



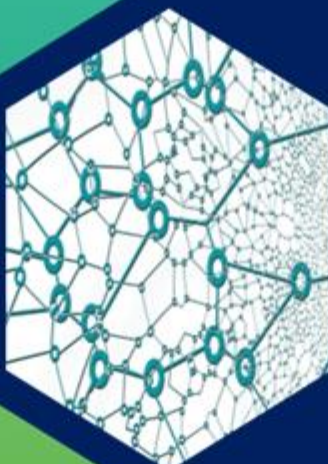
MITIGATE AND PREVENT EXCESSIVE CREDIT GROWTH AND LEVERAGE

MITIGATE AND PREVENT EXCESSIVE MATURITY MISMATCHES AND MARKET ILLIQUIDITY



LIMIT DIRECT AND INDIRECT EXPOSURE CONCENTRATIONS

LIMIT THE IMPACT OF INTERCONNECTEDNESS, SYSTEMIC IMPORTANCE AND MISALIGNED INCENTIVES



STRENGTHEN THE RESILIENCE OF THE FINANCIAL SYSTEM & INFRASTRUCTURE

Macroprudential Policy Report

Highlights

June 2024

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 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.*



Table of Contents

| | |
|---|----|
| Overview | 3 |
| 1.0 Macroeconomic/Macro Financial Developments | 4 |
| 2.0 Macro-Prudential Risk Assessment..... | 6 |
| Credit Risks | 6 |
| Market Risks | 7 |
| Liquidity Risks..... | 9 |
| 3.0 Sectoral Vulnerabilities | 11 |
| 4.0 Stress Tests..... | 13 |
| 5.0 Macro Prudential Policy Summary and Recommendation | 13 |

Overview

The financial system was fairly stable during the June 2024 quarter, as reflected in the Bank's composite measures of financial stability. However, GDP growth continued to slow during the quarter and coincided with a decline in the flow of credit to the private sector.

DTIs' asset quality remained relatively stable over the period and there was a general improvement in the quality of their mortgage portfolio. DTIs also continued to maintain high levels of provisioning. The financial system reflected improvements in liquidity over the review period and foreign currency risk was prudently managed. While fair values losses continued to feature on the balance sheets of both DTIs and SDs, the sector's capital base remained above prudential norms.

Market risk and credit-related stress tests were conducted to assess financial institutions' resilience to various macro-financial shocks. The results of the assessments showed that the financial sub-sectors were broadly resilient to the contemplated stresses, reflecting sufficient capital buffers.

Bank of Jamaica will continue to promote financial stability by conducting ongoing monitoring and assessment of sectoral risks, as well as implementing relevant legislative and regulatory reforms to ensure that adequate levels of liquidity and capital are available to support emerging vulnerabilities.

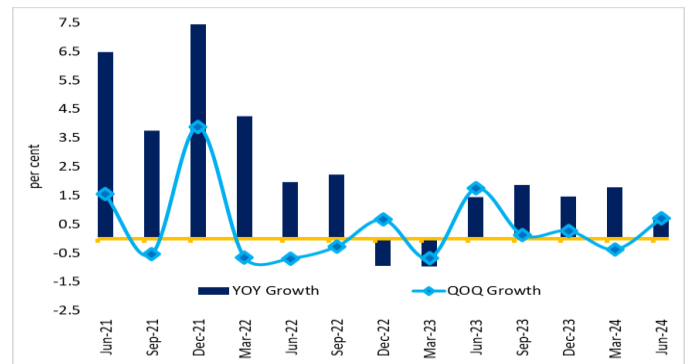
1.0 Macroeconomic/Macro Financial Developments

1.1 There was a slowdown in economic growth for the June 2024 quarter which signals the potential for reduced sources of funding, a fall in credit creation and a deterioration in credit quality. Real GDP is estimated to have grown by 0.4 per cent in the June 2024 quarter, slower than the 1.4 per cent growth for the March 2024 quarter. While, while GDP is projected to decline for the September 2024 quarter, it is expected to gradually rebound.

1.2 Inflation continued to fall in the Bank’s target range. At June 2024, the annual point to point inflation rate was 5.4 per cent lower relative to 5.6 per cent at end March 2024. The Bank’s projections indicate that inflation will remain within the target range over the next two years, except for one-off breaches of the upper limit in the September 2024 and June 2025 quarters. The passage of Hurricane Beryl is expected to adversely impact the prices of agricultural and vegetable products, which may adversely affect inflation expectations.

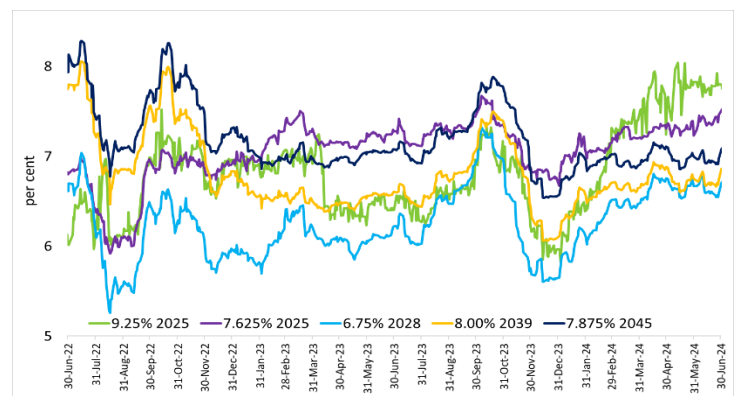
The Jamaican foreign exchange market was relatively more stable during the review quarter. The exchange rate depreciated by 0.74 per cent on an annual basis at end June 2024 compared to 1.78 per cent at end March 2024 (see **Chart 1.1**).

Chart 1.1 Exchange Rate Movements



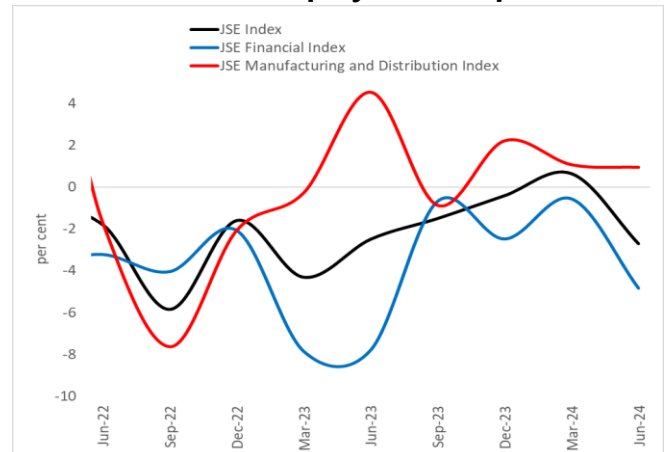
Source: Bank of Jamaica

Chart 1.2 GOJ Global Bond Yields



Source: Bank of Jamaica

Chart 1.3 Jamaican equity markets performance



Source: Jamaica Stock Exchange

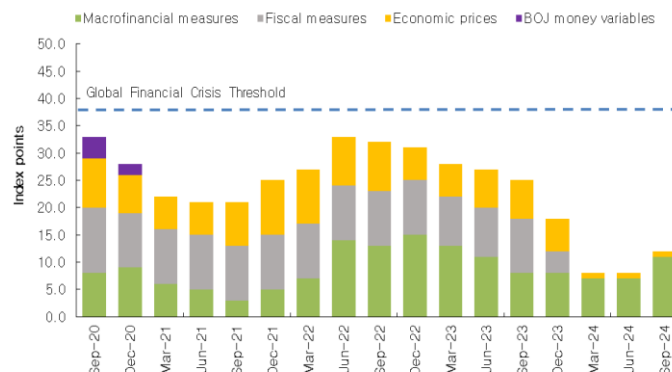
1.3 Over the June 2024 quarter, the weighted average of the indicative yields on GOJ's Eurobonds remained flat in the context of the outlook for the path of the FED's policy rate. However, this metric exhibited significant volatility over the quarter. A disaggregation of the bond yields shows that the yields on the longer tenors (GOJGB 6.75% 2028, GOJGB 8% 2039, and GOJGB 7.875% 2045) increased by 12.7, 10.0 and 8.7 bps, respectively, at end June 2024 relative to end March 2024 (see **Chart 1.2**).^{1,2}

1.4 The JSE Main Market Index declined by 2.7 per cent for the June 2024 quarter compared with an increase of 0.6 per cent for the March quarter. The JSE Financial Index continued to perform below the Main index, representing a continuation of the downward trajectory which began in the third quarter of 2023. However, the JSE Manufacturing and Distribution Index grew during the quarter, albeit at a slower pace when compared with the previous quarter (see **Chart 1.3**).³

Macro-Prudential Indicators

1.5 Aggregate measures of financial stability in Jamaica reflected the positive macro-financial conditions. Similar to the previous quarter, the macro-financial index (MaFI) remained at 8.0 points for the June 2024 quarter.⁴ The continued stability in the index primarily reflected low debt ratios and lower inflation volatility (see **Chart 1.4**).

Chart 1.4 Macro-Financial Index



1.6 The Aggregate Financial Stability Index (AFSI) was also relatively unchanged for the June 2024 quarter compared the March 2024 quarter (see **Chart 1.5**).^{5,6} This stability reflected declines in the Financial Development and Financial Vulnerability sub-indices, which were offset by increases in the Financial Soundness and World Economic Climate sub-indices.

¹ The GOJGB Yields reflect Bid Prices.

² The weighted average of the yields on GOJ's Eurobonds remained flat, increasing by 8.9 bps at end June 2024 from end March 2024 compared to a larger increase of 47.5bps for the March 2024 quarter. The longer term 2028, 2039, and 2045 tenors increased by 12.7, 10.0, and 8.7 bps for the June 2024 compared to 82.7, 56.2, and 34.6 bps for the March 2024 quarter, respectively.

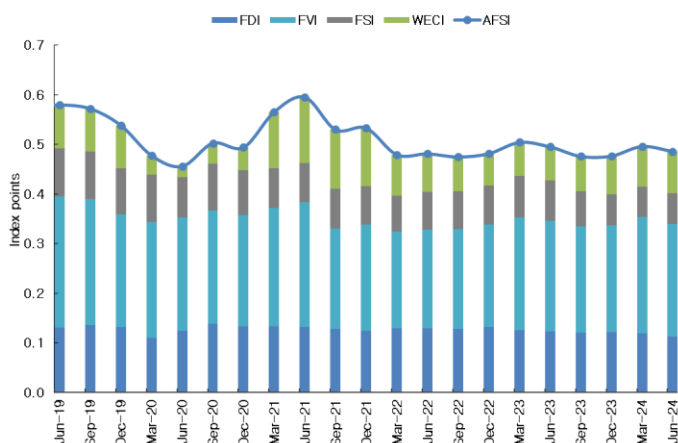
³ The JSE Financial Index measures the performance of only the financial companies listed on the Main Market and Junior Market. The JSE manufacturing and distribution Index measures the performance of only the manufacturing and distribution companies listed on the Main Market and Junior Markets.

⁴ 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.

⁵ 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).

⁶ There was an upward revision to the 0.49 reported in the March quarter which reflects updated estimates.

Chart 1.5 Aggregate Financial Stability Index



2.0 Macro-Prudential Risk Assessment

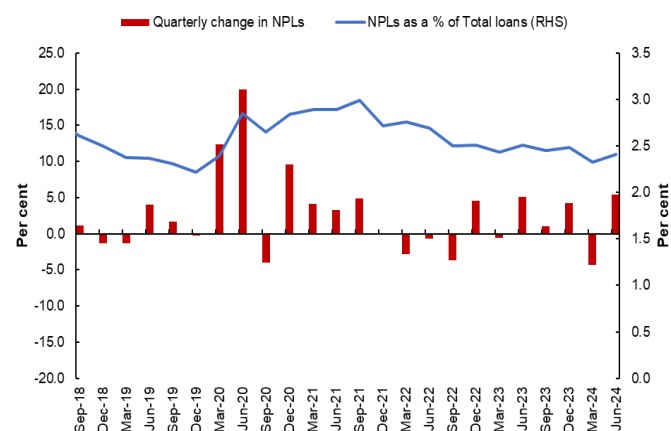
Credit Risks

2.1 DTIs’ asset quality remained relatively stable over the review period. The ratio of non-performing loans to total loans increased by 0.1 percentage point to 2.4 per cent at end-June 2024, relative to end-March 2024. This performance was primarily due to stronger growth in the dollar value of NPLs of 5.4 per cent (to \$35.6 billion) for the June 2024 quarter, relative to growth of 1.6 per cent in DTIs’ total loans (see **Chart 2.0**).

2.2 There was also a general improvement in the quality of DTIs’ mortgage portfolio, particularly residential mortgages, over the review period. The ratio of mortgage NPLs to total mortgage loans was relatively unchanged at 1.5 per cent for the June quarter, compared to the previous quarter.

2.3 Concentration risk however remained significant as DTIs’ loan portfolio continued to be dominated by personal loans. In particular, personal loans (which includes mortgages) continued to account for just over 50.0 per cent of DTIs’ loan portfolio at end-June 2024, with mortgages accounting for 46.1 per cent of personal loans.

Chart 2.0 NPLs in the DTI Sector



Source: Bank of Jamaica

2.4 To mitigate credit risk, DTIs continued to maintain high levels of provisioning during the review period. The NPL coverage ratio decreased marginally to 118.7 per cent at end-June 2024 from 120.9 per cent at end-March 2024.^{7, 8} However, the loan loss provisioning rate, as measured by the ratio of loan loss provisions to total loans, remained relatively unchanged at 2.9 per cent at end-June 2024, relative to end-March 2024.⁹

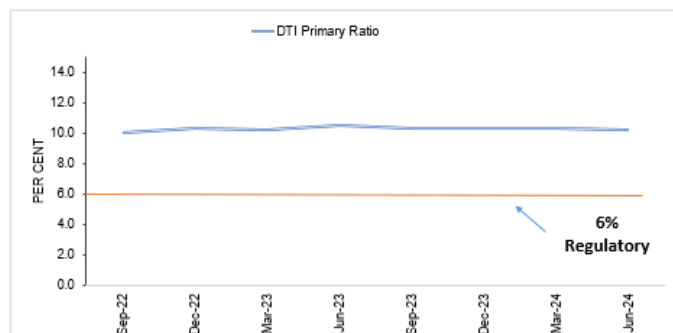
⁷ NPL coverage ratio measures a bank’s ability to absorb potential losses from its non-performing loans. It is calculated as provisions for impairment under the International Financial Reporting Standards (IFRS) plus prudential provisions for expected losses based on regulatory criteria as a ratio to NPLs.

⁸ DTIs’ total provisions over the review period grew by 3.4 per cent to \$42.3 billion at end-June 2024, relative to the 5.4 per cent growth in NPLs.

⁹ Loan loss provisions represent the net new allowances that DTIs make in the period against bad or impaired loans. This is done based on their judgement as to the likelihood of losses. Under the IFRS, it is calculated as provisions of impairment plus prudential provisions as a percentage of total loans. Prudential provisions under IFRS refers to the timelier recognition of liabilities and expenses than of assets and income. It is relevant for financial instruments, where there has been no significant increase in credit risk since initial recognition.

2.5 The leverage ratio for the financial sector, which measures the extent to which financial institutions use debt to fund asset expansion, declined (improved) during the June 2024 quarter.^{10,11} The leverage ratio for the system declined by 2.95 percentage points to 648.6 per cent for the quarter ended June 2024 relative to the March 2024 quarter, which reflected that the financial system (particularly DTIs) increased its use of equity rather than debt to fund asset expansion. The improvement in the leverage metric mainly reflected the growth in equity outpacing the growth in total financial assets (see **Chart 2.1**).¹²

2.6 The primary ratios for all DTIs at end-June 2024, remained above the regulatory requirement of 6.0 per cent, indicating the absence of overleverage.¹³



Source: Bank of Jamaica and Financial Services Commission

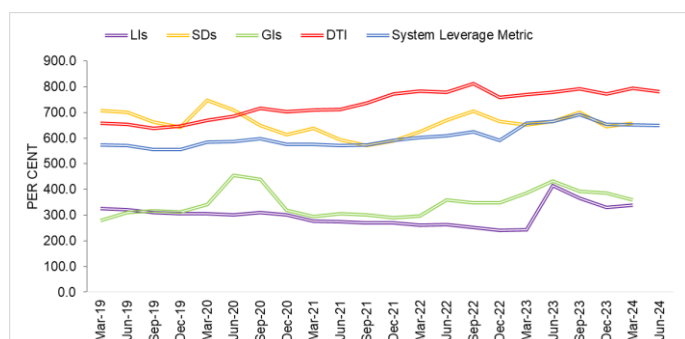
Market Risks

2.7 **Foreign currency risk within the DTI and SD sectors remained fairly stable over the review quarter.** DTIs' foreign currency investment holdings as a proportion of total investments increased marginally to 30.2 per cent at end-June 2024, from 29.9 per cent at end-March 2024. Furthermore, the ratio of DTIs' foreign currency deposits to total deposits was unchanged at approximately 37.0 per cent at end-June 2024, relative to the previous quarter.¹⁴

2.8 At end-June 2024, the DTI sector recorded a net open *short* FX position to capital of 5.6 per cent, relative to a *short* position of 14.1 per cent at end-March 2024, reflecting attempts to reduce their FX risk exposure.¹⁵ This short position nonetheless indicates the continued susceptibility of these institutions to exchange rate depreciation. The change in the NOP was largely attributable to increased holdings of USD-denominated assets by two entities affiliated with SIFI groups.

2.9 The SD sector recorded a net open *long* FX position to capital of 7.7 per cent, relative to a

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



¹⁰ The leverage ratio is calculated as the ratio of total financial assets to equity

¹¹ Calculation of the leverage metric for the system utilized data at end June 2024 for DTIs, while for SDs Lis and GIs the metric used data at end March 2024.

¹² The improvement in the metric for the DTIs reflected an increase in equity which was primarily driven by several factors including increases in unappropriated profits, increases in other non-distributable reserves, fair value gains, distribution of ordinary shares and reductions in prudential loss reserves.

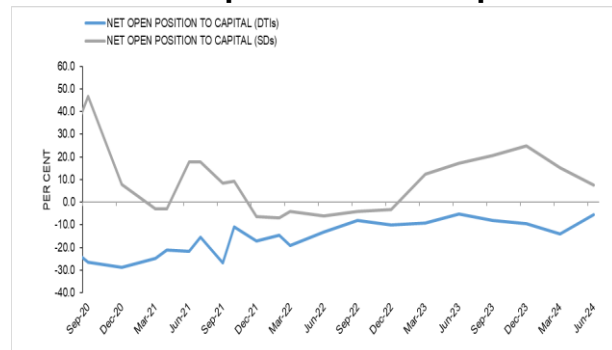
¹³ The primary ratio is calculated as the ratio of total equity to total assets.

¹⁴ Total deposits are the aggregate of all domestic and foreign currency funds held in demand (including current and savings accounts) and term accounts on behalf of financial (excluding deposit-taking institutions) and non-financial customers.

¹⁵ Foreign Currency Net Open Position (NOP) refers to the total exposure in foreign currencies. It represents the difference between their foreign currency assets and liabilities.

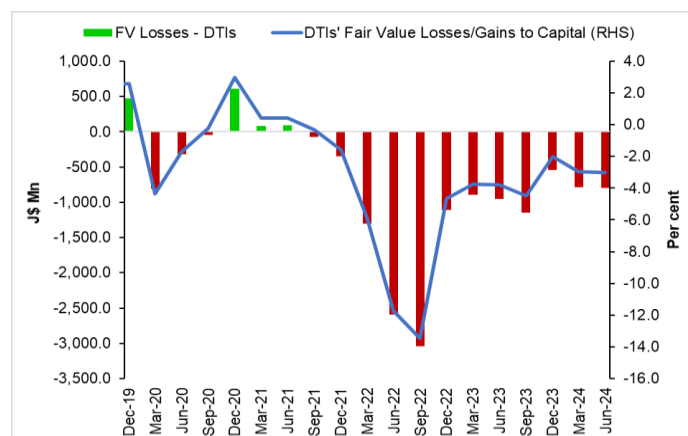
long position of 15.1 per cent at end-March 2024, which also signals a reduction in FX risk exposure (see **Chart 2.2**).^{16, 17}

Chart 2.2 Net Open Position to Capital



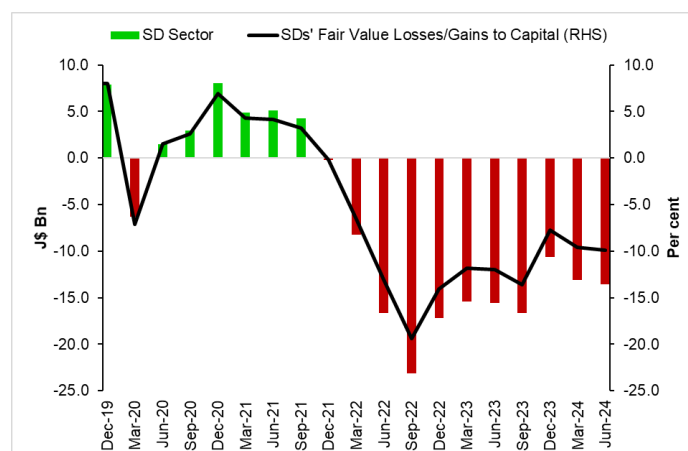
Source: Bank of Jamaica and Financial Services Commission

Chart 2.3 Trends in Fair Value Losses for DTIs



Source: Bank of Jamaica

Chart 2.4 Trends in Fair Value Losses for SDs



Source: Bank of Jamaica

2.10 In the context of the decrease in the prices for the longer tenor GOJGB over the quarter, DTIs' unrealized fair value losses increased by \$0.1 billion to \$7.9 billion during the June 2024 quarter.¹⁸ In this context, the ratio of DTIs' fair value losses to capital was relatively unchanged at -3.0 per cent at end-June 2024, compared to the previous quarter (see **Chart 2.3**).

2.11 SDs' fair value losses also increased marginally by \$0.5 billion to \$13.6 billion for the June 2024 quarter. In this context, the ratio of SDs' fair value losses to capital worsened slightly by 0.4 percentage point to -9.9 per cent at end-June 2024, compared to end-March 2024 (see **Chart 2.4**).¹⁹

2.12 **SDs' and DTIs' exposure to equities remained low.** DTIs' equity investments to assets and equity investments to capital remained unchanged at 0.2 and 2.7 per cent, respectively, at end-June 2024 compared to end-March 2024 (see **Table 2.0**).

2.13 SDs' exposure to equities relative to assets was relatively higher than for the DTI sector. The

¹⁶ These positions were within the prescribed range of +15 per cent/-25 per cent established by the Bank.

¹⁷ 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.

¹⁸ A decomposition of DTIs fair value adjustments on investments showed that the increase in fair value losses primarily reflected increased holdings of GOJ Global bonds by one institution.

¹⁹ This outturn was primarily driven by three SDs (JMMB, BARITA, and PCFS) who were most impacted by fair value losses.

ratios for securities dealers at was 4.8 per cent at end-June-24, while general and life insurance companies recorded respective ratios of 4.8 per cent and 11.2 per cent at end-March 2024.

Table 2.0 Trends in Equities Concentration

| Investments in Equities to Assets (%) | | | | | |
|--|--------|--------|--------|--------|--------|
| | Jun-23 | Sep-23 | Dec-23 | Mar-24 | Jun-24 |
| DTIs | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 |
| Life Insurance | 12.1 | 11.6 | 11.5 | 11.2 | - |
| General Insurance | 3.4 | 4.1 | 4.5 | 4.8 | - |
| Securities Dealers | 4.8 | 4.7 | 4.6 | 4.8 | 4.8 |
| Investments in Equities to Capital (%) | | | | | |
| DTIs | 2.9 | 2.8 | 2.6 | 2.7 | 2.7 |
| Life Insurance | 51.4 | 46.7 | 41.9 | 41.8 | - |
| General Insurance | 11.9 | 12.1 | 12.9 | 12.7 | - |
| Securities Dealers | 31.9 | 34.4 | 29.8 | 32.3 | 32.5 |

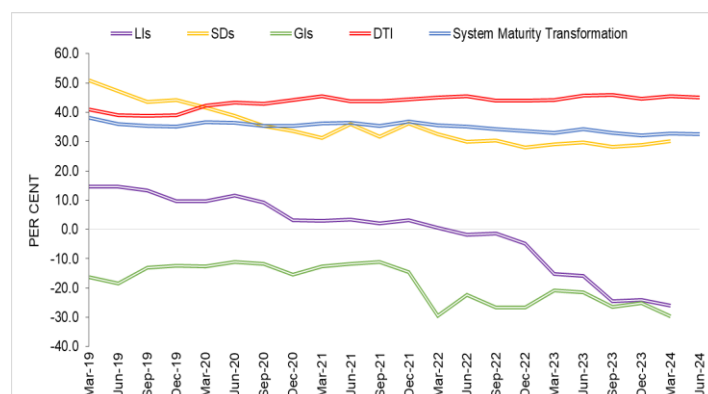
2.14 **The maturity transformation ratio for the financial system, which measures the maturity mismatch between assets and liabilities, remained fairly stable and within historical trends.** For the June 2024 quarter, the maturity transformation risk metric for the financial sector was 32.6 per cent relative to 32.8 per cent for the previous quarter.²⁰ The stability of the system metric reflected a slight increase in long term liabilities and equity relative to long term assets.²¹

2.15 For the SD sector, the metric for the March 2024 quarter was 30.2, a slight deterioration relative to 28.8 for the December 2023 quarter. This was driven by a greater decline in long-term liabilities and equity relative to the decline in long term assets. Similarly, the metric for life and general insurance companies also remained relatively stable during the March 2024 quarter. (see **Chart 2.5**).²²

²⁰ Calculation of the maturity metric for the system utilized data at end June 2024 for DTIs, while for SDs Lis and GIs the metric used data at end March 2024. It is calculated as the follows: $\frac{\text{Long term assets} - \text{long term liabilities} - \text{equity}}{\text{Total assets}}$

²¹ For the DTIs the maturity mismatch ratio was 45.1 at end June 2024 relative to 45.6 at end March 2024

Chart 2.5 Maturity transformation (long term) DTIs, securities dealers, life and general insurance companies



Source: Bank of Jamaica and Financial Services Commission

Liquidity Risks

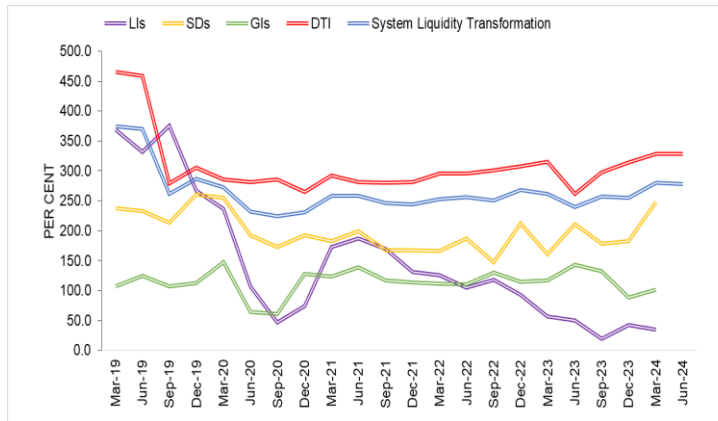
2.16 **The liquidity transformation risk metric for the financial sector improved over the June 2024 quarter.** The metric, which measures the extent of coverage of short-term liabilities by liquid assets, declined by 2.13 percentage points to 278.6 per cent at end-June 2024 relative to end-March 2024 (see **Chart 2.6**).^{23, 24} This performance reflected a slight increase in liquid assets relative to the growth in short term liabilities. This outturn mainly reflected improvements within the DTI sector as liquid assets increased due to increases in short-term loans and domestic currency due from BOJ, and a reduction in short-term investments.

²² For Lis and GIs the maturity metric was -26.0 and -29.6 respectively at end-March 2024 compared to -24.0 and -25.2 at end-December 2023.

²³ The liquidity transformation metric is calculated as the ratio of short-term liabilities to liquid assets. Calculation of the liquidity transformation metric for the system utilized data at end June 2024 for DTIs and, while for SDs Lis and GIs the metric used data at end March 2024

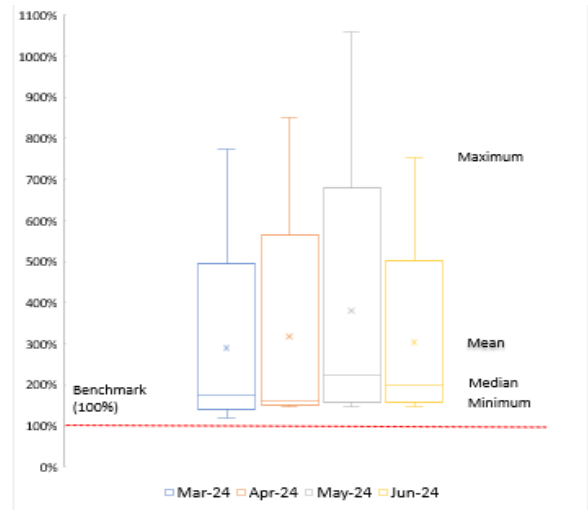
²⁴ At end-June 2024 short-term liabilities grew by 1.1 per cent while liquid assets grew by 1.9 per cent relative to March 2024.

Chart 2.6 Liquidity Transformation – DTIs, securities dealers, life and general insurance companies



Source: Bank of Jamaica and Financial Services Commission

Chart 2.7 Liquidity Coverage Ratio (JMD and USD Equivalent) at end-June 2024 – DTIs



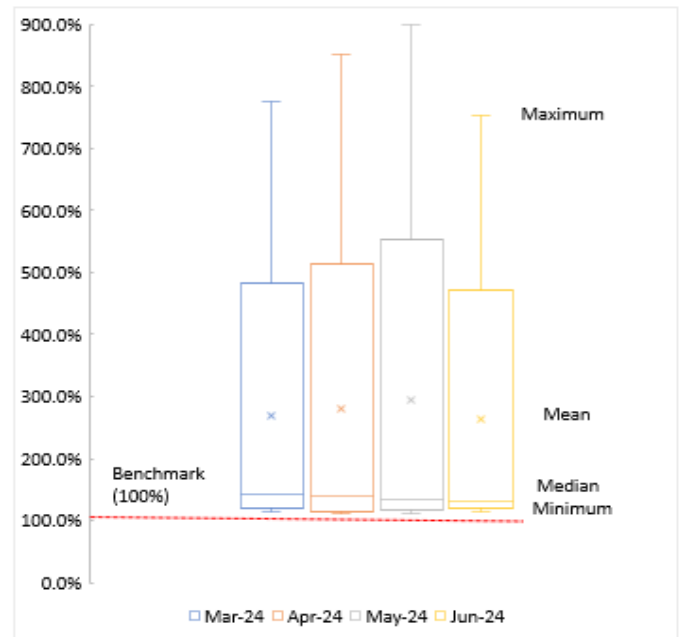
Source: Bank of Jamaica

2.17 The liquidity coverage ratio (LCR) demonstrated that DTI liquidity improved.²⁵

At end-June 2024, the average LCR ratio for the sector increased to 274.4 from 231.9 percent at end March 2024. Additionally, all DTIs exceeded the LCR benchmark of 100.0 per cent for both Jamaican and U.S. dollar denominated LCR and the Jamaican dollar denominated LCR. (see **Charts 2.7 and 2.8**).

2.18 These improvements were mainly driven by the growth in high quality liquid assets (HQLAs) coupled with a decline in net cash outflows across several institutions. The increase HQLAs was concentrated in domestic currency GOJ investments and BOJ reserves and securities.

Chart 2.8 Liquidity Coverage Ratio (JMD only) at end-June 2024 – DTIs



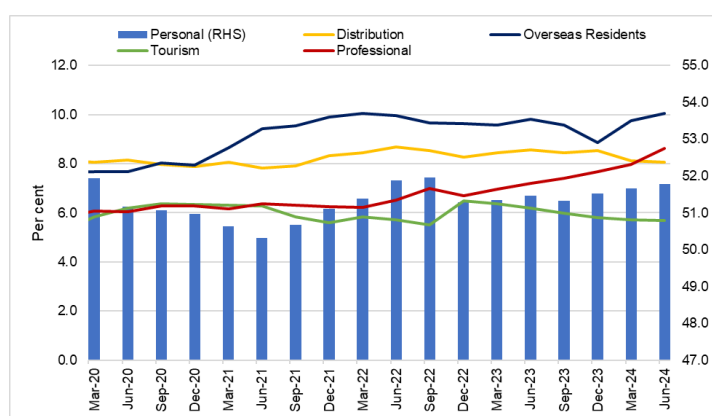
Source: Bank of Jamaica

²⁵ 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.

3.0 Sectoral Vulnerabilities

3.1 DTIs' credit to the top 5 economic sectors, as a share of DTIs' total loans, grew marginally over the June quarter. In particular, DTIs' credit to the top 5 economic sectors grew to 84.2 per cent of DTIs' total loans at end-June 2024, from 83.3 per cent at the close of the previous quarter. However, a decomposition of the shares within the DTIs' loan portfolio showed mixed results. Of note, the share of DTIs' credit to the *Professional services* and *Overseas Residents* sectors increased by 0.7 percentage point and 0.3 percentage point, respectively, to 8.6 per cent and 10.1 per cent of DTIs' total credit at end-June 2024. In contrast, the share of DTIs' credit to the *Distribution* and *Tourism* sectors remained relatively unchanged at 8.1 per cent and 5.7 per cent, respectively (see **Chart 3.0**).

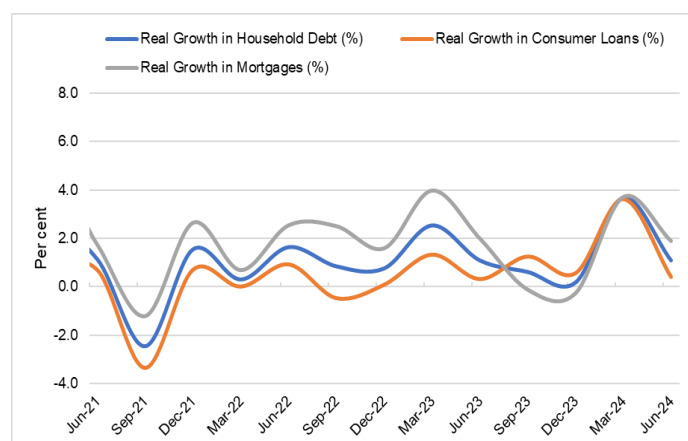
Chart 3.0 DTIs' Share of Credit to the Top 5 Economic Sectors



Source: Bank of Jamaica

- 3.2 DTIs' exposure to the household (HH) sector fell over the June 2024 quarter.** In real terms, HH sector debt grew by 1.1 per cent at end-June 2024, relative to growth of 3.7 per cent for the previous quarter (see **Chart 3.1**).²⁶
- 3.3 The deceleration in the growth in HH debt was largely due to a decline in real growth in consumer loans for the review quarter.** In particular, real growth in consumer loans decelerated to 0.4 per cent for the June 2024 quarter, relative to an increase of 3.6 per cent for the March 2024 quarter.²⁷

Chart 3.1 Real growth in HH debt and its sub-components for DTIs



Source: Bank of Jamaica

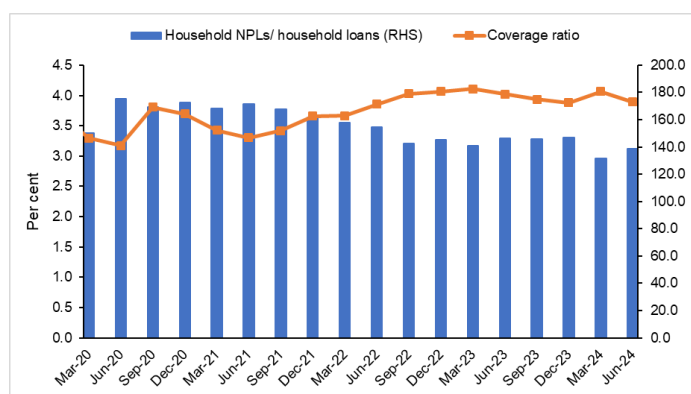
3.4 HH loan quality remained fairly stable over the review quarter. The ratio of households' non-performing loans (NPLs) to total household loans increased marginally to 3.1 per cent at end-June 2024, from 3.0 per cent at end-March 2024. Similarly, the ratio of household's past due loans to total household loans was relatively unchanged at 3.5 per cent at the end of the review quarter, compared to the previous quarter. Moreover, DTIs

²⁶ Personal Loans is used as a measure of household debt. It excludes NHT loans.

²⁷ The deceleration in consumer real loan growth was primarily driven by a decline in the value of overdraft loans extended by DTIs to \$433.0 million from \$507.4 million at end-June 2024, relative to end-March 2024.

maintained adequate coverage of NPLs for the HH sector, with the ratio of loan loss provisions plus prudential provisioning to HH non-performing loans remaining well above 100.0 per cent over the June 2024 quarter (see **Chart 3.2**).

Chart 3.2 DTIs' HH sector loan quality & loan loss provisioning to HH sector NPLs



Source: Bank of Jamaica

3.5 DTIs' exposure to the corporate sector, as measured by corporate sector debt to DTIs' assets, remained fairly stable at end-June 2024. In particular, this ratio declined marginally to 19.0 per cent at end-June 2024, from 19.1 per cent at end-March 2024 (see **Chart 3.3**). Furthermore, in real terms, DTIs' holdings of corporate sector debt remained relatively unchanged.

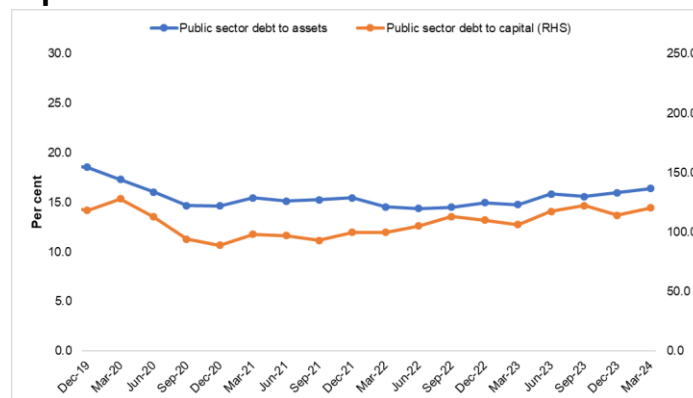
3.6 SDs' exposure to public sector debt continued to trend upwards over the March 2024 quarter. SDs' holdings of public sector debt increased by 5.4 per cent, relative to end-2023, causing the ratio of SDs' public sector debt to total assets to increase slightly by 0.4 percentage point to 16.4 per cent at the end of the review quarter (see **Chart 3.4**).

Chart 3.3 Real growth in corporate debt held by DTIs & corporate debt as a share of DTIs' assets



Source: Bank of Jamaica

Chart 3.4 Public sector debt holdings to assets & capital for securities dealers



Source: Bank of Jamaica

4.0 Stress Tests

Context

- 4.1 Market-based and credit-related stress tests were conducted to assess financial institutions' resilience to various macro-financial shocks. Furthermore, given the highly interconnected nature of the Jamaican financial system and the existence of systemically important financial institutions (SIFIs), any stress by a financial institution from shocks has the potential for spill over and contagion risks.
- 4.2 Three single-factor stress tests, an aggregated stress test as well as a second-round contagion impact assessment, were conducted. These were (a) increases in bond yields, (b) declines in equity prices, (c) increases in NPLs, and (d) interbank contagion effects.
- 4.3 The interest rate risk results indicate that both sectors were generally resilient to the hypothetical increases in GOJ bond yields.²⁸
- 4.4 For the shock to equity prices, the results show that the DTI and securities dealers' sectors remain robust to the contemplated shocks, due mainly to their low exposure to equities.
- 4.5 The findings from the credit risk stress test shows that DTIs also remain generally resilient to the hypothetical shocks to PDLs.

- 4.6 The combined risk assessment shows that the DTIs and securities dealers remain resilient under the contemplated scenarios.

5.0 Macro Prudential Policy Summary and Recommendation

- 5.1 Macro-financial conditions remained stable for the June 2024 quarter. This was reflected in the composite indices of macro-financial performance, which displayed overall improvement. Furthermore, financial entities were largely found to be adequately capitalized, liquid and profitable.

²⁸ The interest rate risk shock has two effects: 1. It reduces the fair value of the entity's securities. 2. It increases the cost of funding through higher rates on repos and deposits. As a result of the shocks/increases in yields, a new market value for these securities (GOJ bonds) are recalibrated using the price formula. Next, the resulting additional fair value loss is derived and first deducted from available buffer capital. Then, the residual FV loss is deducted from statutory capital, if needed, and the corresponding post-shock CAR is calibrated. For the funding cost impact, the interest cost of the interest rate shock is calculated using the historical correlation and the resulting additional cost is deducted first from buffer capital and, if needed, the residual cost is deducted from statutory capital and the corresponding post-shock CAR is calibrated.

Appendix

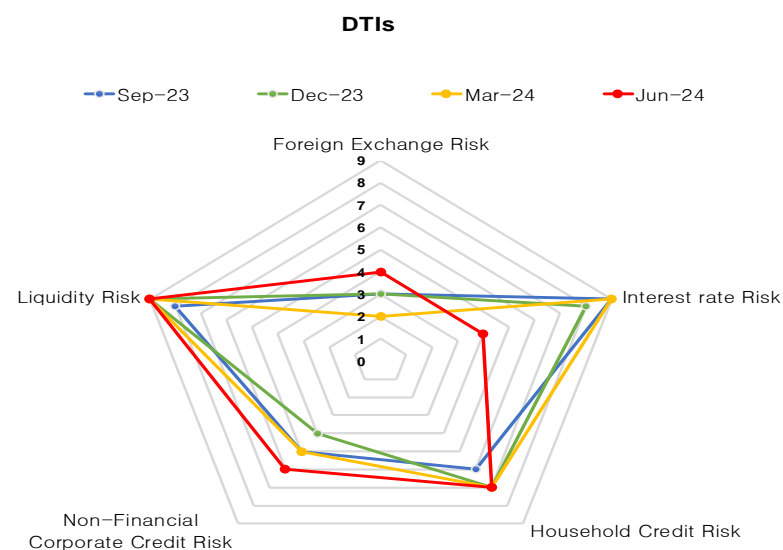
State of the Financial System

Table 1.0 Select Financial Soundness Indicators

| | Dec-21 | Mar-22 | Jun-22 | Sep-22 | Dec-22 | Mar-23 | Jun-23 | Sep-23 | Dec-23 | Mar-24 | Jun-24 |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Asset to GDP (%) | | | | | | | | | | | |
| DTI | 105.6 | 108.9 | 101.4 | 94.2 | 93.8 | 94.4 | 94.7 | 89.5 | 89.4 | 88.9 | 89.3 |
| SDs | 35.7 | 27.1 | 33.6 | 32.5 | 31.8 | 31.6 | 32.3 | 29.7 | 29.7 | 30.7 | 31.7 |
| Lls | 18.3 | 22.6 | 16.4 | 15.7 | 15.4 | 14.7 | 14.5 | 14.2 | 14.5 | n/a | n/a |
| Gls | 4.7 | 4.7 | 4.8 | 4.6 | 4.3 | 3.5 | 4.1 | 3.4 | 3.3 | n/a | n/a |
| Capital Adequacy (%) | | | | | | | | | | | |
| DTI (CAR) | 14.2 | 14.3 | 14.1 | 13.8 | 14.2 | 14.2 | 14.9 | 14.5 | 14.6 | 14.3 | 14.5 |
| SDs (CAR) | 21.4 | 21.4 | 22.3 | 19.9 | 21.9 | 21.0 | 21.2 | 20.5 | 21.2 | N/a | N/a |
| Lls (MCSSR) | 211.1 | 212.8 | 232.8 | 254.4 | 270.7 | 273.3 | 190.0 | 187.6 | 192.5 | n/a | n/a |
| Gls (MCT) | 281.9 | 276.3 | 268.9 | 296.7 | 304.5 | 221.1 | 200.4 | 196.1 | 212.0 | n/a | n/a |
| ROA (%) | | | | | | | | | | | |
| DTI | 0.3 | (0.0) | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.6 | 0.8 | 0.4 | 0.4 |
| SDs | 0.3 | 0.2 | 0.4 | 0.1 | 0.2 | 0.2 | 0.2 | 0.03 | 0.03 | n/a | n/a |
| Lls | 2.3 | 1.7 | 2.8 | 2.1 | 2.4 | n/a | n/a | n/a | n/a | n/a | n/a |
| Gls | 0.5 | (0.1) | (0.2) | 0.3 | 0.6 | n/a | n/a | n/a | n/a | n/a | n/a |
| Liquidity (%) | | | | | | | | | | | |
| DTIs Liquidity Coverage Ratio (LCR) | 260.2 | 231.0 | 211.6 | 199.3 | 339.8 | 308.8 | 296.5 | 276.3 | 285.4 | 231.9 | 274.4 |
| DTIs (liquid assets to short-term liabilities) | 27.8 | 29.5 | 30.2 | 29.6 | 27.5 | 26.3 | 30.7 | 27.1 | 26.6 | 26.4 | 25.1 |
| SDs (liquid assets to short-term liabilities) | 18.2 | 17.3 | 16.4 | 16.9 | 16.5 | 17.0 | 16.6 | 17.7 | n/a | n/a | n/a |
| Lls (liquid assets to total liabilities) | 24.9 | 22.7 | 24.2 | 24.8 | 30.4 | n/a | n/a | n/a | n/a | n/a | n/a |
| Gls (liquid assets to total liabilities) | 67.8 | 69.4 | 69.6 | 66.6 | 70.2 | n/a | n/a | n/a | n/a | n/a | n/a |
| Non-Performing Loans to Total Loans (%) | | | | | | | | | | | |
| DTIs | 2.9 | 2.8 | 2.7 | 2.5 | 2.5 | 2.4 | 2.5 | 2.5 | 2.5 | 2.3 | 2.4 |
| SDs | 0.8 | 0.6 | 0.9 | 0.7 | 0.7 | 0.9 | 1.0 | 1.1 | 0.9 | n/a | n/a |
| Past Due Loans to Total Loans (%) | | | | | | | | | | | |
| DTIs | 2.58 | 3.03 | 2.69 | 2.97 | 2.99 | 2.48 | 3.50 | 2.80 | 3.13 | 2.96 | 3.01 |

Source: Bank of Jamaica and Financial Services Commission

Chart 1.0 Evolution of risk exposure indicators²⁹



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

²⁹ The cobweb diagram is a graphical representation of financial stability. Each ray represents a key risk or condition. The centre band is the median ranking for each dimension and represents a normal level of risk. Movements away from the centre of the diagram represent an increase in financial stability risks. It is computed by: firstly, calculating weighted average of z-scores of each indicator in the dimensions. Secondly, converting the weighted standardized indicator indicators into empirical cumulative probability distributions. This is done by ordering the weighted z-scores for each dimension from lowest to highest. Finally, convert these cumulative probability scores into ordinal rankings on a scale of 1 - 9 based on the percentiles of the empirical cumulative probability distributions.

Chart 2.0 Network Metrics for the Interbank Gross Funding Network³⁰

| J\$ Billions | Jun-23 | Sep-23 | Dec-23 | Mar-24 |
|---|--------|--------|--------|--------|
| Total System Funding to Exposure | 283.1 | 462.9 | 455.5 | 348.8 |
| Network Metrics | | | | |
| Network Mean | 0.6 | 1.0 | 1.0 | 1.0 |
| Reciprocity³¹ (%) | 46.4 | 59.7 | 58.4 | 58.5 |
| Density³² (%) | 27.1 | 29.0 | 29.7 | 28.1 |
| Systemic Risk Score³³ | 4.7 | 4.7 | 5.3 | 5.3 |
| Fragility Score³⁴ | 14.9 | 16.3 | 16.9 | 16.2 |
| Diameter³⁵ | 6 | 6 | 5 | 6 |

Source: Bank of Jamaica

Note: The significant increase in total funding exposure for September and December 2023 was due to increased exposure by one DTI due to securitisation exercises with foreign entities.

³⁰ Network Metrics are based on interbank gross “funding to” data of domestic DTIs, securities dealers and foreign institutions.

³¹ 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.

³² Density measures the proportion of actual funding relationships in the system against the total number of potential funding relationships in the network.

³³ 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. This score excludes foreign institution relationships.

³⁴ 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.

³⁵ Diameter indicates the “speed” of contagion, the more institutions on the diameter the slower the “speed” of contagion.