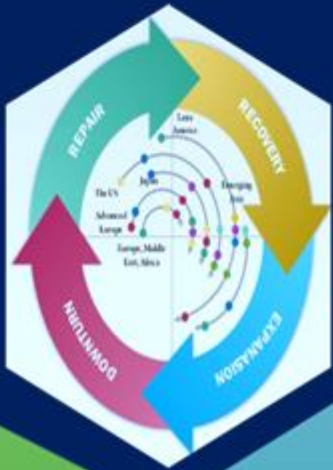


MITIGATE AND PREVENT EXCESSIVE CREDIT GROWTH AND LEVERAGE

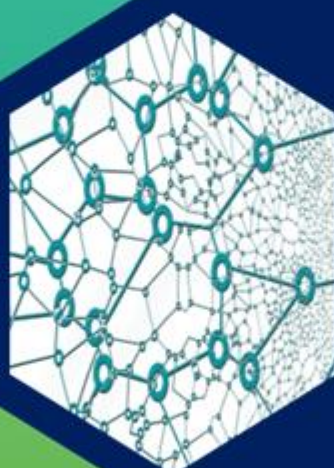
BANK OF JAMAICA

MITIGATE AND PREVENT EXCESSIVE MATURITY MISMATCHES AND MARKET ILLIQUIDITY

LIMIT DIRECT AND INDIRECT EXPOSURE CONCENTRATIONS

Macroprudential Policy Report

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



Highlights

STRENGTHEN THE RESILIENCE OF THE FINANCIAL SYSTEM & INFRASTRUCTURE

March 2020
Quarter

Contents

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 quarterly assessments. Due to the COVID-19 pandemic, this report which would normally cover developments up to December 2019, will provide assessments of relevant systemic developments during the March 2020 quarter.

1 Overview

During the March 2020 quarter there were significant economic stresses associated with the Covid-19 pandemic. The panic related to the pandemic depressed global and local asset markets simultaneously. Despite significant direct and indirect exposure of the financial entities to these markets, the system was well capitalized going into the stress period.

Special Covid-19 related financial scenarios were simulated through stress testing exercises. Deposit-taking institutions (DTIs) showed susceptibility to to the simulated shock to performing loans, given strong exposures to the tourism, construction and distribution sectors, with these sectors being most gravely impacted by the pandemic. At the same time, non deposit-taking financial institutions (NDTFIs) remained largely robust to the contemplated financial shocks as a result of their strong capital positions.

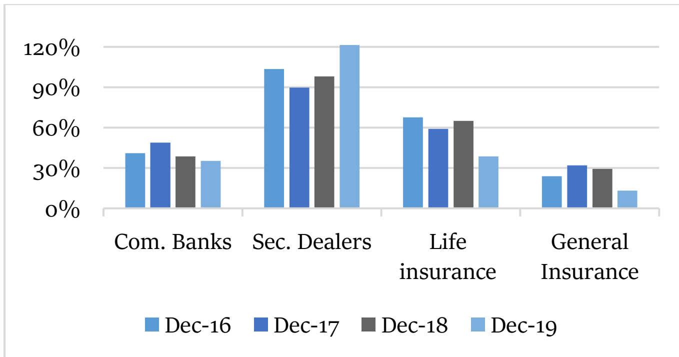
BOJ undertook a number of measures to manage systemic risks associated with the onset of Covid-19. The Bank met with the various financial sector representational groups to understand the developments and risks they were facing. In addition, BOJ ensured that DTIs had sufficient liquid funds available to them. Further, the Bank supported foreign exchange liquidity within the financial system through measures such as reduction in the foreign currency cash reserve requirement.

2.0 Financial System Developments

2.0 Total assets of DTIs grew by 10.6 per cent for the year ended 31st December 2019. This outturn was in line with the 10.0 per cent expansion for 2018. The performance for 2019 was largely influenced by continued growth in loans & advances.[1] Similarly, securities dealers (SDs) demonstrated sound asset growth. The asset base of selected SDs grew by 17 per cent for 2019 and was driven by growth in investments in local securities. The asset base of life insurance companies grew by 6.5 per cent for 2019. The total assets of the general insurance industry grew by 6.0 per cent at end-2019 compared to end-2018.

2.1 In light of the asset expansion of the major-financial subsectors, the pre-shock capital adequacy position of all subsectors remained well above the prudential minimum as at-end 2019 (**see Chart 2.0**).

Chart 2.0 Surplus Capital (% above prudential minimum)



3.0 Asset Prices

3.0 The COVID-19 pandemic has depressed asset markets both locally and globally. A significant worsening in the global outlook for economic activity resulted in a sell-off in financial markets. The Dow Jones Industrial Average and S&P 500

[1] For the December 2019 quarter, DTI assets grew by 0.8 per cent relative to the September 2019 quarter. This performance was driven by JMMB, VMBS and cornerstone which recorded growth of 10.4 per cent, 4.5 per cent and 18.2 per cent, respectively.

Index fell by 37% and 34% respectively between February 19 and March 23. The Jamaica Stock Exchange Main Index fell 30% between February 21 and March 25. The declines in Government of Jamaica global bond prices ranged from 0.0% to 30% based on tenor. Financial entities showed varying exposures to the different asset classes (see **Chart 3.0**).

Chart 3.0 Asset Exposure as a Share of Total Assets

	DTI	SD	L.I	G.I
Investments	22.1	82.7	87.4	54.8
Public Sector	14.6	40.0	52.0	23.3
Other*	7.2	17.2	16.3	10.3
Shares	0.4	2.5	13.7	3.2
Real estate	12.3**	---	1.3	3.0

*such as corporate debt **Real estate represents mortgage loans.

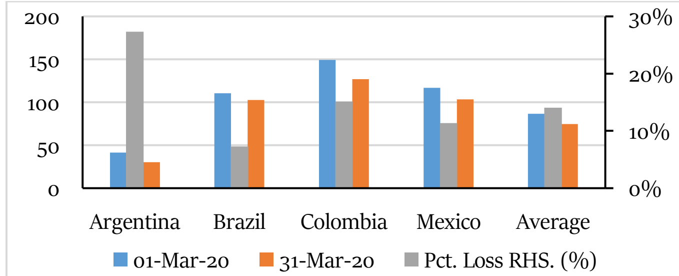
Bond Market

3.1 During the March 2020 quarter, the COVID-19 pandemic led to a global flight to safety and resulted in a significant fall in US Treasury bill yields. Local and regional bond markets showed similar behaviour in face of the uncertainty posed by COVID-19. There was a general rise in long term yields as well as increases in the bid-ask price spread on GOJ bonds which was indicative of the general volatility (**see Chart 3.1 and Chart 3.2**).

Chart 3.1 GOJ Global Bond Prices ($)

	8.0% 2021	11.6% 2022	7.6% 2025	6.7% 2028	8.0% 2039
1-Jan-20	105.4	122.1	119.5	119.3	136.8
2-Mar-20	104.9	117.8	118.2	117.5	137.4
31-Mar-20	105.4	114.3	106.9	106.6	111.5
Pct. change Jan. – Mar.	0.0	-6.4	-10.5	-10.7	-18.5
Pct. change March	0.47	-2.9	-9.5	-9.3	-18.9

Chart 3.2 Select Latin American Bond Prices ($)



Stock Market

3.2 For the March 2020 quarter, all major Jamaica Stock Exchange (JSE) indices recorded declines ranging between 25.6 per cent and 31.2 per cent. Based on the JSE reports, among the main factors contributing to the decline during January and February was a repositioning by investors for upcoming IPOs. During March 2020, the domestic equity market declined substantially in the aftermath of the first confirmed case of Covid-19 in Jamaica on the 10th of March 2020.

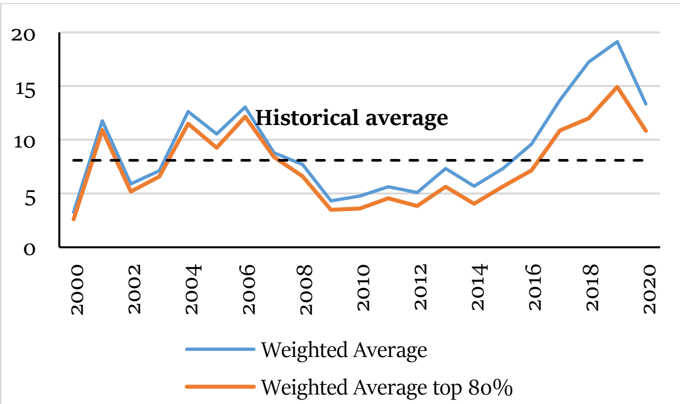
3.3 The market capitalization of Jamaica's Main Market stood at $1 458 billion as at March 2020. The market capitalization relative to GDP as at March, reflected a decrease of 22 percentage points to 69 per cent relative to 91 per cent as at December 2019 (**see Chart 3.3**).[2]

Chart 3.3 Stock Market Capitalization to GDP (%)

2 Market Capitalization to GDP as at end March 2020 was calculated using December 2019 GDP and Market Capitalization as at March 2020.

3.4 An assessment of the degree of over-valuation in the Jamaican stock market was conducted using data up to April 9, 2020. The analysis examined whether stock prices have realigned with fundamentals given the recent sell off in the market due to investor uncertainty surrounding the Covid-19 pandemic (**see Charts 3.4**). The average price to earnings ratio for the Main Market fell to 13.0 as at April 9, 2019, compared to an historical average of 8.0.[3]

Chart 3.4 Price to Earnings Ratio (%)



Real Estate

3.5 In early March, Bank of Jamaica expanded its survey of the property market. At that point in time the outlook for property prices was still positive with most respondents expecting property prices to continue to increase.

3.6 Industry players reported that since Jamaica reported confirmed cases of COVID-19 there has been an evident slowdown in economic activity. The risks to developers' supply chain have been realized and realtors have expressed increased uncertainty regarding how the market will respond in the coming months. In addition, real estate developers also face unprecedented exposure to their supply chain as the material and equipment required to deliver developments are primarily from China.

3.7 Over the review period asset markets all demonstrated simultaneous declines. The performance of real asset markets will have a direct impact on earning capacity, particularly of NDTFIs. In addition DTIs could be indirectly impacted by these declines through a worsening in performing loans, such as those issued to the construction sector.

4.0 Liquidity

4.0 Liquidity transformation risk metrics, which measure the degree of coverage of short-term liabilities with liquid assets showed mixed results across financial sectors for the December 2019 quarter. In particular, the outturn for SDs and general insurance companies deteriorated by 21.7 per cent and 4.7 per cent, respectively. The deterioration for these sub-sectors was as a result of a greater reduction in liquid assets relative to short term liabilities.

4.1 On the other hand, the risk metric for the life insurance sector improved by 28.7 per cent relative to the previous quarter and reflected a greater than proportional increase in liquid assets relative to short term liabilities. Notwithstanding the mixed results across non-bank sub-sectors, liquidity measures remained in line with historical averages and the financial system remained fairly liquid.

5.0 Stress Tests

Potential Impact of Covid-19 on Financial Institutions

5.1 Against the background of the Covid-19 pandemic, stress tests were conducted to ascertain financial institutions' resilience to hypothetical but plausible shocks to credit, liquidity and market risk factors based on data as at end-2019. The assumed shocks were generally determined based on severe movements in these risk factors during the 2008

[3] The values are at April 9, 2020.

global financial crisis and applying a Covid factor. Additionally, given that the Covid-19 pandemic is anticipated to be more severe than the 2008 crisis, two scenarios were contemplated, namely, an adverse scenario with a Covid factor of 1.5 and a severely adverse scenario with a Covid factor of 2.0, with the former indicating that the pandemic will last for three months, while the latter indicating a six month duration.

5.2 The results of the stress test showed that DTIs were susceptible to the credit related shocks, in particular, performing personal loans becoming non-performing. Regarding liquidity risk, SDs were most vulnerable.

5.3 Market risk results showed that all the assessed financial sectors were resilient under both the adverse and severely adverse scenarios. Financial Institutions generally had long foreign exchange net open positions and as such were less susceptible to exchange rate depreciations. In relation to interest rate risk, financial institutions were largely robust to substantial increases in market yields.

5.4 The impact of the hypothetical combined shocks showed that DTIs and the SDs were the two most vulnerable sub-sectors. The DTIs were largely impacted by credit related shocks while SDs were mostly affected by liquidity factors.

6.0 Macroeconomic Outlook

6.0 A significant deterioration in the macroeconomy is expected due to COVID-19. Tourism is expected to be one of the most gravely impacted by the pandemic. Before travel restrictions were fully implemented there was a fall in projected arrivals for the March quarter and no arrivals for the June 2020 quarter.

6.1 There are expected declines in foreign currency flows for the June 2020 quarter as well as the fiscal year 20/21 influenced by the fallout in tourism, foreign direct investment and significant declines in remittance inflows. A substantial widening of the current account deficit is projected as the fall in commodity prices will be partly offset by the fall in inflows. The outlook also includes a substantial fall in commodity prices.

6.2 The Bank projects that the Jamaican economy will contract in the range 4 -7 per cent for FY2020/21. There will be a decline in the transport sub-sector with a reduction in manufacturing due to the lower capacity utilisation in the agro-processing, petroleum refining and cement sectors. Lower capacity utilisation and lower income will also impact mining and wholesale growth respectively.

6.3 The outlook for macoeconomic developments could affect financial system stability predominantly through weaker resilience of financial entities to further shock, as income and capital levels deteriorate. Secondly, lower earning potential of the private sector will reduce the debt repayment profile of households and businesses.

7.0 Bank of Jamaica's Covid Response

7.0 BOJ undertook a number of measures to properly manage systemic risks associated with the onset of Covid-19. The Bank moved expeditiously to meet with the various financial sector representational groups to understand the developments and risks they were facing. In addition a special inter-agency Liquidity Committee of financial supervisors was estabilished to more frequently monitor and assess liquidity pressures within the system.

7.1 In addition, BOJ ensured that DTIs had sufficient liquid funds available to them. In so doing, the Bank:

i. removed the limits on the amounts that DTIs can borrow overnight without being charged a penal rate;
ii. re-introduced a longer-term lending facility for periods of up to six months;
iii. established a GOJ and BOJ bond buying programme;
iv. lowered the Jamaica Dollar cash reserve requirement by two percentage points to the statutory minimum of 5 per cent; and
v. reactivated the Emergency Liquidity Facility.

7.2 Further, the Bank supported foreign exchange liquidity withing the financial system by:

i. temporarily increasing the limit on the foreign currency net open positions of authorised dealers by 5 percentage points.
ii. standing ready to expand the volume of foreign currency swap arrangements with authorised dealers; and
iii. reducing the foreign currency cash reserve requirements for DTIs by two percentage points to 13 per cent.

7.3 Despite the severity of the effect of Covid-19 on the economy since March 2020, the impact on the stability of the financial system has been effectively cushioned through the intervention of the regulators. The Bank's projections envisage that economic activity in the June and September quarters will continue to be well below that of the corresponding period in 2019 before making a gradual recovery in 2021. The next report in this series will focus on the performance of credit exposures and the response of institutions to the macroeconomic policies aimed at rejuvenating economic activity.