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JAMAICA

March 2023

REQUEST FOR AN ARRANGEMENT UNDER THE PRECAUTIONARY LIQUIDITY LINE AND REQUEST FOR AN ARRANGEMENT UNDER THE RESILIENCE AND SUSTAINABILITY FACILITY—PRESS RELEASE; STAFF REPORT; STAFF STATEMENT; AND STATEMENT BY THE EXECUTIVE DIRECTOR FOR JAMAICA

In the context of the Request for an Arrangement Under the Precautionary Liquidity Line and Request for an Arrangement Under the Resilience and Sustainability Facility, the following documents have been released and are included in this package:

- A **Press Release** including a statement by the Chair of the Executive Board.
- The **Staff Report** prepared by a staff team of the IMF for the Executive Board's consideration on March 1, 2023, following discussions that ended on December 14, 2022, with the officials of Jamaica on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on February 7, 2023.
- A **Staff Statement** updating information on recent developments.
- A **Statement by the Executive Director** for Jamaica.

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

PR23/57

IMF Executive Board Approves US$968 Million under the Precautionary and Liquidity Line and US$764 Million under the Resilience and Sustainability Facility for Jamaica

FOR IMMEDIATE RELEASE

- The Executive Board of the International Monetary Fund approved a 24-month arrangement under the Precautionary and liquidity Line (PLL) in the amount of US$968 million.
- The Executive Board also approved US$764 million under the newly created Resilience and Sustainability Facility (RSF).
- The 24-month arrangements will provide insurance against global risks and strengthen physical and fiscal resilience to climate change, advance decarbonization of the economy, and manage transition risks.

Washington, DC – **March 1, 2023:** The Executive Board of the International Monetary Fund (IMF) approved a 24-month arrangement under the Precautionary and liquidity Line (PLL) with access of US$968 million (190 percent of quota), to provide insurance against risks from higher commodity prices, a global slowdown, tighter-than-envisaged global financial conditions, and new COVID outbreaks. The Executive Board also approved an arrangement under the Resilience and Sustainability Facility (RSF) for US$764 million (150 percent of quota) to strengthen physical and fiscal resilience to climate change, advance decarbonization of the economy, and manage transition risks. The RSF is expected to catalyze funding for climate priorities from other official lenders and the private sector.

Over the past few years, Jamaica has been buffeted by a difficult global environment—from COVID, the war in Ukraine, and the ongoing tightening of global financial conditions. Supported by sound policy frameworks and policies prioritizing macroeconomic stability, the economy is now recovering strongly. As COVID waned, tourism has rebounded to pre-crisis levels, and 2022 real GDP growth is expected to be around 4 percent. Public debt is on a downward trajectory and the overall fiscal balance is in line with the medium-term fiscal framework. Pushed by global factors—in particular, the impact of the war in Ukraine on commodity prices—inflation has risen above the Bank of Jamaica's target band but is declining since mid-2022. High commodity prices have resulted in an increase in the current account deficit, but international reserves remain at healthy levels. The financial system is well-capitalized and liquid.

The outlook points to a continued recovery and inflation falling back within the Bank of Jamaica's target range by end-2023. The economy, though, is facing significant external risks. The war in Ukraine may push commodity prices higher, a stronger-than-envisaged tightening of global financial conditions may curb capital flows and reduce remittances, and new COVID variants could disrupt tourism and trade. The authorities' response to recent shocks has been well designed. The fiscal policy response to COVID was nimble, supporting the economy in 2020 but then quickly resuming a downward path for the debt. Similarly, the response to the surge in fuel and food prices allowed for pass-through while providing targeted support within the existing fiscal envelope. The Bank of Jamaica has followed a data dependent tightening of monetary policy to secure convergence to the inflation target. These policies have struck the right balance in responding to shocks, protecting the vulnerable, countering inflationary pressures, and further securing debt sustainability.

Following the Executive Board's discussion, Mr. Kenji Okamura, Deputy Managing Director and Acting Chair of the Board, issued the following statement:

Jamaica strong track record of building institutions and prioritizing macroeconomic stability has aided the post-pandemic recovery. The economy continues its strong recovery from COVID, and inflation is expected to converge to the BOJ target range by end-2023. International reserves remain at adequate levels and the financial sector remains well capitalized and liquid. The post-pandemic increase in the primary surplus and the ongoing monetary tightening strike the right balance in response to the external shocks, reducing inflation and securing debt sustainability.

The authorities continue to enhance policy frameworks. The Fiscal Commission will strengthen the fiscal responsibility framework, public sector reforms will create a standardized and equitable pay structure for government employees that rewards performance, and efforts to strengthen tax and customs administration will support the revenue envelope. Amendments to the BOJ Act have strengthened the central bank's autonomy and governance structures. Progress is also being made in the adoption of the Basel III framework and the enhancement of oversight of the financial system.

To insure against risks from higher commodity prices, a global slowdown, tighter-than-envisaged global financial conditions, and new COVID outbreaks the authorities have requested an arrangement under the Precautionary and Liquidity Line (PLL) along with a Resilience and Sustainability Facility (RSF) to strengthen physical and fiscal resilience to climate change. The PLL will support the authorities' plans to improve financial supervision, the AML/CFT framework, and data reporting.

Reforms in the RSF, built on Jamaica's home-grown climate policy, were prepared in close collaboration with the World Bank and other international partners. They create incentives to switch to renewables, reduce energy consumption, develop green financial instruments, and require proper management of climate risks in the financial sector. Reforms are expected to catalyze private and official financing for climate-related investment.

JAMAICA

February 7, 2023

REQUEST FOR AN ARRANGEMENT UNDER THE PRECAUTIONARY LIQUIDITY LINE AND REQUEST FOR AN ARRANGEMENT UNDER THE RESILIENCE AND SUSTAINABILITY FACILITY

EXECUTIVE SUMMARY

Background. Jamaica has built a strong track record of investing in institutions and prioritizing macroeconomic stability. This aided the country to adapt to the difficult global environment of the past few years. The authorities provided targeted support to the economy during the pandemic but promptly scaled it back as conditions normalized. Similarly, in the wake of the war in Ukraine, domestic food and energy prices were left to adjust to shifts in international markets while targeted support was provided to the poor. The economy is expected to continue its post-COVID recovery, with inflation returning to the central bank's target range by end-2023. The outlook is subject to downside risks from potential new COVID waves, higher commodity prices, a global slowdown, and tighter than expected global financial conditions.

Precautionary and Liquidity Line (PLL). The authorities are requesting a two-year PLL with access of SDR 727.51 million (190 percent of quota), to provide insurance against external risks. Staff assesses that Jamaica qualifies for the PLL, performing strongly in three out of five qualification areas and not substantially underperforming in other areas. The authorities plan to treat the PLL as precautionary.

Resilience and Sustainability Facility (RSF). The authorities are requesting access of SDR 574.35 million (150 percent of quota) under the RSF. The arrangement would support efforts to strengthen physical and fiscal resilience to climate change, advance decarbonization of the economy, and manage the associated transition risks. The RSF is expected to catalyze funding for Jamaica's climate priorities from other official lenders and the private sector.

Policy Agenda. The PLL will support continuing efforts to strengthen the institutional framework for fiscal policy and consolidated supervision of financial conglomerates, enhance the framework for the resolution of financial institutions, bring the AML/CFT framework to international good practice, and adopt the Special Data Dissemination Standard. The RSF will support Jamaica's ambitious agenda to accelerate the transition to renewable power generation, increase resilience to climate change, enhance the climate focus in fiscal policy frameworks, and strengthen management of climate risks by financial institutions.

Approved By
Nigel Chalk (WHD) and Andrea Schaechter (SPR)

Discussions took place in Kingston during December 5–14, 2022. The staff team comprised Esteban Vesperoni (head), Saji Thomas, Mariusz Sumlinski (all WHD), Nicoletta Feruglio (FAD), and Julia Faltermeier (SPR). Siyao Chen and Sheng Tibung (both WHD) provided research and editorial assistance. Mr. Jennings (Executive Director) and Ms. Cunningham (Senior Advisor, OED) participated in the discussions. The team met with Minister of Finance Nigel Clarke, Central Bank Governor Richard Owen Byles, and other senior officials and private sector representatives.

CONTENTS

TABLES

ANNEXES

APPENDICES

BACKGROUND

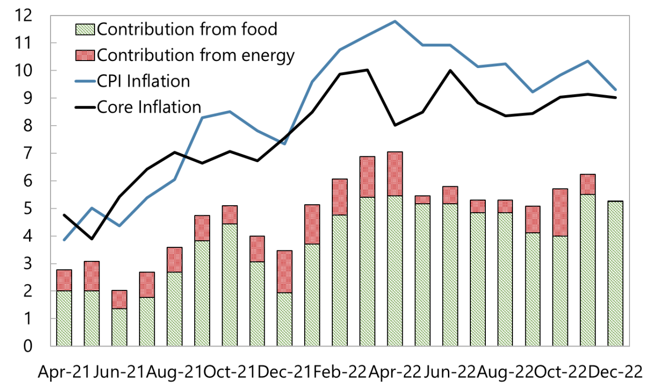
1. Efforts to entrench macroeconomic stability and improve policy frameworks have helped Jamaica navigate recent shocks. Jamaica has reduced public debt, inflation, and external deficits over the last years. It institutionalized fiscal discipline through a Fiscal Responsibility Law (FRL), adopted inflation targeting and a floating exchange rate regime and strengthened financial oversight. These efforts have helped Jamaica face the global shocks associated with the pandemic, higher energy and food import prices, and tighter global financial conditions. The authorities' policy response has been nimble and pragmatic, relying on temporary, targeted measures while remaining committed to reducing the public debt.

2. The economy continues its post-pandemic recovery:

- Tourism has rebounded to pre-pandemic levels, and FY2022/23 growth is expected at 3½ percent despite a prolonged outage in one of the largest alumina plants and the effects of the negative terms of trade shock from the war in Ukraine.

- Pushed by higher commodity prices, inflation has risen above the central bank's (BOJ) target band of 4-6 percent. Inflation has receded from its peak last spring, aided by tighter fiscal and monetary policy and a waning of external price shocks.

CPI Inflation by Major Components
(In percent, year-on-year and contributions)



Sources: STATIN and IMF staff calculations.

- The current account deficit has increased due to higher commodity and freight prices, a shortfall in alumina exports and a moderation in remittances, which have more-than-offset improvements in tourism flows. International reserves remain adequate—about 115 percent of the ARA metric by end-2022—and the external position is assessed to be broadly in line with the level implied by medium-term fundamentals and desirable policies.

- The financial system remains well capitalized and liquid. The capital adequacy of Deposit Taking Institutions (DTIs) was at about 14 percent last September—above the regulatory minimum of 10 percent—and the NPL ratio remains low at 2.5 percent. Other financial institutions have capital adequacy ratios above the minimum and stable liquidity ratios.

- Public debt is on a downward trajectory. As the overall fiscal balance returned to a surplus in FY2021/22 (of 0.9 percent of GDP), the public debt fell to 94 percent of GDP, fully reversing the increase seen during COVID. Despite global shocks, budget execution during the first half of FY2022/23 suggests that the surplus of 0.3 percent of GDP targeted in the Medium-Term Fiscal Framework (MTFF) may be exceeded.

3. There are important external risks facing the economy. The war in Ukraine may increase global inflationary pressures and interest rates, and ultimately weigh on growth. A stronger-than-envisaged tightening of global financial conditions may curb capital flows, reduce remittances, and raise the costs of budget financing. New COVID variants could disrupt tourism and trade. Also, Jamaica faces ever-present risks from climate events. To provide insurance against these risks, the authorities are requesting a Precautionary and Liquidity Line (PLL).

4. The authorities' climate agenda is expected to impact growth and the current account. Climate-related investments are expected to increase medium-term growth and the current account deficit (projected to converge to 1.6 percent and 2 percent of GDP, respectively). These investments are expected to be financed by FDI and catalyzed climate financing; and lessen macroeconomic vulnerabilities arising from increases in global energy prices and natural disasters over the long term. To support their ambitious climate agenda and help catalyze private and official sector financing, the authorities are requesting access under the Resilience and Sustainability Facility (RSF).

Text Table 1. Jamaica: Medium-Term Macroeconomic Framework

(Percent of GDP unless otherwise specified)

	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28
						Proj.			
Growth and Prices									
GDP growth	-0.1	-11.0	8.2	3.5	2.0	1.8	1.7	1.6	1.6
Consumer price inflation (e.o.p.)	4.8	5.2	11.3	7.7	5.2	4.5	5.0	5.0	5.0
Government Finances									
Central government revenue	30.6	29.5	31.0	29.4	29.4	29.4	29.4	29.5	29.7
Central government expenditure	29.7	32.6	30.1	29.1	29.1	29.1	27.9	27.0	27.2
Public sector overall balance	1.0	-3.6	0.9	0.3	0.3	0.3	1.5	2.5	2.5
Central government primary balance	7.1	3.5	6.8	5.8	5.4	5.2	5.6	5.7	5.3
Consolidated public sector debt	94.3	109.7	94.2	84.1	77.9	74.0	69.8	64.0	59.5
Balance of Payments									
Current account	-1.7	-1.1	-1.2	-2.5	-2.8	-2.5	-2.0	-2.0	-2.0
Foreign direct investment	0.8	1.3	1.9	2.3	2.7	3.0	3.5	3.5	3.5
Gross reserves (US$million)	3,688	4,244	4,324	4,191	4,100	4,250	4,350	4,450	4,550

Sources: Jamaican authorities and Fund staff estimates and projections.

POLICIES UNDER THE ARRANGEMENTS

A. Macroeconomic Policies

5. The large primary surplus in the MTFF should help maintain debt sustainability. Following the prudent response to shocks over 2020-22, the prompt return to large primary surpluses predicated on strict expenditure control and improved tax administration has helped to maintain debt sustainability. Maintaining primary surpluses of around 5½ percent of GDP in the coming years will help reduce financing costs, restore fiscal space to respond to potential downside shocks, and lower the public debt to 60 percent of GDP by FY2027/28, in line with the FRL (Annex IV).

6. The ongoing monetary tightening is expected to bring inflation within the target range by end-2023. The BOJ has increased the policy interest rate to 7 percent by end-2022 (from ½ percent in September 2021), mopped up liquidity, and supported a market-determined exchange rate. Upcoming monetary policy decisions are expected to be guided by the pace of disinflation. The authorities stand ready to adjust the monetary policy stance in a data dependent manner to secure convergence to the inflation target, which will also be aided by the prudent fiscal stance.

B. Fiscal and Monetary Policy Frameworks

7. Jamaica continues to improve its fiscal framework. Parliament recently established an independent Fiscal Commission to assess the realism of the government's fiscal plans and their consistency with the FRL. The authorities are reforming the public wage structure including by reducing allowances and standardizing the pay structure to reward performance and retain skilled employees. They continue to manage the debt structure through buybacks of expensive liabilities and lengthening of maturities to mitigate envisaged tighter financial conditions.

8. Efforts continue to strengthen tax and customs administration and public financial management:

- A new tax administration information system will improve compliance and data tracking; and recent efforts focus on timeliness of filings and better tax arrears reporting.
- Customs administration is being modernized for better risk management and post-clearance audits. The new Customs Act would further enhance customs clearance and revenue collection, simplifying business procedures.
- Ongoing efforts in Public Finance Management are focused on expanding the coverage of fiscal accounts (by integrating public bodies into fiscal reporting systems), strengthening cash management, and improving the reporting of fiscal risks. Controls over expenditure commitments and medium-term budgeting should continue to be strengthened.[1] To enhance transparency of public procurement, the authorities plan to reform regulations to require publication of beneficial ownership information of awarded companies on the Ministry of Finance website.

9. An update of the safeguards assessment of the BoJ is underway. Recent amendments to the BoJ Act have strengthened the BOJ's autonomy and governance. Preliminary findings of the ongoing assessment indicate that while financial reporting practices and audit mechanisms continue to be guided by international standards, there is scope to further strengthen the internal audit function's coverage and to introduce an auditor rotation policy given the external auditor's long tenure, which raises independence concerns. Operational frameworks have been developed to help manage the potential risks arising from the recent adoption of a central bank digital currency, though issuance has remained limited thus far.

[1] The authorities are working on the adoption of climate budget tagging with the support of the IDB.

C. Financial System Oversight and AML/CFT Framework

10. The adoption of Basel III standards and the expansion of the BOJ's supervisory authority are ongoing. The minimum capital requirements and the revised definition of regulatory capital have been set up and implementation of Pillar 2 is underway (including the Internal Capital Adequacy Assessment Process, the Supervisory Review and Evaluation Process, and the framework for designating Domestic Systemically Important Financial Institutions—SIFIs). Pillar 3 will focus on market disclosures and additional capital and liquidity requirements. Legislation tabled in parliament would allow the BOJ to supervise credit unions and subject them to comprehensive prudential requirements.

11. The regime for the resolution of non-viable financial institutions should be strengthened. The authorities intend to (i) establish a methodology to identify SIFIs *(structural benchmark, September 2023)* and (ii) submit to parliament a bill to strengthen the resolution of non-viable financial institutions while protecting financial stability and minimizing the recourse to public funds *(structural benchmark, March 2024)*.

12. The BOJ is intensifying its supervisory efforts for financial holding companies. The Banking Services Act already requires financial groups with DTIs to establish a Financial Holding Company (FHC) that is licensed and supervised by the BOJ. The BOJ has been conducting a pilot supervision of the first FHC licensed since May 2021 and has recently licensed a second FHC, which it will also supervise. In addition, the authorities intend to submit legislative amendments that will empower the Financial Services Commission (FSC) to conduct the consolidated supervision of financial groups that do not include DTIs *(structural benchmark, September 2023)*.

13. Going forward, the authorities also intend to unify the framework for financial supervision. Following a recent fraud in a small security dealer, the authorities assessed that financial oversight would benefit from a unified regulatory framework under the BOJ, and they have requested Fund CD support on how best to design such a system. As this reform will take time—likely beyond the duration of the PLL arrangement—the FSC will continue to supervise the non-bank financial system in the short-term. The move towards consolidated supervision of nonbank financial conglomerates would be facilitated by a unified regulatory structure.

14. The authorities remain steadfastly committed to addressing strategic deficiencies in their AML/CFT regime. In February 2020, Jamaica was placed under increased monitoring by the Financial Action Task Force (FATF). Subsequently, an action plan was developed to address deficiencies in the AML/CFT framework, and in 2021 Jamaica published a National Risk Assessment. The authorities have improved their framework but as of December 2022 remain under increased monitoring and the FATF extended the deadline for completion of outstanding measures to February 2023.

15. Following the FATF October Plenary, the authorities have continued to make progress with the AML/CFT action plan. In October, the FATF agreed that seven action items have been completed. Last December, parliament approved the Charities Regulation that empowers the regulator—which received training from the EU Global Facility—to start risk-based supervision (RBS) of the NPO sector. In parallel, the authorities continue to advance RBS by: (i) licensing micro-credit organizations and creating their risk-profiles and (ii) placing trust and corporate services providers (TCSPs) under the FSC's supervision—TCSPs must be licensed by April 2023 or exit the sector. These steps are related to three action items in the action plan (see Box 1).

Box 1. AML/CFT Framework

Jamaica is on FATF's list of jurisdictions under increased monitoring (grey list). In February 2020, FATF and Jamaica agreed on an action plan to address strategic deficiencies, which comprises 13 action items for the five immediate outcomes (IO) rated at moderate/low effectiveness in the 2017 Mutual Evaluation Report. The IOs are: IO1—completion and dissemination of a National Risk Assessment (NRA); IO3—adoption of risk-based supervision (RBS), monitoring and regulation of financial institutions (FI) and the Designated Non-Financial Businesses and Professions (DNFBP) for compliance with the AML/CFT framework; IO5—preventing legal persons from misuse for ML/TF and ensuring beneficial ownership (BO) information is available to competent authorities; IO7—investigation and prosecution of ML offences and application of effective, proportionate and dissuasive sanctions; and IO10—addressing technical deficiencies of recommendation R6 (targeted financial sanctions (TFS) for terrorist financing), ensuring implementation of TFS without delay, issuing regulations for monitoring non-profit organizations (NPO), and applying targeted measures to higher risk NPOs.

FATF plenary in October 2022 acknowledged progress but noted that the action plan requires further work. FATF agreed that seven action items for IO1, IO5.1, IO7, and IO10.1 have been completed. For IO1 the NRA was published in August 2021, for IO5.1 the risk assessment for legal persons and arrangements was included in the NRA, for IO7 and IO10.1 the investigation and prosecution of ML offences and application of sanctions as well as the implementation of TFS have been strengthened with increased coordination between the Financial Investigation Division, the Ministry of Foreign Affairs and Foreign Trade, the Office of the Director of Public Prosecutions, the Office of the Chief Justice, and regulatory authorities. But FATF assessed six actions in IO3, IO5 and IO10 as incomplete and urged Jamaica to demonstrate progress before the evaluation in February 2023 to prevent further steps within the increased monitoring procedure.

Following the October plenary, Jamaica continued to make progress on the action plan. In December 2022, parliament approved the Charities Regulations authorizing the regulator—which received training from the EU Global Facility—to commence RBS of the NPO sector in line with IO10. The work on IO3 calling for adoption of RBS of the FIs and DNFBPs—which had advanced per the microfinance institutions placement under BOJ's supervision and the Trust and Corporate Service Providers placement under the Financial Services Commission's (FSC) supervision—continues. The BOJ expects to finish processing applications for microcredit institutions by Q3 2023 and the FSC is engaging with prospective licensees to ensure early applications ahead of the April application deadline. The placement of the legal profession under AML/CFT standards is pending a ruling by the Privy Council, which heard the lawyers' appeal last November. Regarding the BO regime (IO5), amendments to the Companies Act are expected to be tabled before parliament in Q1 2023. Jamaica's application for re-rating of technical compliance with six recommendations was approved by CFATF last October. Jamaica is now compliant/largely compliant with 33 out of 40 FATF recommendations and will ask for rerating of the remaining seven after completion of action items for the outstanding IOs.

16. Finally, in line with the action plan agreed with FATF, the authorities intend to meet three important action items with parliament's approval of amendments to the Companies Act to strengthen the beneficial ownership (BO) framework. This will ensure that adequate, accurate and up-to-date beneficial ownership information is available on a timely basis to competent authorities. These amendments will: (i) ensure that the definition of BO is amended in line with the international standards endorsed by the FATF; (ii) introduce effective, proportionate, and dissuasive sanctions for legal persons and legal arrangements when they breach their BO obligations; and (iii) ensure that the Register of Companies is granted with powers to ensure compliance, monitor and verify that basic and BO information held by legal companies is accurate and timely updated *(structural benchmark, March 2023)*.

PROGRAM MODALITIES

A. PLL Qualification

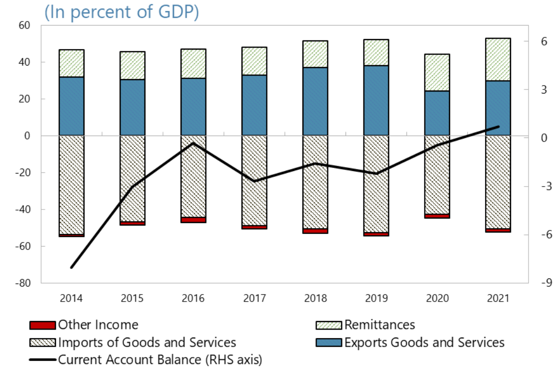
17. Jamaica meets the qualification requirements for a PLL arrangement. Jamaica's economic fundamentals and institutional policy frameworks are sound, the country has a track record of implementing sound policies, and it remains committed to doing so in the future. This is reflected in the generally positive assessment of Jamaica's policies by the Executive Board in the context of the 2022 Article IV consultation concluded on February 6, 2023. Jamaica performs strongly in three out of the five PLL qualification areas.

Assessment of Specific Criteria

External Position and Market Access: *Jamaica performs strongly in the external position and market access area.*

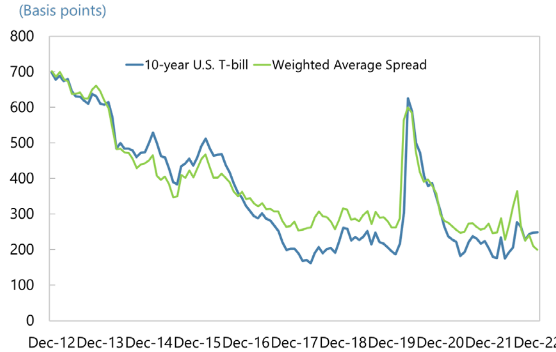
- **Criterion 1. A sustainable external position.** The current account deficit (CAD) has remained below 3 percent of GDP over the last 5 years, and it was more than fully financed by FDI flows (which averaged 3.1 percent of GDP over the same period). The 2022 Article IV consultation assesses the 2021 external position to be broadly in line with medium-term fundamentals and desirable policy settings. The CAD was below the External Balance Assessment norm and the Net International Investment Position (NIIP) is assessed as sustainable. The CAD is projected to have widened in 2022 but the assessment is expected to remain the same. External debt has been declining since 2015—except for the COVID year—and is expected to continue falling over the medium term.

Current Account Components
(In percent of GDP)



Source: BOJ and IMF staff calculations.

Sovereign Spreads
(Basis points)



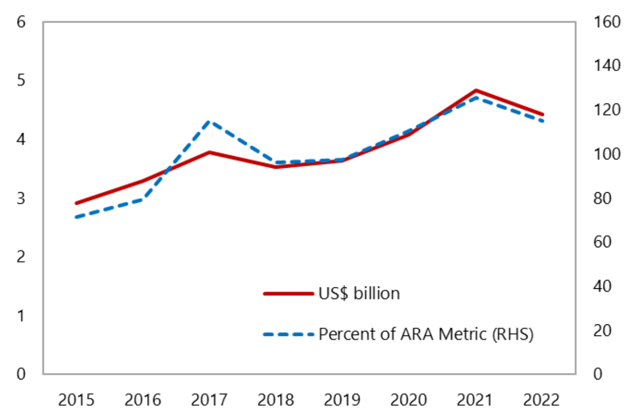
Sources: Bloomberg and IMF staff calculations.

- **Criterion 2. A capital account dominated by private flows.** Between 2017 and 2021, non-government flows represented more than 75 percent of portfolio flows and contributed positively to other investment flows. The bulk of external liabilities are owned by private creditors. Foreign direct investment—mainly related to tourism and mining—accounts for 50 percent of liabilities, while portfolio investment accounts for 25 percent.

- **Criterion 3. A track record of steady sovereign access to international capital markets on favorable terms**. Jamaica has issued a global bond in international markets amounting to US$815 million (158 percent of quota) between 2018 and 2022. Despite the pandemic, Jamaica has recorded an average fiscal surplus of about 0.5 percent of GDP over the last five years. As a result, fiscal financing needs have been low, and the maturity of external debt has been extended substantially. Jamaica continues to be rated favorably by major agencies (ratings are stable at B+ by S&P and Fitch and B2 by Moody's, in the middle of the non-investment grade range). Sovereign spreads are around 200 bps, allowing Jamaica full access to international markets on a durable and sustainable basis.

- **Criterion 4. A comfortable international reserve position.** Over the past three years, reserves averaged 117 percent of the Assessing Reserve Adequacy (ARA) metric and reached 115 percent at end-2022. Reserves have remained well-above 80 percent of the ARA metric and above 5 months of imports since 2017. The exchange rate regime is classified as floating with the BOJ intervening occasionally to limit volatility. Gross reserves dropped in early 2022, reflecting a large public sector amortization payment, but have subsequently increased.

Gross International Reserves



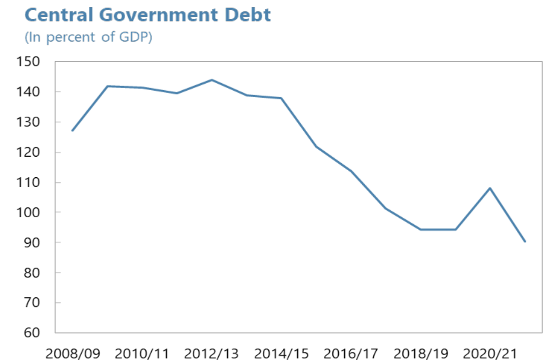
Source: BOJ, IMF Staff calculations.

Fiscal Policy: *Jamaica performs strongly in the fiscal area.*

- **Criterion 5. Sustainable public debt position and sound public finances.** Jamaica has demonstrated a steadfast commitment to debt sustainability, supported by a sound fiscal framework and solid debt management policies:

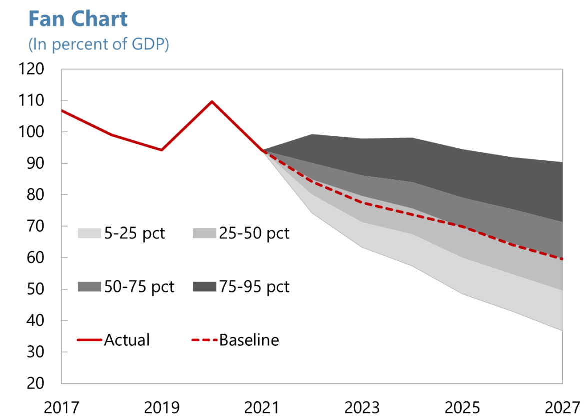
  - **A solid fiscal policy framework**. Jamaica adopted the FRL under the Financial Administration and Audit Act. The fiscal rules established a public debt goal of 60 percent of GDP and a balanced budget rule. The framework includes escape clauses for large shocks and an automatic adjustment mechanism to secure convergence to the debt target. There is broad political support for fiscal prudence and a Fiscal Commission has been created to provide an independent opinion on fiscal policy sustainability.

- **Downward trajectory of public debt**. Central government debt has declined from 142 percent of GDP in 2009/10 to 94 percent of GDP by the end of FY2021/22, despite a significant impact from COVID in FY2020/21.

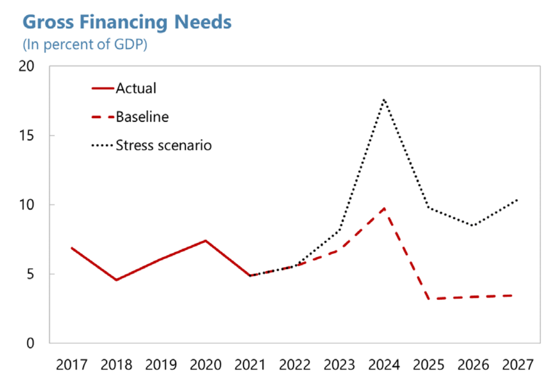


Sources: MOF and IMF staff calculations.

- **The public sector debt is assessed to be sustainable with a high probability.** While Jamaica's debt stock is projected to remain elevated in the near term, the strong fiscal track record, the authorities' commitment to meet the medium-term debt target, and prudent debt management mitigate potential risks. Maintaining large primary surpluses over the medium term (in line with the MTFF) would ensure debt sustainability and lower public debt to 60 percent of GDP by FY 2027/28. While the share of externally issued foreign currency debt remains high, recent debt buybacks and the issuance of long-dated global bonds have reduced gross financing needs to around 5 percent of GDP. Under a stress scenario, financial institutions would need to increase exposures to meet the sovereign's financing needs, but this should be feasible given their current moderate holdings. Risks from contingent liabilities are largely associated with weather-related events and these are mitigated by a diverse set of insurance products that amount to about 5 percent of GDP. In the adverse scenario, public debt would be higher than in the baseline scenario because of lower growth, higher fiscal deficits and higher borrowing costs. However, public debt would be on a downward trajectory and would be sustainable with a high probability (Annex IV, Table 4)



Sources: MOF and IMF staff calculations.



Sources: MOF and IMF staff calculations.

Monetary Policy: *Jamaica performs strongly in the monetary policy area.*

- **Criterion 6. Low and stable inflation in the context of a sound monetary policy framework**. Inflation has remained low and stable, within or below the target bands introduced with the IT regime in 2017—except for 2022, when it rose due to global shocks. Over the last five years

(2018–22) inflation has remained in single digits and averaged 6.1 percent. The credibility of the monetary regime was strengthened with passage of legislation to codify the BOJ's independence. External price shocks have pushed inflation above the target band since August 2021 and the BOJ has responded by raising the policy rate from 0.5 percent in September 2021 to seven percent by end-2022. A tight monetary policy stance and prudent fiscal policy is expected to bring inflation back to the target range by end-2023.

Financial Sector Soundness and Supervision: *Jamaica does not substantially underperform in the financial sector area.*

- **Criterion 7. Sound financial system and the absence of solvency problems that may threaten systemic stability.** The financial sector has remained profitable, well capitalized (capital adequacy of DTIs was at about 14 percent last September—above the regulatory minimum of 10 percent) and liquid. The latest stress tests suggest that the financial sector is resilient to tail events. The main financial stability risks are associated with concentrated ownership, related party and large group exposures, and off-balance sheet positions. As stated in the previous section, staff proposes conditionality to strengthen supervision of financial conglomerates.

- **Criterion 8. Effective financial sector supervision**. The supervisory framework has guided the financial system through a challenging environment over the past years. Adoption of Basel III, risk-based supervision, crisis management and consolidated supervision are advancing. Jamaica is on FATF's list of jurisdictions under increased monitoring. Staff proposes to support these areas through conditionality to strengthen the resolution of financial institutions and improve the AML/CFT framework, correcting weaknesses identified by the last FSAP and FATF assessments.

Data Adequacy: *Jamaica does not substantially underperform in the data adequacy area.*

18. Criterion 9. Data transparency and integrity. Data provision is broadly adequate for surveillance and Jamaica has participated in the GDDS since 2003. Supported by Fund capacity development, improvements to national accounts and price statistics (including GDP rebasing and an updated Household Expenditure Survey), government finance statistics, monetary and financial statistics, and balance of payments continue. The timeliness of monetary and BOP data has improved, and the coverage of fiscal accounts has been expanded to large SOEs. Jamaica did not substantially underperform on data transparency and integrity, but improvements are needed. The authorities will form a committee comprising representatives of the MOF, BOJ, and STATIN to engage with the IMF Statistics Department (*structural benchmark, March 2023)* to identify gaps in data coverage, timeliness, and dissemination practices and develop a roadmap toward subscription to the SDDS, which will be incorporated at the first review.

19. Institutional strength. Jamaica has a relatively good standing on institutional quality. The Worldwide Governance Indicators shows that Jamaica has strong scores on Voice and Accountability and Government Effectiveness.[2] On Political Stability/Absence of Violence and other governance areas, Jamaica scores broadly at the world median.

B. PLL Access and Duration

20. Gross external financing requirements are expected to stabilize at US$2.8 billion by end-2027, which would be financed through FDI and medium- and long-term borrowing (Annex IV). Barring external shocks, gross international reserves are expected to remain above 100 percent of the ARA metric. However, the balance of payments is vulnerable to shocks to commodity prices, lower-than-expected global growth, and tighter-than-expected global financial conditions. Based on an assessment of potential external distress (Annex I), staff has developed an adverse scenario that compared to the baseline assumes: (i) higher oil and food prices; (ii) lower growth in trading partners; and (iii) higher risk premia. Together, these shocks would create an external financing gap of US$ 1.4 billion (Box 2 and Annex II). If the PLL is fully drawn, external debt would rise by 6 percent of GDP and reserves would fall by US$425 million, leaving the ARA metric at about 100 percent.[3]

Box 2. Access Considerations Under an Adverse Scenario

The adverse scenario assumes the materialization of key downside risks to Jamaica's balance of payments, broadly in line with the August 2022 Global Risk Assessment Matrix (G-RAM) and the October 2022 WEO. It entails a growth slowdown in Jamaica's main trading partners (US, UK and Canada) resulting in weaker tourism and remittance receipts, an upward shock to oil and food prices, and tighter and more volatile financial conditions. Against this backdrop and associated disruptions to financial flows, the risk premia for Jamaica could increase and rollover rates decline. The shocks are broadly in line with recent PLL/FCL country cases.[1] The combined impact of these shocks in FY 2023/24 would result in:

- A 15 percent increase in the international oil price relative to the WEO baseline. This would impact the current account through 15 percent higher fuel imports.
- A 10 percent increase in international food prices, which would lead to a similar increase in food imports.
- Lower trading partners' growth by 1¼ percentage point relative to the baseline, broadly consistent with the WEO downside scenario. This would impact the current account through 7 percent lower tourism exports and 5 percent lower remittances (based on estimated elasticities with partners' growth).

[1] Commodity price shocks, weaker growth in trading partners and tightening of financial conditions were the main possible shocks in the recent PLL/FCL requests from Mexico, Morocco, and North Macedonia.

[2] Worldwide Governance Indicators (WGI) project by D. Kaufmann (Natural Resource Governance Institute and Brookings Institution) and A. Kraay (World Bank). Note: The WGI reports aggregate individual governance indicators over the period 1996–2021 for six dimensions of governance. The aggregate indicators combine the views of enterprises, citizens, and expert survey respondents. Results leverage confidence intervals to reflect uncertainty. Most inputs are perception based and thus more subjective than other economic indicators.

[3] The PLL is fully financed by itself even if the RSF disbursements were delayed or the FDI that it is assumed to be catalyzed was not to materialize.

Box 2. Access Considerations Under an Adverse Scenario (Concluded)

- A surge in global financial market volatility with VIX rising by 2 standard deviations, and tighter financial condition through an increase in interest rates by 100 basis points above the baseline, in part reflecting increased risk aversion. This would reduce FDI inflows by 25 percent, generate equity portfolio outflows of about 10 percent and a decline in rollover rates by 10 percent for MLT loans, relative to the baseline. The scenario does not include an impact on rollover rates of short-term debt, which mostly consists of bank liabilities. Financial regulation ensures these liabilities are covered by liquid assets and are thus not a main source of external risk in Jamaica.

The adverse scenario would give rise to a financing need of about US$1.4 billion in the balance of payments compared to the baseline. This would be covered by financial support under the PLL for about US$960 million by the end of 2024 (equivalent to 190 percent of the quota) and use of reserves that would place the ARA metric at around 100 percent.

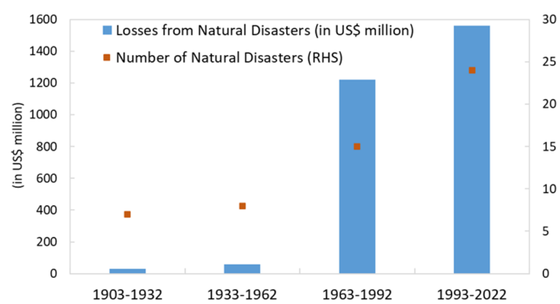
21. The authorities are requesting a 2-year PLL arrangement with access of SDR 727.51 million (or 190 percent of quota). As detailed in the Written Communication (Tables 1 and 2), structural benchmarks will focus on improvements in crisis management, the supervision of financial conglomerates, improvements in the AML/CFT framework, and developing a roadmap for SDDS subscription. Indicative targets are proposed for the public sector fiscal balance and for NIR.

22. The authorities intend to treat the PLL as precautionary. Jamaica is expected to be in a strong position to exit the PLL by end-2024, as external risks subside.

C. Resilience and Sustainability Facility

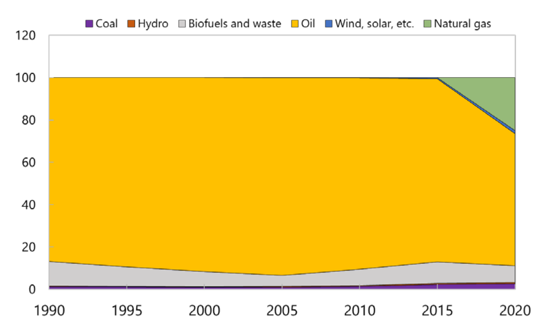
23. Climate change poses risks to Jamaica's external position over the medium term, due to the potential impact of natural disasters and Jamaica's reliance on energy imports:

Frequency and Damages from Natural Disasters
(In US$ Million)



Source: Emergency Events Database and IMF Staff Calculations

Energy Supply by Source
(In percent of total)



Sources: IEA World Energy Balances and IMF Staff Calculations.

- **Natural disasters have inflicted significant damage over the past decades**. Hydrometeorological events have been the most prominent, with two hurricanes in the early 2000s causing cumulative losses of 11 percent of GDP. Looking ahead, expected damages from these events could also be significant. For a one-in-100-year event, fiscal losses could exceed 10 percent of GDP (Annex III). In addition to saddling the public finances with reconstruction costs, disasters also affect key economic sectors. Tourism—which provides about 20 percent of GDP in FX inflows—is highly sensitive to the severity and frequency of natural disasters, as they disrupt the tourist arrivals and erode nature-based assets. They also impact the agricultural sector, which is already coping with rising temperatures, sea levels, and more volatile precipitation patterns.

- **Jamaica's contribution to global greenhouse gas (GHG) emissions is negligible, but the country is dependent on fossil fuel imports for over 85 percent of electricity generation**. This makes Jamaica's external position vulnerable to volatility in international commodity prices. Macroeconomic stability would benefit from transitioning away from hydrocarbons and reducing energy consumption, which will reduce the fossil fuel import bill over the long term (although this would require an up-front investment in imported equipment that would create short-term external financing needs).

24. Jamaica is committed to building climate resilience (Annex III). The National Development Plan provides the framework for climate initiatives, the energy sector plan focuses on mitigation, and the water sector strategy on resilient water infrastructure. The Nationally Determined Contribution (NDC) outlines a strategy for adaptation and mitigation, including ambitious objectives for the transition to renewables.[4] The authorities have developed a Disaster Management Program and taken steps to improve the response to natural disasters—including a relatively well-developed social safety net and a financing framework—aiming at minimizing damage, amplifying relief response, and designing recovery and rehabilitation procedures. They are also working on a National Adaptation Plan and a strategy for Low Carbon Emissions and Climate Resilient Development.

25. Building on the authorities' climate focused strategic objectives, RSF measures have been identified in close collaboration with the World Bank (WB) and the Inter-American Development Bank (IDB) (Annex V). This collaboration began in September 2022— staff also reached out to bilateral development partners during the mission—and identified synergies embedded in the RSF measures. There was agreement that the RSF can perform a coordinating role for the authorities' strategic objectives. Overall, collaboration has comprised three stages: (i) information sharing, (ii) discussion of RSF measures; and (iii) identification of TA areas that can support RSF goals and the authorities' agenda. The inter-institutional collaboration continues to plan technical assistance that can support implementation of reforms.

26. The RSF reform agenda comprises three pillars (Text Table 3). This is described in Annex III—including a table with analytical underpinnings, timing, and objective of each measure:[5]

- **Pillar 1: Building Fiscal and Physical Resilience to Natural Disasters and Climate Change**. The authorities will take steps to enhance fiscal and financial resilience against natural disaster risks, including through development of a National Natural Disaster Risk Financing Policy and improved fiscal policy frameworks. Accordingly, the Ministry of Finance and the Public Service will develop methodologies and tools to incorporate analysis of climate-related risks in fiscal

[4] In August 2021 the authorities with the support of the WB and the NDC partnership developed an NDC implementation plan against which updates on commitments will be duly reported by the Climate Change Division (CCD) in the Ministry of Economic Growth and Job Creation (MEGJC). The sectoral plans embedding climate change mitigation consideration are also quite recent and at early stage of implementation.

[5] The measures are also informed by recommendations of a draft C-PIMA prepared by the IMF's FAD, which will be finalized by the time of the first review.

policy documents. The Government will further strengthen the financing instruments for post-disaster recovery and reconstruction and plans to establish a National Natural Disaster Reserve Fund (NDRF) for catastrophic events (to be defined in the Financial Administration and Audit Act). To improve the prioritization and allocation of fiscal resources for resilient infrastructure, the authorities will incorporate climate considerations into project appraisal and selection. In parallel, the PPP framework will be further amended to include climate requirements in PPP agreements from project identification to contract management.

- **Pillar 2: Strengthening mitigation by increasing energy efficiency and promoting renewable energy.** Jamaica's policy framework implies that about 80 percent of emission reductions will come from a ramp up of renewable electricity generation and improvements in energy efficiency. To complement recently adopted LED street lighting installation and net billing regulations, the authorities will submit to parliament a bill to provide fiscal incentives for investments in renewables. To broaden recent government policies to incentivize electric vehicle usage—such as lower duty rates and the elimination of license fee requirements for electric vehicles—the government will submit to parliament a comprehensive electric vehicle policy.[6] Also, building on the successful implementation of the energy management and efficiency program (funded by the IDB, the Caribbean Investment Fund, and Japan International Cooperation Agency) and the school energy efficiency program (supported by the WB), broader guidelines will be adopted to increase energy efficiency in all public buildings.

- **Pillar 3: Greening the financial sector.** Financial institutions will play an important role in raising private climate finance. Strengthening data collection and data-based risk management in the financial sector will be an important precondition for the reporting, assessment, and management of climate-related risks. The BOJ will publish a climate risks assessment and define a timeline to incorporate climate considerations into supervisory activities. In addition, it will adopt a monitoring framework that improves data collection and establishes reporting requirements for financial institutions to implement Climate Related Financial Risks stress testing. The authorities are also developing an institutional framework for green-bond issuance and trading as a means to mobilize private sector financing for climate adaptation and emission reduction projects.

27. In support of their home-grown reform agenda, the authorities have requested access to SDR574.35 million (150 percent of quota) under the RSF. Jamaica is eligible for RSF financing. The arrangement is proposed to coincide with the 24-month PLL arrangement, with RSF disbursements aligned with the PLL's semi-annual reviews. Staff assesses that the access level is justified by the strength and ambition of RSF-supported measures, the balance of payments impact associated with the implementation of this reform agenda, and an adequate capacity to repay the

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[6] Through the approval of the Customs Tariff (Revision) (Amendment) (No. 2), Resolution, 2022, and the Road Traffic (License Duties) Order—July 19th, 2022.

Fund. The RSF will support reforms that can reduce long-term vulnerabilities of the external position and build-up policy space and buffers to insure against risks from climate change:[7]

- **Strength of the reform agenda.** Measures are being proposed to make progress in dealing with adaptation, mitigation and transition risks. Reform measures 1-6 focus on enhancements to the fiscal framework to manage climate events, facilitate investment in climate-related projects, and take better account of climate risks in fiscal decisions. These reforms will be instrumental to foster investments that will enhance efforts to adapt to climate change. Reform measures 7-9 aim at increasing renewables and curbing energy use to reduce the dependence on energy imports and achieve the NDC's emission reduction targets. They have the potential to increase generation through renewable sources, expand the electric vehicle share in both the private fleet and public transportation, and reduce energy consumption in public buildings, contributing to decarbonize the Jamaican economy, critical to mitigate the impact of climate change (Annex III ¶11). Reform measures 10-12 help manage transition risks in the financial sector and incentivize private climate financing.

- **Balance of payment impact.** Jamaica's adaptation and decarbonization plans entail short-term costs but will provide significant gains over the medium to long term. This is the case, for example, for adaptation projects that may be spurred by reform measures 1-6, or investments associated with reform measures 7-9, aiming to incentivize renewables and energy-efficient equipment, though with a short-term impact on the balance of payments through higher imports and current account deficits. Staff estimated costs of the likely climate projects (drawing on information from climate initiatives included in the NDC and sectoral plans provided by public agencies, Text Table 2 and Table 2 in Annex III) total around US$2.4 billion (about 14 percent of GDP).[8] While estimates of the import intensity of these initiatives are not available, a conservative assumption of 50 percent import content would mean this spending would increase the current

Text Table 2. Jamaica: Cost of Climate-Related Projects
(In USD million)

NDC Projects	
Energy	976
Transportation	30
Other	47
Total for NDC	*1,054*
Other Climate Projects	
Adaptation	160
Water	1,090
Transportation	13
Energy	4
Other	85
Total for Other Climate Projects	*1,352*
Total	**2,406**

Sources: Planning Instutite of Jamaica, National Works Agency, National Water Commission, and Ministry of Science, Energy and Technology.

[7] Investment in resilient public infrastructure can have an important impact on output—ongoing work using a DSGE model (Fernandez-Corugedo, Gonzalez-Gomes, and Guerson, forthcoming 2023 'The Macroeconomic Returns of Investment in Resilience to Natural Disasters under Climate Change: A DSGE Approach') points to potential long-run gains to the level of GDP of 2-3½ percent by 2050.

[8] Information comes from the Planning Institute of Jamaica, the National Works Agency, the National Water Commission and the Ministry of Science, Energy and Technology.

account deficit by around 1 percent of GDP per year during 2024-30, financed by higher FDI and the multilateral and private financing that is expected to be catalyzed by the RSF. [9]

Text Table 3. Jamaica: Reform Measures Supported by the RSF

RSF Approval	PLL 1st Review (PLL & RSF 1st Review, End-Jun 2023)	PLL 2nd Review (PLL & RSF 2nd Review, End-Dec 2023)	PLL 3rd Review (PLL & RSF 3rd Review, End-Jun 2024)
Pillar 1: Building fiscal and physical resilience to natural disasters and climate change	**RM1.** The Ministry of Finance and Public Service (MOFPS) to adopt a National Natural Disaster Risk Financing (DRF) policy. **RM2.** The Development Bank of Jamaica in consultation with the MOFPS to modify the Policy and Institutional Framework for the Public-Private Partnership (PPP) policy Program of the Government of Jamaica to include climate requirements in PPP project agreements from project identification to contract management and revise the PPP Standard Operating Procedure Manual to reflect these requirements.	**RM3.** The Public Investment Appraisal Branch (PIAB) to define a methodology to conduct climate impact assessments at project appraisal stage (*project proposal stage*) and incorporate the methodology in the Public Investment Management System (PIMS) handbook. **RM4.** The Planning Institute of Jamaica (PIOJ) to define and publish project selection criteria including climate change criteria.	**RM5.** The MOFPS to conduct and publish in the Fiscal Risk Statement quantitative analysis of the fiscal risks generated by climate change.
Pillar 2: Strengthening mitigation/promoting renewables	**RM8.** The Ministry of Science, Energy and Technology (MSET) to submit to parliament the electric vehicle policy, in line with the objectives in paragraph 23 of the Written Statement. **RM9.** The MSET to approve guidelines adapted to the type and purpose of the structures, to reduce energy use in schools, hospitals, and public buildings for the existing and new structures.	**RM6.** The MOFPS to submit to parliament an amendment to the Financial Administration and Audit Act to establish a National Natural Disaster Reserve Fund (NDRF) subaccount under the consolidated fund account. In parallel, the MOFPS to approve financial regulations for a transparent administration and reporting of the NDRF.	**RM7.** The MOFPS to submit to parliament a bill to incentivize investment in renewables through fiscal measures.
Pillar 3: Greening the financial sector		**RM10.** BOJ to publish a climate risks assessment (including a diagnostic of related climate and environmental risks detailing the current governance and regulatory regime) and define a timeline to embed these risks in supervisory activities and related databases for the development of climate risks assessments.	**RM11.** Adopt a monitoring framework that improves data collection and establishes the reporting requirements for financial institutions to implement Climate Related Financial Risks stress testing and for the BOJ to gradually integrate climate risks in supervision and macroprudential policy formulation. **RM12.** Establish a regulatory framework for green-bond issuance and trading.

Source: Written Statement Table 3 and Annex III Table 3.

28. Reform measures under the RSF-supported policies should increase the prospects for privately funded investment. In particular, it is expected that incentives for investments in renewables, the greening of the financial system through enhancements in the management of climate risks by regulators/financial institutions, and the institutional framework for green bonds should increase private inflows. In addition, improvements to policy frameworks (e.g., in the management of natural disasters, assessment of climate risks, and PPP frameworks) will facilitate development partners' financing and help foster investor confidence and incentivize private investment. Following an initial meeting in early 2023, the Fund's Climate Finance Working Group continues to engage with the authorities, development partners and the private sector to explore additional ways to leverage the RSF to catalyze private climate financing.

[9] The academic literature suggests that estimates of import content at around 50 percent of investment are plausible even in relatively open advanced economies, suggesting that the assumption for Jamaica is conservative. See: Giancarlo Corsetti and Gernot J. Müller, "Twin deficits: squaring theory, evidence and common sense", Economic Policy October 2006; R. Hickey, M. Lozej & D. Smyth, "Government Investment, Its Financing and the Public Capital Stock: A Small Open Economy Perspective", Research Technical Paper, Vol. 2019, No. 9; Central Bank of Ireland.

29. The RSF is expected to catalyze official financing that will help build fiscal buffers and improve the debt dynamics. Discussions with bilateral donors suggest that greater coordination of the authorities' climate agenda through the RSF could expand the envelope for official flows by identifying financing needs; the authorities are working with partners to define a framework for official climate financing. The World Bank is at the initial stage of preparation of a Development Policy Financing operation in the amount of US$150 million. Among the areas under consideration are reforms targeting the low carbon transition and fiscal and financial resilience to climate change, which would complement structural reform measures under PLL/RSF. The IDB country strategy for Jamaica for the next five years places particular focus on developing private sector financing. It supports innovative approaches and technologies to reduce emissions and increase climate resilience across economic sectors. The reforms under the RSF are expected to help build buffers to mitigate shocks and lead to a reallocation of public investment towards climate goals. In addition, resources available under the RSF will be disbursed as budget support and substitute more expensive market financing, improving debt dynamics and lowering overall financing costs.

D. Capacity to Repay the Fund

30. Debt is sustainable with high probability even in a PLL disbursement scenario. Jamaica has demonstrated an excellent track record meeting obligations to the Fund and adequate buffers, strong policies, and credible policy frameworks mitigate risks.

31. Jamaica's capacity to repay the Fund is adequate (Table 6). Debt outstanding and debt service to the IMF in a PLL purchase scenario would make credit outstanding reach around 375 percent of quota (225 percent of quota excluding the RSF) or 10 percent of GDP in 2024 (Figure 5, Panel A). Debt service to the Fund, including resources drawn under the RSF, would peak at SDR 379 million (about 2.4 percent of GDP). Jamaica's largest peaks for both credit outstanding (as percent of GDP) and debt service to the Fund with RST resources are at the 75th percentile of comparators (Figure 5, Panel C). Over the longer term, risks are mitigated by the authorities' strong commitment to structural reforms, a fiscal stance in line with the MTFF, and international reserves remaining at around 100 percent of the ARA metric in the projection period. The program is fully financed (without RSF disbursements) over the next 12 months, with good prospects for the remainder of the program.

32. The two arrangements would represent manageable credit and liquidity risks for the Fund. Full drawing under the proposed PLL would bring Jamaica's outstanding use of GRA resources to an amount equivalent to SDR 1.43 billion. The proposed access represents a small share of total GRA commitments (0.73 percent), suggesting that the effect on the Fund's liquidity remains manageable. In a PLL purchase scenario, GRA credit to Jamaica would be equivalent to about 0.78 percent of current GRA credit outstanding (as of July 31, 2022). This represents about 3.5 percent of the Fund's end-FY2022 precautionary balances.

STAFF APPRAISAL

33. Jamaica's track record of building institutions and prioritizing macroeconomic stability has aided the post-pandemic recovery. The recovery is supported by a rebound in tourism.

Inflation is expected to converge to the BOJ target range by end-2023. The external position is solid, the country has adequate levels of international reserves, and the financial sector remains well-capitalized and liquid. The post-pandemic increase in the primary surplus and the ongoing monetary tightening strike the right balance in responding to the negative external shocks, reducing inflation and underscoring Jamaica's commitment to debt sustainability.

34. The authorities continue to enhance their already-sound policy frameworks. The Fiscal Commission will strengthen the fiscal responsibility framework, public sector reforms will create a standardized and equitable pay structure for government employees that rewards performance, and efforts to strengthen tax and customs administration will support the revenue envelope. Amendments to the BOJ Act have strengthened the central bank's autonomy and governance structures. Progress is also being made in the adoption of the Basel III framework and the enhancement of oversight of the financial system.

35. Staff supports Jamaica's request for access of SDR727.51 million (190 percent of quota) under a 2-year PLL. Jamaica's economic fundamentals and policy frameworks are sound, the country has a track record of implementing sound policies and remains committed to doing so in the future. Jamaica performs strongly in three out of the five qualification areas, meeting requirements for a PLL. The arrangement will provide valuable insurance against risks from higher commodity prices, a global slowdown, tighter-than-envisaged global financial conditions, and new COVID outbreaks.

36. The arrangement will support the authorities' plans to improve financial supervision, the AML/CFT framework, and data reporting. The PLL will support legislative efforts to improve the resolution regime for non-viable financial institutions and ensure consolidated supervision of large financial conglomerates. The PLL will also prioritize improving transparency of beneficial ownership regime, in line with the action plan agreed with FATF. Finally, capacity development support will strengthen data transparency and integrity to ensure that Jamaica becomes a subscriber to the SDDS.

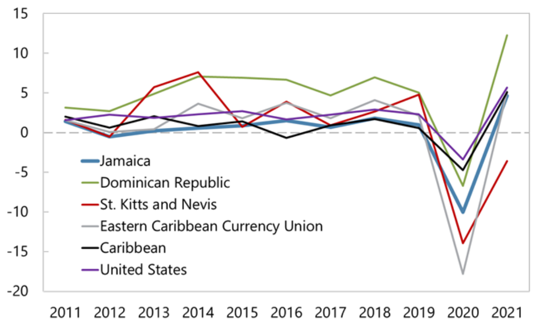
37. Jamaica is steadfastly committed to addressing climate change vulnerabilities. Climate change poses high risks to Jamaica's economy. The National Development Plan provides the framework for climate initiatives, and the Nationally Determined Contribution outlines a broad-based strategy for adaptation and mitigation, including ambitious objectives in transitioning to renewables.

38. Staff supports Jamaica's request for access of SDR574.35 million (150 percent of quota) under the RSF. Building on Jamaica's home-grown climate policy frameworks, the RSF goals are to strengthen physical and fiscal resilience to climate change, create incentives to switch to renewables and to reduce energy consumption, develop new markets for green financial instruments, and require financial intermediaries to properly manage climate risks. In so doing, the RSF will help reduce vulnerabilities and catalyze private and official financing for climate-related investment.

Figure 1. Jamaica: Real Sector Developments

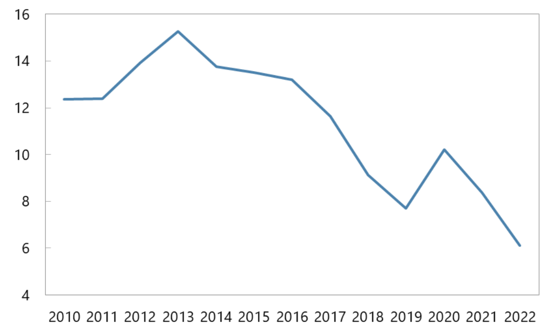
After the massive contraction in 2020, the economy is slowly gaining momentum…

Real GDP Growth
(In percent)



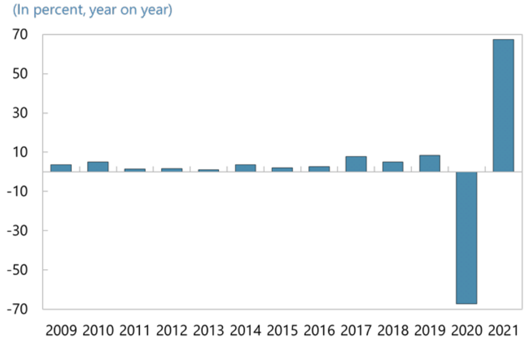
…and unemployment has fallen to historic lows.

Unemployment
(In percent)



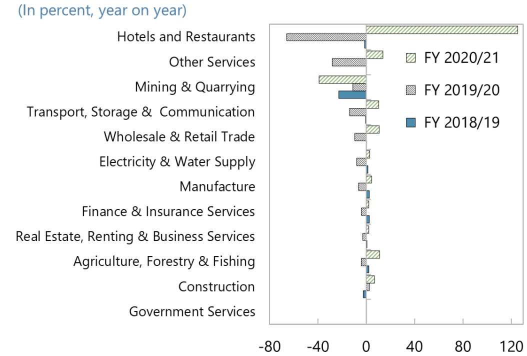
Tourism and hospitality industry have rebounded…

Annual Tourism Performance
(In percent, year on year)



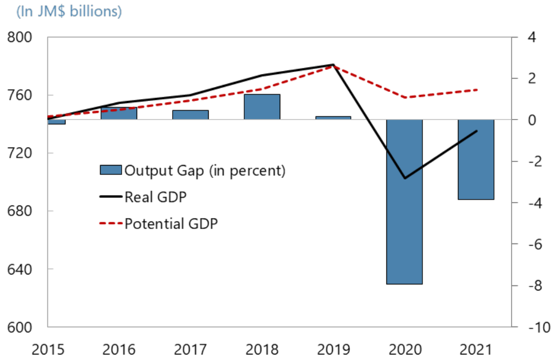
…and most sectors have picked up, except mining.

Real GDP: Sectors
(In percent, year on year)



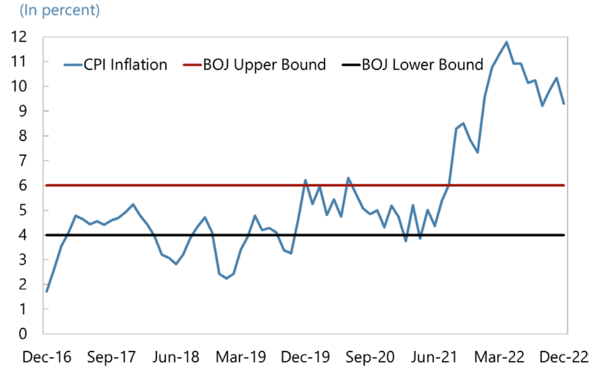
Output gap is closing…

Real GDP and Output Gap
(In JM$ billions)



…and inflation, while receding, remains above the target band.

CPI Inflation versus BOJ Target Band
(In percent)

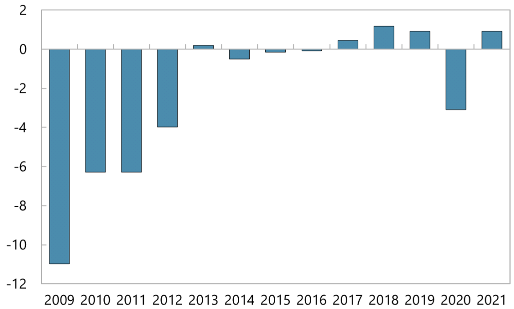


Source: Jamaican and IMF staff calculations.

Figure 2. Jamaica: Fiscal Sector Developments

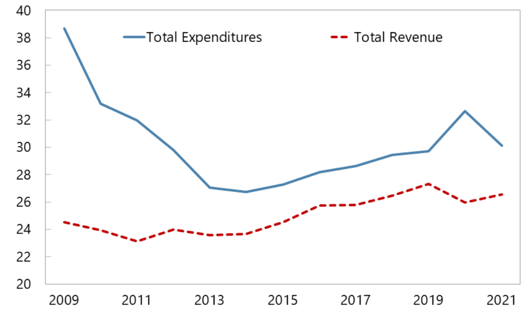
Central government fiscal balance is back in surplus…

Central Government Balance
(In percent of GDP)



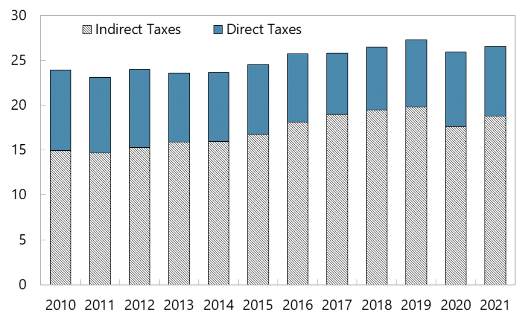
…tax revenues are buoyant while total spending was contained.

Central Government Revenues and Expenditures
(In percent of GDP)



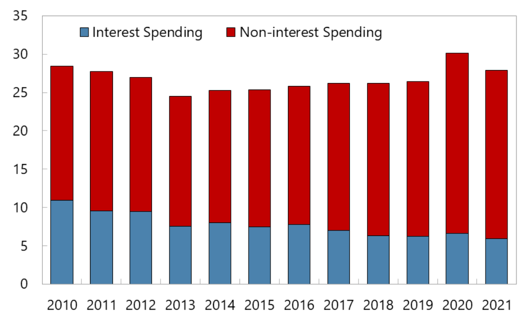
Higher tax revenues were the result of strong GST collections…

Tax Revenue
(In percent of GDP)



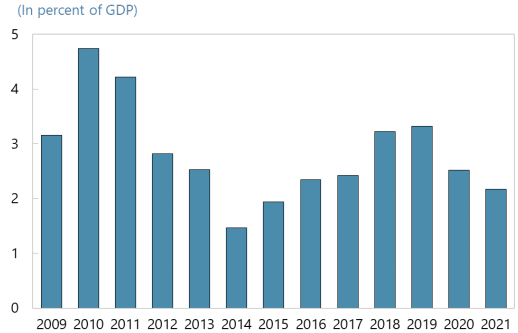
…and the decline in spending was mainly from reduction in wage bill after the spike from pandemic related needs.

Central Government Current Spending
(In percent of GDP)



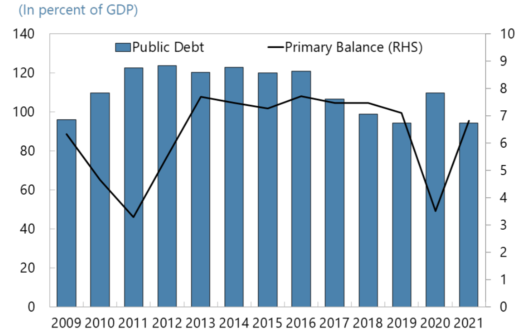
Capital spending continued to remain subdued.

Central Government Capital Spending
(In percent of GDP)



Public debt is on a solid downward path to meet the FRL debt target.

Public Debt and Primary Balance
(In percent of GDP)



Source: Jamaican and IMF staff calculations.

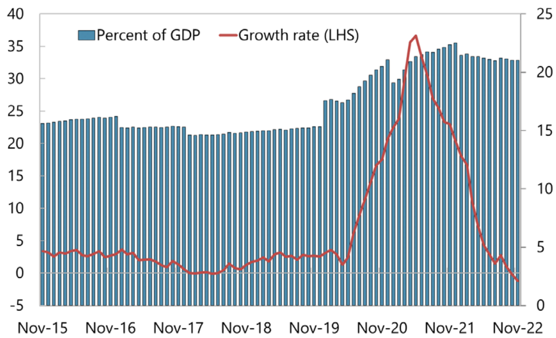
Figure 3. Jamaica: External Sector Developments

Remittances receipts again boosted the CA balance in 2021 but were falling in 2022.

Tourism—especially from the US—started to recover.

Monthly Remittances

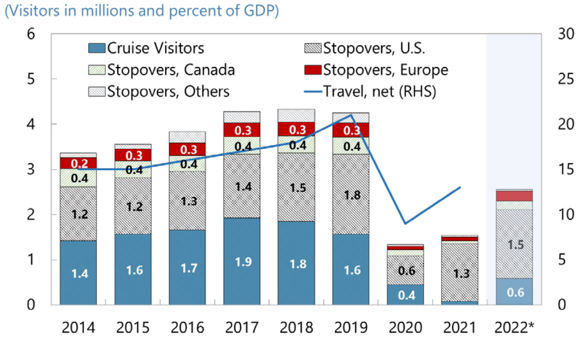
(Percent (LHS), percent of GDP (RHS), 12-month moving sum)



Sources: BOJ, IMF staff calculations.

Total Visitor Arrivals and Travel Exports

(Visitors in millions and percent of GDP)



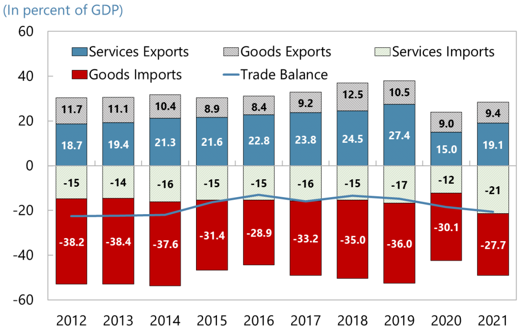
Sources: Jamaica Tourism Board, and IMF staff calculations.
*Jan - Oct only

The trade balance declined…

…amid below-average mining exports.

Trade Balance

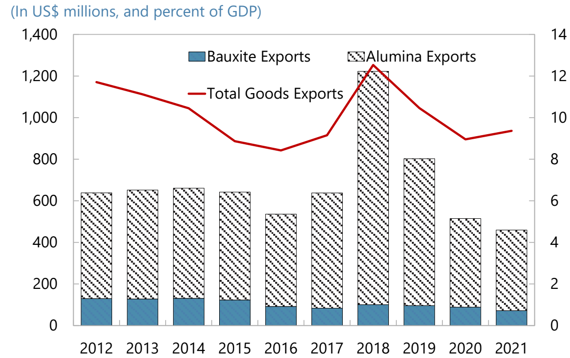
(In percent of GDP)



Sources: BOJ, and IMF staff calculations.

Mining Exports

(In US$ millions, and percent of GDP)



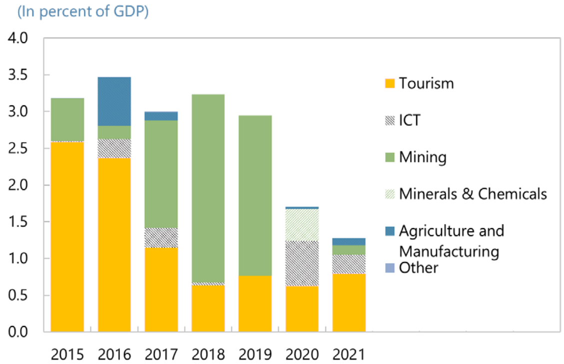
Sources: BOJ, and IMF staff calculations.

COVID hit FDI inflows, but existing tourism projects continued to be executed.

The real effective exchange rate depreciated by 4 percent in 2021 but has appreciated in the first half of 2022.

FDI by Sector

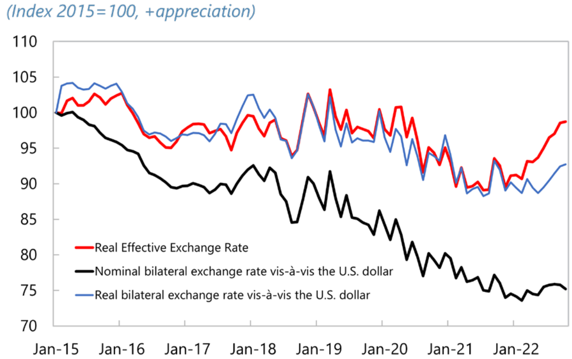
(In percent of GDP)



Sources: BOJ, and IMF staff calculations.

Nominal and Real Effective Exchange Rate

(Index 2015=100, +appreciation)

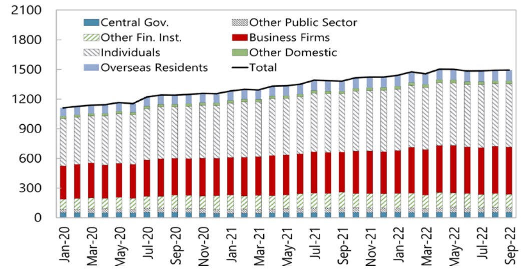


Sources: BOJ, and IMF staff calculations.

Figure 4. Jamaica: Monetary and Financial Sector Developments

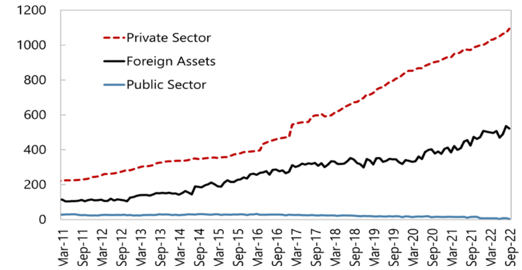
Banking system deposits have been growing steadily with individual and businesses dominating.

Commercial Bank Deposits
(In JM$ billions)



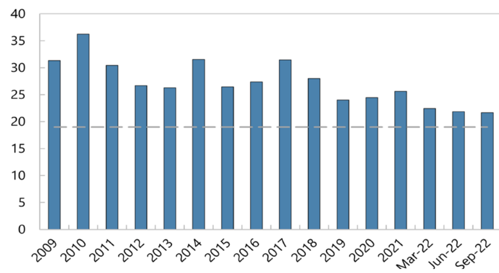
Private credit continues to grow reflecting post-Covid rebound and good prospects going forward.

Evolution of Credit and Foreign Assets
(In JM$ billions)



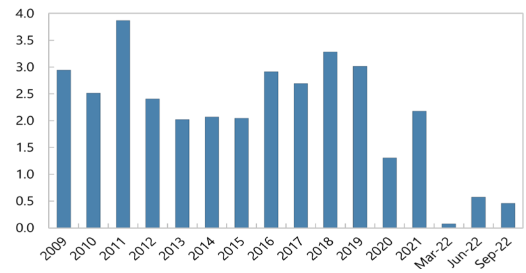
The Depository Institutions retain liquidity above required minimum...

Domestic Currency Liquid Assets
(Share of prescribed liabilities; in percent)



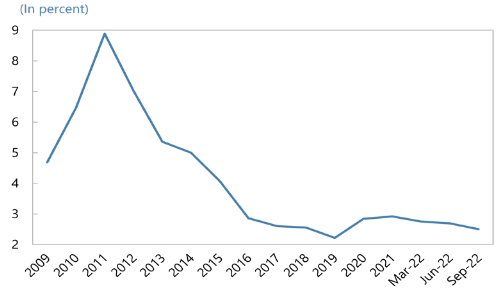
...with moderate profitability.

Return on Assets
(In percent)



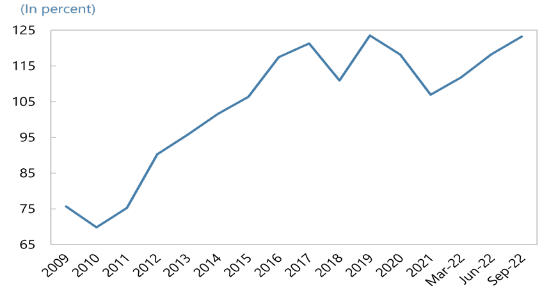
The NPL ratio is very low...

Asset Quality: NPLs/Loans
(In percent)



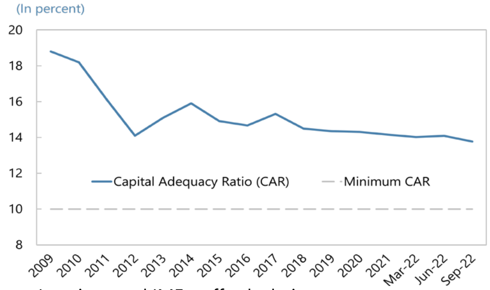
... with sufficient provisioning.

Asset Quality: Provision for Loan Losses/NPLs
(In percent)



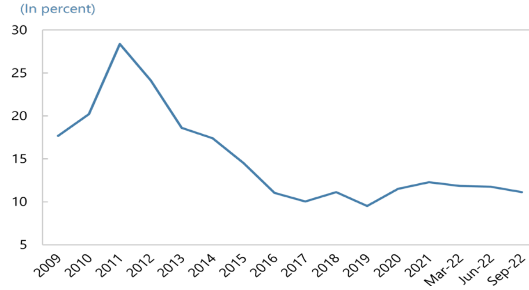
The capital buffers are kept well above the minimum...

Asset Quality: Capital Adequacy
(In percent)



...and sufficient to absorb potential losses.

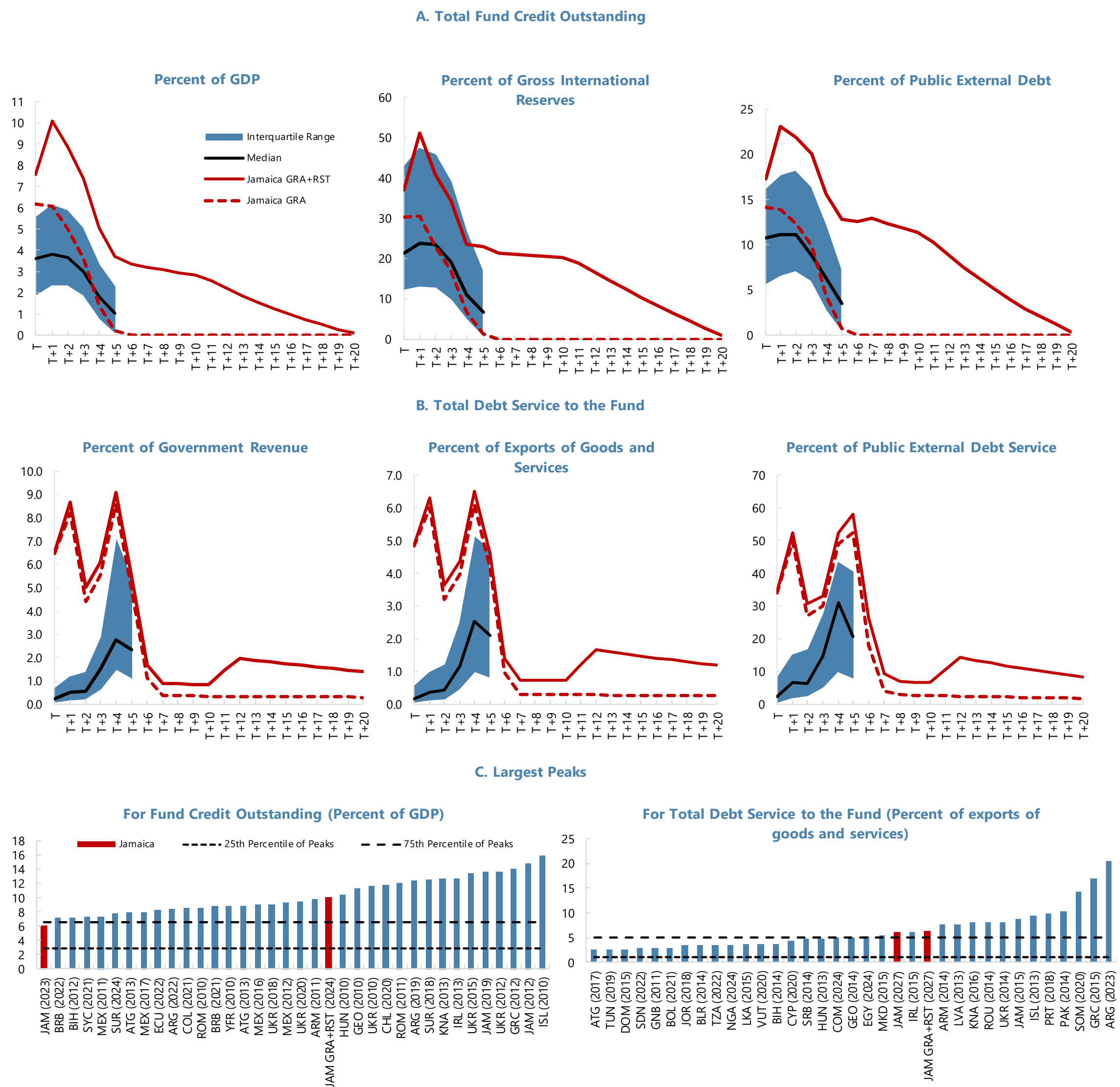
Asset Quality: NPLs/Capital + Provision for Loan Losses
(In percent)



Source: Jamaican and IMF staff calculations.

Figure 5. Jamaica: Capacity to Repay Indicators Compared to GRA-Only Borrowing Counties, All Programs

(In percent of the indicated variable)



Sources: IMF Finance Department, World Economic Outlook.

Notes:

1) T = date of GRA arrangement approval.
2) Red lines/bars indicate the CtR indicator for the arrangement of interest.
3) The median, interquartile range, and comparator bars reflect all RFIs and UCT arrangements approved under the GRA (excluding blending arrangements) between 2008 and 2022.
4) Countries in the control group with multiple RFIs and/or GRA arrangements are entered as separate events in the database.
5) Comparator series is for GRA arrangements only and runs up to T+5.
6) Total Debt Service to the Fund consists of GRA, RST and SDR-related obligations. Reflects prospective payments, including for the current year.
7) All charts use data at the time of program approval with the exception of the chart on the right-hand side of section C, which uses ex-post data due to data limitations.
8) In section C left-hand chart, Jamaica (2023) is not among the 35 largest peaks and is illustrated for the purposes of comparison only.

Table 1a. Jamaica: Selected Economic Indicators 1/ (Fiscal Year)

Population (2019): 2.73 million | Per capita GDP (2019): US$5729
Quota (current; millions SDRs): 382.9 | Literacy rate (2015)/Poverty rate (2017): 87%/12.6%
Main products and exports: Alumina, tourism, chemicals, mineral fuels, bauxite | Unemployment rate (July 2022): 6.6%

				Projections					
	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28
(Annual percent change, unless otherwise indicated)									
GDP and Prices									
Real GDP	-0.1	-11.0	8.2	3.5	2.0	1.8	1.7	1.6	1.6
Nominal GDP	3.3	-8.1	19.2	11.5	7.3	6.4	6.8	6.7	6.7
Consumer price index (end of period)	4.8	5.2	11.3	7.7	5.2	4.5	5.0	5.0	5.0
Consumer price index (average)	4.6	5.0	7.4	9.5	6.5	4.9	4.8	5.0	5.0
Exchange rate (end of period, J$/US$)	134.0	146.6	153.8	...	...	...	...	...	...
End-of-period REER (appreciation +) (INS) 2/	-2.4	-8.4	1.0	...	...	...	...	...	...
Treasury bill rate (end-of-period, percent)	1.8	1.5	6.4	...	...	...	...	...	...
Unemployment rate (percent) 2/	7.3	8.9	6.2	...	...	...	...	...	...
(In percent of GDP)									
Government Operations									
Budgetary revenue	30.6	29.5	31.0	29.4	29.4	29.4	29.4	29.5	29.7
Of which: Tax revenue	27.3	25.9	26.5	26.4	26.4	26.4	26.4	26.5	26.6
Budgetary expenditure	29.7	32.6	30.1	29.1	29.1	29.1	27.9	27.0	27.2
Primary expenditure	23.5	26.0	24.2	23.6	24.0	24.2	23.9	23.8	24.3
Of which: Wages and salaries	9.2	10.7	9.6	10.9	11.3	11.5	11.5	11.5	11.5
Interest payments	6.2	6.6	5.9	5.5	5.1	4.9	4.1	3.2	2.8
Budget balance	0.9	-3.1	0.9	0.3	0.3	0.3	1.5	2.5	2.5
Of which: Central government primary balance	7.1	3.5	6.8	5.8	5.4	5.2	5.6	5.7	5.3
Public entities balance	0.1	-0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Public sector balance	1.0	-3.6	0.9	0.3	0.3	0.3	1.5	2.5	2.5
Public debt (FRL definition) 3/	94.3	109.7	94.2	84.1	77.9	74.0	69.8	64.0	59.5
External Sector									
Current account balance	-1.7	-1.1	-1.2	-2.5	-2.8	-2.5	-2.0	-2.0	-2.0
Of which: Exports of goods, f.o.b.	9.8	9.2	9.4	9.9	9.7	9.5	9.3	9.1	9.1
... of services	27.2	10.9	22.7	28.1	28.1	28.4	28.7	28.9	29.0
Imports of goods, f.o.b.	34.7	29.4	31.4	36.9	35.2	35.0	34.9	35.0	35.2
... of services	16.4	12.3	22.1	21.0	19.8	19.2	18.5	18.2	17.8
Gross international reserves (US$ millions)	3,688	4,244	4,324	4,191	4,100	4,250	4,350	4,450	4,550
(Percent of GDP)									
Money and Credit									
Net foreign assets	18.7	20.6	20.8	15.6	15.4	16.7	16.8	16.7	16.5
Net domestic assets	40.7	53.8	49.6	52.8	52.8	51.9	51.9	52.4	53.1
Of which: Credit to the private sector	49.0	57.7	52.9	51.6	51.9	52.6	53.2	54.2	55.4
Credit to the central government	12.2	20.3	17.0	13.6	11.2	9.2	8.5	7.7	7.5
Broad money	59.4	74.4	70.4	68.4	68.2	68.6	68.8	69.1	69.7
Memorandum Item:									
Nominal GDP (J$ billions)	2,121	1,949	2,322	2,588	2,777	2,955	3,156	3,369	3,594

Sources: Jamaican authorities; and Fund staff estimates and projections.

1/ Fiscal years run from April 1 to March 31. Authorities' budgets presented according to IMF definitions.

2/ As of January in each period.

3/ Consolidated central government and public bodies' debt, consistent with the Fiscal Responsibility Law.

Table 1b. Jamaica: Selected Economic Indicators 1/ (Calendar Year)

Population (2018): 2.73 million — Per capita GDP (2018): US$5733
Quota (current; millions SDRs): 382.9 — Literacy rate (2015)/Poverty rate (2017): 87%/12.6%
Main products and exports: Alumina, tourism, chemicals, mineral fuels, bauxite — Unemployment rate (July 2022): 6.6%

				Projections					
	2019	2020	2021	2022	2023	2024	2025	2026	2027
(Annual percent change, unless otherwise indicated)									
GDP and Prices									
Real GDP	1.0	-9.9	4.6	4.0	2.2	2.0	1.7	1.6	1.6
Nominal GDP	4.1	-6.8	12.4	12.0	7.5	6.6	6.8	6.6	6.6
Consumer price index (end of period)	6.2	5.2	7.3	9.4	5.5	4.5	5.0	5.0	5.0
Consumer price index (average)	3.9	5.2	5.9	10.4	7.0	5.0	5.0	5.0	5.0
Exchange rate (end of period, J$/US$)	131.2	141.7	155.1	152.3	…	…	…	…	…
End-of-period REER (appreciation +) (INS)	-0.3	-5.4	-4.1	…	…	…	…	…	…
Treasury bill rate (end-of-period, percent)	1.6	0.8	4.3	8.2	…	…	…	…	…
Unemployment rate (percent)	7.7	10.2	8.4	…	…	…	…	…	…
(In percent of GDP)									
Government Operations 1/									
Budgetary revenue	30.6	29.5	31.0	29.4	29.4	29.4	29.4	29.5	29.7
Of which: Tax revenue	27.3	25.9	26.5	26.4	26.4	26.4	26.4	26.5	26.6
Budgetary expenditure	29.7	32.6	30.1	29.1	29.1	29.1	27.9	27.0	27.2
Primary expenditure	23.5	26.0	24.2	23.6	24.0	24.2	23.9	23.8	24.3
Of which: Wages and salaries	9.2	10.7	9.6	10.9	11.3	11.5	11.5	11.5	11.5
Interest payments	6.2	6.6	5.9	5.5	5.1	4.9	4.1	3.2	2.8
Budget balance	0.9	-3.1	0.9	0.3	0.3	0.3	1.5	2.5	2.5
Of which: Central government primary balance	7.1	3.5	6.8	5.8	5.4	5.2	5.6	5.7	5.3
Public entities balance	0.1	-0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Public sector balance	1.0	-3.6	0.9	0.3	0.3	0.3	1.5	2.5	2.5
Public debt (FRL definition) 2/	94.3	109.7	94.2	84.1	77.9	74.0	69.8	64.0	59.5
External Sector									
Current account balance	-2.2	-0.4	0.7	-3.2	-2.9	-2.7	-2.1	-2.0	-2.0
Of which: Exports of goods, f.o.b.	10.5	9.0	9.8	9.8	10.1	9.8	9.6	9.4	9.3
… of services	27.4	15.1	19.9	27.9	29.0	29.0	29.4	29.6	29.7
Of which: Imports of goods, f.o.b.	36.0	30.2	29.1	37.5	36.9	35.8	35.8	35.8	36.0
… of services	16.7	12.3	21.4	21.8	20.6	19.9	19.1	18.7	18.3
Gross international reserves (US$ millions)	3,631	4,081	4,833	4,428	4,065	4,200	4,350	4,425	4,525
(Changes in percent of beginning of period broad money)									
Money and Credit									
Net foreign assets	5.9	-0.1	8.8	-4.6	-0.1	3.0	2.3	1.5	1.4
Net domestic assets	3.5	18.4	4.6	12.9	7.5	4.0	4.8	5.7	6.1
Of which: Credit to the private sector	13.7	8.0	6.8	6.6	6.1	6.0	6.1	6.5	7.0
Of which: Credit to the central government	-3.4	15.6	-1.9	-1.8	-2.5	-2.2	-0.6	-0.3	0.2
Broad money	9.3	18.3	13.7	8.3	7.3	7.0	7.1	7.2	7.4
Memorandum Item:									
Nominal GDP (J$ billions)	2,110	1,967	2,210	2,476	2,662	2,837	3,031	3,231	3,445

Sources: Jamaican authorities; and Fund staff estimates and projections.

1/ Government operations presented on a fiscal-year basis. Fiscal year runs from April 1 to March 31.
2/ Consolidated central government and public bodies' debt, consistent with the Fiscal Responsibility Law.

Table 2a. Jamaica: Summary of Central Government Operations

(In millions of Jamaican dollars)

				Projections					
	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28
Budgetary revenue and grants	649,759	575,404	720,224	760,306	817,106	869,245	928,577	994,088	1,066,396
Tax	579,397	505,685	616,368	682,062	733,147	779,929	833,164	892,163	957,514
Of which:									
Income and profits	159,726	161,428	180,183	195,849	206,154	219,309	234,278	252,398	274,081
Of which: Other companies	68,283	66,049	73,311	81,719	87,688	93,283	99,650	108,581	118,313
PAYE	66,670	67,956	76,661	80,454	82,330	87,584	93,562	99,948	108,906
Production and consumption	200,644	171,980	198,231	220,967	237,107	252,236	269,453	287,845	307,493
Of which: GCT (Local)	109,304	91,192	107,799	120,163	128,939	137,167	146,530	156,531	167,216
International Trade	214,810	168,130	232,559	259,233	278,167	295,917	316,115	337,693	360,742
Of which: GCT (Imports)	92,498	76,074	101,902	113,589	121,886	129,664	138,514	147,969	158,068
Non-tax	65,705	62,539	93,736	66,876	71,760	76,339	81,550	87,116	93,063
Grants	4,657	7,180	7,659	6,460	6,932	7,374	7,877	8,415	8,990
Budgetary expenditure	630,354	635,911	698,895	752,800	809,051	860,381	881,231	909,875	976,732
Primary expenditure	498,867	506,873	561,848	609,599	666,866	716,506	753,017	802,358	874,429
Compensation of employees	211,618	222,996	241,751	305,433	338,852	369,338	394,548	421,064	448,323
Wage and salaries	195,936	207,912	222,680	282,137	313,855	339,791	362,984	387,379	412,457
Employer contributions	15,681	15,084	19,071	23,296	24,997	29,547	31,564	33,685	35,866
Programme expenditure	216,857	234,693	269,587	239,099	240,804	251,899	257,465	273,501	300,575
Capital expenditure	70,393	49,184	50,510	65,067	87,210	95,269	101,004	107,792	125,530
Interest	131,487	129,038	137,048	143,201	142,185	143,875	128,214	107,517	102,303
Domestic	47,596	50,339	54,712	64,936	64,083	63,968	51,489	45,183	44,295
External	83,891	78,699	82,336	78,265	78,102	79,907	76,726	62,334	58,008
Budget balance	19,405	-60,507	21,329	7,506	8,055	8,864	47,346	84,213	89,665
Of which: Primary budget balance	150,892	68,530	158,377	150,707	150,240	152,739	175,560	191,730	191,968
Public entities balance	1,123	-9,000	0	0	0	0	0	0	0
Public sector balance	20,528	-69,507	21,329	7,506	8,055	8,864	47,346	84,213	89,665
Gross financing needs 1/	237,700	143,642	113,547	143,877	177,748	287,718	111,541	113,159	128,984
Gross financing sources 1/	237,827	143,642	113,547	143,877	177,748	287,718	111,541	113,159	128,984
Domestic	72,894	76,553	45,419	57,551	71,099	111,087	44,617	45,263	51,593
External	134,239	37,627	68,128	86,326	106,649	172,631	66,925	67,895	77,390
Memorandum items:									
Nominal GDP (billion J$)	2,121	1,949	2,322	2,588	2,777	2,955	3,156	3,369	3,594
Public sector debt (FRL definition, billion J$) 2/	1,999	2,138	2,188	2,177	2,164	2,187	2,204	2,158	2,137

Sources: Jamaican authorities and Fund staff estimates and projections.

1/ Gross financing needs and sources are for the central government.

2/ Consolidated central government and public bodies' debt, consistent with the Fiscal Responsibility Law.

Table 2b. Jamaica: Summary of Central Government Operations

(In percent of GDP)

				Projections					
	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28
Budgetary revenue and grants	30.6	29.5	31.0	29.4	29.4	29.4	29.4	29.5	29.7
Tax	27.3	25.9	26.5	26.4	26.4	26.4	26.4	26.5	26.6
Of which:									
Income and profits	7.5	8.3	7.8	7.6	7.4	7.4	7.4	7.5	7.6
Of which: Other companies	3.2	3.4	3.2	3.2	3.2	3.2	3.2	3.2	3.3
PAYE	3.1	3.5	3.3	3.1	3.0	3.0	3.0	3.0	3.0
Production and consumption	9.5	8.8	8.5	8.5	8.5	8.5	8.5	8.5	8.6
Of which: GCT (Local)	5.2	4.7	4.6	4.6	4.6	4.6	4.6	4.6	4.7
International Trade	10.1	8.6	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Of which: GCT (Imports)	4.4	3.9	4.4	4.4	4.4	4.4	4.4	4.4	4.4
Non-tax	3.1	3.2	4.0	2.6	2.6	2.6	2.6	2.6	2.6
Grants	0.2	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.3
Budgetary expenditure	29.7	32.6	30.1	29.1	29.1	29.1	27.9	27.0	27.2
Primary expenditure	23.5	26.0	24.2	23.6	24.0	24.2	23.9	23.8	24.3
Compensation of employees	10.0	11.4	10.4	11.8	12.2	12.5	12.5	12.5	12.5
Wage and salaries	9.2	10.7	9.6	10.9	11.3	11.5	11.5	11.5	11.5
Employer contribution	0.7	0.8	0.8	0.9	0.9	1.0	1.0	1.0	1.0
Programme expenditure	10.2	12.0	11.6	9.2	8.7	8.5	8.2	8.1	8.4
Capital expenditure	3.3	2.5	2.2	2.5	3.1	3.2	3.2	3.2	3.5
Interest	6.2	6.6	5.9	5.5	5.1	4.9	4.1	3.2	2.8
Domestic	2.2	2.6	2.4	2.5	2.3	2.2	1.6	1.3	1.2
External	4.0	4.0	3.5	3.0	2.8	2.7	2.4	1.9	1.6
Budget balance	0.9	-3.1	0.9	0.3	0.3	0.3	1.5	2.5	2.5
Of which: Primary budget balance	7.1	3.5	6.8	5.8	5.4	5.2	5.6	5.7	5.3
Public entities balance	0.1	-0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Public sector balance	1.0	-3.6	0.9	0.3	0.3	0.3	1.5	2.5	2.5
Gross financing needs	11.2	7.4	4.9	5.6	6.4	9.7	3.5	3.4	3.6
Gross financing sources	11.2	7.4	4.9	5.6	6.4	9.7	3.5	3.4	3.6
Domestic	3.4	3.9	2.0	2.2	2.6	3.8	1.4	1.3	1.4
External	6.3	1.9	2.9	3.3	3.8	5.8	2.1	2.0	2.2
Memorandum items:									
Nominal GDP (billion J$)	2,121	1,949	2,322	2,588	2,777	2,955	3,156	3,369	3,594
Public sector debt (FRL definition, billion J$) 1/	1,999	2,138	2,188	2,177	2,164	2,187	2,204	2,158	2,137
Public sector debt (FRL definition, %GDP) 1/	94.3	109.7	94.2	84.1	77.9	74.0	69.8	64.0	59.5

Sources: Jamaican authorities and Fund staff estimates and projections.

1/ Consolidated central government and public bodies' debt, consistent with the Fiscal Responsibility Law.

Table 3. Jamaica: Summary of Balance of Payments
(In millions of U.S. dollars)

				Projections					
	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28
Current Account	-261	-149	-176	-418	-504	-475	-396	-406	-429
Trade balance	-3,914	-2,742	-3,332	-4,537	-4,573	-4,780	-5,011	-5,240	-5,488
Exports (f.o.b.)	1,531	1,253	1,421	1,671	1,749	1,785	1,815	1,851	1,900
Imports (f.o.b.)	5,445	3,995	4,753	6,208	6,322	6,565	6,827	7,092	7,387
o/w Fuel (cif)	1,601	988	1,727	2,303	2,023	1,973	1,921	1,888	1,880
Services (net)	1,702	-195	90	1,185	1,494	1,732	1,993	2,167	2,343
o/w Travel (net)	3,229	637	2,397	3,505	3,710	3,899	4,096	4,252	4,396
Primary income (net)	-472	-412	-489	-519	-633	-645	-656	-657	-668
Secondary income (net)	2,423	3,200	3,556	3,453	3,208	3,218	3,278	3,324	3,384
Government (net)	137	150	182	158	144	138	129	111	102
Private (net)	2,286	3,051	3,374	3,295	3,065	3,079	3,149	3,213	3,282
Capital Account (net)	-29	-30	-31	-29	-30	-30	-30	-30	-30
Financial Account (net)	-201	-394	-609	-447	-534	-505	-426	-436	-459
Direct investment (net)	-123	-181	-286	-387	-477	-558	-681	-708	-735
Portfolio investment (net)	-544	-163	-87	71	151	-60	-28	-14	-16
Financial derivatives (net)	-97	7	0	-1	0	0	0	0	0
Other investment (net)	479	-612	-315	2	-117	-37	182	185	192
Reserve assets (change)	83	554	80	-133	-91	150	100	100	100
Net Errors and Omissions	89	-215	-401	0	0	0	0	0	0
	(In percent GDP)								
Current Account	-1.7	-1.1	-1.2	-2.5	-2.8	-2.5	-2.0	-2.0	-2.0
Trade balance	-24.9	-20.2	-22.0	-27.0	-25.4	-25.5	-25.7	-25.9	-26.1
Exports (f.o.b.)	9.8	9.2	9.4	9.9	9.7	9.5	9.3	9.1	9.1
Imports (f.o.b.)	34.7	29.4	31.4	36.9	35.2	35.0	34.9	35.0	35.2
Services (net)	10.9	-1.4	0.6	7.1	8.3	9.2	10.2	10.7	11.2
o/w Travel (net)	20.6	4.7	15.8	20.9	20.6	20.8	21.0	21.0	20.9
Primary income (net)	-3.0	-3.0	-3.2	-3.1	-3.5	-3.4	-3.4	-3.2	-3.2
Secondary income (net)	15.4	23.6	23.5	20.5	17.9	17.2	16.8	16.4	16.1
o/w Private (net)	14.6	22.5	22.3	19.6	17.1	16.4	16.1	15.9	15.6
Capital Account (net)	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1
Financial Account (net)	-1.3	-2.9	-4.0	-2.7	-3.0	-2.7	-2.2	-2.2	-2.2
o/w Direct investment (net)	-0.8	-1.3	-1.9	-2.3	-2.7	-3.0	-3.5	-3.5	-3.5
Memorandum Items:									
Gross international reserves	3,688	4,244	4,324	4,191	4,100	4,250	4,350	4,450	4,550
(in months of next year's imports of GNFS)	5.5	9.0	6.4	5.2	5.0	5.0	5.0	5.0	4.9
Net international reserves (NIR)	3,238	3,319	3,676	3,691	3,805	4,177	4,342	4,449	4,549
Exports of goods (percent change)	-23.7	-18.2	13.4	17.6	4.6	2.1	1.7	2.0	2.6
Imports of goods (percent change)	-3.2	-26.6	19.0	30.6	1.8	3.8	4.0	3.9	4.2
Oil prices (composite, fiscal year basis)	58.6	48.6	76.1	92.9	79.7	74.5	71.3	68.9	50.6
GDP (US$ millions)	15,688	13,588	15,130	16,806	17,974	18,759	19,536	20,251	20,985
Jamaican dollar/USD, period average	135	143	153	…	…	…	…	…	…

Sources: Jamaican authorities; and Fund staff estimates.

Table 4. Jamaica: Summary Monetary Survey 1/2/

				Projections					
	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28
				(In billions of Jamaican dollars)					
Net Foreign Assets	397.5	402.1	482.1	403.4	426.3	492.9	531.8	562.8	593.9
Net Domestic Assets	863.0	1,047.7	1,152.7	1,366.2	1,467.6	1,534.3	1,639.4	1,766.0	1,909.8
Net domestic claims	1,353.4	1,581.7	1,699.6	1,772.5	1,839.9	1,921.7	2,052.2	2,196.1	2,377.9
Net claims on central government	259.6	395.9	395.1	352.9	310.1	270.9	269.4	261.0	268.4
Claims on rest of public sector	13.1	14.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
Claims on private sector	1,039.1	1,126.0	1,228.5	1,337.6	1,442.0	1,556.6	1,681.6	1,825.8	1,990.0
Of which: Credit to private sector	1,039.1	1,125.3	1,227.5	1,336.7	1,441.0	1,555.6	1,680.6	1,824.9	1,989.0
Claims on other financial corporations	41.6	45.4	69.5	75.6	81.4	87.8	94.8	102.9	113.1
Capital account	360.1	393.8	367.2	367.2	367.2	367.2	367.2	367.2	367.2
Other	-127.6	-140.2	-179.6	-39.0	-5.1	-20.2	-45.5	-62.9	-100.9
Broad Money (M3)	1,260.5	1,449.8	1,634.8	1,769.7	1,893.9	2,027.2	2,171.2	2,328.8	2,503.7
Narrow money (M2)	1,030.3	1,172.8	1,352.4	1,464.7	1,565.8	1,674.1	1,791.3	1,919.5	2,062.0
Other liabilities	230.2	277.0	282.4	305.0	328.1	353.2	379.9	409.3	441.6
				(Percent change)					
Net Foreign Assets	22.0	1.2	19.9	-16.3	5.7	15.6	7.9	5.8	5.5
Net Domestic Assets	10.5	21.4	10.0	18.5	7.4	4.5	6.8	7.7	8.1
Net domestic claims	9.9	16.9	7.5	4.3	3.8	4.4	6.8	7.0	8.3
Of which: Credit to private sector	28.8	8.3	9.1	8.9	7.8	8.0	8.0	8.6	9.0
Claims on other financial corporations	-0.6	9.0	53.2	8.8	7.7	7.9	8.0	8.5	9.9
Capital account	22.5	9.3	-6.7	0.0	0.0	0.0	0.0	0.0	0.0
Other	-17.3	9.9	28.1	-78.3	-87.0	296.0	125.9	38.1	60.4
Broad Money (M3)	13.9	15.0	12.8	8.2	7.0	7.0	7.1	7.3	7.5
Narrow money (M2)	15.9	13.8	15.3	8.3	6.9	6.9	7.0	7.2	7.4
Other liabilities	5.6	20.3	1.9	8.0	7.6	7.6	7.6	7.7	7.9
				(Percent of GDP)					
Net Foreign Assets	18.7	20.6	20.8	15.6	15.4	16.7	16.8	16.7	16.5
Net Domestic Assets	40.7	53.8	49.6	52.8	52.8	51.9	51.9	52.4	53.1
Net domestic claims	63.8	81.2	73.2	68.5	66.2	65.0	65.0	65.2	66.2
Of which: Credit to private sector	49.0	57.7	52.9	51.6	51.9	52.6	53.2	54.2	55.4
Claims on other financial corporations	2.0	2.3	3.0	2.9	2.9	3.0	3.0	3.1	3.1
Capital account	17.0	20.2	15.8	14.2	13.2	12.4	11.6	10.9	10.2
Other	-6.0	-7.2	-7.7	-1.5	-0.2	-0.7	-1.4	-1.9	-2.8
Broad Money (M3)	59.4	74.4	70.4	68.4	68.2	68.6	68.8	69.1	69.7
Narrow money (M2)	48.6	60.2	58.2	56.6	56.4	56.7	56.8	57.0	57.4
Other liabilities	10.9	14.2	12.2	11.8	11.8	12.0	12.0	12.1	12.3

Sources: Bank of Jamaica; and Fund staff estimates and projections.
1/ The authorities also compile and diseminate monetary data on the basis of the 2016 MFSMCG.
2/ Fiscal year runs from April 1 to March 31. The authorities compile and disseminate monetary data on the basis of the 2000 MFS manual.

Table 5. Jamaica: Financial Soundness Indicators 1/

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Mar-22	Jun-22	Sep-22
Balance Sheet Growth (y/y)																
Capital	13.8	5.1	5.3	4.0	18.3	7.4	9.0	12.6	8.1	11.4	8.1	14.1	5.9	4.1	2.3	2.3
Loans	5.3	-1.4	4.8	12.9	14.1	6.6	9.3	18.3	7.2	14.8	17.2	10.9	9.6	10.4	8.6	11.1
NPLs	68.0	36.1	44.0	-10.8	-12.9	0.2	-11.6	-16.9	-2.6	10.1	4.1	41.9	12.6	5.0	1.1	-7.1
Liquidity																
Domestic currency liquid assets 2/	31.3	36.2	30.5	26.7	26.3	31.5	26.5	27.4	31.5	28.0	24.0	24.5	25.6	22.4	21.9	21.7
Asset Quality																
Prov. for loan losses/NPLs	75.7	69.9	75.2	90.3	95.7	101.6	106.4	117.5	121.3	111.0	123.5	118.2	106.9	111.8	118.3	123.2
NPLs/loans	4.7	6.5	8.9	7.0	5.4	5.0	4.1	2.9	2.6	2.6	2.2	2.8	2.9	2.8	2.7	2.5
Capital Adequacy																
NPLs/Capital+Prov. for loan losses	17.7	20.2	28.4	24.1	18.6	17.4	14.5	11.0	10.0	11.1	9.5	11.5	12.3	11.8	11.7	11.1
Capital Adequacy Ratio (CAR)	18.8	18.2	16.1	14.1	15.1	15.9	14.9	14.7	15.3	14.5	14.3	14.3	14.2	14.0	14.1	13.8
Profitability (calendar year) 3/																
Pre-tax profit margin	21.4	21.1	30.8	21.4	19.0	18.9	19.8	26.8	24.9	27.2	25.4	13.3	21.5	2.9	22.4	17.3
Return on average assets	2.9	2.5	3.9	2.4	2.0	2.1	2.0	2.9	2.7	3.3	3.0	1.3	2.2	0.1	0.6	0.5

Source: Bank of Jamaica.

1/ Commercial banks, building societies, and merchant banks.

2/ Percent of prescribed liabilities.

3/ The significant increase in profitability for 2011 is due to an up-stream dividend from one insurance subsidiary to its parent bank. Without such dividend pre-tax profit margin and return on average assets would be 18.1 and 2.3 percent, respectively. For March, June, September: calendar quarter values.

Table 6. Jamaica: Indicators of Fund Credit, 2022–44 1/

(In millions of SDRs, unless otherwise indicated)

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Fund Obligations Based on Existing Credit (millions of SDRs)																							
Principal	18.8	177.5	247.5	124.1	9.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Charges and interest 2/	0.0	31.2	23.4	15.4	13.1	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8
Fund Obligations Based on Existing and Prospective Credit (millions of SDRs)	18.8	228.7	314.6	186.2	238.7	378.5	228.8	66.4	32.5	32.5	32.6	32.5	60.9	88.1	86.1	84.1	82.1	80.2	78.2	76.2	74.2	72.3	42.0
Principal	18.8	177.5	247.5	124.1	181.8	330.3	191.5	33.5	0.0	0.0	0.0	0.0	28.7	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	28.7
GRA	18.8	177.5	247.5	124.1	181.8	330.3	191.5	33.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RSF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.7	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	28.7
Charges and interest 3/	0.0	51.2	67.2	62.1	56.9	48.2	37.3	32.9	32.5	32.5	32.6	32.5	32.2	30.6	28.7	26.7	24.7	22.7	20.8	18.8	16.8	14.8	13.3
Total Obligations Based on Existing and Prospective Credit																							
Millions of SDRs	18.8	228.7	314.6	186.2	238.7	378.5	228.8	66.4	32.5	32.5	32.6	32.5	60.9	88.1	86.1	84.1	82.1	80.2	78.2	76.2	74.2	72.3	42.0
Percent of exports of goods and services	0.4	4.7	6.1	3.4	4.2	6.3	4.4	1.3	0.6	0.6	0.6	0.6	1.1	1.5	1.5	1.4	1.4	1.3	1.3	1.2	1.2	1.1	0.6
Percent of gross international reserves	0.6	7.4	9.8	5.6	7.1	11.0	6.4	1.8	0.8	0.8	0.8	0.7	1.3	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.1	1.1	0.6
Percent of government revenue	0.5	6.3	8.4	4.7	5.8	8.9	5.3	1.5	0.7	0.7	0.7	0.7	1.3	1.8	1.8	1.7	1.6	1.6	1.5	1.4	1.4	1.3	0.8
Percent of public external debt service	3.1	33.3	50.7	28.9	31.6	50.9	55.9	23.6	7.8	5.8	5.6	5.4	9.6	13.3	12.5	11.7	11.0	10.3	9.6	9.0	8.4	7.8	4.4
Percent of GDP	0.1	1.7	2.2	1.3	1.6	2.4	1.4	0.4	0.2	0.2	0.2	0.2	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.1
Percent of quota	6.5	78.8	82.2	64.2	82.3	130.5	78.9	22.9	11.2	11.2	11.2	11.2	21.0	30.4	29.7	29.0	28.3	27.6	27.0	26.3	25.6	24.9	14.5
Principal	4.9	46.3	64.6	32.4	47.5	86.2	50.0	8.7	0.0	0.0	0.0	0.0	7.5	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	7.5
GRA	4.9	46.3	64.6	32.4	47.5	86.2	50.0	8.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RSF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	7.5
Outstanding IMF Credit Based on Existing and Prospective Drawings																							
Millions of SDRs	558.4	1,031.9	1,435.4	1,311.3	1,129.6	799.3	607.9	574.4	574.4	574.4	574.4	574.4	545.6	488.2	430.8	373.3	315.9	258.5	201.0	143.6	86.2	28.7	0.0
GRA	558.4	840.4	861.0	737.0	555.2	225.0	33.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RSF	0.0	191.5	574.4	574.4	574.4	574.4	574.4	574.4	574.4	574.4	574.4	574.4	545.6	488.2	430.8	373.3	315.9	258.5	201.0	143.6	86.2	28.7	0.0
Percent of exports of goods and services	12.0	21.3	27.8	24.0	19.8	13.3	11.8	11.0	10.8	10.7	10.5	10.4	9.7	8.5	7.4	6.3	5.3	4.3	3.3	2.3	1.4	0.4	0.0
Percent of gross international reserves	17.6	33.2	44.6	39.8	33.5	23.2	16.9	15.3	14.7	14.1	13.5	12.9	11.8	10.1	8.6	7.1	5.8	4.5	3.4	2.3	1.3	0.4	0.0
Percent of government revenue	15.6	28.5	38.1	33.1	27.4	18.7	14.0	13.0	12.9	12.7	12.5	12.3	11.5	10.1	8.8	7.5	6.3	5.1	3.9	2.7	1.6	0.5	0.0
Percent of total public external debt	9.6	17.3	23.1	21.9	20.0	15.6	12.8	12.6	12.9	12.3	11.8	11.3	10.3	8.9	7.5	6.2	5.1	4.0	3.0	2.0	1.2	0.4	0.0
Percent of GDP	4.4	7.6	10.1	8.9	7.4	5.0	3.7	3.4	3.2	3.1	3.0	2.8	2.6	2.2	1.9	1.6	1.3	1.0	0.7	0.5	0.3	0.1	0.0
Percent of quota	145.8	269.5	374.9	342.5	295.0	208.7	158.7	150.0	150.0	150.0	150.0	150.0	142.5	127.5	112.5	97.5	82.5	67.5	52.5	37.5	22.5	7.5	0.0
GRA	145.8	219.5	224.9	192.5	145.0	58.7	8.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RSF	0.0	50.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	142.5	127.5	112.5	97.5	82.5	67.5	52.5	37.5	22.5	7.5	0.0
Net Use of IMF Credit (millions of SDRs)	-18.8	473.5	403.5	-124.1	-181.8	-330.3	-191.5	-33.5	0.0	0.0	0.0	0.0	-28.7	-57.4	-57.4	-57.4	-57.4	-57.4	-57.4	-57.4	-57.4	-57.4	-28.7
Disbursements	0.0	650.9	650.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Repayments and repurchases	18.8	177.5	247.5	124.1	181.8	330.3	191.5	33.5	0.0	0.0	0.0	0.0	28.7	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	28.7
Memorandum items:																							
Exports of goods and services (millions of U.S. dollars)	6,153	6,385	6,804	7,199	7,545	7,909	6,792	6,894	6,998	7,103	7,209	7,317	7,427	7,538	7,652	7,766	7,883	8,001	8,121	8,243	8,367	8,492	8,619
Gross international reserves (millions of U.S. dollars)	4,191	4,100	4,250	4,350	4,450	4,550	4,746	4,950	5,163	5,385	5,616	5,858	6,109	6,372	6,646	6,932	7,230	7,541	7,865	8,203	8,556	8,924	9,308
Government revenue (million of U.S. dollars)	4,728	4,780	4,970	5,235	5,436	5,640	5,725	5,811	5,898	5,986	6,076	6,167	6,260	6,354	6,449	6,546	6,644	6,744	6,845	6,948	7,052	7,158	7,265
Total external debt, public (million of U.S. dollars)	7,654	7,865	8,192	7,902	7,438	6,773	6,280	6,040	5,870	6,147	6,410	6,684	6,970	7,269	7,580	7,904	8,243	8,596	8,964	9,347	9,747	10,165	10,600
External debt service, public (million of U.S. dollars)	803	906	819	850	999	981	540	371	553	738	769	802	836	872	910	949	989	1,031	1,076	1,122	1,170	1,220	1,272
Nominal GDP (millions of U.S. dollars)	16,814	17,969	18,754	19,531	20,226	20,939	21,681	22,609	23,577	24,587	25,639	26,737	27,881	29,075	30,319	31,617	32,971	34,382	35,854	37,389	38,989	40,658	42,399
Quota (millions of SDRs)	382.9	382.9	382.9	382.9	382.9	382.9	382.9	382.9	382.9	382.9	382.9	382.9	382.9	382.9	382.9	382.9	382.9	382.9	382.9	382.9	382.9	382.9	382.9
SDR/USD exchange rate	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32

Source: IMF staff estimates and projections.

1/ Based on a drawing scenario.

2/ Based on the GRA rate of charge of 4.128 percent as of January 19, 2023.

3/ Jamaica belongs to the RST interest Group C. Interest based on the RST rate of interest of 4.078 percent as of January 19, 2023

Table 7. Jamaica: Proposed Schedule and Terms Under the Precautionary and Liquidity Line Arrangement

Review Date	Conditions for Access	Credit Available		
		Millions SDR, cummulative	Percent of Quota, cumulative	Percent of total access, cumulative
March 1, 2023	Board approval of the PLL	459.48	120	63
August 31, 2023	First review based on March 31, 2023 quantitative targets	459.48	120	63
February 29, 2024	Second review based on September 30, 2023 quantitative targets	727.51	190	100
August 31, 2024	Third review based on March 31, 2024 quantitative targets	727.51	190	100

Source: IMF staff estimates

Table 8. Jamaica: Proposed Access Under the Resilience and Sustainability Fund

Availability Date	Millions of SDR	Percent of Quota	Conditions for Access
August 31, 2023	47.8625	12.50	Completion of RSF review of reform measures 1 implementation
August 31, 2023	47.8625	12.50	Completion of RSF review of reform measures 2 implementation
August 31, 2023	47.8625	12.50	Completion of RSF review of reform measures 8 implementation
August 31, 2023	47.8625	12.50	Completion of RSF review of reform measures 9 implementation
February 29, 2024	47.8625	12.50	Completion of RSF review of reform measures 3 implementation
February 29, 2024	47.8625	12.50	Completion of RSF review of reform measures 4 implementation
February 29, 2024	47.8625	12.50	Completion of RSF review of reform measures 6 implementation
February 29, 2024	47.8625	12.50	Completion of RSF review of reform measures 10 implementation
August 31, 2024	47.8625	12.50	Completion of RSF review of reform measures 5 implementation
August 31, 2024	47.8625	12.50	Completion of RSF review of reform measures 7 implementation
August 31, 2024	47.8625	12.50	Completion of RSF review of reform measures 11 implementation
August 31, 2024	47.8625	12.50	Completion of RSF review of reform measures 12 implementation
Total	574.35	150	
Memorandum item:			
Quota	382.90		

Source: IMF staff estimates

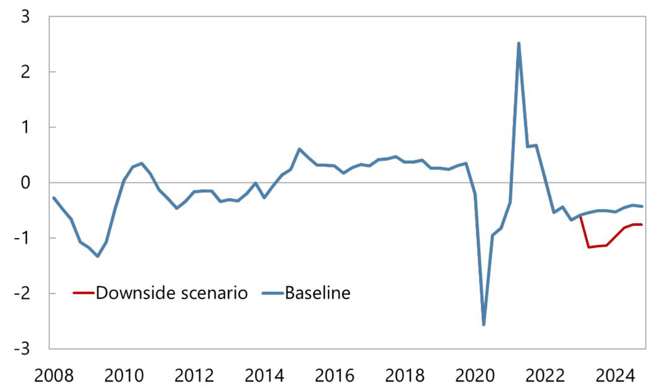
Annex I. External Economic Stress Index

1. Background. The External Economic Stress Index (ESSI) seeks to capture the evolution of the external environment faced by a country. The index is based on a selection of: (i) key external risks facing Jamaica; (ii) proxy variables capturing these risks; and (iii) weights to apply to each of these variables.

2. Risks. The main external vulnerabilities for Jamaica are: (i) dependence on fuel and food imports, exposing Jamaica to commodity price volatility, (ii) de-anchoring of inflation expectations in advanced economies that leads to tighter-than envisaged global financial conditions, restricting external financing to EMDEs; and (iii) a growth slowdown in advanced economies, including Jamaica's main trading partners—Canada, United Kingdom, and United States—which could reduce remittances receipts, FDI inflows, and exports.

External Economic Stress Index

(↓ more external economic stress)



Sources: WEO and IMF staff estimates.

3. Proxy variables. (i) higher imports are captured by international food and oil prices (WEO Commodity Food Price Index/WEO Crude Oil Price Index); (ii) the impact of tighter monetary conditions is captured by the interest rate of the 6-month U.S. treasury bond plus the EMBIG spread for Jamaica, (iii) the VIX captures the volatility in global financial markets; and (iv) the weighted average of GDP growth of Canada, United Kingdom, and United States.

4. Weights. A data-based approach determines the weights, which were estimated using the size of related balance of payment items between 2012 and 2020: (i) the value of consumer goods and fuel imports determines the weight on oil and food prices respectively (0.13 and 0.13); (ii) on funding costs (0.07), the value of portfolio inflows is used; (iv) on volatility (0.05), the value of other investments is used; and (v) the weight for trading partner GDP growth (0.62) is based on Jamaica's exports, remittances, and FDI.

5. Baseline scenario. The baseline corresponds to the October 2022 WEO projections. The index shows that external economic stress is projected to remain high compared to the pre-Covid period. This reflects higher food and oil price path assumptions, higher projected interest rates, and a slowdown in trading partners growth.

6. Downside scenario. The downside scenario is in line with the global downside scenario of the October 2022 WEO. It comprises the impact on fuel and food prices from the war in Ukraine, larger than envisaged financial tightening due to inflationary pressures, and lower global GDP growth. Under this scenario, supply shocks increase global oil and food prices by 15 and 10 percent respectively compared to the baseline in 2023, which gradually begin to dissipate in 2024. In financial markets, the scenario assumes that funding costs increase by 100 basis points and the VIX by two standard deviations in 2023, with the former beginning to dissipate in 2024, though in a context of sustained volatility. Growth in advance economies reflects a stronger deceleration in 2023, in which trading partners' growth is about 1¼ percent below the baseline; the shock begins to dissipate in 2024, in which growth in trading partners is about ½ percent below the baseline.

7. Overall Assessment. The external economic stress index suggests that external pressures under the adverse scenario remain high but are projected to soften, particularly in 2024—though still above the baseline.

Annex II. Access Considerations Under an Adverse Scenario Tables

Table 1. Jamaica: Downside Scenario Variables 1/

	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28
Baseline (percent)						
GDP growth	3.5	2.0	1.8	1.7	1.6	1.6
Inflation (average)	9.5	6.5	4.9	4.8	5.0	5.0
Fiscal balance (% of GDP)	0.3	0.3	0.3	1.5	2.5	2.5
Downside Scenario (percent)						
GDP growth	3.5	1.0	1.4	1.7	1.6	1.6
Inflation (average)	9.5	7.5	5.4	5.1	5.0	5.0
Fiscal balance (% of GDP)	0.3	-1.5	-1.0	1.0	1.5	2.0
Impact (percent)						
GDP (deviation from baseline)	0	-1.0	-0.4	0	0	0
Inflation (pp)	0	1.0	0.5	0	0	0
Fiscal balance (% of GDP)	0	-1.8	-1.3	-0.5	-1.0	-0.5
Main assumptions (percent deviation from baseline)						
US GDP	0	-1.3	-0.6	0	0	0
UK GDP	0	-1.1	-0.5	0	0	0
Canada GDP	0	-1.1	-0.5	0	0	0
Oil (global)	0	15.0	10.0	0	0	0
Food (global)	0	10.0	5.0	0	0	0

	US$ millions			% of total shock	
Jamaica: Shock Scenario	2023	2024	Total	2023	2024
Gross total shock	-892	-494	-1386	100	100
Current account	-709	-401	-1110	79.5	81.1
o/w impact on trade balance	-549	-304	-853	61.5	61.5
o/w impact on secondary income	-160	-97	-257	18.0	19.5
Financial account	-183	-94	-276	20.5	18.9
o/w impact on FDI	-89	-56	-145	10.0	11.3
o/w impact on portfolio investments	-60	-24	-84	6.7	4.9
o/w impact on other investments	-33	-14	-47	3.7	2.8

Sources: IMF staff calculations and estimates.

1/ Commodity price shocks, weaker growth in trading partners and tightening of financial conditions were the main possible shocks in the recent PLL/FCL requests from Mexico, Morocco, and North Macedonia.

Table 2. Jamaica: External Financing Requirements
(In millions of US$)

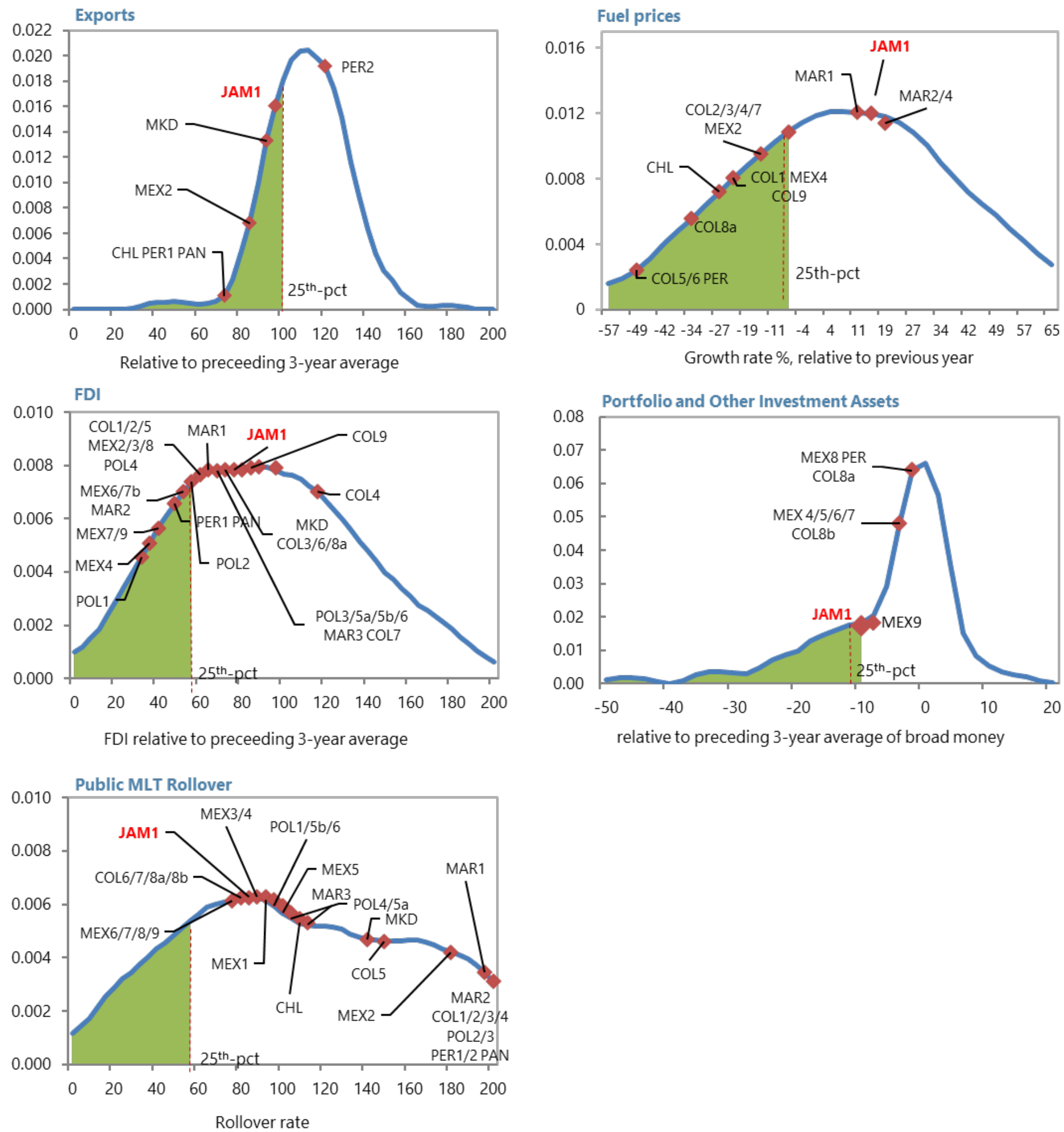
	FY 2023/24		FY 2024/25	
	Baseline	Downside	Baseline	Downside
Gross Financing needs	3,293	4,002	3,250	3,645
Current account deficit	504	1,213	475	875
MLT amortization	595	595	574	574
ST amortization	2194	2194	2201	2196
Financing sources	3,202	3,019	3,400	3,301
FDI (net)	477	388	558	502
MLT debt disbursements	163	143	456	436
Other 1/	2,562	2,488	2,385	2,363
Net sources of financing	91	983	-150	344
PLL	0	607	0	354
in percent of quota	*0*	*120*	*0*	*70*
Net change in reserves (-: increase)	91	376	-150	-10
Memorandum items:				
Gross international reserves (GIR)	4,100	3,815	4,250	3,824
(as % of 2022 ARA metric)	106	98	109	98

Sources: IMF staff calculations and estimates.

1/ Including rollover of short term debt.

Figure 1. Jamaica: Illustrative Adverse Scenarios

(Probability density)



Source: IMF staff calculations.

Annex III. Building Resilience to Natural Disasters and Climate Change

Jamaica is implementing a multipronged strategy to address climate risks by reducing vulnerabilities in physical infrastructure, the financial system, and the fiscal and external positions to the effects of climate change. The strategy includes both adaptation and mitigation measures. The RSF can support these reforms, boost the pace of their implementation, and catalyze private sector financing in a range of areas.

A. Jamaica's Exposure to Climate Change Risks

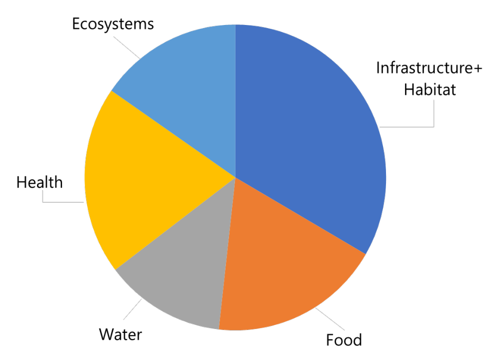
1. Jamaica's geographical and socio-economic characteristics make it highly vulnerable to the impacts of climate change. Jamaica ranks 47th out of 191 countries in the 2023 Inform Risk index. Average temperature levels in the country have risen steadily over the last several decades and are projected to increase further in the future. In a business-as-usual (BAU) global emission scenario (RCP 4.5)[1], Jamaica is projected to face a 1.54°C increase of mean temperature by 2100 relative to the 1986–2005 baseline[2]. This would likely result in increased frequency of prolonged high heat and drought. The frequency of tropical storms or hurricanes is expected to remain steady while their intensity will increase with extreme rainfalls, high wind speed, flooding, and increased damages[3]. Additionally, sea level is rising and threatening Jamaica's infrastructure and population that are concentrated in the coastal areas. According to the 2020 ND-GAIN Vulnerability Index[4], climate change and natural disasters in Jamaica affect the costal, energy and transport infrastructure, as well as urban areas (buildings, water supply and sanitation, etc.).

Natural Hazard Risk-Peer Selected Caribbean Countries (2020)

- 10 Haiti
- 20 Dominican Republic
- 45 Belize
- 47 Jamaica
- 60 Dominica
- 112 Barbados
- 139 Trinidad and Tobago
- 162 Saint Vincent and the Grenadines
- 177 Grenada

Source: 2023 INFORM Global Risks Index.

Composition of Vulnerability by Sector



Source: 2020 ND-GAIN Vulnerability Index.

[1] Representative Concentration Pathway 4.5 (RCP4.5) is one of the GHG concentration trajectories adopted by the Intergovernmental Panel on Climate Change (IPCC) that corresponds to a realistic BAU GHG emission pathway.

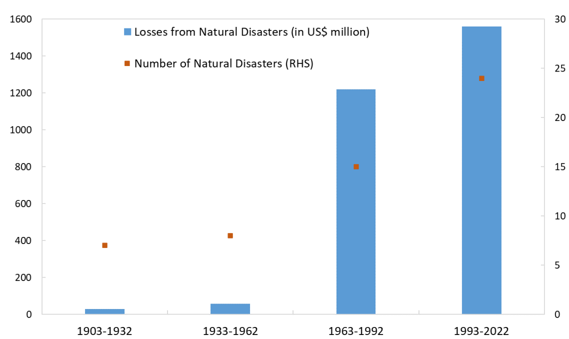
[2] Planning Institute of Jamaica. The State of the Jamaican Climate 2019: Historical and Future Climate Changes for Jamaica, draft March 2021.

[3] Planning Institute of Jamaica. The State of the Jamaican Climate 2019: Historical and Future Climate Changes for Jamaica, draft March 2021. The Intergovernmental Panel on Climate Change (IPCC). 2012. Managing the risks of extreme events and disasters to advance climate change adaptation.

[4] ND-GAIN Vulnerability Index assesses the vulnerability of a country to climate change risks by considering six life-supporting sectors: food, water, health, ecosystem services, human habitat, and infrastructure.

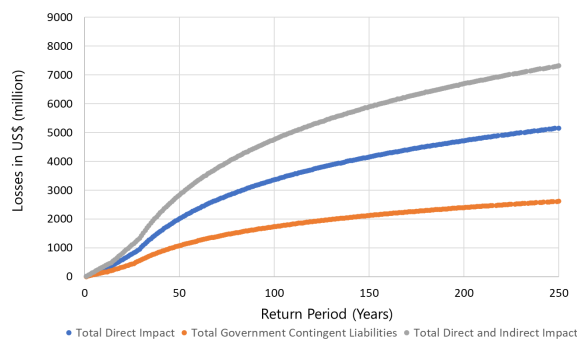
2. Jamaica's high vulnerability to natural disasters poses substantial risk to the country's economic outlook. Jamaica has suffered high and sustained damages from natural disasters over the past several decades[5]. Hydrometeorological events (floods, tropical storms, hurricanes etc.) have been the most prominent hazards in Jamaica. The number of storms passing by or directly affecting Jamaica in the 2000s has been at its highest since 1940-1959[6]. Hurricanes Ivan (2004) and Dean (2007) caused damages of US$580 million and US$329 million each (or 8 and 3 percent of GDP, respectively). In 2010, tropical storm Nicole was an important reminder of a persisting vulnerability to natural disasters, causing damages of US$239 million (or 2 percent of GDP).[7] Looking ahead, the expected damages from the hydrometeorological events would also be significant. For one in 100 years type of event, the fiscal losses are expected to exceed US$ 1,729 million (roughly about 10 percent of GDP); in other words, there is one percent probability in any year that losses will exceed US$ 1,729 million from such an event.

Frequency and Damages from Natural Disasters
(In US$ million)



Sources: Emergency Events Database and IMF Staff Calculations.

Estimated Floods and Hurricane Events Risk Profile
(Indicative probability curve, in US$ million)



Source: 2019 World Bank Jamaica probabilistic risk modelling

3. Climate change and natural disasters threaten Jamaica's external sustainability. The tourism sector is highly sensitive to the effects of climate change and tourism-related BOP inflows are equivalent to some 20 percent of GDP. Tourism dynamics also weigh heavily on economic outcomes given its interconnectedness with other sectors, such as the retail trade, construction, agriculture, and other services. Frequent, severe, and persistent natural disasters would likely sharply reduce tourist arrivals, devalue the capital base of the industry, affect the nature-based tourism assets on the island,

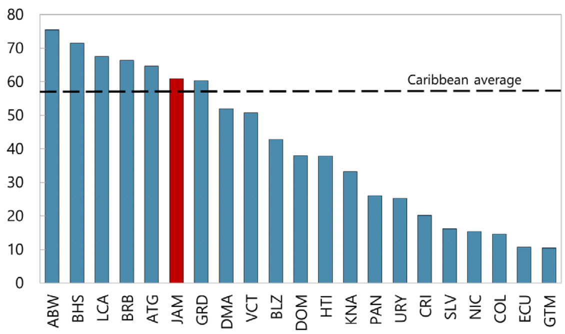
[5] To illustrate trend of damages we use the Centre for Research on the Epidemiology of Disasters' (CRED) Emergency Events Database (EM-DAT; https://www.emdat.be/) which contains data on the occurrence and effects of over 22,000 mass disasters in the world from 1900 to the present day. The database is compiled from various sources, including UN agencies, non-governmental organizations, insurance companies, research institutes and press agencies. The trends shown need to be interpreted with caution due to possible data gaps for the early decades of the last century.

[6] The number of storms passing by or directly affecting Jamaica in the 2000s was 22. Planning Institute of Jamaica. The State of the Jamaican Climate 2019: Historical and Future Climate Changes for Jamaica, draft March 2021. The Intergovernmental Panel on Climate Change (IPCC). 2012. Managing the risks of extreme events and disasters to advance climate change adaptation.

[7] Macro Socio-economic and Environmental Impact Assessment of Damage and Loss caused by the March to June Rains 2017, Planning Institute of Jamaica (PIOJ), PIOJ Economic and Social Survey (2017), Third National Communication (2018).

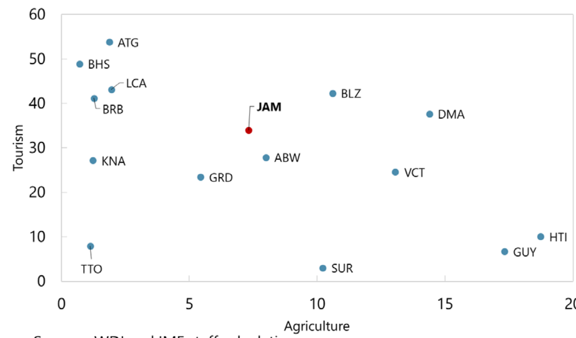
disrupt the inflows of foreign exchange, and trigger unplanned fiscal expenditures. They would also impact other sectors of the economy, especially agriculture which already is coping with higher temperatures, rising sea levels, and volatile precipitation patterns.[8] Those impacts may result in lower agricultural productivity, further constraining availability and quality of food, energy, and water.

Tourism Receipts
(In percent of total export receipts)



Sources: WDI and IMF staff calculations.
Note: Tourism receipts is the average from 2016 to 2022.

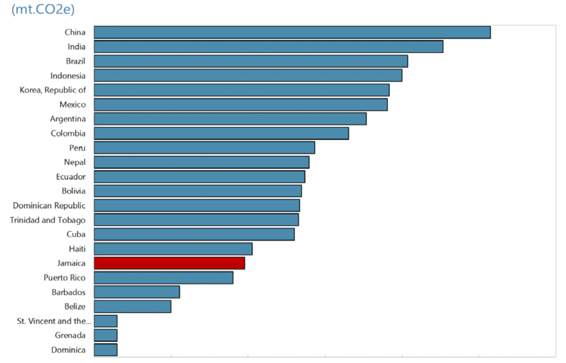
Agriculture and Tourism
(In percent of GDP)



Sources: WDI and IMF staff calculations.
Note: Agriculture and Tourism shares of GDP are averages from 2016 to 2022.

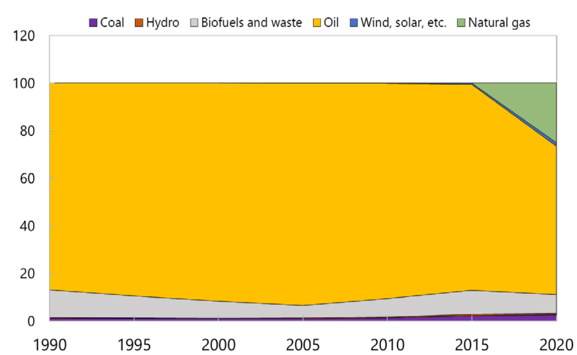
4. Jamaica's contribution to the world-wide greenhouse gases (GHG) emissions is insignificant but its dependence on fossil fuels imports for energy generation calls for a transition to renewables. In 2020, Jamaica contributed negligible amounts to total GHG emissions. However, Jamaica's dependence on fossil fuel imports exposes it to volatility in international commodity prices. This vulnerability can exacerbate balance of payment shocks and compromise fiscal sustainability. In FY 2021/22, fuel commodity imports represented 11 percent of GDP and were twice the level of Jamaica's goods exports. Over 85 percent of Jamaica's electricity production is derived from fossil fuel mostly heavy fuel oil. Mass public transportation is underdeveloped and there is over-reliance on cars and taxis, which leads to high per capita petrol consumption compared to regional peers. The high fuel import bill and the related inflationary pressures following the war in Ukraine highlight the need to transition to renewable energy.

Country GHG Emissions
(mt.CO2e)



Source: IMF-CPAT.

Energy Supply by Source
(In percent of total)



Sources: IEA World Energy Balances and IMF Staff Calculations.

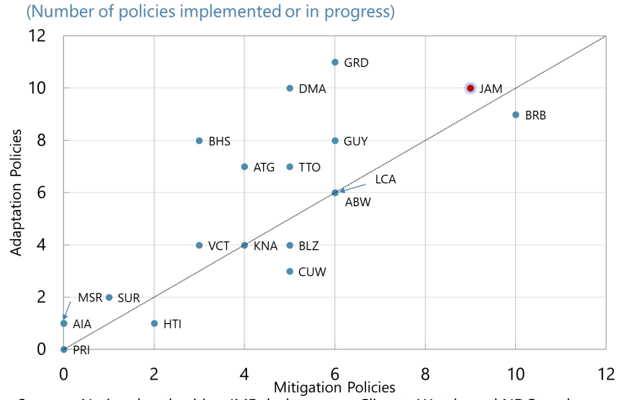
[8] The Climate Change Policy Framework for Jamaica (2015) identifies agriculture as critically important for both mitigation and adaptation.

B. Jamaica's National Climate Change Strategy

5. **Over the past few decades Jamaica has developed a comprehensive policy framework which sets out an ambitious set of measures and targets to mitigate and adapt to climate change**. The Vision 2030 Jamaica-National Development Plan defines the country's long-term strategic development goals towards inclusive and sustainable growth. The 2030 Vision rests on the foundation of three dimensions of sustainable development—social, economic, and environmental—as well as on equity and inclusiveness considerations.[9] The Climate Change Policy Framework for Jamaica was promulgated in 2015 and recently updated in 2021, with the goal of creating a sustainable mechanism for integrating climate change considerations in governance systems (institution arrangement, polices, plans, etc.)[10]. The country submitted its Intended Nationally Determined Contribution (NDC) in November 2016 and ratified the Paris Agreement in April 2017, further signaling its commitment to enhance climate action. The initial NDC which was enshrined in the National Energy Policy (2009- 2030) highlighting the importance of national adaptation planning. In 2019, the government adopted the Integrated Resource Plan (IRP)—a comprehensive decision support tool and a road map for achieving Jamaica's objectives to *transition to renewable energy* over a 20-year period. In June 2020, Jamaica submitted an updated and more ambitious NDC (Table 1 below)[11]. In August 2021, Jamaica launched its NDC Implementation Plan[12].

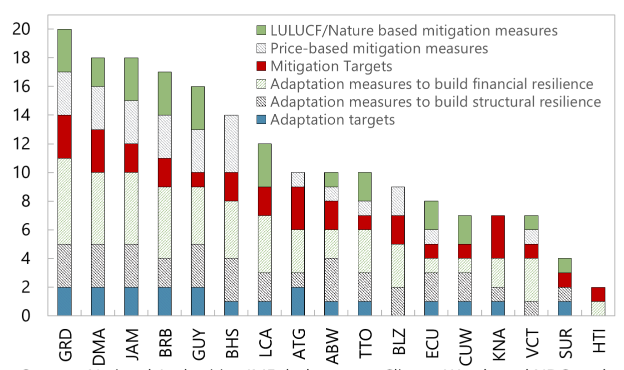
Mitigation vs. Adaptation

(Number of policies implemented or in progress)



Sources: National authorities; IMF desks survey; Climate Watch, and NDC tracker.
Note: Number of policies is a crude number for the strength of reform measures.

Number of Mitigation and Adaptation Measures



Sources: National Authorities; IMF desks survey; Climate Watch, and NDC tracker.
Note: Number of policies is a crude number for the strength of reform measures.

[9] See Jamaica's UN SDG page.

[10] The 2021 Climate Change Policy Framework has not yet been approved.

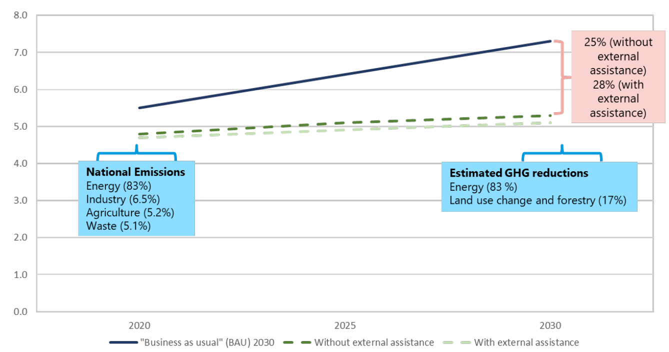
[11] The updated NDC targets emissions reduction of 25-29 percent relative to a business-as-usual scenario by 2030. This target is three times as ambitious as the one included in the First NDC (2015). The NDC addresses emissions from land use and forestry sector and commits to maintain at least 30 percent of the country land mass as forest.

[12] In August 2021 the authorities developed in collaboration with the WB and the NDC partnership, the NDC implementation plan. The Climate Change Division (CCD) in the Ministry of Economic Growth and Job Creation (MEGJC) will provide an update on commitments based on the NDC implementation plan. The next NDC implementation status update is expected in FY2024.

6. **Jamaica is advancing with the adaptation and disaster financing policy as well.** Jamaica is developing its first National Adaptation Plan (NAP) comprising a comprehensive adaptation implementation roadmap and investment plan. In addition, the authorities are developing a National Disaster Risk Financing Policy that provides a menu of financing options the Government can draw upon to respond readily to natural disasters.

7. **The NDC targets emissions reductions of between 25.4 percent and 28.5 percent (with external assistance) relative to business-as-usual by 2030**. About 80 percent of the reductions are expected to come from the energy sector through a large-scale ramp up of renewables in the power sector, as well as improved energy efficiency across all major energy consuming sectors. The rest will come from the land use change and forestry sector when measures such as the 'No Net Loss of Forestry' commitment and the tree planting are completed.

Emission Trends (2020–2030)



Source: 2020 NDC

C. Jamaica's Climate Change Agenda: Implementation to Date and Priorities Going Forward

Building Fiscal and Physical Resilience to Natural Disasters and Climate Change

8. **Implementation to Date**. *Jamaica has made progress in addressing natural disasters and strengthening climate resilience through measures designed to reinforce fiscal stability, mitigate financial risks, create more responsive budgetary mechanisms, and strengthen the public investment management.*

- **The institutional framework and high-level provisions for the management and mitigation of disasters are well laid out in the 2015 Disaster Risk Management (DRM) Act.** The Act establishes the National Disaster Risks Management Council, chaired by the Prime Minister, as the overseeing body. The Office of Disaster Preparedness and Emergency Management (ODPEM), located in the Ministry of Local Government and Development, is the executive arm in charge of coordinating the development and implementation of the integrated disaster preparedness and management systems. The Act also establishes the National Disaster Fund—managed by the ODPEM—to be used for upgrading and maintenance of resilient infrastructure, as well as provincial-level lower impact disasters.

- **In line with the DRM Act, the authorities developed a Comprehensive Disaster Management program (CDM)**. The CDM is directed by the ODPEM.[13] It comprises preparation and execution of: (i) activities to minimize damage and amplify relief response; (ii) recovery and rehabilitation plans; and (iii) a mitigation phase when structural and non-structural measures are undertaken to limit the adverse impact of natural disasters, environmental degradation, and technological hazards. The social safety net is fairly developed and allows for a quick response to humanitarian needs after a natural disaster. During COVID, Jamaica demonstrated sound procedures and relatively efficient institutions in providing support for the population.

- **In November 2018, Jamaica's Cabinet approved a Public Financial Management (PFM) policy framework for natural disaster risk financing**. The framework aims to bolster financial resilience by developing sound legal and institutional arrangements for mounting a swift and cost-effective financial response to natural disasters, while minimizing budget reallocations and protecting the fiscal balance. The framework also addresses the need to identify, monitor, and mitigate all sources of contingent liabilities associated with Public Private Partnerships (PPP), as well as fiscal risks due to natural disasters.

- **A comprehensive financing framework to provide liquidity during natural disasters has been put in place.** A combination of budget instruments, disaster risk insurance and contingent line of credit from International Financial Institutions (IFIs) provides a safety to respond to disasters: (i) the Contingencies Fund has been established under the Constitution and operationalized in Section 13 of the FAA to provide for unforeseen expenditure of any kind, including but not limited to disasters.[14] This is the main budget instrument for the GOJ to finance post-disaster expenditures. The aggregate ceiling of the Contingencies Fund was raised from J$100 million (US$652,000) to J$10 billion in 2019 (US$ 65 million), to provide space for expenses related to natural-disaster risk coverage; (ii) the National Disaster Fund (NDF) has been established under Part IX of the DRM Act. The NDF is intended for projects that mitigate, prevent, prepare for, respond to, and recover from emergencies and disasters and that provide financial assistance to households for relief and recovery from a disaster. The NDF is currently capitalized at US$ 2.2 million and has historically received an annual injection of around J$500 million (US$3.2 million). The authorities are considering shifting the focus of the NDF to local events and making prominently the ex-ante use of the Fund; (iii) Jamaica is a member of the regional catastrophe insurance platform, the Caribbean Catastrophic Risk Insurance Facility (CCRIF) [15]. CCRIF offers its members quick-disbursing, parameter-based insurance cover against

[13] See: https://www.odpem.org.jm/comprehensive-disaster-management-cdm-strategy/.

[14] According to article 96 of the Constitution, and Section 13 of the 2012 FAA.

[15] CCRIF's parametric insurance is different from traditional indemnity insurance as it makes payments based on the intensity of a natural hazard event (e.g., hurricane wind speed, earthquake intensity, and volume of rainfall), the exposure or assets affected, and the amount of loss calculated in a pre-agreed model. CCRIF does not need to wait for on-the-ground assessments of loss and damage–unlike with indemnity insurance–to make payouts. This enables the Facility to disburse funds to governments within 14 days of an event. A CCRIF policy is triggered when the modelled loss for a hazard event equals or exceeds the attachment point selected by the country and specified in the policy contract (like a deductible in a traditional insurance contract).

disaster hazards. Annual CCRIF insurance premia are mostly financed through the budget with the GOJ contributing an over-time increasing share of the premia. In 2021, insured hazards were earthquakes, tropical cyclones, and floods, with coverage up to US$ 248.7 million; (iv) the country is the first small island state to independently sponsor a catastrophe bond (CAT bond) with the assistance of the World Bank's Capital-At-Risk notes program.[16] The bond was placed in July 2021, securing US$185 million of disaster insurance protection from capital markets;[17] and (v) Rapid credit facilities have been also made available to the country. Liquidity needs have been met through the IFIs in the past, including by relying on the IDB (US$ 285 million remain available) and the IMF's Rapid Financing Instrument.

- **Transparency and accountability for natural disaster and climate resilience spending is embeded in budget preparation and execution**. While not used uniformly and consistently across the government agencies, the budget program—disaster management—allows to track disaster-related expenditures incurred by budget units. In 2019, the Ministry of Finance and Public Service (MOFPS) issued post-disaster budget execution guidelines for proper and timely access and allocation of funds in post-disaster situations. The guidelines specify instruments, disbursement modalities, and the financial procedures to be followed in accordanace with the existing disaster-related legislation and the Financial Administration and Audit Act. These guidelines are a key aspect of the PFM Policy Framework for Natural Disaster Risk Financing. The MOFPS is also planning to adopt climate budget tagging with the support of the IDB.

- **Green and resilient public investments have been included on the agenda to facilitate adaptation and mitigation to climate change**. Sectoral plans and strategies are well aligned with the objectives and priorities of the NDC. While Vision 2030 Jamaica—the National Development Plan—is the overarching framework for sustainable development and climate change in Jamaica, the energy sector plan focuses largely on climate change mitigation and the water sector strategy addresses resilient water infrastructure.[18] One important measure was also the promulgation of the 2018 Building Act and the related Code. The National Building Code was adopted in 2018 and came into operation in January 2019. The code comprises the International Building Code (IBC) together with eleven documents describing standards of specification. The IBC provides for construction material and construction practices that resist extreme weather events such as hurricanes, storm surges, floods, and landslide. The code also addresses concerns related to energy mitigation through improving energy efficiency in public buildings. However, many settlements remain outside the formal planning system and likely do

[16] https://www.worldbank.org/en/news/press-release/2021/07/19/world-bank-catastrophe-bond-provides-jamaica-185-million-in-storm-protection. The USAID provided US$5 million grant and US$14 million was leveraged from other donors. The CAT bond premia are financed by development partners in the amount of approximately US$16 million per year. USAID also provides funding for the CAT Bond premia.

[17] Under this program, the World Bank issues notes where some or all of the investors' principal may be at risk, such as catastrophe bonds (cat bonds) and pandemic bonds. https://treasury.worldbank.org/en/about/unit/treasury/ibrd/ibrd-capital-at-risk-notes

[18] Climate change is primarily addressed under National Outcome #14 'Hazard Risk Reduction and Adaptation to Climate Change' but is recognized as cross-cutting for other outcomes and strategies of the Plan.

not meet building standards[19]. The government also initiated a Green Coastal Urban Renewal plan focusing on waterfront renewal that provides sustainable habitable public spaces for recreation along prominent waterfront areas, coastal revetments and sea walls that protect against erosion and flooding from wave action, storm surges, and currents, and relocation of vulnerable communities.

9. Priority Measures Going Forward. *The authorities aim to increase resilience of the country's macro-fiscal stance to climate change and natural disaster shocks including by adopting a fiscally sustainable disaster risks financing strategy and mechanisms and by fostering climate smart public investment.*

- **Integrate climate risks into fiscal planning**. The examination of risk management at MOFPS is primarily focused on control and governance arrangement for public entities such as public corporations and extra-budgetary units. The MOFPS plans to introduce quantitative assessments of disaster risks in the fiscal policy paper by assessing long-term fiscal sustainability under different climate change scenarios.

- **Add climate change requirements into the PPP legal framework.** Jamaica has made extensive use of public-private partnership (PPP) arrangements since 2011[20]. In collaboration with the Inter-American Development Bank (IADB) and the World Bank (WB), work is advancing to amend the existing policy and regulatory framework to include climate requirements in PPP project agreements from project identification to contract management including comprehensive insurance policies to distribute among the PPP partners the burden of contingent liabilities related to natural disasters.

- **Adopt the National Natural Disaster Risk Financing (DRF) Policy.** The diversity of financial coverage tools available in Jamaica in case of disasters reflects its strategic approach to DRM financing but it appears to be based more on opportunities than on a robust assessment of explicit and implicit contingent liabilities. Work is ongoing to develop a policy framework for disaster risk financing, with assistance from the WB to inform the selection of the most cost-effective ex-ante financing mechanisms.

- **Establishment and operationalization of a National Natural Disaster Reserve Fund (NDRF).** The NDRF will be constituted under the consolidated fund and used for relief financing in case of catastrophic national level events to be defined in the FAA according to their impact quantified as a share of GDP.[21] It will also be eligible for external financing.

[19] http://Islandr.com/vision2030/wp-content/uploads/sites/4/2020/12/Microsoft-Word-Vision-2030-Jamaica-Final-Draft-Transport-Sector-Plan-_S%E2%80%A6.pdf.

[20] Compared to other Caribbean countries, Jamaica has been very proactive in developing PPPs. While the PPP capital stock in Belize stood at 8.4 percent of GDP in 2019, and in Dominican Republic at 3.4 percent, in Jamaica the PPP capital stock was 16 percent.

[21] The Consolidated Fund is the principal Government account to which all government revenues must be deposited and from which expenditure, via warrants, is withdrawn. Since the NDRF is also eligible for external financing, for instance from the CAT-bond, the authorities plan to structure the NDRF as a sub-account of the consolidated fund.

- **Integrating climate considerations in the appraisal and selection of public investments**. The PIAB in the MOFPS developed template for the MDAs submission of the project concept and proposal. The templates require a screening of climate hazards—using the Caribbean Climate Online Risk & Adaptation Tool (CCORAL)—at project concept stage. The PIAB is planning to adopt a methodology for inclusion of climate impact assessments at project appraisal (proposal) stage, for infrastructure projects identified at a screening phase as medium or high risk. Inclusion of climate considerations at appraisal stage will improve the prioritization and allocation of fiscal resources.

A Climate Public Investment Management Assessment (C-PIMA) was performed in December 2022. It is being finalized and when completed it will provide further assessment of the reforms' progress and the feasibility and robustness of the priority measures.

Strengthening Mitigation, Promoting Renewables

10. Implementation to Date. *Jamaica has made progress in the implementation of the NDC, including introducing electric buses, enhancing energy efficiency, and advancing tree planting***.**

- **LED street lighting installation—targets replacement of the streetlights with energy efficient LED.** In 2021, the replacement reached 80 percent of streetlights. There were upfront costs of some US$30 million, and international support provided by the Caribbean Development Bank through TA and a US$25 million funding. The initiative is to be extended to the underlit areas and through a development of a smart city roadmap with assistance from the US Trade and Development Agency.

- **Deployment of low-carbon public buses (2020-2025) in the Montego Bay and St. James Parish**— 20 buses deployed as of 2021. By 2025, 136 buses are to be in service. The project requires US$30 million financing yet to be secured plus a financing for supportive infrastructure. The project is supported by IDB's TA.

- **National Tree Planting—about ½ million seedlings were planted by end-2021.** The US$2 million project is advancing with pledges to plant another ¾ million seedlings. Further support from private sector and/or international sponsors is needed for the success of the project.

- **Several externally funded projects are progressing well.** The Energy Efficiency & Conservation Program (EECP) has supported retrofitting of many government facilities—including public health, administrative and educational buildings—and facilitated training in best practices for energy efficiency and conservation. It concluded in 2018. The Energy Management and Efficiency Programme in Jamaica (EMEP) promotes energy efficiency and conservation. [22] The EMEP is a key element of the National Development Plan Vision 2030 and the guide for government's energy efficiency and conservation policies. The EMEP Urban Traffic Management

[22] https://www.eu-cif.eu/en/projects/energy-management-and-efficiency-programme-jamaica#:~:text=This%20Energy%20Management%20and%20Efficiency,spending%20whilst%20also%20contributing%20to This project is partially funded.

System was launched in May 2021.[23] It is expected to ease urban mobility and raise fuel efficiency in the Kingston Metropolitan Area, Spanish Town, and Portmore. This should decrease demand for gasoline and lower oil imports.

11. Priorities Going Forward. *The authorities plan to attract private sector investment to support the transition to renewables and increase efficiency in both energy generation, transmission, and consumption.*

- **Incentives for investment in renewables.** The authorities intend to develop legislation to the Electricity Sector Act to incentivize investment in renewables through fiscal measures like feebates or support for renewables. These policies will be instrumental to achieve a target of about half of electriciy generation from renewables by 2030.

- **Electric vehicles.** The Cabinet approved the Strategic framework for electric mobility developed in conjunction with the IDB. The authorities intend to develop an electric vehicle policy that sets functional standards and regulations for electric mobility, defines energy sector guidelines for electric mobility accommodation, develop operational codes to promote adoption of electric vehicles, and sets guidelines for the development of an electric mobility ecosystem.[24] These measures could result in a share of electric vehicles rising to about 12 percent of total privately-owned fleet, 16 percent of public transport, and savings of 3 $MTCO_{2eq}$ over the next decade.[25] The costs and benefits of expanding electric mobility would span three major areas: fiscal, economy-wide (e.g., GDP impact) and socio-financial impacts. The fiscal impact is estimated to be largely neutral as the burden of early incentives is balanced by later gains in tax collection. The economy-wide and socio-financial impacts are estimated as positive due to investments in infrastructure, fuel imports reductions, development of renewables and socio-financial (including health) savings due to the efficiency advantages in maintenance, emissions, and operations of the electric fleet over the combustible engine-based fleet.

- **Energy efficiency.** Policies and procedures to reduce theft of streetlights, replace existing lightbulbs in schools and hospitals with low energy alternatives[26] and secure inventory of energy-efficient lightbulbs. The government will introduce new reporting, monitoring, and evaluation procedures to ensure efficient application of the replacement process. This initiative would be supplemented with measures to support efficient energy consumption, which could include extending the successful energy conservation program in public buildings to the private sector through incentives to replace air-conditioning equipment with heat exchange units such

[23] https://www.mset.gov.jm/2021/12/08/test-emep-post/ Funding for EMEP is secured through the energy loan from the IDB (US$15 million), the Japan International Cooperation Agency (US$15 million) and the European Union Caribbean Investment Facility (US$ 10 million tbd). The Energy Efficiency has allocation of US$22.8 million, and Urban Traffic has US$3.43 million.

[24] https://www.mset.gov.jm/wp-content/uploads/2022/11/Electric-mobility-Strategic-Framework-DEF.pdf

[25] Ibidem., pp. ii, iii, pp.13-28.

[26] A ban on incandescent light bulbs is to take effect from April 1, 2023. https://jamaica-gleaner.com/article/news/20221007/jamaica-ban-incandescent-bulbs-come-april

as heat-pumps and other green oriented technology. Previous energy conservation programs may be a good benchmark for the potential impact of this measure. The Energy Efficiency and Conservation Program implemented during 2012-2016 retrofitted public health, administrative and educational buildings, supported energy efficiency and conservation and was estimated to had saved some JD131.5 million (US$1 million).[27] A subsequent program developed over 2017-2021 is estimated to have saved more than 0.6 million barrels of oil (equivalent to 8 percent of total crude volume imported in 2020) by equipping 30 public facilities with energy efficient systems.[28]

Greening the Financial Sector

12. Implementation to Date. *In 2022 the Central Bank of Jamaica (BOJ) joined the International Sustainable Banking and Finance Network (SBFN)[29] to better develop capacity to monitor climate change risks in line with best practices*. The BOJ has been engaged by the Basel Consultative Group to participate in its proportionality workstream with a view to expedite adoption of the supervision of the climate adoption risks.[30] The BOJ is also a member of the Association of Supervisors of Banks of the Americas[31] and it will consider becoming a member of the Network for Greening the Financial System (NGFS).[32,33] The Financial Services Commission, at end-2021, adopted a risk-based supervision framework which recognizes the importance of accounting for the climate related risks. The FSC expect to be able, where relevant, to consider such risk when profiling an entity. The FSC encourages its licensees and registrants to adopt the recommendations of the Financial Stability Board's Task Force on Climate related Financial Disclosures (TCFD). It expects that financial institutions should have in place frameworks to factor in the governance, strategy, risk management, and metrics and targets related to climate risk issues.

13. Priorities Going Forward. *The authorities plan to develop green financial instruments and the capacity for management of climate-related risks to enhance financial sector resilience and help*

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[27] See: https://jamaica-gleaner.com/article/news/20170326/governments-energy-efficiency-project-saves-1315m.

[28] See: https://www.eu-cif.eu/en/projects/energy-management-and-efficiency-programme-jamaica

[29] The SBFN (https://www.sbfnetwork.org/) is a platform for knowledge sharing and capacity building on sustainable finance for financial sector regulators and industry associations across emerging markets.

[30] The BOJ has been engaged by the Basel Consultative Group to participate in its proportionality workstream in which the BOJ and other central banks will provide support to the Basel Committee on Banking Supervision (BCBS) to develop proportional and tailored guidelines to the current Basel framework with respect to market risk, credit risk, operational risk, climate-related risk, cyber risk, as well as corporate governance and risk management. This work will improve practices and provide a common baseline for internationally active banks and supervisors (https://www.bis.org/press/p220615.htm). The principles retain flexibility in recognition of the evolving practices in this area. The BOJ is likely to benefit from this engagement with a view to expedite adoption of the supervision of the climate adoption risks https://www.bis.org/bcbs/membership.htm.

[31] http://www.asbasupervision.com/en/who-we-are

[32] https://www.ngfs.net/en is a platform for the central banks and supervisors to share practices for climate risk management in the financial sector and to mobilize support for a transition to a sustainable economy.

[33] For an assessment of how climate change risks can affect the financial system in Jamaica, see https://www.ngfs.net/en/ngfs-climate-scenarios-central-banks-and-supervisors-september-2022.

scale up climate financing. Critical elements in this process will involve: (i) allocation of adequate resources and the building of internal capacity for supervision of climate risks; (ii) setting expectations (guidelines) for financial institutions on governance and strategy, risk management, scenario analysis and stress testing, and disclosure of climate-risks; and (iii) improvements in data collection from financial institutions to better monitor their exposure to climate-related risks.

- **Green bonds[34].** The authorities intend to develop a green bond market to mobilize private sector financing for climate adaptation and emission reduction projects—these bonds would also signal commitment to address the impact of climate change and may catalyze other financing. The authorities will assess the convenience of issuance at an early stage in the adoption of reforms or when the conceptualization reaches its mature stage—an early issuance might be helpful if it locks in private sector interest in the projects and stresses the authorities' own commitment to them.

- **The authorities will build capacity to monitor climate change risks in the financial system.** Currently, there is not enough data on the financial system's exposure to climate related risks. Nevertheless, the BOJ recognizes that the domestic financial institutions are vulnerable to climate risks through lending to the climate exposed sectors. The BOJ has benefitted from the Basel Committee on Banking Supervision guidance on additional buffers needed to mitigate against climate related risks. Additionally, BOJ has partnered with the *Agence Française de Développement* (AFD) to green the Jamaican Financial System. The project comprises two phases, with funding provided by the AFD (phase 1) and the European Union Caribbean Investment Fund (CIF) (phase 2):

    - The first phase will focus on building capacity at the BOJ and the FSC to incorporate Climate-Related Financial Risks (CRFR) into their risk-based supervision, risk monitoring, and evaluation practices. The BOJ will engage a consultant to assess the climate-related financial risks. The consultant's report will outline the national policies/regulatory framework and provide a diagnostic of climate risk considerations in the Jamaican financial system. This will be followed by an adoption of a monitoring framework, including identification of key risks and related monitorable indicators. Supported by the monitoring framework, a detailed guidance on the data required to measure exposures and conduct stress tests will be developed. Finally, a report outlining the recommendations for the implementation of climate stress testing, and the governance and regulatory regime in the Jamaican financial system will be completed.

    - With the completion of the reform measures 11 and 12 the foundations for monitoring of climate changes risks in the financial sector will be established and Phase 2 will focus on the integration of climate risks in supervision and macroprudential policy formulation, which is expected to continue over the next four years. These activities will comprise conducting climate related stress tests, developing a monitoring framework to manage risks, and building capacity at the BOJ and the FSC for on-going assessment of climate-related risks.

[34] Green bonds are fixed-income instruments that allow issuers to raise money for projects with environmental benefits, such as renewable energy, energy efficiency or clean transport.

Table 1. Jamaica: NDC (2020–2030) at a Glance

	Measure	Year		Share of 2030 Mitigation	Funding Need			Gender Impact	Progress
		Start	*End*	*(in percent)*	*USD mln*	*Secured*	*Source*		
1.	By 2030, deploy 484MW of power from renewable sources (IRP)	2019	2030	21	664.86	Partial	Power Producers	Neutral	Ongoing
2.	Allow self-generators selling to the grid (Net billing Facility)	2013	2020	0.5	0.12	Partial	Self-financed	Neutral	Ongoing, COVID delay
3.	Reduction in Transmission & Distribution losses	2013	2020	8.9	64.7	Partial	Various	Neutral	Ongoing, COVID delay
4.	Installation of LED Street Lighting	2017	2021	1	15	Funded	Various	Positive	Ongoing, COVID delay
5.	Switch to fluorescent lights in schools & hospitals	2020	2030	0.1	0.1	Unclear	Domestic	Positive	Unclear, COVID delay
6.	Deploy low-carbon busses	2020	2025	0.2	30.05	Unclear	Various	Positive	Ongoing
7.	Biodiesel blending (B5)	2020	TBD	1.4	148.4 annually	Unclear	Domestic	Neutral	Yet to start, COVID delay
8.	Improved use of heat & power in alumina refining	2020	2030	30	1.96	Partial	Domestic	Neutral	Ongoing
9.	Use LNG @ Alpart refinery	2019	TBD	13	TBD	Unclear	Domestic	Neutral	Yet to start, COVID delay
10.	Tree Planting 3 million	2020	2022	2.2	2.16	Funded	Various	Positive	Ongoing
11.	No net loss of forest cover	2013	2030	13.2	TBD	Unclear	Domestic	Neutral	Ongoing
12.	Reduce non-revenue water losses in Kingston	2015	2021	0.6	45	Partial	Various	Neutral	Ongoing
13.	Energy Efficiency & Conservation	2012	2018	0.2	20	Funded	Various	Neutral	Concluded
14.	Energy Efficiency in Public Buildings	2017	2023	0.4	22.8	Partial	Various	Neutral	Ongoing
15.	Energy Efficiency Urban Traffic System	2017	2023	6.4	3.43	Partial	Various	Neutral	Ongoing
16.	Reduce electricity consumption in water sector	2020	2030	1	34.97	Partial	Various	Neutral	Ongoing

Source: World Bank, Jamaica's NDC Implementation Plan, Washington DC, August 2021.

Table 2. Jamaica: Non-NDC Climate Related Projects			
Project	**Objective**	**Composition/Description**	**Total Cost (US$ Million)**
Climate Change Adaption/Resilience/Disaster Management			
River Training	To modify the hydraulic flow and sediment response of a river.		8.5
Retaining Walls	To restrain soil to a slope that it would not naturally keep; to restrain undesirable slopes in areas where the landscape needs to be shaped severely and engineered for more specific purposes like hillside farming or roadway overpasses.		19.0
Gully Works			9.0
Support to the Formulation of Project Proposal ADAPT-JAMAICA for the Green Climate Fund (GCF) (pipeline initiative, not yet under implementation).	The project intends to support the ministry to develop climate-smart practices in the agriculture and fisheries sector with a focus on water management, agricultural disaster risk management and ecological approaches to sustainable ecosystem management. This will be done on a community-based level thus incorporating key groups such as small farmers, fishers, women and youth.		20.0
Building Community Resilience among Persons with Disabilities through Sustainable Land Management and Climate Smart Agricultural Practices.	To build community resilience among Persons with Disabilities through sustainable land management and climate smart agricultural practices.		0.1
Building Climate Resilience of Urban Systems Through Ecosystem-based Adaptation (EbA) in Kingston, Jamaica.	Increase the capacity of government and local communities living in three medium-sized LAC cities to adapt to the effects of climate change through the integration of EbA into urban planning in the medium-to long-term.	Demonstration of urban EbA interventions in Kingston to increase the capacity of urban and peri-urban communities to adapt to the effects of climate change.	6.0
Centre for Disaster Risk Management Regional (£$3.0 million)	The UK contribution would be delivered through the newly established Centre for Global Disaster Protection, a partnership between DFID and the World Bank Group.	GoJ has requested support for the development of a DRF policy, strategy and the implementation of the strategy. This includes: • developing risk transfer instruments for public assets (such as parametric insurance; indemnity bonds etc);	0.6

Table 2. Jamaica: Non-NDC Climate Related Projects (continued)			
Project	**Objective**	**Composition/Description**	**Total Cost (US$ Million)**
Climate Change Adaption/Resilience/Disaster Management			
	For technical assistance related to disaster preparedness and risk financing strategies at national level, and innovation in financial instruments: 1. National level technical assistance and design of new innovative financial instruments: including support to strengthen disaster preparedness and disaster risk financing strategies, investment in improved risk information, and working to design and pilot new instruments (e.g. for rapid recovery of critical public services). 2. Access to finance (e.g. part-funding insurance premiums or other risk financing instruments) to pilot new national-level approaches to strengthening financial, economic and social resilience to disasters. This could be linked to new products from the Caribbean Catastrophe Risk Insurance Facility (CCRIF) or a new mechanism. A key requirement to access finance is to create a clear link to disaster preparedness plans, systems and policies (i.e. for specific sectors, not budget support).	• supporting private sector to ensure coverage of critical assets held in private hands: business continuity insurance; policy and regulatory work; • Work to assess the feasibility of a CAT bond - Jamaica would be the 7th country to develop one; • Work to optimise the over $80m a year the Jamaican Gov't and SoE's are spending on insurance for critical public assets.	
PPCR-Improving Climate Data and Information Management Project.	To improve the quality and use of climate related data and information for effective planning and action at local and national levels.	Component 1: Updating of the Data Collection, Processing and Forecasting System of the Hydromet Services. Component 2: Developing Climate Change Scenarios and Vulnerability Assessments and Strengthening the Web Portal Climate and Risk Information Platform and Clearinghouse. Component 3: Climate Change Education, Awareness and Behaviour Change.	6.8

Table 2. Jamaica: Non-NDC Climate Related Projects (continued)

Project	Objective	Composition/Description	Total Cost (US$ Million)
Climate Change Adaption/Resilience/Disaster Management			
Resilience Strengthening to Climate Change Impacts through Youth Education in Primary Schools.	The project seeks to strengthen resilience to climate change impacts in Primary Schools through Youth Education and customised climate information to include knowledge products.		0.2
Project for the Improvement of Emergency Communication System.	This initiative is expected to result in the development of a national Disaster Emergency Communication system, Early Warning System and provide equipment for the Training Response team for major incident.	1. Construction of repeater station huts and racks 2. Procurement and installation of equipment 3. Consulting services	12.7
Aquaponics: Increasing Access to Climate- Smart Agriculture in Jamaica.	To create a commercially viable market for aquaponics technology in the production of fish and horticulture for local high value markets.	Component I: Enhancing technical and business capacity for aquaponics production. Component II: Building stronger linkages for aquaponics production. Component III: Structuring customized financial product in partnership with local financial institutions	1.9
Building Resilience through Climate Adaptation Technologies.	To use technology to improve climate, weather data and other hazard-related information and to share it effectively. This will result in the prevention of a loss of life, damage to property and revenue losses as a result of severe weather and climate events.		0.6
PROADAPT2 - Financing Water Adaption in Jamaica's New Housing Sector.	The objectives of the project are: (i) to facilitate the uptake of water adaptation measures in the housing sector across Jamaica, including the use of rain water harvesting systems, water efficient taps and showers, low-flush toilets, efficient irrigation systems, greywater recycling facilities, among other appropriate efficiency measures;	The project will be carried out through 3 components. Namely: Component I: Stakeholder Consultation, Project Launch and Preparation of the Business Case for Water Efficiency (MIF: US$50,500; Counterpart: US$38,000; NDF Cofinancing: US$40,000), Component 2: On-Lending for the Integration of Water Adaptation Measures	1.1

Table 2. Jamaica: Non-NDC Climate Related Projects (continued)			
Project	**Objective**	**Composition/Description**	**Total Cost (US$ Million)**
Climate Change Adaption/Resilience/ Disaster Management			
	(ii) to increase climate resilient housing in Jamaica, through greater awareness of the business and financial cases for developing and building homes with water efficient measures; and (iii) to increase the efficiency in the use of water by Jamaican homes, improve the reliability of water supply and thereby enhance Jamaica's water security and climate resilience.		
Essex Valley Agricultural Development Project (UK-CIF).	To enhance production and productivity of farmers in Essex Valley in a socially inclusive gender equitable and climate sensitive manner.	Component 1: Improved Irrigation Systems; Component 2 : Enhanced Agricultural Production, Marketing Facilities and Systems; Component 3: Energy Efficiency/Renewable Energy; Component 4 : Technical Assistance; Component 5: Land; Component 6 : Project Management, Financial Audits and Baseline Survey.	42.0
Southern Plains Agricultural Development Project.	The project will support, among others, the expansion and improvement of the irrigation and farm access road network of identified areas, strengthening commercial market linkages for small scale farmers, installation of flood control systems; construction of packing houses and Global G.A.P structures in the rural communities of Parnassus in Clarendon and Amity Hall in St. Catherine.		22.2
Strengthening Health Facilities in the Caribbean Regional £43.8m.	To provide safer, greener health facilities in the region. Designed to enable delivery of care in disaster, generate operational savings and reduce disaster losses.	In Jamaica- complete 150 health facility assessments (HIS & greening audits) and upgrade up to 11 facilities A smart audit assessment of all district clinic or polyclinic facilities will be undertaken in Jamaica. At least 6-8 facilities will be rehabilitated and/or retrofitted. Proposed facilities: Greater Portmore; Morant Bay Health Centre; St Ann's Bay Health Centre; Albert Town; Mandeville; Stony Hill, Port Antonio; and Santa Cruz.	5.0

Table 2. Jamaica: Non-NDC Climate Related Projects (continued)

Project	Objective	Composition/Description	Total Cost (US$ Million)
Climate Change Adaption/Resilience/Disaster Management			
Strengthening Disaster Recovery and Resilience in the Caribbean (Regional) £5m.	The protect poor and vulnerable people in ODA-eligible Caribbean states, ensuring action is gender responsive and inclusive, save lives and assist countries to get back on their feet more quickly after a disaster.	To strengthen preparedness and macro public financial investment, speed up recovery and reconstruction, as well as deliver more cost-effective, rapid and reliable response to emergencies e.g. shock responsive social protection.	0.9
Caribbean Disaster Risk Management Fund Regional.	To support community-driven projects throughout the Caribbean seeking resilience to natural hazards and climate change.	In Jamaica, support was approved for the following entities: • Jamaica Amateur Radio Association (2011-2014) • Panos Caribbean (2012-2015) • Jeffrey Town Farmers Association Ltd. (2013-2014) • Abacus for Communities (2015-2016) • Caribbean Coastal Area Management Foundation (2014-2016) • Dolphin Head Local Forest Management Committee (2017-2019, ongoing)	0.4
Impact Assessment of Climate Change on the Sandy Shorelines of the Caribbean Project – Pilot Project.	To improve the resilience of the coastal communities to climate change and sea-level rise.	The establishment of a regional erosion-monitoring networks and the sharing of beach rehabilitation, observation and preservation best practices. Jamaica was selected as the pilot country/launch pad for the coastal monitoring project in the Caribbean. Jamaica was selected as the pilot country/launch pad for the coastal monitoring project in the Caribbean	1.0
Enhancing the Resilience of the Agriculture Sector and Coastal Areas to Protect Livelihoods and Improve Food Security.	To protect livelihoods, food security and safeguarding Jamaica's natural resources, particularly in rural and coastal communities which are vulnerable to the adverse impacts of climate change.	The Programme (i) strengthens coastal resilience (ii) improves land and water management for the agricultural sector (iii) builds institutional and local capacity for climate change adaptation and disaster risk reduction.	10.0

Table 2. Jamaica: Non-NDC Climate Related Projects (continued)			
Project	**Objective**	**Composition/Description**	**Total Cost (US$ Million)**
Climate Change Adaption/Resilience/ Disaster Management			
PPCR- Promoting Community-based Climate Resilience in the Fisheries Sector.	To increase the adoption of climate resilient practices among targeted fishing and fish farming communities in Jamaica.	Component 1 - Strengthening the Fisheries Policy and Regulatory Framework; Component 2 - Diversification and Fisheries Based Alternative Livelihoods; Component 3 - Capacity Building and Awareness-Raising.	4.9
Disaster Vulnerability Reduction Project.	To enhance Jamaica's resilience to disaster and climate risk, through improvement in the collection and generation of risk information, its analysis and use in monitoring systems and decision-making, retrofitting and/or construction of key infrastructure assets, and strengthening institutional capacities for climate and disaster risk management.	Component 1: Technical Assistance for Improved Disaster and Climate Resilience (US$3.815M); Component 2: Risk Reduction (US$23.61M); Component 3: Contingent Emergency Response ; Component 4: Project Administration (US$2.5M)	30.0
Sub-Total Climate Change and Adaption/Resilience Disaster Management			**202.8**
Climate Change Mitigation/Energy			
Negril Water Supply Improvement Project & Transmission Main Installation.	A. Water Treatment Plant Construction - The structure of the water treatment will consist of Raw Water intake, Splitter Box, Clarifiers with sludge draw off system, Sand filters with sand Wash machine, Clear Well with Booster Pumps, Chemical Mixing and Dosing Building, Control Room with Laboratory, Office and Operators facilities. B. Transmission Main Installation - Supply and Installation of 32km of 800mm diameter pipeline between the Roaring River Water Treatment Plant and Sheffield/Negril, Westmoreland. C. Renewable Energy Solutions - Supply and installation of Solar Farm to improve the capacity and		101.0

Table 2. Jamaica: Non-NDC Climate Related Projects (continued)			
Project	**Objective**	**Composition/Description**	**Total Cost (US$ Million)**
Climate Change Mitigation/Energy			
	ability of the water treatment Plant to adapt and be resilient to climate change.		
Island-wide Non-Revenue Water (NRW) Reduction Programme.	The objective of the project is to target the reduction of NRW levels in the service area from its estimated current level of a 75% of water production to 30%. In an environment affected by climate change, efficient us of water resources becomes of paramount importance. The island wide NRW Reduction Programme will provide the ability for the NWC and its water supply infrastructure, to be adaptable and resilient to climate change, inclusive of the reduction of GHG emissions and carbon 'foot-print'.		303.0
Soapberry Wastewater Treatment Plant Privatization and Expansion of Soapberry Wastewater Treatment Plant.	• SWTP is required to be expanded from its current treatment capacity of 75,000 m3/day to 150,000 m3/day, in order to meet the medium-term requirement for treatment of wastewater collected by NWC in the Kingston Metropolitan Area (KMA). The current capacity is capable of serving about 256,000 persons; • The project aims to facilitate the expansion of the KSA sewer network and provide the opportunity for more residential and commercial infrastructure to be developed; • The need to ensure that the output from the plant, meets or exceeds National Environment and Planning Agency's (NEPAs) guidelines for effluent quality;		85.0

Table 2. Jamaica: Non-NDC Climate Related Projects (continued)			
Project	**Objective**	**Composition/Description**	**Total Cost (US$ Million)**
Climate Change Mitigation/Energy			
	• It is envisaged that the output from SWTP is reused for agricultural purposes to offset the current use of potable water sourced from the Rio Cobre River; and • The SWTP should have the ability to adapt and be resilient to climate change, inclusive of climate change mitigation via the introduction of new technologies and renewable energy solutions.		
Greater Spanish Town Centralized Sewerage & Wastewater Treatment Plant - St. Catherine.	A. Rehabilitation of Package Plants Upgrade some of the packaged WWTPs to improve their performance and regulatory compliance within the short to medium planning horizon, so as to satisfy the National Environment and Planning Agency (NEPA) effluent discharge requirements, while awaiting the approval, construction and commissioning of the central WWTP. B. Construction of WWTP & Installation of Sewer Network - Phased construction, inclusive of the decommissioning/retirement of the existing packaged WwTP plants converting them into pumping stations, and implementation of the sewerage network and modular expansion of the centralized WWTP with an actual WWTP Design Flow of 83,000 m3/d. The exercise will require the detailed environmental impact assessment, topographical survey and geotechnical assessment of the proposed location of the central WWTP, hydraulic modeling and analysis of sewer network. C. Climate Change /Renewable Energy Solution: The WTP will have the ability to adapt and be resilient to climate change, inclusive of climate change		526.0

Table 2. Jamaica: Non-NDC Climate Related Projects (continued)			
Project	**Objective**	**Composition/Description**	**Total Cost (US$ Million)**
Climate Change Mitigation/Energy			
	mitigation via the introduction of new technologies and renewable energy solutions. • The project aims to facilitate the expansion of the Great Spanish Town sewer network and provide the opportunity for more residential and commercial infrastructure to be developed; • The need to ensure that the output from the plant, meets or exceeds National Environment and Planning Agency's (NEPAs) guidelines for effluent quality; • The process will be facilitated via the use of energy and resource conservation technology to maximize practical and economic feasibility.		
Greater Portmore Ponds Wastewater Treatment Plant Rehabilitation & Upgrading Works Phase 2	The key objectives of this project are to: • Improve the treatment process and compliance with environmental and effluent standards set by regulators (NEPA, MoH, etc). • Reduce environmental hazard and risk to the surrounding community. • Increase customer base and service/coverage area. • Facilitate land development. • Increase treatment capacity of the western section of the facility.		0.6
Ferry Springs Water Supply System Supply Improvement Project.			30.0

Table 2. Jamaica: Non-NDC Climate Related Projects (continued)			
Project	**Objective**	**Composition/Description**	**Total Cost (US$ Million)**
Climate Change Mitigation/Energy			
Rehabilitation & Upgrading of 8 (K-Factor) NWC WWTPs (K8).			18.0
Greater Portmore Ponds Wastewater Treatment Plant Rehabilitation & Upgrading Works Phase 2 (GPP WWTPP2).			0.6
Design and Build of 5 NWC Wastewater Treatment Plants, M5 (Mechanical Systems: Ensom City, Longsville Park, Paisley Pen, Redhills Pen and Shrewsbury WWTPs).			16.0
Renewable Energy			9.6
(GPP WWTPP2)	Human and institutional capacities are enhanced with the introduction of RE and promotion of EE.	Component 1 :Confirm basic information for capacity building for RE introduction; Component 2: Confirm basic information for capacity building for EE introduction; Component 3: Human/Institution Capacity Enhancement for RE and EE	0.3
Supporting Sustainable Transportation through the Shift to Electric Mobility In Jamaica.	To address prioritised challenges and demonstrate EV technology in Jamaica to determine the conditions for social, technical, economic and environmental sustainability." Short-term, prioritised challenges include: (a) policy design and regulation of key aspects including technical standards and waste management; (b) strengthening of the "EV ecosystem" bybuilding skills and competences, and by supporting "smart" business development; and (c) increase market confidence and reducing perceived risks.	Component 1. Institutionalisation of low-carbon electric mobility. (Outcome 1.1 The policy and institutional framework for eMobility in Jamaica has been strengthened) Component 2. Short term barrier removal through low-carbon e-mobility demonstrations. (Outcome 2.1 eMobility demonstration pilot has been prepared, implemented and monitored to provide evidence on technical, environmental and economic performance and market potential) Component 3. Preparing for scale-up and replication of low-carbon electric mobility. (Outcome 3.1 Jamaica's knowledge base, technical skills, and investors' awareness have been enhanced for accelerating the uptake of eMobility systems).	13.2
Strengthening Energy Sector Resilience in Jamaica.	To increase the resilience of Jamaica's energy sector to the impact of natural disasters by promoting energy resilience and diversification of the energy market.	Global Development Alliance (GDA) with U.S. and Jamaican firms that will: a) support opening the legal and regulatory framework (e.g., by providing analysis and advocacy) to create space for increased diversification to renewable energy; b) increase public sector use of energy efficiency and distributed electricity generation; c) raise consumer awareness and ability to access	4.0

Table 2. Jamaica: Non-NDC Climate Related Projects (continued)			
Project	**Objective**	**Composition/Description**	**Total Cost (US$ Million)**
Climate Change Mitigation/Energy			
		financing to help further increase demand for modern energy technologies including solar photovoltaics and battery storage systems; d) support a Public Private Alliance for Energy and Disaster Resilience. The GDA has the potential to leverage upward of $50m in private sector investments. Jamaican private sector partners include: Wigton Windfarms, the Jamaica Hotel and Tourist Association, Lasco Distributors (where a pilot Solar PV project will be based) and the University of West Indies. US companies include Cadmus and WRB Energy. One diaspora-led Canadian firm, Xergy Energy, also is participating.	
USAID-NREL Partnership for Jamaica	To increase the energy resilience of Jamaica's critical infrastructure, which is essential to effective relief and recovery operations.	NREL will assess three of Jamaica's critical facilities and develop suggested interventions (including procurements) to address vulnerabilities. The assessment and recommendations will provide solutions that support the design and implementation of a distributed network of energy-resilient facilities that ensures continuity of critical community services, protects high risk/high vulnerability populations, and enhances capacity to provide and maintain basic services at a district scale.	0.2
Jamaica Non-Technical Loss Working Group Priorities Execution	To support the implementation of electricity non-technical loss (NTL) activities identified by the USAID funded Jamaica Non-Technical Loss Working Group,	Activity will support the implementation of electricity loss reduction tasks that have been identified as priorities by JPS and the NTL Working Group.	0.3
Improved Forest Management for Jamaica (€16.55 million)	The specific objective (s) of the programme are to: 1. Reverse forest degradation, deforestation and the loss of forest biodiversity, through conservation and sustainable forest management, as well as strengthening the legislative, policy and institutional framework of the sector. 2. Enhance economic, social and environmental benefits of forests through the sustainable utilization of forest resources.	1.1 Strengthened governance, policy and legislative framework to ensure sustainable development of the forest sector. 1.2 Improved participatory planning to protect, conserve and manage Jamaica's forests. 2.1 Strengthened institutional capacity for improved availability of data and capacity for monitoring and knowledge management. 2.2 Improved availability of spatial data for sustainable forest management practices, promoting investments, and assessing vulnerabilities and risks in the forest sector. 2.3 Forest communities, the general public as well as targeted groups of professionals have increased knowledge/capacity	18.9

Table 2. Jamaica: Non-NDC Climate Related Projects (continued)			
Project	**Objective**	**Composition/Description**	**Total Cost (US$ Million)**
Climate Change Mitigation/Energy			
A Jamaican Path from Hills to Ocean (H20) project.	To increase resilience to climate change and reduce poverty by protecting livelihoods through the implementation of an integrated landscape management methodology.	The targeted WMUs are the Wagwater including Castleton Gardens (St. Mary), the Rio Nuevo (St. Mary) and the Rio Bueno and White River (St. Ann and Trelawny). The H2O project will also be implemented in wetland ecosystems in Falmouth (Trelawny) and the Mason River Protected Area (Clarendon and St. Ann), as well as sea grass beds in Ocho Rios (St. Ann) and the Hellshire Bay and Half Moon Bay – Portland Bight Protected Area (St. Catherine and Clarendon).	7.0
Blue carbon restoration in southern Clarendon.	To restore mangrove ecosystems in southern Clarendon along the south coast of Jamaica, to conditions of viable/healthy and optimally functioning coastal forested ecosystems. The interventions are expected to improve the sequestration capacity of these restored areas to store blue carbon (carbon that is stored in coastal and marine ecosystems), in addition to improving climate change resilience.		3.4
Mitigating Deforestation and Enhancing Livelihoods through Climate Smart Agriculture Technology and Knowledge Platform in the Springvale Community.	To equip farmers in two communities with the knowledge to increase their productivity and build resilience while reducing their vulnerability to climate change.		0.1
Conserving the Natural Resources through Innovative Agricultural Techniques in the Negril Environmental Protection Area.	To conserve the natural resources in the Negril Environmental Protection Area, through innovative agricultural techniques.		0.1
Conserving Biodiversity and reducing land degradation using an integrated landscape approach.	To enhance conservation of biodiversity and ecosystem services through the mainstreaming of biodiversity into planning policies and practices into Jamaica's productive sectors.	Component 1: Systemic and institutional capacity for integrated landscape management at national level; Component 2: Application of Integrated landscape planning and management in key biodiversity areas; and Component 3: Knowledge management, gender mainstreaming and monitoring and evaluation.	6.3
CReW+:An integrated approach to water and waste water management using innovative solutions and		To implement innovative technical small-scale solutions in the Wider Caribbean Region using an integrated water and wastewater management approach building on sustainable financing	

Table 2. Jamaica: Non-NDC Climate Related Projects (continued)			
Project	**Objective**	**Composition/Description**	**Total Cost (US$ Million)**
Climate Change Mitigation/Energy			
promoting financing mechanisms in the Wider Caribbean Region REGIONAL (US$15.2 million).		mechanisms piloted through the Caribbean Regional Fund for Wastewater Management.	
Expansion of the Rescue Centre to Support In-situ Conservation of Jamaican Protected and Endangered Fauna and Flora through Capacity Building and Community Education.	The project seeks to conserve a viable population of the Jamaican Iguana and its natural habitat in perpetuity through Public awareness activities while generating alternative livelihoods for Community Members.		0.3
Strengthening Community Resilience to Ensure Sustainable Management of Our Natural Resources Through Social Inclusion.	The project will address issues related to climate change, improper land use such as poor farming practices, cutting of trees in the forest, which lead to land degradation and flooding thus severely impacting the watersheds. Also, issues of social inclusion, 'youth-at-risk' and the elderly.		0.4
Strengthening Community Resilience while Ensuring Food Security through Efficient Management of Natural Resources with the Use of Energy Efficient Technology.	The project seeks to promote sustainable strategies aimed at mitigating climate change risks in the communities of Northern Clarendon (targeting Mount Airey, Richmond Park and Crooked River). The project is in alignment with the UN/GOJ UN Trust Fund on Human Security joint project.		0.4
Sustainable Ecosystem Management to support Agroforestry, Agro-tourism and Community Development in vulnerable communities in Portland and St. Thomas.	To improve sustainable management of resources to support the contribution of agro-forestry and agro-tourism to income generation and community development in four buffer communities of the Blue and John Crow Mountains National Parks.		0.2
Enhancing the Legislative Framework in Jamaica while fostering community and private sectors' engagement to reduce plastic marine litter from land activities.	To enhance the capacity and legislative framework of Jamaica to reduce and management plastic marine litter from land-based activities in an integrated and environmentally sound manner and demonstrate the		0.7

Table 2. Jamaica: Non-NDC Climate Related Projects (concluded)			
Project	**Objective**	**Composition/Description**	**Total Cost** (US$ Million)
Climate Change Mitigation/Energy			
	potentials of plastic waste prevention and sound management while catalyzing action for the reduction of plastic marine litter generated by land-based activities		
Integrating Water, Land and Ecosystems Management in Caribbean Small Island Developing States (IWEco).	To contribute to the preservation of Caribbean ecosystems that are of global significance and the sustainability of livelihoods through the application of existing proven technologies and approaches that are appropriate for small island developing states through improved fresh and coastal water resources management, sustainable land management and sustainable forest management that also seek to enhance resilience of socio-ecological systems to impacts of climate change.		3.1
Strengthening Human Resilience in Northern Clarendon and West Kingston.	To contribute to enhanced resilience and human security of communities in Northern Clarendon and West Kingston.	The project centers on poverty reduction and climate change adaptation and will seek to bolster economic development through enhanced climate resilience, sustainable agriculture, social cohesion and sustainable livelihood.	1.0
Sub-Total Climate Change Mitigation/Energy			**1,149.6**
Grand Total			**1,352.3**

Source: Planning Institute of Jamaica, the National Works Agency, the National Water Commission and the Ministry of Science, Energy and Technology.
Note: activities are still being implemented and funds being disbursed under projects in the matrix that have an end date of 2021.

Table 3. Jamaica: Reform Measures under the RSF[1]		
Measure	**Target Date**	**Analytical Underpinning**
Pillar 1: Building Fiscal and Physical Resilience to Natural Disasters and Climate Change		
RM1: The Ministry of Finance and Public Service (MOFPS) to adopt a National Natural Disaster Risk Financing (DRF) policy.	1st PLL Review (end-June 2023)	RM1 is informed by the WB's 2018 report "Advancing Disaster Risk Finance in Jamaica'' assessing the legislative, financial management, fiscal, and insurance market environment in Jamaica. RM1 deepens synergies with the WB efforts in this area and the WB considers it will advance progress towards the sound DRF policy. Draft C-PIMA near completion.
RM2: The Development Bank of Jamaica in consultation with the MOFPS to modify the Policy and Institutional Framework for the Public-Private Partnership (PPP) policy Program of the Government of Jamaica to include climate requirements in PPP project agreements from project identification to contract management and revise the PPP Standard Operating Procedure Manual to reflect these requirements.	1st PLL Review (end-March 2023)	RM2 is a high urgency measure informed by the IDB's June 2020 report "Improving Climate Resilience in PPPs in Jamaica". RM2 deepens synergies with the IDB's efforts, and it complements ADB's TA in this area. Draft C-PIMA near completion.
RM3: The Public Investment Appraisal Branch (PIAB) to define a methodology to conduct climate impact assessments at project appraisal stage (*project proposal stage*) and incorporate the methodology in the Public Investment Management System (PIMS) handbook.	2nd PLL Review (end-Dec. 2023)	RM3 and RM4 are high urgency measure informed by the IDB's 2020 report "Improving Climate Resilience in PPPs in Jamaica", the WB's 2019 WB report "How Disaster Resilient is Jamaica's Public Financial Management?", and IAD's 2016 report "Status of Incorporation of Disaster Risk Management and Climate Change Adaptation in National Public Investment Systems - Results for The Bahamas, Guyana and Jamaica and Comparative Analysis for Five Caribbean Countries''. RM3 and RM4 deepen synergies with the IDB & WB efforts in this area and the IDB & WB consider it will advance the PIM reforms. Draft C-PIMA near completion.
RM4: The Planning Institute of Jamaica (PIOJ) to define and publish project selection criteria including climate change criteria.		
RM5: The MOFPS to conduct and publish in the Fiscal Risk Statement quantitative analysis of the fiscal risks generated by climate change.	3rd PLL Review (end-March 2024)	RM5 is informed by the World Bank's (WB) 2018 report "Advancing Disaster Risk Finance in Jamaica'' quantifying the fiscal disaster losses. RM5 deepens synergies with the WB efforts in this area and the WB considers it will

[1]The reform measures included in Table 3 have been discussed with the IDB's and the World Bank's experts and deepen synergies with the IDB's and WB's efforts in the areas covered by the reform measures.

Table 3. Jamaica: Reform Measures under the RSF (continued)		
Measure	**Target Date**	**Analytical Underpinning**
Pillar 1: Building Fiscal and Physical Resilience to Natural Disasters and Climate Change		
		contribute to the soundness of fiscal framework and the credibility of the budget. Draft C-PIMA near completion.
RM6: The MOFPS to submit to parliament an amendment to the Financial Administration and Audit Act to establish a National Natural Disaster Reserve Fund (NDRF) subaccount under the consolidated fund account. In parallel, the MOFPS to approve financial regulations for a transparent administration and reporting of the NDRF.	2nd PLL Review (end-December 2023)	RM6 is a high urgency measure informed by the WB's 2018 report "Advancing Disaster Risk Finance in Jamaica''. RM6 deepens synergies with the WB efforts in this area and will ensure safeguards for appropriate funding of the NDRF and its management. The WB considers it will contribute to the Disaster Risk Management reforms. Draft C-PIMA near completion.
Pillar 2: Strengthening Mitigation/Promoting Renewables		
RM7: The MOFPS to submit to parliament a bill to incentivize investment in renewables through fiscal measures.	3rd PLL Review (end-June 2024)	RM7 is high feasibility measure. The incentives are needed to favor the renewable generation environment. They would deepen synergies with the deep decarbonization strategy as spelled out in the WB's 2021 report "Jamaica's Long-Term Climate Change Strategy Recommendations" that notes importance of the appropriate incentives for advancement of climate related measures. In addition, see "A panel data analysis of policy effectiveness for renewable energy expansion on Caribbean islands" by Jessica Kersey, Philipp Blechinger, Rebekah Shirley, in Energy Policy, vol.,155, 2021 for analysis of incentive schemes supportive of investments in renewable energy. For a specific discussion of feebates see I. Parry, 2021, "The Critical Role of Feebates in Climate Mitigation Strategies." In F. Caselli, A. Ludwig, and R. van der Ploeg (eds.), No Brainers and Low-Hanging Fruit in National Climate Policy, Center for Economic Policy Research, London, UK, 217-244.
RM8: The Ministry of Science, Energy and Technology (MSET) to submit to parliament the electric vehicles policy, in line with the objectives in paragraph 23 of the Written Statement.	1st PLL Review (end-June 2023)	RM8 is a high urgency and feasibility. The WB August 2021 report "Jamaica's Long-Term Climate Change Strategy Recommendations" notes the importance of wide adoption of electric vehicles for achievement of deep decarbonization. USAID 2018 report "Caribbean Clean

Table 3. Jamaica: Reform Measures under the RSF (concluded)		
Measure	**Target Date**	**Analytical Underpinning**
Pillar 2: Strengthening Mitigation/Promoting Renewables		
		Energy Program" documents early engagement and interest of the MSET in the subject. In 2020, Deloitte Advisory (contracted by the IDB) prepared "Strategic Framework for Electric Mobility in Jamaica" mapping out specific measures required for electric mobility. In July 2022 the IDB endorsed a partnership with the Green Climate Fund to create the first regional program to promote electric mobility in Latin America and the Caribbean. It will accelerate the use of electric and hydrogen-based public transportation including in Jamaica.
RM9: The MSET to approve guidelines adapted to the type and purpose of the structures, to reduce energy use in schools, hospitals, and public buildings for the existing and new structures.	1st PLL Review (end-June 2023)	RM9 is high feasibility, high urgency and will deepen synergies with the energy management and efficiency program (2017-21) funded by the IDB, the Caribbean Investment Fund (CIF) and Japan International Cooperation Agency. The analytical underpinnings are contained in the internal project's analytical work prepared by the IDB.
Pillar 3: Greening the Financial Sector		
RM10: BOJ to publish a climate risks assessment (including a diagnostic of related climate and environmental risks detailing the current governance and regulatory regime) and define a timeline to embed these risks in supervisory activities and related databases for the development of climate risks assessments.	2nd PLL Review (end-Dec. 2023)	RM10 and RM11 are high feasibility, high urgency measures informed by the BOJ's and the French Development Agency (FDA) assessment of the needs to embed environmental risks in the supervisory activities. The assessment spurred a 2022 project "Assessing Climate Related Risks in the Jamaican Financial System" launched with assistance from the FDA.
RM11: Adopt a monitoring framework that improves data collection and establishes the reporting requirements for financial institutions to implement Climate Related Financial Risks stress testing and for the BOJ to gradually integrate climate risks in supervision and macroprudential policy formulation.	3rd PLL Review (end-June 2024)	
RM12: Establish an institutional framework for green-bond issuance and trading.	3rd PLL Review (end-June 2024)	RM12 is a high feasibility measure building upon the outcomes of a project to develop guidance for green bond listing, capacity building, and education of market players supported with the 2019 Green Climate Fund (GCF) Readiness Grant (LAC-RS-003) of US$0.6 million ("Towards a comprehensive national adaptation planning process in Jamaica" PIOJ, 2020, p.6). RM12 deepens synergy with this project.

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Annex IV. Debt Sustainability Analysis

***Jamaica's public debt is sustainable**. Underpinned by the authorities' sustained efforts in fiscal consolidation, public debt declined to 94 percent of GDP in FY2021/22 and is on a downward trajectory in line with the Fiscal Responsibility Law debt target of 60 percent of GDP by FY2027/28. The authorities have been proactive in reducing near-term gross financing needs with prudent debt management policies and debt buybacks. Debt dynamics remain vulnerable to the uncertainties surrounding the global commodity shocks, natural disasters, and the realization of contingent liabilities from public bodies.*[1]

1. **Jamaica's public debt has been declining steadily as a result of strong fiscal consolidation efforts, and prudent debt management**. Jamaica's public debt fell from 110 percent of GDP in FY 2020/21 to 94 percent in FY2021/22. Debt reduction efforts resumed promptly following the pandemic. The authorities are committed to bringing public debt below 60 percent of GDP by FY2027/28, although with a modest (two-year) delay from the original FY2025/26 target date under the Fiscal Responsibility Law.

2. **The baseline scenario of the DSA reflects the medium-term macroeconomic assumptions, and fiscal targets stipulated under the fiscal rule.** Following the recovery from the pandemic, growth is expected to converge to its potential over the medium-term, and inflation to the target range amid fading commodity markets. While inflation has risen above the central bank's target range as a result of result of rising global food and energy prices, and global supply-chain shortages, it is expected to recede to 5 percent over the medium-term. Fiscal balance is expected to be around 0.5 percent of GDP in the near term, in line with the MTFF and FRL targets. Over the medium-term fiscal balances are projected to rise to 1.5-2 percent of GDP to bring debt down to the FRL target of 60 percent of GDP by FY 2027/28. Interest rates are assumed to increase by 100 basis points in FY 2022/23. Interest payments are projected to fall in line with retiring of maturing bonds. External debt projections are based on projected increases in the current account deficit of around 2 percent of GDP over the medium term and planned disbursements of project loans by multilateral and bilateral creditors. Use of RSF funds would create fiscal space by lowering the gross financing needs. Without the RSF, a larger share of GFN would be financed by government borrowing from the market, on less concessional terms. Also, RSF funds would boost investment and growth which would lower the long-term debt ratios over time.

3. **Jamaica faces modest near-term gross financing needs**. External debt stood at 61 percent of GDP at end of FY2021/22 and is predominantly owed to private creditors (58 percent). Most of the external debt is denominated in US dollars (98 percent). In terms of maturity profile, 35 percent of the external debt is medium term (1-5 years) and 55 percent is long-term (over 5 years), and as such the rollover risks remain contained and gross financing needs over the medium-term are modest.

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[1] The analysis refers to the consolidated public sector debt, which includes direct debt by the central government, guaranteed debt and debt of public bodies guaranteed by the government, excluding the central bank.

4. The authorities have been proactive in their debt management strategy to mitigate market-related costs and risks. In 2019, the Government of Jamaica conducted buybacks of outstanding global bonds coming due in 2022, 2025, and 2028, totaling around US$1 billion. These buybacks together with new bond issuances through the reopening of the global bond coming due in 2045 led to substantial maturity extension. As part of their medium- term debt strategy, the authorities plan to continue to conduct opportunistic liability management operations (LMOs) to further mitigate costs and risks in public debt portfolio. The public debt risk profile would also benefit from plans to reduce reliance on FX-denominated borrowing, while further developing the local currency bond market over the medium term.

5. The profile of public debt poses limited risk. Domestic debt (mostly treasury bills and bonds) accounted for about 35 percent of the central government debt. External debt consisted of multilateral loans (22 percent of the central government debt), bilateral loans (5 percent), international sovereign bonds (38 percent), and nonresidents' holdings of treasury bills and bonds (3 percent). The evolution of public debt holders has shifted towards a more evenly distributed creditor base, and the sovereign-financial sector interconnectedness has been reduced over the years. The 2010 and 2013 debt restructurings resulted in a large reduction in debt service as short-term debt was swapped with long-term debt or discounted, and the restructured securities have longer grace period and maturity accompanied by low interest rates. In addition, the debt buybacks of outstanding global bonds coming due in 2022, 2025, and 2028, have also drastically lowered the gross financing needs over the medium-term. Principal payments associated with buybacks of external debt will resume only from 2025 onwards.

Medium-Term Risk Analyses

6. The medium-term risk analysis is low consistent with mechanical signals.

- **Fan chart**. Debt fan chart index–measuring medium-term solvency risks –indicates a high risk with the score at 1.5, which is moderate. The baseline debt trajectory and the fan are on a downward trend, and the probability of debt not stabilizing is assessed to be limited. Overall, solvency risks should be contained with continuous fiscal consolidation and a gradual economic recovery. However, this assessment is susceptible to other economic shocks, including the re-emergence of COVID-19, natural disasters, and a global economic downturn.

- **Gross Financing Needs (GFN)**. The GFN finance ability index—measuring medium-term liquidity risks—indicates a low risk with the score of 6.5 (below the low-risk threshold of 7.6). Medium-term GFN is expected to gradually come down as fiscal consolidation progresses. Additionally, there are limited roll-over risks in the medium-term since the authorities have extended maturity of the existing debt though issuance of 2045 bonds.

Long-Term Risk Analyses

7. Long-term risk is assessed to be moderate. The large amortization module shows gradual declines in GFN and debt relative to GDP both under the baseline and customized scenarios.

Climate-related expenditure are manageable and would not significantly impact debt sustainability. In the long-term, the customized scenario assumes an increase of 0.5 percent of GDP per year of spending related to climate risks arising from adaptation and mitigation investment needs. In this scenario, public debt and GFN will increase relative to the baseline but will be on a downward trajectory over the 20-year horizon (Figure 6). While the current healthcare expenditure policies would not pose significant sustainability concerns, pension expenditures under the current system would lead to larger GFNs and an upwards debt trajectory in the long run. This points to the need to undertake parametric reforms of the current public pension system.

8. Jamaica's public debt is assessed to be sustainable with a high probability. The projected debt trajectory remains vulnerable to the high degree of uncertainty from the size and duration of the ensuing global shocks and the associated risks to growth, interest rates, exchange rate and fiscal revenues. However, the strong policy track record, the authorities' commitment to meet the medium-term debt target sooner should growth overperform, and prudent debt management mitigate potential risks. In the adverse scenario, public debt will be higher than in the baseline scenario because of lower growth, higher fiscal deficits and higher borrowing costs. However, public debt would be on a downward trajectory and will be sustainable with a high probability.

Table 1. Jamaica: Decomposition of Public Debt and Debt Service by Creditor, 2021–2023 1/

	Debt Stock (end of period)			Debt Service					
	2021			2021	2022	2023	2021	2022	2023
	(In US$ millions)	(In percent total debt)	(In percent of GDP)	(In US$ millions)			(In percent GDP)		
Total	**14310.1**	**100.0**	**94.3**	1651.2	2094.0	1412.2	10.9	13.1	8.6
External	**9260.0**	**64.7**	**61.0**	894.9	1013.7	951.1	5.9	6.3	5.8
Multilateral creditors[2,3]	3193.2	22.3	21.0	373.5	372.5	321.2	2.5	2.3	2.0
IMF	110.2	0.8	0.7						
World Bank	1042.2	7.3	6.9						
ADB/AfDB/IADB	1737.6	12.1	11.4						
Other Multilaterals	303.1	2.1	2.0						
o/w: list largest two creditors									
list of additional large creditors									
Bilateral Creditors[2]	682.9	4.8	4.5	124.8	122.4	120.8	0.8	0.8	0.7
Paris Club	24.9	0.2	0.2	5.0	4.9	4.8	0.0	0.0	0.0
o/w: list largest two creditors									
list of additional large creditors									
Non-Paris Club	658.0	4.6	4.3	119.8	117.5	116.0	0.8	0.7	0.7
o/w: list largest two creditors									
list of additional large creditors									
Bonds	5383.8	37.6	35.5	396.6	518.8	509.1	2.6	3.2	3.1
Commercial creditors	5383.8	37.6	35.5	396.6	518.8	509.1	2.6	3.2	3.1
o/w: list largest two creditors									
list of additional large creditors									
Other international creditors									
o/w: list largest two creditors									
list of additional large creditors									
Domestic	**5050.2**	**35.3**	**33.3**	756.3	1080.3	461.1	5.0	6.7	2.8
Held by residents, total									
Held by non-residents, total									
T-Bills	320.5	2.2	2.1	141.9	143.4	139.8	0.9	0.9	0.9
Bonds	4729.7	33.1	31.2	609.4	932.3	316.7	4.0	5.8	1.9
Loans	0								
Memo items:									
Collateralized debt[4]	0								
o/w: Related	0								
o/w: Unrelated	0								
Contingent liabilities	1618.3								
o/w: Public guarantees									
o/w: Other explicit contingent liabilities[5]									
Nominal GDP	15178								

1/As reported by Country authorities according to their classification of creditors, including by official and commercial. Debt coverage is the same as the DSA.

2/Some public debt is not shown in the table due to [confidentiality clauses/capacity constraints].(Include for all creditor groups where applicable)

3/Multilateral creditors" are simply institutions with more than one official shareholder and may not necessarily align with creditor classification under other IMF policies (e.g. Lending Into Arrears)

4/Debt is collateralized when the creditor has rights over an asset or revenue stream that would allow it, if the borrower defaults on its payment obligations, to rely on the asset or revenue stream to secure repayment of the debt. Collateralization entails a borrower granting liens over specific existing assets or future receivables to a lender as security against repayment of the loan. Collateral is "unrelated" when it has no relationship to a project financed by the loan. An example would be borrowing to finance the budget deficit, collateralized by oil revenue receipts. See the joint IMF-World Bank note for the G20 "Collateralized Transactions: Key Considerations for Public Lenders and Borrowers" for a discussion of issues raised by collateral.

5/Includes other-one off guarantees not included in publicly guaranteed debt (e.g. credit lines) and other explicit contingent liabilities not elsewhere classified (e.g. potential legal claims, payments resulting from PPP arrangements).

Table 2. Jamaica: Risk of Sovereign Stress

Horizon	Mechanical signal	Final assessment	Comments
Overall	…	Moderate	Jamaica's overall risk of sovereign stress is moderate, reflecting a relatively moderate level of vulnerability in the near-term and long-term, and a low level of vulnerability in the medium term.
Medium term	Low	Low	Medium-term risks are assessed as low on the basis of the strength of institutions. Fan chart suggests a moderate risk due to the volatility of key macroeconomic indicators, and public debt is on a declining path. GFN tool indicates a low risk reflecting the declining GFN needs and limited roll-over risks. The authorities have been proactive in reducing medium-term gross financing needs with prudent debt management policies and debt buybacks
Fanchart	Moderate	…	
GFN	Low	…	
Stress test	...	…	
Long term	…	Moderate	Long-term risks are moderate. The large amortization module shows gradual declines in GFN and debt relative to GDP both under the baseline and customized scenarios. Climate-related expenditure are manageable and would not significantly impact debt sustainability in the long run even under the customized scenario. Health care and pension expenditures would not pose any significant concerns to debt sustainability.
Sustainability assessment 2/		**Sustainable with high probability**	Public debt is already on a declining path and GFNs are low and remain at manageable levels. The Fiscal responsibility law ensures that the fiscal path ensures a debt target of 60% of GDP by 2027. Therefore debt is assessed as sustainable with high probability.
Debt stabilization in the baseline			Yes

DSA summary assessment

Commentary: Jamaica is at a moderate overall risk of sovereign stress and debt is sustainable with a high probability. After the Covid-19 shock, the economy is recovering and debt is on a declining trend and is expected to decline to 60 percent of GDP by FY2027/28, as stipulated ubder the FRL GFN needs over the medium-term are low and the Medium-term liquidity risks as analyzed by the GFN Module are low. In the adverse scenario, public debt will be higher than the baseline scenario because of lower growth, higher fiscal deficits and higher borrowing costs. However, public debt will be on a downward trajectory and will be sustainable with a high probability.

Source: Fund staff.

Note: The risk of sovereign stress is a broader concept than debt sustainability. Unsustainable debt can only be resolved through exceptional measures (such as debt restructuring). In contrast, a sovereign can face stress without its debt necessarily being unsustainable, and there can be various measures—that do not involve a debt restructuring—to remedy such a situation, such as fiscal adjustment and new financing.

1/ The near-term assessment is not applicable in cases where there is a disbursing IMF arrangement. In surveillance-only cases or in cases with precautionary IMF arrangements, the near-term assessment is performed but not published.

2/ A debt sustainability assessment is optional for surveillance-only cases and mandatory in cases where there is a Fund arrangement. The mechanical signal of the debt sustainability assessment is deleted before publication. In surveillance-only cases or cases with IMF arrangements with normal access, the qualifier indicating probability of sustainable debt ("with high probability" or "but not with high probability") is deleted before publication.

Figure 1. Jamaica: Debt Coverage and Disclosures

1. Debt coverage in the DSA: 1/

CG	GG	NFPS	CPS	Other
CG (chosen)				

1a. If central government, are non-central government entities insignificant? 0

2. Subsectors included in the chosen coverage in (1) above:

	Subsectors captured in the baseline	Inclusion	Comments
1	Budgetary central government	Yes	
2	Extra budgetary funds (EBFs)	No	Not applicable
3	Social security funds (SSFs)	No	
4	State governments	No	
5	Local governments	No	
6	Public nonfinancial corporations	Yes	
7	Central bank	No	
8	Other public financial corporations	No	

(Grouping: CG = rows 1–3; GG: expected = rows 1–5; NFPS = rows 1–6; CPS = rows 1–8)

3. Instrument coverage:

Currency & deposits	Loans	Debt securities	Oth acct. payable 2/	IPSGSs 3/
Included	Included	Included	Missing	Missing

4. Accounting principles:

Basis of recording		Valuation of debt stock		
Non-cash basis 4/	Cash basis	Nominal value 5/	Face value 6/	Market value 7/
	Chosen	Chosen		

5. Debt consolidation across sectors:

Consolidated	Non-consolidated
	Chosen

Color code: chosen coverage; Missing from recommended coverage; Not applicable

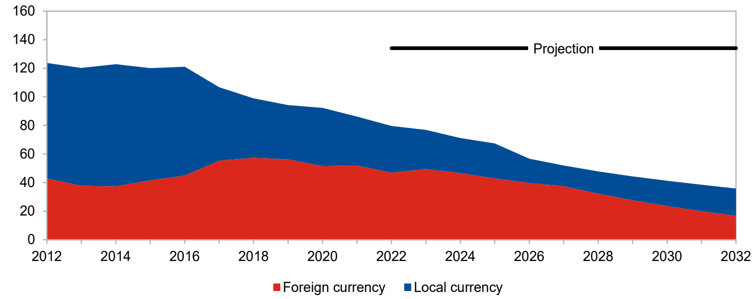
Reporting on intra-government debt holdings

	Issuer \ Holder	Budget. central govt	Extra-budget. funds	Social security funds	State govt.	Local govt.	Nonfin. pub. corp.	Central bank	Oth. pub. fin corp	Total
1	Budget. central govt									0
2	Extra-budget. funds									0
3	Social security funds									0
4	State govt.									0
5	Local govt.									0
6	Nonfin pub. corp.									0
7	Central bank									0
8	Oth. pub. fin. corp									0
	Total	0	0	0	0	0	0	0	0	0

1/ CG=Central government; GG=General government; NFPS=Nonfinancial public sector; PS=Public sector.
2/ Stock of arrears could be used as a proxy in the absence of accrual data on other accounts payable.
3/ Insurance, Pension, and Standardized Guarantee Schemes, typically including government employee pension liabilities.
4/ Includes accrual recording, commitment basis, due for payment, etc.
5/ Nominal value at any moment in time is the amount the debtor owes to the creditor. It reflects the value of the instrument at creation and subsequent economic flows (such as transactions, exchange rate, and other valuation changes other than market price changes, and other volume changes).
6/ The face value of a debt instrument is the undiscounted amount of principal to be paid at (or before) maturity.
7/ Market value of debt instruments is the value as if they were acquired in market transactions on the balance sheet reporting date (reference date). Only traded debt securities have observed market values.

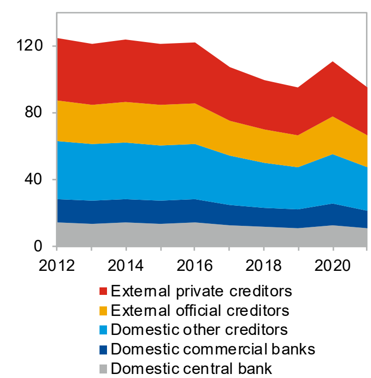
Commentary: The DSA covers debt issued by central government, public bodies and debt guaranteed by central government. The authorites are improving coverage and quality of public debt data, including expanding the coverage to general government.

Figure 2. Jamaica: Public Debt Structure Indicators



Note: The perimeter shown is central government.

Public debt by holder (percent of GDP)

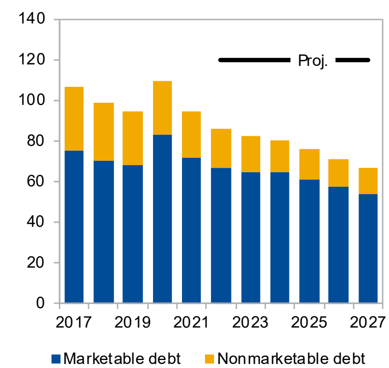


Note: The perimeter shown is central government.

Public debt by governing law, 2021 (percent)

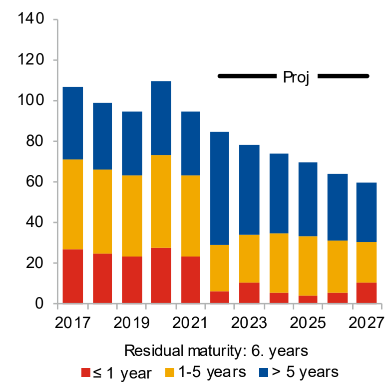
Note: The perimeter shown is central government.

Debt by instruments (percent of GDP)



Note: The perimeter shown is central government.

Public debt by maturity (percent of GDP)



Note: The perimeter shown is central government.

Commentary: The share of external debt is expected to decline over the medium-term as the authorities implement strategies and policies in support of continued development of the domestic debt market. Local currency debt is projected to decline with projected fiscal surpluses over medium-term and use of government deposits to pay down domestic debt. In particular, the strong declining share of "domestic other creditors" in total public debt. Liability management operations and buybacks of global bonds have also reduced the stock of foreign currency debt. In terms of maturity structure most of the planned issuances are for medium to long-term maturity.

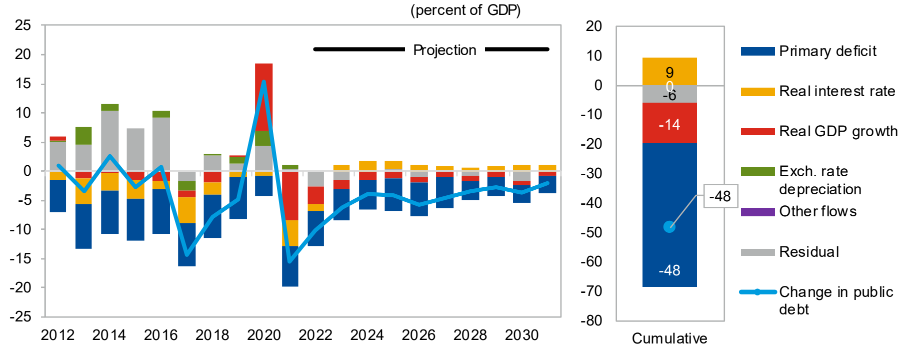
Table 3. Jamaica: Baseline Scenario

(Percent of GDP, unless indicated otherwise)

	Actual	Medium-term projection						Extended projection				
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Public debt	94.2	84.1	77.9	74.0	69.8	64.0	59.5	56.1	53.3	49.5	47.4	45.8
Change in public debt	-15.5	-10.1	-6.2	-3.9	-4.2	-5.8	-4.6	-3.4	-2.8	-3.7	-2.1	-1.6
Contribution of identified flows	-15.9	-8.0	-5.6	-3.9	-4.8	-4.9	-4.7	-3.8	-2.8	-3.2	-2.3	-3.0
Primary deficit	-6.8	-5.8	-5.4	-5.2	-5.6	-5.7	-5.3	-3.3	-3.2	-3.0	-3.0	-2.9
Noninterest revenues	31.0	29.4	29.4	29.4	29.4	29.5	29.7	30.0	30.0	30.1	30.3	30.4
Noninterest expenditures	24.2	23.6	24.0	24.2	23.9	23.8	24.3	26.7	26.8	27.1	27.3	27.5
Automatic debt dynamics	-9.1	-2.2	-0.2	1.2	0.8	0.8	0.6	-0.5	0.4	-0.2	0.7	-0.1
Int. rate-growth differential	-12.9	-4.4	-0.6	0.5	0.0	-0.1	-0.2	-0.2	-0.1	0.2	0.2	0.3
Real interest rate	-4.6	-1.2	1.0	1.8	1.2	1.0	0.8	0.7	0.8	1.0	1.0	1.0
Real growth rate	-8.3	-3.2	-1.6	-1.4	-1.2	-1.1	-1.0	-0.9	-0.9	-0.8	-0.8	-0.7
Real exchange rate	0.6	…	…	…	…	…	…	…	…	…	…	…
Relative inflation	3.2	2.6	1.2	0.8	0.9	0.9	0.8	0.8	0.7	0.6	0.6	0.5
Other identified flows	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Contingent liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other transactions	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Contribution of residual	0.4	-2.5	-1.4	0.0	0.5	-0.9	0.1	-0.7	-0.2	-1.6	0.0	0.5
Gross financing needs	4.9	5.6	6.4	9.7	3.5	3.4	3.6	10.5	8.9	5.7	2.2	3.5
of which: debt service	11.7	11.4	11.8	14.9	9.1	9.0	8.9	13.8	12.1	8.7	5.2	6.4
Local currency	6.9	6.5	4.9	9.1	5.3	4.1	5.5	9.8	8.9	4.5	3.0	4.3
Foreign currency	4.8	4.8	6.9	5.8	3.8	4.9	3.5	4.0	3.1	4.2	2.3	2.1
Memo:												
Real GDP growth (percent)	8.2	3.5	2.0	1.8	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Inflation (GDP deflator; percent)	10.1	7.7	5.2	4.5	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Nominal GDP growth (percent)	19.2	11.5	7.3	6.4	6.8	6.7	6.7	6.7	6.7	6.7	6.7	6.7
Effective interest rate (percent)	5.1	6.3	6.5	7.0	6.8	6.6	6.3	6.3	6.4	7.1	7.2	7.3

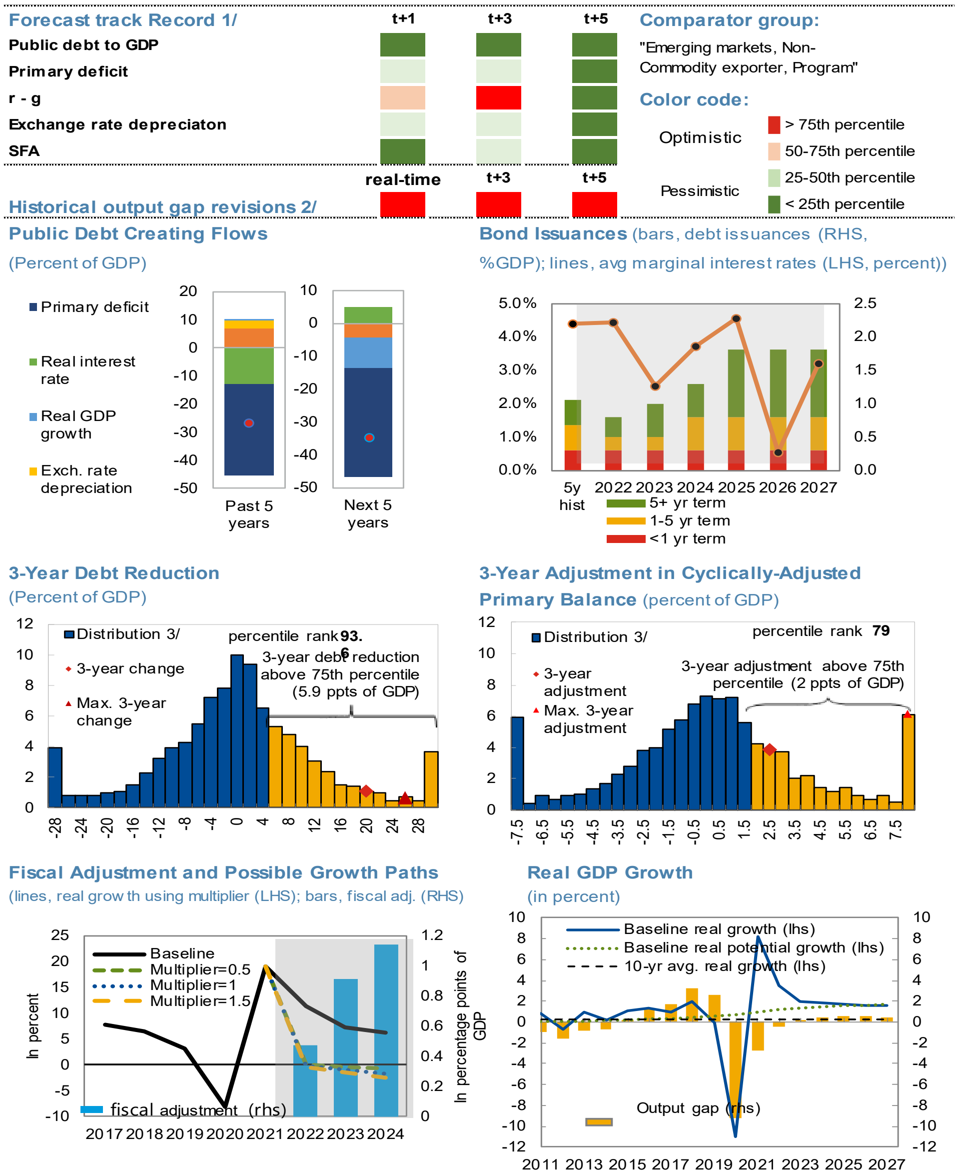
Contribution to change in public debt

(percent of GDP)



Staff commentary. Public debt is expected to resume its downward path to meet the debt target of 60 percent of GDP by FY2027/28, in accordance with the Fiscal Responsibility Law. The authorities have been proactive in reducing near-term financing needs through liability management operations, buybacks and maturity extension (by issuing 2045 bonds). However, debt dynamics remain vulnerable to the uncertainties surrounding the global shocks, natural disaster susceptibility, and the realization of contingent liabilities from public bodies. The authorities have large GFN needs in FY2024, FY2028 and FY2029 as the global bonds mature. They may issue global bonds after 2025 when the financial conditions improve.

Figure 3. Jamaica: Realism of Baseline Assumptions



Commentary: The realism analysis does not point to major concerns. Past forecast errors do not reveal any systematic biases and the projected fiscal adjustment and debt reduction are well within norms. Most of the debt reduction in the next five years is expected from the improvements in primary blance, underpinned by the planned fiscal path under the MTFF, in line with the FRL. Similar or bigger debt reductions and fiscal adjustments were implemented by Jamaica in the past even though these are above the 79th percentile of the distribution as shown in the chart. The improvement in the fiscal balance from 2025, will come come lower program spending and decrease in interest payments. Interest payments are lower because of declining debt, lower term spreads on external financing.The r-g differential is also impacted by the high inflation forecast in the near-term, reflecting in low real rates. Better debt management is also expected to reduce the real interest rate of public debt. Growth projections are in line with historical averages. In terms of realism of fiscal adjustments, similar or bigger debt reductions and fiscal adjustments were implemented by Jamaica in the past (during 2013-19), even though these are above the 75th percentile of the distribution as shown in the chart. The output gap tool calculates the output gap difference between the latest WEO vintage and the projections, and indicates the existence of negative bias (above 75th percentile) in output gap projections.

Source : IMF Staff.

1/ Projections made in the October and April WEO vintage.

2/ Data cover annual observations from 1990 to 2019 for MAC advanced and emerging economies. Calculated as the percentile rank of the country's output gap revisions (defined as the difference between real time/period ahead estimates).

3/ Starting point reflects the team's assessment of the initial overvaluation from EBA (or EBA-Lite).

Figure 4. Jamaica: Medium-Term Risk Analysis

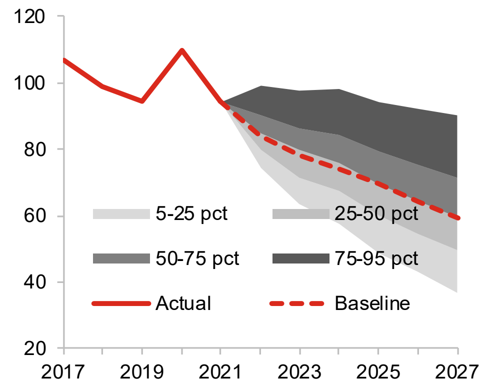
Debt fanchart and GFN financeability indexes

(percent of GDP unless otherwise indicated)

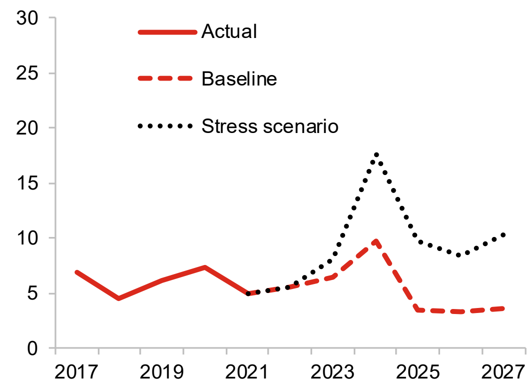
Module	Indicator	Value	Risk index	Risk signal	EM., Non-Com. Exp, Program (0 / 25 / 50 / 75 / 100)
Debt fanchart module	Fanchart width	53.7	0.8	…	
	Probability of debt not stabilizing (pct)	2.5	0.0	…	
	Terminal debt level x institutions index	31.6	0.7	…	
	Debt fanchart index	**…**	**1.5**	**Moderate**	
GFN finance-ability module	Average GFN in baseline	5.4	1.8	…	
	Bank claims on government (pct bank assets)	10.8	3.5	…	
	Chg. in claims on govt. in stress (pct bank assets)	3.5	1.2	…	
	GFN financeability index	**…**	**6.5**	**Low**	

Legend: Interquartile range; Jamaica

Final fanchart (pct of GDP)



Gross Financing Needs (pct of GDP)

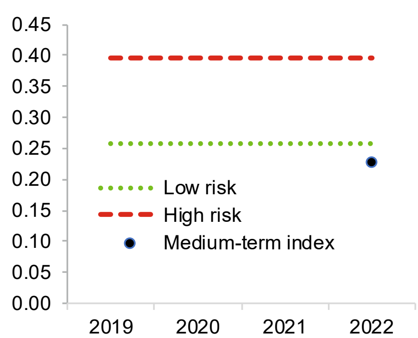


Triggered stress tests (stress tests not activated in gray)

Banking crisis | Commodity prices | Exchange rate | Contingent liab. | Natural disaster

Medium-term index

(index number)



Medium-term risk analysis

	Low risk threshold	High risk threhsold	Weight in MTI	Normalized level
Debt fanchart index	1.1	2.1	0.5	0.3
GFN finaceability index	7.6	17.9	0.5	0.1
Medium-term index (MTI)	0.3	0.4	…	0.2, Low

Prob. of missed crisis, 2022-2027 (if stress not predicted): 9.1 pct.

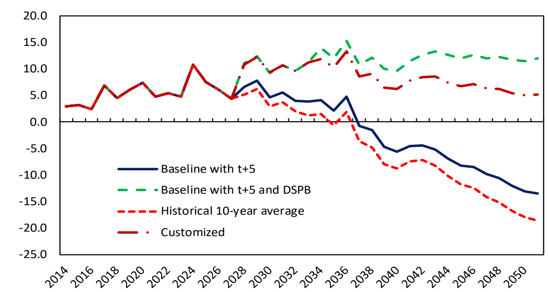
Prob. of false alarm, 2022-2027 (if stress predicted): 48.9 pct.

Commentary: Both the medium-term tools, the Debt Fanchart Module and the GFN Financeability Module suggests lower level of risk. In the natural disaster stress scenario, the GFN needs will increase by about 1% of GDP relative to baseline.

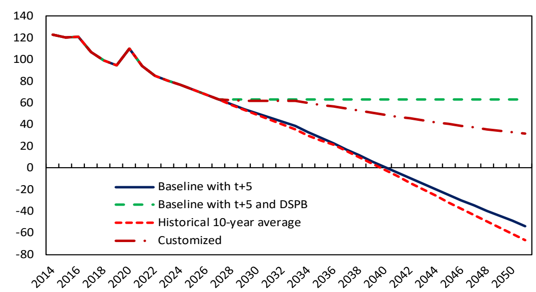
Figure 5. Jamaica: Long-Term Risk Analysis

Large Amortization

GFN-to-GDP ratio



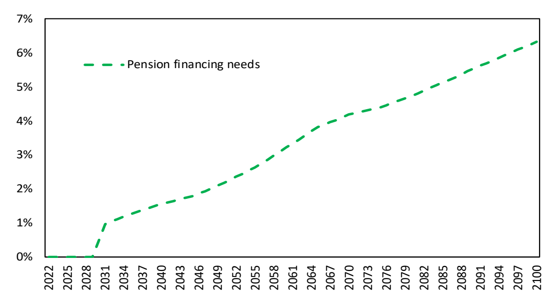
Total public debt-to-GDP ratio



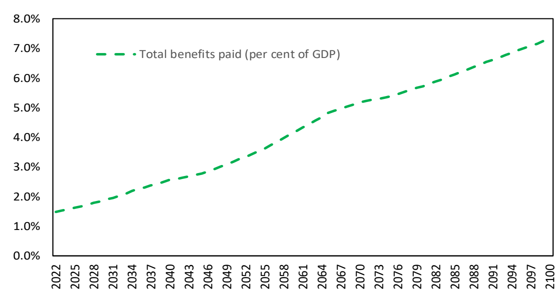
Demographics: Pension

Permanent adjustment needed in the pension system (pp of GDP per year)	To keep pension assets positive for:		
	30 years	50 years	Until 2100
	1.05%	1.79%	2.66%

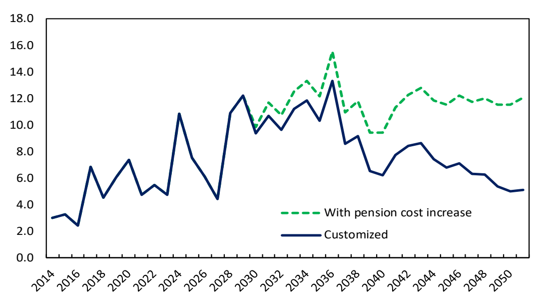
Pension Financing Needs



Total benefits paid



GFN-to-GDP ratio



Total public debt-to-GDP ratio

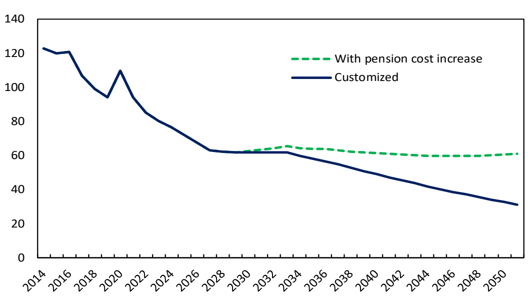
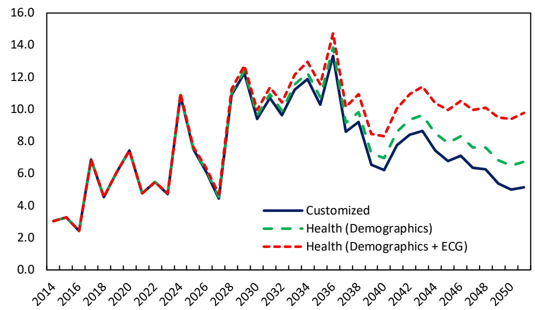


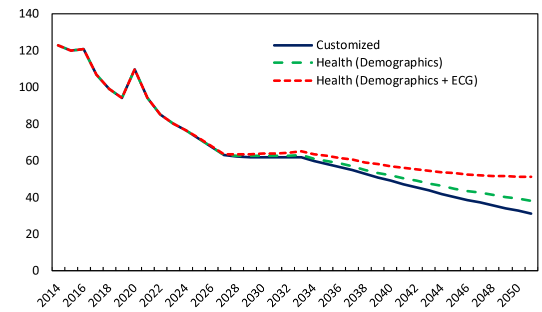
Figure 5. Jamaica: Long-Term Risk Analysis (Concluded)

Demographics: Health

GFN-to-GDP ratio

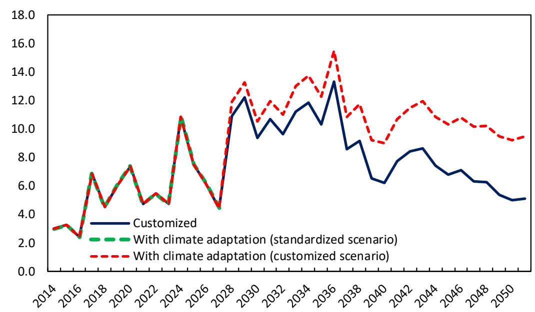


Total public debt-to-GDP ratio

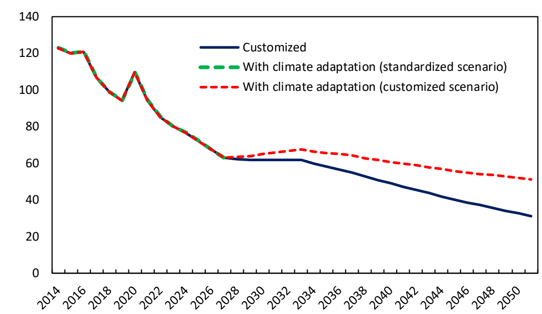


Climate change

GFN-to-GDP ratio



Total public debt-to-GDP ratio



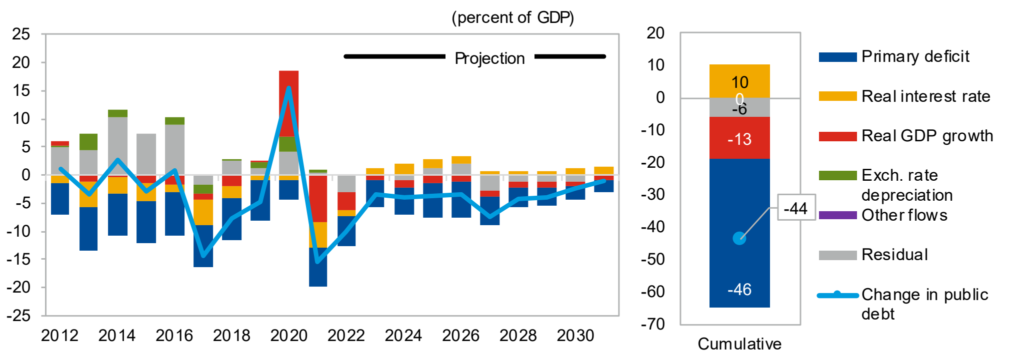
*Staff Commentar*y: Long-term risk is assessed to be moderate. The large amortization module shows gradual declines in GFN and debt relative to GDP both under the baselineand customized scenarios. Climate-related expenditure are manageable and would not significantly impact debt sustainability. While the current healthcare expenditure policies would not pose significant sustainability concerns, pension expenditures under the current system would lead to larger GFNs and an upwards debt trajectory in the long run. This points to the need to undertake parametric reforms of the current public pension system.

Table 4. Jamaica: Adverse Scenario

(In percent of GDP, unless indicated otherwise)

	Actual	Medium-term projection						Extended projection				
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Public debt	94.2	84.1	80.8	76.7	73.0	69.7	62.2	58.1	54.2	51.8	50.8	50.5
Change in public debt	-15.5	-10.1	-3.4	-4.0	-3.7	-3.3	-7.4	-4.1	-3.9	-2.4	-1.0	-0.4
Contribution of identified flow s	-15.9	-7.5	-4.1	-3.1	-5.2	-5.3	-4.7	-3.9	-2.9	-2.4	-1.4	-2.2
Primary deficit	-6.8	-5.3	-4.9	-4.8	-6.1	-6.4	-5.1	-3.3	-3.2	-2.3	-2.2	-2.1
Noninterest revenues	31.0	28.7	28.5	28.3	28.2	27.7	27.6	27.6	27.6	27.6	27.6	27.7
Noninterest expenditures	24.2	23.4	23.6	23.6	22.0	21.3	22.5	24.2	24.4	25.3	25.4	25.6
Automatic debt dynamics	-9.1	-2.1	0.8	1.7	1.0	1.0	0.4	-0.6	0.3	-0.1	0.8	-0.1
Int. rate-grow th differential	-12.9	-4.3	0.4	0.9	0.1	0.2	-0.4	-0.3	-0.2	0.3	0.3	0.3
Real interest rate	-4.6	-1.1	1.3	2.0	1.4	1.3	0.7	0.7	0.7	1.2	1.2	1.1
Real grow th rate	-8.3	-3.2	-0.8	-1.1	-1.3	-1.1	-1.1	-1.0	-0.9	-0.9	-0.8	-0.8
Real exchange rate	0.6	…	…	…	…	…	…	…	…	…	…	…
Relative inflation	3.2	2.6	1.2	0.8	0.9	0.9	0.8	0.8	0.7	0.6	0.6	0.5
Other identified flow s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Contingent liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other transactions	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Contribution of residual	0.4	-3.1	0.0	-1.0	1.3	2.0	-2.7	-1.2	-1.2	-1.0	0.3	0.9
Gross financing needs	4.9	6.1	4.9	11.1	2.4	0.8	7.7	10.6	10.0	8.0	6.5	5.5
of w hich: debt service	11.7	11.4	9.8	15.9	8.6	7.2	12.8	13.9	13.2	10.4	8.7	7.6
Local currency	6.9	6.6	5.1	9.4	5.7	5.1	6.5	9.4	9.0	6.7	6.7	5.5
Foreign currency	4.8	4.8	4.7	6.5	2.9	2.0	6.4	4.5	4.2	3.6	2.0	2.1
Memo:												
Real GDP grow th (percent)	8.2	3.5	1.0	1.4	1.7	1.6	1.6 .	1.6	1.6	1.6	1.6	1.6
Inflation (GDP deflator; percent)	10.1	7.7	5.2	4.5	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Nominal GDP grow th (percent)	19.2	11.5	7.3	6.4	6.8	6.7	6.7	6.7	6.7	6.7	6.7	6.7
Effective interest rate (percent)	5.1	6.4	6.8	7.1	7.0	7.0	6.1	6.2	6.3	7.3	7.4	7.3

Contribution to change in public debt



Staff commentary. Public debt is expected to resume its dow nw ard path to meet the debt target of 60 percent of GDP by FY2027/28, in accordance w ith the Fiscal Responsibility Law . The authorities have been proactive in reducing near-term financing needs through liability management operations, buybacks and maturity extension (by issuing 2045 bonds). How ever, debt dynamics remain vulnerable to the uncertainties surrounding the global shocks, natural disaster susceptibility, and the realization of contingent liabilities from public bodies. The authorities have large GFN needs in FY2024, FY2028 and FY2029 as the global bonds mature. They may issue global bonds after 2025 w hen the financial conditions improve.

Table 5. Jamaica: External Debt Sustainability Framework 2017–2027

(In fiscal year and in percent of GDP, unless otherwise indicated)

	Actual							Projections						
	2017	2018	2019	2020	2021			2022	2023	2024	2025	2026	2027	Debt-stabilizing non-interest current account 6/
Baseline: External debt	90.4	85.7	82.6	103.9	95.4			**90.3**	**87.1**	**83.0**	**78.4**	**74.4**	**70.8**	**-2.6**
Change in external debt	-7.2	-4.7	-3.1	21.3	-8.5			-5.1	-3.3	-4.1	-4.6	-4.0	-3.6	
Identified external debt-creating flows (4+8+9)	-12.2	-6.3	-0.2	10.7	-12.4			-2.3	-0.4	-0.4	-2.8	-2.0	-2.0	
Current account deficit, excluding interest payments	0.2	-0.9	-0.9	-1.2	-1.4			0.5	0.9	0.3	-1.0	-1.2	-1.1	
Deficit in balance of goods and services	-83.1	-89.6	-88.1	-61.8	-87.2			-97.3	-98.6	-98.1	-95.6	-94.5	-93.7	
Exports	33.7	38.0	37.0	20.1	32.2			38.4	40.2	40.8	40.6	40.4	40.1	
Imports	-49.5	-51.7	-51.1	-41.7	-55.0			-59.0	-58.4	-57.3	-55.0	-54.1	-53.6	
Net non-debt creating capital inflows (negative)	-9.1	-4.2	-2.1	-3.2	-2.5			-1.9	-1.9	-1.5	-2.7	-2.0	-2.1	
Automatic debt dynamics 1/	-3.2	-1.3	2.8	15.2	-8.5			-0.8	0.6	0.8	0.9	1.1	1.1	
Contribution from nominal interest rate	2.9	2.5	2.6	2.3	2.4			2.3	2.3	2.3	2.3	2.3	2.2	
Contribution from real GDP growth	-0.9	-1.7	0.1	10.5	-7.6			-3.2	-1.8	-1.5	-1.3	-1.1	-1.1	
Contribution from price and exchange rate changes 2/	-5.2	-2.1	0.1	2.3	-3.3			...	...	...	...	...	...	
Residual, incl. change in gross foreign assets (2-3) 3/	4.9	1.7	-2.9	10.6	3.9			-2.8	-2.9	-3.7	-1.8	-2.0	-1.6	
External debt-to-exports ratio (in percent)	268.5	225.8	223.3	517.0	296.6			235.3	216.6	203.4	193.2	184.2	176.6	
Gross external financing need (in billions of US dollars) 4/	4314.9	2360.3	2369.6	2061.1	2829.3			2922.4	3336.8	3219.8	2860.5	2846.7	2815.3	
in percent of GDP	28.6	15.0	15.1	15.2	18.6	10-Year	10-Year	18.2	20.4	19.0	16.1	15.4	14.7	
Scenario with key variables at their historical averages 5/								**90.3**	**86.5**	**83.0**	**82.5**	**81.0**	**79.8**	**-1.8**
Key Macroeconomic Assumptions Underlying Baseline						Historical Average	Standard Deviation							
Real GDP growth (in percent)	0.9	1.9	-0.1	-11.0	8.2	0.3	4.7	3.5	2.0	1.8	1.7	1.5	1.5	
GDP deflator in US dollars (change in percent)	5.7	2.4	-0.2	-2.7	3.3	0.3	3.2	2.0	0.1	1.5	3.2	2.3	2.2	
Nominal external interest rate (in percent)	3.2	2.9	3.0	2.4	2.6	3.8	1.4	2.6	2.6	2.8	2.9	3.0	3.0	
Growth of exports (US dollar terms, in percent)	12.9	17.7	-2.8	-53.0	79.0	6.0	32.1	26.0	6.9	4.9	4.3	3.4	3.0	
Growth of imports (US dollar terms, in percent)	15.3	9.0	-1.4	-29.3	47.5	2.2	19.9	13.1	1.2	1.3	0.7	2.1	2.9	
Current account balance, excluding interest payments	-0.2	0.9	0.9	1.2	1.4	-0.5	2.9	-0.5	-0.9	-0.3	1.0	1.2	1.1	
Net non-debt creating capital inflows	9.1	4.2	2.1	3.2	2.5	4.4	2.2	1.9	1.9	1.5	2.7	2.0	2.1	

1/ Derived as [r - g - r(1+g) + ea(1+r)]/(1+g+r+gr) times previous period debt stock, with r = nominal effective interest rate on external debt; r = change in domestic GDP deflator in US dollar terms, g = real GDP growth rate, e = nominal appreciation (increase in dollar value of domestic currency), and a = share of domestic-currency denominated debt in total external debt.

2/ The contribution from price and exchange rate changes is defined as [-r(1+g) + ea(1+r)]/(1+g+r+gr) times previous period debt stock. r increases with an appreciating domestic currency (e > 0) and rising inflation (based on GDP deflator).

3/ For projection, line includes the impact of price and exchange rate changes.

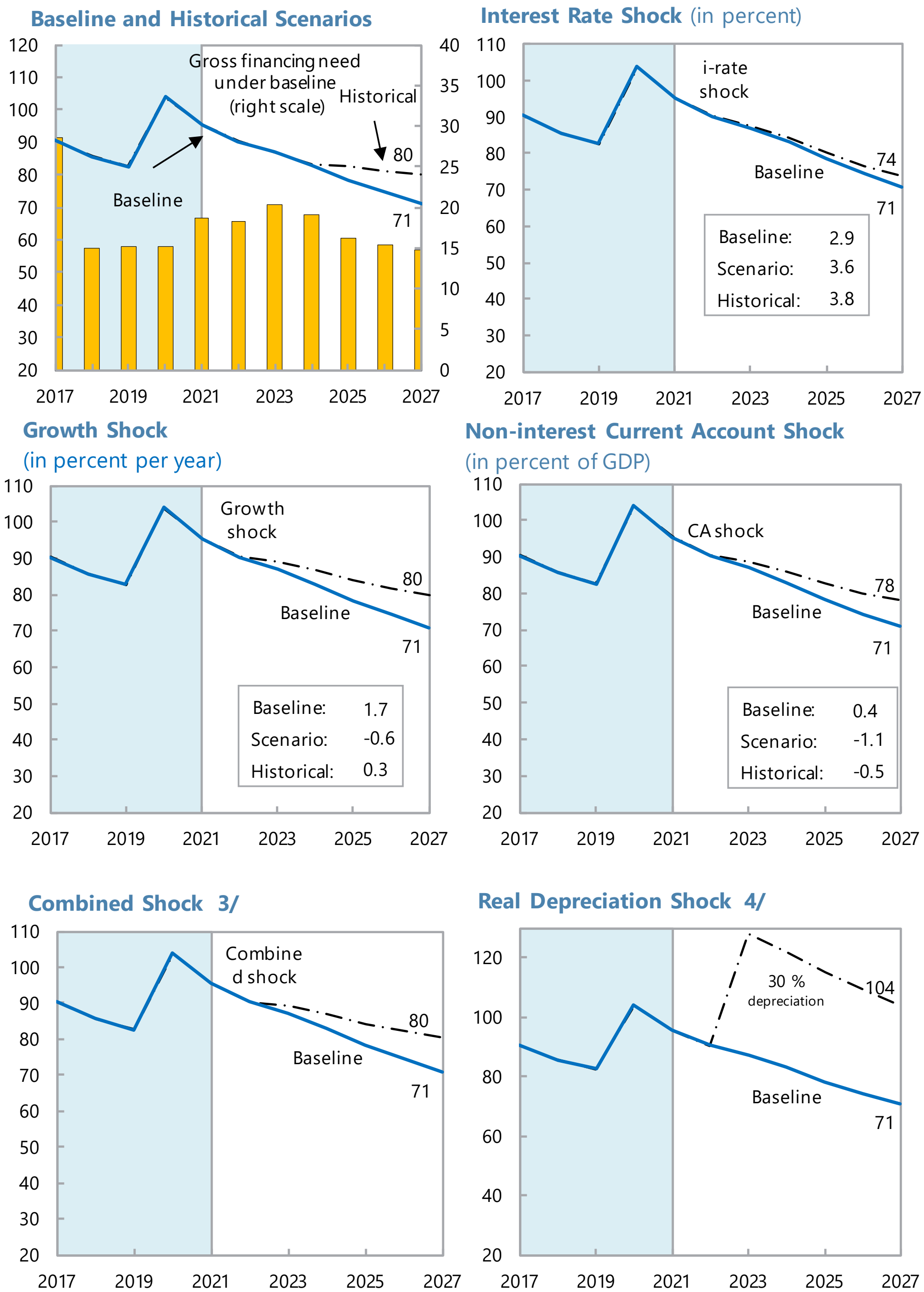
4/ Defined as current account deficit, plus amortization on medium- and long-term debt, plus short-term debt at end of previous period.

5/ The key variables include real GDP growth; nominal interest rate; dollar deflator growth; and both non-interest current account and non-debt inflows in percent of GDP.

6/ Long-run, constant balance that stabilizes the debt ratio assuming that key variables (real GDP growth, nominal interest rate, dollar deflator growth, and non-debt inflows in percent of GDP) remain at their levels of the last projection year.

Figure 6. Jamaica: External Debt Sustainability: Bound Tests 1/ 2/

(External debt in percent of GDP)



Sources: International Monetary Fund, Country desk data, and staff estimates.
1/ Shaded areas represent actual data. Individual shocks are permanent one-half standard deviation shocks. Figures in the boxes represent average projections for the respective variables in the baseline and scenario being presented. Ten-year historical average for the variable is also shown.
2/ For historical scenarios, the historical averages are calculated over the ten-year period, and the information is used to project debt dynamics five years ahead.
3/ Permanent 1/4 standard deviation shocks applied to real interest rate, growth rate, and current account balance.
4/ One-time real depreciation of 30 percent occurs in 2023.

Annex V. Inter-Institutional Collaboration for the RSF

The IMF began collaboration with the World Bank (WB) and the Inter-American Development Bank (IDB) in September 2022. This collaboration supported the country engagement synergies identified by the IDB, the WB, and the IMF during the design of RSF reforms. Overall, collaboration has comprised three stages, which while frequently overlapping can be broadly identified as: (i) information sharing, (ii) discussion of potential RSF reform measures; and (iii) identification of TA areas that can support the RSF goals and the related agenda of the Jamaica's government. The inter-institutional collaboration continues and aims at spurring engagement with the government of Jamaica to identify technical assistance (TA) that can support implementation of the RSF measures.

1. The early stage of inter-institutional engagement focused on information sharing. Steps during this stage can be summarized as follows:

- **Diagnosis.** The IMF team identified country climate change issues relevant for Jamaica and engaged with WB and IDB counterparts to review existing diagnostic and analytical research, including among others: (i) climate smart Public Investment Management (PIM); (ii) green Public Financial Management (PFM); (iii) disaster risks management by public institutions; (iv) transition to renewables; (v) green financing; and (vi) the use of Public and Private Partnerships (PPP) for climate related investments. The counterparts shared many insightful diagnostic and analytical documents, project documents and evaluations, TA reports, and their expert knowledge and guidance.

- **Assessment and Design.** The IMF team analyzed the provided reference materials and held multiple discussions with the WB and IDB counterparts to ensure proper understanding of the issues to formulate RSF measures. Examples of this process can be summarized as follows:

    - *National Natural Disaster Risk Financing policy (DRF).* The WB noted that the DRF is a milestone for disaster and risk management due to the country's high vulnerability to natural hazards and shared a policy project report and expert guidance on the importance of a DRF for building climate resilience in Jamaica.[1] During follow up meetings, teams discussed the importance of enhanced fiscal and financial frameworks to build resilience to climate change impacts and the lessons from implementation of WB policy projects. An issue considered was the proper design and placement of the National Natural Disaster Reserve Fund (NDRF) in the architecture of disaster financing, and discussions helped the IMF team appreciate the intricacies of its proper placement within this architecture. WB counterparts noted that these reforms can create synergies between the RSF and the WB planned engagement with Jamaica. This collaboration culminated in formulation of the Reform Measures 1 and 6 in Annex III Table 3.

[1] WB, "First Economic Resilience Development Policy Loan", *2020.*

- *PPPs Framework and Electric Vehicles Policy*. IDB counterparts shared a report and expert guidance on the importance of PPPs for building climate resilience in Jamaica.[2] Teams discussed the importance of the integration of climate change issues into the PPP policy and institutional framework given the extensive use of these contracts for public investments. An inclusion of climate risk insurance in the PPPs Request of Proposals and contract management emerged as a key issue—discussions helped the IMF team appreciate the importance of proper allocation of climate risks among the PPP partners for own and the project's protection from the potential materialization of a contingent liability. IDB counterparts also shared lessons from their collaboration with the authorities and noted the inclusion of climate-PPPs among RSF measures would create synergies between the RSF and their engagement with Jamaica. On the electric vehicles (EV) policy, they highlighted their engagement with the authorities on electric mobility and suggested the RSF measure could build on the work initiated in 2020.[3] This collaboration culminated in formulation of the Reform Measure 2 (PPPs) and 8 (EV) in Annex III Table 3.

2. The second stage of inter-institutional engagement focused on the discussion of potential RSF reform measures. The IMF team shared the draft RSF reform measures with the WB and the IDB counterparts, and teams reviewed their analytical underpinnings as well. The discussions considered: (i) the importance of the reform measures for Jamaica's climate agenda; (ii) the proposed deadlines for their implementation; and (iii) the potential synergies with the prospective operation of the counterparts in Jamaica—for example, for the WB prospective 2024 Development Policy Operation. Regarding the proposed deadlines for the implementation of reform measures, the WB cautioned that the executive and legislative approval processes in Jamaica was lengthy, and the IMF team adjusted deadlines to account for these constraints.

3. The Technical Assistance (TA) complementarity is building on previous steps. Over the last weeks, the IMF team has organized meetings with the WB and the IDB counterparts to flesh out the areas suitable for the TA support based on the expertise of each institution.

4. Engagement with other development partners. The IMF Team also engaged with Global Affairs Canada (GAC) office in Kingston—which will help the Jamaican authorities develop a climate financing agenda—during its mission in December to discuss GAC's coordination with the development partners working group in Jamaica, with a view to focus them on the country's climate change related goals.

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[2] IDB, "*Improving Climate Resilience in Public Private Partnerships in Jamaica", 2020.*

[3] IDB, "*Strategic Framework for Electric Mobility", April 2020.*

Appendix I. Written Communication

February 2, 2022

Ms. Kristalina Georgieva
Managing Director
International Monetary Fund
Washington, DC 20431
United States

Dear Ms. Georgieva:

1. Over the decade preceding the pandemic, Jamaica pursued prudent and credible home-grown macroeconomic policies that, among other things, resulted in a sharp reduction of public debt—from more than 140 percent of GDP in 2010 to 94 percent in 2019—placing it on a solid downward path. These policies were designed and implemented in the context of broad-based social consensus and were supported by international partners, including two consecutive Fund-supported programs. Our ambitious reform agenda included institutionalization of fiscal discipline through a Fiscal Responsibility Law (FRL), strengthened public finance management and revenue mobilization, adoption of an inflation targeting framework with a flexible exchange rate regime, and strengthened financial oversight. These efforts aided a noteworthy reduction in fiscal and external deficits and inflation in the context of enhanced macroeconomic policy frameworks.

2. The entrenched macroeconomic stability and improved policy frameworks have served us well including during the recent pandemic. Our policy response, supported inter alia by the Fund's assistance through the Rapid Financing Instrument, was nimble and focused where it was needed the most. Post-pandemic, our policy framework allowed for continued support of the economy alongside prompt fiscal consolidation aiming for the downward public debt path prescribed by the Fiscal Responsibility Law. By end 2021, the public debt to GDP ratio was already at pre-pandemic levels, a reflection of a broad social consensus that we should never sacrifice disciplined sustainable policy making or economic resilience for short-term expediency. At the same time, we have ensured that those most in need of assistance have been protected from the impact of the crisis. Our response to the current cost-of-living shock has been consistent with our commitment to fiscal prudence. It comprised temporary, targeted subsidies to energy bills, vouchers for transportation services, and transfer to students under social programs. We did not resort to price controls so as not to distort individual consumption and investment choices.

3. The economy has rebounded from the pandemic induced slump. Growth in 2021 was supported by the recovery in services and goods producing industries, amid challenging conditions for recovery in the tourism sector. Nonetheless, tourism is spearheading economic activity in 2022. Following our decision to lift COVID related entry restrictions last April, tourism rebounded to the

pre-crisis levels by mid-2022. The impact from the terms of trade shock due to the war in Ukraine, tightening of global financial conditions, and an expected deceleration in global growth remain the three major external downside risks for the economy's recovery.

4. In sum, the recovery benefitted from well designed, purposeful, and disciplined policy choices supported by resource buffers we built prior to the pandemic. These resource buffers comprise (i) fiscal buffers accumulated from privatizations and reforms of public institutions executed during 2019/20 as well as dividend transfers in April 2021 from the restoration of profitability to the BOJ over the period 2018-2020, (ii) external buffers from a strong foreign reserve position in the context of a flexible exchange rate regime and an inflation targeting regime, and (iii) resilience buffers accumulated in 2018-19 to counter impacts of natural disasters. Growth is expected to remain above potential this year and next and converge to the pre-pandemic trend afterwards. Monetary policy tightening and the fading of commodity shocks will aid inflation convergence to the targeted corridor and combined with the continued recovery in tourism will allow the current account deficit to fall. The prompt fiscal consolidation following the pandemic and adherence to the FRL have returned public debt to its downward path.

5. While we are pleased with the recovery, we keep a watchful eye on the risks and challenges that are buffeting the global economy. These include volatility in commodity markets as the war in Ukraine affects energy and food prices, inflationary pressures exacerbated by continued supply chain disruptions, tightening global financial conditions, and potential reversal of gains against the COVID-19 pandemic. These risks are particularly damaging to economies such as ours, which depend on international tourism, are energy and food importers, and rely on foreign investment and external financing to meet their financing needs. They may hinder the post-pandemic rebound and increase the likelihood that a global economic slowdown will impact Jamaica's growth and create larger-than-expected need for external financing. Finally, but not less ominous there are the ever-present risks due to natural disasters and climate change. Jamaica's exposure to these calls for careful planning to build right-size buffers to address these potentially unpredictable shocks while addressing the current expenditure needs.

6. Climate change and natural disasters threaten Jamaica's development prospects in stark contrast to our insignificant contribution to the global carbon emissions. This threat is increasing as the global climate change impacts continue to intensify. Also, our geographic, climatic, socio-economic characteristics and economic structure amplify our exposure to the climate change risks. Our infrastructure has been repeatedly damaged by powerful storms demanding recurring diversion of fiscal resources to its restoration. These days, tourism, and equally agricultural and urban areas are at risk from storms and hurricanes, higher temperatures, droughts and floods and a creeping sea level rise. The tourism sector is as sensitive to the effects of climate change as it is important for our economy. It provides foreign exchange inflows equivalent to about 20 percent of GDP and has significant positive spillovers to the rest of the economy through its interconnectedness with retail trade, construction, agriculture, and other services. Frequent, severe, and more damaging and longer lasting natural disasters will jeopardize these spillovers. They would also lower agricultural

productivity and affect the availability and quality of food, energy, and water, and will lead to a loss of forested areas and biodiversity, and adversely impact the health outcomes.

7. Our dependence on fuel imports is another equally important challenge to our development prospects. It exposes our economy to volatility in international commodity prices exacerbating balance of payment shocks. The high fuel prices and the inflationary pressures following the war in Ukraine highlight the need to expeditiously transition to renewable energy sources. In FY 2021/22, fuel commodity imports costed 11 percent of GDP or twice the level of Jamaica's goods exports. Over 85 percent of Jamaica's electricity production is derived from hydrocarbon sources, mostly heavy fuel oil. Mass public transportation is underdeveloped and there is over-reliance on cars and taxis, which leads to high per capita petrol consumption compared to regional peers.

8. These challenges combine with the impact of severe weather events on physical capital, and hence economic growth. The damage does not stop at destroyed buildings, bridges, roads, and other infrastructure. They disrupt labor markets and supply chains, force diversion of resources to reconstruction which delays productivity enhancing investments that foster long-term growth. Hence, they may reverse wider development gains including development of human capital. Further, when the disaster relief is financed with new borrowing that adds to public debt it may threaten fiscal and/or financial stability. The damage and disruption are not limited to the physical economy. The financial institutions suffer as well since the value of their assets gets eroded, the availability of domestic resources shrinks, and external resources become more expensive.

9. Despite all the above challenges and with the benefit of prior technical assistance from the Fund, we continued to make progress with our structural reform agenda even after the conclusion of the last Fund arrangement that ended in 2019. That agenda includes most prominently:

a. Approval of the amendments to the Bank of Jamaica Act in December 2020. The amended Act asserted the independence of the BOJ and established as the principal objectives of the Bank the maintenance of price stability and financial system stability with the primary objective being the maintenance of price stability. It clarifies the functions of the Bank to formulate and implement monetary policy, implement prudential and macro-prudential policies and other pertinent functions.

b. Approval of a law mandating establishment of an Independent Fiscal Commission last February. The Independent Fiscal Commission will strengthen Jamaica's fiscal responsibility framework, promote sound fiscal policy and fiscal management to sustain fiscal discipline, and macro-economic stability.

c. Reforms to the public compensation framework to establish a wage structure that is simple, fair, equitable, sustainable, affordable, and fit for the purpose of attracting talent and recognizing performance. The implementation of this reform will be done within the fiscal envelope envisaged by the Fiscal Responsibility Law.

d. Reforms in the financial sector to strengthen stability, sustainability, and crisis management. These comprise progressing adoption of Basel III regulation, risk-based supervision, expanding regulatory remit of the central bank, progress towards adoption of a special resolution regime, and continued implementation of recommendations arising from our National Risk Assessment published in August 2021 and an action plan agreed with FATF to secure an exit from a list of jurisdictions under increased monitoring by FATF.

10. In this context, we consider that the following two IMF arrangements would be most beneficial for Jamaica as we advance our reform agenda and build resilience to the growing climate challenges. A Precautionary Liquidity Line (PLL) would help shield ongoing efforts to secure macroeconomic stability and with the implementation of reforms to strengthen policy frameworks from the potential impact of global shocks. It would also support our structural reforms that target some of our remaining vulnerabilities. Additionally, support provided by the Resilience and Sustainability Facility (RSF) would help catalyze private financing and multilateral support to spearhead structural reforms aimed at reducing vulnerabilities to climate events and help us implement our ambitious climate agenda.

11. We are requesting IMF support for our policy agenda in the form of a 24-month Precautionary and Liquidity Line (PLL) arrangement in the amount of SDR727.51 million (190 percent of quota), which we intend to treat as precautionary. Concurrently, we are requesting support through a Resilience and Sustainability Facility in the amount of SDR574.35 million (150 percent of quota).

12. Our immediate priority is to secure Fund support through readily available resources in case global shocks put our development progress at risk and threaten macroeconomic stability. Over the longer horizon, the reforms supported by these arrangements would accelerate the pace of implementation of our public policy reforms for stronger, more inclusive growth while enhancing macroeconomic resilience in particular, by implementing an ambitious reform agenda to reduce vulnerabilities of our balance of payments from climate-change related events.

13. Policies under the PLL aim at continued enhancement of our macroeconomic policy framework, with a special focus on the areas in need of further strengthening, including: (i) financial integrity, addressing strategic vulnerabilities of our AML/CFT regime; (ii) financial supervision and regulation; and (iii) the data adequacy framework. In addition, we will continue to work on our fiscal policy framework, aiming at preserving fiscal and debt sustainability. As a result, we expect to boost growth, reinvigorate business confidence, maintain sound economic policies and respond appropriately to shocks should they arise.

14. We intend to continue improving regulations to the 2018 procurement Act to enhance transparency. In this regard, we plan to reform the regulations to require collection and publication on the Ministry of Finance website of beneficial ownership information of awarded companies. As a

first step, we have published that information for companies awarded COVID-related contracts by public agencies.[1]

15. We are addressing the remaining vulnerabilities in our AML/CFT regime in line with the action plan agreed with FATF. As part of this plan, in August 2021, we published a National Risk Assessment (NRA). The NRA includes measures that are in line with the agreed action plan and informs the following structural benchmark (Table 2):

- The submission to Parliament of Amendments to the Companies Act (CA) to: (i) ensure that the definition of beneficial ownership (BO) is amended in line with the Financial Action Task Force international standards; (ii) have effective, proportionate, and dissuasive sanctions for legal persons and legal arrangements when they breach their BO obligations; and (iii) ensure that the Registrar of Companies is granted with powers to ensure compliance, monitor and verify that basic and BO information held by legal companies is accurate and timely updated (*Structural Benchmark, end-March 2023*).

With respect to financial supervision and regulation, we will continue to advance with the Basel III adoption plan. A significant milestone under Phase I of the roadmap was achieved with the publication of the Standard of Sound Practice for Capital Adequacy (SSP), which sets out the minimum capital requirements for credit, market, and operational risk components under Pillar 1 of Basel III and the revised definition of regulatory capital of the Basel framework. Implementation of Pillars 2 and 3 of the Basel framework and the work to make the SSP into a capital adequacy regulation are ongoing. Phase II comprises Pillar 2, including the Internal Capital Adequacy Assessment Process (ICAAP), the Supervisory Review and Evaluation Process (SREP), and the framework for designating Domestic Systemically Important Financial Institutions (D-SIFIs). This phase also covers the execution of a quantitative impact studies (QIS) by the licensed DTIs. Phase III will involve Pillar 3, focusing on market disclosures, consultation and implementation of additional capital and liquidity measures—including capital buffers and the Net Stable Funding Ratio (NSFR).

16. We continue to expand application of risk-based supervision and the regulatory perimeter of the BOJ to the financial institutions not hitherto supervised by it. The amendment to the Co-operative Societies Act will bring credit union cooperatives under the regulatory perimeter of the Ministry of Finance and the BOJ—including provisions restricting deposit-taking activities of cooperatives to those operating as credit unions. The bill will be presented to Parliament jointly with the proposed Credit Unions (Special Provisions) Act, which contains prudential requirements for credit unions. It will cover licensing, capital, reserves, prohibited business, and intervention processes—defining the role of authorized credit unions and allowing the BOJ to monitor their operations.

[1] The Auditor General's Department published audit reports of Jamaica's COVID-related spending programs: Audit of the COVID-19 Allocation of Resources for Employees (CARE) Program – Auditor General's Department; Audit of the COVID-19 Allocation of Resources for Employees (CARE) Program – Auditor General's Department. The integrity commission database lists all contracts (including Covid-19) awarded to companies since 2006. This can be found under: Quarterly Contract Awards (QCA) Searchable Database | Integrity Commission

17. We will also strengthen the regulatory framework with the following actions (see Table 2):

a. The regime for the resolution of non-viable financial institutions—while protecting financial stability and public funds—needs to be strengthened. The work on the Special Resolution Regime (SRR) started in October 2017. The Technical Working Group is preparing a draft law for submission to Parliament establishing administrative resolution powers for systemically important financial institutions and modifying the insolvency component for non-systemic financial institutions, in line with Fund staff recommendations (*Structural Benchmark, end-March 2024*).

b. We will publish a methodology used to identify systemically important (bank and non-bank) financial institutions (*Structural Benchmark, end-September 2023*).

c. We will continue to advance the supervision of financial holding companies. The Banking Services Act requires that financial groups with DTIs establish a Financial Holding Company (FHC) to be licensed and supervised by the BOJ. In May 2021, the BOJ granted a first FHC license and commenced an ongoing pilot monitoring exercise of the FHC including developing the pilot's supervisory strategies. In this context, the BOJ is intensifying its supervisory efforts and collaboration with regulators including through a regional Consolidated Supervision Group established in 2021.

d. We will expand supervisory remit of the Financial Services Commission (FSC). The FSC launched a risk-based supervision framework in November 2021. It applies to financial groups not comprising DTIs, which are supervised by the FSC. The FSC is preparing an amendment to be tabled in Parliament to enhance the framework for consolidated supervision (*Structural Benchmark, end-September 2023*).

18. We will continue to improve the quality of our evidence-based policy making. We have made steady progress with national accounts and price statistics (including the rebasing and updating the methodology used to compile the national accounts, and an updated Household Expenditure Survey), government finance statistics, monetary and financial statistics, and balance of payments—including with support from CARTAC and STA. We have participated in GDDS since 2003. We plan to subscribe to the SDDS and the PLL will help to map out the progress to this goal. In this context, we will form a committee comprising representatives from the MOF, BOJ, and STATIN to engage with the IMF Statistical Department to help us identify the gaps in data coverage, timeliness, and dissemination practices (*Structural Benchmark, end-March 2023*), in preparation for a diagnostic STA mission that will take place before the first review. The STA diagnostic will inform the needed benchmarks that we will agree at the first review.

19. While the PLL and the reforms enumerated above are strengthening our ability to respond to global economic shocks, we continue to pursue an ambitious set of reforms to build resilience to climate change. While Jamaica contributes little to carbon emissions, our vulnerabilities to climate change events have increased. We are exposed to higher temperatures, sea level rise, as well as more frequent natural disasters: droughts, hurricanes, storms, and floods. This high vulnerability to

climate change calls for forward looking strategy with adequate resources to build resilience and adaptation to climate change.

20. The RSF will be instrumental to implement the reform agenda that has the potential to strengthen our resilience to climate change vulnerabilities and to facilitate the integration of this agenda in macroeconomic policy formulation. Concessional resources provided under the RSF can play a fundamental role in catalyzing private sector financing and other support from development partners.

21. Our climate agenda is comprehensive and ambitious, including reforms to transition to renewables in electricity generation, enhancement of policy frameworks to scale up needed infrastructure investment and catalyze private and other financing for climate change issues, reforms to strengthen financial resilience and "green" the financial system including sound monitoring throughout the economy's transition to climate change resilience.

22. We want to incentivize investment in renewables, invest in climate resilient infrastructure, and adopt a comprehensive layered financial framework supporting relief and reconstruction spending while safeguarding public finances. We do not stop at the real economy and trade activities. We realize that a financial system well equipped to handle climate risks will facilitate the decarbonization efforts laid out in our Updated Nationally Determined Contribution (NDC).

23. The reform agenda supported by the RSF—and its timeline—is presented in Table 3 and comprises three pillars:

- The first pillar will enhance policy frameworks to tackle the adaptation challenge by building resilience to natural disasters and climate change. It comprises reforms to be completed between March 2023 and March 2024. Specifically, we will: (i) reform the Public-Private Partnership (PPP) policy to include climate requirements from project identification to contract management, and revise the PPP Standard Operating Procedure Manual to include these requirements; (ii) adopt a National Natural Disaster Risk Financing (DRF) policy; (iii) adopt methodologies to conduct climate risks assessments at project appraisal stage (*project proposal stage*) and incorporate the methodology in the Public Investment Management System (PIMS) handbook; (iv) define and publish project selection criteria including climate change criteria; (v) conduct and publish in the Fiscal Risk Statement quantitative analysis of the fiscal risks generated by climate change, and (vi) establish a National Natural Disaster Reserve Fund (NDRF) and financial regulations for a transparent administration and reporting of the NDRF.

- The second pillar will tackle the mitigation challenge to decarbonize our economy—we aim to convert about half of total electricity generation capacity to renewables by 2030. This pillar comprises reforms to be completed between June 2023 and September 2023. Specifically, we will: (i) submit to parliament an electric vehicle policy that sets functional standards and regulations for electric mobility, defines energy sector guidelines for electric mobility accommodation, develop operational codes to promote adoption of electric vehicles, and sets guidelines for the development of an electric mobility ecosystem; (ii) approve the guidelines adapted to the type and purpose of the structures, to reduce energy use in the existing and newly constructed public buildings, and (iii) submit to parliament a bill to incentivize investment in renewables through fiscal measures.

- The third pillar includes measures that will help us green the financial system in order to mitigate transition risks and attract private financing for green projects. It comprises actions to be completed between December 2023 and June 2024. Specifically, we will: (i) publish a climate risks assessment with diagnostic of climate and environmental risks and define a timeline to embed these risks in supervisory activities and related databases for the development of climate risks assessments; (ii) adopt a monitoring framework and the reporting requirements for financial institutions to implement Climate Related Financial Risks stress testing and for the BOJ to integrate climate risks in supervision and macroprudential policy formulation; iii) establish an institutional framework for green-bond issuance and trading which will open new avenues for private climate related financing.

24. The reform agenda defined above will be accomplished against the background of progressive implementation of our Updated NDC—the RSF agenda and the NDC measures complement and support each other. We will also make sure that the lessons learnt during the implementation of the program are shared across the responsible institutions and considered to improve efficiency, timeliness, and accuracy of the on-going and future climate resilience work. We have no intention of slowing down after the RSF is complete as we see it as helping us to get off the starting blocks and propel us forward in our endeavor to make Jamaica safe, secure and thriving because it will have enabled us to address potential bottlenecks.

25. As a member of the IMF, we will be presenting relevant information on our economic and policy developments within the framework of this letter and the Fund's Articles of Agreement ahead of the semi-annual reviews, expected to be completed no later than August 31, 2023, February 29, 2024, and August 31, 2024. We will also observe the standard performance criteria on trade and exchange restrictions, bilateral payment agreements, multiple currency practices and the non-accumulation of payment arrears on the external debt. We will provide the Fund with all the needed information to monitor the program under the PLL and RSF arrangements.

26. The IMF has been a strong partner to Jamaica throughout the last 10 years; we extend our utmost gratitude to the Executive Board and to the Fund staff for being trusted advisors over this period. Our engagement now will further strengthen our capacity to design and implement sound policies to durably improve the living standards of the Jamaican people.

27. We believe that the policies contained in this communication are adequate for achieving the economic goals supported by the PLL and the RSF arrangements, and we are committed to taking additional measures that may be necessary to attain these goals. IMF's technical support with the adoption of these measures would be appreciated. The continued strengthening of the economy's resilience should position Jamaica well for achieving the objectives of the program, both in the short- and the medium-term. We will treat the PLL as precautionary. The risks that could trigger the

drawings are likely to dissipate in the next two years. Jamaica is expected to be in a strong position to exit the PLL by end-2024 once external risks subside, and external buffers continue to grow.

28. On behalf of the government of Jamaica, we extend our gratitude for the continued support we have received from the Fund toward the success of our economic policies in the current global environment.

29. Finally, we authorize the IMF to publish this statement, its attachments, and the staff report for this request in line with the commitment to transparency.

Very truly yours,

/s/	/s/
Nigel Clarke, DPhil., MP	Richard Owen Byles
Minister of Finance and the Public Service	Governor, Bank of Jamaica

Table 1. Jamaica: PLL Quantitative Targets

	March 31, 2023	Sept. 30, 2023
Indicative Targets:		
Overall Fiscal Balance of the Central Government (floor)1/	JD 7,506 million	JD 3,625 million
Net International Reserves (floor)	US$ 3,535 million	US$ 3,620 million

Source: IMF staff estimates.

1/ Cumulative flows from April 1 through March 31.

Table 2. Jamaica: PLL Structural Benchmarks

		Measure	Timing
Data Adequacy			
	A.	The cabinet will formally establish a National Statistical Committee comprising representatives of the BOJ, the MFPS, and STATIN. The Committee will be tasked to approve an Action Plan to Subscribe to the SDDS; monitor and make recommendations to ensure its implementation.	March 31, 2023
Financial Regulation			
	A.	Submit the Special Resolution Regime law to parliament to strengthen the resolution of non-viable financial institutions while protecting financial stability and the public funds, in line with Fund staff recommendations.	March 31, 2024
	B.	Publish a methodology via a BOJ consultation paper to identify systemically important (bank and non-bank) financial institutions and identify such institutions.	September 30, 2023
	C.	Submit to parliament amendments to establish supervision by the Financial Services Commission of financial conglomerates without a deposit taking institution.	September 30, 2023
Financial Integrity			
	A.	To ensure that adequate, accurate and up-to-date basic and beneficial ownership (BO) information on legal persons and legal arrangements is available on a timely basis to competent authorities, submit to Parliament an amended Companies Act to: (i) ensure that the definition of beneficial ownership is amended in line with the Financial Action Task Force international standards; (ii) have effective, proportionate, and dissuasive sanctions for legal persons and legal arrangements when they breach their BO obligations; and (iii) ensure that the Registrar of Companies is granted with powers to ensure compliance, monitor and verify that basic and BO information held by legal companies is accurate and timely updated.	March 31, 2023

Table 3. Jamaica: Reform Measures Under the RSF 1/	
Measure	**Target Date**
Pillar 1: Building Fiscal and Physical Resilience to Natural Disasters and Climate Change	
RM1: The Ministry of Finance and Public Service (MOFPS) to adopt a National Natural Disaster Risk Financing (DRF) policy.	1st PLL Review (End-June 2023)
RM2: The Development Bank of Jamaica in consultation with the MOFPS to modify the Policy and Institutional Framework for the Public-Private Partnership (PPP) policy Program of the Government of Jamaica to include climate requirements in PPP project agreements from project identification to contract management and revise the PPP Standard Operating Procedure Manual to reflect these requirements.	1st PLL Review (End-March 2023)
RM3: The Public Investment Appraisal Branch (PIAB) to define a methodology to conduct climate impact assessments at project appraisal stage (*project proposal stage*) and incorporate the methodology in the Public Investment Management System (PIMS) handbook	2nd PLL Review (End-Dec. 2023)
RM4: The Planning Institute of Jamaica (PIOJ) to define and publish project selection criteria including climate change criteria.	2nd PLL Review (End-Dec. 2023)
RM5: The MOFPS to conduct and publish in the Fiscal Risk Statement quantitative analysis of the fiscal risks generated by climate change.	3rd PLL Review (End-March 2024)
RM6: The MOFPS to submit to parliament an amendment to the Financial Administration and Audit Act to establish a National Natural Disaster Reserve Fund (NDRF) subaccount under the consolidated fund account. In parallel, the MOFPS to approve financial regulations for a transparent administration and reporting of the NDRF.	2nd PLL Review (End-Dec. 2023)
Pillar 2: Strengthening Mitigation/Promoting Renewables	
RM7: The MOFPS to submit to parliament a bill to incentivize investment in renewables through fiscal measures.	3rd PLL Review (End-June 2024)
RM8: The Ministry of Science, Energy and Technology (MSET) to submit to parliament the electric vehicle policy, in line with the objectives in paragraph 23 of the Written Statement.	1st PLL Review (End-June 2023)
RM9: The MSET to approve guidelines adapted to the type and purpose of the structures, to reduce energy use in schools, hospitals, and public buildings for the existing and new structures.	1st PLL Review (End-June 2023)
Pillar 3: Greening the Financial Sector	
RM10: BOJ to publish a climate risks assessment (including a diagnostic of related climate and environmental risks detailing the current governance and regulatory regime) and define a timeline to embed these risks in supervisory activities and related databases for the development of climate risks assessments.	2nd PLL Review (End-Dec. 2023)
RM11: Adopt a monitoring framework that improves data collection and establishes the reporting requirements for financial institutions to implement Climate Related Financial Risks stress testing and for the BOJ to gradually integrate climate risks in supervision and macroprudential policy formulation.	3rd PLL Review (End-June 2024)
RM12: Establish an institutional framework for green-bond issuance and trading.	3rd PLL Review (End-June 2024)
[1] The reform measures included in Table 3 have been discussed with the IDB's and the World Bank's experts and deepen synergies with the IDB's and WB's efforts in the areas covered by the reform measures.	

Attachment I. Technical Appendix

Under the first year of the PLL arrangement, indicative targets (IT) as defined in Table 1 of our written communication will be set for end-March 2023 and end-September 2023. They include:

- **Cumulative Floor of the Central Government Fiscal Balance.** The fiscal balance of the central government is defined as total revenues minus total expenditures and covers government activities as specified in the budget. Revenues are recorded when the funds are transferred to a government revenue account. Revenues will also include grants. Capital revenues will not include any revenues from divestment operations. Central government expenditure is recorded on a cash basis and includes compensation payments, other recurrent expenditures, and capital spending. Government-funded PPPs will be treated as traditional public procurements. Total expenditure also includes transfers to other public bodies which are not self-financed. Costs associated with divestment operations or liquidation of public entities, such as cancellation of existing contracts or severance payments to workers, will be allocated to current and capital expenditures accordingly. All expenditures directly settled with bonds (except for provision for losses of the Bank of Jamaica) or any other form of non-cash liability will be recorded as expenditure financed with debt issuance and will therefore affect the overall fiscal balance.
    - *Reporting:* Data will be provided not later than six weeks after the test date.

- **The central government** for the purposes of the monitoring of the IT consists of the set of institutions currently covered under the state budget. The central government includes public bodies that are financed through the Consolidated Fund. The fiscal year starts on April 1 in each calendar year and ends on March 31 of the following calendar year.

- **Public Sector** refers to the "Specified Public Sector" (SPS) as defined under the Fiscal Responsibility Law (FRL) and consists of the central government and self- financed public bodies that are not deemed "commercial" by the Office of the Auditor General (OAG), based on the set of legislated criteria. It excludes the Bank of Jamaica (BOJ). For the purposes of the arrangement monitoring, public bodies comprise the following self-financed public bodies: AEROTEL; Airports Authority of Jamaica; Betting, Gaming and Lotteries Commission; Broadcasting Commission; Bureau of Standards; Clarendon Alumina Production Limited; Coconut Industry Board; Development Bank of Jamaica Limited; Factories Corporation of Jamaica; Financial Services Commission; Firearm Licensing Authority; Harmonization Limited; HEART Trust- NTA; Housing Agency of Jamaica Limited; Jamaica Agricultural Commodities Regulatory Authority; Jamaica Bauxite Institute; Jamaica Bauxite Mining; Jamaica Deposit Insurance Corp.; Jamaica International Freezone Limited; Jamaica Mortgage Bank; Jamaica National Accreditation Agency; Jamaica Racing Commission; Jamaica Railway Corporation; Jamaica Ultimate Tyre Company Limited; Jamaica Urban Transport Company Limited; Kingston Free Zone Limited; Micro Investment Development Agency; Montego Bay Free Zone; Montego Bay Metro Limited; National Export Import Bank of Jamaica - EX-IM Bank; National Health Fund; National Housing Trust; National Insurance Fund; National Water Commission; National Road Operating and Constructing Company Limited; Ocho Rios Commercial Centre Limited; Office of Utilities Regulation; Overseas

Examination Commission; Petrojam Ethanol Limited; Petrojam Limited; Petroleum Corporation of Jamaica; Port Authority of Jamaica; Ports Management and Security Limited; Ports Security Corps Limited; Postal Corporation of Jamaica; Public Accountancy Board; Runaway Bay Water Company Limited; SCJ Holdings Limited; Spectrum Management Authority; St Ann Development Company Limited; Student Loan Bureau; Sugar Industry Authority; Transport Authority; Universal Service Fund; Urban Development Corporation.

- **Floor on the Stock of Net International Reserves** of the BOJ (NIR-BOJ) is defined as the U.S. dollar value of gross foreign assets of the BOJ minus gross foreign liabilities. *Gross foreign assets* are defined per the Sixth Edition of the Balance of Payments Manual and International Investment Position Manual (BPM6)[1] as readily available claims on nonresidents denominated in foreign convertible currencies. They include the BOJ's holdings of monetary gold, SDR holdings, foreign currency cash, foreign currency securities, liquid balances abroad and the country's reserve position at the Fund. Excluded from reserve assets are any assets that are pledged, collateralized, or otherwise encumbered, claims on residents, claims in foreign exchange arising from derivatives in foreign currency vis-à-vis domestic currency (such as futures, forwards, swaps and options), precious metals other than gold, assets in nonconvertible currencies and illiquid assets. *Gross foreign liabilities* of the BOJ include all foreign exchange liabilities to nonresidents (thus excluding all foreign exchange liabilities to residents), including commitments to sell foreign exchange arising from derivatives (such as futures, forwards, swaps and options) and all credit outstanding from the Fund but excluding credit transferred by the Fund into a Treasury account to meet the government's financing needs directly. In deriving NIR, credit outstanding from the Fund is subtracted from foreign assets of the BOJ. GOJ foreign liabilities are excluded from gross foreign liabilities of the BOJ. Non-U.S. dollar denominated foreign assets and liabilities will be converted into U.S. dollar at the arrangement exchange rates except for items affecting government fiscal balances, which will be measured at current exchange rates. The arrangement exchange rates are those that prevailed on December 14, 2022—shown in Table 1 below.

Table 1. Jamaica: Arrangement Exchange Rates 1/

Jamaica $/ to the US dollar	1 USD = 154.2889 JMD
Jamaica dollar to the SDR	1 SDR = 205.8055 JMD
Jamaica dollar to the Euro	1 EUR = 165.3159 JMD
Jamaica dollar to the Canada dollar	1 CAD = 112.8969 JMD
Jamaica dollar to the British Pound	1 GBP = 188.7903 JMD

[1] Available via Internet at: https://www.imf.org/external/pubs/ft/bop/2007/bopman6.htm.

Table 1. Jamaica: Arrangement Exchange Rates 1/ (concluded)	
Jamaica dollar to the Swiss Franc	1 CHF = 166.5378 JMD
Jamaica dollar to Chinese Renminbi	1 CNY = 22.2002 JMD
1/ Average daily selling rate of December 14, 2022	

- *Adjusters:* The NIR targets will be adjusted upward (downward) by the surplus (shortfall) in expected loan disbursements from multilateral institutions (the IBRD, IDB and CDB) and commercial loans guaranteed by multilateral sources, relative to the baseline projection reported in table below. Loan disbursements are defined as external loan disbursements (excluding project financing disbursements) from official creditors that are usable for the financing of the *public sector*. The NIR targets will be adjusted upward (downward) by the surplus (shortfall) in grants or loan disbursements to the central government that are purchased by or deposited at the BOJ, relative to the baseline projection reported below.

Table 2. Jamaica: External Disbursements (Baseline Projection)	
Cumulative flow from Dec 31, 2022	(in US$ million)
Budget Support Grants	
• End-March 2023	11.37
• End-September 2023	36.97
Multilateral Loans	
• End-March 2023	0.00
• End-September 2023	0.00
Loans Guaranteed by Multilaterals	
• End-March 2023	0.00
• End-September 2023	0.00

  - *Reporting:* Data will be provided by the BOJ to the Fund with a lag of no more than 10 days after the test date.

- **As per the policy of the Government of Jamaica all its external obligations will be met on time and with no delays.** The policy of the government has also been to pay domestic obligations on time, including commercial loans, treasury bills, notes, and bonds. For the arrangement, the payment arrears are defined as external debt service obligations (principal and interest) that have not been paid at the time they are due as specified in the contractual agreements, on central government and central government guaranteed debt. Overdue debt and debt-service obligations that are in dispute will not be considered external payment arrears.

- **Timing of reviews.** Assuming the approval of this arrangement by the IMF Executive Board on March 1, 2023, the reviews are expected to be completed by no later than August 31, 2023, for the first review, February 29, 2024, for the second review, and August 31, 2024, for the third review.

JAMAICA

February 7, 2023

REQUEST FOR AN ARRANGEMENT UNDER THE PRECAUTIONARY AND LIQUIDY LINE AND REQUEST FOR AN ARRANGMENT UNDER THE RESILIENCE AND SUSTAINABILITY FACILITY—WORLD BANK ASSESSMENT LETTER FOR THE RESILIENCE AND SUSTAINABILITY FACILITY

WORLD BANK ASSESSMENT LETTER FOR THE RESILIENCE AND SUSTAINABILITY FACILITY

A. Country Vulnerability to Climate Change Including Human, Social and Economic Costs

1. **Jamaica has made notable development progress in recent years, but challenges posed by climate change remain significant.** After decades of weak macroeconomic performance, an austerity program launched in 2013 helped to reduce the public debt-to-GDP ratio by over 50 percentage points, improving investor sentiment. Despite historically low real GDP growth of around 1 percent, Jamaica also lowered the poverty rate by 17.4 percentage points between 1990 and 2019 and increased life expectancy. But Jamaica's geographic location and economic structure make it highly vulnerable to exogenous shocks, including climate change, which can quickly reverse economic and social gains, especially in the context of limited fiscal space.

2. **Climate change represents a major risk to Jamaica's growth and the wellbeing of its population.** Situated along the Atlantic hurricane belt, the country is highly susceptible to recurrent extreme weather and climatic events that threaten the viability of its key infrastructure assets and industries. Nearly two-thirds of Jamaicans live within two kilometers of the coast. In addition, the coastal zone is home to three-quarters of the country's industry and its dominant tourism sector, which combines to generate about 90 percent of GDP. The poor and vulnerable are more exposed because many rely on agriculture and live in dwellings not built to the required standards. Recent estimates suggest that 14.5 percent of the population lives in high-risk flood zones, with about 118,000 of them likely to be poor (living on less than $5.50 per day). In recent decades the frequency of natural disasters – mainly floods, tropical depressions, tropical storms, hurricanes, droughts, and landslides – in Jamaica increased, creating significant physical

and economic damages.[1] As climate change impacts intensify, costs and risks for Jamaica will grow, largely due to the increasing severity of storms.[2]

3. Changing climatic conditions will also have significant impacts on a number of sectors. They will lead to deterioration of agricultural yields as growing conditions for key crops shift away from optimal season length, temperature, and precipitation profiles. Periods of extreme heat and weather events will have widespread effects across the economy, including infrastructure degradation and associated business interruption, and negative impacts on health and human development. For example, tourism is at risk from damage to assets and losses from disruption of activities. Under a 4.3°C scenario, a 1- in-100-year hurricane event could cause damages and losses of more than $98 million to the tourism sector alone.[3] Acute hazards such as storms, floods, and heatwaves directly cause deaths and injuries. Indirectly, they contribute to public health risks by tainting drinking water with chemical runoff and with disease-bearing human or animal waste, increase vulnerability to illness and exploitation by making homes uninhabitable, and reduce the future prospects of young people who are exposed to sanitation conditions that increase risk of chronic illness or stunting and to educational conditions that inhibit learning. Low-income households residing in informal communities within the largest urban centers are disproportionately exposed and vulnerable to these climate-driven risks.

4. Jamaica's share of global greenhouse gas emissions (GHG) is low, yet the country is taking important steps and demonstrating regional leadership in decarbonizing its economy. In 2018, Jamaica's emissions were 10.2 MtCO2e, with the industrial and electricity generation sectors contributing 62 percent of total emissions. Industrial emissions, which include those from industrial processes and manufacturing/construction sectors, contribute 32 percent of overall emissions. The second largest contributor to Jamaica's emissions is the electricity/heat sector, which contributes 30 percent of total emissions. Transport emissions make up 20 percent of total emissions, with the remaining emissions attributed to agriculture, waste, land use change and forestry, buildings and other sectors. GHG emissions peaked at 14 $MtCO_2e$ in 2006. Falling GHG emissions reflected the declines in the manufacturing/construction and electricity/heat subsectors which coincided with the downturn in mining activities. However, the available analysis suggests that GHG emissions could grow by 50 percent by 2050 under a baseline of no climate action, including no action on the commitments presented in the updated Nationally Determined Contributions (NDC) of 2020. These projections reflect the expected impact of economic growth and population growth. The emissions growth will be led by industrial production, electricity, and transport sectors.

[1] Hurricane Ivan (2004) caused damages and losses of US$580 million with over half of the physical asset damages inflicted on houses. Damage to roads and bridges accounted for approximately 75 percent (US$159 million) of damages from Hurricane Gustav (2008).

[2] Jamaica's long-term climate change strategy recommendations.

[3] Jamaica's long-term climate change strategy recommendations.

B. Government Policies and Commitments in Terms of Climate Change Adaptation and Priority Areas to Strengthen Resilience

5. **The Government of Jamaica has gradually integrated climate change adaptation efforts into its policy framework and sector policies.** Jamaica's overarching development strategy through 2030 is articulated in Vision 2030 Jamaica: National Development Plan (NDP) and is based on the comprehensive vision of "Jamaica, the place of choice to live, work, raise families, and do business". The NDP includes climate change adaptation as a national development priority. The implementation of the strategy is guided by medium-term national strategies, sector level programs, plans and activities for each of the social, governance, economic and environmental pillars of the NDP. In this regard, the Climate Change Policy Framework for Jamaica elaborates on the overarching vision of the NDP and is intended primarily to support the goals of Vision 2030 and to facilitate the development and implementation of risk reduction measures in all sectors including through strengthened climate change governance arrangements, improved water resource management, and enhanced disaster risk financing. It outlines the objectives, principles and strategies that the country will employ in order to effectively respond to the impacts and challenges of climate change, through measures which are appropriate for varying scales and magnitudes of climate change impacts. Recognizing the challenges posed by natural hazards and climate change, and vulnerability of Jamaica's population and key economic sectors, the Government of Jamaica has also strengthened the country's disaster risk management (DRM) framework and developed national strategies and policies accordingly. These include the Natural Hazard-Risk Reduction Policy (2005), the Building Code Bill (2013), and the DRM (Amendment) Act (2021), which is the primary policy tool for DRM in the country. The country leads the region in developing a comprehensive disaster risk financing strategy which includes a tailored menu of financial instruments to address low to high intensity events. Jamaica has also taken additional steps to strengthen its fiscal resilience to natural hazard shocks, including by becoming a member of the multi-country risk-pooling Caribbean Catastrophe Risk Insurance Facility. It has also established a National Disaster Fund to finance emergency response and rehabilitation activities and has adjusted its public financial management procedures to improve efficiency in responding to disasters. The social protection system has also been strengthened and now includes a portfolio of programs across social insurance, labor market programs, and social assistance, and has contributed to improving equity and social resilience.

C. Government Policies and Commitments in Terms of Climate Change Mitigation and Priority Areas to Reduce GHG Emissions

6. **The Government of Jamaica is taking important steps towards a sustainable low carbon transformation of its economy.** Demonstrating leadership, in June 2020 Jamaica became the eleventh country worldwide to submit an updated NDC, which has an unconditional target of 25.4 percent and a conditional target of 28.5 percent reduction in emissions relative to business-as-usual by 2030.[4] The revised NDC identifies additional opportunities within the energy sector and – for

[4] 83 percent of the unconditional reductions comes from the energy sector given plans to ramp up renewables in the power sector. In addition, 17 percent of these reductions come from the land use change and forestry sector due to the 'No Net Loss of Forestry' commitment and the initiative to plant 3 million trees.

the first time - within the forestry sector. Building on its NDC, the Government of Jamaica is in the process of developing a long-term strategy for low carbon and climate resilient development. It also has a number of complementary sectoral policies that are addressing and directly contributing to the country's climate change mitigation efforts. Recognizing the importance of decarbonization of the energy sector, the government adopted a national Energy Policy in 2010, which establishes a goal of 20 percent renewable energy in the energy mix by 2030. The Government of Jamaica is also preparing a new Integrated Resource Plan which sets out Jamaica's 20-year plan for the sector, including for increasing the share of renewable energy the current from 12 percent to currently to 30 percent.

D. Other Challenges

7. **Institutional capacity and gaps in financing are major challenges to decarbonizing and building climate resilience in Jamaica.** Notwithstanding notable progress in developing and deploying initiatives to expand ex-ante financial protection to mitigate the impact of climate shocks, there is significant scope to strengthen the institutional framework across the government for the formulation, implementation and enforcement of climate change policies, including through strengthen infrastructure and urban planning, integrated coastal zone management, and development of insurance and risk transfer instruments, among others.[5] This includes efforts to further strengthen infrastructure and urban planning, integrated coastal zone management, and provision and use of climate data. Fiscal space is expected to remain limited over the medium-term. For instance, the total upfront investment need for the sixteen commitments that underpin Jamaica's revised NDC alone is estimated at US$921.1 million, with around 76 percent of this funding coming from private sources.[6] As such, additional initiatives to boost fiscal space and explore the use of innovative climate finance instruments would help to bridge the financing gap and mobilize additional funding (e.g., in from of Public Private Partnerships (PPPs), green bonds and other sustainability linked financing) for scaled-up climate action. For the low-carbon transition in coming years, policies and investments geared toward harnessing the value of a nature-based economy will be important for Jamaica.

E. World Bank Engagement in the Area of Climate Change

8. **The World Bank has been actively engaged in supporting Jamaica's efforts to improve its resilience to observed and anticipated climate change risks and contribute to the global efforts to curb emissions.** With the support of the Bank, the Government of Jamaica has embarked upon a comprehensive strategy toward resilience to climate shocks. The reforms cover financial,

[5] Rozenberg, Julie; Browne, Nyanya; De Vries Robbé, Sophie; Kappes, Melanie; Lee, Woori; Prasad, Abha. 2021. *360° Resilience : A Guide to Prepare the Caribbean for a New Generation of Shocks*. World Bank, Washington, DC. © World Bank. https://openknowledge.worldbank.org/handle/10986/36405 License: CC BY 3.0 IGO.

[6] Jamaica's ND World Bank.2021. Jamaica's Nationally Determined Contribution Implementation Plan. Washington, D.C. : World Bank Group.

physical, and social resilience and are being supported through various instruments, including Development Policy Financing (DPF), Investment Policy Financing (IPF), and technical assistance (TA). For example, the ongoing Jamaica Disaster Vulnerability Reduction Project aims to enhance Jamaica's resilience to disaster and climate risk in the wider context of sustainable development. The project is supporting key investments to: (i) improve the capacity of Government institutions to generate and use hazard and risk information to shape local and national development; and (ii) reduce disaster and climate vulnerability by making infrastructure more resilient. Similarly, both DPFs approved by the Bank since 2020 (the Economic Resilience DPF and the COVID-19 Response and Recovery DPF) supported reforms to advance the country's climate agenda, including adaptation reforms, and green transition in energy. The World Bank has also been supporting initiatives to create an enabling environment for private sector resource mobilization, including through a Catastrophe Bond, and PPPs in energy and infrastructure, as well as the framework for the development of insurance and risk transfer instruments. The Bank is currently supporting the Jamaica Generation Procurement Entity in strengthening the capacity to conduct renewable energy tender auctions. Further, in addition to cross-sectoral investment operations with significant climate co-benefits, the World Bank also provided TA to support the NDC update and translating these commitments into a low-emission, climate-resilient development plan. The Bank also supported the preparation of low emission development pathways and a related strategy up to 2050, which will play an important role in guiding the country's overall climate change policy and ambitions, informing subsequent NDC updates.

Statement by the Staff Representative on Jamaica
March 1, 2023

This statement provides an update on events that took place after the staff report was finalized. The additional information does not change the thrust of the staff appraisal.

1. **On February 24, the Financial Action Task Force (FATF) issued a statement on Jamaica's progress with the implementation of the Action Plan to improve the Anti Money Laundering/Combating the Financing of Terrorism framework (AML/CFT).** FATF recognized Jamaica' political commitment to strengthen the effectiveness of its AML/CFT regime, recognized progress to date, and urged continued efforts to address remaining strategic deficiencies.[1]

2. **During the plenary, FATF upgraded two more action items to the category of largely addressed.** These include: (i) issue necessary regulations for the monitoring and application of the risk-based supervision to the Non-Profit Organizations sector (Immediate Outcome (IO) 10.2); and (ii) approve legislative amendments to bring the microfinance sector under AML/CFT requirements and start implementation to ensure adequate risk-based supervision of the sector (IO 3.1). Against this recent development, 9 of the 13 action items are addressed/largely addressed.

3. **The authorities have continued to make progress to include Designated Non-Financial Business and Professions under risk-based AML/CFT supervision**. As stated in the staff report, the legal framework for company service providers is in place, and service providers have until end-April to apply for a license. Since the issuance of the staff report, Jamaica's Privy Council ruled that the AML/CFT regime should apply to the legal profession, thus rejecting the appeal by the latter against that application. This advances another action item in the plan (IO 3.2, see Box 1 in the staff report).

4. **As informed in the staff report, proposed conditionality in the PLL will support the authorities' efforts to complete three action items in the plan agreed with FATF (IO 5.2, 5.3, and 5.4).** The proposed structural benchmark aims to ensure that adequate beneficial ownership (BO) information will be available to competent authorities, which requires that the definition of BO be amended in line with the international standards endorsed by FATF, the Register of Companies is granted powers to ensure compliance, and sanctions are introduced for breaching BO reporting obligations.

[1] Jurisdictions under Increased Monitoring - 24 February 2023 (fatf-gafi.org)

Statement by Philip Jennings, Executive Director for Jamaica, Feargal O'Brolchain, Alternate Executive Director, and Rose Cunningham, Senior Advisor to Executive Director
March 1, 2023

The Jamaican authorities thank IMF staff for the comprehensive report and for the very constructive policy dialogue and engagement during program negotiations and mission meetings. While Jamaica's economy is recovering well from the pandemic, with tourism rebounding and the expansion broadening to other sectors, important risks and vulnerabilities remain. The external environment poses important downside risks in the near-term. In addition, intensifying climate change and natural disasters threaten Jamaica's economic development prospects and external position. As a Caribbean island, Jamaica is heavily exposed to these risks due to its reliance on international tourism and on imports, especially energy and food products. In this context, Jamaican authorities are requesting IMF support to advance their ambitious agenda to build resilience to climate change and external shocks and to strengthen financial buffers. Specifically, they are requesting a 2-year PLL arrangement in the amount of SDR 727.51 million (190 percent of quota), and a concurrent RSF arrangement for SDR 574.35 million (150 percent of quota).

Precautionary Liquidity Line (PLL)

A PLL arrangement is appropriate for Jamaica, and staff assess that Jamaica qualifies. PLL arrangements are intended for countries with sound policies, which may still have some remaining vulnerabilities. As a result of strong fundamentals and continued sound policy actions, staff assess that Jamaica clearly meets the three PLL qualification areas related to a sustainable external position and market access, fiscal policy and monetary policy. On the other two PLL qualification areas (related to financial sector soundness and supervision and data), Jamaica does not substantially underperform.

Successful completion of IMF programs over the past decade helped Jamaica build effective policy institutions and fundamentals. These include: fiscal rules, a monetary policy framework with an inflation target, and a flexible exchange rate. As the recent Article IV report notes, these frameworks have served Jamaica well during the pandemic and recent commodity price shocks, allowing authorities to respond nimbly and effectively to enact appropriate fiscal and monetary policies while continuing to implement structural reforms.

Authorities remain committed to sound policies and a sustainable fiscal and external position. Prudent fiscal policy has put Jamaica's public debt back on a downward trajectory and on track to reach the debt target of 60 percent of GDP by FY2027/28. Staff assess debt to be sustainable with high probability. Monetary policy was tightened for over a year to tackle above-target inflation. The central bank's monetary policy approach remains data dependent, and inflation is expected to reach the target range by end-2023. Jamaica's external position is sustainable, with the current account deficit averaging less than 3 percent of GDP over the past 5 years, a downward trend in external debt, and strong private capital flows led by FDI. Net international reserves are comfortable, at or above 115 percent of the Assessing Reserve Adequacy (ARA) metric over the past 3 years. Jamaica has good access to sovereign debt markets, and its weighted average spreads have been around 200 bp over the past year and have dropped below 200 bp in recent weeks.

The PLL conditionality is well structured to address the identified vulnerabilities, and the authorities are fully committed to meeting all agreed targets and structural benchmarks. Authorities recognize the importance of improving data quality and are moving swiftly to establish a National Statistics Committee by the end of March 2023. The Committee will approve an action plan to subscribe to the SDDS and will also monitor and make recommendations as agreed to in the first structural benchmark.

Three of the PLL structural benchmarks relate to financial stability and oversight, and authorities are fully engaged in advancing this reform agenda. The Jamaican authorities have made steady progress in implementing Basel reforms and have recently completed expansion of the regulatory perimeter to include micro-credit institutions. They are also advancing work on a special resolution regime for financial institutions and making progress with consolidated financial supervision. The government has also recently announced further safeguards, including plans to have supervision of both banks and non-bank financial institutions, overseen by the Bank of Jamaica.

Staff and the authorities have also built in a structural benchmark to complete improvements in the AML/CFT framework consistent with Jamaica's action plan agreed with FATF. Jamaican officials are working diligently to continue making progress on FATF Action Plan items. As part of the PLL, they have agreed to complete a structural benchmark that would ensure compliance with FATF requirements on beneficial ownership by the end of March 2023. This would address three (3) of Jamaica's outstanding action plan items. The authorities also welcome the results of the February 2023 FATF Plenary that concluded that Jamaica has made progress and now has nine (9) action items that are addressed or largely addressed (up from 7 in October). *The authorities are committed to completing the remaining action items by June 2023.* We also note that a constitutional challenge that had delayed completion of a sub-action item regarding the legal profession was decided in mid-February. Since this news came after the cut-off date for inputs into the February FATF meeting, we expect it will allow another FATF action item to be largely completed for the FATF Plenary in June, once the risk-based supervision for trust and company service providers, the gaming sector and lawyers are in place. ***With the completion of nine action plan items, the inclusion of lawyers in the AML/CFT framework, completion of risk-based supervision for all designated nonfinancial businesses and professions, and the PLL structural benchmarks, our authorities see a clear path to completing all the FATF action items by June 2023.***

The Jamaican authorities fully intend to treat the PLL arrangement as precautionary to provide a backstop against external shocks. Staff and the authorities expect robust growth of 3.5 to 5.5 percent in FY 2022/23 and a current account deficit of less than 3 percent of GDP.

However, external conditions are challenging, and further commodity price shocks, tighter global financial conditions or other disruptions pose important risks to Jamaica's tourism and related sectors, remittances and capital flows. As the report shows in Annex I, external stress is elevated and is expected to remain so through end-2024 in both the baseline and downside risk scenarios.

Resilience and Sustainability Facility (RSF)

Jamaica has an ambitious and a multi-pronged strategy to address climate risks and reduce vulnerabilities using a wide range of adaptation and mitigation measures. Staff have conducted detailed analysis as part of a Climate Public Investment Management Assessment (C-PIMA) to understand the feasibility, urgency and robustness of Jamaica's climate policies and priorities. Through the C-PIMA and other policy engagements, staff and authorities have distilled authorities' climate priorities into twelve (12) reform measures that constitute the conditionality for the RSF arrangement. The twelve (12) reform measures are grouped into three (3) pillars:

- Building Fiscal and Physical Resilience to Natural Disasters and Climate Change
- Increasing Energy Efficiency and Promoting Renewable Energy
- Greening the Financial Sector

The first pillar involves six (6) reform measures to adopt and enhance policy frameworks to manage physical and financial risks from climate change and natural disasters. The authorities agree to adopt a National Natural Disaster Risk Financing Policy and to pass legislation establishing a reserve fund to cope with natural disasters. In addition, authorities will incorporate climate considerations into fiscal policy risk assessments, as well as public investment project appraisal and assessment processes and public-private partnership (PPP) frameworks.

Increasing use of renewable energy is one of the most critical elements of Jamaica's climate agenda due to its dependence on imported fossil fuels for electricity and energy. In the second pillar of the RSF reforms, authorities will pass legislation providing fiscal incentives to increase investment in renewables; establish an electric vehicle policy and approve guidelines on increasing energy efficiency in public buildings. Investment in renewables and energy efficiency can have large beneficial effects over the medium and long term and may ultimately improve the balance of payments position as the import content of energy production declines. However, the needed investments can entail high initial costs and large increases in imports, which would increase the current account deficit in the short to medium term.

Under the third RSF reform pillar, authorities have also committed to measures to help green the financial sector to help manage transition risks and incentivize private climate financing. Most notably, the authorities will set up an institutional framework for green-bond issuance and trading. The authorities will also assess climate risks and develop a timeline to incorporate these risks into supervisory activities. The authorities will also build capacity to monitor climate change risks in the financial system.

Given the ambition of the Jamaican government's climate agenda, its potential BOP impacts, and Jamaica's capacity to repay, full RSF access of 150 percent of quota is appropriate. Reform measures under the proposed RSF will accelerate implementation of some of Jamaica's climate agenda, including policies to attract investment from other IFIs and the private sector. Staff estimate in Text Table 2 that the RSF policy reform measures could spur implementation of likely climate-related projects costing about US$2.4 billion. About half of these costs would be for imports, affecting Jamaica's BOP by adding about one (1) percent of GDP per year to its current account deficit from 2024 to 2030. Staff assess that Jamaica's debt will remain sustainable with high probability and its capacity to repay the Fund is adequate. While the RSF would increase Jamaica's debt servicing obligations to the Fund, it would remain below that of its 2015 program. Jamaica's strong track record of successful engagement with the Fund, including repayment and reform implementation, also supports the request for full access.

The Jamaican authorities appreciate the excellent work by Fund staff in preparing the PLL and RSF program package and the highly effective collaboration with them, the World Bank, and other stakeholders. They look forward to continuing to engage closely with staff and other partners as they implement the reform measures in the RSF and PLL and further advance Jamaica's economic development and climate goals.