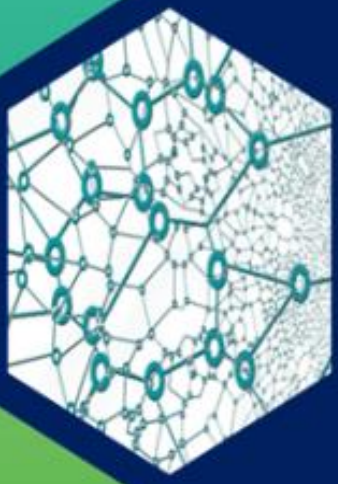
MITIGATE AND PREVENT EXCESSIVE CREDIT GROWTH AND LEVERAGE

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

A Credit Risk Assessment
September 2020

Contents

Preface

Bank of Jamaica frequently conducts assessments of the resilience and strength of the financial system. This macroprudential policy report forms part of the Bank's communication of its view on systemic risks. From time to time, the Bank may conduct special assessments related to potential systemic risk areas. Recent assessments of financial system stability shows that underlying credit risks forms the predominant risk exposure associated with expected Covid-shock conditions. This report provides highlights of those assessments with the objective 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

The financial system has continued to be impacted by the significant economic stresses associated with the Covid-19 pandemic. The substantial decline in economic activity has reduced revenue generating capacity in both real and financial sectors. The local stock market is less buoyant, compared to pre-Covid periods, and there is a general shift in capital markets to less risky assets. On the other hand, the market has remained fairly liquid. There is no evidence of widening market spreads and short term borrowing rates remain low. Moreover, entities generally hold capital positions in excess of the prudential minimum.

The loan market, inclusive of corporate bond issues, is beginning to show a slowdown in the pace of growth of credit creation. Despite the slowdown in credit over the review quarter, credit relative to GDP remains greater than its historical long-term trend. When coupled with persistently low GDP growth, the credit-to-GDP gap indicate that the pace of credit creation could further decline. However concentration risks were evident in the credit market. There is some evidence that loan growth has not been broad-based. In addition there were significant common exposures across the system to select real sectors.

Special COVID-19 related macrofinancial scenarios were simulated through stress testing exercises. The DTI sector showed susceptibility to credit-related shocks, with a number of entities being adversely impacted by hypothetical shocks to loans extended to individuals. At the same time, *non deposit-taking financial institutions (NDTFIs), in particular securities dealers, were most impact by interest rate related shocks involving a substantial increase in yields on GOJ bonds.*

1. Financial System Developments

Financial Institutions

1.0 **The financial system continued to show growth in assets.** During the June 2020 quarter, financial institutions' assets as a share of GDP increased relative to the previous quarter (see Chart 1.0). This performance was primarily due to stronger growth in financial system assets relative in addition to the decline in nominal GDP.

1. 1 **Financial *institutions' liquidity profile deteriorated marginally during the June 2020 quarter relative to the previous quarter.*** The decline in DTIs' liquidity profile was largely due to a sharper increase in system assets relative to liquid asset holdings. Similarly, the decline in the liquidity of life insurance companies was largely due to a sharper reduction in liquid assets relative to total assets. Financial entities remained well capitalized but in some instances demonstrated slight deterioration in surplus capital. There was deterioration in capital adequacy for both DTIs and general insurance companies during the June 2020 quarter (see Chart 1.1).

Financial Markets

1.3 **Uncertainties associated with the sharp increase in COVID-19 cases in Jamaica, resulted in investors aversion to riskier asset classes**. Asset prices remained below levels observed prior to the initial COVID-19 shock in February. However, GOJ global bond prices reverted by approximately 96.0 per cent since May. Further, there was little evidence of liquidity pressures in the money market. For example, the Jamaican 3-month Treasury bill rate averaged 1.13 per cent in August 2020, compared to 1.84 per cent for August 2019. Similarly, the 30-day private money market rate averaged 1.85 per cent in August 2020, coming down from its March 2020 high of 2.89 per cent (see Chart 1.2).

Chart 1.0 Select Financial Soundness Indicators

	Jun-18	Jun-19	Mar-20	Jun-20
Asset to GDP (%)				
DTI	82.0	83.8	87.1	90.2
SDs	28.6	27.6	27.8	29.9
LIs	16.5	16.0	16.5	17.2
GIs	4.3	4.3	4.1	4.5
ROA (%)				
DTI	0.8	0.6	0.3	0.0
SDs	0.6	1.2	-0.1	0.2
LIs	2.3	2.4	1.5	1.5
GIs	0.9	0.6	0.0	1.4
Liquidity (%)				
DTIs	31.5	29.5	29.3	28.7
SDs	20.7	18.0	16.8	16.2
LIs	25.1	30.7	28.5	25.8
GIs	70.1	61.9	66.1	66.1

Chart 1.1 Surplus Capital (% above prudential minimum)

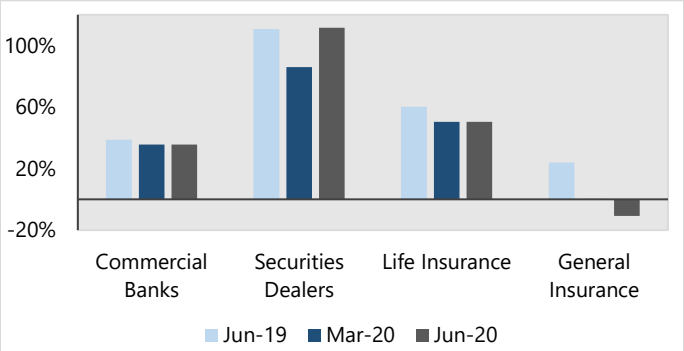
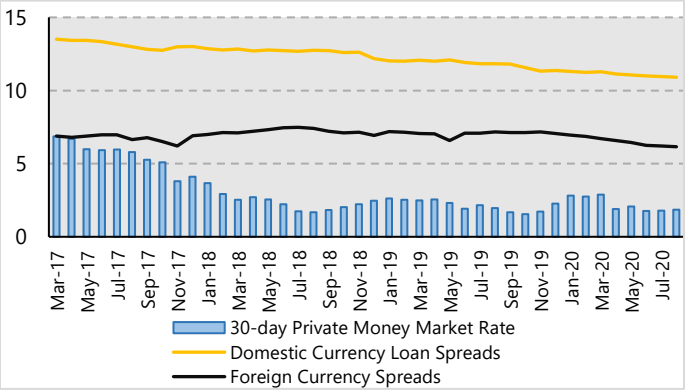


Chart 1.2 Funding Costs and Spreads



2. Systemic Credit Risk

Credit Expansion

2.0 **Private sector credit expansion slowed marginally during the June 2020 quarter.** Credit provided by the DTIs to the private sector grew by 13.3 per cent for the year-ended June 2020, relative to growth of 17.2 per cent for the year ended March 2020. During the review quarter, total credit, plus financing via exempt distribution, increased by 8.1 per cent relative to growth of 8.7 per cent for the previous quarter. This growth in financing associated private sector credit and corporate bond issues by non-financial entities resulted in additional financing of $10.1 billion in the system compared to the March 2020 quarter (see Chart 2.0).[1]

2.1 ***DTIs provided loan repayment* moratoriums *totaling* $240.5 billion *as at June 2020.*** *In addition, t*he dollar value of DTIs' NPLs increased by 20.0 per cent during the June quarter relative to the previous quarter and was driven by increased NPLs of approximately $4.6 billion over the quarter. Despite these trends, he NPLs to gross loans ratio increased to 2.8 per cent at end-June 2020 compared to 2.4 per cent as at end-June 2019.

2.2 **Economic *growth continued to lag the creation of credit.*** The output gap was -9.8 per cent as at June 2020. Furthermore, there was a broad variation in the decomposition of credit to GDP by sector. For example, the tourism sector demonstrated a sectoral credit-to-GDP gap of 1.96 per cent, below its historical trend. Concurrently, the energy sector demonstrated a sectoral credit-to-GDP gap of 21.7 per cent above its long-term trend (Chart 2.1).

Chart 2.0 Annual Growth in Credit

[1] Private Sector Credit is comprised of DTIs' loans and advances to the private sector excluding that credit to overseas residents and other financial institutions. Total DTI Credit is measured as private sector credit plus corporate securities held by DTIs plus public sector credit.

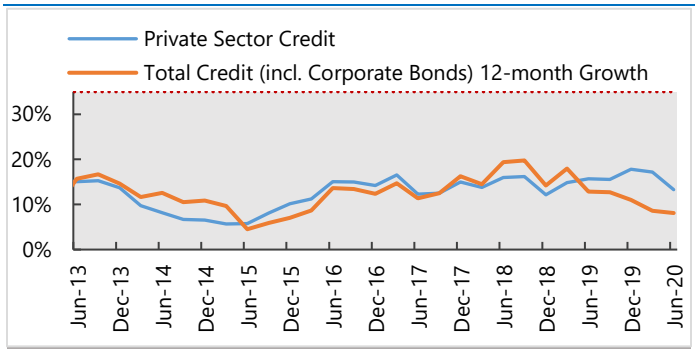
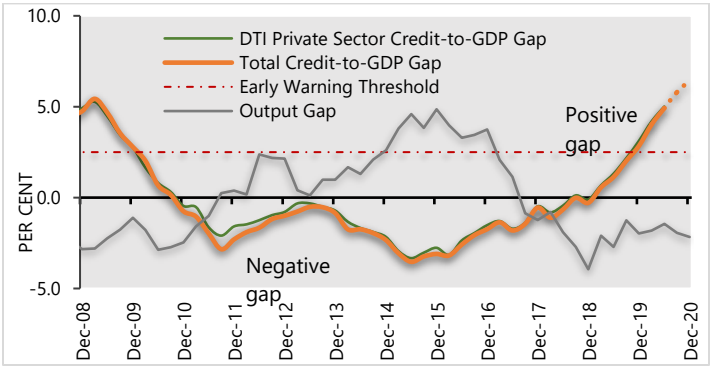


Chart 2.1 Evolution of Credit-to-GDP Gap Indicators[2]



2. 3 **Risks associated with concentrated credit growth may be high for specific real sectors.** Notwithstanding that personal loans accounted for DTIs' largest sectoral credit exposure, high credit concentration also existed within non-personal loan categories. Specifically, *Distribution* and *Tourism* sectors accounted for 41.0 per cent of non-personal loans. These economic sectors were projected to have among the worst economic outturns as forecasted up to March 2021 due to the COVID-29 pandemic.

Credit Concentration through Commonalities across DTIs

2.4 **Concentration risks were evident through common large exposures to the financial and energy sectors.** DTIs' common large exposures at June 2020, totalled approximately J$170.0 billion. Large exposures that were common across DTIs were mainly concentrated in the financial sector. These exposures accounted for 35.0 per cent of overall large exposures as at end-June 2020. However, after excluding the commonalities explained by financial interconnectedness, the energy sector formed the predominant concentration risk due to common exposures across DTIs. System wide commonality in exposures was also present in the form of bonds held by NDTFIs.

3. Systemic Resilience

Market Based Measure of Solvency

3.0 **Market based measures of solvency showed that the financial system had a strong capacity to absorb shocks, despite deterioration in June 2020.** A contingency claims analysis found that the distance to default for publicly listed DTIs was 7.9 standard deviations in June 2020 relative to 11.7 standard deviations for December 2019 (Chart 3.0).[3] This represented a decline of 32.5 per cent in the distance to default of domestic listed financial institutions during the COVID-19 stress period relative to normal times. The deterioration in the distance to default resulted from an overall decrease in the market value of these institution's assets during March and June 2020 along with an increase in volatility.

[2] The output gap is the percentage difference between actual output and potential output in the Jamaican economy. The credit-to-GDP gap indicators measure the deviation of the ratio of credit-to-GDP relative to its long-term trend and is used to excessive credit accumulation.

[3] The distance to default is a function of the growth in firm's assets, the volatility of the firm's assets, as well as the difference between the market value of the firm and the default barrier. The numerator measures the distance between the expected one-year ahead market value of the firm's assets and the distress barrier while the denominator is used to scale the numerator with respect to units of standard deviations.

$$d^* = \frac{LN\left(\frac{V_A}{DB}\right)+\left(\mu-\frac{\sigma^2}{2}\right)T}{\sigma\sqrt{T}}$$

Chart 3.0 Distance to Default of Publicly Listed Financial Institutions

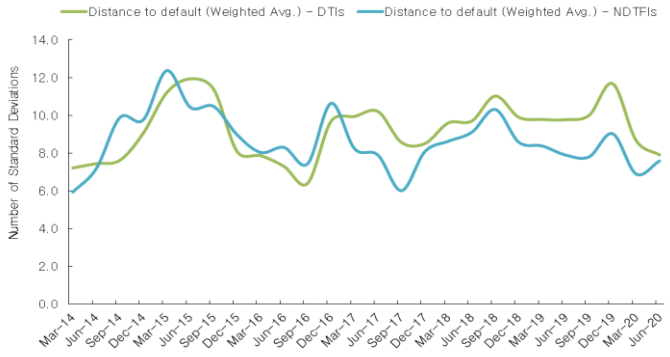


Chart 3.1 Covid-19 Stress Test Scenarios

Risk	SCENARIO		RANGE OF SHOCKS: *Adverse Scenario*	RANGE OF SHOCKS: *Severely Adverse Scenario*
a. Liquidity	Deposit withdrawal		30%	40%
b. Credit	*Past due loans becoming NPLs*		*75%*	*100%*
	Performing loans becoming NPLs	*SME Loans*	*40%*	*60%*
		Corporate Loans	*20%*	*40%*
		Retail Loans	*20%*	*40%*
c. Market	F/X - Depreciation		10%	15%
	GOJ Bond yields ↑ (domestic)	Parallel Shift	30%	40%
	GOJ Bond yields ↑ (globals)	Parallel Shift	55%	70%
d. Aggregate Impact	Combined liquidity, credit and market risk impact.		a+b+c	a+b+c

3.1 **A deterioration in the expectations of the future solvency of the financial system was also evident in the non-DTFI sectors.** The result for the NDTFI sector was 7.6 standard deviations as at June 2020 relative to 9.0 standard deviations at December 2019. Furthermore, the NDTFI sector experienced its most significant reduction in distance to default during March 2020, when the sector recorded a distance to default of 6.9 standard deviations. Specifically, the distance to default for NDTFIs was mainly impacted by the fall in asset value.

Impact of Covid-19 on Financial Institutions – Top-down Stress Test Assessment

3.2 **Simulations of COVID-19 related scenarios showed that credit risk and associated spillovers formed part of the largest risk exposure of the financial system.** Financial institutions' resilience to contemplated COVID-19 related shocks to credit, liquidity and market risk factors was assessed at end-June 2020. The severity of these hypothetical shocks were determined based on actual shocks which occurred during the 2008 global financial crisis in addition to a applying a COVID-19 factor (see Chart 3.1).

3.3 **A few financial institutions would be further impaired after a second round propagation of the financial shock.**[4] Overall, the aggregate post-shock CARs of the institutions were maintained after the second-round contagion effects, with the exception of five institutions under the adverse scenario. Furthermore, of these five institutions, four institutions were further impacted under the severely adverse scenario.

4. Conclusion

4.0 **The magnitude of the COVID-19 pandemic and duration of the economic downturn associated with it remains largely uncertain.** The Bank's assessments of financial system stability, since financial markets began reacting to the onset of the COVID pandemic in late February, demonstrated that the initial shock resulted in simultaneous declines in asset markets. Margin calls associated with these declines resulted in a need for liquidity by some financial institutions. The initial shock to the market also resulted in client encashment demands which creates a further need for liquid balances. Liquidity

4 These assessments examines how a potential default by financial counterparties may propagate among financial institutions subsequent to the initial hypothetical shocks.

support from the Central Bank and related parties alleviated the impact of these liquidity shocks.

4.1 **The low interest rate environment and continued bearish capital markets will constrain earnings across the financial system.** The expansion of private sector credit slowed marginally and there are systemic risks associated with a credit concentration in specific economic sectors. In addition, financial system interconnectedness increases these risks. Furthermore, large and common exposures to companies within the energy sector forms a significant contribution to these concentrations. System wide commonality in exposures was present in the form of bonds held by NDTFI. For these reasons, it is important that the Financial System Stability Committee continue to advance work on creating a picture of borrower indebtedness and debt repayment capacity.

4.4 **The Jamaican financial sector should continue to support economic conditions through the provision of credit and financial intermediation.** Since the onset of the pandemic, DTIs have offered household and businesses loan repayment moratoria, to help manage financing needs. Even though the uncertainty of the COVID-19 pandemic warrants the conservation of capital, financial institutions must still try to maintain a prudent flow of credit to sound borrowers.