Highlights of the Macroprudential Report for *March 2018*

July 2018

FINANCIAL STABILITY DEPARTMENT

Preface

Bank of Jamaica frequently conducts assessments of the resilience and strength of the financial system. These financial system stability assessments inform the Bank's macro-prudential policy decision making. This report provides highlights of those assessments for the reporting quarter. The document is organized by five objective assessment areas, the analysis of which utilizes leading and coincident indicators relevant to the specific type of vulnerability. The aim of the report is to:

1. *Convey Bank of Jamaica's financial system stability assessment.*
2. *Make clear the link between the Bank's assessment and any policy action taken.*
3. *Provide information on matters related to financial system stability.*

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Overview:

During the March 2018 quarter, risks to the financial system remained tempered. System developments occurred within a stable macro-economic environment which was reflected by low and stable inflation as well as continued declines in domestic interest rates.[1]

Core indicators of cyclical risks did not signal any excessive build-up but there was a continued upturn in the credit-to-GDP gap indicator due to strong growth in credit coupled with low levels of GDP growth.

The strong growth in credit was unmatched by any observed excesses in asset price growth or leverage in the financial sector. At the same time, despite the continued acceleration in credit growth, there was slight narrowing of duration mismatch among both deposit taking institutions (DTIs) and non-deposit taking financial institions (NDTFIs).

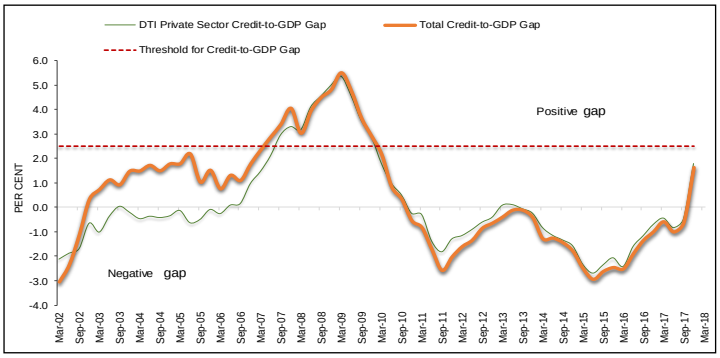
Regarding the evolution of core indicators of structural risks, vulnerabilities to the financial system emanating from exposure concentration to household debt and the financial reach of large systemically important financial institutions (SIFIs) has demonstrated a slight increase.

Regarding broad resilience to financial shocks, stress testing results remained largely unchanged for the March 2018 quarter. DTIs demonstrated resilience to the applied shocks based on worst-case macroeconomic projections.

Objective 1: Mitigate and prevent excessive credit growth and leverage

1.0 *Total credit-to-GDP gap* increased marginally to 1.9 per cent in the first quarter of 2018 (see Chart 1.0.) This outturn was driven by a 2.4 per cent growth rate in total DTI credit compared to the approximately 1.0 per cent growth in nominal GDP over the same quarter.

Chart 1.0 Evolution of Credit-to-GDP Gap Indicators



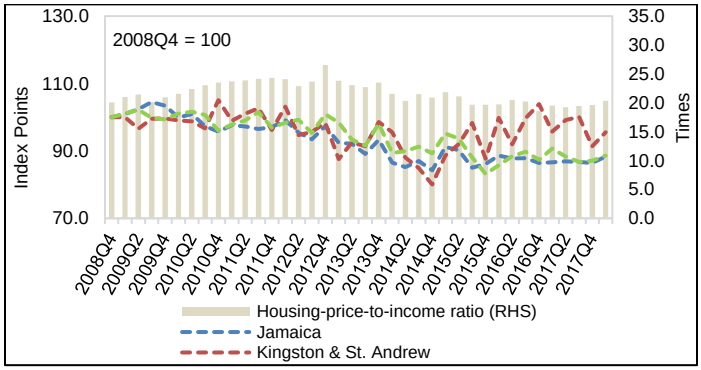
1.1 Total credit including corporate bond issues increased by 3.0 per cent for the review quarter, injecting approximately $27.2 billion additional credit in the system compared to the previous quarter.[2] This resulted in an annual percentage growth of 17.8 per cent compared to the 18.4 per cent annual growth recorded in the December 2017 quarter.

1.2 For the review quarter, there was no evidence of excessive asset price growth as measured by residential property prices. Notwithstanding, there were increases in the inflation-adjusted residential real estate prices for all three indices. Specifically, the indices for Jamaica, Kingston & St. Andrew and St. Catherine grew by 2.2 per cent, 4.5 per cent and 1.7 per cent, respectively.

[1] The annual point to point inflation rate at March 2018 was 3.9 per cent. The overnight interbank, overnight private money market rate and 30-day private money market rate also declined by 8 bps, 133 bps and 154 bps, respectively.

[2] Private Sector Credit is comprised of DTIs' loans and advances to the private sector excluding credit to overseas residents and other financial institutions. Total DTI Credit used to calculate the credit-to-GDP gap, is comprised of private sector credit plus corporate securities held by DTIs plus public sector credit. The credit-to-GDP gap indicators measure the deviation of credit-to-GDP variables relative to long-term trends to signal excessive credit risk accumulation.

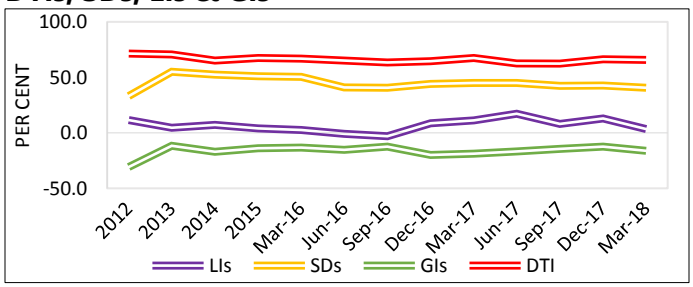
Chart 1.1 Residential Real Estate Price Indices *(inflation adjusted)* and House Price-to-Income Ratio[3]



Objective 2: Mitigate and prevent excessive maturity mismatches and market illiquidity

2.0 Despite strong credit growth, there was a marginal contraction in maturity and liquidity transformation across the DTI and NDTFI sectors for the March 2018 quarter. Both the DTI and securities dealers sector showed greater proportional increases in long-term liabilities relative to long-term assets. While the outturn for the insurance sector was as a result of reductions in long-term assets relative to long-term liabilities (see Chart 2.0). Growth in long-term assets and long-term liabilities for DTIs, securities dealers (SDs) and life insurers (LIs) were 4.9 per cent and 23.4 per cent, 0.6 per cent and 19.3 per cent, and -8.3 per cent and 1.4 per cent, respectively.

Chart 2.0 Maturity Transformation (Long term)[4] – DTIs, SDs, LIs & GIs

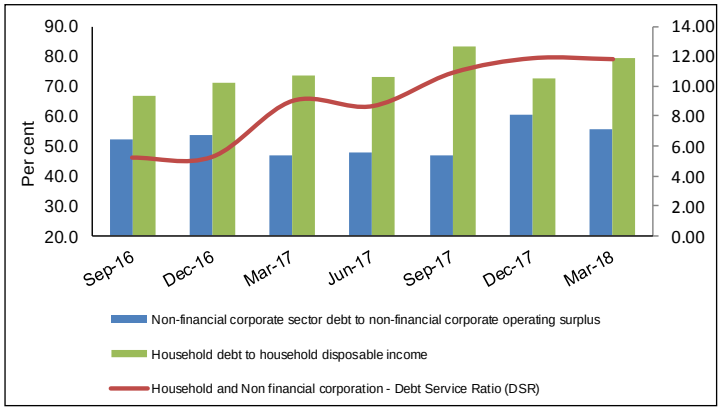


Objective 3: Limit direct and indirect exposure concentrations

3.0 Consistent with the continued expansion in domestic credit, there was further growth in household debt for the review quarter. This contributed to deterioration in the household debt sustainability, as measured by the net financial position to GDP ratio.

3.1 Conversely, the non-financial corporate sector's (NFC's) net financial position improved over the review period. This was due to a reduction in NFCs' liabilities relative to assets. In addition, the debt to operating surplus ratio decreased for the March 2018 quarter. The decline in corporate sector debt was largely driven by a reduction in loans to the professional sector (Charts 3.0).

Chart 3.0 Household and NFC Debt Ratios[5]



[3] (i) The house price-to-income ratio (HPIR) is the average price of a housing unit (across all types of dwellings) per quarter relative to the per capita personal disposable income for households.

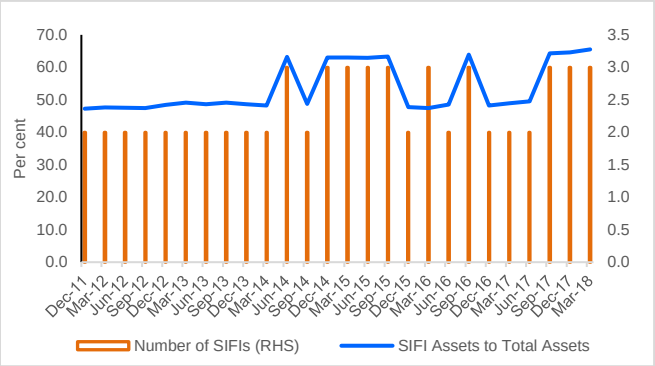
[4] (i) Maturity Transformation (Long term) = (long term assets - long term liabilities - nonredeemable equity) / total financial assets.

[5] Debt service ratio measures the amount of income used for interest payments and amortizations and takes account of the maturity profile of outstanding loans along with the average interest per quarter.

Objective 4: Limit the impact of interconnectedness and systemic importance

4.1 As it relates to measures of systemic importance, total assets of SIFIs as a share of the total system assets increased marginally by 0.9 percentage point to 65.5 per cent (Chart 4.1). The number of domestic SIFIs remained at three for the March 2018 quarter relative to the previous quarter. [6,7]

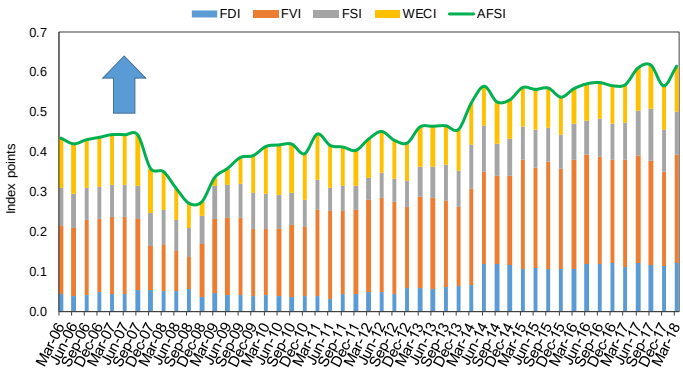
Chart 4.1 Total Assets of SIFI Groups to Total System Assets



Objective 5: Strengthen the resilience of the financial system

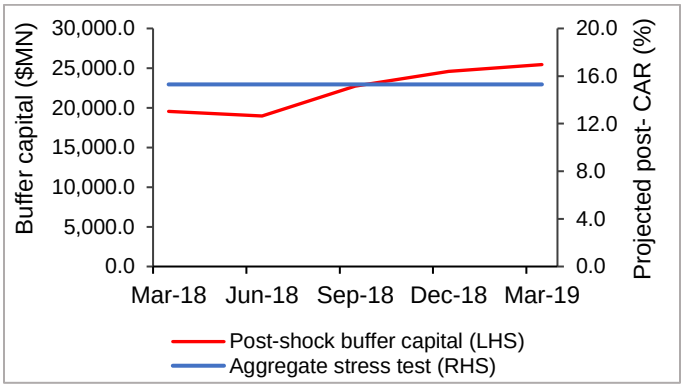
5.0 Composite indicators of macro-financial conditions showed an improvement over the review quarter. The AFSI strengthened in the first quarter of 2018 in comparison to the last quarter of 2017 (Chart 5.1). The outturn was largely due to a decline in inflation volatility over the past twelve months and a narrowing of interest rate spreads.

Chart 5.1 Aggregate Financial Stability Index[8]



5.1 Based on a hypothetical worst case macroeconomic scenario for domestic interest rates, the JMD:USD exchange rate and real GDP growth, over a one-year period, an aggregate stress test was applied to the DTI sector (see Chart 5.2). Stress test results showed that the DTI sector was robust to the hypothetical macroeconomic scenario. In particular, following this macro-financial assessment, the capital adequacy of all DTIs remained above the 10.0 per cent prudential benchmark.

Chart 5.2 Aggregate stress test result based on macro-economic scenarios[9]



[6] The D-SIFI framework currently used by the Bank follows the methodology outlined in Brämer and Gischer (2012), which assesses the significance of banking groups based on four key categories: (1) size, (2) interconnectedness, (3) non-substitutability and (4) complexity. The score for banking group i for period j is computed as follows:

$$SCORE_{ij} = \frac{A_{ij}}{\sum_i^n A_{ij}} + \left(\frac{(LFC_{ij} + DFC_{ij})}{(\sum_i^n LFC_{ij} + \sum_i^n DFC_{ij})}\right) + \left(\frac{(LH_{ij} + LNFC_{ij} + LGG_{ij} + LCS_{ij})}{(\sum_i^n LH_{ij} + \sum_i^n LNFC_{ij} + \sum_i^n LG_{ij} + \sum_i^n LCS_{ij})}\right) + \left(\frac{(TS_{ij} + IS_{ij})}{(\sum_i^n TS_{ij} + \sum_i^n IS_{ij})}\right)$$

where, A represents total resident assets, LFC represents loans to financial corporations, DFC represents deposits from financial corporations, LH represents loans to households, LNFC represents loans to non-financial corporations, LGG represents loans to the general government, LCS represents loans to community service and non-profit organizations, TS represents trading securities and IS represents investment securities.

[7] As a result of revised data, actual number of SIFIs for the June 2017 quarter was two, and revised total SIFI group assets as a share of the total assets for June 2017 is 49.5 per cent.

[8] The Aggregate Financial Stability Index aggregates microeconomic, macroeconomic and international factors to form a single measure of financial stability. A higher value indicates increased financial stability while a lower value indicates deterioration in financial sector stability.

[9] Buffer capital is representative of the excess capital held by each DTI.