HIGH-LEVEL SUMMARY TECHNICAL ASSISTANCE REPORT

BARBADOS

Stress Testing

April 2025

Prepared By

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2025 International Monetary Fund HLS/25/12

High-Level Summary Technical Assistance Report
Monetary and Capital Markets Department and Caribbean Regional Technical Assistance Center

Barbados
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The *High-Level Summary Technical Assistance Report* series provides high-level summaries of the assistance provided to IMF capacity development recipients, describing the high-level objectives, findings, and recommendations.

ABSTRACT: The technical assistance mission developed a multi-factor, multi-period solvency stress testing framework for banks supervised by the Central Bank of Barbados (CBB) and credit unions supervised by the Financial Services Commission (FSC). This framework is built around explicit macroeconomic scenarios and credit risk satellite models for non-performing loans (NPLs), estimated separately for each type of institution. The calibrated macroeconomic scenarios are integrated into the NPL satellite models to project NPLs and, ultimately, credit losses. The developed tools provide scenario-specific, macroeconomically consistent projections of institutions' key balance sheet, profit and loss, and capital adequacy items over a period of up to three years.

JEL Classification Numbers: G01; G21; G23; G30; H00
Keywords: stress testing; financial stability; systemic risk; banks; credit unions

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Background

The joint mission to the Central Bank of Barbados (CBB) and the Financial Services Commission (FSC) followed up on the February 2023 CARTAC technical assistance recommendation to enhance the existing solvency stress test methodologies for banks and credit unions. The February mission discussed the key parameters of the existing stress testing framework at the CBB and FSC, as published in the joint financial stability report. The framework is based on first-generation Cihak-type simple top-down stress tests using a static balance sheet approach. A move towards a dynamic balance sheet approach, incorporating explicit macroeconomic scenarios and a longer stress test horizon, was recommended.

Summary of Findings

The mission developed new stress test tools that fully respect the existing accounting, tax, and regulatory rules for both banks and credit unions. The new framework is based on common explicit macroeconomic scenarios and two newly built credit risk satellite models for non-performing loans (NPLs) for banks/finance companies and credit unions. The calibrated macroeconomic scenarios—one baseline and two adverse—are integrated into the NPL satellite models to project NPLs and ultimately credit losses. These tools provide scenario-specific, macroeconomically consistent projections of institutions' key balance sheet, profit and loss (P&L), and capital adequacy items over a period of up to three years. The CBB and FSC stress testing teams were trained to use and update the new stress testing tools. Both tools are designed to handle any end-quarter initial data for banks' and credit unions' balance sheets and P&L, allowing for updates and new stress tests to be run quarterly if needed. In addition to the institutions' initial data, macroeconomic time series need to be updated, and new macro projections for the scenarios provided. Both authorities were instructed on how to set various parameters and assumptions, calibrate scenarios, and interpret the results. In addition to the Excel-based tools and EViews files with the credit risk models, a detailed user manual for each tool was delivered, along with a step-by-step checklist to follow when updating the tool and running a new stress test.

Summary of Recommendations

The mission provided several recommendations to the CBB and FSC. These recommendations covered technical aspects of stress testing, the use and communication of stress test results, related operational aspects and processes, and data sources and their management. The CBB and FSC staff involved in stress testing and financial stability monitoring need to become familiar with the newly developed framework. They should be able to regularly update the tool with new macro-financial and institution-specific data, calibrate the scenarios, and adjust additional assumptions and parameters to reflect potential changes in the economy and regulations. The new framework should be used for regular internal stress tests at least twice a year—once in the spring and once in the autumn.