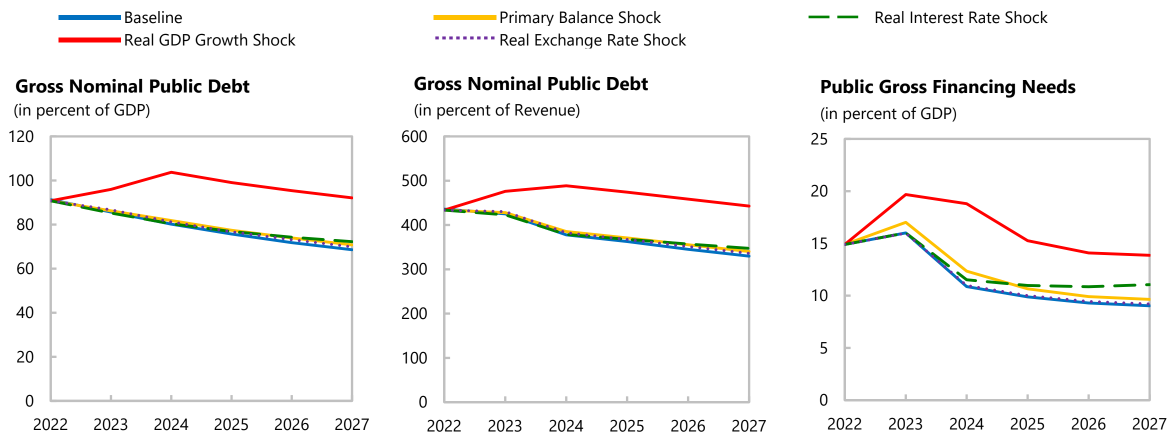
Baseline Scenario	2022	2023	2024	2025	2026	2027
Real GDP growth	6.0	5.6	5.4	4.0	2.7	2.7
Inflation	8.5	4.5	2.4	2.0	2.0	2.0
Primary Balance	-0.4	-0.9	1.5	2.0	2.1	2.1
Effective interest rate	3.0	3.4	3.8	3.9	4.0	4.2
Constant Primary Balance Scenario						
Real GDP growth	6.0	5.6	5.4	4.0	2.7	2.7
Inflation	8.5	4.5	2.4	2.0	2.0	2.0
Primary Balance	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4
Effective interest rate	3.0	3.5	3.8	3.9	4.1	4.3

Historical Scenario	2022	2023	2024	2025	2026	2027
Real GDP growth	6.0	1.6	1.6	1.6	1.6	1.6
Inflation	8.5	4.5	2.4	2.0	2.0	2.0
Primary Balance	-0.4	-1.0	-1.0	-1.0	-1.0	-1.0
Effective interest rate	3.0	3.5	4.1	4.3	4.6	5.0

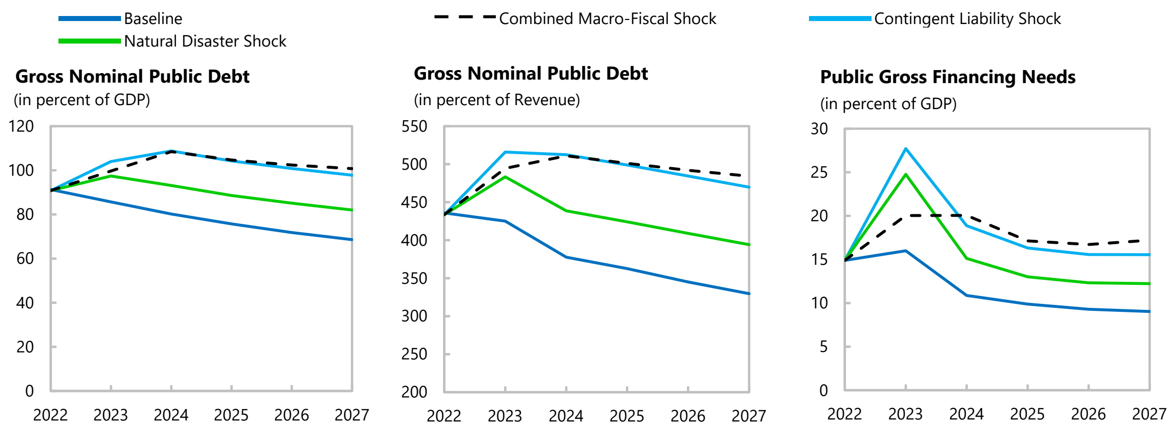
Source: IMF staff.

Figure 5. Antigua and Barbuda: Public DSA – Stress Tests

Macro-Fiscal Stress Tests



Additional Stress Tests



Underlying Assumptions

(in percent)

Primary Balance Shock	2022	2023	2024	2025	2026	2027
Real GDP growth	6.0	5.6	5.4	4.0	2.7	2.7
Inflation	8.5	4.5	2.4	2.0	2.0	2.0
Primary balance	-0.4	-1.9	0.4	2.0	2.1	2.1
Effective interest rate	3.0	3.5	3.9	4.0	4.1	4.3
Real Interest Rate Shock						
Real GDP growth	6.0	5.6	5.4	4.0	2.7	2.7
Inflation	8.5	4.5	2.4	2.0	2.0	2.0
Primary balance	-0.4	-0.9	1.5	2.0	2.1	2.1
Effective interest rate	3.0	3.5	4.8	5.1	5.6	6.1
Combined Shock						
Real GDP growth	6.0	-2.3	-2.5	4.0	2.7	2.7
Inflation	8.5	2.5	0.4	2.0	2.0	2.0
Primary balance	-0.4	-3.0	-2.8	2.0	2.1	2.1
Effective interest rate	3.0	3.5	4.8	5.4	5.9	6.4

Real GDP Growth Shock	2022	2023	2024	2025	2026	2027
Real GDP growth	6.0	-2.3	-2.5	4.0	2.7	2.7
Inflation	8.5	2.5	0.4	2.0	2.0	2.0
Primary balance	-0.4	-3.0	-2.8	2.0	2.1	2.1
Effective interest rate	3.0	3.5	4.0	4.3	4.4	4.5
Real Exchange Rate Shock						
Real GDP growth	6.0	5.6	5.4	4.0	2.7	2.7
Inflation	8.5	6.8	2.4	2.0	2.0	2.0
Primary balance	-0.4	-0.9	1.5	2.0	2.1	2.1
Effective interest rate	3.0	3.5	3.8	3.9	4.0	4.2
Contingent Liability Shock						
Real GDP growth	6.0	-2.3	-2.5	4.0	2.7	2.7
Inflation	8.5	2.5	0.4	2.0	2.0	2.0
Primary balance	-0.4	-10.9	1.5	2.0	2.1	2.1
Effective interest rate	3.0	3.7	4.8	4.6	4.6	4.8

Source: IMF staff.

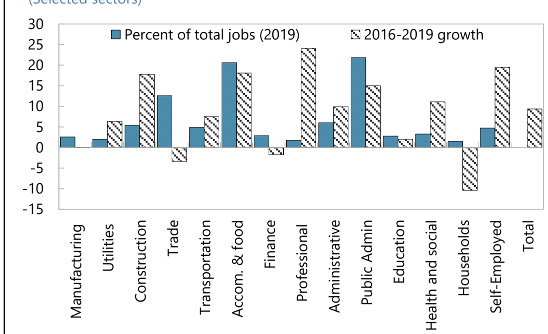
Annex V. Pandemic Impact on the Labor Market[1]

The pandemic's impact on Antigua and Barbuda's labor market persisted into 2021, even as output growth rebounded. Job loss intensified but average earnings improved year-on-year, albeit with significant heterogeneity at the industry level. Self-employment and hospitality sectors were particularly hard hit in terms of employment and earnings, and male employment suffered more than female employment, partly due to the over-representation of male workers among the self-employed. The design of policies for economic recovery would benefit from a sectoral and demographic assessment of labor market weaknesses, providing targeted support for most affected groups such as the self-employed, young workers, and workers in the hospitality industry.

Antigua and Barbuda's Labor Market – The Pre-Pandemic Landscape[2]

1. **Formal employment in Antigua and Barbuda is primarily supported by the public sector and the hospitality industry.** Over the decade between 2008/09 and 2018/19, jobs in the hospitality (accommodation and food services) and public sectors increased while employment in agriculture, trade, construction, and transportation shrank moderately. In 2019, the public and hospitality sectors dominated registered employment, with each contributing to one-fifth of total employment and trade activities employing an additional 13 percent of the registered labor force. The number of registered jobs grew by 9 percent between 2016 and 2019, outstripping the estimated rate of population growth in the same period, indicating improved labor market opportunities. The strongest job growth was seen in the professional, construction and hospitality sectors, alongside a significant increase in self-employment.

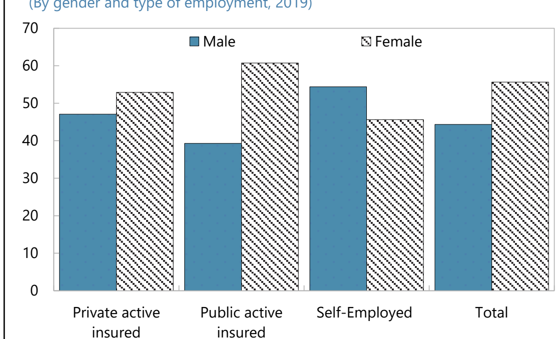
Jobs and Job Growth by Sector of Employment
(Selected sectors)



Sources: ABSSB and IMF staff calculations.

2. **Sole proprietorship is prevalent, particularly among male workers and older workers.** The size of private enterprises varies by sector, with employers in the hospitality and arts and entertainment sectors hiring 25 or more employees on average, but agriculture and manufacturing being small scale with less than 10 employees per employer, and over 40 percent

Distribution of Employment
(By gender and type of employment, 2019)



Sources: ABSSB and IMF staff calculations.

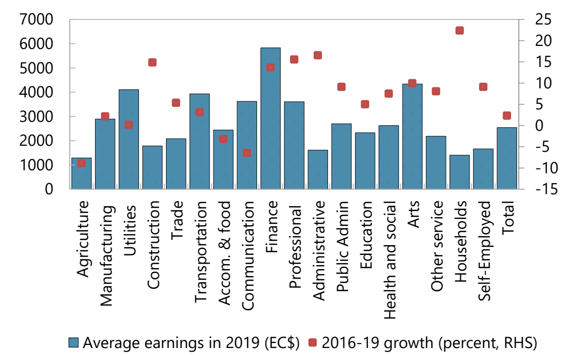
[1] Prepared by Salma Khalid.

[2] The data used in this Annex is collected by the Antigua and Barbuda Social Security Board (ABSSB) and reflects registered workers who are actively contributing to the social security system.

of employers being self-employed sole proprietors. Men are a significantly larger proportion of the self-employed, even though they form a smaller proportion of the total labor force, with more women working in the private and public sector. The self-employed are also more likely to be older workers, 40–60 years of age.

3. Average public sector earnings are comparable with the private sector, with self-employment earning among the lowest. Average reported earnings in 2019 were highest in finance, transportation, utility companies, and arts and entertainment. Average public sector earnings were comparable with average private sector earnings.[3] Household workers, construction workers, agricultural workers, administrative workers, and the self-employed all reported earnings well below the average for the workforce. Cumulative average earnings growth over 2016-19 period was only 2 percent, relative to average inflation of 4.6 percent. Earnings in the hospitality and communication sectors declined during this period, while earnings of utility, manufacturing, and transportation workers did not keep pace with inflation, implying erosion of living standards among this subset of workers.

Average Earnings and Average Earning Growth by Sector



Sources: ABSSB and IMF staff calculations.

Impact of COVID on the Labor Market

4. Labor market disruptions arising from the pandemic have the potential for creating long-term economic scarring.[4] Experience from past episodes of economic recession has shown that protracted separation from the labor force can create deterioration in job-specific human capital and reduce incentives to return to work, lowering overall labor force participation rates. If shock-induced transition into informality becomes permanent, it can also weaken long-run economic productivity, reduce overall earnings and harm social security system sustainability, particularly if informal workers are younger. Earning decline as a result of economic shocks is particularly harmful for new entrants to the labor force who face permanently lower earnings trajectories and employment opportunities.

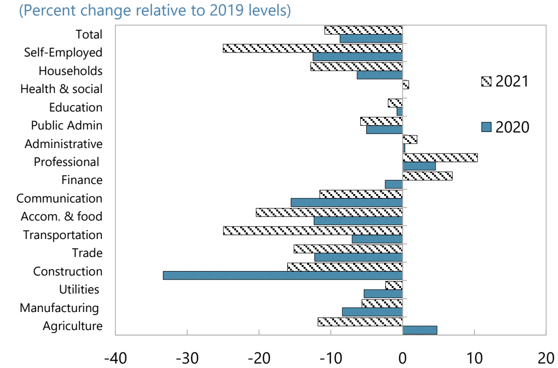
5. Employment has not rebounded post-COVID even as the economic contraction reversed. In 2020, when the economy contracted by an estimated 20 percent, registered employment remained relatively resilient, falling by a smaller 9 percent. The largest employment contractions occurred in manufacturing, construction, trade, hospitality, communication, and self-employment. In 2021, despite positive economic growth, registered employment fell further to 90

[3] When calculating average private sector earning, the following sectors are considered: manufacturing, transportation, construction, trade, hospitality, communication, financial services, administrative and support services, arts and entertainment, and other services.

[4] G-20 Background Note on Minimizing Scarring from the Pandemic, International Monetary Fund, 2022.

percent of the pre-pandemic peak in 2019, with further contractions in several sectors. Prominently, hospitality employment fell 9 percent year-on-year and self-employment contracted by 14 percent in the second year of the pandemic. In addition to a decline of jobs, there was also loss of employers as the number of employers in every sector fell between 2019 and 2021, notably in utilities and administrative employers where the number of employees per employer rose significantly.

Changes in Employment During COVID-19 Pandemic
(Percent change relative to 2019 levels)

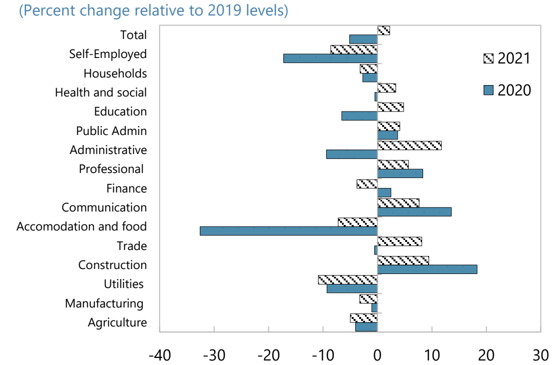


Sources: ABSSB and IMF staff calculations.

6. **Persistent labor market decline indicates that benefits from the nascent economic recovery are not reaching the labor force.** The negative trajectory of the labor market between 2020 and 2021 may be partly attributable to a strong first quarter of 2020, prior to the introduction of COVID restrictions, with 2021 being the first year that fully captures the pandemic impact on domestic demand. It may also be the result of businesses retaining their workers in the early stages of the pandemic but having to retrench as the pandemic got drawn out. The number of public sector workers also declined during the initial year of the pandemic, falling by nearly 5 percent y-o-y in 2020 without notable recovery in 2021 when a further decline of 14 percent was recorded.

7. **Sources of job growth in the pandemic years were limited.** Professional employment showed positive growth in 2020 and 2021, increasing by 5 and 6 percent y-o-y, respectively, but this sector reflects a small portion of overall employment. Because of a smaller pandemic shock in 2021, a rebound in employment in the finance sector also resulted in the numbers of jobs increasing in this sector, relative to pre-pandemic levels. This trend is in line with the pandemic shock having a limited impact on less contact industries which are more amenable to teleworking. The construction sector also showed a strong rebound in the number of jobs in 2021, but overall employment remained well below pre-pandemic levels due to a more severe contraction in 2020.

Changes in Earnings During COVID-19 Pandemic
(Percent change relative to 2019 levels)



Sources: ABSSB and IMF staff calculations.

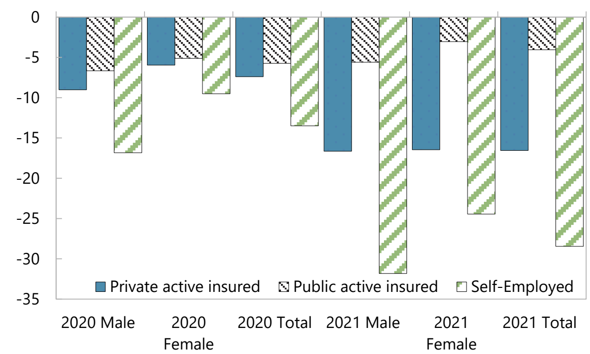
8. **The pandemic also contributed to earnings decline in many sectors of employment, with limited reversal in 2021.** Self-employment income recorded further losses in 2021, on the heels of substantial losses in 2020. Wages in the hospitality sector showed some signs of recovery in 2021 but remained 7 percent below their pre-pandemic level. Some sectors such as construction, communication and professional employment recorded higher average wages during the first year of the pre-pandemic when their employment numbers were declining,

indicating labor supply bottlenecks in these markets. Wages in these sectors continued to rise in 2021. Administrative workers and trade workers also recorded earnings increases in 2021, relative to pre-pandemic levels.

9. Employment decline was larger among men who are more likely to be self-employed and among younger workers. The reduction in active contributors to the social security system exacerbated between 2020 and 2021 across all employee categories with no large asymmetries by gender among public and private sector workers. However, in self-employment men suffered larger employment losses relative to women. Evaluating the change in contributors by age profile indicates that the youngest labor market participants were the hardest hit, with older public sector workers being the least likely to stop contributing to social security. This loss of young contributors to the social security system may have far-reaching impacts on the sustainability of the system if the trend is not reversed.

Change in Active Contributors to Social Security

(Percent change relative to 2019 levels)



Sources: ABSSB and IMF staff calculations.

Policy Recommendations

10. Economic recovery without labor market recovery will exacerbate household vulnerabilities and may increase informality. The pandemic has adversely affected labor market outcomes of the self-employed, who tend to be older workers, and the youth. The authorities should pursue a labor-centered approach in their economic recovery plans, which focuses on skills enhancement to compensate for lost human capital due to prolonged separation from the labor market; comprehensive assistance with job search, particularly for the youth; and greater support for small businesses and sole proprietorships which have suffered disproportionately from the pandemic. The authorities' plans to expand access to vocational skills training and continuing education will greatly assist in labor market entry and labor market transitions for new and separated workers. In addition, more resources can be channeled towards improving skills certification to allow domestic workers greater access to the regional CARICOM labor market. Business support can be tailored to improve productivity and improve weak earnings prevalent in the self-employment, through the provision of greater credit, training and improvement of digital capacity. Supporting labor market recovery is also critical to prevent greater transition into informality which will compromise not only labor force productivity and weaken economic growth, but also put a dent in the government's revenue base and weaken the sustainability of the social security system.

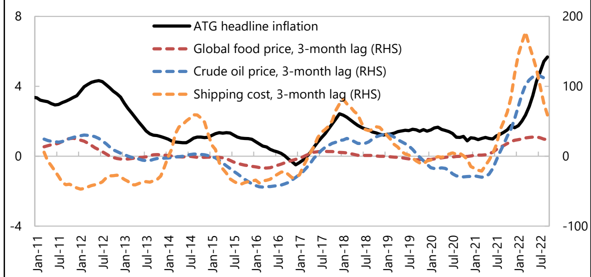
11. Improved data collection will permit design of more effective labor market policies. Social security data, while useful, provides only a partial account of labor market developments as it pertains to formal, registered workers who are actively contributing to the social security system. Since the most vulnerable populations tend to be unregistered, informal workers with shocks exacerbating vulnerabilities among these unprotected workers, a more comprehensive accounting of labor force data would be useful for the design of labor market and social protection policy. The authorities should seek to engage with technical assistance partners to improve collection of labor market statistics, including labor force participation and unemployment rates, which would shed greater light on the overall health of the labor market and areas for improvement.

Annex VI. Inflation Developments[1]

1. Antigua and Barbuda's economy is exposed to global price shocks due to its heavy reliance on imported goods. Inflation is significantly related to global food prices and inflation in the U.S. The surge in global food prices, worsened by Russia's invasion of Ukraine and supply chain issues stemming from the pandemic, has been a major driver of inflation. Global oil prices, however, have had limited impact on inflation up to end-2021 due to regulated prices in the energy sector, including price caps on fuels (gasoline and diesel), LPG, public transportation, among others. Fuel prices had remained fixed since February 2016 and were adjusted in line with global trends beginning in March 2022. Co-movements in inflation between Antigua and Barbuda and the U.S., the island's largest trading partner and accounting for nearly one-half of its imports, remain very strong. The main determinants of Antigua and Barbuda's inflation can be summarized in a simple regression model (text table), where U.S. headline inflation and global food price lagged by a quarter are statistically significant.

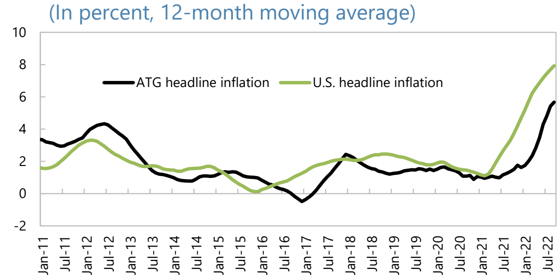
2. Tourism activity is also a driver for inflation. The ongoing recovery in tourist arrivals that started last year is expected to push up the demand for imported goods, which could lead to higher inflation. This could be moderated by the recent appreciation of REER.

Global Shocks and Domestic Inflation
(In percent, 12-month moving average)



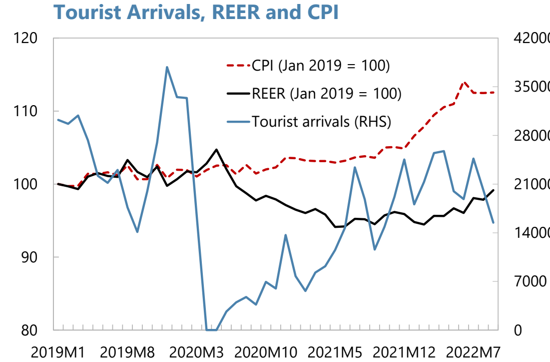
Sources: Country authorities and IMF staff calculations.

Headline Inflation in Antigua and Barbuda and U.S.
(In percent, 12-month moving average)



Sources: Country authorities and IMF staff calculations.

Tourist Arrivals, REER and CPI



Sources: Country authorities and IMF staff calculations.

[1] Prepared by Manuel Rosales Torres and Huilin Wang.

Inflation Model

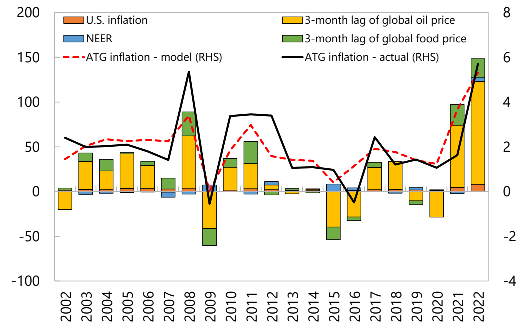
Variables	Coefficients
U.S. headline CPI	0.420***
Global food price (3-month lag)	0.0380***
Global oil price (3-month lag)	0.00193
NEER	0.0283
Constant	0.741***
Observations	254
R-squared	0.411

Note: *** p<0.01, ** p<0.05, * p<0.1

Source: IMF's staff estimates.

Inflation Model

(In percent; average)



Sources: Country authorities, ECCB and IMF staff estimates and calculations.

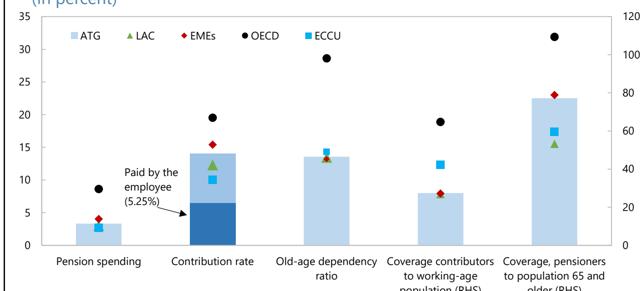
Annex VII. Sustainability of Pension System and Reform Options[1]

Antigua and Barbuda's population is aging rapidly. Prior to the pandemic, parametric reforms were insufficient to effectively improve the social security system's financial position. This Annex assesses the status of the pension scheme and the pandemic's impact on the system. It compares key pension indicators across countries and offers policy recommendations to improve the sustainability of the system.

1. Antigua and Barbuda's social security system covers short-term and long-term benefits. It operates as a pay-as-you-go (PAYGO) system (i.e., defined contribution and benefits). The system is financed by contributions paid by employees, employers, and self-employed. Benefits are also covered by running down reserves. The system covers health, pension, and a solidarity component. Short-term benefits include sickness, maternity, and a funeral grant; long-term benefits comprise old-age pensions, permanent disability, and survivors. A third pillar in the form of non-contributory pensions (grants) is fully financed by transfers from the central government's budget.

2. The system compares well relative to countries in the region in terms of key parametric indicators. These include the contribution rate, retirement age, and replacement rate (Table, Figure). These reflect the effect from ongoing changes in key parametric indicators in Antigua and Barbuda's pension system.

Pension System Indicators
(In percent)



Sources: Antigua and Barbuda Social Security Board, University of Oxford, and IMF staff calculations.

3. Despite parametric reforms to improve the sustainability of the pension system starting in 2017, its financial position weakened even prior to the COVID-19 shock. Ongoing pension reforms include a gradual increase in the retirement age, minimum number of work weeks, and contribution rates. Raising the retirement age helped improve the dependency ratio since 2017 (Figure). The reserves' life, hitherto projected to be exhausted by 2026, was extended to 2040. The projected results are dependent on the Antigua and Barbuda Social and Security Board's (ABSSB) ability to collect 100 percent contribution income. Prior to the pandemic, however, revenues fell short of the actuarial projections while ABSSB's expenses met the projected estimates (Figure). The 12th actuarial review

Antigua and Barbuda: Recent Parametric Reforms

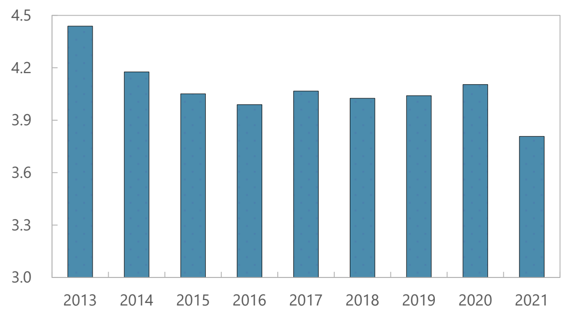
	Retirement age	Minimum contributions (work weeks)	Contribution rate (percent)	
			Employer	Employee 1/
2016	60	500	6.00	3.00 / 4.00
2017	60/61	500/549	7.00	4.00 / 5.00
2018	60/61	500/550	7.25	4.25 / 5.25
2019	62	600	7.50	4.50 / 5.50
2020	62	600	7.75	4.75 / 5.75
2021	63	650	8.00	5.00 / 6.00
2022	63	650	8.25	5.25 / 6.25
2023	64	700	8.50	5.50 / 6.50
2024	64	700	8.75	5.75 / 6.75
2025	65	750	9.00	6.00 / 7.00

Source: Antigua and Barbuda Social Security Board.
1/ Public and private, respectively.

[1] Prepared by Manuel Rosales Torres.

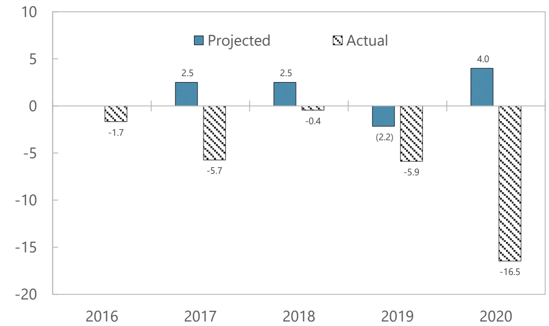
estimates that a five percent deficit in contribution income reduces the reserves by one year, further requiring a higher PAYGO or sufficiency rate (i.e., the rate at which current outlays on pension benefits equals current revenue) than the estimated 25 percent.

Social Security System: Support Ratio
(Number of contributors to pensioners)



Sources: Antigua and Barbuda Social Security Board, 12th Actuarial Review, and IMF staff calculations.

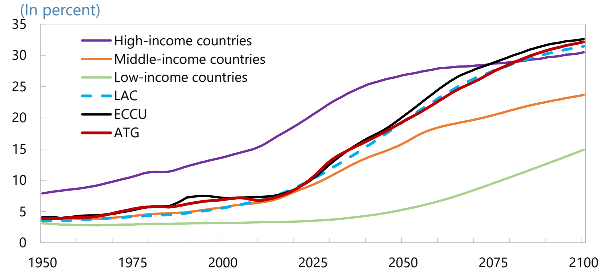
Social Security Overall Balance
(EC$ million)



Sources: Antigua and Barbuda Social Security Board and IMF staff calculations.

4. **The COVID-19 pandemic has imposed a heavy toll on the ABSSB's finances, further raising questions about the sustainability of the system amid rapid population aging.** The pandemic's impact on economic activity and employment has led to a significant contraction in the number of active contributors and employers in the private sector thus reducing sharply contribution income and reversing the improvements in the dependency ratio. Despite the ongoing economic recovery, full recovery is only expected by 2025, while the rapid population aging is expected to continue, and thus posing risk of invalidating the 2017 actuarial projections in terms of the projected timing for the full depletion of the system's reserves.

Share of Population Aged 65 and Over
(In percent)



Sources: University of Oxford and IMF staff calculations.

5. **Despite large reserves, the system's lacks liquidity to absorb large shocks as shown by the pandemic.** About 60 percent of the reserves are in the form of a long-term government bond and the remaining 40 percent invested in real estate, with the share of the latter increasing sharply from 9 percent in 2016 despite such investments yielding about 0.5 percent per year over the same period. Amid the contraction in contribution income in 2020, the sale of certain assets and transfers from the government was needed to fully finance all pensions and the ABSSB's operational costs.

6. **A combination of administrative and parametric reforms will help better meet the payment of benefits on a timely manner, extend the life of the system's reserves, and ensure its long-term sustainability.** Administrative or managerial actions could include the development

of an updated investment framework to ensure timely payment of benefits and strengthening the enforcement of collection of contribution income. Parametric reforms should focus on enhancing the system's equity and increasing the stock of reserves to strengthen the sustainability of the pension scheme.

7. **The investment framework should focus on diversifying the assets composition, improving ABSSB's liquidity position, and ensuring reserves balances risks and returns.** Against this background, current assets (i.e., land and buildings) could be converted into cash with the proceeds invested in highly liquid and high return assets such as securities in the regional government securities market, while retained real estate properties should generate revenue in line with market returns. Efforts to improve the collection of contribution income should focus on increasing penalties for non-compliant employers and strengthening institutional coordination with other government agencies such as Inland Revenue Department or procurement offices to ensure non-compliant employers fully comply with their obligations to the ABSSB.

8. **Additional parametric reforms are needed to ensure the sustainability of the pension system.** Starting in 2026, the contribution rate should be raised gradually (0.5 percent per year—equally distributed between employers and employees—over 2026-29 up to 17 and 18 percent for public and private sector employees respectively). The pensionable age could be gradually increased by half a year each year instead of one year every other year (i.e., it does not remain fixed for two years) without affecting the target date (i.e., 2023 is 64, 2024 is 64.5, and 2025 reaches 65). Further, to keep the ratio of working life to retirement constant, starting in 2026, the pensionable age could be increased automatically in line with Antigua and Barbuda's rising life expectancy by two-thirds of the life expectancy gains at age 65. In parallel, the early retirement age could be raised at the same pace as old-age pensionable age, as early retirement more than five years before the statutory retirement age is not optimal. The reference wage for old-age benefits (i.e., average wage) should be extended to cover the full career earnings to make it more equitable. As a transitory step, the reference wage could be extended to include the last ten years of contributory service instead of the current best five in last ten years as these will better reflect contributions and benefits. Subsequently, the reference wage could be increased by one or two years every year. As the PAYGO rate indicates, further increases in the contribution rate are required to cover pension benefits. This will also help reduce potential risks for reserves being exhausted before 2040.

Contribution Rate Adjustments

- Raise rate by 2 percent over four years (2026-29) up to 17 and 18 percent for public and private sector employees respectively.

Retirement Age and Earnings Adjustments

- Increase pensionable age by 0.5 in 2024 and 2025.
- Increase pensionable age by two-thirds of the life expectancy gains starting in 2026.
- Increase average annual earnings from best 5 years to the last 10 years of covered earnings.
- Afterwards, add 1-2 years to the average covered earnings.

Managerial Initiatives

- Develop an updated investment strategy.
- Strengthen collection compliance.

Annex VIII. Climate Resilience Building[1]

Antigua and Barbuda is highly vulnerable to climate shocks, with hurricanes expected to become more intense and frequent due to climate change, and is taking action to strengthen climate resilience. The analysis in this Annex suggests that the country needs a more comprehensive and targeted strategy to cope with climate change and an enhancement of public awareness of resilience building.

Resilience Building in Antigua and Barbuda

Barbuda: Before and After Hurricane Irma

Sources: NASA earth observatory and Antigua and Barbuda Adaptation Communication Nov. 2021

1. Antigua and Barbuda is highly exposed to natural disasters, with extreme disaster events occurring in recent decades. Hurricanes and tropical storms are major climate hazards affecting the country. From 1851 to 2011, it experienced 93 storm systems, among which 44 were hurricanes. In 2017, it had the first-ever Category 5 hurricanes, Hurricanes Irma and Maria. Irma destroyed 90 percent of the properties in Barbuda.[2] With a relatively arid tropical maritime climate, Antigua and Barbuda frequently had droughts, with severe ones occurring every 5 to 10 years and the one in 2013-16 being the worst recorded in history. Natural disasters caused large economic and social costs. The economic loss is estimated to be on average 4.2 percent of GDP per annum, on the higher end among small island countries (typically around 2 to 3 percent of GDP).[3] The loss can be extremely large in certain years. The immediate damage of hurricanes in 2017, for example, reached 9.3 percent of GDP (around US$136 million).

2. Extreme climate events are expected to occur more frequently due to climate change.[4] The frequency of high-intensity hurricanes will continue to increase, and droughts will last longer and become more frequent as well.[5] Therefore, the vulnerability of the country to natural disaster shocks is expected to further increase over time. Moreover, sea-level rise can significantly erode the

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[1] Prepared by Weicheng Lian.

[2] Only nine Category 4 and two Category 5 hurricanes have been recorded since 1850, with eight of them occurring since 1995.

[3] See Guerson (2019).

[4] According to the World Bank's Climate Change Knowledge Portal, climate change risks for Antigua and Barbuda include accelerated coastal erosion and inundation, lower average annual rainfall, increased rainfall intensity causing flooding and a likely increase in tropical storm intensity.

[5] According to Antigua and Barbuda Adaptation Communication in November 2021, the frequency of Category 4 and 5 hurricanes will increase by 80 percent over the next 80 years while stronger storms with maximum wind speed increases of 2 to 11 percent can be expected. The RCP 4.5 scenario predicts nine drought years during 2040–69, which represents an 8 percent increase in drought severity to 23 percent.

land mass of Antigua and Barbuda, presenting grave threat to the tourism sector, whose activities concentrate in coastal areas.

3. The vulnerability due to natural disasters can interact with other vulnerabilities. The country also faces the disruption to tourist flows from global shocks such as the COVID-19 pandemic. Shocks causing these vulnerabilities can overlap. A heavy rainfall in November 2020 eroded most of the road network, causing a damage of around US$62 million and exacerbating the hardship already inflicted by the pandemic.

4. The large damage caused by severe disasters is due to Antigua and Barbuda's inadequate resilience to such shocks. A recent IMF study estimates the gross benefit of resilience building in Antigua and Barbuda to be as large as 13 percent of GDP if 80 percent of infrastructure can become resilient (Guerson, 2019). Antigua and Barbuda's lack of resilience is manifested in several areas:

- **Underprepared for severe disasters.** A severe hurricane can disrupt Antigua and Barbuda's power and water supply for 3–24 months and its communication and transport infrastructure for up to 6 months.[6] The weak infrastructure is due to the fact that Antigua and Barbuda has a low capital stock per capita and public investment as percent of GDP, even compared with peers in the ECCU, and has insufficient maintenance spending (Wayne, Wickham, and Torres, 2020).

- **Lack of financial resilience.** Antigua and Barbuda has limited protection from insurance instruments against severe disasters. The payment from the Caribbean Catastrophe Risk Insurance Facility (CCRIF) for Antigua and Barbuda after Hurricane Irma, for example, was only 2.7 percent of total damage.[7] The country's high indebtedness implies that it can easily hit borrowing constraints when the need arises to repair infrastructure damaged by disasters. Through such channels, high indebtedness can amplify scarring effects of severe natural disasters (Lian et al., 2022), which lower growth and in turn drive up the debt ratio, causing vicious cycles.

- **Low penetration of private insurance.** The non-life insurance penetration measured against the average annual disaster cost is 1.8 percent for Antigua and Barbuda (IMF, 2022). This extremely low insurance penetration could be caused by high insurance premia, insufficient enforcement of building codes to meet insurability standards, and a lack of social tradition of purchasing insurance.[8] A need to assist the private sector recovery after severe disasters further increases the burden for public finances.

[6] According to "Antigua and Barbuda Updated Nationally Determined Contribution for the Period 2020–30".

[7] The cost of parametric insurance and catastrophe bonds can be significantly larger than the expected annual payout (e.g., around 1.5–3.2 times). According to the Antigua and Barbuda Adaptation Communication in November 2021, large tail risks, geographical correlation of risks across potential buyers, and thin insurance markets can all be contributing factors.

[8] The authorities are considering new insurance products in agriculture and fishing sectors.

Actions to Improve Resilience

5. Mainstreaming climate resilience building in the systems and processes of the public and private sectors is critical for coordinating resilience building efforts. In recent years, Antigua and Barbuda has passed legislations and improved institutions to facilitate the mainstreaming and coordination effort. The 2015 Environmental Protection and Management Act (EPMA) transitioned the Division of Environment to the Department of Environment (DOE). The 2019 EPMA further gave the DOE the responsibility to coordinate core issues related to climate change (as well as sustainable development, and environment and natural resource management). A Technical Advisory Committee (TAC), whose representatives come from 17 government agencies, three NGOs, and one private sector coalition, meets monthly, to support the work of the DOE.[9] These institutions are playing a critical role in spearheading resilience building efforts.

6. A National Adaptation Plan (NAP) is scheduled to be completed by June 2023, which together with the Nationally Determined Contributions (NDC) Implementation Plan, are expected to accelerate climate change adaptation.[10]

- **First, the NAP and the NDC Implementation Plan address adaptation issues comprehensively.** The NAP includes: (i) data collection and climate risk assessment; (ii) sectoral and local areas planning; and (iii) a strengthening of policies, legislation, and financial incentives for adaptation action. While covering related issues, the NDC Implementation Plan also includes a capacity building action plan to enhance the relevant policy, regulatory and financing frameworks.[11]

- **Second, priority areas are being identified.** For example, guided by the NDC Implementation Plan, a Climate Change Transformational Program will initially give priority to projects that build resilience in the building, infrastructure, energy (off-grid back-up energy), micro-finance and health sectors.

7. To facilitate the implementation of these plans, Antigua and Barbuda is developing a Measuring, Reporting, and Verification (MRV) system to communicate and track climate actions and report on the progress made in achieving the NDC. It will include loss and damage tracking, greenhouse gas (GHG) emission, climate support that includes financing, technology transfer, and capacity building. The MRV system is expected to increase awareness of climate challenges, help the public engage in and benefit from climate investment, promote data collection,

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[9] The committee provides technical guidance and policy recommendations and facilitates communication and cooperation between relevant stakeholders during project identification, development, and implementation. Project Management Committees and partner agencies also support project activities.

[10] The NAP will be submitted to the UNFCCC by 2023.

[11] It also ensures resource allocation processes and capacity development and awareness raising mechanisms, such as a youth engagement strategy.

and assist decision making. The authorities are also developing a risk map and an early warning system to improve disaster management.

8. Recognizing the important role of international financing for resilience building, Antigua and Barbuda is also actively seeking donor support in building resilience. The high vulnerability to climate shocks, limited fiscal space, and the significant upfront cost for resilience building make it critical for the country to leverage upon resources provided by green funds, international financial institutions, as well as other donors. The government of Antigua and Barbuda, through the DOE, has built a strong relationship with the Adaptation Fund (AF), Global Environment Facility (GEF), and Green Climate Fund (GCF), among other donor agencies.[12] Stronger institutions and the completion of the NAP process are also expected to play a catalytic role in coordinating and facilitating donor support.

9. Antigua and Barbuda has set up a Sustainable Island Resources Framework Fund (SIRF Fund), a national environment fund managed by the DOE, to channel donor funding into environmental management and climate change action. It serves as a financing mechanism for achieving multiple objectives related to climate change adaptation and mitigation.[13] The DOE is mandated to manage and administer the SIRF Fund. In addition, the Climate Resilience and Development Fund (CRDF) is being established, financed by the Tourism Accommodation Levy.

Further Improvements for Climate Resilience Building

10. Antigua and Barbuda's climate resilience building should be more comprehensive and targeted at coping with the upward trend of low probability but high impact climate shocks. The donor support in building resilience ex ante should be accompanied by an accumulation of liquidity buffer and a strengthening of the protection from contingent payment instruments. This is urgently needed given the borrowing constraints implied by the country's high indebtedness. It is, however, important to strengthen the governance and institutional arrangements to minimize the risk of misusing the fund accumulated in the self-insurance fund.

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[12] The DOE obtained accreditation to the AF in 2015 and was re-accredited in 2020 until 2025. It has accessed US$10 million from the AF for a project to restore natural drainage canals and climate-proofing vulnerable homes and storm shelters to reduce flooding and disaster risks. Moreover, the DOE is currently in the advanced stages of accessing funds from the AF for resilience in schools. The DOE also had a long history of engaging with the GEF and obtained accreditation to the GCF in 2017. It has accessed US$21.4 million from the GCF for climate change activities, including adaptation action. To date, the DOE has two approved GCF-funded projects at various stages of implementation valued at US$64.8 million. One of the projects has three main components: (i) climate-proofing interventions implemented in critical public service and community buildings to improve resilience to, and recovery from, extreme climate events; (ii) climate change adaptation mainstreamed into the building sector and relevant financial mechanisms; and (iii) climate information services strengthened to facilitate early action within the building sector to respond to extreme climate events. The DOE also plans to obtain funding from the GCF for resilience building in the energy sector and roads.

[13] They include (i) the implementation of Multilateral Environmental Agreements; (ii) building ecosystem resilience to the impacts of climate change; (iii) supporting programs and measures for climate change adaptation, climate change mitigation, climate change loss and damage; and (iv) giving financial support to vulnerable groups and communities for disaster preparedness, disaster recovery and rehabilitation.

11. The co-benefits of resilience building and other development goals should be better identified to help prioritize projects. The trade-off between resilience building and achieving other development goals can be alleviated by prioritizing projects that generate co-benefits for these objectives. The capacity building plan of the NDC Implementation Plan and agencies involved in project selection should pay more attention to these issues, which calls for a strengthening of coordination across agencies in determining and quantifying co-benefits of development objectives.

12. Public awareness about climate resilience building should be enhanced. Political support from the public can benefit resilience building in several ways, including the enforcement of building codes, a better culture of purchasing private insurance, and stronger public support for mobilizing resources for post-disaster reconstruction effort to limit and avoid scarring effects of natural disasters (Lian et al., 2022).

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Annex IX. Sovereign Blue Bonds[1]

Antigua and Barbuda's large financing needs and large stock of outstanding arrears make a strong case for a debt treatment to help restore debt sustainability, while its vast ocean and coastal resources present potential synergies between climate-related financing and debt treatments in the form of a debt-for-nature swap. However, relative to recent cases of successful sovereign debt swaps, Antigua and Barbuda has significantly larger stock of debt to official bilateral creditors, which may make a debt-for-nature swap a less feasible instrument for restoring debt sustainability. However, the authorities should continue to make progress on operationalizing its Marine Economy Plan in order to unlock blue financing and increase fiscal space for achieving its conservation goals.

Antigua and Barbuda's Blue Economy

1. **The blue economy is a prominent contributor to Antigua and Barbuda's GDP and its sustainable development prospects.**[2] Antigua and Barbuda's tourism sector—estimated to contribute over one-half of total GDP and one of the largest sources of domestic employment—is highly dependent on the maintenance of a healthy and resilient marine and coastal environment. A significant portion of tourism is driven by large cruises ships, yachts, speedboats and other leisure crafts, which have supported an industry of ports, harbors and associated coastal infrastructure. Port infrastructure also forms a critical part of the transportation sector of the island economy. Fishing, while contributing less to GDP, is a prominent domestic food source and provides seasonal employment opportunities. The coastal ecosystem is also important from a climate resilience perspective. Mangroves and reefs prevent coastal erosion and protect the shoreline from damaging effects of storms, while extensive mangrove wetlands and ocean resources serve the critical function of carbon sequestration.

2. **The authorities' Maritime Economy Plan (MEP) identifies key opportunities and challenges for the blue economy.** With coastal areas increasingly vulnerable to the effects of climate change, promoting climate resilient coastal infrastructure is high on the list of the government's priorities, including with respect to its housing stock which is also concentrated in coastal areas. Resilience of ports and shipping facilities to stronger weather shocks is also an important priority in order to maintain tourism and transportation infrastructure. Tourism, while dependent on the marine environment, also poses a risk to marine resources, highlighting the importance of developing and promoting sustainable tourism infrastructure. The needs of the fishing sector as a source of employment and food must also be balanced against its impact on the natural ecosystem.

3. **Implementation of a comprehensive blue economy framework requires strategic planning, coordination, and financing.** Antigua and Barbuda has established the Department of

[1] Prepared by Salma Khalid.

[2] The scope of the blue economy includes economic activities that take place in the marine environment, that use marine resources as an input, or produce goods or services that will contribute to activities that take place in the marine environment.

the Blue Economy within the Ministry of Social Transformation and the Blue Economy, in order to support the implementation of the MEP and enable coordination across diverse stakeholders. The next step towards operationalization of the MEP requires creating detailed implementation plans; ensuring the existence of supporting legislation and closing of gaps in existing legislative frameworks; establishing technical partnerships to enhance local capacity development and stewardship; and critically, financing.

4. The market for blue financing can supplement the government's resources as it seeks to achieve the goals of its MEP. Antigua and Barbuda has been receiving technical and financial assistance from the UK Government since 2016 under their Commonwealth Marine Economies Programme, and has successfully engaged with the Adaptation Fund, Green Climate Fund, and Global Environment Facility for climate financing. With its sizeable blue economy and market access, Antigua and Barbuda can position itself to take advantage of the emerging market for blue financing in the form of blue bonds. The recent experiences of blue bond issuances by sovereigns in the context of debt restructurings and debt swaps also present an interesting possibility for Antigua and Barbuda, given its long-standing arrears with bilateral creditors. However, given the small size of the market for such debt swaps, and blue bonds in general, it is important to consider the enabling environment that has allowed financing-constrained sovereigns access to these novel financing instruments.

The Global Market for Blue Bonds

5. Blue bonds are debt securities that finance the implementation of sustainable development goals (SDGs) related to the blue economy. Blue bonds are part of a set of fixed income financing instruments including green bonds and social bonds where the classification of the instrument is based on the objective of the projects that will be financed by its proceeds.[3] Blue bonds have been launched with the objective of financing activities that enable the implementation of sustainable development goals (SDGs) specific to life under water, ocean conservation or improved water management. As such, blue bonds are a subset of green bonds and sustainable development bonds, since their objectives fall within the sustainable development goals.

6. Sovereign blue bonds hold promise for island economies with abundant marine resources but limited financing for their conservation. The rise in debt during the pandemic was particularly sharp amongst tourism-dependent island economies which experienced the largest shocks to their output and a slow path to recovery. These economies are also more susceptible to natural disasters, which have created an environment of low growth and limited fiscal space owing to frequent reconstruction needs. As such, the ability of countries that have a wealth of global marine resources to self-finance marine conservation is extremely limited. Sovereign blue bonds are a promising vehicle for connecting social and climate impact investors with governments. They also

[3] Hence, green bonds are targeted towards the financing of climate-related activities, and social bonds have been developed to finance projects that aim to achieve positive social outcomes.

provide governments with the incentive for developing comprehensive frameworks for marine conservation and adaptation that align with the SDGs in order to attract available climate financing.

7. Unlike the green bond market, the blue bond market is relatively small. Instruments classified under the green bond market were issued as early as 2008, with the market's debt volume topping US$500 billion in 2021. The first blue bond was issued a decade later in 2018 by Seychelles (Box 1). Since then, blue bonds have been issued by multilateral banks such as the World Bank, Asian Development Bank and Nordic Investment Bank, commercial banks such as the Bank of China, and other sovereigns such as Belize who recently issued the world's largest blue bond at over US$550 million (Box 2). However, by debt volume and issuances, the blue bond market remains relatively thin and estimates of its size are currently unavailable.

Box 1. The Sovereign Blue Bond of Seychelles

Seychelles issued the first sovereign blue bond in the amount of US$15 million in 2018. The bond has a coupon of 6.5 percent and will be redeemed in 3 equal installments in 2026, 2027 and 2028. The bond is a private placement to three U.S.-based investors, priced at market rates rather than concessionary rates, to stimulate further demand in the capital markets. However, given the government's BB- credit rating, narrow revenue base and high risk, the issuance needed the support of the World Bank who provided a US$5 million grant to guarantee the bond and the Global Environment Facility (GEF) who provided a US$5 million loan to subsidize the payment of the bond's coupons, lowering the coupon from 6.5 percent to 2.8 percent.

The blue bond is complimentary to the debt-for-nature swap carried out by the Seychelles government in partnership with The Nature Conservancy (TNC) in 2015. TNC raised US$20.2 million in impact funding and grants to allow the government to purchase US$21.6 million of debt to Paris Club creditors and South Africa at a discount of 6.5 percent, using the Seychelles Conservation and Climate Adaptation Trust (SeyCCAT) to manage the funds. In return, the government issued two promissory notes: the first in the amount of US$15.2 million to repay SeyCCAT's loan financing, at 3 percent over 10 years; the second in the amount of US$6.4 million to capitalize SeyCCAT and fund conservation activities. This was the first instance of Paris Club creditors participating in a debt-for-nature swap.

Blue financing has allowed Seychelles to protect 30 percent of its national waters. Critical to the success of the debt swap and the blue bond was the Seychelles Marine Spatial Plan (SMSP) initiative that started in 2014. Through a participatory process that included 11 marine sectors and civil society, the SMSP has designated 13 marine protection areas which cover 30 percent of Seychelles' Exclusive Economic Zone, where fishing, oil exploration and other marine development is restricted. This plan will further guide SeyCCAT's strategies for sustainable management of marine resources and development of the blue economy.

8. The experience of Seychelles and Belize in issuing the first two sovereign blue bonds contains important lessons for scalability.

- If sovereign credit ratings are weak, guarantees and/or insurance may be necessary to ensure favorable financing terms. Hence, the Seychelles issuance was backed by guarantees to reduce the risk of the instrument and a grant to subsidize the market rates at which the bond was issued, while the Belize issuance was given political risk insurance by the U.S. Development Finance Corporation (USDFC). In the absence of such insurance and guarantees, demand for these instruments may have been lower and the terms of financing not as favorable.

Box 2. The Sovereign Blue Bond of Belize

Belize issued the largest sovereign blue bond to date in the amount of US$364 million in 2021. Following Belize's default on its commercial external debt (Eurobond of US$553 million), TNC created a subsidiary, the Belize Blue Investment Company (BBIC) which bought back the outstanding debt for a discount of 55 cents on the dollar. Credit Suisse fully financed the transaction in the amount of US$364 million by issuing the blue bond through a repackaging vehicle which was syndicated to institutional investors. The USDFC provided political risk insurance for the blue bond, allowing the bond to receive an Aa2 investment grade rating, thereby lowering the cost of financing. The syndication was oversubscribed multiple times, indicating high levels of interest by investors. The blue bond is also the first case of a commercial sovereign issuance being covered by parametric catastrophe insurance, which provides coverage in the event of eligible hurricane events.

The design of the blue bond sought to improve Belize's debt sustainability while generating financing for conservation. The bond has a step-up coupon schedule to reduce near-term financing costs: 3 percent in 2022, 3.55 percent in 2023, 5.15 percent in 2024, and 6.04 percent thereafter, with a maturity of 19 years and grace of 10 years. US$301 million of the blue bond was used to retire the Eurobond at a discount, allowing US$24 million of the bond principal to prefund the establishment of a Conservation Fund in Belize, in partnership with TNC. An additional US$39 million was used for financing the costs of the transaction and setting up a reserve account for debt service which also lowered the risk of the bond for investors.

By lowering its debt service burden, the blue bond allows the government to redirect the savings towards conservation efforts. With the debt conversion yielding over US$200 million in debt service savings, the Belizean government has committed to channeling approximately US$4 million annually towards ocean conservation efforts, in addition to the initial capitalization of the Conservation Fund. In partnership with TNC, the authorities will produce a Marine Spatial Plan which will guide the protection and conservation of 30 percent of Belize's ocean area. Other conservation commitments include protection of public lands in the barrier reef system, marine and coastal biodiversity offsets in the Coastal Zone Management Plan, governance frameworks for fisheries, aquaculture and mariculture, and creation of a national blue carbon policy framework.

- While not a necessary condition, both current examples of blue sovereign bond issuances involved debt conversions. In the case of Seychelles, the debt conversion occurred prior to the blue bond transaction, whereas in the case of Belize the blue bond transaction itself involved a debt conversion. This requires extensive consultation and cooperation between multiple stakeholders, in particular willingness to engage on the part of creditors. Moreover, this implies a long timeline for successful negotiations, in excess of one year in both cases.

- The Nature Conservancy and its Blue Bonds for Ocean Conservation strategy have been pivotal to the structuring of both blue bonds and the provision of assistance for the development of marine spatial plans which guide the conservation efforts and provide the monitoring frameworks for the conservation commitments made by the sovereigns. However, the preparation of marine spatial plans, of necessity, requires spearheading by the government and coordination and collaboration with multiple stakeholders in the local economy, therefore requiring significant political capital and human resource allocation by the country.

Antigua and Barbuda's Case for Blue Bonds

9. Outstanding arrears to bilateral creditors necessitate a debt treatment but the size of bilateral debt for treatment is much larger than past similar transactions. The amount of debt involved in the Seychelles debt swap was very small in comparison with US$150 million in debt owed to Paris Club creditors by Antigua and Barbuda. Belize's larger debt swap involved commercial creditors.

10. Tighter global financing conditions may limit benefits of blue issuance in terms of improving debt sustainability. To restore its debt sustainability, Antigua and Barbuda must clear its outstanding arrears with official bilateral creditors and lower its rollover risks by securing more financing sources with longer maturities, ideally at favorable rates. A conservation-based swap would improve a government's debt sustainability if it is received at a large discount, lowering the stock of debt, or reduces the flow of debt service obligations by extending the duration of the stock of debt, hence reducing financing needs. The discount received by Seychelles on its debt swap was relatively small, which reduces the benefit of the transaction with respect to its impact on debt stock in the case of bilateral creditors. Given an increase in the cost of market financing at large, issuing a blue bond at market rates may also affect financing needs adversely unless grant financing can be acquired to lower the cost of debt service.

11. Antigua and Barbuda can lay the groundwork for securing blue financing to increase fiscal space for achieving its conservation goals. Conservation commitments are key to securing blue financing, which require the identification of concrete and measurable Key Performance Indicators (KPIs) in the blue economy space and creating a monitoring and reporting system to ensure that commitments are met. The government's work with the Commonwealth Marine Economies Programme is a good step in this direction, creating a data-driven baseline for the scope of Antigua and Barbuda's blue economy, but more work needs to be done to develop concrete project proposals and action plans to operationalize the MEP. The integration of climate objectives into the country's macroeconomic and budget frameworks would also go a long way towards signaling seriousness of intent to the blue financing market.

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INTERNATIONAL MONETARY FUND

ANTIGUA AND BARBUDA

STAFF REPORT FOR THE 2022 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

November 10, 2022

Prepared By | Western Hemisphere Department (in consultation with other departments)

CONTENTS

FUND RELATIONS

(As of October 31, 2022)

Membership Status: Joined February 25, 1982; Article VIII

General Resources Account:	**SDR Million**	**Percent of Quota**
Quota	20.00	100.00
IMF's Holdings of Currency (Holdings Rate)	19.96	99.79
Reserve Tranche Position	0.05	0.26

SDR Department:	**SDR Million**	**Percent of Allocation**
Net cumulative allocation	31.67	100.00
Holdings	0.24	0.76

Outstanding Purchases and Loans: None

Latest Financial Arrangements:

Type	Date of Arrangement	Expiration Date	Amount Approved (SDR Million)	Amount Drawn (SDR Million)
Stand-By	June 7, 2010	June 6, 2013	67.50	67.50

Overdue Obligations and Projected Payments to Fund 1/
(SDR Million; based on existing use of resources and present holdings of SDRs):

	Forthcoming				
	2022	2023	2024	2025	2026
Principal					
Charges/Interest	0.15	0.78	0.78	0.78	0.78
Total	0.15	0.78	0.78	0.78	0.78

1/ When a member has overdue financial obligations outstanding for more than three months, the amount of such arrears will be shown in this section.

Implementation of HIPC Initiative: Not Applicable

Implementation of Multilateral Debt Relief Initiative (MDRI): Not Applicable

Implementation of Catastrophe Containment and Relief (CCR): Not Applicable

Article IV Consultation: The 2021 Article IV Consultation was concluded by the IMF Executive Board on July 28, 2021, but the staff report was not published.

Exchange Arrangements: The exchange rate arrangement is a currency board. Antigua and Barbuda participates in a currency union with seven other members of the Eastern Caribbean Currency Union and has no separate legal tender. The Eastern Caribbean Central Bank (ECCB) manages monetary policy and the exchange system for its eight members. The common currency, the Eastern Caribbean dollar, has been pegged to the U.S. dollar at the rate of EC$2.70 per U.S. dollar since July 1976. Antigua and Barbuda has accepted the obligations of Article VIII, Sections 2(a), 3 and 4, and maintains an exchange system that is free of restrictions on the making of payments and transfers for current international transactions and multiple currency practices.

Safeguards Assessment: An updated safeguards assessment of the ECCB, finalized in 2021, found strong external audit and financial reporting practices that continue to be aligned with international standards, and further improvements in the capacity of the internal audit function. Legal reforms were recommended to further strengthen operational autonomy of the ECCB and align its Agreement Act with leading practices. The issuance of DCash introduces new risks that require additional controls and oversight, and the assessment made recommendations to enhance the related project-governance framework.

Technical Assistance: Several missions from FAD, MCM, and STA, supported by the Caribbean Regional Technical Assistance Centre (CARTAC), have visited the country. The table below is the compilation of technical assistance delivered during 2019–22.

Antigua and Barbuda: Fund Technical Assistance, 2019–22	
Date	**Mission Description**
February 2019	**Tax Administration -** TADAT Assessment
June 2019	**Macroeconomic Program** - Assisting with medium-term macroeconomic forecasting
July 2019	**External Sector Statistics -** Data sources and backcasting
July 2020	**External Sector Statistics** - Collection and compilation in the context of the COVID-19 pandemic
July 2021	**Customs Administration** – Strengthening performance management (creating an action plan to develop performance targets and key performance indicators)
August 2021	**External Sector Statistics -** Data sources and estimation techniques
September 2021	**Tax Administration** - Strengthening audit capacity
September 2021	**Tax Administration** - Implementation of a performance management system for the Internal Revenue Department
October 2021	**Tax Administration** - Enhancing compliance risk management for large and medium taxpayers
November 2021	**Real Sector Statistics** - Development of services producer price indices
July 2022	**Real Sector Statistics** - Review of rental component of the consumer price index
September 2022	**External Sector Statistics** - Provisional 2021 balance of payments

RELATIONS WITH OTHER INTERNATIONAL FINANCIAL INSTITUTIONS

(As of October 31, 2022)

- World Bank

WBG Finances - Country Details - Antigua and Barbuda (worldbank.org)

- Caribbean Development Bank

Antigua and Barbuda | Caribbean Development Bank (caribank.org)

STATISTICAL ISSUES

(As of October 31, 2022)

I. Assessment of Data Adequacy for Surveillance
General: Data provision has some shortcomings but is broadly adequate for surveillance. The key area that requires attention is the timely publication of reports on central government and SOEs' operations.
Real Sector Statistics: The national accounts are currently compiled with a base year of 2006. Source data are currently being collected to facilitate rebasing to reference year 2019. These include new survey and administrative data for agriculture, merchandise trade, construction, and tourism. The new series are being updated to comply with the *System of National Accounts* (2008). Introduction of quarterly estimates of GDP using the production approach has been delayed due to the pandemic, high staff turnover, and the new population census. A new national CPI series was introduced in November 2019, with 2006 as the weight reference period and 2019 as the index reference period. The collection of rental prices has stopped since September 2019 due to resource constraints at the national statistical agency and the pandemic, and its resumption is being supported by Fund technical assistance. Progress has been made on the production of a new PPI, including on expanding the coverage of services PPI.
Government Finance Statistics: Annual and quarterly data on central government finances published by the ECCB are compiled broadly in line with the methodology set out in the 1986 *Government Financial Statistics Manual*. To better understand the underlying fiscal situation of member countries, the ECCB has expressed interest in aligning the fiscal statistics of the ECCU with the methodology of the *Government Finance Statistics Manual 2014 (GFSM 2014)* and the *Public Sector Debt Statistics Guide (PSDS Guide)*. Work is still in progress in this area. The authorities are working on addressing recent delays in the submission of central government statistics due to recent upgrades in the information system. Reports on SOEs' financial operations are not available.
Monetary and Financial Statistics: Monthly monetary statistics are compiled and reported to the Fund by the ECCB, based on standardized report forms for the central bank and for other depository corporations, since July 2006. The main shortcomings of the monetary statistics relate to incomplete institutional coverage of other depository corporations. Specifically, mortgage companies, finance companies, building societies, and credit unions—all of which accept deposits—are not covered by the monetary statistics. Also, accrued interest is not incorporated in the value of the interest-bearing assets and liabilities, and valuation adjustments are included in other liabilities. To achieve better coverage, close coordination between the ECCB and the single regulatory unit (which supervises financial corporations other than those licensed under the Banking Act) is crucial. The ECCB has implemented a new reporting system for commercial banks addressing the recommendations made by the 2014 MFS mission and has been reporting data in the new format since 2020.

Antigua and Barbuda reports data for several series and indicators of the Financial Access Survey including the two indicators (commercial bank branches per 100,000 adults and ATMs per 100,000 adults) adopted by the UN to monitor Target 8.10 of the Sustainable Development Goals.

Financial Sector Surveillance: The ECCB reports quarterly data for Antigua and Barbuda's thirteen core and seven additional FSIs for deposit takers, covering commercial banks only. Two additional FSIs for the real estate markets are also reported. The Financial Services Regulatory Commission reports credit unions' balance sheets on a quarterly basis upon request.

External Sector Statistics: The ECCB has implemented new BOP survey forms and released revised BOP statistics consistent with the *BPM6* methodology. BOP and International Investment Position (IIP) Statistics are timely and regularly disseminated on the ECCB website, although data are irregularly provided to the IMF's Statistics Department (STA). Data coverage needs to be improved, particularly to include international banks and international business companies. The response rate to surveys to the nonfinancial private sector could be strengthened with a strong legal basis for the compilation. With support from STA, Antigua and Barbuda's Statistical Division was able to backcast the balance of payments for 2000-13 series compiled under a discontinued methodology that had several deviations from the current international standards. Current account deficits narrowed and better fit with the *BPM6* estimates for 2014 onwards.

II. Data Standards and Quality

Antigua and Barbuda, which has been a participant in the IMF's General Data Dissemination System (GDDS) since October 31, 2000, is in its successor data dissemination initiative, Enhanced GDDS (e-GDDS). Metadata is posted in the Fund's Dissemination Standards Bulletin Board (http://dsbb.imf.org) but is outdated for most data categories, and data is yet to be disseminated under the e-GDDS. A data ROSC mission was conducted in April 2007; however, the report was not published.

Antigua and Barbuda: Table of Common Indicators Required for Surveillance
(As of October 31, 2022)

	Date of Latest Observation	Date Received	Frequency of Data[7]	Frequency of Reporting[7]	Frequency of Publication
Exchange Rates[1]	Fixed rate	NA	NA	NA	NA
International Reserve Assets and Reserve Liabilities of the Monetary Authorities[2]	07/2022	10/2022	M	M	M
Reserve/Base Money	07/2022	10/2022	M	M	M
Broad Money	07/2022	10/2022	M	M	M
Central Bank Balance Sheet	07/2022	10/2022	M	M	M
Consolidated Balance Sheet of the Banking System	07/2022	10/2022	M	M	M
Interest Rates[3]	07/2022	10/2022	M	M	M
Consumer Price Index	09/2022	10/2022	M	M	M
Revenue, Expenditure, Balance and Composition of Financing[4]—General Government	NA	NA	NA	NA	NA
Revenue, Expenditure, Balance and Composition of Financing[4]—Central Government	12/2021	10/2022	M	M	M
Stock of Central Government and Central Government-Guaranteed Debt[5]	12/2021	09/2022	Q	Q	A
External Current Account Balance	2021	03/2022	A	A	A
Exports and Imports of Goods and Services[6]	2021	03/2022	A	A	A
International Investment Position[4]	2021	03/2022	A	A	A
GDP/GNP	2021	06/2022	A	A	A
Gross External Debt	12/2021	09/2022	Q	Q	A

[1] Antigua and Barbuda is a member of the Eastern Caribbean Currency Union, in which the common currency of all members states (E.C. dollar) is pegged to the U.S. dollar at US$1 = EC$2.70.
[2] Includes reserve assets pledged or otherwise encumbered.
[3] Both market-based and officially determined, including discount rates, money market rates, rates on treasury bills, notes and bonds.
[4] Foreign, domestic bank, and domestic nonbank financing.
[5] Including currency and maturity composition.
[6] Exports and imports of goods are reported at the monthly frequency, with the latest available data as of June 2022.
[7] Daily (D), Weekly (W), Monthly (M), Quarterly (Q), Annually (A), Irregular (I), and Not Available (NA).