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Central Bank of Trinidad & Tobago

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FINANCIAL STABILITY REPORT

Central Bank of Trinidad and Tobago
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Central Bank of Trinidad and Tobago

Financial Stability Report 2022

FOREWORD

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In 2022, Trinidad and Tobago's financial system navigated a challenging global macroeconomic environment marked by geopolitical tensions, high inflation, and monetary tightening in advanced economies. Despite these difficulties, the domestic financial system demonstrated resilience, evidenced by generally stable financial soundness indicators.

The current global economic environment is facing downside risks. There is a possibility that global output could weaken further in 2023 if financial stress intensifies. The ongoing Russian-Ukraine war could contribute to rising inflation by driving up energy and food prices. Continued inflation could prompt advanced economies to undertake further monetary tightening. These developments can transmit to the domestic economy, posing risks to financial stability.

The recent failure of Silicon Valley Bank in the United States has sparked concerns about the potential impact of tightening monetary and financial conditions on the stability of financial institutions. This bank's failure was followed by high interest rates, which forced the institution to sell off long-term bonds at large discounts to meet higher than anticipated withdrawals, exacerbating a deposit run in the bank. Cyber incursions are also becoming a more significant systemic threat. In addition to navigating the challenging macroeconomic environment, the need to implement regulatory reforms to strengthen cyber resilience in financial institutions is becoming increasingly important.

Key risks facing the domestic financial system include rising international interest rates, larger liquidity requirements due to increases in the size of required liquidity buffers, and increasing cyber-attacks. In the near term, the Central Bank plans to implement the Basel III Liquidity Coverage Ratio requirement to ensure banking institutions can better withstand liquidity outflows during stress periods. In June 2023, the Central Bank released its Cybersecurity Best Practices Guideline to all licenced financial institutions to improve cyber resilience.

Patrick Solomon

Mr. Patrick Solomon
Inspector of Financial Institutions

TABLE OF
CONTENTS

TABLE OF

CONTENTS

LIST OF
ABBREVIATIONS

ABBREVIATION	NAME
ACH	Automated Clearing House
AE	Advanced Economy
AFSI	Aggregate Financial Stability Index
AML/CFT	Anti-Money Laundering/Combatting the Financing of Terrorism
ATM	Automated Teller Machine
BATT	Bankers Association of Trinidad and Tobago
BIS	Bank for International Settlements
BPSP	Bill Payment Service Provider
BSI	Banking Stability Index
CAR	Capital Adequacy Ratio
CDFPI	California Department of Financial Protection and Innovation
CIS	Collective Investment Scheme
CLICO	Colonial Life Insurance Company (Trinidad) Limited
COVID-19	Coronavirus Disease 2019
CSO	Central Statistical Office
DOW	Dow Jones Industrial Average
ECLAC	Economic Commission of Latin America and the Caribbean
EMDE	Emerging Market and Developing Economy
E-Money	Electronic Money
EMV	Europay, MasterCard® and Visa®
EU	European Union
FCI	Financial Conditions Index
FDIC	Federal Deposit Insurance Corporation
FRB	First Republic Bank
FSB	Financial Stability Board
FSI	Financial Soundness Indicators
FSR	Financial Stability Report
FY	Fiscal Year
Gap	Credit-to-GDP Gap
GDP	Gross Domestic Product

LIST OF ABBREVIATIONS

ABBREVIATION	NAME
GFSR	Global Financial Stability Report
GGI	Greenhouse Gas Inventory
GSC	Global Stablecoin
HHI	Herfindal-Hirschman Index
IA 2018	Insurance Act, 2018
IAIS	International Association of Insurance Supervisors
ICAAP	Internal Capital Adequacy Assessment Process
ICS	Insurance Capital Standard
IDB	Inter-American Development Bank
IFRS	International Financial Reporting Standards
IMF	International Monetary Fund
LAC	Latin America and the Caribbean
LCR	Liquidity Coverage Ratio
MRV	Monitoring, Reporting and Verification
NASDAQ	Nasdaq Composite Index
NGFS	Network of Central Banks and Supervisors for Greening the Financial System
NPL	Non-Performing Loan
NRA	National Risk Assessment
OTC	Over-the-Counter
PF	Proliferation Financing
POS	Point of Sale
RCR	Regulatory Capital Ratios
RTGS	Real Time Gross Settlement System
RWA	Risk-Weighted Assets
SB	Signature Bank
SDD	Simplified Due Diligence
SLGB	Silvergate Bank
SRAI	Systemic Risk Accumulation Index
SVB	Silicon Valley Bank
US	United States

PREFACE

Financial stability refers to the smooth functioning of financial intermediation, financial markets, and payments and settlement systems, even in the face of adverse shocks. Efficient financial intermediation promotes sustainable economic growth and advances the socio-economic welfare of citizens. Accordingly, the Central Bank of Trinidad and Tobago (the Central Bank) plays a vital role in fostering stability and soundness and maintaining confidence in the domestic financial system (Financial Institutions Act, 2008 Part II 5[2] and Insurance Act, 2018 Part II 7[2]).

The Financial Stability Report (FSR), which is currently published annually, complements the Central Bank's bi-annual *Monetary Policy Report* and other publications by providing insights into the recent developments and vulnerabilities of the financial system and risks to its stability from domestic, regional, and international factors. Financial system vulnerabilities can increase a country's susceptibility to adverse shocks. However, effective governance and risk management, adequate capital measures, and proactive oversight help improve the loss-absorbing capacity of the financial system and enhance its resilience. The FSR also highlights the ongoing efforts of the Central Bank to strengthen these areas and aims to facilitate informed discussion on financial stability issues.

The FSR is available on the Central Bank's website at
https://www.central-bank.org.tt/latest-reports/financial-stability-report.

OVERVIEW[1]

In 2022, global financial stability risk increased due to high and persistent inflation, a rapid rise in interest rates and deterioration in economic growth in many countries. Central banks in advanced economies and many emerging market economies accelerated policy rate increases to prevent inflation from becoming entrenched. Increasing policy interest rates, along with supply chain challenges and geopolitical risks, negatively impacted economic growth in many countries. As a result, the International Monetary Fund (IMF), in its April 2023 *World Economic Outlook*, estimated that global economic growth slowed to 3.4 per cent in 2022 from 6.1 per cent in 2021. Financial stability risks have increased significantly in 2023 as stubbornly high inflation, persistent interest rate hikes and intermittent liquidity pressures have put the global financial system under considerable strain. Following the actions by central banks to tame inflationary pressures, the IMF revised its global growth projection for 2023 to 2.8 per cent. While risks related to monetary tightening, high inflation, and reduced global growth have major global financial stability implications, cyber and climate-related risks are becoming increasingly important.

Banking stress in the United States (US) and Europe in early 2023 highlight the challenges posed by the interaction between tighter monetary conditions and financial stability. According to the IMF, global headline inflation will likely slow from 8.9 per cent in 2022 to 6.1 per cent in 2023 due to projected lower commodity prices. However, underlying core inflation is expected to decline at a much slower pace and as such, many countries are unlikely to achieve their inflation targets during 2023. According to the IMF's April 2023 *Global Financial Stability Report*, tighter monetary and financial conditions can magnify the financial system vulnerabilities relating to financial leverage, liquidity mismatches, and financial sector interconnectedness. The spill-overs from these factors can weigh on real estate prices and firms' and households' ability to service debt, increasing default risks. Early monetary tightening in major emerging market economies has helped these countries to partially offset the negative consequences of monetary tightening in advanced economies. However, several emerging economies remain vulnerable to international financial shocks that could trigger capital outflows.

The domestic economy showed signs of a recovery in 2022 after two years of economic contraction. Data from the Central Statistical Office (CSO) revealed that Gross Domestic Product (GDP) at constant prices (real GDP) expanded by 3.0 per cent in the first three quarters of 2022, compared to the same period of the previous year. This growth was primarily attributed to a 4.7 per cent expansion in non-energy sector production,

1 This Report includes economic developments up to May 2023, while financial industry data are as at December 2022.

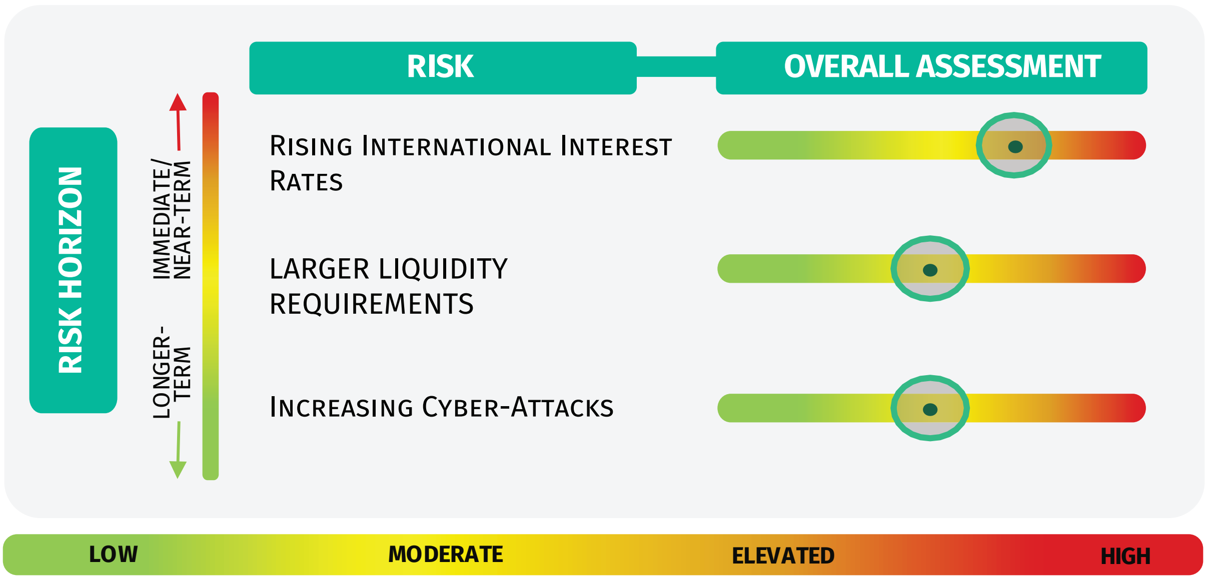
which outweighed a decrease of 0.7 per cent in energy sector output. The improvement in economic activity was accompanied by a slight decline in the unemployment rate during 2022. Based primarily on external developments, inflation emerged as a noteworthy economic concern, with headline inflation at 8.7 per cent in the twelve months to December 2022. The post-lockdown expansion in economic activity and favourable financial market conditions led to increased credit demand. Business lending experienced significant growth, with double-digit increases recorded in six out of the twelve months of 2022. Consumer lending also rebounded in the last eight months of 2022, following nineteen consecutive months of decline. However, there was a slowdown in real estate lending growth. The improvements in GDP helped contain household debt-to-GDP and corporate sector credit-to-GDP ratios from levels that would signal high systemic risk accumulation. Moreover, the Government's fiscal position improved considerably. In Fiscal Year (FY) 2022, a fiscal surplus of 0.6 per cent of GDP was recorded compared to a fiscal deficit of 7.7 per cent in FY2021. This improvement was attributed to higher energy commodity prices, which resulted in improved energy revenues, which outpaced the falloff in non-energy revenue and the increase in expenditure.

International developments could generate financial stability risks in Trinidad and Tobago. The 2021 *Financial Stability Report* highlighted three sources of risks to the domestic financial sector – sovereign concentrations, contagion effects from rising international interest rates, and risks associated with digital transformation. While these sources remain relevant, the financial turmoil in the US and Europe in early 2023 has raised concerns about another potential risk. Specifically, there is concern about the interaction between tighter monetary and financial conditions, which could lead to liquidity risk in financial institutions. Despite improved sovereign debt dynamics and increased inflows from the energy sector, sizable sovereign exposures on financial institutions' balance sheets remain a source of vulnerability, but current levels do not pose a near-term threat to financial stability.

The key risks to the health of the domestic financial sector are rising international interest rates, increasing cyber-attacks, and larger liquidity requirements (Summary Heat Map). Rising interest rates in advanced economies can adversely impact domestic financial institutions' investment portfolios via asset revaluations. A deterioration of TT-US interest rate differentials can place added pressure on the domestic foreign exchange market, which can have potential financial stability implications. Adjustments to domestic interest rates primarily to contain inflation can negatively impact households in terms of higher borrowing costs, larger debt servicing obligations, and possibly greater default risk. Additionally, although financial institutions are well capitalised, adverse shocks can precipitate swings in liquidity which, if not quickly stabilised, can have solvency ramifications. Although domestic liquidity stress test results as at December 2022 were satisfactory, a few financial institutions were below the target minimum number of days to stay adequately liquid in response to a severe shock. Concurrently, cyber-attacks continue to increase as digitalisation efforts ramp up, making financial institutions more prone to cyber-related crimes. There was an increase in reported cyber-related incidents in 2022 compared to the year prior. Cyber risk has not resulted in systemic disturbances to either financial intermediation or economic activities; however, the probability of the risk manifesting is increasing as hackers innovate and become more insidious.

GRAPHIC 1

SUMMARY HEAT MAP –
RISKS TO FINANCIAL STABILITY IN TRINIDAD AND TOBAGO



Source: Central Bank of Trinidad and Tobago

Climate change does not pose an immediate systemic threat to domestic financial stability. However, as natural disasters (physical risks) intensify and the policy landscape evolves to facilitate a greener economy (transition risks), macro-financial challenges could emerge in the medium to long term. **Box 3** provides an update on climate change mitigation efforts in Trinidad and Tobago, with specific focus on current data gaps and potential data sources to conduct climate-related assessments of the financial sector.

The domestic financial sector is sound and resilient and appears able to withstand adverse macro-financial shocks in the short term. At the end of 2022, the banking, insurance, and pension sectors were in relatively healthy positions, helped by the gradual economic recovery. In the banking sector, credit risk appears contained, but interest rate and liquidity risks require close monitoring. Commercial banks and non-banks continued to be well capitalised and profitable. The long-term insurance industry experienced fluctuations in profitability over the last five years. Over 2022, liquidity in the long-term sector declined but remained within an acceptable range. Similarly, general insurers remained profitable; however, the increased claims experienced in 2022 negatively impacted the return on equity. A noteworthy milestone was the Central Bank relinquishing emergency control over Colonial Life Insurance Company Limited and British American Limited in December 2022 after just over a decade of intervention. For pension plans, contributions, interest and dividend income remain sufficient to cover expenses; however, liquidity mismatch between assets and liabilities remains a major source of vulnerability. Regarding payments system activity, the volume and value of electronic payments and online money transfer transactions increased in 2022 owing to a recovery in economic activity. With the increased usage and importance of electronic and online money transfers in the local financial landscape, improved supervision is necessary to ensure payments system operators strengthen their operational risk resilience.

The Central Bank continues to promote financial stability through various initiatives based on an ongoing assessment of sectoral risks. In 2022, the Central Bank advanced work on implementing new supervisory standards relating to the Liquidity Coverage Ratio and additional capital buffers on domestic systemically important banks under Basel II/III. The Central Bank received IMF technical assistance to strengthen the cybersecurity posture of the Central Bank, as well as to strengthen the supervision of cybersecurity of financial institutions regulated by the Central Bank. In addition, there was enhanced engagement with all banks and non-banks on their key risks and risk management practices. The Central Bank issued the updated Simplified Due Diligence Requirements for Basic Banking Accounts and revised its internal Anti-Money Laundering/Combating the Financing of Terrorism/Counter Proliferation Financing policy. Furthermore, the Central Bank continued work on a comprehensive payments system legislation that would, inter alia, improve the safety and soundness of the national payments system and allow the safe onboarding of financial technology (fintech) firms into the domestic payments space.

CHAPTER 1

The Macro-Financial Context

THE MACRO-FINANCIAL CONTEXT

In 2022, the global economy experienced a sharp increase in inflation due to geopolitical risks, supply chain bottlenecks, and the release of pent-up demand. Central bank actions to raise interest rates and reduce prices unveiled hidden vulnerabilities accumulated over years of easy financial conditions, exacerbated by Coronavirus disease 2019 (COVID-19) support measures. Although a slowdown in the global economic recovery and bouts of heightened financial market volatility could weaken financial systems, improving domestic economic conditions may help contain spill-overs.

GLOBAL MACRO-FINANCIAL STABILITY

Geopolitical risks dented the global economic recovery effort. Russia invaded Ukraine in February 2022. The conflict disrupted the production and distribution of major commodities, impairing global supply chains. This alongside the release of pent-up demand, accumulated during the pandemic, led to a significant build-up of inflationary pressures. To bring down prices central banks aggressively tightened monetary policies. Although inflation proved persistent, prices appeared to have peaked in late 2022. This development dampened recovery expectations as the International Monetary Fund (IMF), in its April 2023 *World Economic Outlook* (WEO)[2], projected that global growth is expected to slow to 2.8 per cent in 2023 – from 3.4 per cent in 2022.

Financial stability risks increased as side effects of sharp monetary policy tightening manifested. As central banks aggressively pursued policies to bring inflation back to target, vulnerabilities exacerbated by the pandemic were exposed. The IMF, in its April 2023 *Global Financial Stability Report (GFSR)*[3], noted that this was particularly the case for banks as a search for yield on the longer end of yield curves (due to very low short-term interest rates) increased their exposure to liquidity and duration risks. Alongside this, amid rising rates, banks also faced heightened credit risks. However, economic agents have so far shown resilience as COVID-19 support measures allowed some to amass sizable buffers. Notwithstanding, other hazards outlined in regional financial stability reports (FSRs), include; cyber risks, climate change and limited fiscal space **(Figure 1)**.

2 IMF. "World Economic Outlook April 2023: A Rocky Recovery." International Monetary Fund. April 2023. https://www.imf.org/en/Publications/WEO/Issues/2023/04/11/world-economic-outlook-april-2023

3 IMF. "Global Financial Stability Report April 2023: Safeguarding Financial Stability amid High Inflation and Geopolitical Risks." International Monetary Fund. April 2023. https://www.imf.org/en/Publications/GFSR/Issues/2023/04/11/global-financial-stability-report-april-2023

International financial and regulatory bodies supported national efforts to maintain financial stability (Figure 2). Between May 2021 and April 2022, the IMF: (i) conducted 126 country health checks; (ii) lent US$113 billion to 23 countries; and (iii) spent US$242 million to strengthen capacity at central banks, finance ministries and statistical agencies. As crypto markets experienced extreme volatility, leading to the collapse of some of the riskiest segments, the Financial Stability Board (FSB) proposed revisions to global stablecoin supervision recommendations – emphasising strengthening governance frameworks and stabilisation mechanisms. Finally, several strategic partnerships were formed in 2022 to improve conceptual frameworks for building resilience. For instance, to improve guidance on climate-related financial risks, the FSB and Network for Greening the Financial System (NGFS) paired up to analyse findings from climate scenario exercises undertaken by other financial authorities.

FIGURE 1

SUMMARY OF GLOBAL FINANCIAL STABILITY RISKS, 2022 – HY1 2023

GLOBAL CHALLENGES

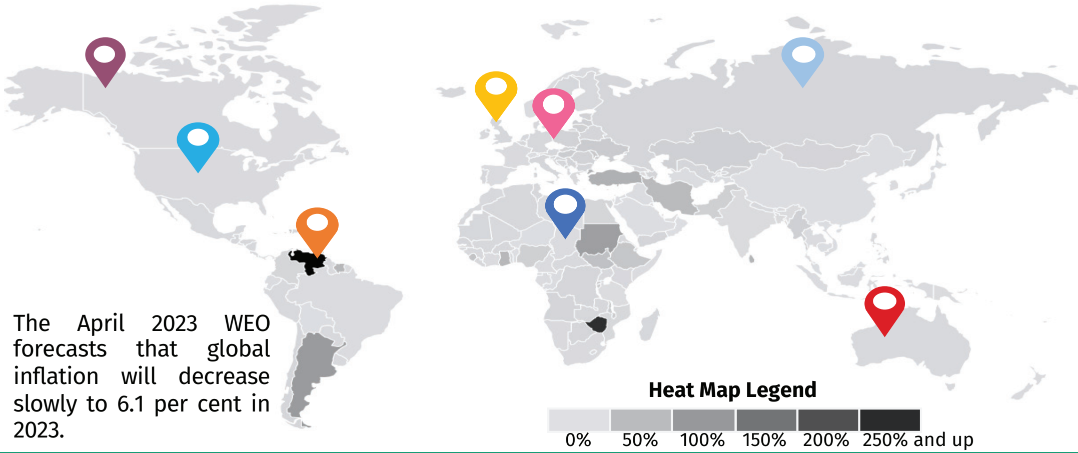
Cost of Living
8.9%
increase in global inflation

Geopolitical Risk**
325.42
highest monthly value recorded

Climate Change**
0.02°C
increase in global temperature

Cyber Risk**
38%
increase in global cyberattacks

GLOBAL INFLATION RATES AS AT APRIL 2023



The April 2023 WEO forecasts that global inflation will decrease slowly to 6.1 per cent in 2023.

COUNTRY BLOCKS: INFLATION RATES AND KEY CONCERNS

UNITED STATES — **6.6%**
- Level of business and household debt
- Funding risks
- Financial sector leverage

CANADA — **6.6%**
- Household debt
- Liquidity in fixed-income markets
- House price correction

LATIN AMERICA AND THE CARIBBEAN — **14.7%**
- Rising incidents of civil unrest
- Illicit economic activity
- Public sector debt

UNITED KINGDOM — **10.5%**
- External financing risks
- Financial stress levels
- Non-bank financial sector

EUROPE — **9.2%**
- House price correction
- Loan quality
- Market funding costs

AFRICA* — **16.1%**
- Public sector debt
- Anti-money laundering and countering terrorism financing issues

ASIA* — **15.6%**
- Property developer defaults
- Banking sector exposure to real estate

AUSTRALIA — **7.8%**
- Falling house prices
- Increase in insolvencies
- Rising financial stress

Sources: Various countries' FSRs and IMF April 2023 WEO Database: "Inflation, end of period consumer prices"
Note: * Africa and Asia are not groupings used in the April 2023 *World Economic Outlook* (WEO) Database. The closest proxies appear to be Sub-Saharan Africa and Middle East and Central Asia, respectively.
** Sourced from Caldara and Iacoviello (2022), the 2022 Global Climate Report and Check Point (a multinational cybersecurity firm).

FIGURE 2

KEY DEVELOPMENTS AND PERSPECTIVES AT MAJOR MULTILATERAL FINANCIAL ORGANISATIONS, 2022 – HY1 2023

Bank for International Settlements (BIS)

Principles for the Effective Management and Supervision of Climate-Related Financial Risks (JUNE 2022)
The Basel Committee on Banking Supervision published 18 principles to improve management of climate-related financial risks. The principles provide a common baseline for internationally active banks and supervisors in a rapidly evolving and diverse area.

ISO 20022 Harmonisation Requirements for Enhancing Cross-border Payments (MARCH 2023)
The Committee on Payments proposed harmonisation requirements for ISO 20022 – a messaging standard financial institutions use for cross-border payments.

Financial Stability Board

Regulation, Supervision and Oversight of "Global Stablecoin" Arrangements (OCTOBER 2022)
The report put forward recommendations to address gaps in global stablecoins (GSCs) revealed in 2022. Of note, it was advised that GSCs should have stabilisation methods with sufficient safeguards and prudential requirements.

Climate Scenario Analysis (NOVEMBER 2022)
This report was produced in conjunction with the NGFS. It noted that, while climate related-risks appear contained across domestic financial systems, tail risks and spillovers associated with climate change may not be so manageable.

International Association of Insurance Supervisors

FSB Endorses the Holistic Framework (DECEMBER 2022)
The FSB, in consultation with the International Association of Insurance Supervisors (IAIS), discontinued the annual identification of Global Systemically Important Insurers. The IAIS' Holistic Framework will now be used to assess and mitigate systemic risks in the insurance sector.

Group-Wide Insurance Capital Standards (MARCH 2023)
The IAIS is developing an Insurance Capital Standard (ICS) for Internationally Active Insurance Groups. The ICS will provide holistic standards for supervisory discussions on group solvency – enhancing global convergence on group capital standards.

International Monetary Fund

Resilience and Sustainability Trust (APRIL 2022)
The IMF's Executive Board approved the creation of a Resilience and Sustainability Trust on April 13 2022. It is designed to help vulnerable countries improve resilience to external shocks by providing financing to address longer-term challenges such as climate change.

Annual Report, Financial Year 2021/22 (OCTOBER 2022)
The publication reported that between May 01 and April 30: (i) 126 country health checks were carried out; (ii) US$113 billion was lent to 23 countries; and (iii) US$242 million was spent on improving technical capacities at finance ministries, central banks, statistical agencies and financial supervisory agencies.

International Organisation of Pension Supervisors

Good Practices for Designing, Presenting and Supervising Pension Projections (MARCH 2022)
The report issued guidelines to encourage the provision of meaningful projections on the likely values of retirement funds (of public and private schemes). Recommendations were also put forward for regulators when it comes to standardising how the industry; designs (methodology, assumptions), delivers (physical or digital), discloses and presents results to pension plan members.

Network for Greening the Financial System

Enhancing Market Transparency in Green and Transition Finance (APRIL 2022)
The report recommended that policymakers could: (i) enhance reporting by implementing global disclosure standards with industry-specific metrics; and (ii) compare taxonomies and frameworks to mitigate divergences and create comparable and reliable climate databases.

NGFS Scenarios (SEPTEMBER 2022)
In the latest (3rd) version of this exercise, scenarios have been brought up to date by incorporating countries' commitments to reach net-zero emissions and adding more sectoral granularity alongside finer representation of physical risk (including acute risks).

Sources: Various reports of international regulatory and supervisory bodies, central banking groups, and other multilateral organisations

REGIONAL DEVELOPMENTS

In several Advanced Economies (AEs), interest rate sensitive assets came under pressure. In September 2022, a sharp rise in yields on long-dated government bonds (gilts) in the United Kingdom impaired liquidity in many defined benefit pension schemes – the Bank of England pledged £65 billion towards gilts to stem risks to these funds. In October 2022, South Korea experienced a sharp rise in short-term yields as project finance asset-backed commercial paper came under pressure following high-profile defaults and delays. To address strains, authorities deployed several tools (including reactivating COVID-era asset purchase programmes). Meanwhile, in the first five months of 2023, United States (US) regulators resolved three bank failures **(Box 1)** while the Swiss National Bank provided emergency liquidity support to Switzerland's second-largest bank. Although the response by policymakers in AEs mitigated systemic risks, some regulators have expressed the need to revisit regulations to enact more preventive measures.

Emerging market banks have avoided significant losses in their securities portfolios. The April 2023 GFSR noted that the side effects of aggressive policy tightening on regulatory ratios – increased unrealised losses – are likely to be modest in Emerging Market and Developing Economies (EMDEs) as banks tend to have low exposure to interest rate risk. Notwithstanding, some events have deteriorated global risk appetites. For EMDEs, this could; fuel exchange rate depreciations, increase sovereign bond yields and intensify asset repricing risks. For example, rising interest rates lowered housing demand as average house prices fell in 60 per cent of emerging markets over the second half of 2022 (China experienced a 28 per cent contraction in home sales). If these risks manifest, the financial stability of EMDEs may come under threat, as the April 2023 WEO reported that 25 per cent are at high risk of sovereign default.

Financial conditions tightened in Latin America and the Caribbean (LAC) following the rise in global interest rates. The Inter-American Development Bank (IDB) reported that debt issuance in the region fell as average yields on external bonds (by governments) increased from 5.3 per cent in 2021 to over 9 per cent in late 2022.[4] While reduced access to credit may inhibit growth, it should be noted that the LAC region has high levels of public debt. For example, the Economic Commission of Latin America

4 IDB. "2023 Latin American and Caribbean Macroeconomic Report: Preparing the Macroeconomic Terrain for Renewed Growth." Inter-American Development Bank. March 2023. https://www.iadb.org/en/news/idb-report-highlights-policies-economic-recovery-amid-global-financial-uncertainty

and the Caribbean estimated that the average debt-to-Gross Domestic Product (GDP) ratio for the Caribbean was 84.1 per cent of GDP in the first quarter of 2022. With debt sustainability being one of the fundamental pillars of financial stability, fiscal consolidation is important. However, this may be challenging as governments attempt to balance controlling inflation while protecting the most vulnerable. Notwithstanding, several efforts have been made in recent years to improve self-sufficiency. For instance, Barbados, Grenada and Sint Maarten implemented or proposed policies to improve the sustainability of national pension funds. Further, countries such as St. Kitts and Nevis[5] and Antigua and Barbuda[6] tapped grant financing to advance instruments and policies to promote resilience to climate change.

5 CDB. "CDB Approves US$17 Million for Geothermal Energy Development in Nevis." Caribbean Development Bank. December 2022. https://www.caribank.org/newsroom/news-and-events/cdb-approves-us17-million-geothermal-energy-development-nevis

6 CDB. "UK Government, CDB and CDF Supporting Barbuda's Recovery and Resilience with Energy Project. Caribbean Development Bank." April 2023. https://www.caribank.org/newsroom/news-and-events/uk-government-cdb-and-cdf-supporting-barbudas-recovery-and-resilience-energy-project

THE DOMESTIC SETTING

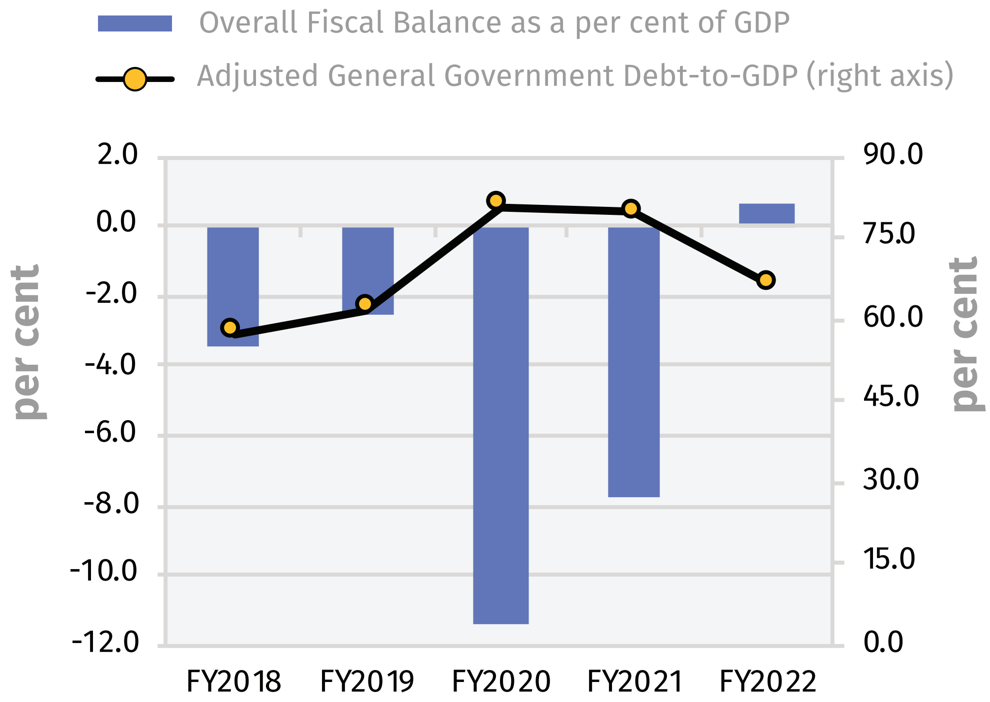
The domestic economy continued to show signs of recovery during 2022. The Central Statistical Office (CSO) estimated that real GDP grew by 3.0 per cent over the first three quarters of 2022, compared to the corresponding period in 2021. Improved economic activity coincided with favourable labour market conditions as the unemployment rate fell from 4.9 per cent in 2021 to 4.7 per cent in 2022, and daily job advertisements in print media increased by 13.4 per cent. Despite improved performances, due to global supply chain issues, price levels increased as headline inflation averaged 5.8 per cent in 2022 (up from 2.1 per cent in 2021). Measures implemented to control the rise in prices included: (i) zero-rating several basic food items; (ii) suspending the Common External Tariff; and (iii) increasing the Export-Import Bank's supply of foreign exchange to local manufacturers.

The fiscal accounts recorded a surplus for the first time since 2009, as high commodity prices bolstered energy receipts and supported a decrease in the public debt ratio. In Fiscal Year (FY) 2022, the overall fiscal balance registered a surplus of $1.1 billion (0.6 per cent of GDP) – its first in over a decade and after a deficit of $12.4 billion (7.7 per cent of GDP) in FY2021. High energy proceeds drove the improvement in the Government's fiscal performance as commodity prices rose significantly over 2022 For example, realised oil (West Texas Intermediate and gas prices (Henry Hub) were higher than budgeted prices by 45.2 per cent and 70.7 per cent, respectively. Increased energy revenue supported a transfer to the Heritage and Stabilisation Fund, the first since 2013. Further, adjusted General Government debt (which excludes sterilised debt) fell from 79.5 per cent of GDP in FY2021 to 66.5 per cent of GDP in FY2022. Alongside the improved fiscal performance are strong external buffers, as gross official reserves stood at US$6.8 billion as at end-2022 – 8.6 months of import cover **(Figures 3 and 4)**.

The Central Bank maintained an accommodative stance to sustain favourable financial conditions supportive of domestic economic recovery efforts. The Repo rate remained at 3.50 per cent throughout 2022, unchanged since the 150 basis point decrease in March 2020 at the onset of the COVID-19 pandemic. Due to this stance, the prime lending rate remained at 7.5 per cent, but the weighted average lending rate declined to 7.0 per cent by December 2022. The impact of favourable financial conditions was reflected in the growth of private sector credit, which rose by 5.5 per cent over 2022. The increase was driven by business sector lending which rose by 9.9 per cent compared to the previous year – loans to consumers showed marginal improvement, recording an increase of 2.2 per cent over 2022 **(Figure 5)**. Notwithstanding, due to the improvement in economic activity, estimated household debt-to-GDP **(Figure 6)** fell to 31.9 per cent. This represented a decrease of 440 basis points over 2022. Further, credit risks appear contained as the commercial banking sector's consumer and corporate non-performing loans ratios improved compared to 2021.

FIGURE 3

FISCAL OPERATIONS, FY2018 – FY2022

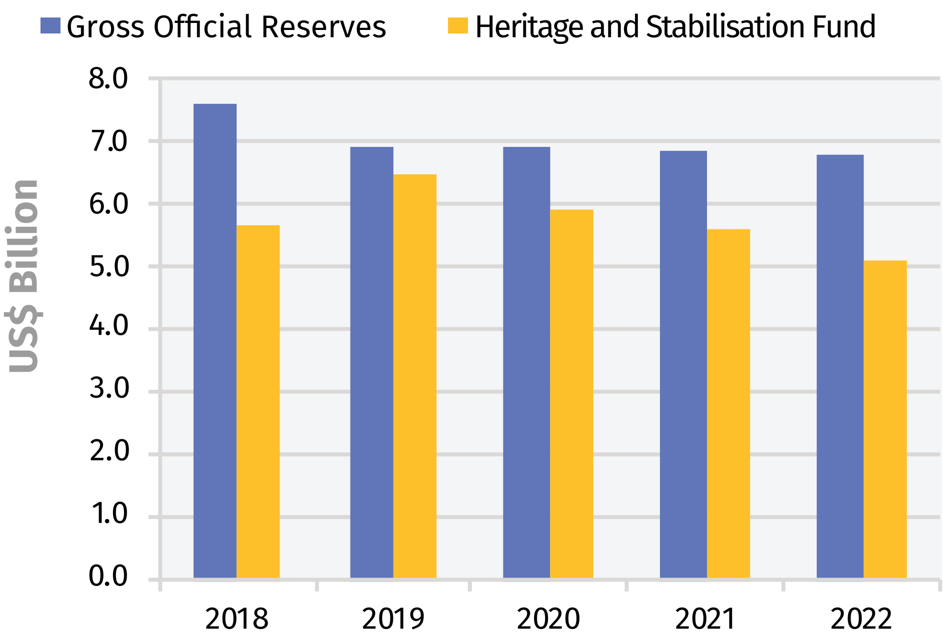


Source: Ministry of Finance

Note: GDP data used for ratios prior to FY2022 were sourced from the CSO. GDP data for FY2022 were estimated by the Central Bank.

FIGURE 4

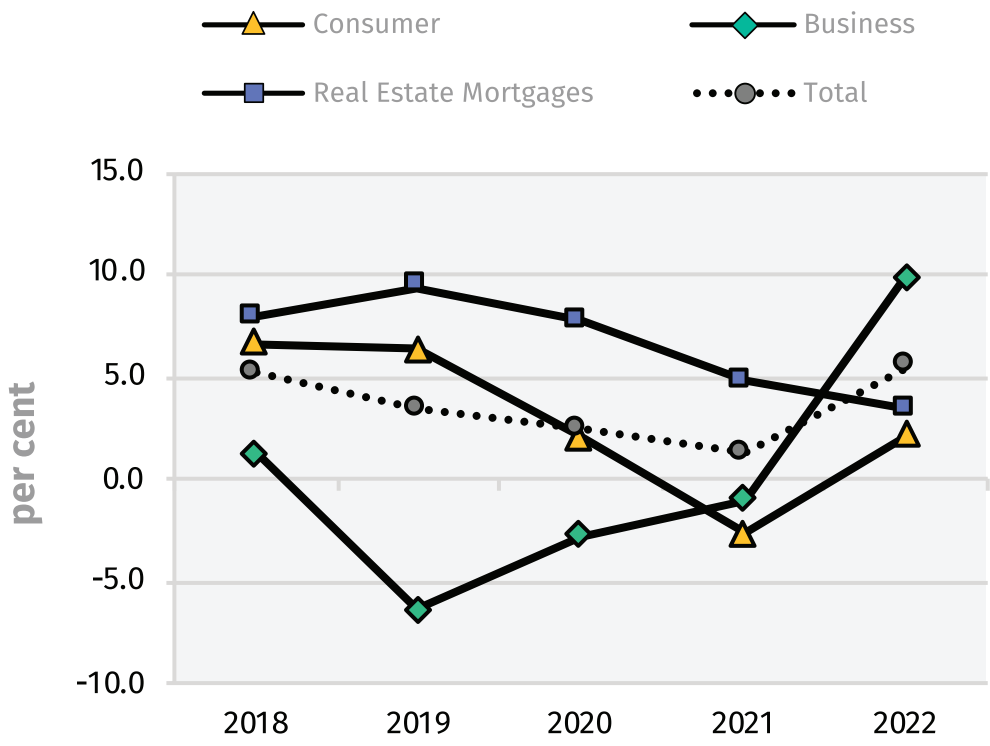
OFFICIAL FOREIGN ASSETS, 2018 – 2022



Source: Central Bank of Trinidad and Tobago

FIGURE 5

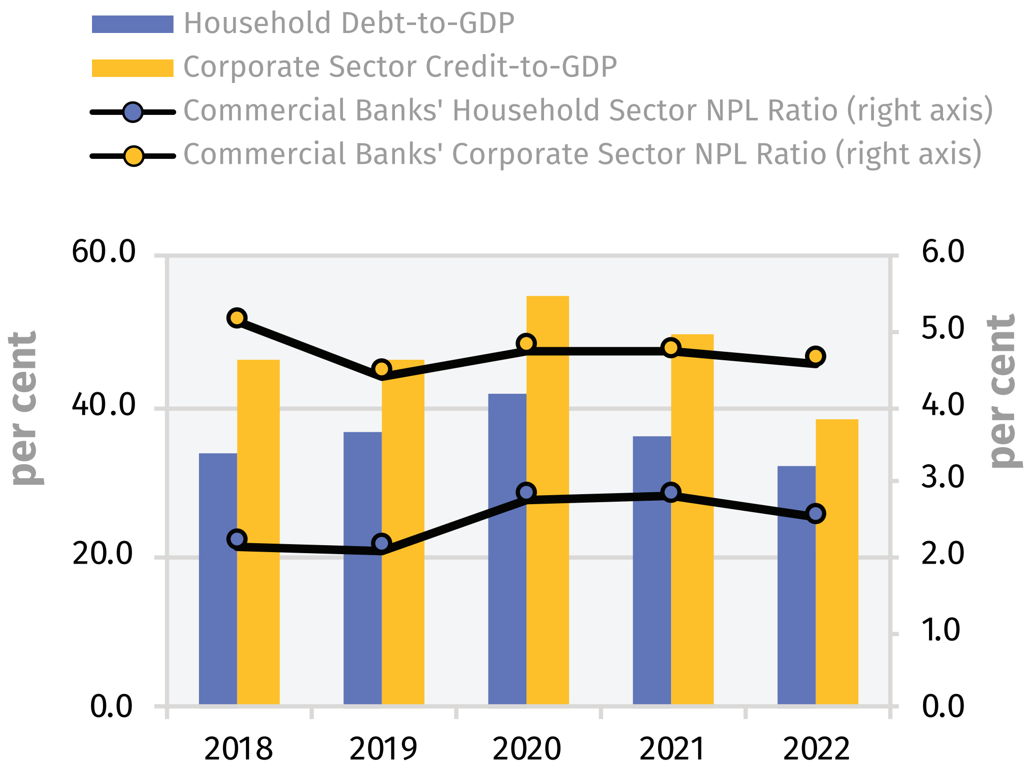
PRIVATE SECTOR CREDIT GRANTED BY THE CONSOLIDATED FINANCIAL SYSTEM – AVERAGE, 2018 – 2022



Source: Central Bank of Trinidad and Tobago

FIGURE 6

HOUSEHOLD AND CORPORATE SECTOR CREDIT, 2018 – 2022



Source: Central Bank of Trinidad and Tobago

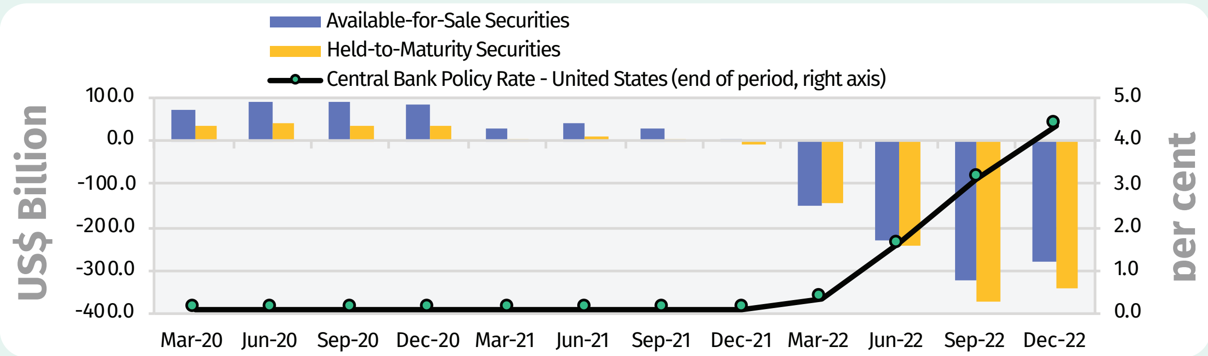
Note: GDP data used for ratios prior to FY2022 were sourced from the CSO. GDP data for FY2022 were estimated by the Central Bank.

BOX 1: RISING INTEREST RATES AND BANK FAILURES IN THE UNITED STATES (US)

Strains in the US banking sector have reignited concerns around financial institutions' business models. In the first five months of 2023, the US experienced four bank failures. A report on three of these cases, by the US Federal Deposit Insurance Corporation (FDIC)'s Chairman noted a common thread.[1] Specifically, a heavy reliance on uninsured deposits exacerbated withdrawal demands which fuelled a liquidity crunch. While bank failures are not uncommon[2] and the specific events behind these failures were different from the 2008/09 Global Financial Crisis, the potential adverse spillovers between monetary and financial stability policies provide useful insights for systemic risk assessments

Runs on deposits exposed vulnerabilities in US banks that were triggered by aggressive monetary tightening. The COVID-19 pandemic led to a large accumulation of savings but low loan demand. Banks consequently leaned on securities (such as Treasuries) to gain a meaningful return on deposits. However, the increased demand for these 'safe investments' drove up their prices and transaction costs, resulting in decreased yields. This development resulted in these banks increasing their exposure to interest rate risk over the pandemic. On its own this would not be a major concern but, when combined with sudden large withdrawals (as social media incited financial panic) and interest rate hikes (which lowered prices of outstanding securities), liquidity can quickly come under pressure. Unrealised losses on available-for-sale and held-to-maturity securities totalled US$620.4 billion **(Figure 1)** in the fourth quarter of 2022. Quick intervention by federal agencies may have alleviated a systemic event, but as policy rates continued to increase into the second quarter of 2023, banking stability may still be tenuous.

FIGURE 1
US, UNREALISED GAINS (LOSSES) ON INVESTMENT SECURITIES
(MARCH 2020 - DECEMBER 2022)



Sources: Federal Deposit Insurance Corporation and Bank for International Settlements

1 Gruenberg J. Martin. "Recent Bank Failures and the Federal Regulatory Response." Federal Deposit Insurance Corporation, Committee on Banking, Housing, and Urban Affairs, United States Senate. March 2023. https://www.fdic.gov/news/speeches/2023/spmar2723.pdf

2 As an example, the FDIC reported 564 bank failures between January 2001 and April 2023.

BOX 1: RISING INTEREST RATES AND BANK FAILURES IN THE UNITED STATES (US) (CONTINUED)

Collapses were triggered by high withdrawal requests. Signature Bank (SB) and Silvergate Bank (SLGB), at end-2022 the 29th (US$110.4 billion in assets) and 128th (US$11.4 billion in assets) largest banks in the US (where there are 2,124 banks) respectively, received large withdrawal requests when the crypto sector came under duress in 2022 – both banks are exposed to digital asset firms. When tech start-ups faltered after economies re-opened, their bank of choice, Silicon Valley Bank (the 16th largest bank in the US, with US$209.0 billion in assets at year-end 2022) faced significant withdrawal requests – as firms tried to lean on savings to maintain operations. Finally, when rising interest rates undermined a sizeable loan portfolio (single-family mortgages) at First Republic Bank (the 14th largest bank in the nation with reported assets of US$212.6 billion as at December 31, 2022), large clients drew down on their accounts (as they sought to protect their wealth). In all cases, to meet higher than anticipated withdrawal requests, banks were forced to sell fixed-income investments at significant losses – SVB, for instance, reported US$1.8 billion in unrealised losses as it tried to meet withdrawal requests (which reached US$42 billion on March 8, 2023). The damage from large deposit withdrawals and investment losses proved too severe as SLGB announced on March 8, 2023, that it would go into liquidation – winding down included: (i) full repayment of all deposits; and (ii) proposals to resolve claims and preserve the residual value of assets. To prevent similar occurrences, various federal agencies intervened. For instance, the California Department of Financial Protection and Innovation (CDFPI) closed SVB and appointed the FDIC as its receiver on March 10, 2023. SVB's resolution involved fully protecting depositors, ensuring other key stakeholders 'take the loss' and selling its operations to First-Citizens Bank & Trust Company.

First Republic Bank (FRB) experienced significant unrealised losses due to rising interest rates and lost a substantial amount of deposits. As at December 31, 2022 FRB reported US$212.6 billion in assets – making it the 14th largest bank in the nation. Although FRB had several lines of business, their earnings report on April 24, 2023, showed significant unrealised losses as rising interest rates undermined single-family mortgages (a sizeable loan portfolio). Moreover, FRB lost US$100 billion in deposits in the first quarter of 2023 – attributed to large clients protecting their wealth as most reported deposits were uninsured. The poor earnings report unnerved investors as FRB's stock price dropped by 78.0 per cent over the next 4 days. During that period FRB announced intentions to craft a recovery plan but, as capital losses continued to widen, the CDFPI closed FRB and appointed the FDIC as its receiver on May 1, 2023. On that same day, FDIC entered into an agreement with JPMorgan Chase Bank to assume all of the deposits and most of the assets of FRB.

Financial institutions in Trinidad and Tobago had limited direct exposure to the failed US banks however, there are lessons to be learned. These include the need to address low deposit insurance limits, and consider the risks associated with technological innovation, digitalisation and social media. Also, systemic risk should be considered in monetary policymaking. Further, the Central Bank should continue to actively: (i) monitor local financial institutions' foreign exposures; (ii) encourage strong risk management frameworks; and (iii) promote the early identification of vulnerabilities and risks through credit, market and liquidity stress testing.


T&T Spirit

CHAPTER 2

Financial Stability Risks in Trinidad and Tobago

FINANCIAL STABILITY RISKS IN TRINIDAD AND TOBAGO

In 2022, domestic financial stability faced challenges related to spill-overs from geopolitical tensions, inflationary pressures, and escalating market uncertainties in light of rising interest rates. Stability concerns were tested as early warning indicators suggest that external supply-side pressures weighed on investor sentiment and risk appetites over 2022. Alongside this, the industry intensified the digitalisation of financial services. These developments may present interest rate, liquidity, and cyber risk challenges for financial institutions over the short term. Although not a near-term risk, the Central Bank is also considering climate-related factors in its risk assessments.

Chapter 2 identifies and assesses near term risks to the domestic financial system and evaluates its resilience to potential shocks.

The most prominent risks to the domestic financial system are interest rate risk and cyber risk, with the need for higher liquidity buffers coming in to sharper focus. Although domestic rates remained low in 2022, higher interest rates could slow the post-pandemic economic recovery, increase market volatility and lead to asset devaluations. Coming out of increased digitalisation efforts that quickened on account of the pandemic, an increased number of cyber-attacks were recorded. A severe widespread attack, irrespective of origination, could erode profitability and undermine confidence in the financial system. Notwithstanding persistent excess liquidity in the banking system, an inflationary environment can dis-incentivise savings as well as impair household debt servicing as real incomes fall. Moreover, the US banking failures in early 2023 seem to suggest that larger liquidity buffers may be required to sustain market confidence. Overall, given the availability of sizeable financial buffers financial stability risk in Trinidad and Tobago was assessed as moderate.

MACROPRUDENTIAL EARLY WARNING INDICES (EWIS)

During 2022, composite indices of financial resilience deteriorated moderately but remained within acceptable ranges. The deterioration in the EWIs appears to be driven primarily by external supply-side pressures, as inflation can undermine investor sentiment and risk appetites.[7] The Aggregate Financial Stability Index (AFSI) fell from 88.4 in 2021 to 81.2 in 2022. Notwithstanding, private sector credit grew at an average of 5.5 per cent in 2022 as government and regulatory support maintained favourable financial conditions – as suggested by the Financial Conditions Index (FCI). However, in the face of rising policy rate hikes in the US, the TT-US 91-day differential widened from 26 basis points in December 2021 to -392 basis points in December 2022. The Systemic Risk Accumulation Index (SRAI) implied that this, alongside (i) declining domestic banking system liquidity, (ii) increased interbank activity, (iii) high and rising inflation and (iv) softer energy prices (in the fourth quarter of 2022) raised the domestic risk profile. The financial sector demonstrated resilience against this backdrop as profitability, liquidity, and capital indicators remained favourable. Albeit, there was a moderation in the Banking Stability Index (BSI) as, for the second consecutive year, total net asset growth was subdued while the net open position in foreign exchange-to-capital expanded **(Figure 7)**.

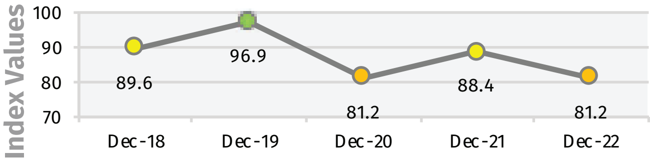
7 In 2017, the Central Bank enhanced its surveillance toolkit by introducing Macroprudential Surveillance Indicators as EWIs. The indices serve to signal financial tensions and aid the Central Bank in evaluating systemic risks. These indicators assist in highlighting potential areas of concern within the regulated financial system.
For further details, see Central Bank of Trinidad and Tobago. 2017. Financial Stability Report 2017. Port-of-Spain: Central Bank of Trinidad and Tobago. Accessed July 2023.
https://www.central-bank.org.tt/sites/default/files/reports/FSR_2017_Final.pdf

FIGURE 7

DOMESTIC MACROPRUDENTIAL EARLY WARNING INDICES, 2018 – 2022

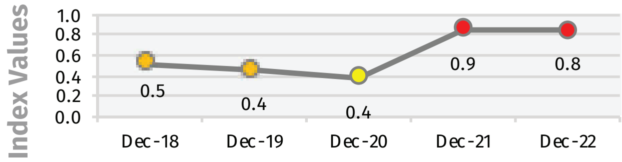
Aggregate Financial Stability Index (AFSI)

The AFSI monitors macro-financial variables related to stability. Increases (decreases) in the value indicate improvements (deterioration) in financial stability.



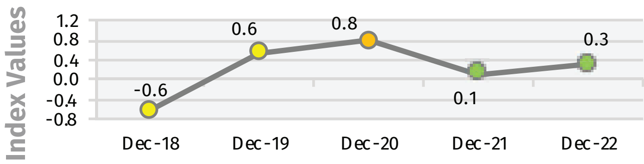
Systemic Risk Accumulation Index (SRAI)

The SRAI determines the degree of systemic risk build-up in the financial system. Increases (decreases) indicate accelerated (decelerated) systemic risk accumulation.



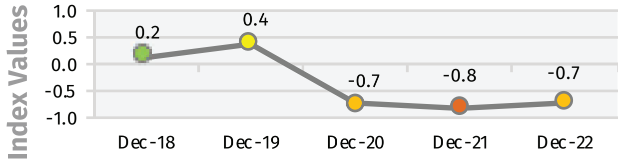
Financial Conditions Index (FCI)

The FCI estimates stress in domestic funding conditions. Excessive negative (positive) values signal loose (tight) funding conditions.



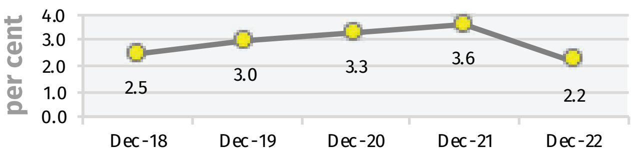
Banking Stability Index (BSI)

The BSI is a consolidated measure of the financial soundness of commercial banks and non-banks. Significantly positive (negative) values signal overheating (higher vulnerability).



Credit-to-GDP Gap (Gap)

The Gap is the difference between private sector credit-to-GDP and its long-term trend. When it is greater than 2 per cent, credit growth can be potentially destabilising.



Benchmarks*

	AFSI	SRAI	FCI	BSI	Gap
Low	90 – 100	0 – 0.2	0 – 0.4	0 – 0.3	0 – 2.0
Moderate	85 – 90	0.2 – 0.4	0.4 – 0.8	0.3 – 0.5	2.0 – 4.0
Elevated	80 – 85	0.4 – 0.6	0.8 – 1.0	0.5 – 0.8	4.0 – 6.0
High	75 – 80	0.6 – 0.8	1.0 – 1.5	0.8 – 1.0	6.0 – 8.0
Very High	≤ 75	0.8 – 1.0	> 1.5	> 1.0	> 8.0

Source: Central Bank of Trinidad and Tobago

*These thresholds are intended only as a general guide and are not unconditional statements on the risk levels. Also, the indices are part of a broader financial stability surveillance framework (Appendix A). They should not be viewed in isolation but complemented with evaluations from stress tests, financial soundness indicators (FSIs), network maps, and other useful risk measurement tools.

RISKS IN THE REGULATED DOMESTIC FINANCIAL SECTOR

In addition to quantitative surveillance, the Central Bank also reviews external and domestic conditions for macro-financial risks. While the early warning indicators suggested a broadly stable outlook for domestic financial stability as at the end of 2022, rapidly evolving events in the international macro-financial environment in the first half of 2023 have altered the risk outlook to the downside. The spectrum of key risks includes:

1. Rising international interest rates;
2. Larger liquidity requirements; and
3. Increasing cyber-attacks.

The following analysis considers the timing and evolution of the above risks to provide an overall assessment and outlook for domestic financial stability.

RISING INTERNATIONAL INTEREST RATES

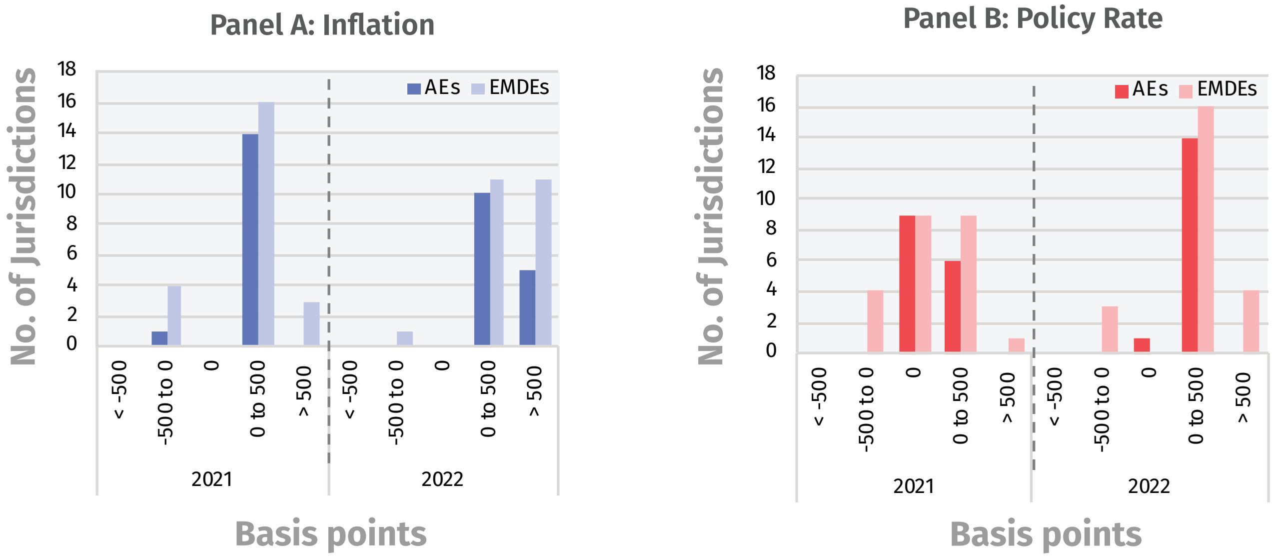
Persistent supply chain issues in the aftermath of the COVID-19 pandemic coupled with the Russia-Ukraine conflict have escalated inflation conditions globally, prompting most monetary authorities to raise their policy interest rates in 2022 and early 2023. Policy rates are expected to remain high over the near term as economies combat elevated prices, which can weigh on domestic financial sector asset valuations. Increases in domestic rates can threaten the post-pandemic economic recovery and impact financial institutions' balance sheets.

Central banks continued to tighten policy rates during 2022 in response to above-target inflation, exposing vulnerabilities in the global financial sector. Inflation surged in both AEs and EMDEs in 2022 as commodity prices rebounded, which was exacerbated by the ongoing Russia-Ukraine conflict and global supply chain disruptions. All but one BIS-reporting jurisdiction recorded higher inflation over the year, with around 42 per cent experiencing increases over 500 basis points **(Figure 8, Panel A)**. On average, inflation rose by 439 basis points in AEs and 753 basis points in EMDEs in 2022. Aggressive monetary policy tightening followed to suppress rising prices, particularly in EMDEs – these economies experienced higher average rate increases over the year **(Figure 8, Panel B)**. However, a greater proportion of AEs raised policy rates in 2022. Investors' concerns surrounding losses on interest-rate sensitive assets triggered widespread sell-offs in AEs.[8] Moreover, soaring interest rates and the associated fall in bond prices contributed to a series of US bank failures in early 2023 **(Box 1)**. Spillovers to EMDEs were contained in 2022 due in part to proactive monetary policy tightening ahead of AEs, alongside stronger fundamentals and higher buffers.

8 IMF. "Global Financial Stability Report April 2023: Safeguarding Financial Stability amid High Inflation and Geopolitical Risks." International Monetary Fund. Accessed May 12, 2023. https://www.imf.org/en/Publications/GFSR/Issues/2023/04/11/global-financial-stability-report-april-2023.

FIGURE 8

CHANGE IN GLOBAL INFLATION AND MONETARY POLICY RATES IN 2021 AND 2022



Source: BIS Statistics

Note: The data consists of a balanced sample of 38 BIS-reporting jurisdictions that had inflation and policy rate data available as of December 2021 and December 2022. Inflation is measured as the annual change in the consumer price index, with no seasonal adjustments.

Persistently high international interest rates could magnify global financial stability concerns and impact domestic financial institutions' portfolios. Global inflation decelerated at the end of 2022 because of a sharp reversal in energy and food prices; however, interest rate increases extended into the first half of 2023 as inflation remained above target.[9] The IMF, in its April 2023 WEO, noted that higher borrowing costs could weaken economic growth and the possibility of a recession has increased, particularly in advanced economies, which could have knock-on effects on global economic activity.[10] This development could have negative implications for the domestic economy through trade and financial linkages. Financial market volatility in light of tighter global financial conditions and a potential slowdown could adversely impact domestic financial institutions' portfolios due to asset revaluations on bonds and other fixed-income instruments. Nevertheless, higher international interest rates could bolster net asset returns in the long-term insurance and occupational pension plans sectors. Moreover, unchanged domestic rates in the context of tightening in the US have led to a widening of negative short-term interest rate differentials –

9 On May 3, 2023 the US Federal Reserve increased its Fed funds rate by 25 basis points to the range of 5.0 per cent to 5.25 per cent, its tenth consecutive rate hike since March 2022. The European Central Bank also increased its main policy rate by 25 basis points to 3.75 per cent on May 4, 2023, its seventh consecutive increase since July 2022.

10 IMF. "World Economic Outlook April 2023: A Rocky Recovery." International Monetary Fund. April 2023. Accessed May 12, 2023. https://www.imf.org/en/Publications/WEO/Issues/2023/04/11/world-economic-outlook-april-2023.

the TT-US differential on three-month treasuries declined by 418 basis points over 2022 and reached -392 basis points at the end of the year.[11] Though there is limited evidence of significant capital outflows due to adverse interest rate differentials, further widening may heighten the risk of portfolio outflows and increase exchange rate pressures.

Increases in domestic rates could impact financial institutions' balance sheets via several channels. The domestic Repo rate has held steady since March 2020 despite the uptick in inflation over the year. At the macroeconomic level, increasing interest rates to reduce inflationary pressures while the business cycle is in an early phase of an upturn could threaten the economic recovery by raising borrowing costs for households and corporates, thereby curtailing credit growth. Private sector credit grew by 5.5 per cent in 2022, compared to 1.3 per cent in 2021, largely due to an uptick in business lending (Chapter 3). While increasing domestic interest rates could boost net interest income and support bank profitability, weaker debt servicing capacity could worsen asset quality in private sector loan portfolios. Mismatched durations on interest rate-sensitive assets and liabilities could also trigger financial losses on bank balance sheets, affecting bank solvency and liquidity.[12]

The domestic financial system is resilient to moderate increases in interest rates, though some vulnerabilities exist. Stress test results for December 2022 indicated that the commercial banking sector is adequately capitalised against a moderate shock to domestic rates.[13] Breaking point analysis suggested that the sector would breach the minimum capital requirement of 10.0 per cent in response to an extreme, instantaneous shock of 486 basis points due to asset-liability mismatches in the medium- to long-term time bands. The banking system loan portfolio is concentrated in real estate mortgages – at the end of December 2022, commercial and residential mortgages accounted for over 30 per cent of banking sector lending. A closer examination of the distribution of the portfolio revealed that approximately 97 per cent of commercial bank residential mortgages were variable- or adjustable-rate; therefore, upward interest rate movements could negatively impact repayment capacity. However, credit risk stress tests pointed to sufficient buffers against a deterioration in asset quality in the commercial banking sector – the sector's capital adequacy ratio (CAR) fell by 4.8 per cent in response to a general increase in past-due loans, but remained above the regulatory minimum.

11 The TT-US differential on three-month treasuries further widened to -461 basis point in June 2023.
12 This is discussed further in Chapter 2, "Heightened Liquidity Risk".
13 The interest rate risk test assesses the impact of a parallel shift in rates on an institution's market value of equity, that is, the change in the economic value of its interest rate-sensitive assets and liabilities, based on the average duration of the portfolio. Therefore, greater mismatch of its interest rate-sensitive assets and liabilities in the longer term increases interest rate risk. The test does not assess the impact of a change in interest rates on profitability (net interest income impact).

The Central Bank continues to monitor risks stemming from rising international interest rates. Global policy rates are expected to tighten further or remain at peak levels as economies continue to combat elevated prices. The Central Bank in its supervisory capacity continues to encourage active asset-liability management within financial institutions and management of interest rate risks in the banking book, for example through their Internal Capital Adequacy Assessment Process (ICAAP) in the case of banks. While there are potential gains from higher rates within the domestic financial sector, vulnerabilities exist within portfolios which could reduce net profitability, shrink safety buffers, and compromise financial sector health. Therefore, the risk to domestic financial stability from rising international interest rates is assessed as **'moderate-to-elevated'**.

LARGER LIQUIDITY REQUIREMENTS

Globally, persistent inflation and aggressive monetary policy tightening are testing the global financial system. Domestically, financial system liquidity was adequate as the banking system liquidity ratios were approximately 20 per cent (liquid assets to total assets) and 25.1 per cent for liquid assets to short term liabilities in December 2022. Further, insurance companies reflected favourable liquid positions. Though liquidity remains sufficient in Trinidad and Tobago, unexpected shocks can quickly amplify liquidity requirements, as demonstrated by the US banking failures in early 2023. The Central Bank adapted its liquidity management strategy in 2023, tilting its monetary operations to permit higher than average excess reserves to improve the ability of the financial sector to withstand liquidity shocks.

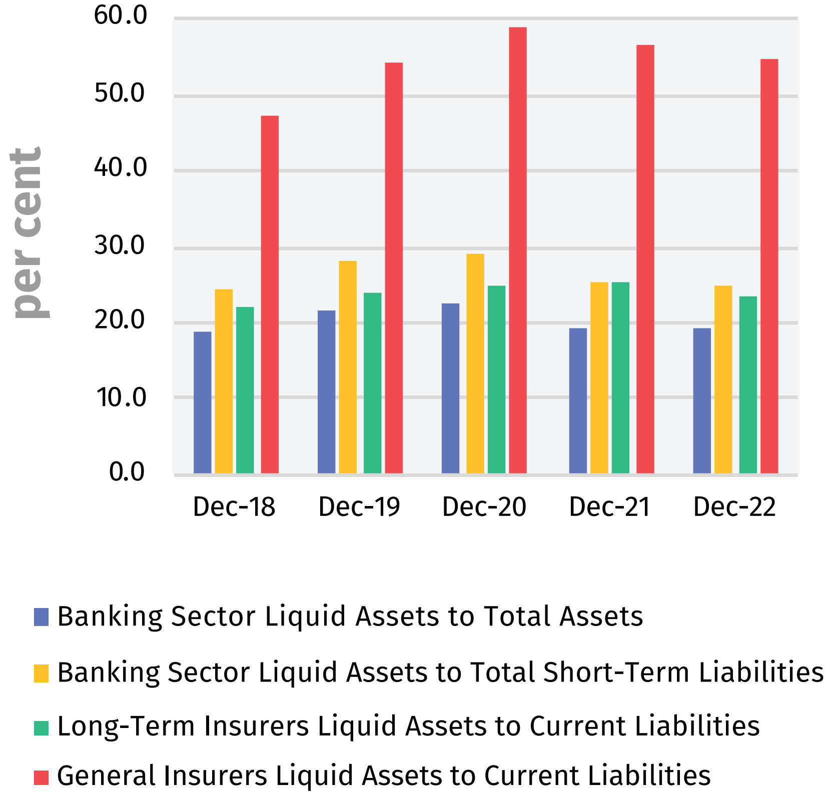
The impact of tighter monetary policy on financial conditions, particularly heightened liquidity risk in financial institutions, has complicated the task of many central banks. Central Banks are faced with addressing inflation while also avoiding the risks of a liquidity crunch that could trigger bank failures. The failure of several banks in the US has led to concerns over the potential financial vulnerabilities such as asset-liability liquidity mismatches and the high degree of interconnectedness, which can amplify depositor withdrawal runs. US bank failures in early 2023 have been linked to selling off securities at a loss due to declining bond prices in the high interest rate environment to meet customers' withdrawal demand **(Box 1)**.

Domestically, the Central Bank faces a complex trade-off between safeguarding financial stability and maintaining low inflation. Despite the challenges of elevated domestic prices and rising global interest rates, the Central Bank maintained its accommodative monetary policy stance in 2022 to support the economic recovery. In this context, liquidity levels for the banking and insurance sectors remained favourable **(Figure 9)**. Additionally, deposits at the Central Bank increased by 21.3 per cent over the period December 2021 to December 2022. However, the TT-US three-month Treasury differential slipped into negative territory since early 2022 **(Figure 10)**. Over 2022, the TT-US 10-year Treasury differential also narrowed substantially. In the event of an adverse shock that warrants shifting monetary considerations towards mitigating external vulnerabilities via the interest rate channel, this may bolster institutions' earnings but may also impact specific institutions without substantial liquidity buffers. Sharp increases in interest rates and lower liquidity levels can amplify asset price movements such as bond prices. Government securities comprise a significant portion of domestic financial institutions' total investment portfolios, 76.7 per cent and 59.8 per cent for the local banking and insurance sectors, respectively.[14] These instruments tend to be long term and sensitive to interest rate changes which can result in significant loss in financial institutions' bond portfolios and asset-liability liquidity mismatches if interest rates rise. Further, losses in bond portfolios and asset-liability mismatches can also cascade into solvency concerns if there is a loss of confidence in these financial entities.

14 December 2022 data for commercial banks suggest approximately 95 per cent of investments are fixed.

FIGURE 9

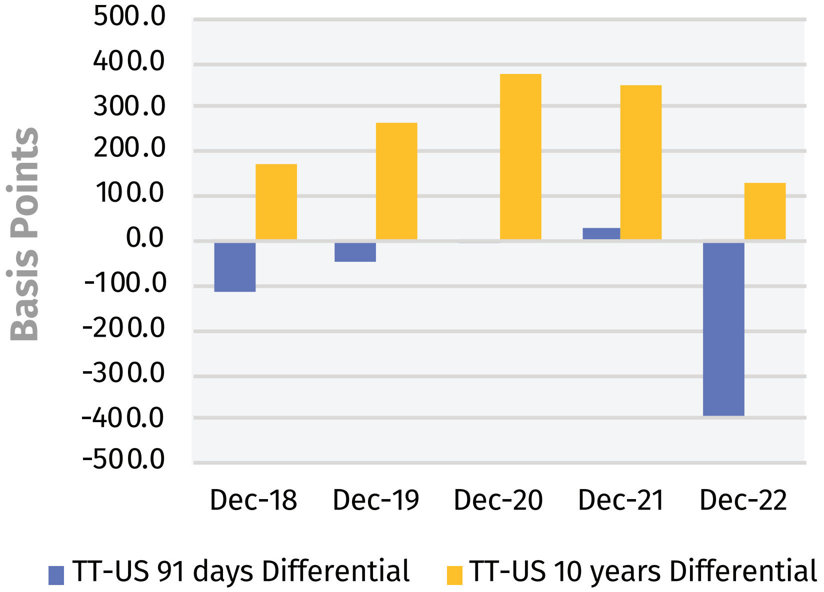
SELECTED LIQUIDITY INDICATORS, DEC 2018 – DEC 2022



Source: Central Bank of Trinidad and Tobago

FIGURE 10

TT-US DIFFERENTIALS, DEC 2018 – DEC 2022



Source: Central Bank of Trinidad and Tobago

The December 2022 liquidity stress test results were satisfactory; however, the results highlighted that the commercial banking sector inched closer to breaching the 30-day average benchmark. While the current stress test results highlight that the sector remains fairly liquid (31 days before becoming illiquid) **(Chapter 3)**, the sector will become illiquid within 13 days under a more severe stress scenario (above-average deposit run rates). This may be explained by the deterioration in liquid assets and marketable investments over the year. Further examination indicated that three of the eight commercial banks could not remain liquid above the 30-day minimum benchmark - one of the institutions is a systemically important bank. This suggests that larger liquidity buffers may be required in order to safeguard the system against adverse liquidity shocks.

Enhanced and effective supervision are essential to ensure that financial system liquidity is not compromised by spillover risks from the restrictive monetary policy actions of advanced economies. The Central Bank issued a guidance document on liquidity risks in January 2021 which should assist with strengthening financial institutions' internal risk management frameworks. Furthermore, the Central Bank progressed work towards the implementation of the Liquidity Coverage Ratio front **(Chapter 4)**. Given that the current policy rate environment remains accommodative, system liquidity buffers are ample and financial institutions may be incentivised to voluntarily increase liquidity buffers following recent US bank failures, this risk can be assessed as **"moderate"**.

INCREASING CYBER-ATTACKS

As digitalisation efforts are ramped up, the frequency of cyber-attacks continues to intensify, posing an increased threat to financial institutions. Locally, there was an increase of 5.7 per cent in reported cyber-related incidents in 2022 compared to the year prior. Cyber risk has not resulted in any systemic disturbances; however, the potential for such incidents is escalating as hackers innovate and become more insidious. Therefore, effective cyber risk management regimes are key to deterring significant financial stability challenges.

The rapid shift towards digitalisation continues to expose financial institutions to cyber-attacks. The pandemic intensified the automation of financial services, which continues to accelerate. This thrust has arisen as institutions adapt to derive value from digital technology. Against this backdrop, with increased financial technology entities[15] and increased access to artificial intelligence, the domestic economy remains vulnerable to cybercrimes. Publicly available information gathered from a technology company International Business Machines Corporation indicated a greater frequency of cyber-attacks in the first half of 2022 in Latin America and the Caribbean, with the Caribbean region encountering 144 million cyber-attacks mainly through ransomware activities.

Notwithstanding the lack of cyber risk related data, evidence suggests that the economy has been subjected to cyber-attacks. Statistics provided the Trinidad and Tobago Cyber Security Incident Response Team show that domestically there were 48 phishing attacks, 40 data breaches, 30 cases of website defacement and denial of service, 14 reports of business email compromise, 13 ransomware incidents, and two malicious insider events between 2019 to 2022. Approximately 57.1 per cent of total incidents were reported by the private sector.[16] While the specifics of this information are unavailable, some major cyber incidents have been reported in the media. Over the last year, in April 2022, a regional conglomerate, Massy Group was subjected to a cyber-attack that resulted in operational disruptions. In that same month, a US-based logistics company, Aeropost encountered a data breach that resulted in the cancellation of customers' credit cards locally. Further, in November 2022, Beacon Insurance Group reported a cybersecurity incident that compromised its information technology infrastructure.

Cyber-related risks challenge the financial sector as the digital footprint expands domestically. In December 2022, mobile internet, fixed internet and voice penetration expanded by 5.0 per cent, 0.8 per cent and 0.2 per cent, respectively **(Figure 11)**. Moreover, expenditure on software development increased by 5.7 per cent for banks and insurers in 2022 compared to the previous year, attributed mainly to the banking

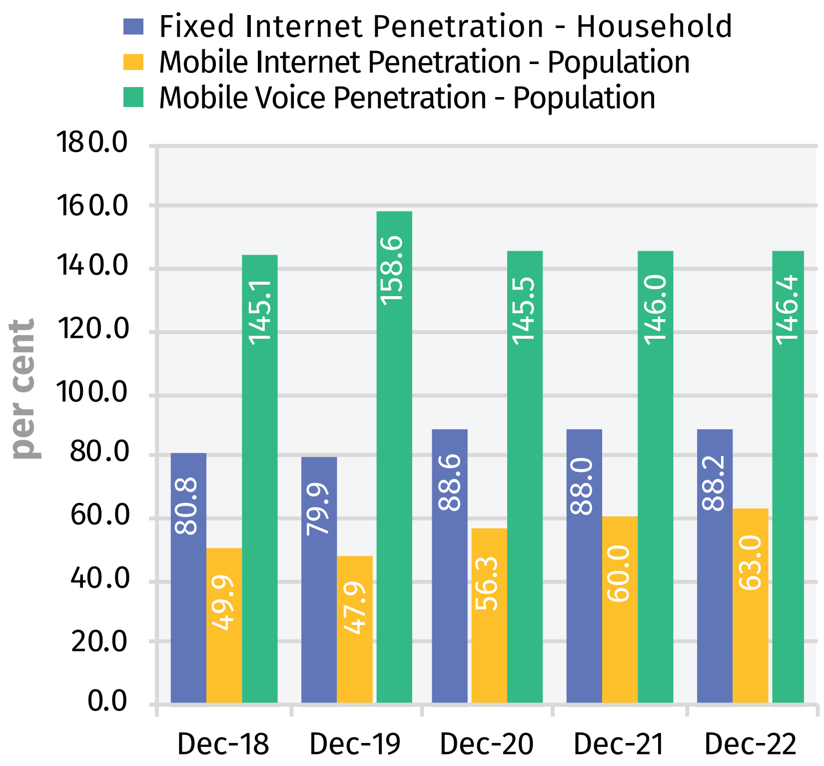
15 Domestically, on February 1, 2023, the Central Bank of Trinidad and Tobago authorised the Telecommunication Services of Trinidad and Tobago and PESH Money Limited to issue electronic money, and extended the provisional registration of another e-money issuer (Paywise) for six months commencing March 1, 2023.

16 Mark Lyndersay. (2022). "A blitzkrieg of ransomware." Tech News TT. November 21, 2022. https://technewstt.com/bitdepth1381-rise-in-ransomware/

sector **(Figure 12)**. As institutions in the financial sector steer towards digital transformation, the attack surface widens. Cyber incidents can result in loss of confidence by clients in financial institutions, which can lead to significant withdrawals; this event can morph into a systemic crisis via the interconnections that exist amongst institutions. Moreover, if institutions defence and recovery capabilities are weak, this poses an operational risk that may affect earning capabilities.

FIGURE 11

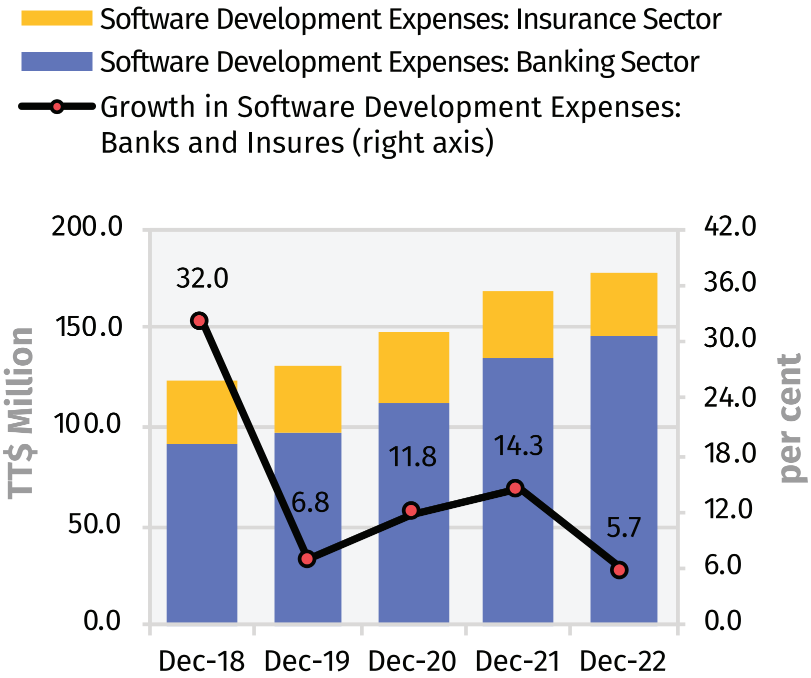
INTERNET AND VOICE PENETRATION RATES, DEC 2018 – DEC 2022



Source: Telecommunications Authority of Trinidad and Tobago

FIGURE 12

FINANCIAL SECTOR SOFTWARE DEVELOPMENT EXPENSES, DEC 2018 – DEC 2022



Source: Central Bank of Trinidad and Tobago

Cybercrimes are continuously evolving and are an imminent threat to the financial sector, necessitating appropriate mitigating actions. Several institutions' annual reports highlighted that a key area of priority in their risk management framework is managing cyber-related risk. Notably, the thematic review on cybersecurity management practices[17] in the banking sector instituted by the Central Bank highlighted that cybersecurity frameworks implemented were fairly robust, however, there were areas for improvement in which recommendations were provided.[18] Moreover, following an IMF Technical Assistance Mission on strengthening cybersecurity in November 2022, the Central Bank is developing a cyber-security guideline, including an incident-reporting regime to improve its surveillance on cyber risk of financial institutions. While the guideline will be applicable to institutions regulated by the Central Bank, other financial institutions could voluntarily adopt the guideline **(Chapter 4)**. The overall risk to domestic financial stability is characterised as **'moderate'**.

17 The report on the thematic review can be accessed using the following link: https://www.central-bank.org.tt/sites/default/files/page-file-uploads/thematic-report-on-cybersecurity-management-practices-at-commercial-banks%20-20220818.pdf

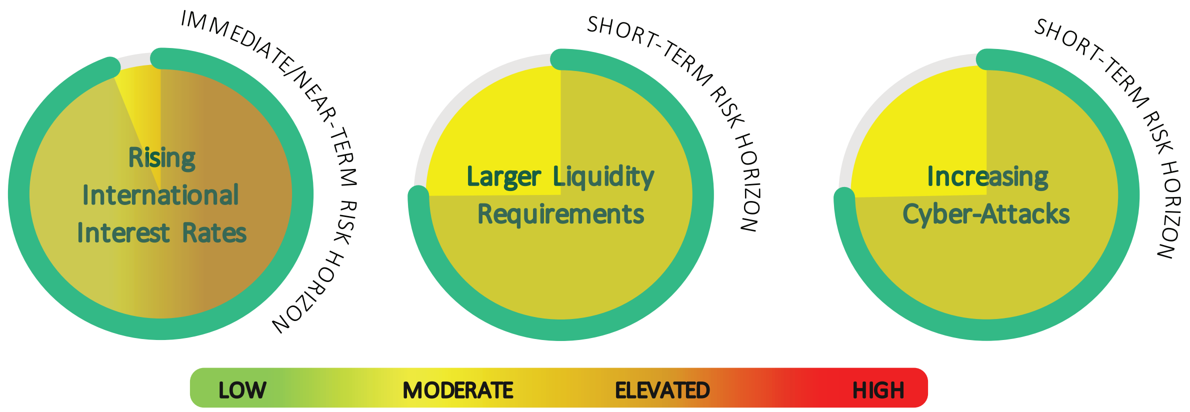
18 These recommendations looked at enhancing cyber risk management and oversight, fostering industry collaboration and information sharing on potential threats as well as reviewing and monitoring third party security controls.

RISK ASSESSMENT

Figure 13 summarises key financial stability risks in the Trinidad and Tobago financial sector. The overall risk assessment considers the length of the risk horizon based on ongoing developments in the global and domestic macro-financial system. Overall, financial stability risks are assessed as **'moderate'**.

FIGURE 13
FINANCIAL STABILITY RISK ASSESSMENT

CHAPTER 2
Figure 13 Financial Stability Risk Assessment



Source: Central Bank of Trinidad and Tobago

BOX 2: ADDRESSING CLIMATE RISK DATA GAPS TO SUPPORT FINANCIAL STABILITY

Quantifying climate-related risks is crucial to conducting effective risk assessments in the financial sector, but efforts have been hindered by severe data shortcomings. Some central banks, supervisors, and financial institutions are ahead of the curve in exploring the impact of physical and transition risks related to climate change through advanced techniques such as stress testing and scenario analysis.[1] However, many of the approaches and methodologies explored in advanced economies are challenging to deploy in small island developing states owing to inadequate datasets, as well as limited technical expertise and resources. These compound common hurdles in the field of climate risk, such as inconsistencies in methodologies to project climate data and the short supply of robust approaches to link climate risk drivers to economic and financial sector variables. Researchers, policymakers, and supervisors have underscored the critical role of high-quality, sufficiently-detailed, and accessible climate data to inform decision-making to support the financial sector's stability.

There is considerable uncertainty in the trajectory of climate risk drivers and the extent to which they may impact the environment. Global temperature pathways are influenced by the implementation of national climate mitigation policies and technologies, especially within the largest carbon-emitting economies. The high degree of uncertainty suggests that outcomes may be subject to significant model risk. Climate risks, especially physical risks, are unprecedented and occur over a long-term horizon. Historical data are therefore less useful in modelling future environmental impacts. The extent to which global temperature paths affect the economic and financial impact of climatic events is dependent on the existence of potential mitigants, such as insurance protection, sustainable technologies, behavioural response, and government support. Numerous assumptions must be applied for the aforementioned factors, which introduces multiple layers of uncertainty. This gives rise to inconsistencies in the data and underlying methodologies supplied by various providers to model the impact of changing climate risk drivers on financial sector variables. More than one potential trajectory for risk drivers should be evaluated to consider these uncertainties.[2]

Climate risk drivers lie outside the financial system, presenting several data compilation challenges. Transition risk drivers such as national mitigation and adaptation policies, "green" technologies, and investor or consumer sentiment can influence greenhouse gas emissions and, by extension, global temperature pathways. In turn, physical risk drivers are related to temperature pathways, which have implications for projected hazards and long-term changes to climate systems. The projection of environmental data such as temperature increases, extreme weather events, sea level rise, and changing rainfall patterns is beyond the purview of central banks and supervisors. As a result, engagement with public agencies, commercial data providers, and climate science experts is required to close some of the existing data gaps and translate risk drivers into environmental impacts. Within a particular country, climatic effects vary by geographic location and sector of activity. The supervisory authority may not collect financial institutions' geographic and sectoral exposures on standard regulatory returns, or may collect at insufficient granularity. Moreover, data may not be housed at the financial institution or collected in a consistent manner.

1 Duke, Kateri, and Nikkita Persad. 2021. *Exploring the Financial Sector's Resilience to Climate Change: The New Frontiers of Stress Testing*. Compilation of Working Papers Vol. 2. 2021, Central Bank of Trinidad and Tobago.

2 NGFS. 2022. *Physical Climate Risk Assessment: Practical Lessons for the Development of Climate Scenarios with Extreme Weather Events from Emerging Markets and Developing Economies*. Technical document, Network for Greening the Financial System.

BOX 2: ADDRESSING CLIMATE RISK DATA GAPS TO SUPPORT FINANCIAL STABILITY (CONTINUED)

The overall risk to the health of financial sector balance sheets due to climate-related risks is a function several variables or climate risk indicators. The construction of such indicators requires the integration of several detailed datasets with sufficient coverage of a range of potential hazards within a region and their probabilities of occurrence, carbon emissions intensities, the location and value of exposures, vulnerability of exposures, and socio-economic and financial feedback effects.[3] The components of physical and transition risk indicators are described in Table 1.

TABLE 1

DATA NEEDS FOR THE ASSESSMENT OF CLIMATE-RELATED RISK

	PHYSICAL RISK		TRANSITION RISK	
	Balance Sheet Data	*Environmental Data*	*Balance Sheet Data*	*Environmental Data*
	Sector exposures as per internationally recognised sector classification system	Sensitivity to physical climate hazards (by sector)	Sector exposures as per internationally recognised sector classification system	Average carbon intensity per sector
	Country exposures	Vulnerability to physical climate impacts (by country)		
	Location-specific exposures (district-level)	Vulnerability to physical climate impacts (by district)	Single-name (that is, group-level) and firm-level exposures	Carbon emissions data from individual firms
	Location-specific exposures (facility-level, counterparty disclosures)	Vulnerability to physical climate impacts (by geographical location)	Revenue streams from single-name exposures (activity-level)	Carbon intensity of business activities
	Value chain exposures (location-specific data for vulnerable producers, suppliers, aggregators and distributors etc)	Vulnerability to physical climate impacts (by geographical location)	Sector exposures (value chain)	Input-output tables (embedded emissions)

Low granularity   Medium granularity   High granularity

Source: Adapted from the NGFS

3 Willeke, Caroline, Malgorzata Osiewicz, Romana Peronaci, Daphné Aurouet, Jörn Franke, Alessandro De Sanctis, and Davide Del Giudice. 2021. "Experimental statistical indicators on granular exposures to climate-related physical risks." Presented at the IMF Ninth Statistical Forum November 17-18, 2021.

BOX 2: ADDRESSING CLIMATE RISK DATA GAPS TO SUPPORT FINANCIAL STABILITY (CONTINUED)

Although gaps and shortfalls exist, in moving towards its Paris Agreement commitments, Trinidad and Tobago has taken steps to improve data collection related to climate change. Notable advancements include establishing a National Climate Mitigation Monitoring, Reporting and Verification (MRV) System. The MRV System (in conjunction with a Knowledge Management System) was launched in 2019, under the purview of the Environmental Management Authority. It facilitates: (i) collecting, collating and verifying all data related to greenhouse gases from all emitting entities; (ii) tracking the progress of meeting National Determined Contributions; (iii) and monitoring mitigation actions and financial support received for climate change-related initiatives. While the MRV has been in operation since its launch, it still requires incorporation into law in order to mandate reporting and submission of mitigation plans.[4] Notwithstanding, a national greenhouse gas inventory (GGI) for Trinidad and Tobago (from 2006 – 2018) was compiled by the Ministry of Planning and Development.

The Central Bank of Trinidad and Tobago (Central Bank) noted, in its strategic plan for 2021 to 2026, intentions to integrate environmental issues and climate change into policy considerations. Projects such as the MRV and GGI are welcome additions to address data gaps as, at the institutional level, incorporating climate-related issues into risk management practices appear mixed. This was based on the findings of a survey, issued by the Central Bank in 2020, where respondents generally noted that attempts to incorporate and assess the impact of climate change are ongoing. At the regulatory level, this data will assist the Central Bank in its ongoing efforts to integrate climate risk into financial sector supervision, including through the development of scenario analysis and stress testing. Trinidad and Tobago's First Biennial Update Report to the United Nations Framework Convention on Climate Change listed several actions that will be taken in the next few years to reduce greenhouse gas emissions – as an example, an e-mobility policy that will phase in electric vehicles. As mitigation strategies can have unintended side effects on institutions with climate-related exposures, to ensure consistency with international best practices, it is essential to collate data that allows for incorporating transition risks in the regulatory stress testing exercise.

4 GORTT. 2021. "*First Biennial Update Report of the Republic of Trinidad and Tobago under the United Nations Framework Convention on Climate Change*." Government of the Republic of Trinidad and Tobago.

CHAPTER 3

Performance and Resilience of the Financial System

PERFORMANCE AND RESILIENCE OF THE FINANCIAL SYSTEM

The domestic financial system's health remains intact as profitability, liquidity and capital indicators remained favourable over the year. Assets of the system increased marginally, but asset concentration in major sectors reduced during the year. The Central Bank relinquished emergency control over Colonial Life Insurance Company (Trinidad) Ltd. (CLICO) and British American Insurance Company (Trinidad) Ltd. (BAT) in December 2022. The domestic stock market declined in 2022, while secondary bond market activity increased as institutions aimed to hedge against inflation. The first non-bank E-Money Issuer was provisionally registered in 2022. The sector's cyber risk susceptibility is heightened as fintech integration continues.

FINANCIAL SECTOR INTERLINKAGES

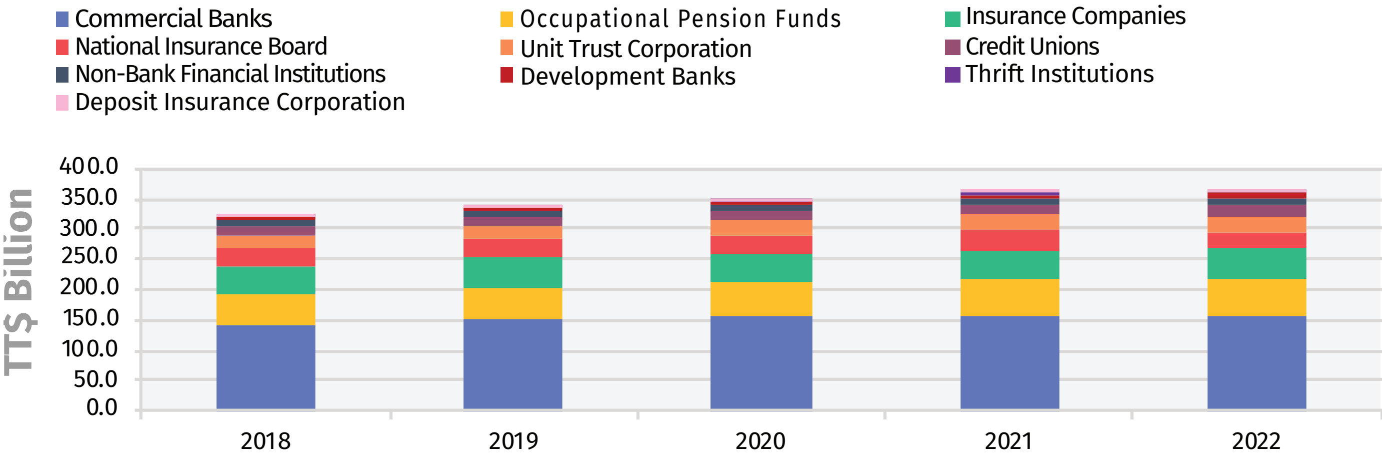
The interconnectedness of the domestic financial sector remained relatively stable over the year, with the number of direct and indirect linkages broadly unchanged. While there was regional merger and acquisition activity as a financial holding company expanded its cross-border operations, domestic activity was muted. However, institutions that were acquired or introduced into the domestic landscape within recent years continued to grow their operations in 2022, thus capturing greater market share. Common portfolio exposures persist among the various financial segments, which could propagate shocks to the sector.

Domestic financial sector assets increased marginally over 2022 and remained dominated by a few sectors. Total financial sector assets grew by $1.0 billion (0.3 per cent) to $363.6 billion at the end of 2022 (Figure 14), equivalent to 185.3 per cent of GDP. The three major sectors – banking, pension, and insurance – accounted for 77.4 per cent of total assets or 143.5 per cent of GDP. These sectors have notable linkages to the capital markets as approximately 65 per cent of registrants were either associated with, or belonged to a group consisting of a financial or banking entity in 2021.[19]

19 Trinidad and Tobago Securities and Exchange Commission. "Securities Market Bulletin #9". November 2022. Accessed 15 May, 2023. https://www.ttsec.org.tt/wp-content/uploads/Securities-Market-Bulletin-Issue-9.pdf.

FIGURE 14

DOMESTIC FINANCIAL SECTOR ASSETS, 2018 – 2022



Source: Central Bank of Trinidad and Tobago
Note: The data for Credit Unions are estimated.

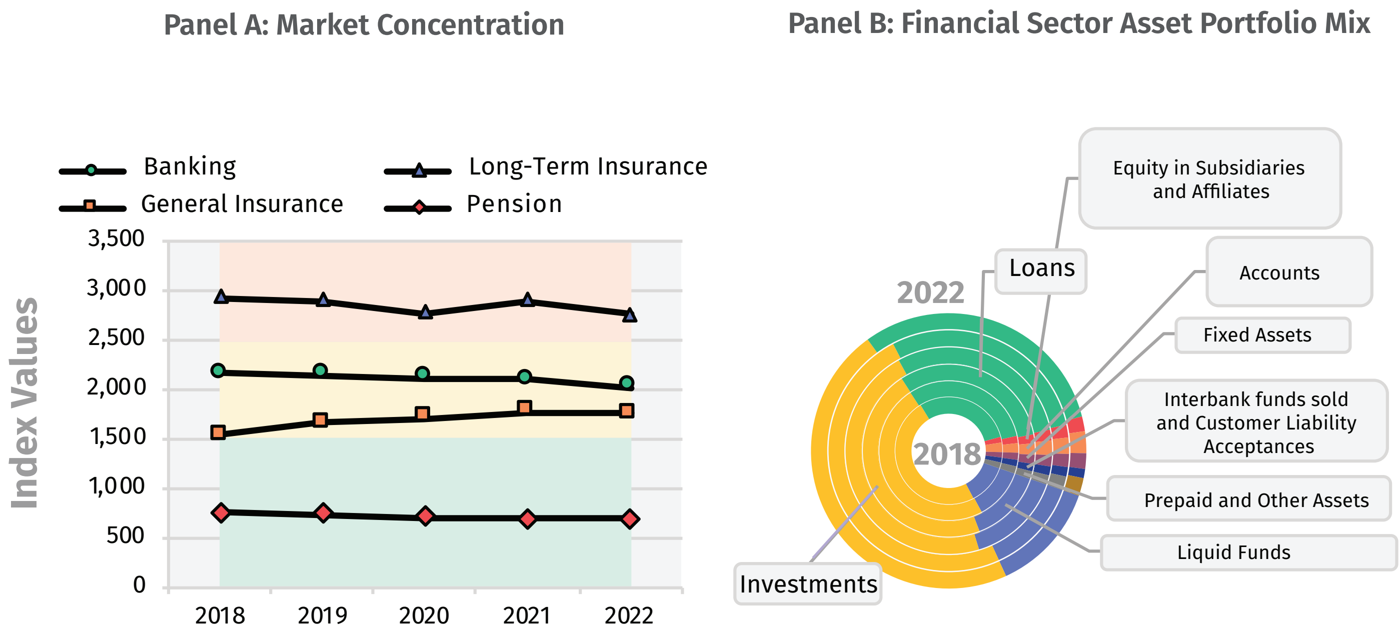
Concentrations within the major financial industries have reduced over the year. Low market concentration values in the pension sector, measured by the Herfindahl-Hirschman Index (HHI) (using assets), pointed to fair competition within the industry **(Figure 15, Panel A)**. While the banking sector was moderately concentrated at the end of 2022, the HHI (using deposits) fell by 4.0 per cent over the year owing to an increased share of deposits by a newly-owned commercial bank. Market concentration in the general insurance industry (using gross premiums) was also moderate at the end of the period and reduced marginally from 2021. In contrast, the HHI (using gross premiums) indicated a high concentration in the long-term insurance industry at the end of 2022. However, there was greater substitutability compared to the previous period due to the entrance of a new market player in 2021.[20] While the introduction of a new insurance company has the benefit of increasing competition within the industry, it accentuates the interconnectedness among the various financial industries as the company is a subsidiary of a major financial conglomerate with mainly banking operations.

The major industries also share similar asset exposures. The asset mix of the financial system, using the three major sectors as a proxy for the total system, indicated that exposures were relatively consistent over the year **(Figure 15, Panel B)**. Though investments slowed in 2022 on account of the banking and pension sectors, this asset category continued to contribute close to half of all financial sector assets. Within the investment portfolio, domestic sovereign exposures dominated. From the cross-border perspective, banks and insurance companies were exposed to North America (68 per cent of foreign country investments), the Caribbean Community (CARICOM) (12 per cent), and Europe (8 per cent).

20 Reporting subsequently commenced in 2022.

FIGURE 15

FINANCIAL SECTOR CONNECTIONS, 2018 – 2022



Source: Central Bank of Trinidad and Tobago
Note: HHI < 1,500 (low concentration), HHI between 1,500 and 2,500 (moderate concentration) and HHI > 2,500 (highly concentrated).

Ongoing concentrations and interlinkages between the individual financial industries underscore systemic risk concerns as adverse shocks to one sector can spill over to other financial segments. Moreover, these interconnections could exacerbate macro-financial shocks that affect various industries simultaneously. In the context of a tepid economic recovery, higher inflation, and rising interest rates internationally, the domestic financial sector remained resilient throughout 2022.

The following sections summarise the recent performance of the individual financial segments.

FINANCIAL SOUNDNESS INDICATORS

BANKING SECTOR (COMMERCIAL BANKS AND NON-BANKS)

Macroeconomic challenges did not translate into any material decline in key banking sector FSIs in 2022 (Table 1). The banking sector steered excess liquidity into US treasuries and domestic government bonds at the onset of the pandemic, with the latter being the primary driver of an increase of 8.9 per cent in sovereign exposure, from $42.1 billion in 2020 to $45.9 billion in 2021. However, a subsequent decline in sovereign investments and a reduction in government borrowing resulted in a decrease in sovereign assets to total assets from 26.7 per cent in 2021 to 23.6 per cent in 2022. As credit demand strengthened, increases in customer deposits together with sovereign investment maturities funded growth in business and consumer loan portfolios due to strengthened credit demand. The banking sector continued to be well capitalised and profitable. Improvements in asset quality were notable, while liquidity remained ample, although on a declining trend. Further, foreign currency balance sheets increased $3.8 billion or 9.0 per cent over the year, which led to higher levels of net open position in foreign exchange from 21.4 per cent in 2021 to 27.0 per cent of banking system capital.

TABLE 1

BANKING SECTOR: FINANCIAL SOUNDNESS INDICATORS, 2018 – 2022

/ Per Cent /

	Dec-18	Dec-19	Dec-20	Dec-21	Dec-22
Capital Adequacy*					
Regulatory capital-to-risk-weighted assets	23.3	23.6	18.8	19.3	18.7
Common equity tier 1 capital-to-risk-weighted assets	-	-	-	18.9	18.4
Regulatory tier 1 capital-to-risk-weighted assets	23.5	22.4	18.3	18.9	18.4
Regulatory capital-to-total assets	12.7	13.0	12.6	13.3	13.2
Net open position in foreign exchange-to-capital	14.4	11.2	14.8	21.4	27.0
Loan Composition					
Sectoral distribution of selected loans-to-total loans					
Household sector	47.2	47.4	48.4	47.9	47.1
Public sector	13.1	13.6	13.1	12.6	11.8
Financial sector	16.0	16.1	16.1	16.2	16.8
Oil and gas sector	4.9	4.8	4.2	4.4	4.1
Construction sector	4.4	2.8	3.8	3.8	4.4
Transport and communication sector	3.1	2.2	1.9	1.8	2.2
Non-resident loans-to-total loans	5.1	7.0	6.9	7.1	8.4
Foreign currency loans-to-total loans	17.0	18.1	16.3	15.6	16.2
Asset Quality					
Non-performing loans-to-gross loans	3.1	3.1	3.4	3.4	3.2
Non-performing loans (net of provisions)-to-capital	5.1	5.4	3.3	3.5	3.6
Total provisions-to-impaired loans	68.6	61.6	88.0	87.2	85.3
Specific provisions-to-impaired loans	53.4	48.8	71.2	67.6	65.5
General provisions-to-gross loans**	0.5	0.4	0.6	0.7	0.6
Specific provisions-to-gross loans	1.7	1.5	2.4	2.3	2.1
Earnings and Profitability					
Return on assets	3.0	3.6	1.8	2.2	2.6
Return on equity	20.2	24.3	12.4	15.2	17.1
Interest margin-to-gross income	64.5	61.7	67.1	63.2	63.0
Non-interest income-to-gross income	35.5	38.3	32.9	36.8	37.0
Non-interest expenses-to-gross income	58.4	54.8	70.9	63.9	61.1
Liquidity					
Liquid assets-to-total assets	19.0	21.5	22.5	19.4	19.3
Liquid assets-to-total short-term liabilities	24.4	27.9	28.9	25.2	25.1
Customer deposits-to-total (non-interbank) loans	153.2	150.3	164.4	165.2	157.1
Foreign currency liabilities-to-total liabilities	26.4	25.8	24.5	25.4	26.2

Source: Central Bank of Trinidad and Tobago

*Although the new Capital Adequacy Regulations were passed into law in May 2020, regulatory reporting on Basel II/III only became effective from August 2020. All capital adequacy ratios prior to August 2020 are based on the Basel I framework. Adjustments related to the new framework seek to raise the quality and quantity of the regulatory capital required and enhance the risk coverage of the capital framework. For further information on Central Bank's Basel II/III framework implementation, please view: https://www.central-bank.org.tt/core-functions/supervision/basel-ii-iii-implementation

**This ratio is not a typically used measure of financial soundness, but is included for comparison purposes.

LONG-TERM INSURANCE INDUSTRY

The long-term insurance industry demonstrated resilience over the last five years and exhibited enhanced capital strength and profitability (Table 2). Industry profits fluctuated over the five-year period, influenced by the volatility in the markets. Several one-off transactions made by large insurers also shifted the cumulative industry profits. There was a moderate contraction in the industry's liquidity level over the year; however, it remained within an acceptable range.

TABLE 2

LONG-TERM INSURANCE INDUSTRY:
FINANCIAL SOUNDNESS INDICATORS, 2018 – 2022
/ Per Cent /

	Dec-18	Dec-19	Dec-20	Dec-21	Dec-22
Capital Adequacy					
Capital-to-total assets	20.9	23.2	21.2	23.6	24.6
Capital-to-technical reserves	29.0	33.2	30.4	33.5	35.9
Asset Quality					
(Real estate + unquoted equities + debtors)-to-total assets	8.8	8.4	9.5	9.3	9.1
Earnings and Profitability					
Expense ratio = expense (incl. commissions)-to-gross premium	28.2	27.2	25.4	26.8	25.3
Investment yield = investment income-to-investment assets	4.7	4.9	4.9	4.8	4.9
Return on equity = pre-tax profits-to-shareholders' funds	13.1	16.7	11.4	12.5	14.7
Liquidity					
Liquid assets-to-current liabilities	22.1	24.0	25.2	25.4	23.9

Source: Central Bank of Trinidad and Tobago
Note: Excludes data from CLICO and BAT.

GENERAL INSURANCE INDUSTRY

The general insurance industry was unaffected by any catastrophic events in 2022. However, claims continued to rise due to increased activity following the rollback of COVID-19 restrictions in the latter half of 2021, the higher cost of claims due to inflation, and increased flooding activity in the latter part of 2022. Overall, the sector remained profitable; however, the uptick in claims elevated the net loss ratio for the sector from 46.3 per cent in 2021 to 53.2 per cent in 2022, as well as negatively impacted the return on equity (ROE) over the period **(Table 3)**.

TABLE 3

GENERAL INSURANCE INDUSTRY:
FINANCIAL SOUNDNESS INDICATORS, 2018 – 2022
/ Per Cent /

	Dec-18	Dec-19	Dec-20	Dec-21	Dec-22
Asset Quality					
(Real estate + unquoted equities + accounts receivables)-to-total assets	18.3	17.4	16.7	16.4	18.1
Debtors-to-(gross premiums + reinsurance recoveries)	14.6	13.4	14.6	13.5	15.6
Reinsurance and Actuarial Issues					
Risk retention ratio = net premiums written-to-total gross premiums	46.0	46.9	43.7	39.7	39.1
Net technical reserves-to-average of net claims paid in the last three years	139.7	130.9	133.1	131.0	118.9
Earnings and Profitability					
Combined Ratio	106.2	100.1	97.3	107.3	113.8
Expense ratio = expense (incl. commissions)-to-net premiums	56.8	54.9	56.6	61.0	60.3
Loss ratio = net claims-to-net earned premiums	49.4	45.2	40.7	46.3	53.5
Investment income-to-net premium	7.4	6.7	6.6	7.6	6.5
Return on equity = pre-tax profits-to-shareholders' funds	7.3	11.2	12.0	11.4	5.3
Return on assets	3.1	5.1	5.9	5.5	2.5
Liquidity					
Liquid assets-to-current liabilities	47.2	54.3	58.8	56.5	54.6

Source: Central Bank of Trinidad and Tobago

BANKING SECTOR (COMMERCIAL BANKS AND NON-BANKS) PERFORMANCE

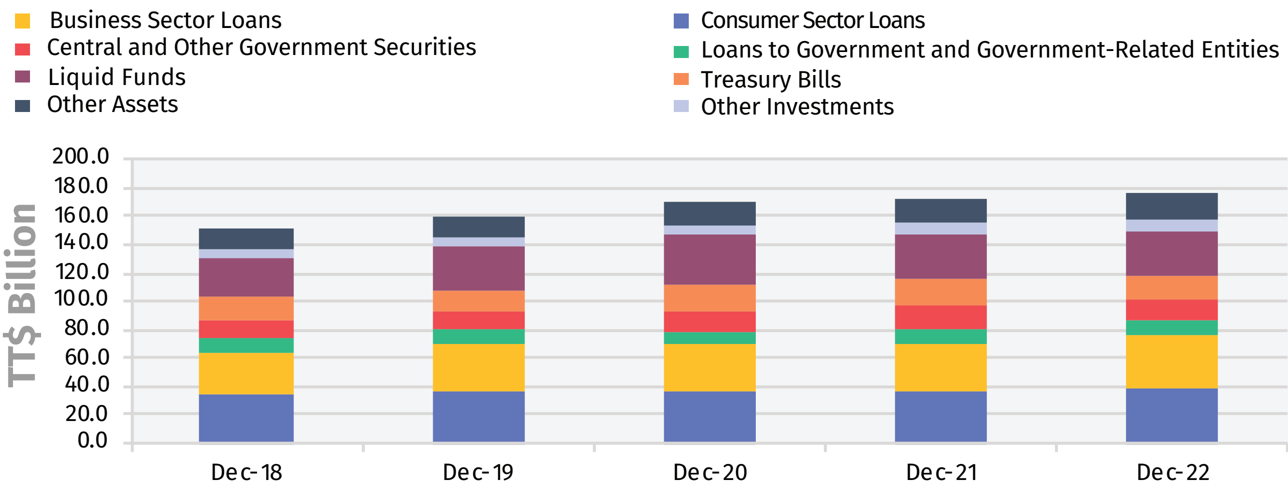
ASSETS

Banking sector assets grew moderately in 2022, supported by an expansion in the loan portfolio (Figure 16). The gross asset base increased by 2.4 per cent ($4.1 billion) to $176.0 billion as at December 2022, compared to growth of 1.5 per cent in 2021. Higher borrowing from businesses and consumers accounted for the majority of the increase, which was funded by an expansion in customer deposits as well as maturities of short term government investments.

Assets continued to comprise mostly loans, investments, and liquid funds, with accentuation noted in the loan portfolio. Total loans grew by 7.6 per cent ($6.1 billion) to nearly one-half of the asset base in 2022. Business sector lending led the recovery in credit as pandemic restrictions were lifted and lending conditions improved, particularly in the Services sector. As demand for credit revived, commercial banks steered cash from maturities in the investment portfolio to loan disbursals. As a result, the investment portfolio contracted to 23.5 per cent of total assets, compared to 25.7 per cent in 2021. Liquid funds in the banking sector grew marginally (0.05 per cent or $13.9 million) but remained ample over 2022, with core funding and cash available from the maturities of investments sufficient to fund loan growth. Liquidity accounted for 19.3 per cent of total assets as at December 2022.

FIGURE 16

ASSET COMPOSITION, 2018 – 2022



Source: Central Bank of Trinidad and Tobago

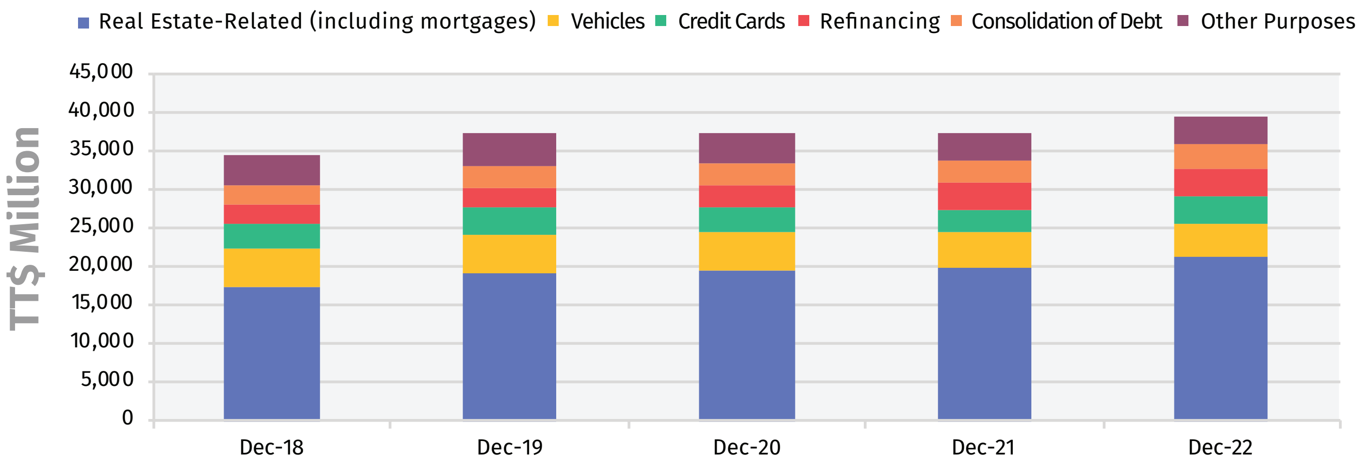
Consumer Sector Loans

Consumer debt grew in 2022 as a combination of pent-up demand, high inflation, and ongoing household debt consolidation/refinancing efforts drove borrowing activity. Consumer loans increased by 6.1 per cent ($2.3 billion) to $39.5 billion (45.9 per cent of gross loans) at the end of December 2022 **(Figure 17)**. There was a greater appetite for real estate-related loans[21], which increased by 6.6 per cent ($1,304.9 million) in 2022. Motor vehicle lending declined year-on-year by 2.9 per cent ($134.9 million), but showed signs of recovery over the latter half of 2022 as shipping operations and the timely delivery of vehicles improved **(Table 4)**.

Despite nascent improvement in the domestic economy, increased requests by consumers for two main loan remediation methods via refinancing and debt consolidation were prominent – loans geared towards refinancing and debt consolidation increased by 13.5 per cent ($442.2 million) and 6.7 per cent ($191.6 million), respectively. Meanwhile, loans for Other Purposes grew by 2.5 per cent ($527.2 million) over the year. Consumers utilised credit cards as a primary payment method as international travel resumed, and to settle online and in-person purchases at merchants.

FIGURE 17

CONSUMER LOANS BY PURPOSE, 2018 – 2022



Source: Central Bank of Trinidad and Tobago

21 Real Estate-Related loans comprise of residential mortgages, bridging finance, land and real estate, home improvement and renovation.

TABLE 4

GROWTH IN CONSUMER LOANS BY PURPOSE[22], 2018 – 2022

/Year-on-Year Per Cent Change/

CATEGORIES	Dec-18	Dec-19	Dec-20	Dec-21	Dec-22
Real Estate-Related (including mortgages)	4.1	9.8	1.7	2.3	6.6
Vehicles	0.6	2.5	-0.6	-9.7	-2.9
Credit Cards	7.6	3.8	-2.5	-7.6	12.3
Refinancing	11.4	9.1	6.7	17.8	13.5
Consolidation of Debt	18.4	13.6	2.9	-3.2	6.7
Other Purposes	6.4	9.9	-7.3	-2.4	2.5
TOTAL GROWTH IN CONSUMER LOANS	**5.5**	**8.4**	**0.4**	**0.0**	**6.1**

Source: Central Bank of Trinidad and Tobago

Business Sector Loans

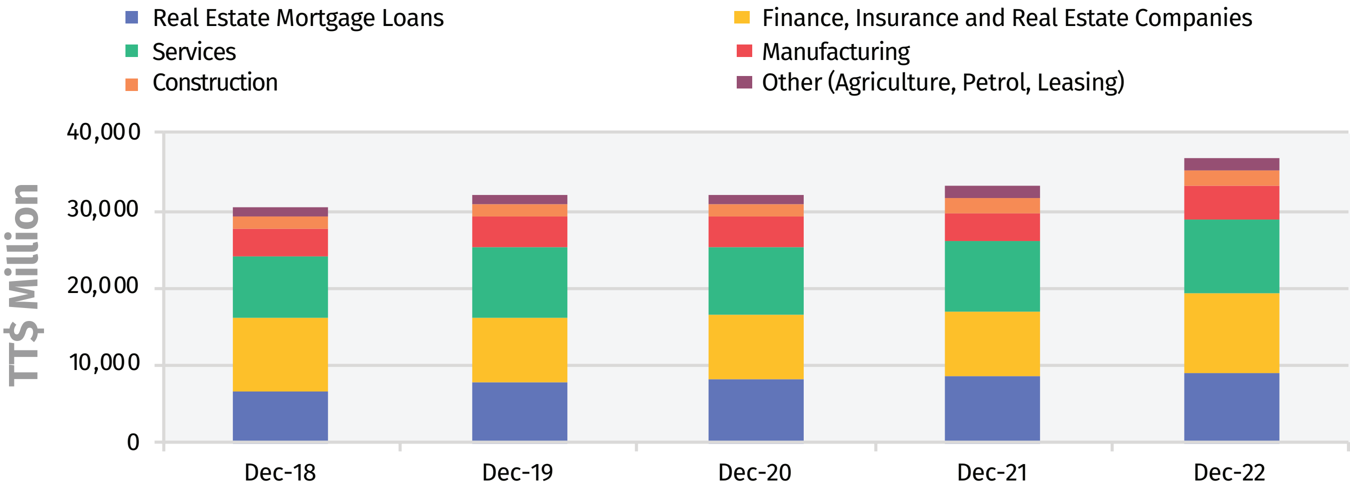
Lending to the business sector surged by 11.4 per cent ($3.8 billion) in 2022 primarily driven by increased borrowing within the Finance, Insurance and Real Estate sector, while Services sector firms also sought additional financing to contend with higher operational costs and increased competition. Finance, Insurance and Real Estate lending grew by 24.2 per cent ($2.0 billion) while lending to Services sector businesses expanded by 9.3 per cent ($827.1 million) **(Figure 18)**. Within the Services sector, lending to the Distribution sub-sector (including restaurants and bars), increased by 11.2 per cent ($439.5 million) in 2022. The adverse effects of the COVID-19 pandemic, which stymied occupancy rates at hotels and guest houses and the operations of personal services providers, were alleviated over the year. Banks extended additional credit to these businesses, increasing by 19.3 per cent ($345.4 million) and 5.1 per cent ($70.7 million), respectively.

Credit to the Manufacturing sector was buoyant, particularly due to the strong demand from both local and foreign consumers of products from the Food and Drink sub-sector and component parts from the Assembly-Type and Related Industries sub-sector. Borrowing expanded by 27.0 per cent ($312.5 million) and 61.4 per cent ($164.9 million) over the period, respectively. There was also notable acceleration in Construction lending over the first half of 2022, which led to an overall increase of 18.0 per cent ($330.4 million) year-on-year. Meanwhile, growth in commercial mortgages slowed but remained positive – real estate loans increased by 1.7 per cent ($150.1 million) in 2022, compared to 5.5 per cent in 2021.

22 Absolute values are available in **Appendix B**.

FIGURE 18

BUSINESS LOANS BY ACTIVITY, 2018 – 2022



Source: Central Bank of Trinidad and Tobago

Asset Quality

Increased loan remediation methods amidst robust loan growth supported an improvement in the banking sector's asset quality in 2022. The non-performing loan (NPL) ratio declined by 20 basis points to 3.2 per cent as at December 2022 due to a marginal uptick in non-performing loans by $13.5 million (0.5 per cent), which was more than offset by an increase in the value of the loan portfolio by $6.1 billion (7.6 per cent). The larger commercial banks allocated less in specific provisioning to loan losses over the year compared to increases at the onset of the pandemic, when credit risk escalated. Compared to a year prior, the specific provisions-to-impaired loans ratio trended downward, falling from 67.6 per cent at the end of 2021 to 65.5 per cent in 2022. Notwithstanding, total provisioning for loan losses in the banking sector remained higher than pre-pandemic levels, averaging 51 per cent **(Figure 19 and Table 5)**.

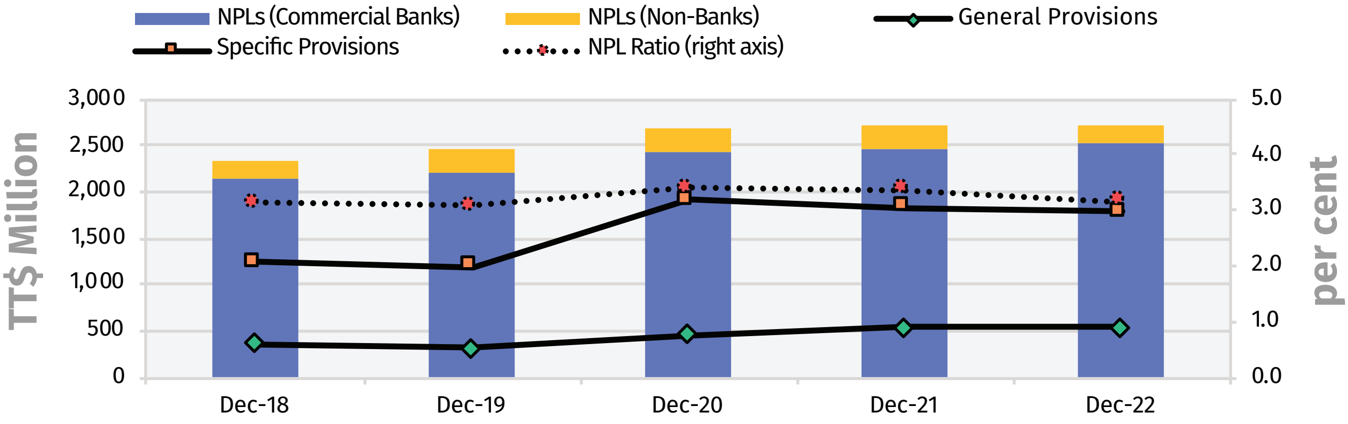
Although asset quality as measured by the NPL ratio improved, there was a rise in the stock of business sector NPLs at commercial banks. Business sector NPLs for the commercial banking sector[23] registered a marked increase of $109.4 million or 7.4 per cent, largely due to late payments on commercial mortgages ($99.9 million or 33.6 per cent), other personal services ($16.7 million or 114.0 per cent), and other business services ($61.4 million or 30.6

23 Only commercial banks' NPLs are disaggregated by sector. See **Figure 20** for commercial bank sectoral NPLs to gross loans.

per cent). In contrast, consumer NPLs for the commercial banking sector declined by $41.3 million (4.2 per cent), mainly due to reductions in Other Purpose Loans ($40.3 million or 13.9 per cent). However, there were upticks in residential mortgage NPLs of $7.6 million (3.7 per cent), as well as Debt Consolidation NPLs of $8.2 million (6.0 per cent), and Refinancing NPLs of $6.3 million (3.8 per cent).

FIGURE 19

BANKING SECTOR NPLs, 2018 – 2022



Source: Central Bank of Trinidad and Tobago

TABLE 5

NPLs BY SECTOR, 2021 – 2022

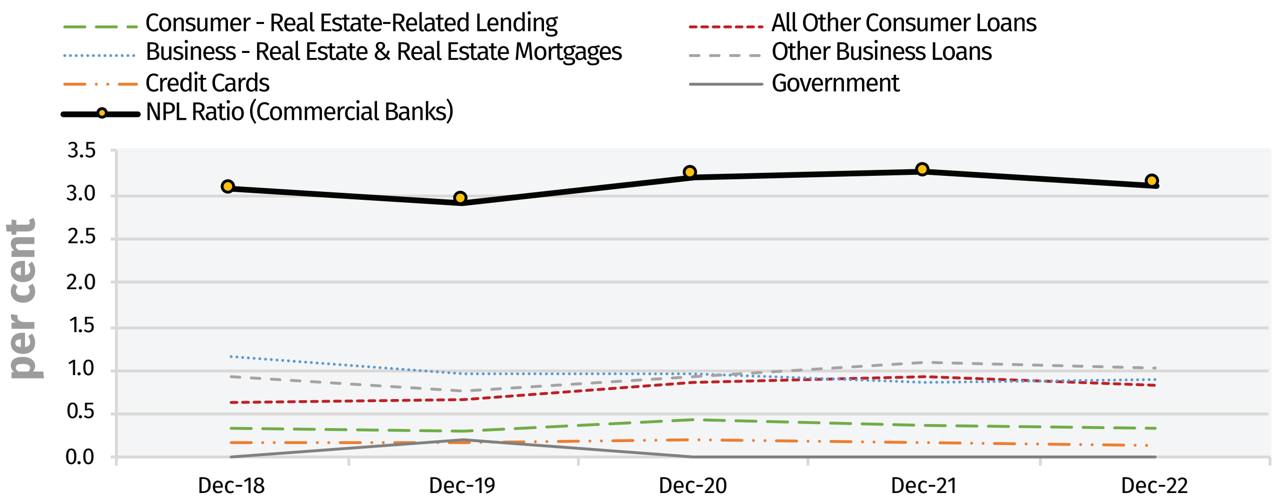
/TT$ Thousand/

	Dec-21	Dec-22	Change	Change (per cent)	NPL Ratio (per cent)	
					Dec-21	Dec-22
Consumer NPLs	992,433	951,148	-41,285	-4.2	2.8	2.5
Business NPLs	1,478,977	1,588,338	109,360	7.4	4.7	4.6
Government NPLs	1,153	612	-541	-46.9	0.0	0.0
NPLs – Commercial Banks	2,472,566	2,540,111	67,545	2.7	3.3	3.1
NPLs – Non-banks	236,364	182,360	-54,004	-22.8	5.5	4.0
Total NPLs – SYSTEM	**2,708,930**	**2,722,471**	**13,541**	**0.5**	**3.4**	**3.2**
Loan Loss Provisions (Specific and General)	2,362,672	2,322,096	-40,576	-1.7	-	

Source: Central Bank of Trinidad and Tobago

FIGURE 20

COMMERCIAL BANKS' SECTORAL NPLs TO GROSS LOANS, 2018 – 2022



Source: Central Bank of Trinidad and Tobago

Sovereign Exposure

With buoyancy in credit to businesses and consumers, commercial banks used maturities of short-term domestic sovereign debt to fund credit expansion. Sovereign investments declined by $4.4 billion (12.2 per cent) primarily due to maturities of Treasury bills and Central Government securities. The banking sector's sovereign investment exposure reduced from 21.0 per cent of total assets in 2021 to 18.0 per cent by the end of 2022.

Loans to the Government and Government-related entities remained relatively flat over the last year, increasing by $61.9 million (0.6 per cent). Higher international energy prices improved the Government's fiscal outturn for FY2022. Despite growth for the first nine months of 2022, government borrowing decelerated sharply in the fourth quarter, reflected by lower government borrowing in the Finance, Insurance and Real Estate sector ($507.0 million or 11.7 per cent) and the Education, Culture and Community Services sector ($100.5 million or 53.2 per cent). Public sector lending in the Construction and Transport, Storage and Communication sectors increased by $413.1 million (36.4 per cent) and $305.6 million (74.1 per cent), respectively, tempering an overall decline in sovereign loan exposure.

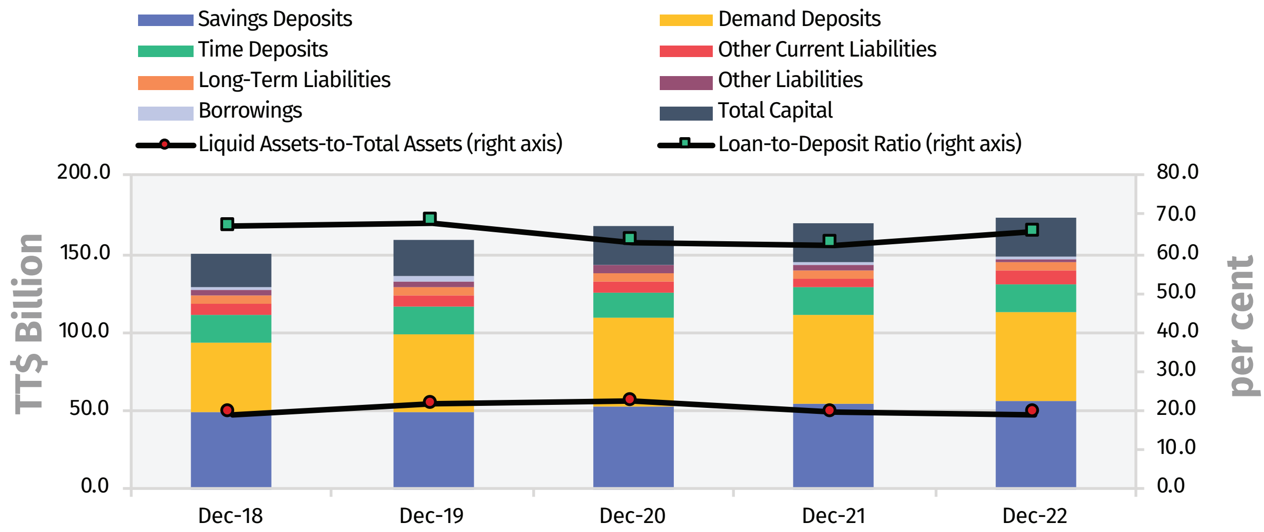
LIABILITY PROFILE AND FUNDING

Deposit liabilities increased moderately over 2022, adding $3.2 billion (2.5 per cent) mainly in demand and time deposits (Figure 21). Deposits placed by the Government (primarily from Government-related and state-owned financial institutions) drove the growth in demand deposits, while increases in time deposits were attributed to private non-financial businesses. Deposits remained the key funding source for asset growth over the period, accounting for 89.1 per cent ($131.4 billion) of total liabilities in the banking sector.

The deposit base comfortably funded loan growth, resulting in a higher loan-to-deposit ratio of 65.6 per cent, compared to 62.5 per cent one year prior. However, it remains low compared to historical levels, suggesting continued high levels of liquidity. Loan growth was also bolstered by proceeds from maturing investments such that the liquid assets-to-total assets ratio reduced marginally to 19.3 per cent in December 2022, from 19.4 per cent in December 2021.

FIGURE 21

DEPOSITS, OTHER LIABILITIES AND CAPITAL, 2018 – 2022



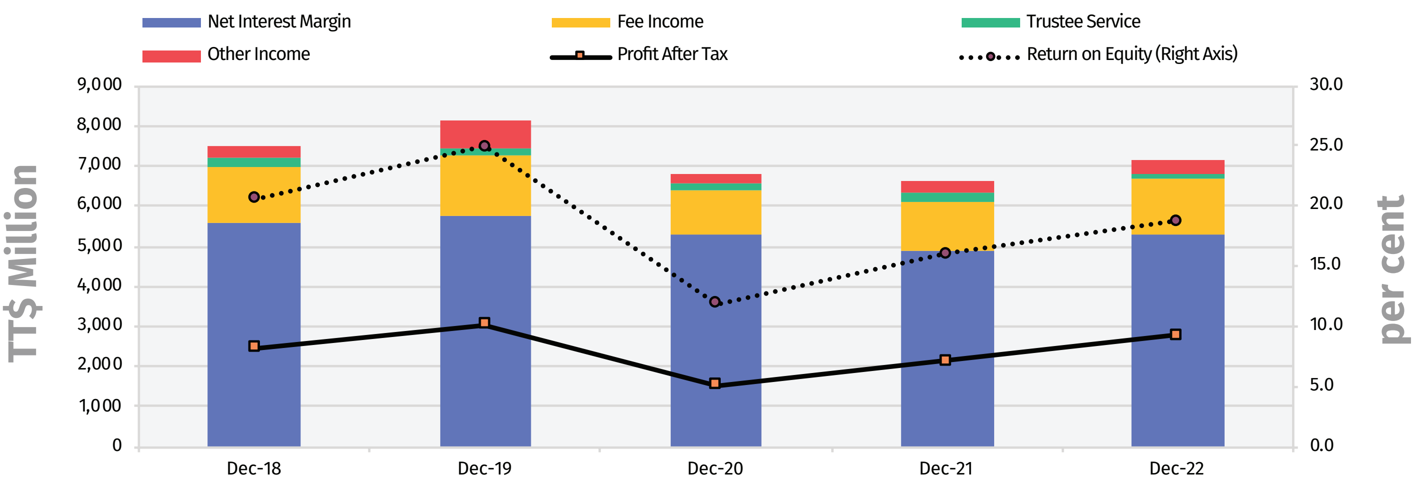
Source: Central Bank of Trinidad and Tobago

SOURCES OF EARNINGS AND PROFITABILITY

Banking sector profitability improved year-on-year due to significant gains on operating income from three main categories, coupled with declining operating expenses due to provisioning releases. Profits before taxes reflected robust growth to $4.5 billion in 2022, an increase of $776.4 million (21.0 per cent) from the year prior. Specifically, operating income increased year-on-year by $637.3 million (6.9 per cent), boosted by interest income of $396.4 million (6.5 per cent) from robust loan growth and fee income of $188.3 million (11.5 per cent) from higher credit card spending by consumers. Foreign exchange profits increased by $80.1 million (8.6 per cent), which also boosted income levels. Supporting overall profitability were an additional $300.2 million (51.6 per cent) in dividends from subsidiaries and affiliates of two commercial banks. In contrast, operating expenses were reduced as provisions for bad debt continued to be released, particularly in the second and fourth quarters of 2022 **(Figures 22 and 23)**. The higher profitability was reflected in the improved profitability indicators from December 2021 to December 2022, namely the banking sector's ROE ratio, which rose by 190 basis points from 15.2 per cent to 17.1 per cent at the end of 2022.

FIGURE 22

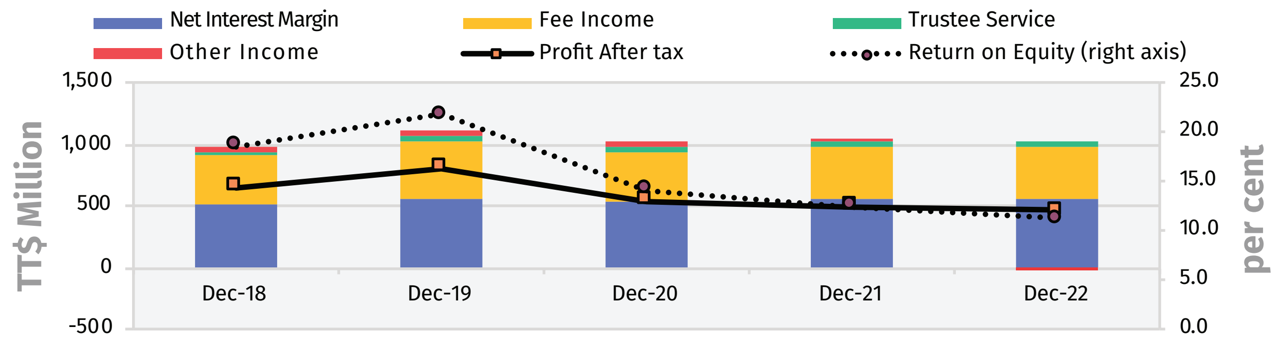
COMMERCIAL BANKS' CONTRIBUTION TO PROFIT BY SOURCE, 2018 – 2022



Source: Central Bank of Trinidad and Tobago

FIGURE 23

NON-BANKS' CONTRIBUTION TO PROFIT BY SOURCE, 2018 – 2022



Source: Central Bank of Trinidad and Tobago

CAPITAL ADEQUACY

Despite declining by 60 basis points to 18.7 per cent as at December 2022, the capital adequacy ratio (CAR) for the banking sector remained strong, with an ample Tier 1 ratio which largely comprised Common Equity Tier 1 capital. All licensed financial institutions remained above the minimum regulatory requirement as at December 2022 (Table 6). Although the banking sector registered an increase in total qualifying capital of 2.1 per cent ($482.7 million), the decline in the CAR was due to increases in credit risk-weighted assets (RWA) of 7.1 per cent ($6.5 billion) amidst robust loan growth. Over the review period, one commercial bank reclassified public sector entity exposures to a higher risk rating as recommended under Basel II capital standards, adding approximately $1.0 billion to credit RWA.

TABLE 6

CAPITAL RATIOS AND RISK-WEIGHTED ASSETS (RWA) AS AT DECEMBER 2022

/Per Cent/

Capital Ratio	Minimum Requirement	Banking Sector Ratio
Regulatory capital-to-risk-weighted assets	10.0	18.7
Regulatory tier 1 capital-to-risk-weighted assets	6.0	18.4
Common equity tier 1 capital-to-risk-weighted assets	4.5	18.4
Risk-Weighted Assets (RWA)	**as a per cent of RWA**	**TT$ Billion**
Total RWA	100.0	124.9
RWA Credit Risk	78.6	98.2
RWA Operational Risk	11.3	14.1
RWA Market Risk	10.1	12.6

Source: Central Bank of Trinidad and Tobago

Stress Testing the Commercial Banking Sector

The stress test results as at December 2022 indicated that the commercial banking sector was generally resilient to most of the single factor shocks, attributed to adequate capital buffers and loan loss provisioning levels (Table 7). As at December 2022, the CAR and the adjusted CAR (using provisioning guidelines for non-performing credits) stood at 16.7 per cent and 16.2 per cent, respectively. The foreign exchange shock continued to produce satisfactory results (post-shock CAR of 18.2 per cent) due to the net open long position of the aggregate foreign exchange balance sheet. Although liquidity has been declining, the results of a simulated bank run remained acceptable, slightly above the 30-day benchmark; however, some institutions fell below the benchmark when reserves were excluded from liquid funds **(Chapter 2)**.

The commercial banking sector maintained capital levels above the minimum regulatory capital threshold when the credit risk stress test was applied. Loan deferral and restructuring measures in response to the COVID-19 pandemic cushioned the effect of higher NPLs but have been touted to capture the risk of defaults inaccurately. Nevertheless, despite the cessation of these measures in September 2021 and September 2022, respectively, the latest data showed that the sector remained generally resilient to the shock (post-shock CAR of 11.5 per cent). However, real incomes can decline if inflation gains momentum, giving rise to credit risk challenges.

The results of the downward interest rate shock were favourable; however, the upward interest rate shock posed a risk to the commercial banking sector. The upward interest rate shock of 500 basis points resulted in a post-shock CAR of 9.8 per cent, breaching the regulatory minimum threshold. The decline was largely due to mismatches between the stock of assets and liabilities due to mature or be repriced, particularly in the medium- to long-term time bands.[24]

24 This test uses a duration methodology, which is the weighted average of assets held in a portfolio to maturity. As such, the further away the asset is from maturing, the higher interest rate risk it will incur.

TABLE 7

COMMERCIAL BANKING SECTOR STRESS TEST RESULTS, DECEMBER 2021 – DECEMBER 2022

		Dec-21	Jun-22	Dec-22	
Pre-Shock CAR		**17.1**	**17.5**	**16.7**	
Pre-Shock CAR Adjusted for Provisions		**16.7**	**16.9**	**16.2**	
SINGLE FACTOR TESTS				**Post-Shock CAR**	***Change from Pre-Shock Adjusted CAR***
Interest Rate Risk	Upward shock of 500 bps	**10.0**	**10.2**	**9.8**	*(6.4)*
	Downward shock of 100 bps	**18.0**	**18.1**	**17.4**	*1.2*
Foreign Exchange Risk	TT Dollar depreciates 40 per cent	**18.2**	**18.2**	**18.1**	*1.9*
Credit Risk	General increase in non-performing loans	**12.0**	**12.1**	**11.5**	*(4.8)*
DAYS UNTIL ILLIQUID					
Liquidity Risk (including reserves as liquid funds)	Bank Run	**34 days**	**32 days**	**31 days**	
Liquidity Risk (excluding reserves as liquid funds)	Bank Run	**23 days**	**21 days**	**19 days**	

Source: Central Bank of Trinidad and Tobago

Note: The Central Bank's current stress testing framework covers six single-factor stress tests. These are the interest rate, foreign exchange, credit and liquidity risk stress tests. Two liquidity stress tests are conducted. One of these includes reserves and applies a standard daily run-off rate to all deposit types. The other liquidity test excludes reserves and applies different daily run-off rates based on the type of deposit (time deposits at 1 per cent and savings and demand deposits at 2 per cent). The upward shock to interest rates has been reduced to 500 basis points, compared to 700 basis points. Moreover, a 6 per cent provisioning rate is applied to current loans and loans past due 1 to 3 months, compared to 1 per cent previously. The property price test has been removed but can be carried out on an ad-hoc basis. This exercise is conducted semi-annually.

BOX 3: MACRO-PRUDENTIAL STRESS TESTING REVISITED

Strains in the global financial market in early 2023 have underscored the importance of expanding risk management frameworks. Financial institutions regularly pursue measures to manage potential vulnerabilities and threats to their stability. This involves constant monitoring for credit (asset quality), market, operational, strategic, liquidity, and reputational risks. Stress testing is a risk management technique that evaluates the potential effects of an exceptional but plausible event on an institution's financial condition. However, these exercises tend to focus largely on capital adequacy, but recent bouts of global financial market volatility have demonstrated that shocks can have ramifications that extend well beyond capital.

Dynamic stress tests are useful to consider multi-factor shocks as well as uncover relationships between macroeconomic developments and financial sector performance. The Central Bank of Trinidad and Tobago gained insights from IMF technical assistance missions on improving regulatory stress testing. Macroprudential stress testing, a framework that incorporates endogenous feedback effects into risk management assessments by capturing the linkages between the macro-economy and the financial sector that amplify/propagate systemic shocks, had been initially explored. However, given recent strains in global financial markets, building off earlier[1] work in this area, the soundness of the domestic banking and insurance sectors was evaluated under an in-house macroprudential stress testing framework.

Using quarterly data up to December 2022, under adverse scenarios, estimated stress test results for the four quarters of 2023 revealed that the banking sector was resilient but some vulnerabilities are evident. The banking sector **(Figure 1)** remained well capitalised above the minimum regulatory capital threshold of 10 per cent, which may be the result of adequate provisioning that has been implemented by the sector to cushion the effects of the pandemic as well as effective risk management approaches such as forbearance and less credit risk taking. Moreover, liquidity levels were adequate only deteriorating slightly from the baseline scenario. However, commercial banks had an increased risk exposure to the sovereign, which may not bode well in times of sovereign distress. Commercial banks were also most susceptible to income risk than non-banks – non-banks have more diverse income streams as loans comprise only 32.2 per cent of their gross assets compared to 50.6 per cent for commercial banks in 2022. Notwithstanding, non-banks were more susceptible to a credit default shock as they tend to engage largely in private and corporate lending.

On the insurance front, although the sector is robust to adverse shocks, there is susceptibility to capital, asset quality, and sovereign risks. Marginal increases were observed in response to the liquidity shock for the insurance sector that may have arisen due to a build-up of liquid assets to cope with the pandemic. Moreover, the sector was slightly affected by an income shock. On the other hand, long-term insurers were more at risk to the credit and sovereign shock while general insurers were more prone to solvency challenges. Long-term insurers may be subjected to higher duration risk as asset holdings tend to be longer in term. Sovereign risk will also be higher as, to mitigate against asset quality risks, long-term insurance companies may actively seek risk-free securities such as government-related financial instruments, which commonly carry a 0 per cent risk weight. Regarding general insurance companies, solvency issues can arise as weak economic conditions can undermine the ability to make premium payments and reduce policy offerings.

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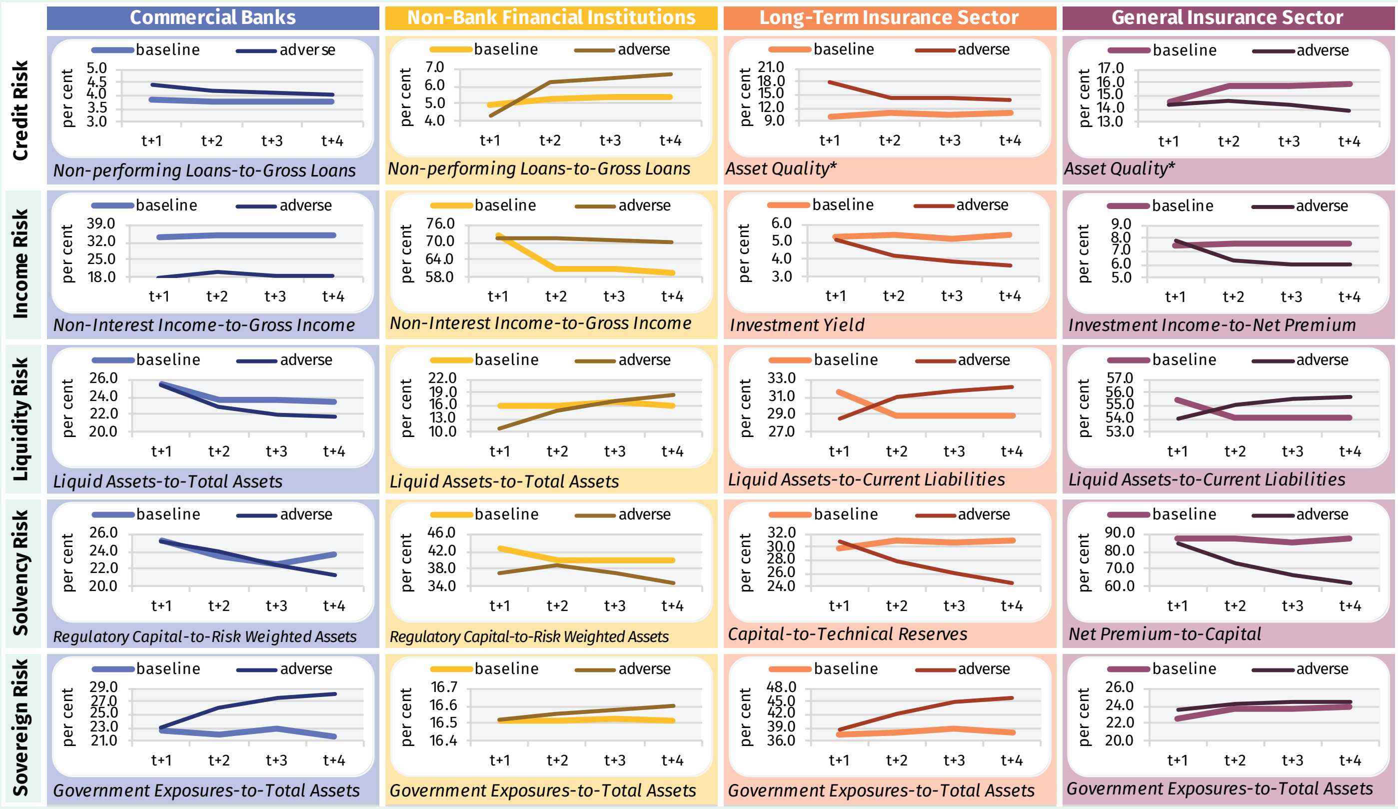
[1] The framework predicts possible movements, in several banking and insurance sector financial soundness indicators, under baseline and adverse scenarios. The baseline scenarios were derived using in-house and international projections (on the likely path of future growth) while the adverse scenarios replicate developments that took place domestically during the oil price crash of the early 1980s. Refer to Box 5 of the 2020 FSR for further details on the macroprudential stress testing approach: https://www.central-bank.org.tt/sites/default/files/reports/financial-stability-report-2020.pdf

FIGURE 1: MACROPRUDENTIAL STRESS TEST RESULTS



Source: Central Bank of Trinidad and Tobago

Note: The variable used in the stress test is listed below the chart in italics.* The ‘Asset Quality’ for the Long-term segment is ‘(Real estate + unquoted equities + debtors)-to-total assets’ while the ‘Asset Quality’ for the General segment is ‘(Real estate + unquoted equities + accounts receivables)-to-total assets’.

INSURANCE SECTOR

Insurance companies continued to restructure operations to ensure compliance with the Insurance Act, 2018 (IA 2018).[25] Insurers filed their first audited annual fiscal packages over the course of 2022, in keeping with new regulatory requirements. Financial condition reports were prepared by appointed actuaries. Collaboration between the regulator and the industry, on topics such as the reporting of excess credit exposures and the publication of abridged financial statements, furthered efforts to strengthen risk management frameworks. Several major financial groups have also been reforming operations to ensure compliance with the new legislation, including separating financial and non-financial entities. As an example, to meet IA 2018 requirements, four entities that previously existed as branches of foreign insurers in the local market reconfigured their operations to register as locally incorporated entities, effective January 31, 2023. There was also a noteworthy milestone in that the Central Bank relinquished emergency control over CLICO and BAT on December 1, 2022 and December 22, 2022, respectively. Since 2009, following the financial collapse of the parent company, CL Financial Limited, the Central Bank had exercised emergency control over the two insurance subsidiaries. However, these two entities no longer pose a threat to the stability of the financial sector, and will continue to operate and be regulated by the Central Bank under the IA 2018.

The sector is well capitalised, with most insurers reporting regulatory capital ratios (RCRs) over 300 per cent. Under the IA 2018, insurers are required to hold adequate levels of capital to support risks associated with their operations, with the minimum RCR being 150 per cent. In order to facilitate adjustments that may be required for compliance with the Regulations, insurers who did not meet the minimum RCR upon proclamation of the IA 2018 were allowed a transition period ending no later than the end of the fifth year following commencement of the Regulation. Insurers who are in the transition period are required to have a minimum transitional RCR of 120 per cent as at December 31, 2022, which is the second-year transitional ratio. However, if at any time during the period the RCR exceeded the minimum transitional ratio, then that higher ratio must be maintained as the second-year transitional ratio.

The industry has also been assiduously preparing for the implementation of the new International Financial Reporting Standards (IFRS) 17 for insurance contracts that came into effect on January 1, 2023 and which significantly transformed the measurement and reporting of insurance contracts. Amended regulatory forms and legislative changes are in the developmental phase and consultations with the industry are well underway.

25 These regulations came into effect on January 1, 2021.

LONG-TERM INSURANCE INDUSTRY PERFORMANCE

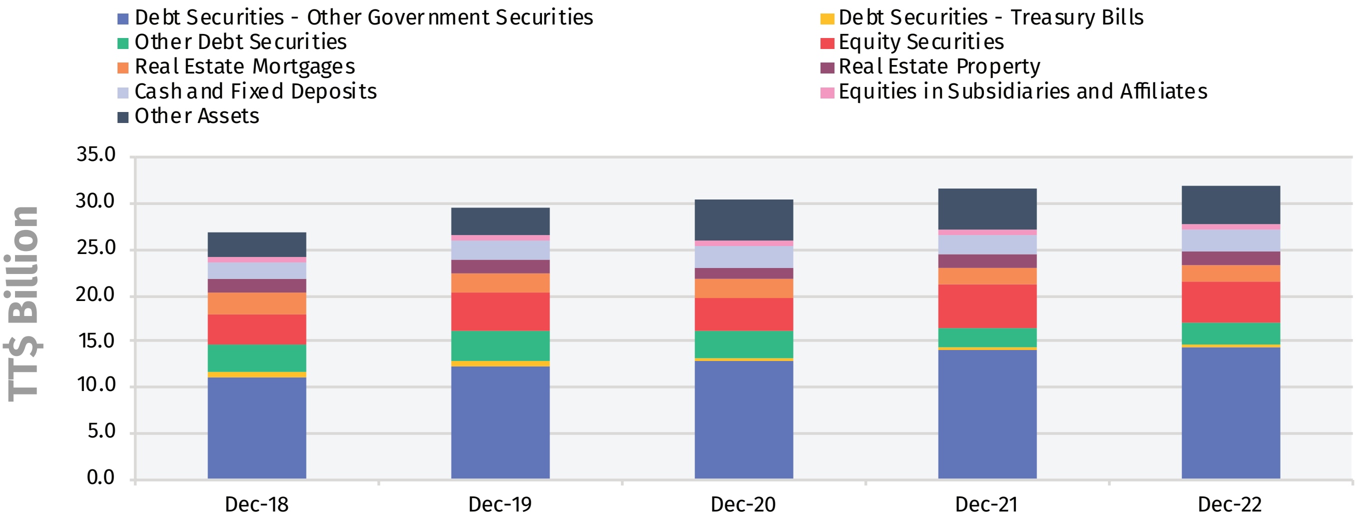
ASSETS

As at December 2022, the total assets of the long-term insurance industry were $32.1 billion. Two of the larger long-term insurers together held 63.8 per cent of the industry's total assets and 70 per cent of premium income. Total assets grew at an average rate of 4.7 per cent over the last five years (2018-2022). The acquisition of pension plans in wind-up in 2019, 2020, and 2022 played a role in the growth achieved.

Asset composition remained unchanged over the five-year period (Figure 24) with debt securities being the major asset class, accounting for an average of 53.6 per cent of the total asset base. Debt securities are the preferred asset class due to their longer-term duration, facilitating appropriate asset-liability matching for the industry's long-term liabilities. Notably, as at December 2022, approximately 86.3 per cent of the long-term industry's debt securities were government securities due to their low-risk nature.

FIGURE 24

ASSET MIX – LONG-TERM INSURANCE INDUSTRY, 2018 – 2022

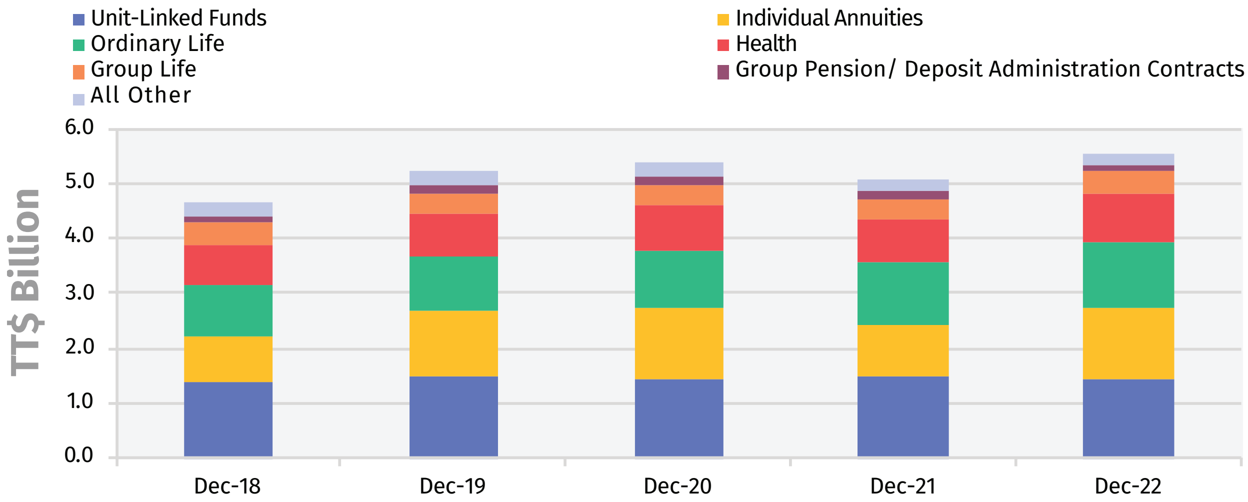


Source: Central Bank of Trinidad and Tobago

LINES OF BUSINESS

Over the last five years, annualised gross premium income in the long-term industry grew from $4.6 billion in 2018 to $5.6 billion in 2022. The spikes in gross premium income in 2019, 2020, and 2022 can be attributed to the acquisition of pension plans in wind-up by different insurers. As a result, the long-term industry experienced an average annual growth rate of 4.5 per cent over the five-year period. The three major contributors to gross premium income were Unit-Linked products, Ordinary Life, and Individual Annuities, which accounted for 26.1 per cent, 21.7 per cent, and 23.4 per cent of total premium income, respectively **(Figure 25)**.

FIGURE 25
ANNUALISED GROSS PREMIUM INCOME – LONG-TERM INSURERS, 2018 – 2022



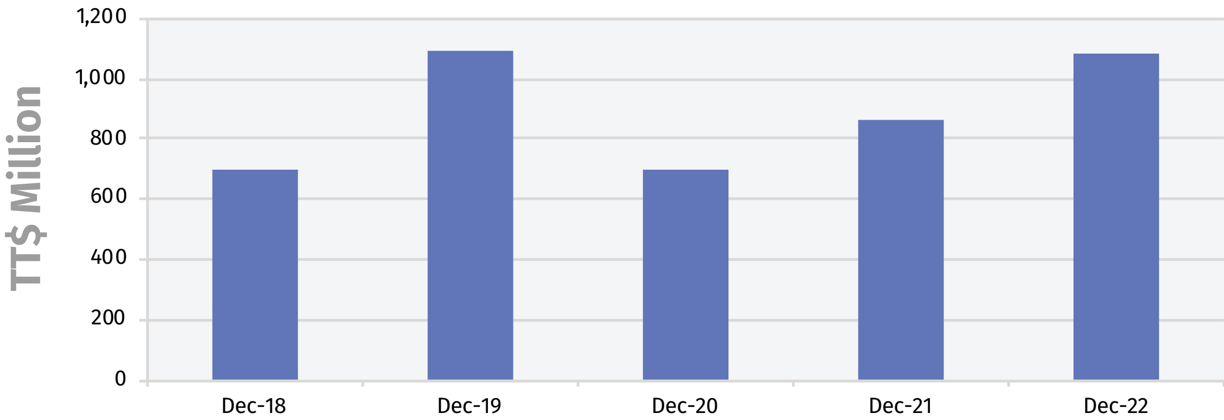
Source: Central Bank of Trinidad and Tobago

REPORTED PROFITS

Annualised profits before taxes grew from $697.5 million in December 2018 to $1,081.6 million in December 2022 (Figure 26). A mix of factors over the five-year period contributed to the fluctuations observed. In 2019, the drastic spike in profits was partially due to a change in accounting and actuarial assumptions by major players. Additionally, increased fair value profits were recorded in 2019 from the recovery of the markets after slumping in 2018. The onset of the pandemic, the subsequent waves of COVID-19, and the resultant business inactivity occasioned continued volatility in the stock market and fluctuations in profits, particularly in 2020. However, improved industry results were recorded by the end of 2021 with the recovery in local and international markets. In 2022, the spike in profits was not solely attributable to business operations, but mainly due to accounting adjustments which resulted in a release of reserves into profits.

FIGURE 26

ANNUALISED PROFITS BEFORE TAXES – LONG-TERM INSURERS, 2018 – 2022



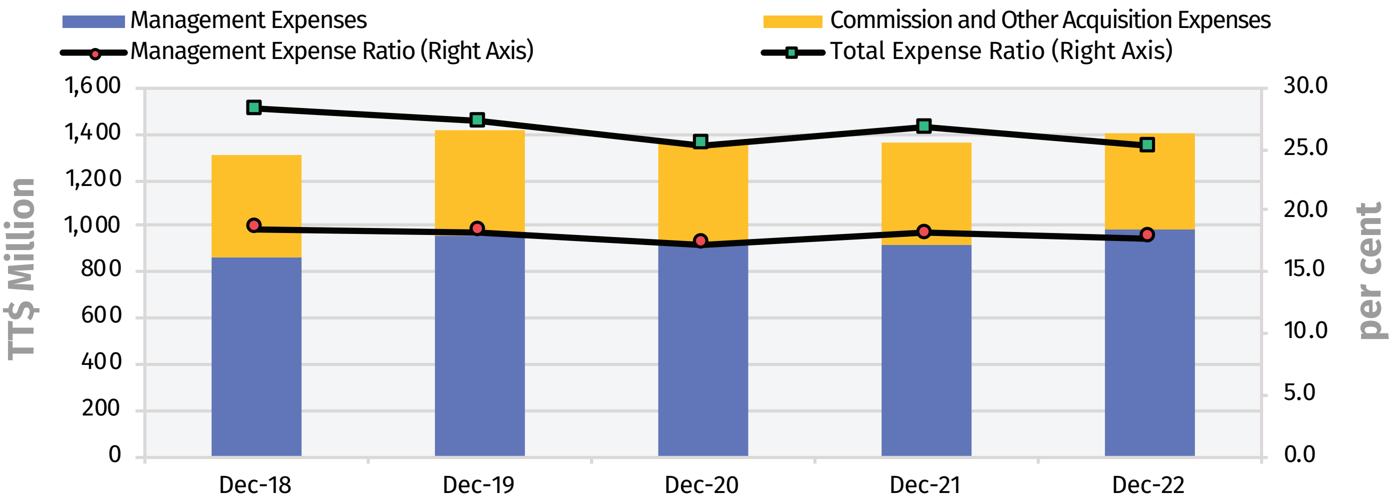
Source: Central Bank of Trinidad and Tobago

EXPENSES

Total expenses climbed in 2022 (Figure 27); however, the elevated levels of premium income from pension plan acquisitions lowered the expense ratios. Notably, the sector faced a series of additional costs related to the implementation of the IFRS 17 for insurance contracts.

FIGURE 27

ANNUALISED EXPENSES AND EXPENSE RATIOS – LONG-TERM INSURERS, 2018 – 2022



Source: Central Bank of Trinidad and Tobago

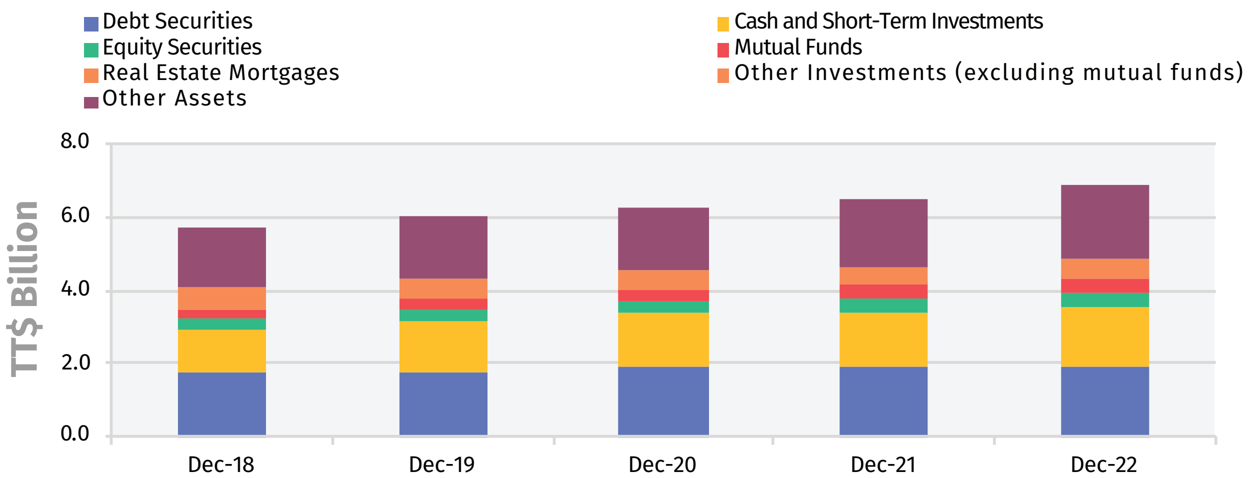
GENERAL INSURANCE INDUSTRY PERFORMANCE

ASSETS

The general insurance industry reported an increase in total assets from $5.7 billion as at December 2018 to $6.9 billion as at December 2022, at an average annual rate of 2.3 per cent. The asset mix contained a more diversified investment portfolio **(Figure 28)** when compared with that of the long-term industry. Investments were concentrated in government bonds and cash. Due to the shorter-term nature of the industry's insurance liabilities, companies maintain a higher allocation in cash and short-term investments. Accounts receivables accounted for 14.8 per cent of the general industry's assets and has been subtly growing over the years. Insurers need to manage their collection of these receivables since, under the IA 2018, uncollected debts adversely impact insurers' capital adequacy.

FIGURE 28

ASSET MIX – GENERAL INSURANCE INDUSTRY, 2018 – 2022



Source: Central Bank of Trinidad and Tobago

LINES OF BUSINESS

Gross premium income for the general insurance industry increased from $3.6 billion in December 2018 to $4.5 billion in December 2022, at an average annual rate of 5.5 per cent. The property and motor lines of business remained the industry's top two contributors to gross premium income, accounting for 53.3 per cent and 29.0 per cent of total gross premium income, respectively.

Motor premiums showed signs of shrinking over the five-year period, partially due to the lower demand for coverage during the

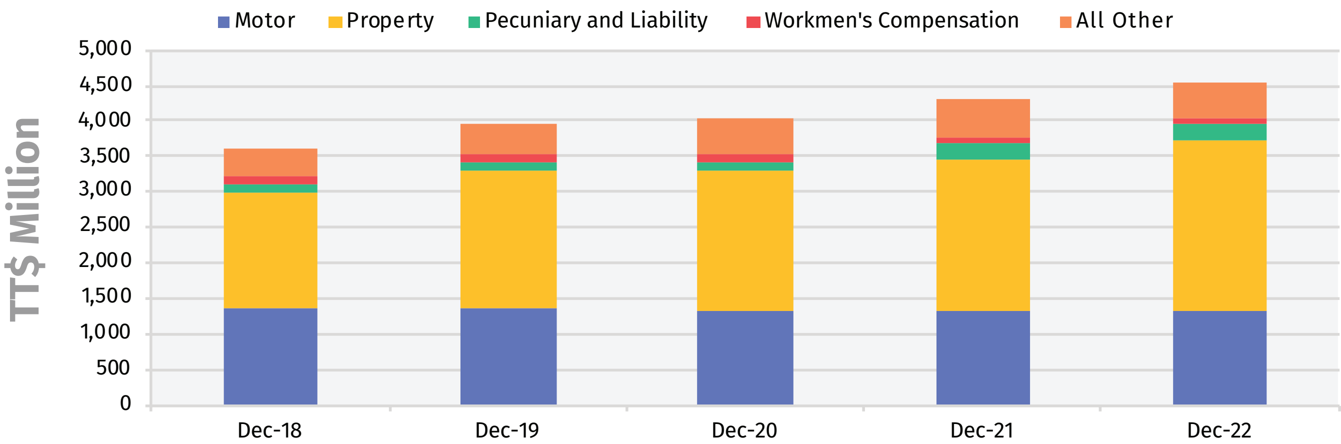
pandemic. Over the last year, the motor line of business experienced marginal growth of 1.1 per cent as the economy showed signs of recovery from the COVID-19 pandemic. Data collected from the Motor Insurance Survey revealed that the number of insured vehicles has been trending upward in contrast with the general movement of the premiums collected. This disparity may indicate lower rates in the industry, increased demand for minimum coverage under third-party policies, or a higher proportion of policyholders holding on to older vehicles or gravitating towards foreign-used vehicles.

On the other hand, property insurance premiums have been growing over the last five years. During the pandemic period, there was a deceleration of premium growth; however, the pace picked up in 2022. Increased demand for coverage, combined with higher premium rates associated with the rising cost of reinsurance, have influenced this upward trend.

On a net premium basis, the motor and property lines of business accounted for 64.6 per cent and 6.7 per cent of the total net premiums, respectively (Figure 29). The disparity is due to a higher proportion of property business being reinsured, whereas for motor business most of the premiums are retained.

FIGURE 29

GROSS ANNUAL PREMIUM INCOME – GENERAL INSURERS, 2018 — 2022



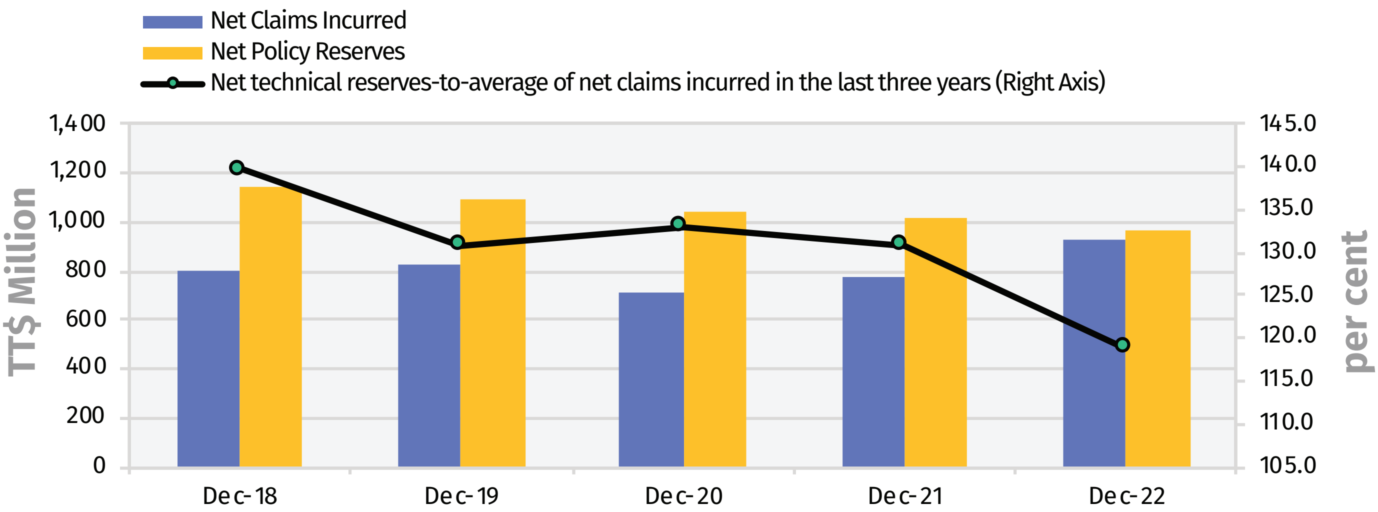
Source: Central Bank of Trinidad and Tobago

CLAIMS ADEQUACY

Net claims incurred leapt by 19.6 per cent in 2022 (Figure 30). The rollback of restrictions in the latter half of 2021 resulted in an increase in the number of claims incurred; the rising cost of claims as a result of inflation, as well as significant flooding activity in the fourth quarter of 2022 all contributed to elevated levels of claims. As a result of the increased number of claims, the ratio of net technical reserves as a per cent of the three-year average of net claims incurred declined over the year from 131.0 per cent to 118.9 per cent.[26]

FIGURE 30

NET TECHNICAL RESERVES / THREE-YEAR AVERAGE OF NET CLAIMS INCURRED – GENERAL INSURERS, 2018 – 2022



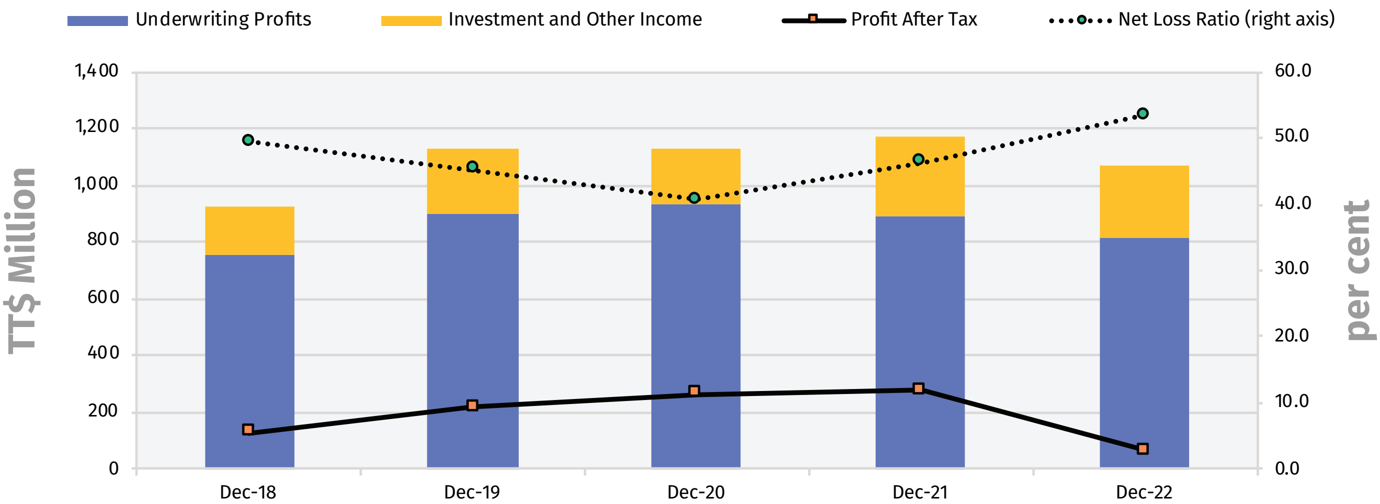
Source: Central Bank of Trinidad and Tobago

EARNINGS AND PROFITABILITY

The net loss ratio increased from 46.3 per cent to 53.5 per cent over the year ended December 2022 (Figure 31) due to the heightened claims activity (motor and property lines) and the rising cost of reinsurance. As a result, underwriting profits over the period declined by 8.9 per cent. Despite the elevated loss ratio, the sector remained profitable.

26 Technical Reserves = Claims Reserves + any Other Transfers from Funds.

FIGURE 31
CONTRIBUTION TO PROFIT AND EXPENSES (ANNUALISED) – GENERAL INSURERS, 2018 – 2022



Source: Central Bank of Trinidad and Tobago

OCCUPATIONAL PENSION PLANS

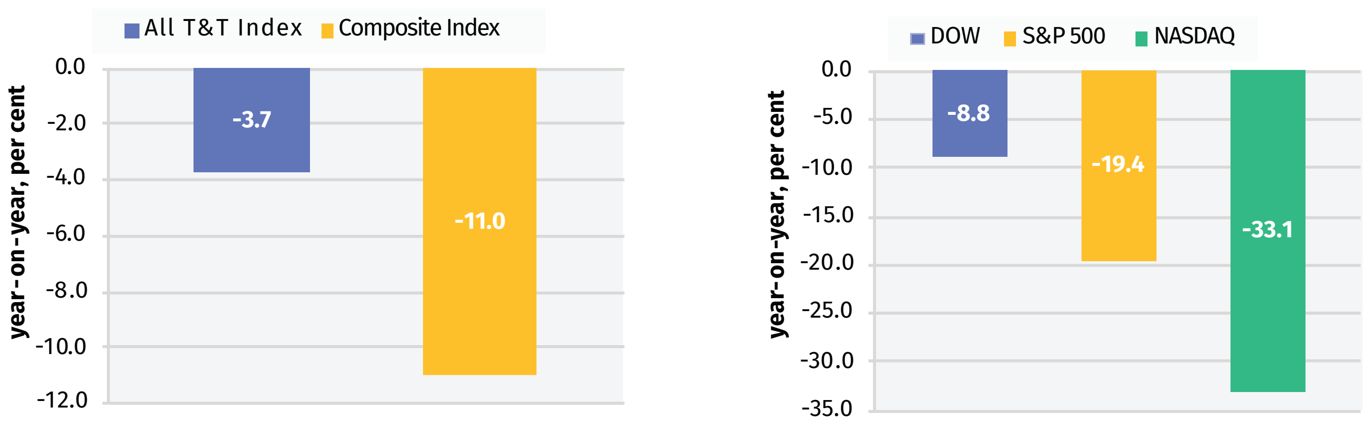
ASSETS

The assets held by occupational pension plans totalled $57.1 billion as at December 2022. This represented a decrease of 1.7 per cent from total assets of $58.1 billion as at December 2021. The fall in assets was driven primarily by the decline in the share prices of foreign companies, which previously posted significant gains in 2021. Shares traded locally also declined, negatively impacting some investment portfolios. Figure 32 shows the year-on-year declines in key local (the All T&T Index and the Composite Price Index) and foreign stock markets indices (Dow Jones Industrial Average (DOW), S&P 500 Index, and the Nasdaq Composite Index (NASDAQ)) from December 2021 to December 2022.

FIGURE 32

SELECTED DOMESTIC AND FOREIGN STOCK MARKET INDICES, DECEMBER 2022

/Year-on-Year Price Change/



Source: Central Bank of Trinidad and Tobago

Most of the sector's assets continued to be in defined benefit pension plans[27], which held $47.9 billion (approximately 84 per cent of total assets) as at December 2022. The remainder of the assets were in defined contribution plans[28] ($3.7 billion) and hybrid plans[29] ($5.5 billion). The asset mix of the sector continued to be dominated by Trinidad and Tobago Government securities (38 per cent of assets) and locally traded shares (32 per cent of assets) **(Figure 33)**.

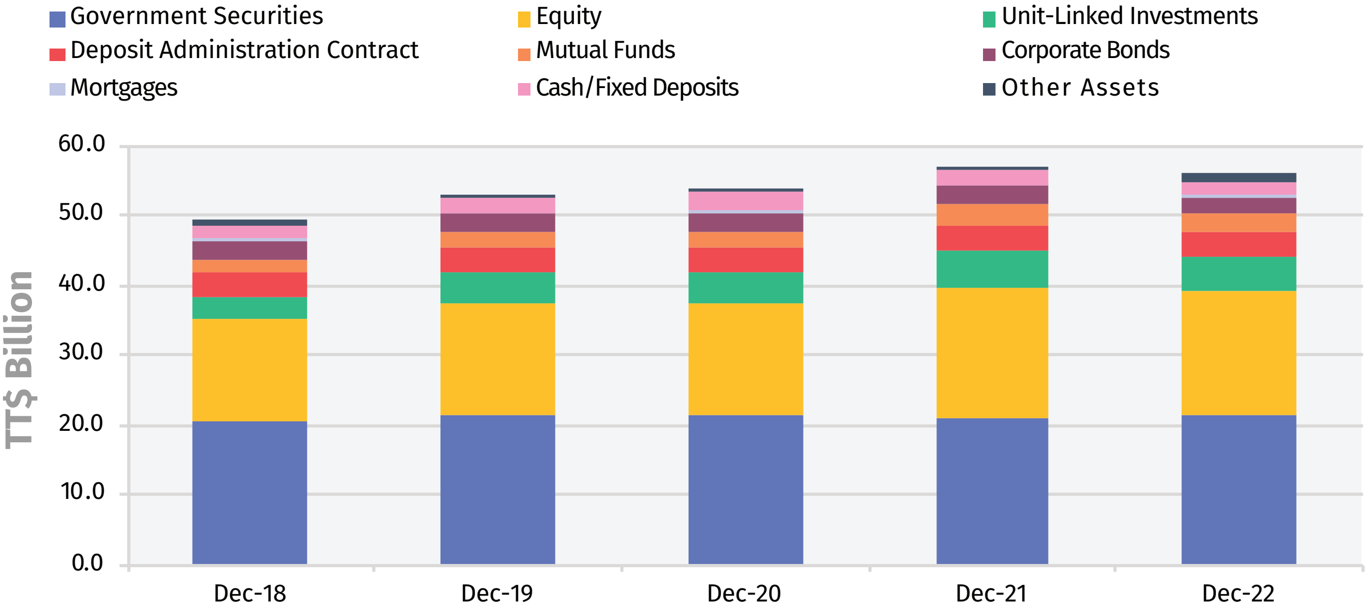
27 A defined benefit plan specifies the monthly payment (benefit) to be received by a pensioner. The benefit is typically specified in terms of years of pensionable service and a percentage of pensionable salary, and is calculated using a pre-determined formula.

28 In a defined contribution plan, the monthly benefit is calculated at retirement and is typically determined by the amount of money paid into the plan by the employer and member, the returns on the plan's investments, and the annuity purchase rates at the time the member retires.

29 A hybrid pension plan combines elements of both defined benefit and defined contribution plans.

FIGURE 33

PENSION PLAN ASSET COMPOSITION, 2018 – 2022

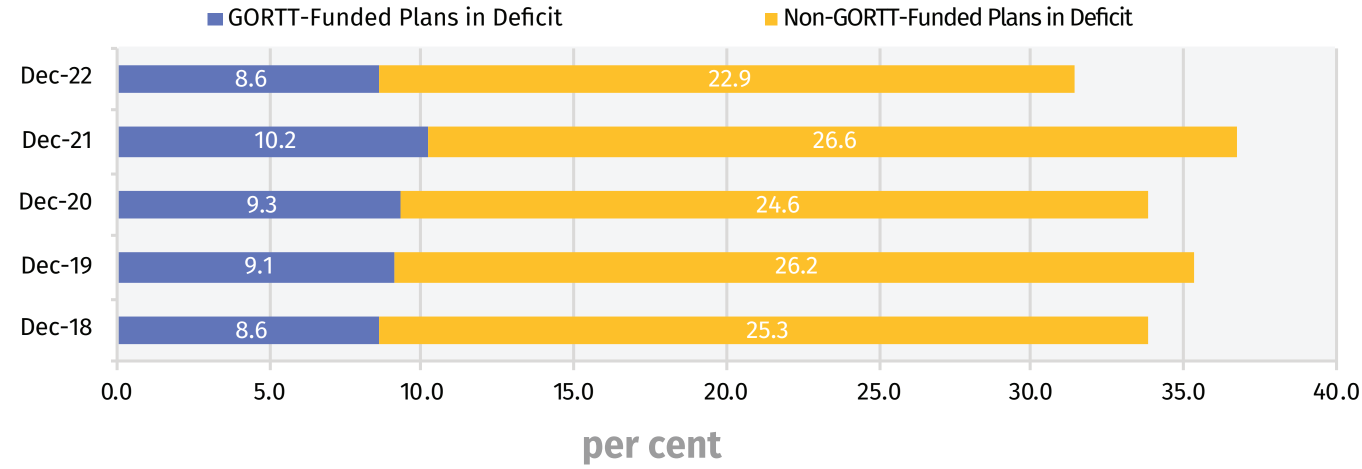


Source: Central Bank of Trinidad and Tobago

FUNDING

There were 175 active pension plans as at end-December 2022. Of these, 56 plans (32 per cent) reported funding deficits on ongoing and wind-up bases **(Figure 34)**. However, the combined deficit of underfunded plans decreased by 36 per cent over the year from $1.4 billion as at December 2021, to $0.9 billion as at December 2022. Overall, there was an improvement in funding positions due in part to actuarial forecasts of increased interest rates over the near to medium term, which would reduce costs in funding defined benefits. Other reasons for improved funding positions included modifications to pension plan structures, that is, conversions from defined benefit to defined contribution plans which have little or no obligation in terms of funding guaranteed pension benefits, and some employers paying the actuarial-recommended increased contributions to liquidate deficits.

FIGURE 34
OCCUPATIONAL PENSION PLANS IN DEFICIT, 2018 – 2022

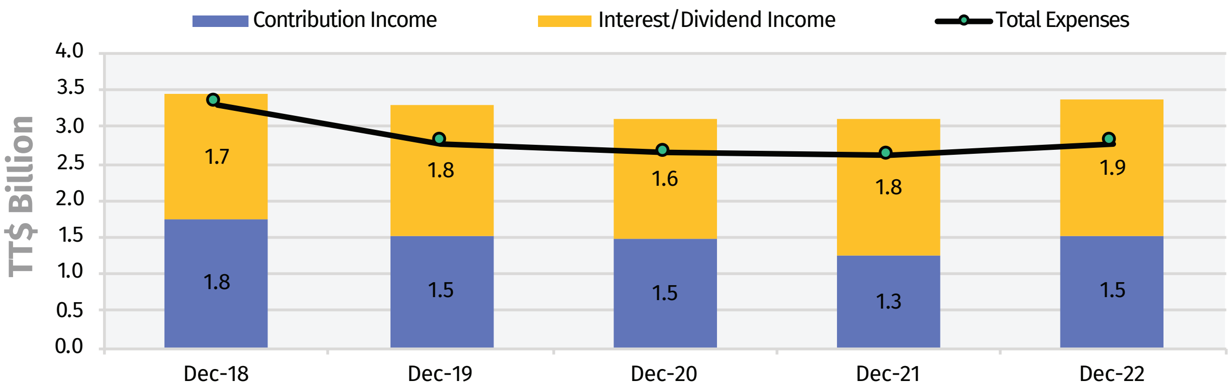


Source: Central Bank of Trinidad and Tobago

INCOME

A pension plan's income is derived from contributions made by the members and the employer and earnings from investing those contributions. The sharp decline in contribution income in 2021 was reportedly due to the adverse effects of the COVID-19 pandemic on business operations **(Figure 35)**. In 2022, some recovery appeared evident. Overall, contributions plus interest and dividend income remained sufficient to cover expenses, indicating that liquidity in the pension sector was adequate. However, if contribution income declines while benefit payments increase, pension plans may have to depend more on investment income to meet future obligations.

FIGURE 35
OCCUPATIONAL PENSION PLAN INCOME AND EXPENSES, 2018 – 2022



Sources: Central Bank of Trinidad and Tobago

CHALLENGES

Investments

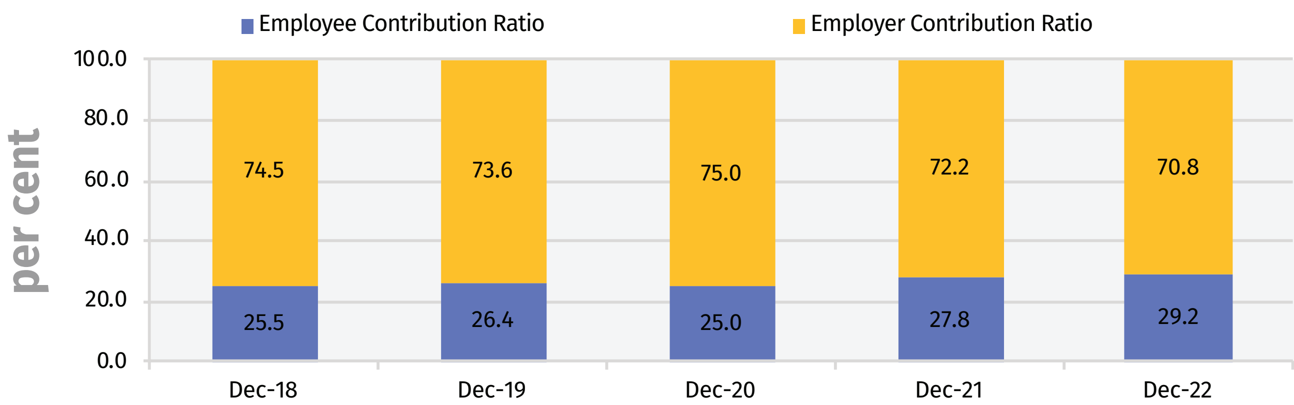
Pension plans are exposed to risks related to mismatches between assets and liabilities. Plans typically seek high-quality bonds and stocks to ensure future long-term income while preserving capital. The local capital market is relatively small and lacks breadth. Additionally, although pension plans are allowed to invest up to 30 per cent of their funds in foreign assets, investment managers are challenged with increasing their foreign portfolios. The lack of suitable investments for a pension plan – especially one with more pensioners than active members, and therefore heavily reliant on investment income to pay benefits – may become an increasing concern.

Employers' ability to fund

The diversification of pension plans away from the defined benefit structure to the defined contribution or hybrid structures continues. In January 2018, 60 per cent of active pension plans were defined benefit. At the end of 2022, the number fell to 57 per cent. Additionally, of the six new plans registered over the last five years (2018-2022), four were defined contribution. This may indicate employers' inability or unwillingness to undertake the funding obligations associated with defined benefit plans. In aggregate, over the last five years, the ratio of employer contributions to employee contributions has been decreasing **(Figure 36).**

FIGURE 36

PENSION SECTOR CONTRIBUTION RATIOS, 2018 – 2022



Source: Central Bank of Trinidad and Tobago

Demographic Change

There is preliminary evidence that the ratio of contributors to pension plans compared to those receiving a pension is declining. A review of 50 pension plans showed that, from 2018 to 2022, the number of active members, that is, those still employed with the plans' sponsor companies and contributing to the pension plans, declined from 25,191 to 23,259. At the same time, the number of pensioners increased from 9,994 to 11,979. This changing demographic in pension plans, if it results in greater payments than income, would require pension plans to examine their investment strategies and benefit structures to ensure that they continue to meet the obligations to members.

CAPITAL MARKETS DEVELOPMENTS

Activity in the primary debt market declined significantly in 2022 compared to 2021. Provisional data show that the market issued debt at a total face value of $3.4 billion (5 issues) in 2022, $11.5 billion (15 issues) lower than in 2021. Central Government financing, which accounted for 73.3 per cent of the total face value of bonds issued during 2022, declined by 81.3 per cent. The Government accessed financing mainly for budgetary support; private sector firms did not access the market for financing during the year **(Figure 37)**. The local equities market also saw a decline of 11.0 per cent in 2022 compared to 2021. The decline in equities reflected the underperformance of regional and local companies, which were negatively impacted by rising inflationary pressures. As a result, total stock market capitalisation fell by 11.1 per cent in 2022 to just under $127.0 billion **(Figure 38)**. The unfavourable market conditions led to substantially higher trading activity. In this context, the first-tier market witnessed the exchange of 184.3 million shares, valued at $1,706.9 million, resulting in a turnover ratio of 1.283. By comparison, the market recorded 94.8 million shares traded at a value of $1,314.7 million, with a turnover ratio of 0.980.

Likewise, the secondary Government bond market witnessed 91 trades (at a face value of $792.2 million) in 2022, compared to 20 trades (at a face value of $79.4 million) in 2021 (Figure 39). The increase in market activity can be attributed to portfolio rebalancing as a hedge against inflation and higher yields on the government yield curve. Conversely, the secondary corporate bond market experienced a decline in 2022, with 183 trades at a face value of $24.8 million, as opposed to 258 trades at a face value of $133.7 million in 2021.

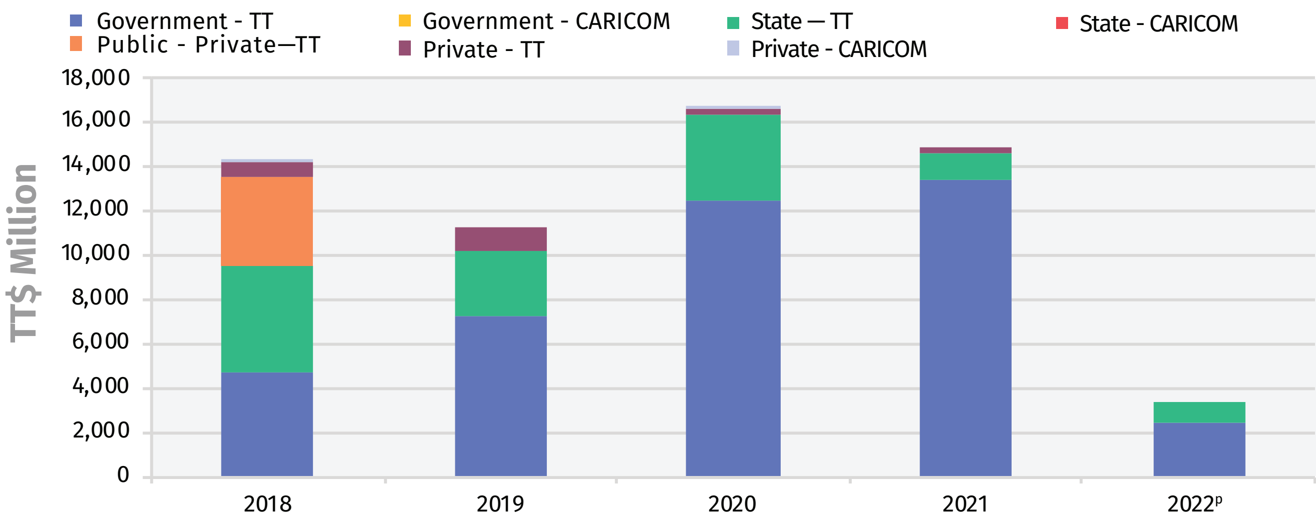
In the case of Collective Investment Schemes (CISs), mutual fund assets under management fell by 1.8 per cent in 2022. The industry downturn was driven by declines in most fund types. Equity funds, in particular, experienced the most significant reduction of 9.8 per cent, while income funds decreased by 5.1 per cent. These fund types were negatively affected by valuation changes from monetary tightening policies in advanced economies and volatility in foreign and local equity markets. However, in response to financial market challenges, investors sought to protect principal investments and minimise interest rate risks, which resulted in money market funds expanding by 10.7 per cent.

Local debt securities and equity markets underwent significant repricing during 2022. Further stresses can be triggered by monetary tightening in advanced economies, which may impact domestic banks and other financial sector segments such as the insurance, pension, and the local CIS sectors. Based on data for 2022, some types of mutual funds already experienced declines in the form of valuation losses stemming from increases in foreign interest rates. Further valuation losses may result in increased risks for investors and fund managers of fixed net asset value funds. The recent turmoil in the US stemmed in part from unrealised losses in portfolios of safe but declining-in-value securities **(Figure 40)**.

The domestic capital market is shallow, which has cultivated activities that create financial stability vulnerabilities. The dominance of public sector borrowing in the primary debt market has led to pockets of asset concentration within a few segments of the financial system. Also, there is a need for more trading activity in the local stock market. The low level of trading activity has resulted in a lack of liquidity in the local stock market. The ability of banks or other financial entities such as insurance companies and mutual funds to access liquidity via the local capital market, if needed, may be limited should policy reversals occur. Also, given the lack of frequent trading of most equities, a massive sell-off by one financial entity can trigger significant price instability in the local market.

FIGURE 37

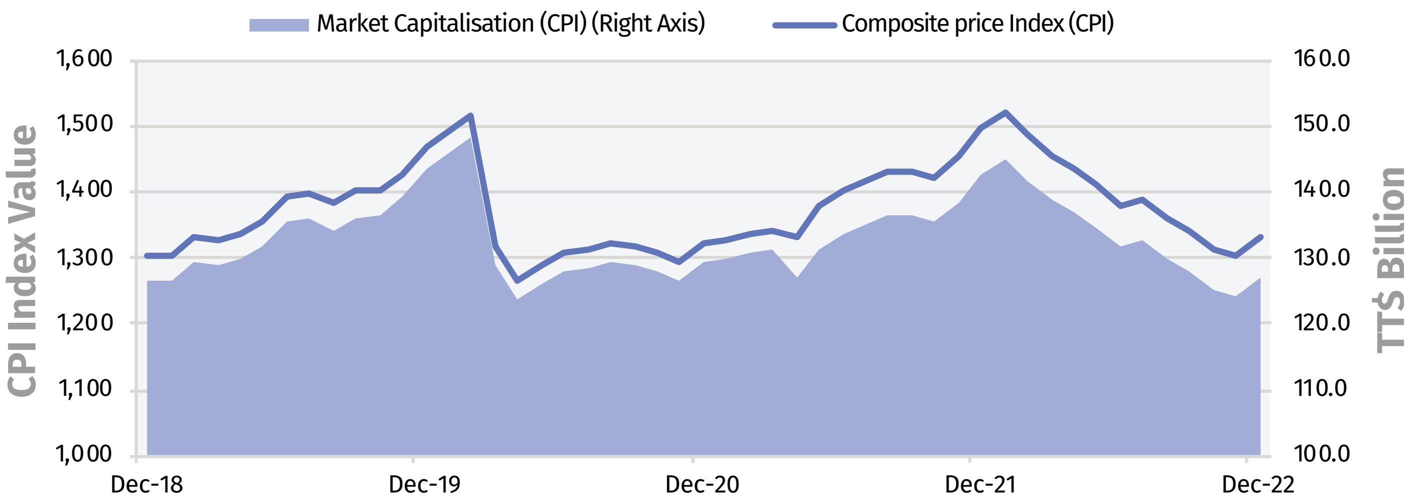
PRIMARY DEBT MARKET ACTIVITY, 2018 – 2022P



Sources: Ministry of Finance and market participants
"Note: Includes bonds issued by local and CARICOM institutions and governments in domestic market but excludes bonds issued by the Local Government and firms on the international market.
p (provisional)"

FIGURE 38

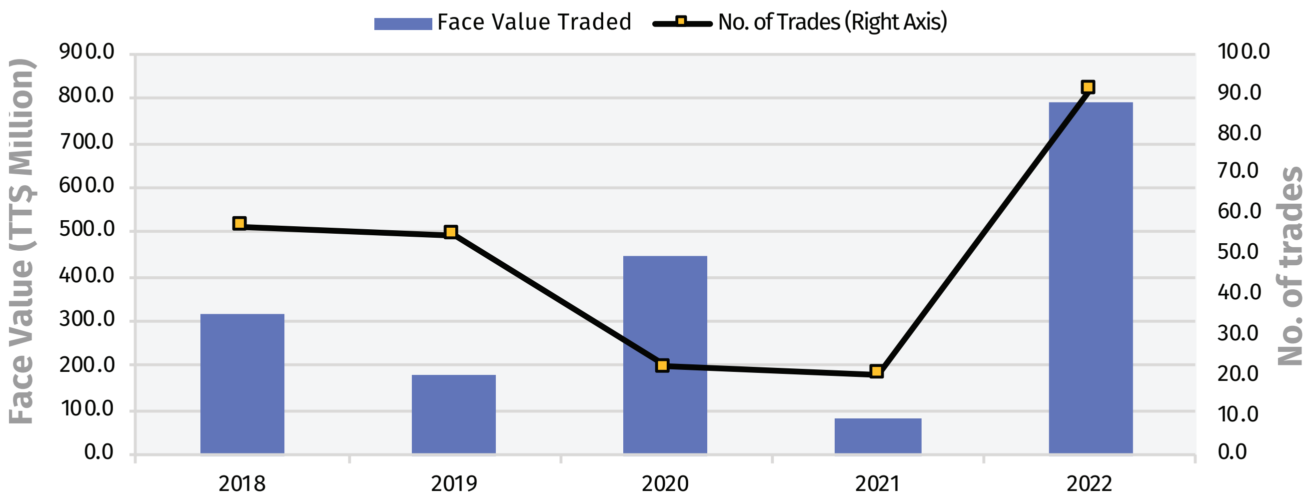
EQUITY PRICES AND MARKET CAPITALISATION, 2018 – 2022



Source: Trinidad and Tobago Stock Exchange

FIGURE 39

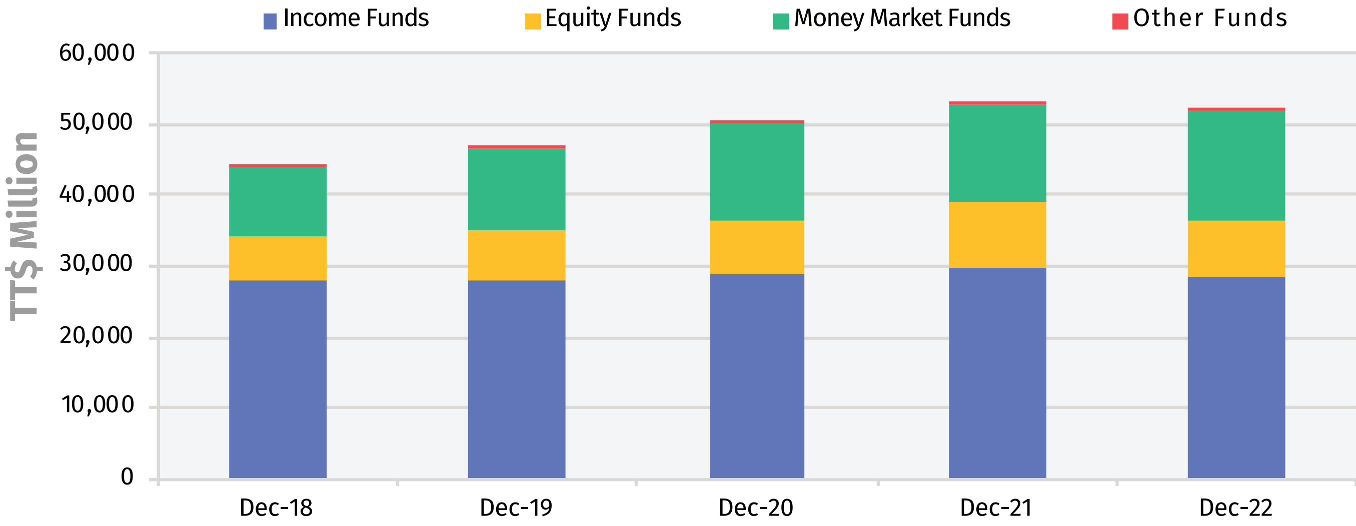
SECONDARY GOVERNMENT DEBT MARKET ACTIVITY, 2018 – 2022



Source: Trinidad and Tobago Stock Exchange

FIGURE 40

VALUE OF ASSETS UNDER MANAGEMENT (FUND TYPE), DEC 2018 – 2022



Source: Trinidad and Tobago Securities and Exchange Commission

PAYMENTS SYSTEM (LOCAL CURRENCY PAYMENTS)

In 2022, the total volume and value of electronic payments (large-value and retail payments) increased as the economy continued to emerge from the effects of the COVID-19 pandemic. This was evident in a rise in the volume and value of the Real Time Gross Settlement System (RTGS), Automated Clearing House (ACH), and card transactions. Regarding the latter, consumers appeared to have returned to in-store shopping, as reflected by a notable increase in the volume and value of debit and credit card transactions made at Point of Sale (POS) machines. Moreover, there was an increase in the volume and value of cash withdrawals, suggesting that cash remains a popular payment instrument domestically. The value of wholesale[30] cheque payments also increased in 2022, owing to increased spending by the public and private sectors. Additionally, new technologies and participants entered the payments ecosystem, thus widening the payment options available to consumers and businesses. In August 2022, pursuant to the E-Money Issuer Order (2020), the first non-bank E-Money Issuer was provisionally registered by the Central Bank to issue e-money, effective September 2022.

WHOLESALE (LARGE-VALUE) PAYMENTS TRANSACTION VOLUME AND VALUE

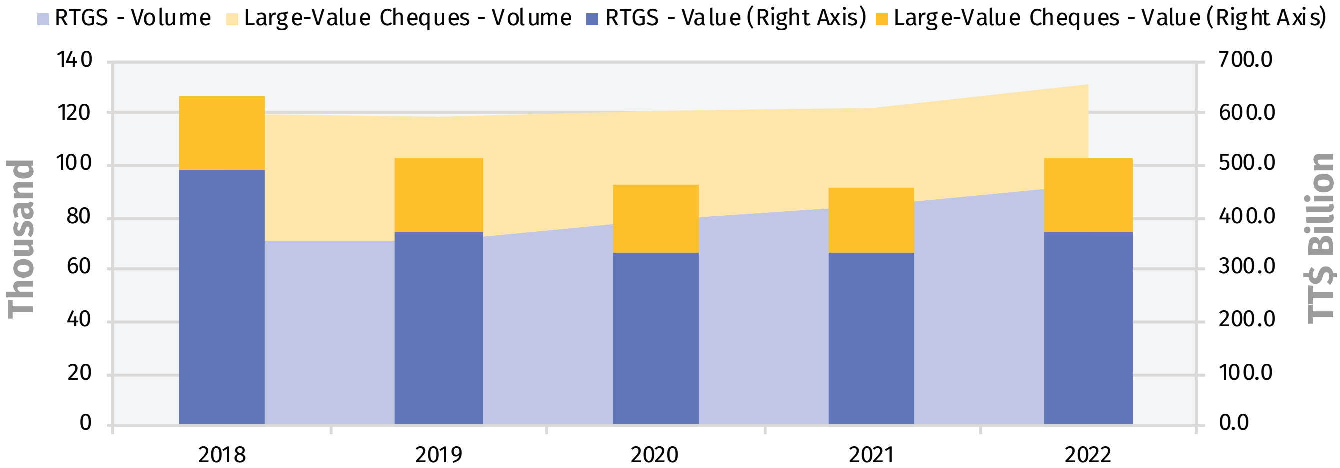
In 2022, the volume and value of large-value payments processed over the RTGS grew by 9.1 per cent and 11.6 per cent, respectively, compared to 2021. RTGS payments also accounted for over 70 per cent of the volume and value of all large value payments. As in 2021, the volume and value of customer payments[31] remained higher than interbank payments[32] during the period. Unlike previous years, the volume and value of large-value cheque transactions increased by 3.7 per cent and 12.0 per cent, respectively, in 2022. This was due

30 Wholesale or large-value payments are payments of TT$500,000 and over.
31 Refers to SWIFT 103 payments.
32 Refers to SWIFT 202 payments.

to increased spending by the public and private sectors as the effects of the COVID-19 pandemic abated **(Figure 41)**.

FIGURE 41

SHARE OF WHOLESALE PAYMENTS – VOLUMES AND VALUES, 2018 – 2022



Source: Central Bank of Trinidad and Tobago

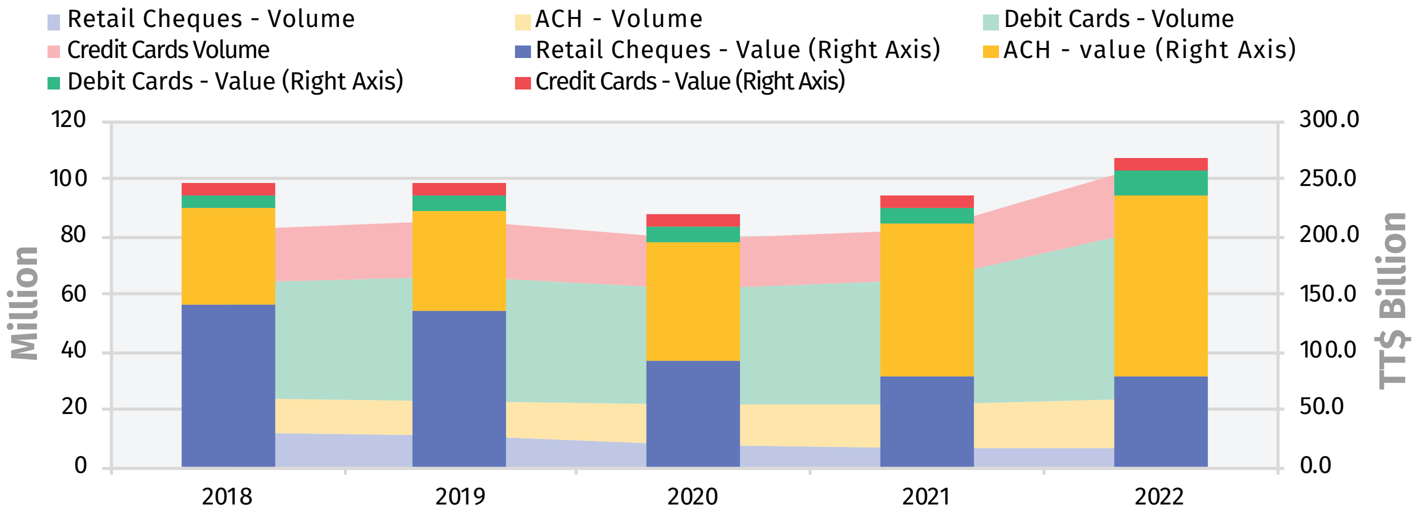
RETAIL PAYMENTS TRANSACTION VOLUME AND VALUE

There was an uptick in the volume and value of all retail payments[33] by 28.6 per cent and 13.7 per cent, respectively, in 2022. This was driven by a climb in ACH payments as a result of the use of online and mobile banking payment channels to make routine payments (for example, bill payments and other interbank transfers). During the year, the ACH processed a total volume of 17.0 million transactions valued at $158.2 billion, an increase of 11.6 per cent and 19.5 per cent, respectively, compared to 2021. Comparatively, the volume and value of retail cheques processed in 2022 continued on a downward trend. At the end of 2022, the volume and value of retail cheques amounted to 6.8 million and $79.3 billion, a fall of less than 5 per cent and 2 per cent, respectively, from 2021 **(Figure 42)**.

33 Refers to retail electronic and cheque transactions.

FIGURE 42

SHARE OF RETAIL PAYMENTS – VOLUMES AND VALUES, 2018 – 2022



Source: Central Bank of Trinidad and Tobago

With the ease of COVID-19 restrictions in 2022 and the return of consumers to in-store shopping, there was a significant increase in the number of card payments made using POS machines. The rollout of new EMV[34] cards by commercial banks in 2022 also increased the convenience of using cards at POS machines. Payments made using debit and credit cards accounted for 55.8 per cent and 21.8 per cent, respectively, of all retail payments in 2022. ACH transaction volumes accounted for 16.0 per cent, while retail cheque volumes accounted for 6.4 per cent of retail payments.

In terms of value, ACH transactions accounted for the largest share of retail payments at 58.8 per cent, followed by retail cheques at 29.4 per cent. This signalled an important market development, as since 2019, the value of ACH payments superseded that of retail cheque values and accounted for the largest share of all retail payments. Debit cards accounted for 7.1 per cent of retail payments, followed by credit card payments at 4.7 per cent in 2022.

PAYMENTS INFRASTRUCTURE

At the end of 2022, the number of Automated Teller Machines (ATMs) in Trinidad and Tobago stood at 498, an increase of 2 ATMs from the previous year. The number of POS machines also rose to 24,390 machines from 22,784 machines recorded in 2021. Commercial banks continue to use ATMs to improve

34 EMV stands for Europay, MasterCard® and Visa®. EMV cards offer increased security of payment card transactions through the use of a chip embedded in the cards.

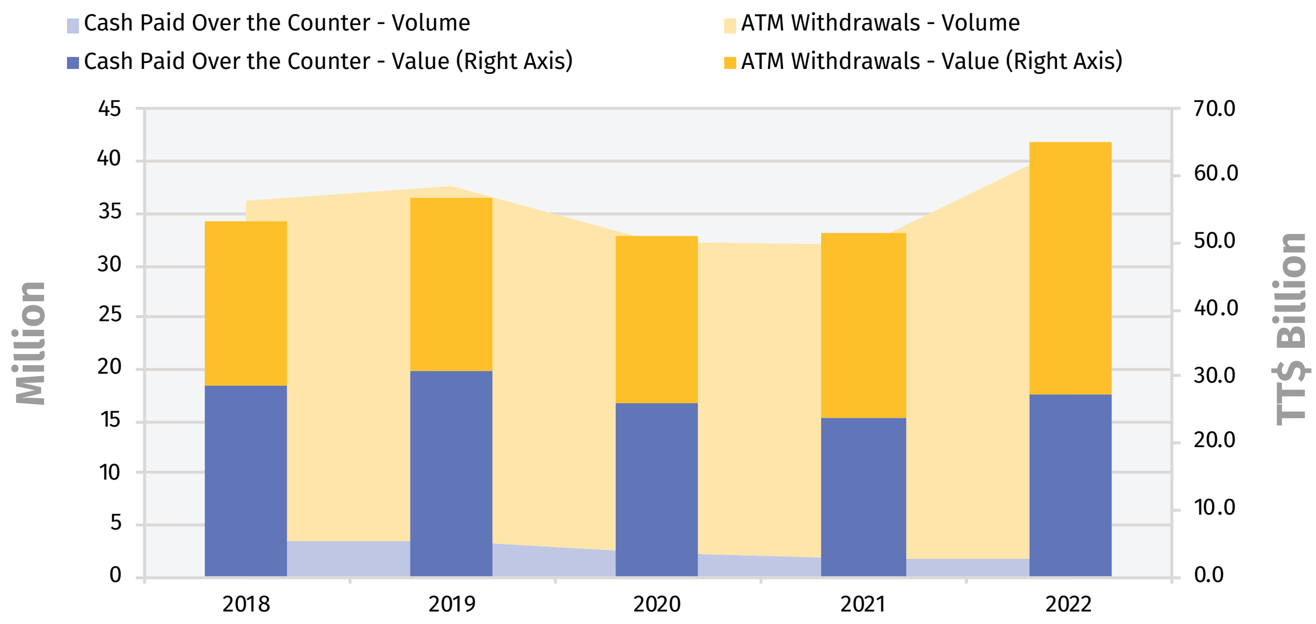
access to electronic banking services, routine transactions and cash withdrawals. They have also been encouraging online banking rather than in-person banking, where possible, to reduce the number of over-the-counter (OTC) transactions. Banks have also been seeking to increase their merchant base and convenience to customers by offering POS machines, including mobile POS devices.

CASH WITHDRAWALS

In 2022, the volume and value of cash withdrawals by businesses and consumers increased by 29.9 per cent and 25.9 per cent, respectively, when compared to 2021. The number of cash withdrawals OTC at commercial banks and at ATMs grew by 6.0 per cent and 31.3 per cent, respectively. The value of cash paid OTC also increased from $24.0 billion in 2021 to $27.4 billion in 2022 (14.2 per cent) and ATM withdrawals increased from $27.7 billion in 2021 to $37.7 billion in 2022 (35.9 per cent). Data for the period 2018-2022 show that the highest average value of cash withdrawals was in 2022, suggesting that cash remains an important means of making payments **(Figure 43)**. Cash in active circulation increased from $7.5 billion in 2021 to $7.6 billion in 2022 (0.8 per cent). When taken as a percentage of GDP, cash in circulation has nonetheless been falling.

FIGURE 43

CASH WITHDRAWALS – VOLUMES AND VALUES, 2018 – 2022



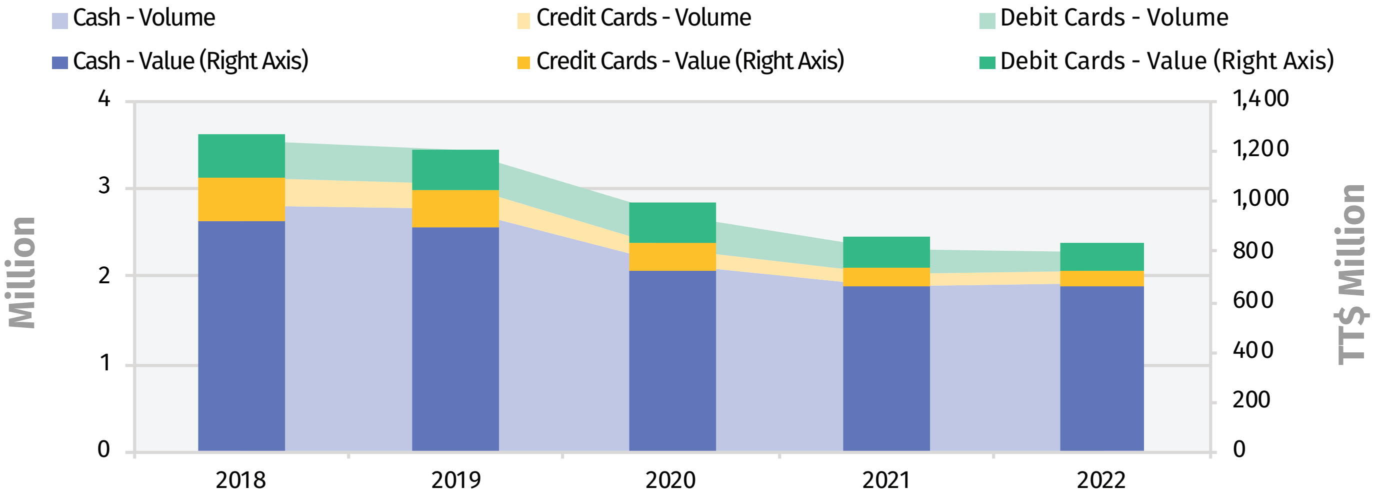
Source: Central Bank of Trinidad and Tobago

BILL PAYMENT SERVICE PROVIDERS

In 2022, the three registered BPSPs processed a total of 2.29 million transactions valued at $0.83 billion, compared with 2.31 million transactions valued at $0.87 billion in 2021. Cash remained the most popular means of making payments at BPSPs, accounting for over 79 per cent of the total volume and value of all payments made (Figure 44). Meanwhile, the volume and value of payments made at BPSPs using debit cards and credit cards declined in 2022 compared to the previous year. The fall in the value of BPSP payments was ascribed to the migration of consumers to online bill payment options.

FIGURE 44

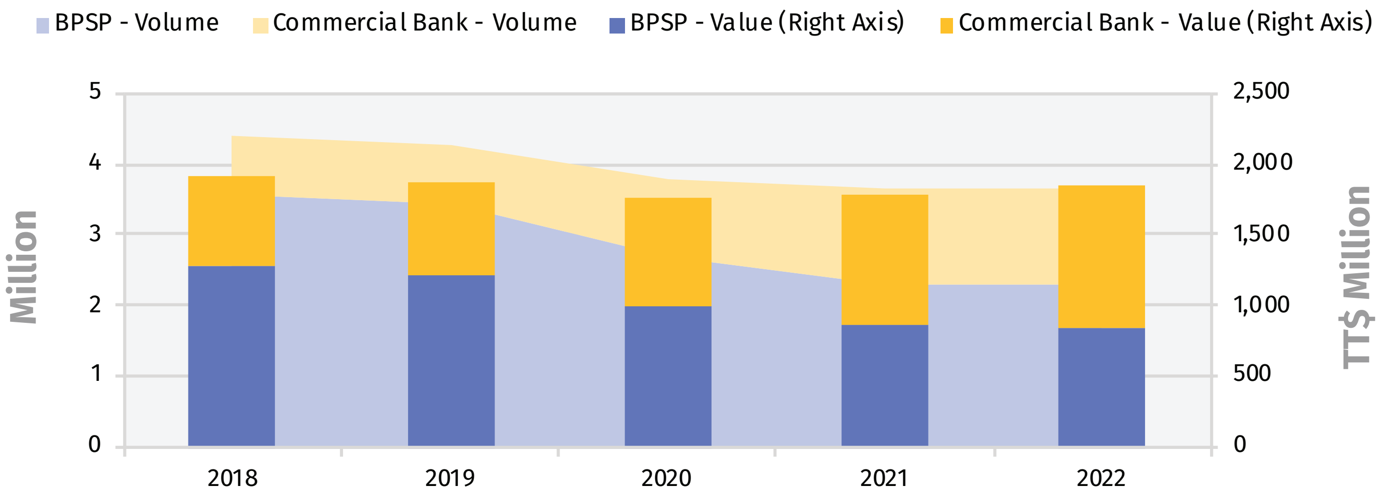
TRENDS IN DOMESTIC RETAIL PAYMENTS – BILL PAYMENTS, 2018 – 2022



Source: Central Bank of Trinidad and Tobago

Comparatively, the volume of utility payments processed by commercial banks slightly decreased by 1.4 per cent, while its value increased by 10.0 per cent in 2022. Traditionally, commercial banks accounted for the larger value of bill payments (Figure 45).

FIGURE 45
TRENDS IN DOMESTIC RETAIL PAYMENTS – BILL PAYMENTS AND COMMERCIAL BANKS, 2018 – 2022



Source: Central Bank of Trinidad and Tobago

CHAPTER 4

Safeguarding the Financial System

SAFEGUARDING THE FINANCIAL SYSTEM

During 2022 and early 2023, the Central Bank advanced its efforts to support and promote domestic financial stability through various legislative reforms. Notable reforms include the draft liquidity coverage ratio consultation paper, updated guidelines on pension plans and guidance on publications of abridged financial statements. The Central Bank also engaged the IMF to strengthen cybersecurity and drafted a Cybersecurity Management Guideline. Meanwhile, work continues on implementing IFRS 17 throughout the insurance industry and advances in strengthening the Anti-Money Laundering/Combatting the Financing of Terrorism/Counter Proliferation Financing (AML/CFT/CPF) framework.

STATUS OF IMPLEMENTATION OF NEW SUPERVISORY STANDARDS

BASEL II/III

The Central Bank issued the draft Liquidity Coverage Ratio (LCR) Consultation Paper and Reporting Framework for industry consultation in November 2022, for which feedback was received in February 2023. A meeting of the Basel II/III Technical Working Group and the Bankers Association of Trinidad and Tobago (BATT) Foreign Trade and Treasury Committee[35], was held on April 26, 2023 to discuss the comments and the Quantitative Impact Study (QIS) on the LCR, which is planned for the period May to July 2023.

The Central Bank is also preparing to request that the Minister of Finance issue a Notice in the Gazette to activate additional Basel III capital buffers contained in the Financial Institutions (Capital Adequacy) Regulations, 2020. These are the Capital Conservation Buffer, the Leverage Ratio, and the Capital Add-on for Domestic Systemically Important Banks (DSIBs).

IMPLEMENTATION OF LEVERAGE RATIO

In June 2022, the Bank concluded consultation on the draft Leverage Ratio Guideline and conducted a Quantitative Impact Study (QIS) on the Leverage Ratio Reporting Framework. Based on the results of the QIS, all institutions have the capacity to meet the proposed minimum Leverage Requirement of 3 per cent.

35 A Central Bank and industry working group, and a BATT industry group, respectively.

EXTENSION OF TIMELINE FOR SUBMISSION OF ICAAPS

The Central Bank amended the timeline for submitting ICAAPs from four months to six months after the licensee's and financial holding company's year-end. Accordingly, ICAAP submissions are due as follows:

a. DSIBs, financial holding companies, and other banking groups are required to submit a group ICAAP to the Central Bank annually within six months of their financial year-end;
b. all other commercial banks and selected non-banks should submit the ICAAP every two years, within six months of their financial year-end. The non-banks to which this may be applicable will be determined and contacted after the first round of ICAAP submissions; and
c. all other non-banks should submit the ICAAP every three years, within six months of their financial year-end.

STRENGTHENING FINANCIAL STABILITY

GUIDELINE ON AMENDING A PENSION PLAN'S TRUST DEED AND RULES AND CORRECTING THE REGISTER OF PENSION PLANS[36]

The purpose of this Guideline is to inform Plan Sponsors and Trustees of the legislation and the steps they are to take, prior to submitting amendments to Trust Deeds and Rules to the Central Bank for registration or documents to correct the register. Feedback on the draft Guideline was received by the sector and revisions are currently ongoing. Issuance of the final Guideline is expected by mid-2023.

GUIDELINE ON THE PUBLISHING OF ABRIDGED FINANCIAL STATEMENTS

Pursuant to the IA 2018 and the Financial Institutions Act, 2008, the Central Bank and the Institute of Chartered Accountants of Trinidad and Tobago agreed to the form and content of abridged financial statements required to be published by an insurer, licensee, or financial holding company in the daily newspapers. After consultation with the stakeholders in the financial sector, a notice was published in the Gazette and the daily newspapers, and a circular letter was issued to the industry on October 17, 2022, informing of the establishment of the Guideline, which became effective on the same date. In this regard, subject to the requirements of the Guideline, an insurer or financial holding company of an insurer may publish an abridged format of its audited financial statements, and a licensee or financial holding company of a licensee may publish an abridged format of its audited financial statements, instead of publishing its full audited financial statements in the daily newspapers.

36 The draft guideline can be accessed using the following link: https://www.central-bank.org.tt/sites/default/files/circular_letters/draft-guideline-on-amending-a-pension-plan-trust-deed-and-rules-and-correcting-the-register-of-pension-plans.pdf.

IFRS 17 – INSURANCE CONTRACTS

Work continued on the implementation of IFRS 17 by the insurance industry. During the period September 30, 2022 to March 30, 2023 the following occurred:

1. A QIS that focuses on the effects of IFRS 17 on the capital adequacy of the insurers was issued. Responses to the QIS have been received and are being reviewed.
2. The regulatory reporting forms were amended to incorporate IFRS 17 requirements. The amended annual reporting forms have been sent to the industry for comments. Several responses were received and are in the process of being reviewed.
3. The Central Bank hired a consultant to provide training to staff on IFRS 17 and to provide technical assistance. This training was conducted in October 2022.
4. Meetings were held with all the insurance companies in late 2022 and early 2023 to assess their readiness for the implementation of IFRS 17.
5. The Caribbean Regional Technical Assistance Centre and the Caribbean Association of Insurance Regulators continued to support the region in implementing IFRS 17.

GUIDELINE FOR THE MANAGEMENT OF OUTSOURCING RISKS

On February 22, 2022, the Central Bank of Trinidad and Tobago issued a Guideline for the Management of Outsourcing Risks. The Guideline establishes minimum standards for the management of outsourcing risks by regulated institutions, and sets out the expectations of the Central Bank for the management of risks arising from the outsourcing of material activities, functions, and services by regulated institutions.

GUIDELINE ON THE MANAGEMENT OF MARKET RISK

The Central Bank issued its Guideline on the Management of Market Risk on July 1, 2022. The guideline outlines minimum standards for the management of market risk and encourages improved market risk management practices by institutions under the Bank's regulatory purview. The principles set out in the guideline accord with international best practices and legislative requirements and are underpinned by the principle of proportionality.

DRAFT MARKET CONDUCT GUIDELINE FOR REGISTRANTS UNDER THE INSURANCE ACT 2018

In August, 2022, the Central Bank of Trinidad and Tobago issued a draft Market Conduct Guideline for Registrants under the Insurance Act, 2018, to promote the existence of efficient and fair insurance markets. The draft Guideline seeks to increase the registrants' awareness of the importance of fair treatment of all consumers in the conduct of their business and encourage compliance with market conduct standards in accordance with Schedule 11 of the Act.

DRAFT RECOVERY PLANNING GUIDELINE

The Central Bank developed and issued a draft Recovery Planning Guideline in August 2022 to the banking and insurance sectors for their review and comment. The draft Guideline outlines a framework for financial institutions to develop and maintain recovery plans, including the measures to be taken by the institution to restore it to financial viability following a stress event. The Guideline was developed in accordance with international standards and captures practices of standard setting bodies such as the FSB as well as other international regulatory agencies. The draft Guideline can be viewed on the Central Bank's website.

STRENGTHENING CYBERSECURITY IN FINANCIAL INSTITUTIONS

In 2022, the Central Bank requested IMF technical assistance to (i) strengthen the cybersecurity posture of the Central Bank; and (ii) strengthen the cybersecurity of financial institutions regulated by the Central Bank. Accordingly, the Central Bank convened a working group comprising representatives from all the domestic agencies with responsibility for regulating financial institutions, namely, the Central Bank, the Trinidad and Tobago Securities and Exchange Commission, the Commissioner of Cooperative Development, and the Financial Intelligence Unit of Trinidad and Tobago. A TA mission visited Trinidad and Tobago from October 31–November 4, 2022 to provide support to the Central Bank in a project aimed at enhancing its cybersecurity posture. The TA focused on (i) governance and Identity and Access Management; (ii) providing guidance on drafting a guideline applicable to financial institutions; (iii) conducting a seminar on regulations; and (iv) assessing the supervisory capacity. To date, the Central Bank has drafted a Cybersecurity Best Practices Guideline. The draft Guideline was issued to the industry for comment in June 2023.

SUPERVISORY LADDER OF INTERVENTION

In May 2022, the Central Bank published its Supervisory Ladder of Intervention Policy. The policy articulates the Central Bank's general approach to supervisory intervention where it has concerns with inter alia a regulated institution's financial performance, risks, governance, risk management, compliance and/or internal controls. It seeks inter alia to promote transparency in the Bank's supervisory process by documenting the typical and discretionary actions that the Bank would utilise to either:

i. preserve or restore financial soundness; or
ii. resolve / exit a financial institution where financial viability cannot be restored.

Thematic Reviews

The Central Bank conducted several thematic reviews on key areas in the banking industry as follows:

a) Corporate Governance

Following the issuance of a new Corporate

Governance Guideline in March 2021, the Bank conducted a survey of corporate governance practices in the banking sector. All banking institutions responded to a survey that was issued in September 2021. A sector report on the findings of survey was issued to the banking industry on August 17, 2022, which outlined key findings and recommendations for implementation by the banking sector. Individual findings were also shared with each bank.

b) Cyber Risk

The increasing use of digital financial products and services and the increased frequency and severity of cyber threats led to the Central Bank to conduct a Thematic Review of Cybersecurity Risk Management Practices in the banking sector. The thematic review was conducted across seven of the eight commercial banks to gather information on their cybersecurity framework/practices and cyber resilience. The Central Bank completed its thematic review of cyber risk in the banking sector and reports were issued to individual banks. In addition, an industry report was issued to the sector on August 10, 2022.

STRENGTHENING THE AML/CFT REGULATORY FRAMEWORK

REVISED GUIDANCE NOTES ISSUED

Revised Addendum to the Central Bank's AML/CFT Guideline – Simplified Due Diligence (SDD) Requirements for Basic Banking Account

On March 6, 2023 the Central Bank issued the updated SDD Requirements for Basic Banking Accounts. The SDD Requirements have been amended to reflect the personal income tax allowance increase from $84,000 to $90,000 per annum, effective January 1, 2023. The tax exemption threshold was used as the baseline for the application of SDD. In addition, clarity was provided on the minimum standards for ongoing risk-based monitoring of these basic banking accounts.

EXTERNAL ASSESSMENTS

Fifth Round Mutual Evaluation

The Caribbean Financial Action Task Force notified Trinidad and Tobago that the on-site review for the Fifth Round Mutual Evaluation will be conducted in January 2026. In preparation, the Central Bank will focus on addressing the second National Risk Assessment findings for the Central Bank and its regulated sectors, and advocating for the finalisation of the Admin Fines regulatory framework. In line with its AML/CFT/CPF Risk-Based Supervisory Framework, work will also commence to identify high-risk institutions for conducting risk-based on-site examinations over 2023/2024 and 2024/2025.

INTERNATIONAL LISTS

The country remains on the European Union's (EU) Tax and AML lists and the Organisation for Economic Cooperation and Development (OECD) Global Forum list, pending the completion of action plans to address the deficient areas. The EU is providing technical assistance to the country to advance work on beneficial ownership, regulation of non-profit organisations, and the gaming sector. The competent authorities are prioritising implementation plans to address the EU and Global Forum's tax transparency requirements.

As a consequence of the listings, certain EU banks have de-risked the accounts held by Diplomatic Missions and, in some instances, Ambassadors and employees of the Missions. Officials of Trinidad and Tobago and the EU are in discussions to address the de-risking as a matter of priority.

Additionally, the Central Bank has been advised of the repeal of legislative provisions initially passed by the German government, which introduced a 15 per cent withholding tax on claims, commission payments, and all other remittances from German reinsurers to the insurers domiciled in Trinidad and Tobago. The withholding tax was imposed as a consequence of the country being listed on the EU AML list.

The Central Bank continues to support the work of the Government of Trinidad and Tobago to address issues related to the EU Commission's Tax and AML lists and the OECD Global Forum requirements on the Exchange of Information Request and the Automatic Exchange of Information Standards.

NATIONAL RISK ASSESSMENT (NRA)

Second National Risk Assessment

The Central Bank is supporting the National Anti-Money Laundering and Terrorism Financing Committee with the completion of the NRA. The assessments of the sectors regulated by the Central Bank have been submitted to the NRA Coordinator for collation into the overall NRA report.

Virtual Assets Risk Assessment

The World Bank is providing assistance for the conduct of a standalone assessment of virtual assets and virtual asset service providers, which is due to commence in the third quarter of 2023. Representatives of the Central Bank are part of the working group.

National Risk Assessment of Proliferation Financing (PF) Risk

King's College UK is providing technical assistance to Trinidad and Tobago to conduct a standalone PF risk assessment, which was launched on February 10, 2023. Representatives of the Central Bank are part of the working group.

REVISED CENTRAL BANK AML/CFT/CPF POLICY

The Central Bank is finalising revisions to its internal AML/CFT/CPF Policy. The revisions seek to clarify and strengthen the Central Bank's AML risk management controls including, inter alia, source of funds requirements, improvements to the internal reporting form, and guidance on enhanced due diligence measures.

REVIEW OF DEVELOPMENTS IN PAYMENTS SYSTEMS

To ensure the orderly development of the payments sector and to manage the ongoing developments in the space, the Central Bank in 2022 continued work on developing comprehensive payments system legislation that would, inter alia, allow a wider range of Fintech solutions to be accommodated safely in the space. The Central Bank also continued executing its Fintech Policy and through the Joint Regulatory Innovation Hub (the Hub), has engaged with 53 entities on fintech matters since its launch in October 2020.

REGISTRATION OF AN E-MONEY ISSUER

Pursuant to the E-Money Issuer Order (2020), the Central Bank issued a provisional registration to PayWise Limited (PayWise) as an electronic money (e-money)[37] issuer on August 10, 2022. PayWise was the first company, apart from banks and non-bank financial institutions, authorised to issue e-money domestically. This provisional registration authorised PayWise to issue e-money in Trinidad and Tobago from September 1, 2022. Under the terms of the provisional registration, PayWise was allowed to enlist new customers in a controlled environment monitored by the Central Bank. PayWise is a company incorporated in Trinidad and Tobago in 2013 and was registered as a payment service provider since 2019 by the Central Bank.[38]

DEVELOPING COMPREHENSIVE PAYMENTS SYSTEM LEGISLATION

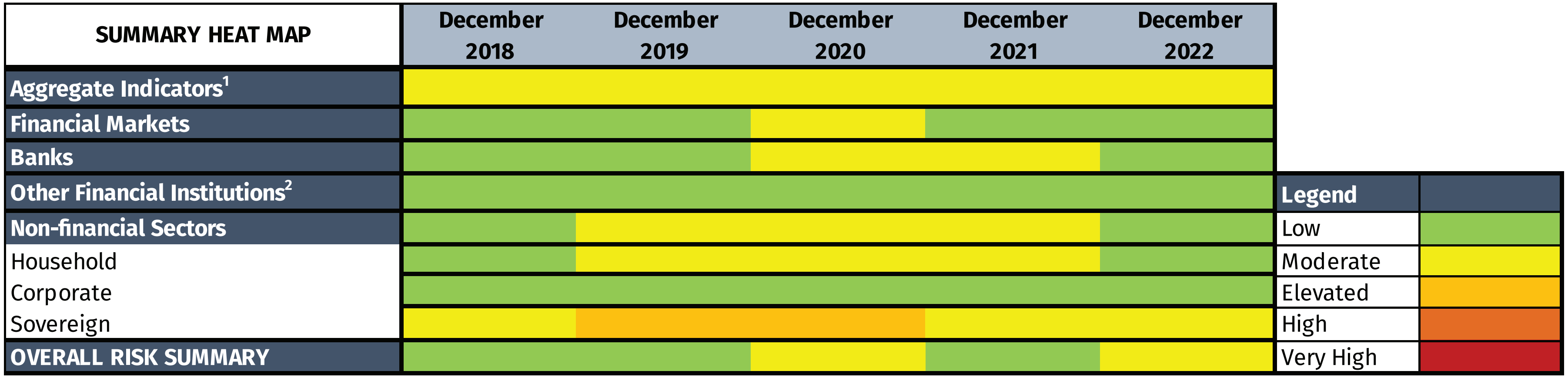
In May 2021 the Bank prepared a draft Policy Proposal Document to inform the development of payments systems legislation and received stakeholder feedback on its proposals. In addition to stakeholder feedback received, the Central Bank is engaging in TA with the IMF to draft a Payments Systems Bill and accompanying Regulations. The public will be consulted on the proposed Bill in 2023 before it enters the parliamentary process. The Central Bank will also develop guidelines to accompany the eventual Act.

37 E-money can be broadly defined as an electronic store of monetary value on a technological device (including mobile phones) that may be widely used for making payments to entities other than the e-money issuer.

38 More on Paywise registration can be accessed at: https://www.central-bank.org.tt/sites/default/files/latest-news/paywise-authorized-to-issue-electronic-money-in-tandt-20221008.pdf

APPENDIX A

DOMESTIC FINANCIAL STABILITY MONITOR HEAT MAP, 2018 – 2022



Source: Central Bank of Trinidad and Tobago

Note: A 'heat map' is a data visualisation tool, which takes the form of a matrix. They condense a large amount of data into a more user-friendly form. The Central Bank's Domestic Financial Stability Monitor summarises 51 macroeconomic and financial data series, as well as 4 composite risk indices, over a five-year period. Each indicator is assigned a risk rating of 1 (low) to 5 (very high) based on a specific benchmark. The overall and sub-sector risk ratings are estimated by using the equal-weighted average of the associated indicators. The result is rounded to the nearest whole number and the respective colour rating is subsequently applied. With this approach, it is possible for the overall risk rating to change as a result of aggregate changes in the underlying indicators, without sufficient magnitude to trigger sectoral rating adjustments.

1. Aggregate Indicators consist of indicators which evaluate macroeconomic, macro-financial or composite risk.
2. 'Other Financial Institutions' consist of Insurance (Long-Term and General) and Occupational Pension Funds sectors.

APPENDIX B

BANKING SECTOR LOANS BY SECTOR, 2017 – 2022

	TT$ Millions (Absolute Values)						TT$ Millions (Change)					Percentage Change (per cent)				
PUBLIC SECTOR LOANS	**Dec-17**	**Dec-18**	**Dec-19**	**Dec-20**	**Dec-21**	**Dec-22**	**Dec-17 Dec-18**	**Dec-18 Dec-19**	**Dec-19 Dec-20**	**Dec-20 Dec-21**	**Dec-21 Dec-22**	**Dec-17 Dec-18**	**Dec-18 Dec-19**	**Dec-19 Dec-20**	**Dec-20 Dec-21**	**Dec-21 Dec-22**
Petroleum	1,553.4	2,995.4	3,155.4	2,534.3	2,427.1	2,375.9	1,441.9	160.0	(621.0)	(107.3)	(51.2)	92.8	5.3	(19.7)	(4.2)	(2.1)
Construction	1,652.4	1,714.2	645.4	1,226.4	1,135.5	1,548.5	61.8	(1,068.8)	581.0	(91.0)	413.1	3.7	(62.4)	90.0	(7.4)	36.4
Transport, Storage and Communication	1,177.6	1,244.0	640.2	525.6	412.4	718.0	66.5	(603.8)	(114.6)	(113.3)	305.6	5.6	(48.5)	(17.9)	(21.5)	74.1
Finance, Insurance and Real Estate	2,350.8	2,371.9	4,369.8	4,007.5	4,330.8	3,823.8	21.1	1,997.9	(362.2)	323.2	(507.0)	0.9	84.2	(8.3)	8.1	(11.7)
Electricity and Water	2,638.5	1,045.0	1,067.8	1,030.5	651.3	682.8	(1,593.5)	22.8	(37.3)	(379.2)	31.5	(60.4)	2.2	(3.5)	(36.8)	4.8
Other	25.1	139.2	757.4	719.8	844.2	714.1	114.1	618.2	(37.7)	124.4	(130.1)	454.2	443.9	(5.0)	17.3	(15.4)
TOTAL	**9,397.9**	**9,509.8**	**10,636.0**	**10,044.2**	**9,801.2**	**9,863.0**	**111.9**	**1,126.2**	**(591.8)**	**(243.1)**	**61.9**	**1.2**	**11.8**	**-5.6**	**(2.4)**	**0.6**
BUSINESS LOANS	**Dec-17**	**Dec-18**	**Dec-19**	**Dec-20**	**Dec-21**	**Dec-22**	**Dec-17 Dec-18**	**Dec-18 Dec-19**	**Dec-19 Dec-20**	**Dec-20 Dec-21**	**Dec-21 Dec-22**	**Dec-17 Dec-18**	**Dec-18 Dec-19**	**Dec-19 Dec-20**	**Dec-20 Dec-21**	**Dec-21 Dec-22**
Real Estate Mortgage Loans	6,161.4	6,841.3	7,856.5	8,347.8	8,810.2	8,960.3	679.9	1,015.2	491.3	462.4	150.1	11.0	14.8	6.3	5.5	1.7
Finance, Insurance and Real Estate Companies	8,514.9	9,206.3	8,240.5	8,358.2	8,228.9	10,224.0	691.4	(965.7)	117.6	(129.2)	1,995.0	8.1	(10.5)	1.4	(1.5)	24.2
Services	7,447.0	8,148.3	9,270.8	8,464.5	8,919.9	9,747.1	701.3	1,122.5	(806.3)	455.4	827.1	9.4	13.8	(8.7)	5.4	9.3
Manufacturing	4,044.3	3,601.9	3,933.8	3,949.0	3,829.6	4,251.5	(442.5)	332.0	15.1	(119.4)	421.9	(10.9)	9.2	0.4	(3.0)	11.0
Construction	1,715.4	1,449.9	1,566.2	1,684.5	1,840.4	2,170.8	(265.4)	116.3	118.3	156.0	330.4	(15.5)	8.0	7.5	9.3	18.0
Other (Agriculture, Petroleum, Leasing)	1,186.0	1,155.6	1,137.7	1,168.8	1,391.9	1,427.6	(30.4)	(17.9)	31.0	223.1	35.7	(2.6)	(1.5)	2.7	19.1	2.6
TOTAL	**29,069.0**	**30,403.2**	**32,005.6**	**31,972.6**	**33,021.0**	**36,781.2**	**1,334.3**	**1,602.4**	**(33.0)**	**1,048.4**	**3,760.2**	**4.6**	**5.3**	**(0.1)**	**3.3**	**11.4**
CONSUMER LOANS BY PURPOSE	**Dec-17**	**Dec-18**	**Dec-19**	**Dec-20**	**Dec-21**	**Dec-22**	**Dec-17 Dec-18**	**Dec-18 Dec-19**	**Dec-19 Dec-20**	**Dec-20 Dec-21**	**Dec-21 Dec-22**	**Dec-17 Dec-18**	**Dec-18 Dec-19**	**Dec-19 Dec-20**	**Dec-20 Dec-21**	**Dec-21 Dec-22**
Real Estate including Mortgages	16,642.3	17,321.5	19,016.7	19,336.4	19,779.6	21,084.5	679.1	1,695.2	319.7	443.2	1,305.0	4.1	9.8	1.7	2.3	6.6
Vehicles	5,062.6	5,092.4	5,219.4	5,187.9	4,683.7	4,548.8	29.8	126.9	(31.5)	(504.2)	(134.9)	0.6	2.5	-0.6	-9.7	-2.9
Credit Cards	2,886.1	3,105.3	3,224.8	3,143.2	2,903.6	3,260.4	219.2	119.5	(81.6)	(239.6)	356.8	7.6	3.8	-2.5	-7.6	12.3
Refinancing	2,140.3	2,384.0	2,601.6	2,776.2	3,270.5	3,712.8	243.8	217.6	174.6	494.3	442.2	11.4	9.1	6.7	17.8	13.5
Consolidation of Debt	2,139.1	2,532.4	2,877.7	2,961.6	2,865.9	3,057.5	393.2	345.3	83.9	(95.7)	191.6	18.4	13.6	2.9	-3.2	6.7
Other Purposes	3,551.3	3,777.8	4,152.3	3,850.2	3,758.0	3,852.3	226.6	374.5	(302.1)	(92.2)	94.3	6.4	9.9	-7.3	-2.4	2.5
TOTAL	**32,421.7**	**34,213.5**	**37,092.5**	**37,255.5**	**37,261.2**	**39,516.3**	**1,791.7**	**2,879.1**	**163.0**	**5.7**	**2,255.1**	**5.5**	**8.4**	**0.4**	**0.0**	**6.1**

Source: Central Bank of Trinidad and Tobago
Note: Banking sector loans data are obtained from regulatory reports submitted to the Central Bank.

Central Bank of
Trinidad & Tobago