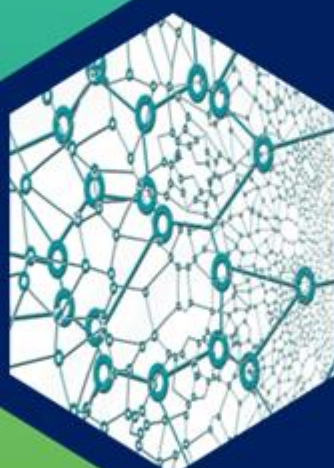
MITIGATE AND PREVENT EXCESSIVE CREDIT GROWTH AND LEVERAGE

MITIGATE AND PREVENT EXCESSIVE MATURITY MISMATCHES AND MARKET ILLIQUIDITY

LIMIT DIRECT AND INDIRECT EXPOSURE CONCENTRATIONS

LIMIT THE IMPACT OF INTERCONNECTED-NESS, SYSTEMIC IMPORTANCE AND MISALIGNED INCENTIVES



STRENGTHEN THE RESILIENCE OF THE FINANCIAL SYSTEM & INFRASTRUCTURE

BANK OF JAMAICA

Macroprudential Policy Report

Highlights

JULY 2021

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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 macroprudential policy. This report provides highlights of those assessments for the reporting quarter. The document is organized into 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:

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

Overview

Financial risks during the June 2021 quarter remained tempered in the context of continued improvements in the macro-economic environment.

The risks associated with financial cycles remained stable during the quarter. In particular, the estimated credit-to-GDP gap indicator moderated for the June 2021 quarter, reflecting a faster pace of growth in GDP relative to growth in credit. At the same time, there was a general improvement in the maturity mismatch and liquidity ratios for financial institutions.

Deposit-taking institutions and non-deposit taking financial institutions (NDTFIs) continued to be broadly resilient to the hypothetical macro-economic shocks. As it relates to interbank interconnectedness, Commercial banks and securities dealers continued to be the central players of the network.

Going forward, the Jamaican economy is projected to improve further in the context of recovery in the global economy. However, uncertainties remain concerning the duration of the pandemic. The expected improvement in the economy will allow deposit-taking institutions to release loan-loss reserves as the debt repayment capacity of borrowers improve. Further, as the economy recovers and as capital markets regain momentum, financial entities should begin to report increased profits.

The supervisors of the financial system will continue their enhanced monitoring of early warning indicators to ensure that the system remains sound.

Objective 1 – Mitigate and prevent excessive credit growth and leverage

1.1 The pace of credit growth decelerated over the review period. Annual growth of total credit, which includes corporate bond issues and public sector credit, was 8.9 per cent for the year ended-April 2021, a slower pace relative to the growth of 9.5 per cent at end December 2020 (see Chart 1.0).[1] More specifically, private sector credit increased by 8.8 per cent for the year to April 2021, relative to the 10.4 per cent growth recorded for the year ended-December 2020.[2] The growth in total credit resulted in the provision of additional financing of $21.2 billion to the private sector up to April 2021 (see Chart 1.1).

1.2 The credit-to-GDP gap indicator (which is a measure of excessive credit in the economy) is estimated to have fallen by 0.9 percentage point to 7.2 per cent at end-June 2021 relative to end-March 2021 (see Chart 1.2).[3] This is based on estimated increases of 2.0 per cent and 3.0 per cent in credit and nominal GDP, respectively, for the June 2021 quarter.[4] The estimated credit-to-GDP gap continues to be below the Bank of International Settlements' (BIS) upper threshold of 10.0 per cent.

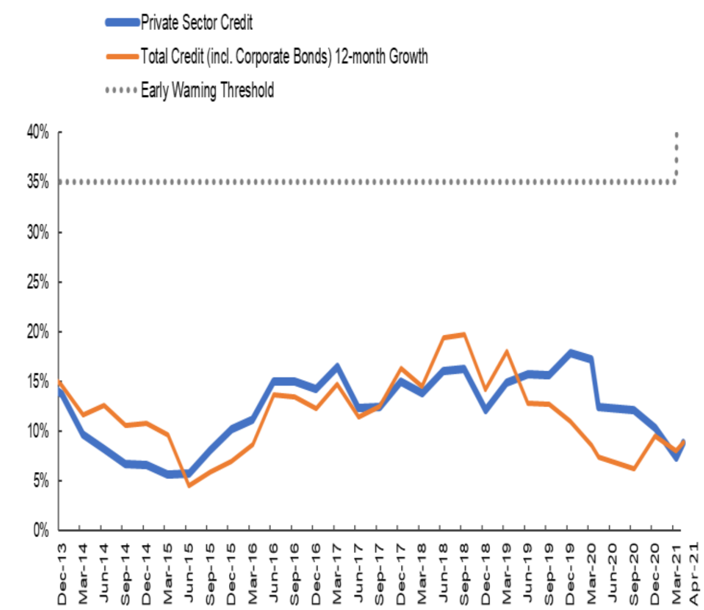
[1] The annual growth in corporate bond issues at end-April 2021 was 9.0 per cent while public sector credit decreased by 8.2 per cent over the same period.

[2] Private Sector Credit is measured as DTIs' loans and advances to the private sector excluding credit to overseas residents and other financial institutions. Total DTI credit includes private sector credit plus credit issued to the public sector plus DTIs' holdings of corporate securities.

3 The credit-to-GDP gap indicator measures the deviation of credit-to-GDP relative to its long-term trend. It signals the extent of credit risk accumulation. Total 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. Nominal GDP is annualised by calculating a 4 quarter moving sum.

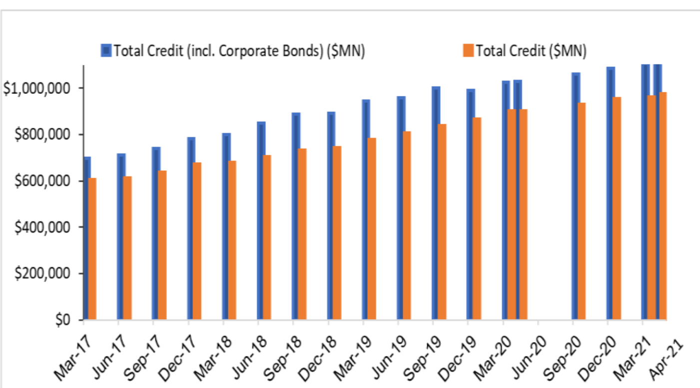
[4] The projected 2.0% growth in total credit and private sector credit were based on the eight quarter and four quarter average of credit growth between March 2019 and March 2021. Projections for nominal GDP growth were received from the Research and Economic Programming Division.

Chart 1.0 Annual Growth in Credit



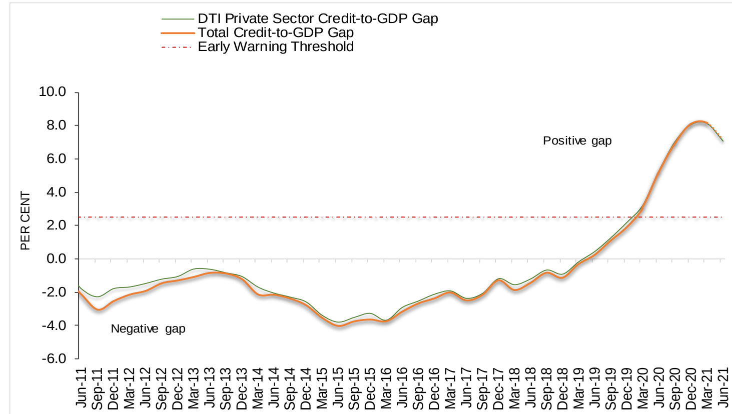
Source: Bank of Jamaica

Chart 1.1 DTI Credit plus Corporate Bond Issues via Exempt Distribution



Source: Bank of Jamaica and Financial Services Commission

Chart 1.2 Evolution of Credit-to-GDP Gap Indicators



Source: Bank of Jamaica

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

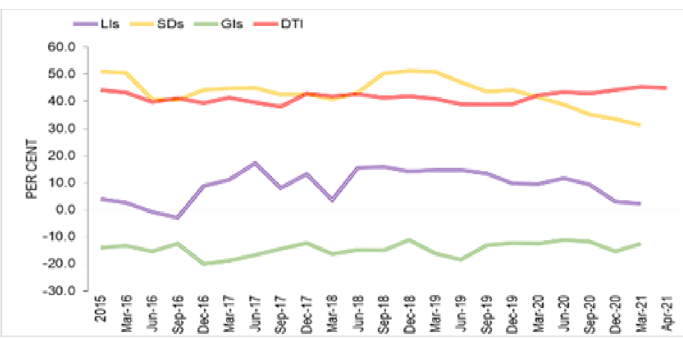
2.1 The maturity transformation ratio for the DTI sector, which captures the maturity mismatch between assets and liabilities, remained relatively stable for the review period. The ratio marginally increased by 0.7 percentage point to 44.9 per cent at end-April 2021 relative to 44.2 per cent at end-2020 (see Chart 2.0).[5] The performance in the maturity transformation ratio mainly reflected a faster pace of growth in long-term assets relative to long-term liabilities and equity.[6]

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

[6] Long-term assets, long-term liabilities, equity and total financial assets all increased by 8.2 per cent, 15.5 per cent, 4.0 per cent and 6.6 per cent respectively

2.2 Data on the maturity transformation risk metric for securities dealers and insurance companies is available for the period ended March 2021. There was a general improvement in the asset liability mismatch across all non-deposit taking financial institutions (NDTFIs), with the exception of the general insurance sub-sector (see Chart 2.0). The improvement in the maturity mismatch ratios for the life insurance and securities dealers' sub-sectors mainly resulted from a greater than proportional increase in long-term liabilities & equities relative to long-term assets. On the other hand, the performance for the general insurance sub-sector was primarily driven by a greater percentage decrease in long-term liabilities relative to the decrease in long-term assets and equity.

Chart 2.0 Maturity Transformation (Long term) DTIs, SDs, Lis & GIs



Source: Bank of Jamaica and Financial Services Commission

2.3 At end-April 2021, the liquidity transformation risk metric for DTIs, which measures the extent of coverage of short-term liabilities with liquid assets, increased relative to the previous month. Specifically, the liquidity risk metric increased by 4.1 per cent, reflecting the impact of a faster pace of growth in short-term liabilities relative to liquid assets (see Chart 2.1).

2.4 DTIs continued to maintain adequately levels of liquidity as measured by the liquidity coverage ratio.[7] More specifically, at end-April 2021, all DTIs exceeded the liquidity coverage ratio (LCR) benchmark of 100.0 per cent with the median ratio being higher, relative to end-March 2021 (see Chart 2.2).

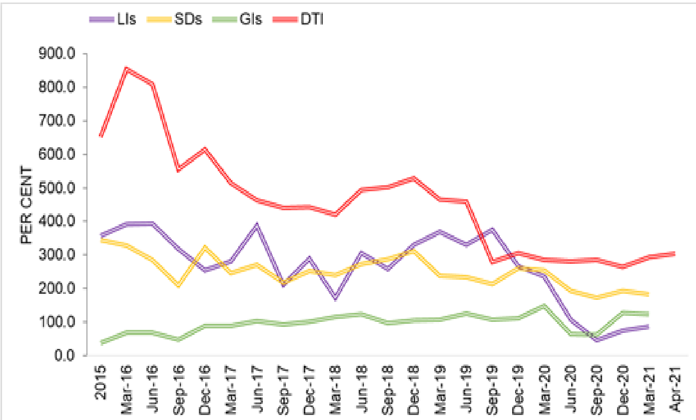
2.5 For the NDTFIs, liquidity metrics at end-March 2021 generally reflected improvements, relative to the previous quarter. The liquidity transformation ratio for the life insurance sub-sector, however, increased by 12.7 percentage points, relative to the previous quarter, to 86.9 per cent at end March 2021. The metric for the general insurance sub-sector was relatively unchanged (see Chart 2.1).[8,9]

[7] LCR is a requirement under Basel III whereby banks are required to hold an amount of high-quality liquid assets that's enough to fund cash outflows for 30 days.

[8] Liquidity Transformation = short term liabilities [≤ 30 days] / liquid assets. Liquid assets include high quality liquid assets, such as cash and equivalents, short-term investments and government securities with a 0% risk-weight.

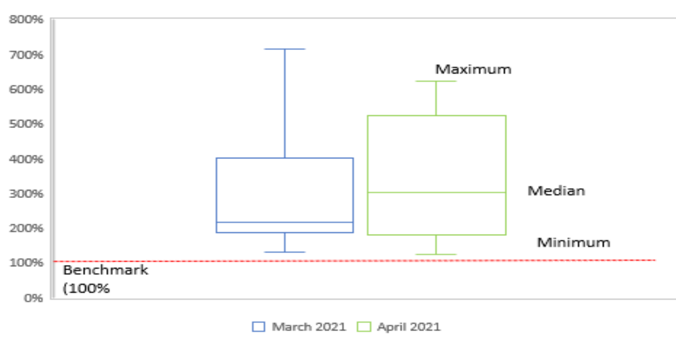
[9] The improvement in the ratio for securities dealers' sector was mainly due to a slower pace of decline in liquid assets relative to short-term liabilities. Liquid assets for securities dealers and life insurance companies declined by 3.6 per cent, and 18.0 per cent respectively, while liquid assets for the general insurance companies grew by 8.2 per cent for the March 2021 quarter. Meanwhile short-term liabilities for securities dealers and life insurance companies declined by 8.6 per cent and 4.0 per cent, respectively. On the other hand, the performance for the life insurance sub-sector was attributed to a faster pace of decline in liquid assets relative to short-term liabilities.

Chart 2.1 Liquidity Transformation – DTIs, SDs, and LIs & GIs



Source: Bank of Jamaica and Financial Services Commission

Chart 2.2 Liquidity Coverage Ratio at end-April 2021 – DTIs



Source: Bank of Jamaica

Objective 3 – Limit direct and indirect exposure concentrations & misaligned incentives

3.1 DTIs' exposure to households, as measured by household debt as a share of total assets, declined by 1.1 percentage points to 24.9 per cent at end-April 2021, relative to end-2020.[10] This decline was primarily due to a stronger increase in DTIs' overall assets relative to the growth in household debt (Chart 3.0). DTIs' lending to the main economic sectors increased by 4.2 per cent at end-April 2021 compared to end-2020.

3.2 Personal loans, which are used as a measure of household debt and which reflects consumer and mortgage loans, continued to account for the largest share of the DTIs' loan portfolio. Personal loans increased by 2.5 per cent at end-April 2021, relative to end-2020 (Chart 3.1).[11]

3.3 At end-April 2021, consumer loans continued to account for the largest share of household debt. There has also been a trend increase in residential mortgage loans as a share of household debt (Chart 3.2). This increase was due to an increase in the demand for mortgages loans by households and may have been driven by a search for yields. Some DTIs were also more aggressive in the mortgage market.

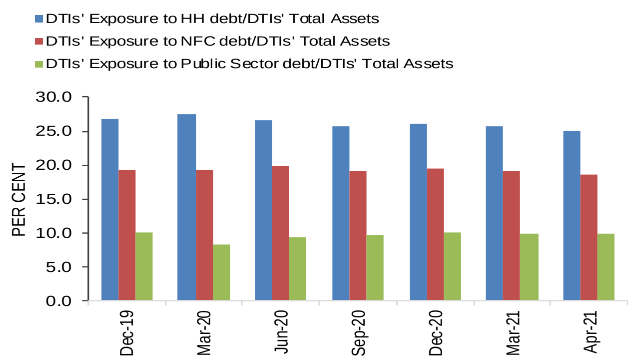
3.4 Credit risk associated with the system's exposure to households appeared to remain contained. The ratio of household NPLs as a share of household loans by the DTI sector declined marginally by 0.2 percentage point to 3.7 per cent at end-April 2021, relative to end-2020 (Chart 3.3). This performance may have been related to the ongoing effects of the loan deferral arrangements as well as other credit risk mitigation strategies by the DTIs.[12,13]

[10] Increase in assets were primarily due to an increase in investment holdings.
[11] Personal Loans is used as a measure of household debt, and it includes residential mortgage loans and consumer loans extended by the DTI sector. Therefore, it excludes NHT loans.
12 These strategies include establishing sound and well-defined credit granting criteria as well as increased monitoring of the overall composition and quality of credit portfolios.

[13] DTIs offered loan moratorium of $54.1 billion as at-end April 2021, relative to 70.2 billion at-end 2020. At end April 2021, households accounted for 11.0 per cent of the outstanding loans offered by DTIs which were under moratoria, while large corporates accounted for approximately 79.0 per cent.

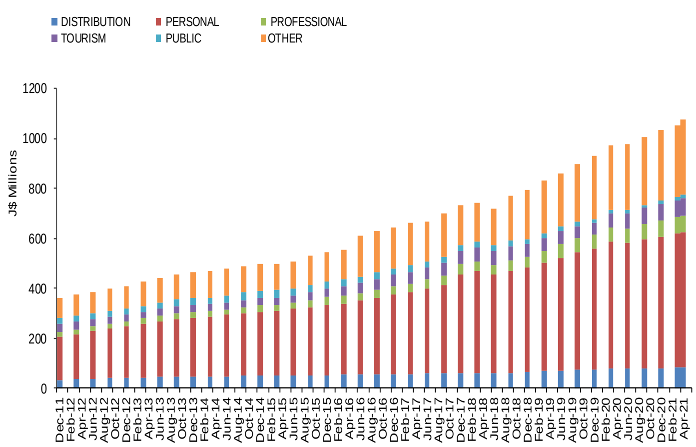
3.5 Foreign exchange risk in the system has also been fairly stable. DTIs' foreign currency investment holdings as a proportion of total investments increased marginally to 33.0 per cent at end-April 2021 from 30.4 per cent at end-2020. Furthermore, the ratio of DTIs' foreign currency deposits to total deposits increased to 39.6 per cent at end-April 2021 from 38.6 per cent as at end-2020 (see Chart 3.4).

Chart 3.0 DTI Exposure to Public, Household and NFC Debt



Source: Bank of Jamaica

Chart 3.1 Loan Concentration- Selected Industries



Source: Bank of Jamaica

Chart 3.2 Decomposition of Household Debt

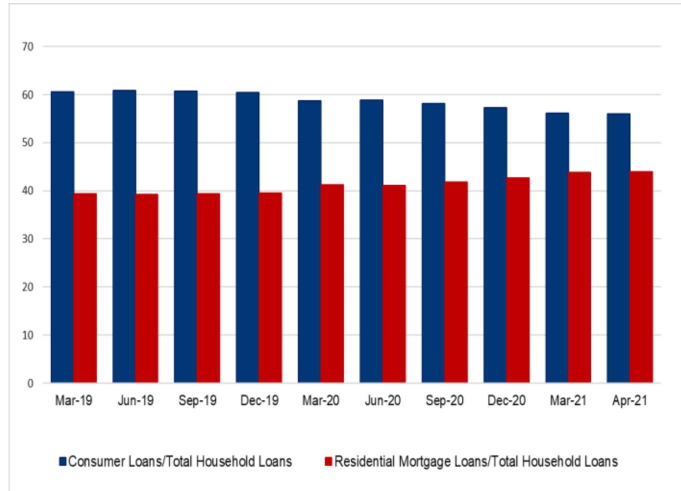
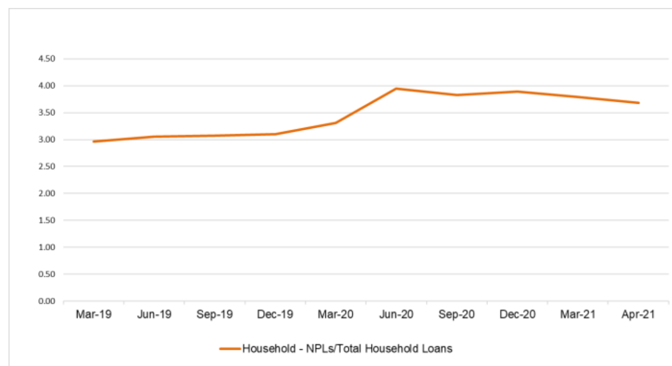


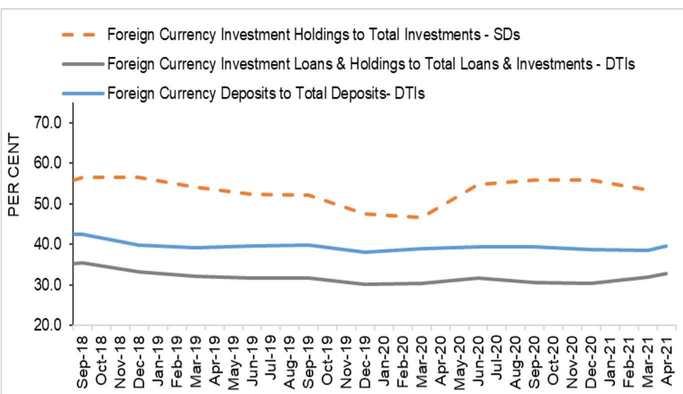
Chart 3.3 Household Loan Quality



3.6 The data for securities dealers is available only up to March 2021. Securities dealers' foreign currency investment holdings as a share of total investments decreased by 2.6 percentage points to 53.3 per cent at end-March 2021 compared to end-2020 due to a reduction in *Other Foreign Currency Investments*.[14]

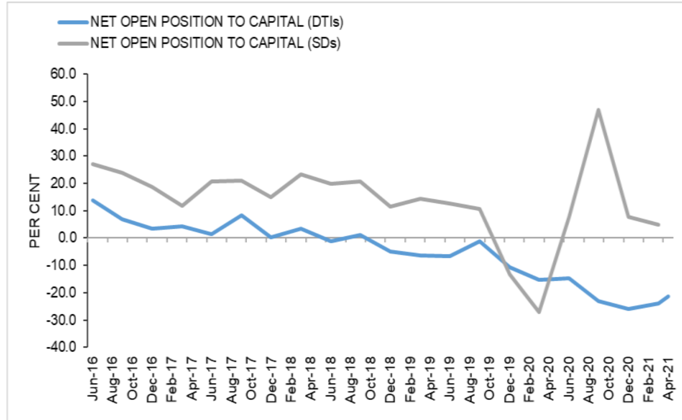
3.7 For the tenth consecutive quarter since December 2018, the DTI sector recorded a net open short position at end April 2021. Of note, the NOP to capital ratio for the DTIs was -21.2 per cent at April 2021, relative to -26.0 per cent at end-2020 (within the prescribed range of +15%/-25% per cent established by the Bank of Jamaica) (see Chart 3.5). Securities dealers' net open long position to capital decreased to 5.0 per cent for the March 2021 quarter from 7.8 per cent at end-2020. This reduction was mainly attributable to a reduction in holdings by one entity affiliated to a DTI group.

Chart 3.4 Dollarization ratios for DTIs and securities dealers[15]



Source: Bank of Jamaica and Financial Services Commission

Chart 3.5 Net Open Position to Capital[16]



Source: Bank of Jamaica

Objective 4 – Limit the impact of interconnectedness and systemic importance

4.1 The number of domestic systemically important banking groups (SIFIs) remained at three at end-March 2021 (Chart 4.0). Total SIFI assets as a share of total assets was relatively unchanged for the period at 61.2 per cent compared to 61.4 per cent at end-2020.[17]

4.2 Commercial banks and securities dealers continued to be the central players in the network (Chart 4.1). The network metrics continued to indicate that the network remained dense and reciprocated (Chart 4.2).

[14] Foreign Currency Investments include: Jamaican Govt Foreign Currency Securities which are locally issued and registered to institutions, purchased under margin arrangements and purchased under repo arrangements. As well as, Foreign Govt Securities which are registered to institution, purchased under margin arrangements and purchased under repo arrangements.

[15] DTI data excludes information on foreign currency loans as it relates to the buildings societies sector.

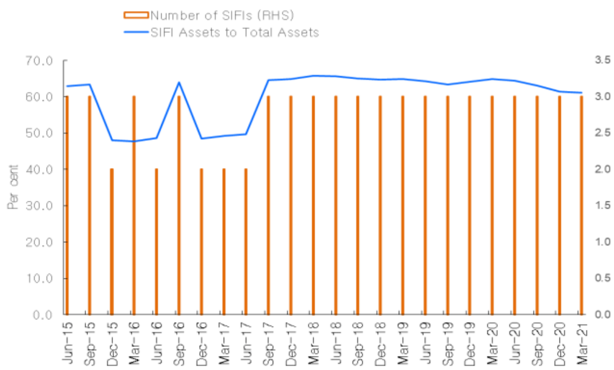
[16] The increase in Oct 2020 was mainly attributable to an entity affiliated to a DTI group holding a significant amount of "Other currency" assets

[17] The D-SIB 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:

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

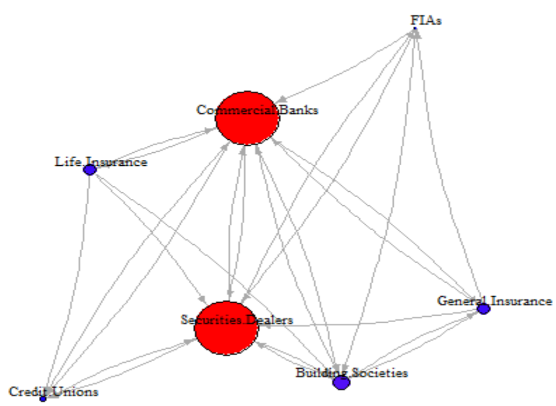
where, A represents total resident assets, LFC represents loans to financial corporations, DFC represents deposits from financial corporations, LH represents loans to households, LNFC represents loans to non-financial corporations, LGG represents loans to the general government, LCS represents loans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

Chart 4.0 Total SIFI Group Assets to Total System Assets



Source: Bank of Jamaica

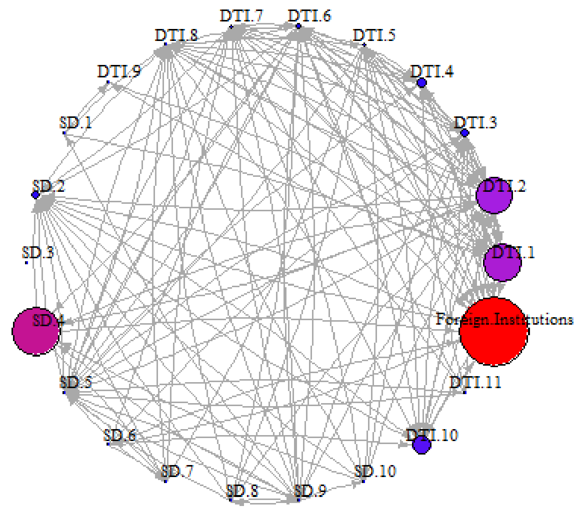
Chart 4.1 Network of gross credit exposures among financial subsectors



Source: Bank of Jamaica

4.3 Network analysis that examined DTIs' and securities dealers' funding relationships with other financial institutions showed that the total dollar value of exposures declined by 5.4 per cent at end-March 2021, relative to end-2020. The contribution of foreign institutions to the funding of the domestic network also fell by 7.5 per cent, relative to end-2020.

Chart 4.2 Network of gross credit exposures among DTIs and securities dealers (including foreign institutions)



Source: Bank of Jamaica

Objective 5 –Strengthen the resilience of the financial system

5.1 Capital positions across the financial system remained above prudential requirements. At end-April 2021, DTI's capital adequacy ratio remained relatively stable at 14.1 per cent, relative to 14.3 per cent end-March 2021.

5.2 As it relates to NDTFI, securities dealers reflected an average CAR of 21.8 per cent at end-March 2021, which was well above the 10.0 per cent prudential benchmark. The general insurance industry had a weighted average Minimum Capital Test ratio of 266.4 per cent, which exceeded the 250.0 per cent regulatory minimum. The life insurance industry had a weighted average Minimum Continuing Capital Surplus Requirement of 215.0 per cent at end-March 2021, which was well above the regulatory benchmark of 150.0 per cent.

5.3 There was an overall improvement in financial institutions' earnings and profitability. DTIs' and securities dealers return on assets (ROA) rose to 0.4 per cent and 0.6 per cent, respectively, for the March 2021 quarter, relative to 0.3 per cent and -0.1 per cent for the March 2020 quarter. These outturns were primarily due to a 52.3 per cent growth in profits relative to the growth of 12.4 per cent in assets.

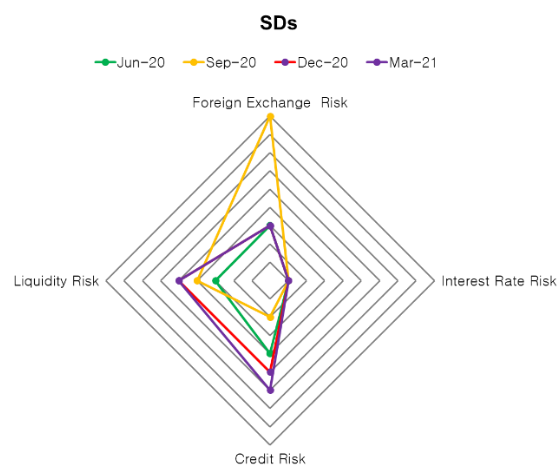
5.4 Securities dealers' exposure to credit risk increased marginally for March 2021 relative to the December 2020 quarter. This was reflected in an increase in securities dealers' non-performing loans (net of provisions) to capital ratio. The sector's exposure to interest rate, foreign exchange and liquidity risks, however, remained unchanged for the March 2021 quarter (See chart 5.0).

Table 5.0 Select Financial Soundness Indicators

Select Financial Soundness Indicators	Mar-20	Jun-20	Sep-20	Dec-20	Mar-21	Apr-21
Asset to GDP (%)						
DTI	87.38	92.89	100.62	102.88	105.92	n/a
SDs	27.89	30.82	33.48	35.20	35.85	n/a
LIs	16.57	17.74	18.10	18.67	18.90	n/a
GIs	4.13	4.82	4.75	4.67	4.61	n/a
Capital Adequacy (%)						
DTI (CAR)	14.19	14.16	14.23	14.31	14.33	14.10
SDs (CAR)	18.60	21.17	22.37	22.31	21.77	n/a
LIs (MCSSR)	225.59	225.59	225.59	225.59	214.98	n/a
GIs (MCT)	250.83	223.09	223.09	223.09	266.41	n/a
ROA (%)						
DTI	0.26	0.20	0.27	0.56	0.36	n/a
SDs	(0.11)	0.23	0.91	0.74	0.63	n/a
LIs	1.51	3.05	4.73	3.42	1.31	n/a
GIs	0.00	0.48	0.63	0.65	0.38	n/a
Liquidity (%)						
DTIs (liquid assets to short term liabilities)	29.31	28.72	28.14	30.54	28.56	25.94
SDs (liquid assets to total assets)	16.77	16.20	15.59	14.63	14.89	n/a
LIs (liquid assets to total liabilities)	28.66	25.96	23.39	21.08	23.52	n/a
GIs (liquid assets to total liabilities)	66.08	66.07	64.68	63.86	65.16	n/a

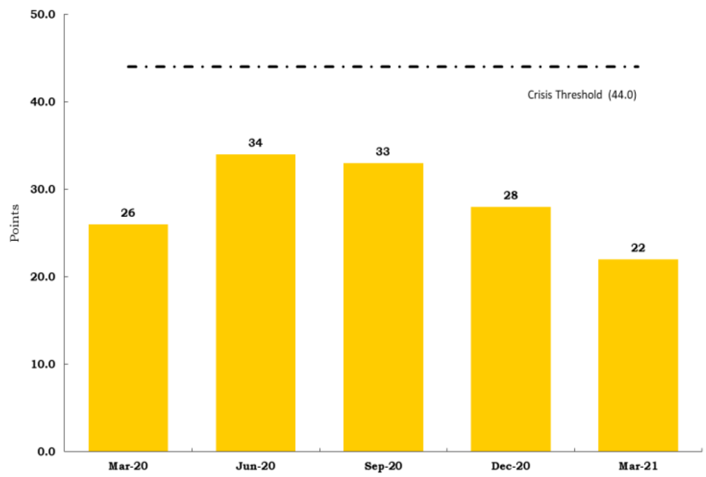
Source: Bank of Jamaica and Financial Services Commission

Chart 5.0 Evolution of risk exposure indicators - SDs



Risk exposure indicators:
- Credit Risk - NPLs/Loans (SDs); NPLs (net)/ Capital
- Interest Rate Risk - Cumulative maturity gap < 30 days, < 90 days, < 360 days/Assets, DVBP/Capital
- Foreign Exchange Risk - NOP/Capital, FX liabilities/Total liabilities
- Liquidity Risk – Liquid assets/total assets, liquid assets to short-term liabilities

Chart 5.1 Macro-Financial Index



Source: Bank of Jamaica

The macro-financial index (MaFI) improved by 6.0 points to 22.0 points at end-March 2021, reflecting a return to pre-COVID-19 levels. This improvement largely reflected a positive outturn for the twelve-month growth in the stock market index as well as an improvement in the net international reserves (see Chart 5.1)

5.5 The DTI sector remained largely resilient to hypothetical shocks at end-April 2021, while the insurance sector was also generally robust to the stress tests that were applied to their balance sheets at end-March 2021. In relation to the performance of securities dealers, the stress test results showed that at end March 2021, this sector, with the exception of extreme interest rate shocks, was also generally robust to the hypothetical shocks which were examined.

Outlook

6.1 The Jamaican economy is projected to improve further in the context of recovery in the global economy. A partial rebound in economic activity is expected to commence in FY2021/22 consequent on a strong recovery in tourism sector and tourism-related activities. This improvement will allow deposit-taking institutions to release loan-loss reserves as the debt repayment capacity of borrowers improve. Despite the foregoing, uncertainty concerning the duration of the pandemic remains