BANK OF JAMAICA

Macroprudential Policy Report

September 2023

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 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.*

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Overview

Macro-financial conditions remained broadly stable for the September 2023 quarter. This was reflected in the Bank's composite index of macro-financial performance, which exhibited moderate improvement. Measures of systemic risks associated with the financial cycle and the system's exposure to other financial actors, as well as to selected sectors of the real economy, also remained within reasonable parameters. By extension, standard indicators of financial health for the DTIs, in particular, capitalization, liquidity, profitability and asset quality measures were generally stable and in line with recent trends.

Several positive macroeconomic developments supported the stability in the financial system for the September 2023 quarter. The Jamaican economy is estimated to have grown by 1.9 per cent for the quarter and reflected broad based growth. The unemployment rate fell to a historic low of 4.5 per cent at July 2023. Annual point-to-point inflation moderated to 5.9 per cent at September 2023, relative to 6.3 per cent at June 2023. While inflation in the United States trended upwards to 3.7 per cent at end-September 2023, relative to 3.0 per cent at end-June 2023, underlying or core inflation remained stable.

Notwithstanding the stable macro-financial environment, there are risks that domestic inflation could again breach the upper limit of the central bank's inflation target in the near future. Moreover, inflation among Jamaica's major trading partners could be sustained above their targets for longer than currently anticipated. Geopolitical tensions could cause imported prices to reverse directions while the tight domestic labour market, among other factors, could put upward pressure on inflation in Jamaica through higher-than-projected future wage adjustments.

As such further monetary policy tightening could be required to ensure a sustainable return of inflation to policy targets. The risk of higher interest rates implies the potential for increased funding costs and fair value losses for financial institutions.

In this context, stress tests were conducted to determine the impact on balance sheets of domestic financial institutions of further increases in bond yields. The results of the assessment showed that the DTI and securities dealers' sectors were broadly resilient to the contemplated interest rate shocks. However, there continued to be instances of vulnerability, which would need to be remedied by additional capital injections.

Other potential near-to-medium term risks include cyber risk and climate-related financial risks. The Supervisors have noted the spate of cyberattacks on financial institutions in the recent past and have enhanced their monitoring of the system, working closely with their licensees to ensure that their customers' banking experience continues to be safe and efficient. In this regard, the Authorities have issued a set of principles that financial institutions will follow in addressing vulnerabilities to cyber events. Supervisors are also consulting with their licensees and actively encouraging mechanisms among them for strong cyber-attack resistance and cyber-attack recovery.

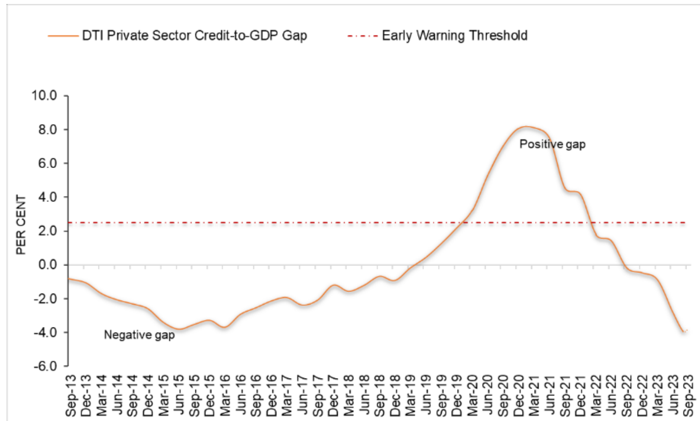
The Supervisors also noted the risks that climate change and associated systemic risk factors pose to the economy and, by extension, to the financial system. Therefore, the Authorities have published a set of commitments that they will pursue to enhance the climate resilience of the financial sector over the medium-term. More broadly, the Supervisors of the financial sector will continue to determine the most appropriate policy response to minimize risks and to promote financial system stability.

Objective 1 – Mitigate and prevent excessive credit growth and leverage

1.1 **There was a further reduction in credit risks related to the financial cycle in Jamaica during the September 2023 quarter**. The credit-to-GDP gap fell to -3.9 per cent at end-August 2023 from -2.8 per cent at end-June 2023 (see **Chart 1.0**), far below the Bank of International Settlements' (BIS) upper threshold of 10.0 per cent and the BOJ early warning threshold of 2.5 per cent for financial-cycle-related credit risks. This measure of credit risk indicates that credit to GDP is progressively falling below its trend. The credit-to-GDP gap is nonetheless projected to increase slightly at end-September 2023.[1,2]

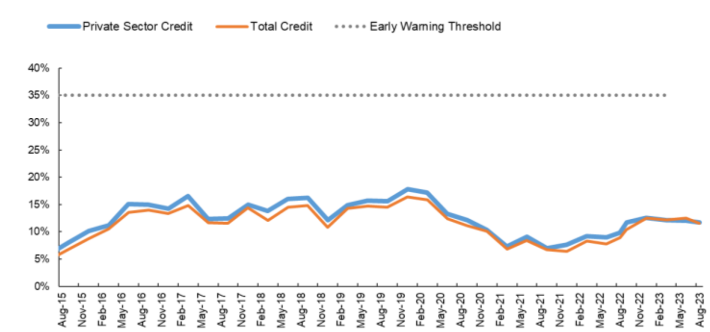
1.2 **Consistent with the moderation in the credit-to-GDP gap, there was a slower pace of growth in credit compared to GDP**. Total credit, which includes private and public sector credit, grew by 11.5 per cent for the year ended August 2023, relative to growth of 12.5 per cent for June 2023 (see **Chart 1.1**). In this context, DTIs credit to the private sector grew at an annual rate of 11.7 per cent for the year ended-August 2023, which was slower than the 12.0 per cent growth for the year ended-June 2023 (see **Chart 1.1**).[3] At the same time, nominal GDP is estimated to have grown by 4.0 per cent for the September 2023 quarter.

Chart 1.0 Evolution of credit-to-GDP gap Indicators



Source: Bank of Jamaica

Chart 1.1 Annual Growth in Credit



Source: Bank of Jamaica

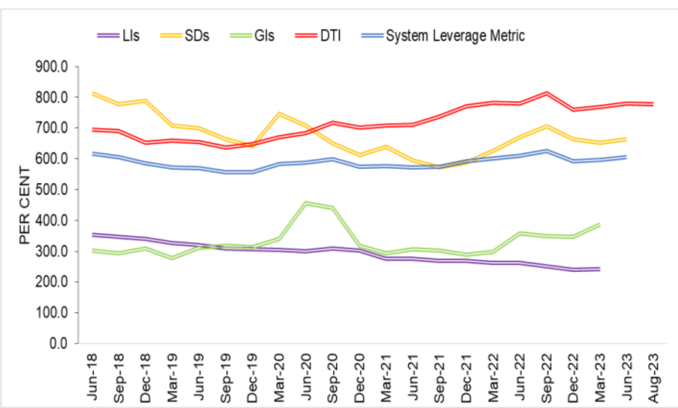
[1] The credit-to-GDP gap indicator measures the deviation of credit-to-GDP from its long-term trend. It is a systemic risk indicator associated with financial cycles which signals the extent of credit risk accumulation. Total credit used to calculate the credit-to-GDP gap is comprised of private sector credit plus public sector credit. Nominal GDP is annualized by calculating a 4-quarter moving sum. The trend in credit/GDP is estimated using the Hodrick Prescott (HP) filter data smoothing econometric technique.

[2] The credit to GDP gap is projected to increase by 0.1 percentage points to -3.8 per cent at end September 2023. This estimate is based on estimated growth (Q-t-Q) in credit and nominal GDP for the September 2023 quarter of 2.0 per cent and 4.0 per cent, respectively.

[3] Private sector credit is measured as DTIs' loans and advances to the private sector excluding credit to overseas residents and other financial institutions.

1.3 **The leverage metric for the DTI sector, which measures the extent to which financial institutions use debt to fund asset expansion, fell (improved) during the September 2023 quarter.**[4] The metric reflected a marginal decline of 2.3 percentage points between end-June and end-August 2023 (see **Chart 1.2**) due to a faster pace of growth in equity relative to total financial assets. This reflected DTIs' lower use of debt to fund their operations.[5] The growth in equity was primarily driven by increases in unappropriated profits across most entities within the sector. Notably, BNS recorded the largest increase in equity of 7.8 per cent. Notwithstanding the marginal improvement for the review period, leverage rose on a year over year basis at August, continuing the trend deterioration observed since 2019.

Chart 1.2 Leverage – DTIs, securities dealers, life and general insurance companies

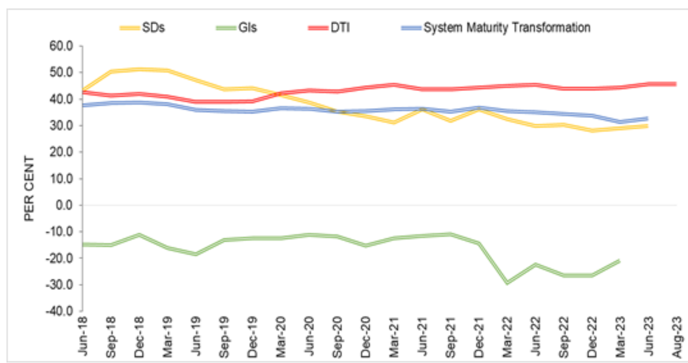


Source: Bank of Jamaica and Financial Services Commission

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

2.1 **Maturity transformation risk for the DTI sector recorded a marginal improvement over the September 2023 quarter** (see **Chart 2.0**).[6] The maturity transformation ratio for DTIs, which measures the maturity mismatch between assets and liabilities, remained relatively stable, declining by only 0.2 percentage point to 45.6 per cent over the two-month period ended-August 2023.[7] This performance was primarily driven by faster pace of growth in long term assets (principally loans with a duration of one year or more) relative to their long-term liabilities and equity.

Chart 2.0 Maturity transformation (long term) DTIs, securities dealers, life and general insurance companies



Source: Bank of Jamaica and Financial Services Commission

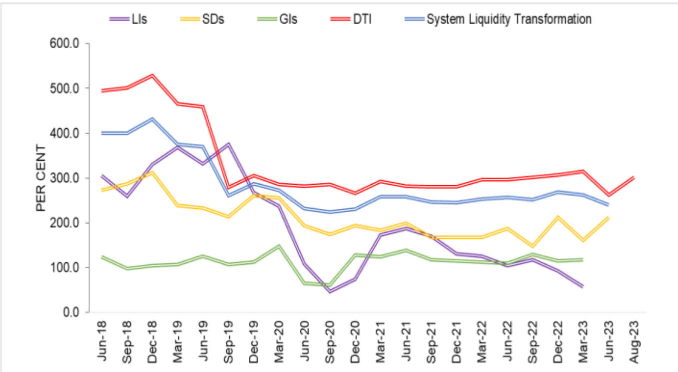
[4] Leverage is calculated as total financial assets/equity. Growth in the ratio reflects an increase in leverage.

[5] At end August 2023 for the DTI sub-sector, equity grew by 2.4 per cent relative to an increase of 2.1 per cent in total financial assets when compared to end June 2023.

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

[7] Equity, total financial assets and long-term assets, increased by 2.4 per cent, 2.1 per cent, and 1.3 per cent respectively, while long-term liabilities declined by 2.6 per cent.

Chart 2.1 Liquidity Transformation – DTIs, securities dealers, life and general insurance companies

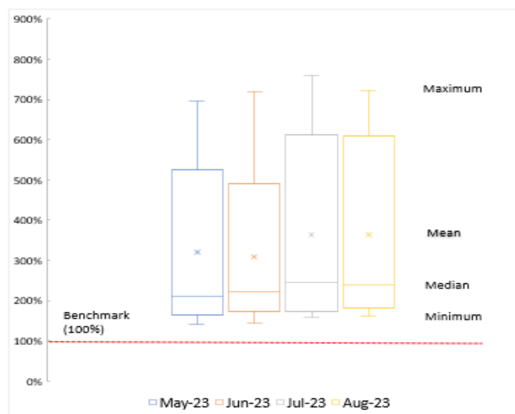


Source: Bank of Jamaica and Financial Services Commission

2.2 The liquidity transformation risk metric for the DTI sector deteriorated over the September 2023 quarter. The metric, which measures the extent of coverage of short-term liabilities by liquid assets, increased by 39.8 percentage points to 301.9 per cent at end-August 2023 (see **Chart 2.1**).[8] This performance reflected a larger than proportional decline in liquid assets relative to marginal growth in short term liabilities.[9] The reduction in liquid assets was primarily driven by the maturity of BOJ and GOJ investments across most entities within the sector (particularly NCB and FGB).

2.3 **Notwithstanding the increase in liquidity risk, DTIs' liquidity remained robust at August 2023.** At end-August 2023, all DTIs exceeded the liquidity coverage ratio (LCR) benchmark of 100.0 per cent, with an average ratio for the sector of 344.0 per cent, relative to 296.5 per cent at end-June 2023.[10] With regard to the Jamaican dollar-denominated LCR, an average ratio of 222.6 per cent was recorded at end-August 2023, relative to 187.7 per cent at end-June 2023 (see **Charts 2.2** and **2.3**).[11] No institution recorded an LCR below the minimum.

Chart 2.2 Liquidity Coverage Ratio (JMD and USD Equivalent) at end-August 2023 – DTIs



Source: Bank of Jamaica

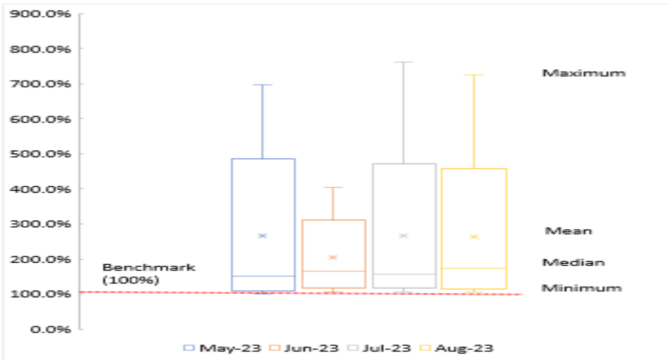
[8] At end-August 2023 short-term liabilities grew by 1.5 per cent while liquid assets declined by 11.9 per cent relative to end June 2023.

[9] The cobweb measure of risk exposure also showed an increase in liquidity risk for the DTI sector. This was due to a deterioration in the liquid assets to total assets ratio for the sector as well as the liquid assets to short-term liabilities ratio (see Appendix).

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

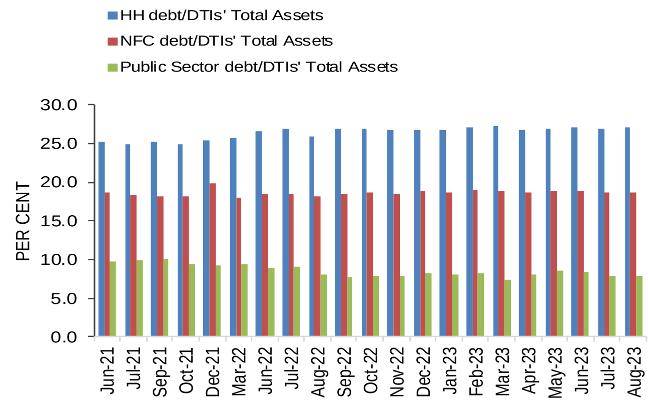
[11] The improvement in the total JMD LCR was driven by a slight increase in high quality liquid assets driven by both the JMD and USD components, as well as a decline in net cash outflows from the USD component.

Chart 2.3 Liquidity Coverage Ratio (JMD only) at end-August 2023 – DTIs



Source: Bank of Jamaica

Chart 3.0 DTI Exposure to Public, Household and NFC Debt



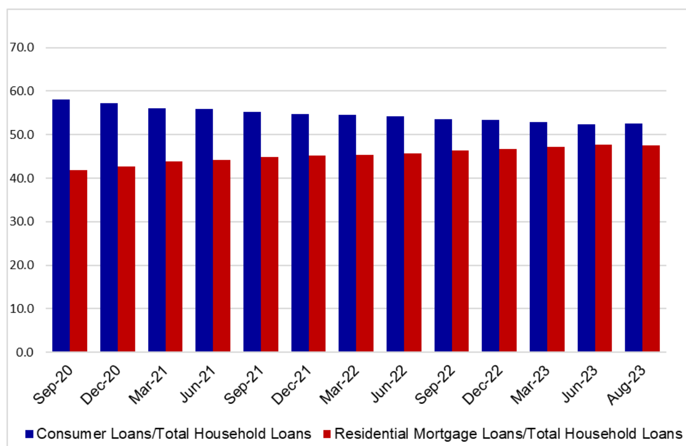
Source: Bank of Jamaica

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

3.1 **DTIs' exposure to households was relatively constant over the September 2023 quarter, although the relative importance of this exposure continued to shift to mortgages.** The ratio of household loans (the largest part of the DTIs' loan portfolio) to DTI assets was increased marginally to 27.2 per cent at end-August 2023, relative to 27.1 per cent at end June 2023 (see **Chart 3.0** and **Appendix – Table 2.0**).[12]

3.2 Household loans grew by 1.8 per cent over the two-month period ended August 2023. Within household loans, consumer loans increased by 2.2 per cent, while mortgage loans grew by 1.4 per cent. In this context, the share of other consumer loans (not mortgages) grew by 0.2 percentage point to 52.5 per cent at end-August 2023 relative to June 2023, notwithstanding the overall trend decline from the 55.8 per cent that was recorded at June 2021.

Chart 3.1 Decomposition of Household Debt



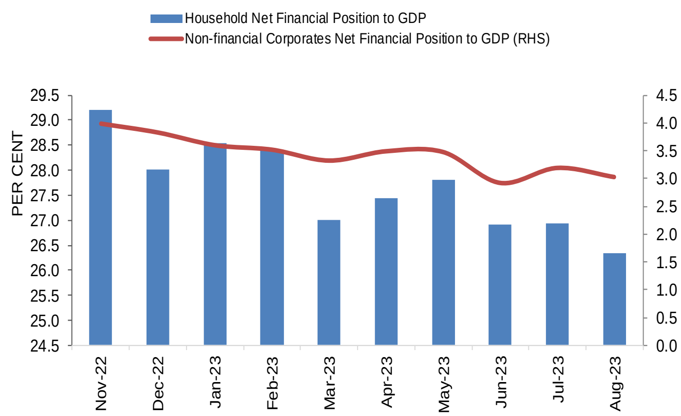
Source: Bank of Jamaica

[12] Personal Loans is used as a measure of household debt. It excludes NHT loans.

3.3 **The quality of the loans extended to the household sector by DTIs remained relatively unchanged over the review period**. The ratio of households' non-performing loans (NPLs) to total household loans remained relatively unchanged at 3.3 per cent at end-August 2023, relative to end-June 2023.[13] Similarly, the ratio of household's past due loans to total household loans deteriorated marginally by 0.1 percentage point to 3.2 per cent at end-August 2023, compared to end-June 2023.

3.4

Chart 3.2 Household and NFC Net Financial Positions



Source: Bank of Jamaica

3.5 **Debt sustainability measures for households and non-financial corporates (NFCs) showed mixed results over the review period.** Households' net financial position to GDP declined (deteriorated) by 2.0 percentage point to 26.3 per cent at end-August 2023, relative to end-June 2023.[14] However, NFCs' net financial position to GDP remained unchanged at per cent to 3.0 per cent at end-August 2023, relative to-end June 2023 (see **Chart 3.2**). The decline in households net financial position was due to faster growth in nominal GDP and household financial liabilities, relative to the growth in their financial assets. The performance in the ratio is indicative of a weakening in households' ability to meet their financial obligations.

3.6 At end-August 2023, the DTI sector recorded a net open *short* FX position to capital of 8.7 per cent, relative to a short position of 5.3 per cent at end-June 2023, which represents a slight uptick in FX risk exposure.[15, 16] (see **Chart 3.4**).

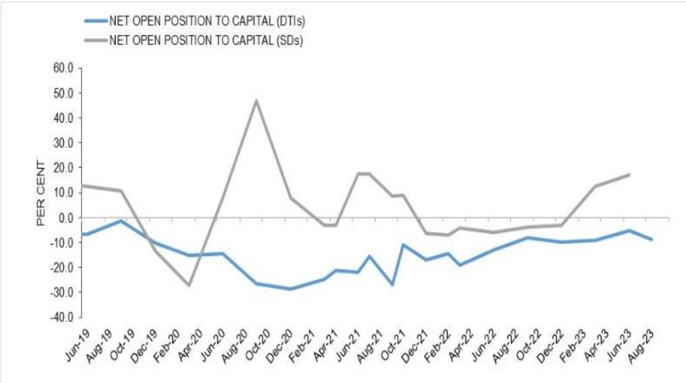
[13] This outturn is consistent with the results of the cobweb measures of financial exposures for DTIs, which showed that DTIs' household and non-financial corporates credit risk were generally unchanged for the review period (see Appendix).

[14] The net financial position to GDP ratio is computed as the difference between household's liabilities and assets as a share of nominal GDP. The liabilities of the household include DTI loans (other consumer & mortgage) and NHT loans, while assets include DTI deposits classified as "Individuals", on-balance sheet retail repo, policy holders' funds on deposit, pension fund deposits, life assurance and annuity contracts. Equity investments and the value of real estate holdings are currently not included in the ratio, which implies that the ratio may understate household true net worth. These components are not included because of data unavailability (i.e equities information is not disaggregated into households and corporates).

[15] These positions were within the prescribed range of +15 per cent/-25 per cent established by the Bank.

16 The net open position across the selected foreign currencies for each institution is the sum of the foreign currency spot position, net forward position and the foreign currency guarantees that are certain to be called and likely irrevocable. The spot position is calculated as foreign currency assets less foreign currency liabilities and capital items.

Chart 3.4 Net Open Position to Capital[17]



Source: Bank of Jamaica

Objective 4 – Limit the impact of interconnectedness and systemic importance

4.1 **There was an increase in DTI's counterparty risk at end-August 2023, relative to end-June 2023.** The dollar value of funding exposures within the domestic financial network of DTIs increased by 6.5 per cent to $232.6 billion at end-August 2023 (see **Table 4.0**).

4.2 **Systemic risk and interconnectivity within the domestic network also decreased over the period.**[18] The systemic risk score fell to 5.0 at end-August 2023, relative to 5.2 at end-June 2023.[19] This was due to a lower concentration of transactions with important entities in the network. The fragility score remained relatively unchanged at 12.7 at end-August 2023 when compared with end June 2023 (see **Chart 4.0**).[20] Notably, the reciprocated links of the DTIs' funding network decreased to 43.5 per cent at end-August 2023, compared to 47.7 per cent at end-June 2023 (see **Table 4.0**).[21]This indicated that financial institutions were less willing to engage in interbank funding transactions with each other and may have preferred to engage with other institutions within their financial group. Moreover, density marginally increased to 50.0 per cent at end-August 2023 relative to 49.2 per cent at end-June 2023.[22]

4.3 **Funding transactions among foreign institutions remained the main sources of systemic risk.** There was an increase in foreign institutions' funding of the domestic network to $206.8 billion at end-August 2023, relative to the $184.7 billion recorded at end-June 2023.

[17] The increase in December 2022 was mainly attributable to an entity affiliated to a DTI group holding a significant amount of "Other currency" assets

[18] Network Metrics as at August 2023 include DTIs only.

[19] The systemic risk score quantifies systemic risk in the financial system by combining each institution's contribution to interbank network risk for a specific period weighted by its overall ranking in the financial system.

[20] Fragility refers to how quickly the failure of any one institution would trigger failures across the network. The greater the degree of concentration in a few institutions the higher the fragility. Scores above 2 are considered fragile.

[21] Reciprocity reflects the proportion of bi-directional funding relationships (Entity X both sends and receives funding from Entity Y and vice versa) that exist in the network.

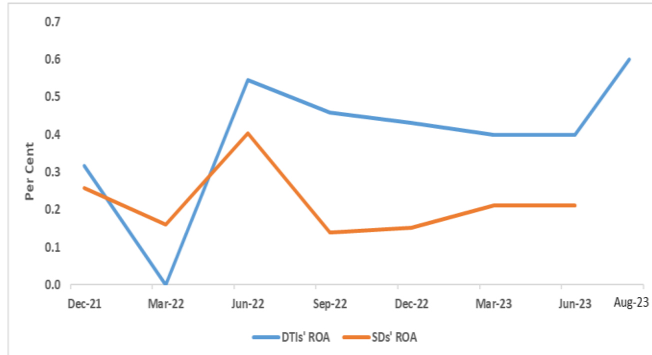
[22] Density measures the proportion of actual funding relationships in the system against the total number of potential funding relationships in the network.

Table 4.0 Descriptive statistics of the financial institutions "funding to" exposures network[23]

J$ Billions	Jun-23	Aug-23
Total System Funding to Exposure	218.5	232.6
Network Metrics		
Network Mean	1.5	1.6
Reciprocity (%)	47.7	43.5
Density (%)	49.2	50.0
Systemic Risk Score	5.2	5.0
Fragility Score	12.7	12.7
Diameter[24]	4.0	5.0

Source: Bank of Jamaica

Chart 5.0 Profitability indicator trends for both DTIs and securities dealers



Source: Bank of Jamaica and Financial Services Commission

Objective 5 – Strengthen the resilience of the financial system

Financial Soundness Indicators

5.1 **Capital adequacy for DTIs remained above the prudential requirement, while DTIs' earnings and profitability improved marginally during the review period.** The capital adequacy ratio (CAR) for DTIs decreased slightly to 14.6 per cent at end-August 2023 relative to 14.9 per cent at end-June 2023 (see **Appendix – Table 1.0**). In addition, DTIs' return on assets (ROA) increased marginally to 0.6 per cent at end-August 2023, relative to 0.4 per cent at end-June 2023 (see **Chart 5.0)**.

Macro-Prudential Indicators

5.2 **Aggregate measures of financial stability in Jamaica showed an improvement in macro-financial conditions**. The macro-financial index (MaFI) is estimated to have improved to 25.0 points for the September 2023 quarter, relative to 27.0 points for the June quarter. This is primarily due to an improvement in annual inflation, which moved to a signal of 0.0 point at end-September 2023, from a signal of 3.0 points at end-June 2023 (see **Chart 5.1**).

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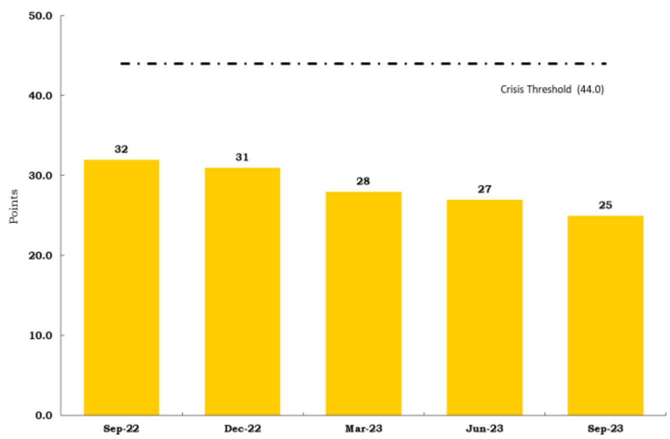
[23] Network Metrics (reciprocity, density, systemic and fragility score, diameter and articulation points) are based on a network without foreign transactions and DTI only.

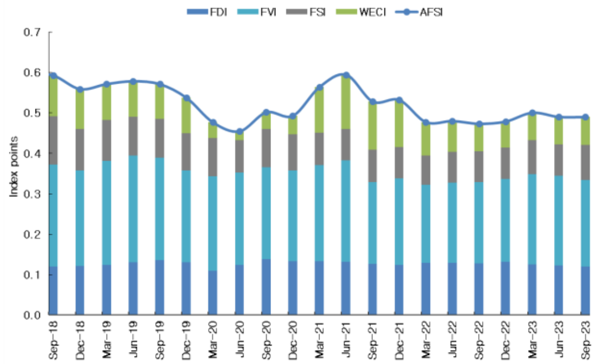
[24] Diameter indicates the "speed" of contagion, the more institutions on the diameter the slower the "speed" of contagion.

Chart 5.1 Macro-Financial Index[25]



Source: Bank of Jamaica

Chart 5.2 Aggregate Financial Stability Index[26]



Source: Bank of Jamaica

5.3 The Aggregate Financial Stability Index (AFSI) is estimated to have remained unchanged for the September 2023 quarter at 0.49. Three of the sub-indices were largely unchanged for the period. On the other hand, the financial development sub-index deteriorated slightly due to a fall in the capitalization of the domestic equity market, relative to GDP (see **Chart 5.2**).

Stress Tests

5.4 Stress tests were consequently conducted to determine the resilience of financial institutions to the impact of further increases in bond yields (domestic and GOJ Eurobonds) (based on data as at end-August 2023). Two scenarios (moderate and severe) related to increases in GOJ bond yields were contemplated (see **Table 5.1**).[27]

[25] The MaFI is a signal-based index computed using scores for indicators based on the number of standard deviations of each indicator from its ‘tranquil period’ mean value. The tranquil period for both indices spans the period March 2002 to March 2003. The scores range from 0 to 5 with a score of 5 representing the most severe signal. The higher the aggregate score, the more severe the signal.

[26] The Aggregate Financial Stability Index is computed as a weighted average of normalized balance sheet and macroeconomic indicators, capturing financial development (FDI), financial vulnerability (FVI), and financial soundness (FSI). See BOJ working paper, “Measuring and Forecasting Financial Stability: The Composition of an Aggregate Financial Stability Index for Jamaica”, Verlie Morris (2010).

[27] The moderate scenario uses the entire historical time series to generate the shock value at the 95th percentile while, under the severe scenario, the data is stratified and only periods of financial stress is used to derive the applicable shocks. The rationale for using this methodology is that it is useful for capturing tail risk. i.e. high impact events that have a small probability of occurring as predicted by a probability distribution.

The magnitude of the interest rate shocks was adjusted downwards based on the assumption that some of the rate increases have already passed-through to existing rates. Current and expected market conditions by end-2023 were also accounted for as they relate to the Fed’s policy adjustment and BOJ’s policy reaction in order to maintain interest rate parity. The historical time series uses quarterly data and spans the period 2000 -2022.

Table 5.1 Stress Testing shocks/Scenarios

Risk	Shocks	
	Moderate	Severe
Interest rate risk		
↑Yields -Domestic	75 bps	125 bps
↑Yields - Foreign	50 bps	100 bps

Fair Value - Stress Test Results

The results of the interest rate risk assessment at end-August 2023 showed that financial institutions are generally resilient to the contemplated increases in GOJ bond yields.[28]

[28] As a result of selected shocks/increases in yields, the new market value of these securities (GOJ bonds) are recalibrated using the price formula in excel. Next the fair value loss is derived and deducted from available buffer capital. However, if the buffer capital is insufficient to cover losses, the residual FV losses are deducted from statutory capital and the corresponding post-shock CAR re-calibrated.

Appendix

Table 1.0 Select Financial Soundness Indicators

	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23	Aug-23
Asset to GDP (%)							
DTI	108.9	101.4	94.2	93.8	94.4	94.7	96.1
SDs	27.1	33.6	32.5	31.8	31.6	32.3	n/a
LIs	22.6	16.4	15.7	15.4	14.7	n/a	n/a
GIs	4.7	4.8	4.6	4.3	n/a	n/a	n/a
Capital Adequacy (%)							
DTI (CAR)	14.3	14.1	13.8	14.2	14.2	14.9	14.6
SDs (CAR)	21.4	22.3	19.9	21.9	21.0	21.2	n/a
LIs (MCSSR)	212.8	232.8	254.4	270.7	273.3	n/a	n/a
GIs (MCT)	276.3	268.9	296.7	304.5	221.1	n/a	n/a
ROA (%)							
DTI	(0.0)	0.5	0.5	0.4	0.4	0.3	0.6
SDs	0.2	0.4	0.1	0.2	0.2	0.2	n/a
LIs	1.7	2.8	2.1	2.4	n/a	n/a	n/a
GIs	(0.1)	(0.2)	0.3	0.6	n/a	n/a	n/a
Liquidity (%)							
DTIs Liquidity Coverage Ratio (LCR)	231.0	211.6	199.3	182.4	183.6	184.0	191.3
DTIs (liquid assets to short-term liabilities)	29.5	30.2	29.6	27.5	26.3	25.7	25.1
SDs (liquid assets to short-term liabilities)	17.3	16.4	16.9	16.5	17.0	17.0	n/a
LIs (liquid assets to total liabilities)	22.7	24.2	24.8	30.4	n/a	n/a	n/a
GIs (liquid assets to total liabilities)	69.4	69.6	66.6	70.2	n/a	n/a	n/a
Non-Performing Loans to Total Loans (%)							
DTIs	2.8	2.7	2.5	2.5	2.4	2.5	2.6
SDs	0.6	0.9	0.7	0.7	0.9	1.0	n/a
Past Due Loans to Total Loans (%)							
DTIs	3.03	2.69	2.97	2.99	2.48	3.50	3.44

Source: Bank of Jamaica and Financial Services Commission

Heat Maps of Core Indicators

The below tables provide the values over time of core indicators associated with macro-prudential assessment objectives. Each indicator is ranked according to five percentiles based on the empirical distribution of historical values. Each percentile is shaded according to the below key.

0 – 20%, 21% – 40%, 41% – 60%, 61% – 80%, 81% – 100%

Objective 1: Core indicators associated asset price and credit boom-bust cycles

			Jun-21	Sep-21	Dec-21	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23	Aug-23
Objective 1: Mitigate and prevent excessive credit growth and leverage	**Credit-to-GDP measures[1/]**	DTI private credit-to-GDP gap	7.53	4.55	4.18	1.80	1.44	-0.17	-0.47	-0.88	-2.82	-3.94
		Total credit-to-GDP gap	7.55	4.55	3.89	1.56	1.06	-0.52	-0.58	-0.89	-2.84	-0.02
	Credit Indicators: year-on-year growth (%)	Total Credit	6.83	7.08	7.08	8.05	7.73	10.28	4.36	12.30	12.54	11.50
		DTI Credit to Households	6.40	4.80	5.56	10.81	9.60	6.71	6.98	3.47	3.44	3.40
		DTI Credit to Non-financial Corporates	5.36	1.74	12.17	12.10	5.48	4.78	6.71	4.15	2.83	2.83
	Leverage 2[/]	DTI	710.89	737.13	771.07	782.52	782.52	812.35	759.38	769.51	779.20	776.93
		SDs	594.53	571.96	588.55	625.20	625.20	705.07	663.83	652.46	664.26	-
		LIs	274.98	269.28	269.80	261.81	262.41	251.33	240.48	242.19	-	-
		GIs	306.52	298.63	289.77	296.78	358.71	348.07	347.19	386.10	-	-

[1/] Total credit is DTI credit plus public sector credit (gross loans to public sector)

[2/] Leverage = (total financial assets) / equity

[3/] * Data for Jun and August 2023 remains unavailable for SDs, Lis and GI's, therefore the missing indicators are denoted by the symbol in parentheses (-)

Objective 2: Core indicators associated with the intermediation of funds

			Jun-21	Sep-21	Dec-21	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23	Aug-23
Objective 2: Mitigate and prevent excessive maturity mismatches and market illiquidity	Cumulative Maturity Gap to Total Assets (%)	DTIs - up to 30 days	-42.05	-41.92	-40.66	-43.21	-44.89	-44.85	-44.42	-43.50	-44.62	-43.77
		DTIs - up to 90 days	-46.61	-45.95	-44.35	-47.83	-47.86	-46.33	-44.89	-46.93	-46.30	-46.49
		DTIs - up to 365 days	-44.85	-44.69	-45.38	-46.06	-46.50	-44.91	-44.88	-45.21	-46.39	-46.14
		SDs - up to 30 days	-14.82	-11.16	-9.63	-6.17	-7.68	-4.19	-9.25	-8.69	-8.17	-
		SDs - up to 90 days	-28.48	-24.26	-20.76	-22.75	-21.95	-22.04	-26.21	-21.72	-25.00	-
		SDs - up to 365 days	-33.73	-27.85	-32.40	-28.33	-29.40	-32.84	-30.75	-30.34	-33.87	-
	Maturity Transformation (%)[1/]	DTI - MT1	43.78	43.71	44.41	45.01	45.01	43.88	44.01	44.28	45.72	45.57
		SDs - MT1	36.03	31.71	36.19	32.44	32.44	30.36	28.06	29.01	29.78	-
		LIs - MT1	3.39	2.12	3.18	0.59	-1.77	-1.43	-4.76	-31.24	-	-
		GIs - MT1	-11.68	-11.13	-14.48	-29.34	-22.28	-26.59	-26.58	-20.78	-	-
	Liquidity Transformation (%)[2/]	DTI - LT3	281.72	280.18	281.05	295.91	295.91	300.88	307.26	315.19	262.18	301.96
		SDs - LT3	199.27	167.46	167.20	166.84	166.84	148.20	211.97	160.61	211.77	-
		LIs - LT3	187.18	169.50	130.83	125.59	104.84	117.78	93.04	56.65	-	-
		GIs - LT3	138.47	122.59	114.32	112.02	110.02	129.77	114.92	116.95	-	-

[1/] MT1 = (long term assets - long term liabilities - nonredeemable equity) / total financial assets
[2/] LT3 = short term liabilities [≤ 30 days] / liquid assets [broad]
[3/] * Missing indicators, due to unavailable date, are denoted by the symbol in parentheses (-).

Objective 3: Core indicators associated with exposure concentrations

			Jun-21	Sep-21	Dec-21	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23	Aug-23
Objective 3: Limit direct and indirect exposure concentrations	**Exposure to Financial Markets (%)**	Composite Indicator of Systemic Stress	0.30	0.28	0.39	0.23	0.37	0.27	0.37	0.31	-	-
		DTIs - Net open position to capital	-21.47	-26.78	-16.86	-19.00	-13.12	-8.05	-9.97	-9.23	-5.27	-8.71
		Securities Dealers - Net open position to capital	17.65	8.51	-6.44	-4.04	-5.98	-3.96	-3.10	12.44	17.31	0.00
	Exposure to Sovereign Risk (%)	DTIs - Public Sector Debt to total assets	9.72	10.00	9.32	9.67	8.83	7.76	8.22	7.32	8.35	7.87
		Securities Dealers - Public Sector Debt to total assets	15.14	15.27	15.45	14.55	14.39	14.51	14.97	14.77	15.84	-
		Insurance Companies - Public Sector Debt to total assets	35.22	35.54	36.39	23.40	34.69	35.57	35.89	-	-	-
	Exposure to Households and Corporates (%)	Household debt to GDP	38.44	37.29	36.90	37.25	37.13	33.47	32.86	33.54	32.49	32.00
		Household Net Financial Position to GDP	38.97	36.54	34.42	31.57	31.70	29.40	28.02	28.33	27.30	26.35
		Corporate debt to GDP	20.67	19.65	21.39	20.87	19.28	17.38	17.56	17.87	17.37	17.05
		Corporate Net Financial Position to GDP	4.79	4.67	2.10	3.17	4.76	4.06	3.82	3.36	3.01	3.03
	Exposure to Real Estate (%)	DTIs - Mortgages to Assets	11.19	11.31	11.48	12.53	12.16	12.47	12.49	12.83	12.90	12.86

1/ * Missing indicators, due to unavailable date, are denoted by the symbol in parentheses (-).

Objective 4: Core indicators associated with systemic importance and interconnectedness

			Jun-21	Sep-21	Dec-21	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23	Aug-23
Objective 4: Limit the impact of interconnectedness, systemic importance and misaligned incentives	**Systemically Important Financial Institutions (SIFIs)**	Total SIFI group assets to total system assets	75.21	74.83	75.01	74.81	75.05	74.94	75.33	73.79	64.42	-
	Non-Deposit Taking Financial Institution (NDTFIs)	NDTFIs asset share to total system assets	35.95	35.98	35.71	36.01	36.52	35.91	35.48	25.43	25.40	-
	Dollarization Indicators (%)	FX investment holdings to total investment - SDs	55.98	53.14	53.66	55.98	55.10	55.15	54.51	53.92	53.92	-
		FX loan & investment holdings to total investment - DTIs	31.73	30.83	32.11	31.56	30.71	32.25	32.86	32.62	32.28	31.67
		FX deposits to total deposits - DTIs	38.90	38.82	39.64	41.05	40.11	39.89	39.01	38.34	38.44	37.98

1/ * Missing indicators, due to unavailable date, are denoted by the symbol in parentheses (-).

Objective 5: Core indicators associated with resilience of financial institutions and the macro-financial environment.

			Jun-21	Sep-21	Dec-21	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23	Aug-23
Objective 5: Strengthen the resilience of the financial system & infrastructure	**Composite Indices**	Macro-Financial Index	21.00	21.00	25.00	27.00	33.00	32.00	31.00	28.00	27.00	25.00
		Micro-Prudential Index - DTIs	21.00	25.00	29.00	25.00	27.00	28.00	26.00	28.00	30.00	29.00
		Banking Stability Index	0.39	0.21	-0.16	0.10	0.32	0.04	0.03	0.00	-	-
		Aggregate Financial Stability Index	0.59	0.53	0.53	0.48	0.48	0.47	0.48	0.50	-	-

1/ * Missing indicators, due to unavailable date, are denoted by the symbol in parentheses (-).