ISSN 1817-9959

Central Bank of Trinidad & Tobago

2023

MONETARY POLICY REPORT

NOVEMBER 2023 | VOLUME XXV No. 2

Central Bank of Trinidad and Tobago
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Monetary Policy Report

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VOLUME XXV NUMBER 2

The Central Bank of Trinidad and Tobago conducts monetary policy geared towards the promotion of low inflation and a stable foreign exchange market that is conducive to sustained growth in output and employment. This Report provides an account of how monetary policy actions support this objective, in light of recent economic developments.

Preface

The Central Bank of Trinidad and Tobago's monetary policy framework is guided by the objectives of maintaining low and stable inflation in an environment conducive to economic growth and financial system development. The Central Bank employs a range of instruments (direct and indirect) to effect monetary policy. Prior to the 1990s, the Central Bank utilised direct policy tools such as reserve requirements and direct credit controls. However, the onset of trade and financial liberalisation in the 1990s brought about a greater emphasis on market-based instruments such as Open Market Operations. Since mid-2002, the Central Bank's monetary policy framework was revised to include the use of a Repurchase ('Repo') rate as a key policy tool. The Central Bank utilises the Repo rate to signal to the banking system the direction in which it wishes short-term interest rates, and ultimately, the structure of interest rates, to move. Open Market Operations involve the purchase and sale of Government securities by the Central Bank to impact the level of liquidity in the domestic financial system.

The Monetary Policy Committee (MPC) develops and communicates the Central Bank's overall monetary policy stance. The MPC currently comprises members of the Central Bank's Senior Management and is chaired by the Governor. The Committee issues quarterly Monetary Policy Announcements (MPA) which provide insights into the MPC's deliberations, and oversees the preparation of the semi-annual Monetary Policy Report (MPR). The MPC is assisted by the Monetary Policy Secretariat (MPS), made up of staff from various Departments, which undertakes ongoing economic and financial analysis. The Central Bank utilises the MPR to communicate to the public its views on economic and financial developments and the main factors that influence the Central Bank's monetary policy decisions.

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KEY MESSAGES

- As geopolitical tensions persist and intensify, global macroeconomic prospects may be undermined. Fresh conflict in the Middle East threatens to reignite inflation if energy prices increase and suppress economic growth.

- The International Monetary Fund's October 2023 World Economic Outlook forecasts global economic activity to slow to 3.0 per cent in 2023, lower than the 2022 outturn. Advanced Economies are expected to drive the slowdown with faster growth among Emerging Market and Developing Economies.

- Domestically, there is evidence of sustained economic recovery during the second quarter of 2023 based on an improvement in non-energy sector activity which countered a decline in output from the energy sector. Meanwhile, price pressures decelerated in October 2023, reflecting a slowdown in both food and core inflation.

- Financial system liquidity decreased owing to Central Government borrowing and VAT bond repayments. Nonetheless, excess liquidity remained ample to support the ongoing expansion in private sector credit.

- Monetary policy thus far in 2023 has centred on keeping inflation in check while supporting the post-pandemic economic recovery. The Central Bank, in the September 2023 Monetary Policy Committee meeting kept the Repo rate steady at 3.50 per cent.

MONETARY POLICY OVERVIEW AND OUTLOOK

Overview

Economic uncertainty may increase if new geopolitical conflicts escalate further. The International Monetary Fund (IMF) warns of a 'new cloud' darkening and of the potential for an upward trajectory in inflation if oil prices increase. Additionally, though much of the fallout was contained, the banking sector turmoil in the United States (US) and Europe earlier in 2023 exposed fragilities in the financial system. This, coupled with ongoing policy tightening in several Advanced Economies (AEs) increased borrowing costs, including for developing countries, at a time when buffers are yet to be fully replenished following the COVID-19 pandemic.

Underlying price pressures continue to contribute to above-target inflation for many central banks. However, after decelerating during 2023 some major central banks paused rate hikes. The US Federal Reserve along with the Bank of England maintained benchmark interest rates in November 2023 as economic activity expanded and price pressures eased. Similarly, the Bank of Japan held its key short-term interest rate unchanged during the third quarter of 2023. On the other hand, the European Central Bank increased its main refinancing rate as inflation remained above-target.

Domestically, several indicators suggest economic activity picked up in the second quarter of 2023. Activity was driven by an improvement in the non-energy sector which countered a decline in output from the energy sector. This may have also contributed to an improvement in labour market conditions as the unemployment rate fell and labour force participation improved. Employment gains were noted in the Construction (including Electricity and Water); Wholesale, Retail, Restaurants and Hotels; and Community, Social and Personal Services sectors. Meanwhile, headline inflation eased to 1.3 per cent in October 2023 on account of a deceleration in both food and core inflation.

Financial system liquidity decreased from May to November 2023. Fiscal operations, usually the main driver of excess liquidity, resulted in net injections of $2.6 billion over the review period, compared to injections of $7.8 billion one year earlier. Central Bank Open Market Operations (OMOs) resulted in net injections of $2.0 billion over May to November 2023. Simultaneously, the Central Bank's foreign exchange sales to authorised dealers indirectly removed $5.6 billion from the system. Nonetheless, excess liquidity remained ample, underpinning expansions in private sector credit. As of September 2023, consolidated system credit remained favourable driven by robust growth in consumer, real estate mortgage and business lending. Meanwhile, conditions in the foreign exchange market remained relatively tight.

In this context, the Central Bank of Trinidad and Tobago kept its monetary policy stance unchanged. During its June and September 2023 Monetary Policy Committee (MPC) meetings, the Central Bank kept the short-term rate on its overnight collateralised financing to commercial banks, the Repo rate, at 3.50 per cent. The MPC took account of the economic recovery alongside the deceleration in domestic inflation in calibrating its stance. At the same time, the Committee noted that the (negative) short-term interest differential between Trinidad and Tobago and the United States had widened. In this regard, particular attention needed to be paid to the interest rate trajectory of the US Federal Reserve, while balancing the implications of higher domestic rates on economic growth.

Outlook

The international economic outlook continues to be clouded by the impacts of restrictive monetary policy to arrest inflationary pressures and the resultant highest borrowing costs in decades. The IMF in its October 2023 World Economic Outlook (WEO) projects a slowdown in global growth to 3.0 per cent in 2023 following a larger expansion of 3.5 per cent in 2022.

Domestic inflation is expected to remain low in the final months of 2023, with a possible uptick in 2024, based on how global prices evolve and the timing and magnitude of utility rate changes. Some demand pressures could also materialise depending on the extent of wage settlements and payments of salary arrears.

Activity in the non-energy sector is expected to benefit from increased business activity alongside the ongoing resurgence in consumer demand. Energy sector performance hinges on the commencement of upstream projects to bolster supply. Production from Touchstone's Cascadura and EOG's Osprey prospects, expected before year's end, can support output in the second half of 2023.

Monetary policy will continue to focus on inflation, while taking into account domestic growth prospects and interest differentials with the rest of the world. At present, inflation is very low, there are signs that the economy's steady recovery continues, credit is recovering at a good pace, and short-term interest differentials with the US are still negative. All of these factors could change in light of, among other things, international supply-side uncertainties affecting global prices, the outcome of energy production plans, and the path of interest rates in the US and elsewhere. The Central Bank of Trinidad and Tobago remains poised to calibrate its monetary policy in light of emerging developments.

1. THE INTERNATIONAL ECONOMIC CONTEXT

Despite a slowdown in global inflationary pressures and a pause in policy rate hikes by a few Advanced Economies (AEs), above-target inflation resulted in some AEs maintaining their monetary tightening cycles. Consequently, tight financial conditions amidst heightened geopolitical tensions are anticipated to slow global growth notwithstanding positive growth in Emerging Market and Developing Economies (EMDEs).

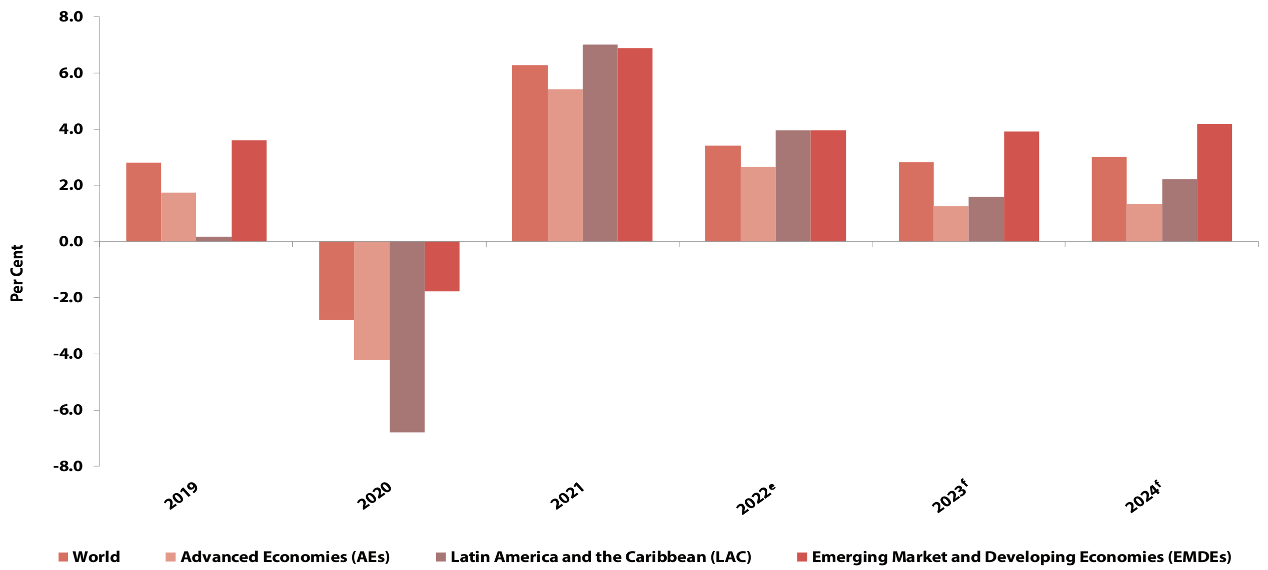
Recent Economic Developments and Outlook

As new geopolitical conflicts emerge, macroeconomic prospects may be undermined. The situation in the Middle East threatens to reignite inflation if energy prices increase and suppress global economic growth prospects. According to the International Monetary Fund's (IMF) October 2023 World Economic Outlook (WEO), drafted before the conflict in the Middle East emerged, global growth was already forecasted to decelerate to 3.0 per cent in 2023, lower than the previous year's growth of 3.5 per cent and unchanged from the July 2023 projections (Chart 1.1). AEs represent the main driver of the slowdown with an anticipated outturn of 1.5 per cent in 2023 from 2.6 per cent in 2022. Meanwhile, growth in the EMDEs is expected to partially offset the slowdown in AEs, expanding by 4.0 per cent in 2023. Additionally, underlying price pressures continue to contribute to well-above target inflation for a number of central banks despite decelerating during 2023.

Over the past year, as central banks engaged in fast-paced interest rate hikes in the fight against inflation, tighter financial conditions have begun to restrict the repayment capacity of debtors. Against this background, the IMF's October 2023 Global Financial Stability Report warns of growing credit risk as corporate and household borrowers face greater financing costs. This threat may not subside in the near term as central banks keep rates higher for longer as inflation remains elevated in many economies. Furthermore, the situation in the Middle East presents a new catalyst for possible derailment of the world economy.

CHART 1.1

Global Growth: Annual Real GDP Growth



Source: International Monetary Fund, World Economic Outlook, October 2023
e estimated
f forecasted

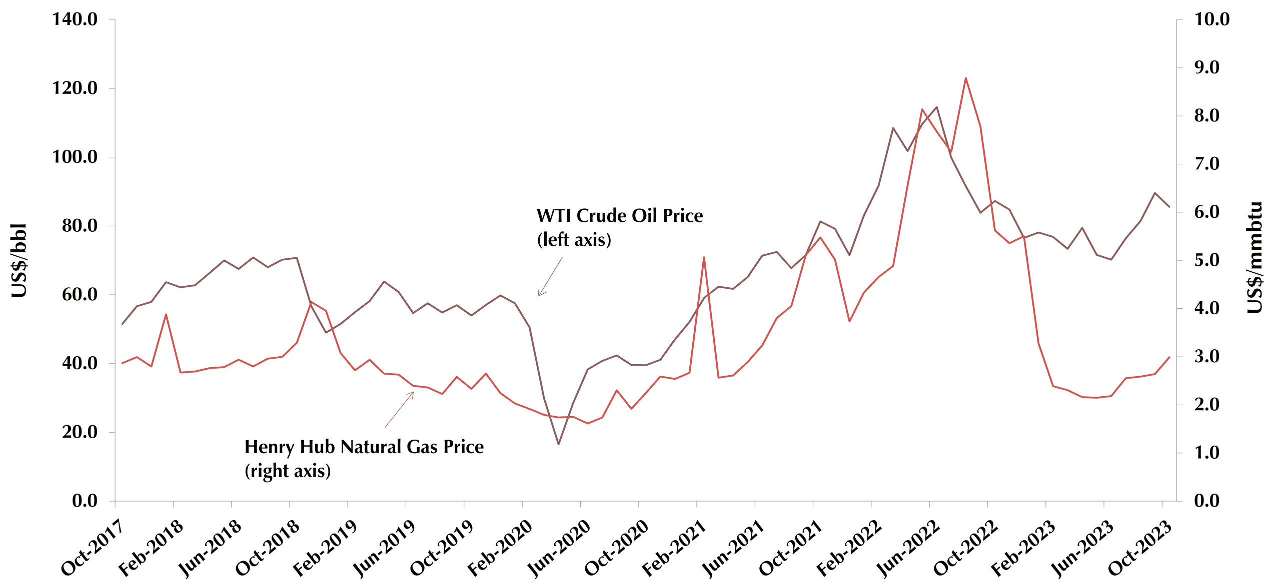
Although energy prices moderated and inflation slowed, escalating geopolitical tensions threaten to add impulses

The Energy Commodity Prices Index (ECPI) decreased over the first ten months of 2023. On a year-on-year basis, the ECPI decreased by 35.2 per cent to average 116.36, with all commodities included in the index experiencing contractions. Crude oil prices were restrained by slow global economic growth, recessionary concerns and inventory builds. West Texas Intermediate (WTI) prices averaged US$78.25 per barrel over the ten-month period, representing a 19.5 per cent decline from price levels in the corresponding period of the previous year. Brent crude prices also decreased by 20.1 per cent to an average of US$82.91 per barrel. In September, prices experienced an uptick following commitments from Saudi Arabia and Russia to continue working together to support market stability. In November, Saudi Arabia and Russia reaffirmed their commitment to extra voluntary oil supply cuts until the end of the year, which will bring additional upward impetus to oil prices.

Meanwhile, US Henry Hub natural gas prices recorded a decline of 61.6 per cent (year-on-year), falling from an average of US$6.57 to US$2.52 per million British Thermal Units (mmbtu) over the period, on account of milder winter temperatures and robust US output (Chart 1.2). Uncertainty arising from the Middle East conflict, which escalated in October, threatens to add upward pressure to energy prices. The largest risk lies in the potential effect on supply, should the conflict spiral into a regional war including major commodity exporters.

CHART 1.2

Natural Gas and Crude Oil Prices



Source: Bloomberg

Though lower, inflation remains a challenge for major central banks

Persistent inflation continues to challenge monetary authorities. Inflation in the US, as measured by the Personal Consumption Expenditure price index, slowed to 3.0 per cent (year-on-year) in October 2023 from 3.4 per cent one month earlier, amid a deceleration in energy costs (Chart 1.3). Meanwhile, inflation in the United Kingdom (UK) decelerated to 4.6 per cent (year-on-year) in October 2023, from 6.7 per cent in both August and September, largely due to reduced prices for food and energy. Despite a slight deceleration, inflation in the Euro area remained above the European Central Bank's (ECB) 2.0 per cent target. Consumer prices dipped to 2.9 per cent (year-on-year) in October 2023 from 4.3 per cent recorded in the previous month, owing to a decline in the cost of energy, amid a deceleration in prices for food, alcohol and tobacco, and non-energy industrial goods. On the other hand, prices in China experienced deflation of 0.2 per cent in October, following a flat performance (0.0 per cent year-on-year) one month earlier, on account of a falloff in food prices.

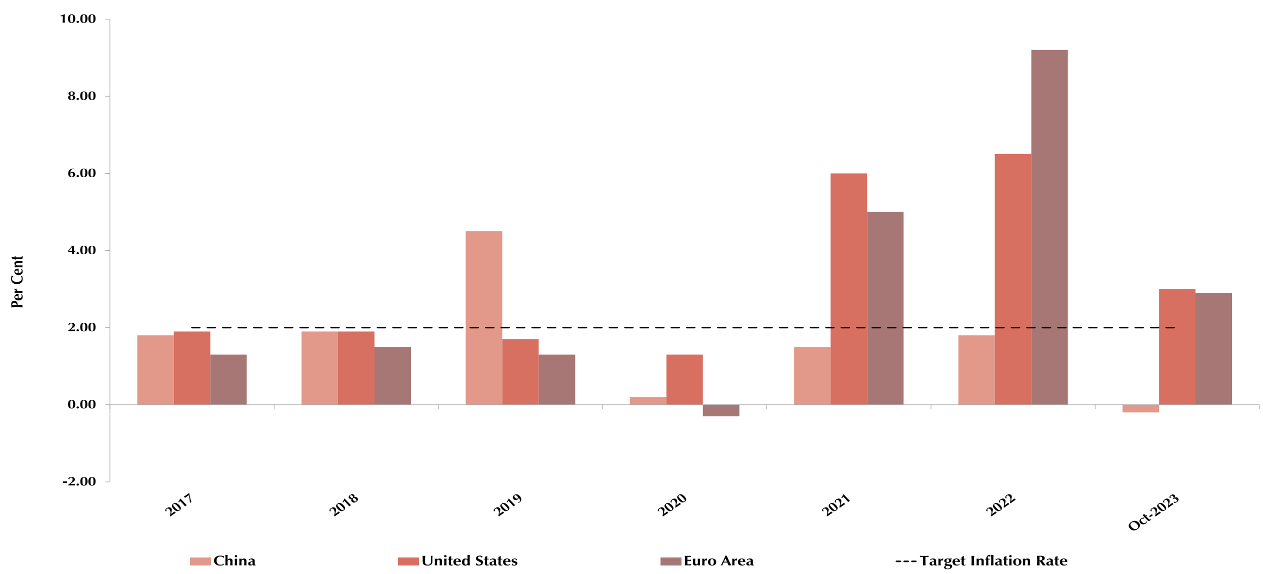
Inflation rates in several Latin American (LA) countries continued to decelerate during the fourth quarter of 2023 as tighter monetary policy conditions took effect. More specifically, year-on-year inflation rates eased in Colombia (10.5 per cent from 11.0 per cent) and Mexico (4.3 per cent from 4.5 per cent) in October 2023 compared to one month earlier. Similarly, consumer prices in Chile eased to 5.0 per cent (from 5.1 per cent in the previous month) and prices in Peru decelerated to 4.3 per cent (from 5.0 per cent in the previous month). Brazil's inflation rate also slowed to 4.8 per cent in October 2023 from 5.2 per cent recorded in the previous month.

Inflation trended downward in the Caribbean. Jamaica's inflation was just under the upper bound of its inflation target range, decreasing to 5.1 per cent (year-on-year) in October 2023 from 5.9 per cent recorded in the previous month. This downward movement was largely influenced by a deceleration in 'Housing, Water, Electricity, Gas and Other Fuels'. Despite upward price pressures from domestic factors, such as prolonged drought conditions, inflation in Barbados consistently trended downward in the first seven months of 2023, driven mainly by softer international commodity prices along with lower freight and distribution costs. Inflation in Barbados decelerated to 4.3 per cent (year-on-year) in July 2023, down from 4.6 per cent one month earlier.

CHART 1.3

Selected Economies: Headline Inflation

(Year-on-Year Per Cent Change)



Source: Bloomberg

Despite remaining focused on reducing inflation, some major central banks have paused rate hikes and adopted a more cautious approach in light of other financial system challenges

As inflationary pressures eased, some AEs paused rate hikes in the third and fourth quarters of 2023. In November 2023, the US Federal Reserve maintained the federal funds target range of 5.25 to 5.50 per cent, stating that economic activity grew at a solid pace and the unemployment rate remained low. Nonetheless, the Federal Open Market Committee reiterated its commitment to returning inflation to its 2.0 per cent target and achieving its employment goals, noting that further policy tightening will depend on the lags with which monetary policy affects the economy along with economic and financial developments.

Similarly, the Bank of England (BoE) held its policy rate steady in November 2023. Following fourteen consecutive rate hikes, the BoE maintained its benchmark rate at 5.25 per cent in September and again in November on the basis of a slowdown in inflation. The BoE indicated that given the significant interest rate increases since the start of the tightening cycle (December 2021), the current monetary policy stance will remain sufficiently restrictive until the 2.0 per cent inflation target is sustainably achieved over the medium-term. Meanwhile, faced with above-target inflation rates, the ECB increased the interest rate on its main refinancing operations by 25 basis points, bringing the rate to a historic high of 4.50 per cent in September 2023[1]. Subsequently, the rate was maintained at 4.50 per cent in October 2023, with the ECB reiterating its commitment to return inflation to the 2.0 per cent target.

In keeping with its inflation target of 2.0 per cent, the Bank of Japan (BoJ) held its key short-term interest rate unchanged at the start of the fourth quarter of 2023. The BoJ kept its benchmark interest rate steady at -0.1 per cent in October 2023. However, the BoJ decided to conduct its yield curve control with more flexibility to improve the sustainability of monetary easing. The target level on the 10-year Japanese Government Bond yield was held at around 0.0 per cent but the upper bound of 1 per cent will be regarded as a reference point rather than a rigid limit. Furthermore, the BoJ indicated that it would continue with monetary easing while responding to developments in economic activity, prices and financial conditions.

Monetary policy actions in the EMDEs remained mixed as economies pursued either an accommodative position or actions tilted toward inflation management. The People's Bank of China (PBoC) loosened its monetary policy stance during the third quarter of 2023. Following a 10 basis point reduction in June 2023, the PBoC further reduced its 1-year Loan Prime Rate

1 The interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility were all increased to 4.50 per cent, 4.75 per cent and 4.00 per cent, respectively.

(LPR) by a similar magnitude to reach 3.45 per cent in August to support economic activity and its currency. In its September, October and November monetary policy meetings, the PBoC maintained the 1-year LPR.

Within the LA and Caribbean region, monetary authorities maintained either a neutral or accommodative position as price pressures moderated

Several central banks in the LA region paused interest rate hikes, while others reduced policy rates amid easing price pressures during the latter months of 2023. In November 2023, the Central Bank of Peru reduced its policy interest rate by 25 basis points to 7.0 per cent following a similar magnitude one month earlier to support economic activity. In October 2023, the Central Banks of Chile and Brazil lowered their benchmark interest rates by 50 basis points to 9.0 per cent and 12.25 per cent, respectively, citing the improved outlook for inflation. Meanwhile, the Central Banks of Colombia and Mexico maintained their key policy rates at 13.25 per cent and 11.25 per cent, respectively in October and November 2023.

Monetary policy in the Caribbean remained neutral during the third quarter of 2023. In support of economic recovery, the Eastern Caribbean Central Bank (ECCB), in its July 2023 Monetary Council meeting, maintained its minimum savings rate at 2.0 per cent, and the discount rates for short-term and long-term credit at 2.0 per cent and 3.5 per cent, respectively. In November 2023, the Bank of Jamaica (BOJ) maintained its key policy rate- the rate offered to deposit-taking institutions (DTIs) on overnight placements, at 7.0 per cent. Meanwhile, during the first half of 2023, the Bank of Guyana's monetary policy remained focused on price stability, ensuring adequate liquidity in the banking system and creating an enabling environment for credit and economic growth. Against that backdrop, the discount rate was kept at 5.0 per cent.

Growth was mixed in the AEs and EMDEs

In the US and UK real GDP continued on an upward trend, but slowed in the Euro area. Following growth rates of 1.7 per cent and 2.4 per cent in the first and second quarters of 2023, respectively, real GDP in the US expanded by 3.0 per cent (year-on-year) in the three months to September 2023 due to increased consumer spending and business investment. Meanwhile, real GDP growth in the UK expanded by 0.6 per cent (year-on-year) in the third quarter of 2023, unchanged from its outturn in the previous quarter. On the other hand, real GDP growth slowed in the Euro area to 0.1 per cent (year-on-year) in the third quarter of 2023 compared to 0.5 per cent in the second quarter. The slowdown reflected the impact of high inflation and rising borrowing costs.

China's economic activity edged down during the third quarter of 2023 as real GDP expanded by 4.9 per cent (year-on-year), down from 6.3 per cent in the previous quarter, as the economy continued to grapple with challenges facing the property sector.

While growth slowed in most of the LA region, the Caribbean recorded upticks in economic activity

Elevated interest rates constrained economic activity during the third quarter of 2023. In the third quarter of 2023, real GDP in Chile expanded by 0.6 per cent (year-on-year), an improvement from a contraction of 0.8 per cent (year-on-year) in the previous quarter, primarily due to a pickup in Government spending. Despite recording positive outturns, real GDP growth eased in Mexico and Brazil during the third quarter of 2023. More specifically, economic activity in Mexico and Brazil slowed to 3.3 per cent and 2.0 per cent during the third quarter of 2023, respectively, compared to expansions of 3.4 per cent and 3.5 per cent, respectively, recorded in the previous quarter. Colombia's economic activity contracted by 0.3 per cent in the third quarter of 2023, down from an expansion of 0.4 per cent in the second quarter of 2023, constrained by a decline in household consumption and Government spending. Meanwhile, Peru's economy contracted for the third consecutive quarter by 1.0 per cent (year-on-year) in the three months to September 2023, largely due to a falloff in domestic demand. The IMF, in its October 2023 WEO, upwardly revised the 2023 growth rate for the Latin American and Caribbean (LAC) region to 2.3 per cent from 1.9 per cent previously forecasted in July 2023, stemming from stronger-than-expected growth in Mexico and Brazil.

Growth in the Caribbean region remained positive, primarily driven by the performances in the Services and Energy sectors. Real GDP in Jamaica grew by 2.3 per cent (year-on-year) in the second quarter of 2023, driven by improvements in the Services, Mining and Quarrying, and Manufacturing sectors. This represented Jamaica's ninth consecutive quarter of growth. In Barbados, economic activity continued to expand during the third quarter of 2023, representing its tenth consecutive quarterly expansion. Over the first nine months of 2023, Barbados' real GDP expanded by 4.4 per cent on account of strong tourism activity which spilled over into the non-traded sectors of the economy. The Central Bank of Barbados anticipates economic growth to expand by 4.5 per cent in 2023, driven by the continued recovery of tourism activity, increased private sector investments and a pickup in construction activity.

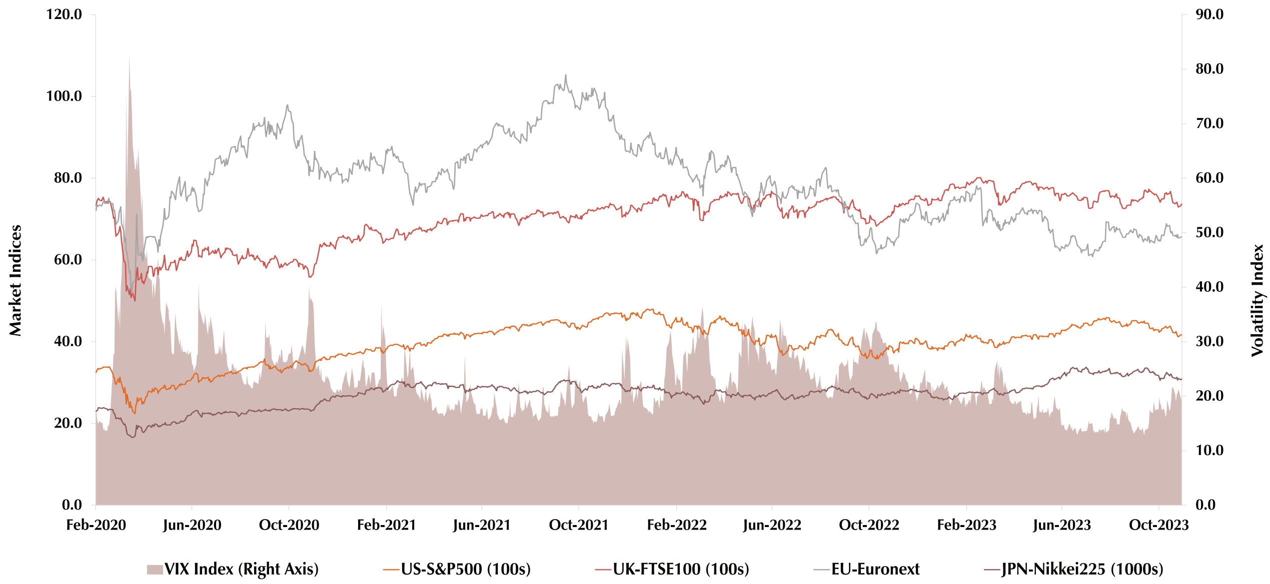
The Guyanese economy recorded robust growth during the first half of 2023, driven by oil and non-oil sectors. Real oil GDP grew by 59.5 per cent, boosted by a pickup in crude oil production. At the same time, real non-oil GDP expanded by 12.3 per cent, mainly on account of the Construction, Agriculture and Services sectors.

The growth in AE equity markets tempered slightly over the four months ending October 2023, likely driven by persistent downside risks from inflationary pressures, tighter financial conditions and concerns about a global recession

Following two years of monetary accommodation and quantitative easing which supported equity markets, a cycle of tightening which started in 2022 continued to place pressure on advanced economy equity markets. The recent positive performance in AE equities was largely due to the relative strength of the US economy, strong corporate earnings and an easing of supply chain disruptions. However, in an effort to curtail inflationary challenges, monetary authorities in AEs increased key policy rates which resulted in increases in corporate bond yields and spreads, indicative of bear market conditions. Over the five months ending October 2023, these conditions produced slower growth in AE equity markets as the US S&P 500 gained only 0.3 per cent, and the European Euronext expanded by 5.9 per cent. On the other hand, the UK FTSE 100 declined by 1.7 per cent, and the Japan Nikkei 225 slipped by 0.1 per cent. Additionally, despite tighter financial conditions and concerns about the future of corporate credit, the VIX[2] index depicted low levels of volatility, averaging 15.6 over the five months ending October 2023. Notwithstanding the relatively stable market, numerous factors will continue to weigh on equity performance, primarily related to the continuation of global monetary tightening, fears of a global recession, in addition to various geopolitical tensions (Chart 1.4).

CHART 1.4

Advanced Economies Equity Market Indices



Source: Bloomberg

2 The Chicago Board Options Exchange (CBOE) VIX Volatility Index is a benchmark index used to measure the markets expectation of future volatility. The index is based on option trading of the S&P 500 and is considered a main gauge of US equity market volatility. A level above 20 is considered to be high volatility.

2. DOMESTIC ECONOMIC ACTIVITY AND PRICES

Economic activity improved due to an expansion in the non-energy sector which outweighed the contraction in the energy sector. Reflecting the expansion in non-energy sector activity, employment conditions improved as the rate of unemployment fell and labour force participation improved in the second quarter of 2023. Meanwhile, domestic inflation continued its downward trend in October 2023, based on easing food and core inflation.

Recent Economic Developments and Outlook

Growth was premised on an expansion in the non-energy sector which countered the decline in the energy sector

Economic activity continued to improve in the first quarter of 2023. According to data published by the Central Statistical Office (CSO), real GDP expanded by 3.0 per cent (year-on-year) in the first quarter of 2023. Growth was driven mainly by activity in the non-energy sector (4.2 per cent) coupled with a minor improvement in the energy sector (0.3 per cent). Improved activity in the Accommodation and Food Services (17.5 per cent), Transport and Storage (16.7 per cent) and Trade and Repairs (excluding Energy) (13.4 per cent) sectors led growth. Meanwhile, an improvement in Natural Gas Extraction (1.7 per cent) coupled with an expansion in Asphalt production and Petroleum Support Services outweighed declines in Crude Oil Extraction (4.5 per cent), the Manufacture of Petrochemicals (3.5 per cent) and Refining (including LNG) (1.0 per cent).

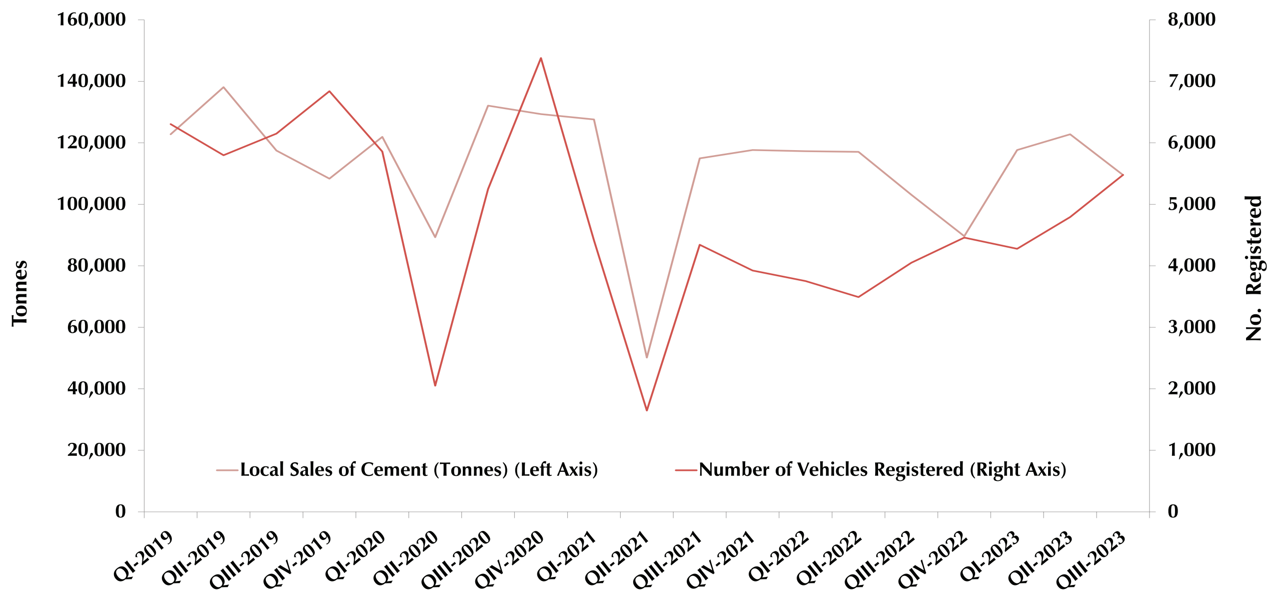
Contractions in upstream activity led to lower output in the energy sector during the second quarter of 2023. Lower crude oil (4.8 per cent) and natural gas (0.7 per cent) production had trickle-down effects on the production of other commodities in the sector. Though natural gas output remained relatively stable over the three-month period, production levels were lower compared to one year ago - when several upstream projects came on stream. This moderation of natural gas output filtered through to the Refining sector, which in turn experienced a marginal decline in the production of liquefied natural gas (LNG) (0.7 per cent) and a sharp fall in the production of natural gas liquids (NGLs) (35.0 per cent). The proportionately larger fall off in NGLs production signalled drier gas coming to shore. Petrochemical production was hampered by reduced output of fertilizers as ammonia and urea production fell by 4.6 per cent and 40.4 per cent, respectively. In addition to the falloff in natural gas production, urea production was affected by maintenance activity in the second quarter of 2023. Despite the upstream challenges, the production of methanol improved (9.8 per cent) over the period, reflecting a base effect, given the closure of the M5000 facility in the corresponding period of 2022.

Preliminary data for the period July to August 2023 suggests continued contractions in energy sector output. According to data from the Ministry of Energy and Energy Industries, crude oil and natural gas production fell by 10.0 per cent and 13.8 per cent, respectively. These output losses had negative knock-on effects for production in several midstream and downstream sectors which declined, specifically, LNG (17.7 per cent), ammonia (17.5 per cent), NGLs (7.6 per cent) and Methanol (4.4 per cent).

Indicators monitored by the Central Bank suggest that activity in the non-energy sector remained positive in the second quarter of 2023. Notably, estimates suggest that the Transportation and Storage sector displayed strong year-on-year expansion over the period (16.5 per cent), supported by an uptick in air travel, land and water transportation. Estimates also suggest heightened activity in the Wholesale and Retail Trade (excluding Energy) sector (4.0 per cent). These estimates were supported by year-on-year growth (5.8 per cent) in the CSO's Index of Retail Sales over the second quarter of 2023. Improvements in the index were driven by amplified activity in the Motor Vehicles and Parts (22.7 per cent); Supermarkets and Groceries (5.8 per cent); and Textiles and Wearing Apparel (2.5 per cent) sub-sectors. Positive activity is also estimated in the Electricity and Water (excluding Gas) (9.8 per cent) and Construction (4.9 per cent) sectors. Estimates for the Construction sector were informed by improvements in the local sales of cement (Chart 2.1). Meanwhile, estimates for the Financial and Insurance Activities sector suggest a decline, reflecting a falloff in insurance premiums and shares traded in the stock exchange. Softer activity was also noted in the Manufacturing (excluding Refining and Petrochemicals) and Agriculture sectors.

CHART 2.1

Non-Energy Indicators (Cement Sales, Vehicle Registrations)



Source: Central Bank of Trinidad and Tobago

Reflecting the improvements in the non-energy sector, labour market activity was positive in the first half of 2023

Consistent with the positive performance in the domestic economy, latest official labour market data from the CSO suggest labour market conditions improved in the second quarter of 2023. The unemployment rate measured 3.7 per cent in the second quarter of 2023, lower than the 4.5 per cent reported in the corresponding quarter of 2022. The lower unemployment rate was reflective of an increase in the number of persons employed by 24.7 thousand persons (year-on-year), and a decline in the number of unemployed (by 3.9 thousand persons). As a result, the labour force participation rate measured 56.2 per cent. Employment gains occurred in the Construction (including Electricity and Water) (9.4 thousand persons); Wholesale, Retail, Restaurants and Hotels (7.7 thousand persons); and Community, Social and Personal Services (7.5 thousand persons) sectors.

Inflation continued to ease as both food and core inflation decelerated

Headline inflation, measured by the CSO's Index of Retail Prices (RPI), decelerated to 1.3 per cent (year-on-year) in October 2023, down from 5.7 per cent in May 2023 (Chart 2.2). The deceleration in headline inflation came from slower price increases for food and core inflation which averaged 6.8 per cent and 3.7 per cent, respectively over the period.

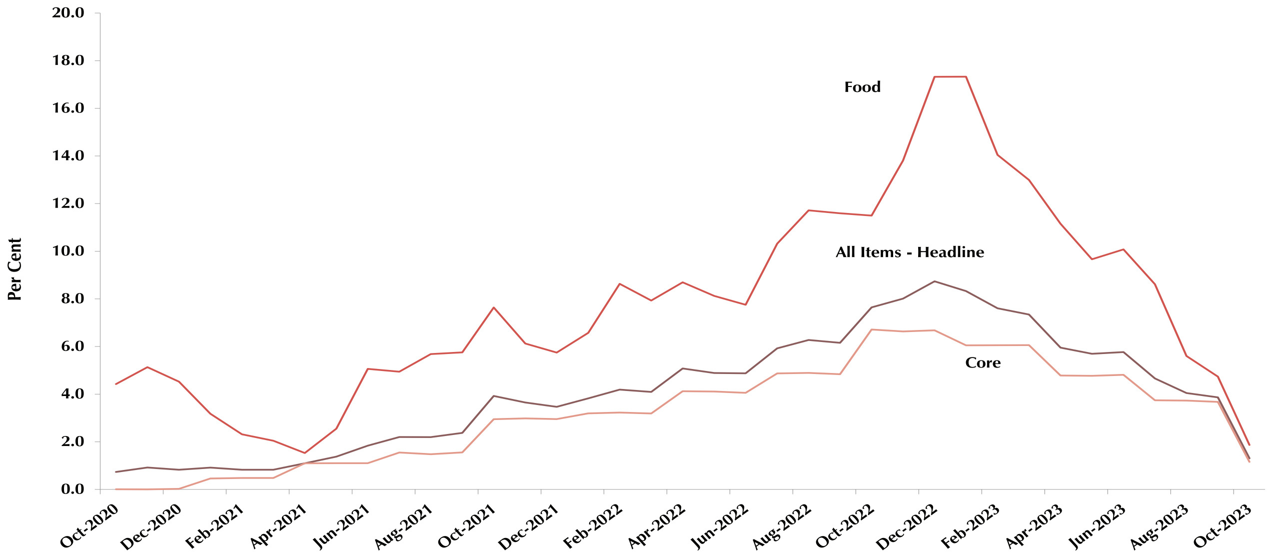
Food inflation, the most volatile component of headline inflation, decelerated to 1.9 per cent in October 2023 from 9.7 per cent in May 2023. Slower price movements in several major categories of food, including; Vegetables (5.3 per cent in October 2023 from 10.0 per cent in May 2023), Fruits (6.8 per cent in October 2023 from 7.3 per cent in May 2023) and Sugar, Jam and Confectionery (4.0 per cent in October 2023 from 9.6 per cent in May 2023) were responsible for the deceleration in domestic food inflation. As several categories of food with high import content (Breads and Cereals along with Milk, Cheese and Eggs) slowed in October 2023 consistent with softer international food commodity prices[3], domestic food inflation narrowed. Additionally, price declines were noted in the Meat and Fish sub-indices, underpinned by an uptick in supply, particularly for fish.

3 The United Nation Food and Agriculture Organisation (FAO) real Food Price Index declined by 12.6 per cent in October 2023, reflecting the ninth consecutive monthly decline for the year.

CHART 2.2

Retail Price Index

(Year-on-Year Per Cent Change)



Source: Central Statistical Office

Core inflation, a measure of underlying inflation, moderated from 4.8 per cent in May 2023 to 1.2 per cent in October 2023. Price declines in several major categories including, Furnishing, Household Equipment and Routine Maintenance (-1.3 per cent in October 2023 from 6.2 per cent in May 2023), Housing, Water, Electricity and Gas (-1.3 per cent in October 2023 from 0.7 per cent in May 2023) and Clothing and Footwear (-4.8 per cent in October 2023 from -1.1 per cent in May 2023) were responsible for the general slowdown in core inflation. Meanwhile, the Alcoholic Beverages and Tobacco (7.4 per cent in October 2023 compared to 2.8 per cent in May 2023), Health (7.1 per cent in October 2023 from 3.3 per cent in May 2023) and Communication (3.9 per cent in October 2023 compared to 1.3 per cent in May 2023) sub-indices recorded faster price increases.

Wholesale prices, as measured by the CSO's Producer Price Index (PPI), increased marginally to 2.6 per cent in the second quarter of 2023. This compares to 2.0 per cent (year-on-year) recorded in the first quarter of 2023. Stronger producer prices in the Chemical and Non -metallic Products industry (5.5 per cent in the second quarter of 2023 compared to 0.02 per cent in the first quarter of 2023) fashioned the increase in the PPI. Conversely, softer producer prices were noted in two industries including; the Food Processing (5.0 per cent in the second quarter of 2023 compared to 5.4 per cent in the first quarter of 2023) and the Drink and Tobacco (1.9 per cent in the second quarter of 2023 compared to 2.1 per cent in the first quarter of 2023). Meanwhile, producer prices in a few industries namely; Textiles, Garment and Footwear, Printing, Publishing and Paper Converters and Wood Products held steady.

The CSO's Index of Retail Prices of Building Materials (BMI) eased further in 2023. The BMI rose by 3.1 per cent (year-on-year) in the second quarter of 2023, down from 5.0 per cent recorded in the first quarter of 2023 and 9.0 per cent in the corresponding quarter one year prior. The slowing momentum was broad-based, occurring in all categories of the BMI. Notably, Electrical Installation and Fixtures (12.4 per cent in June 2023 compared to 15.0 per cent in March 2023); Site Preparation, Structure and Concrete Frame (2.8 per cent in June 2023 compared to 5.2 per cent in March 2023) and Windows and Doors (2.2 per cent in June 2023 compared to 2.5 per cent in March 2023) drove the slowdown in building material prices.

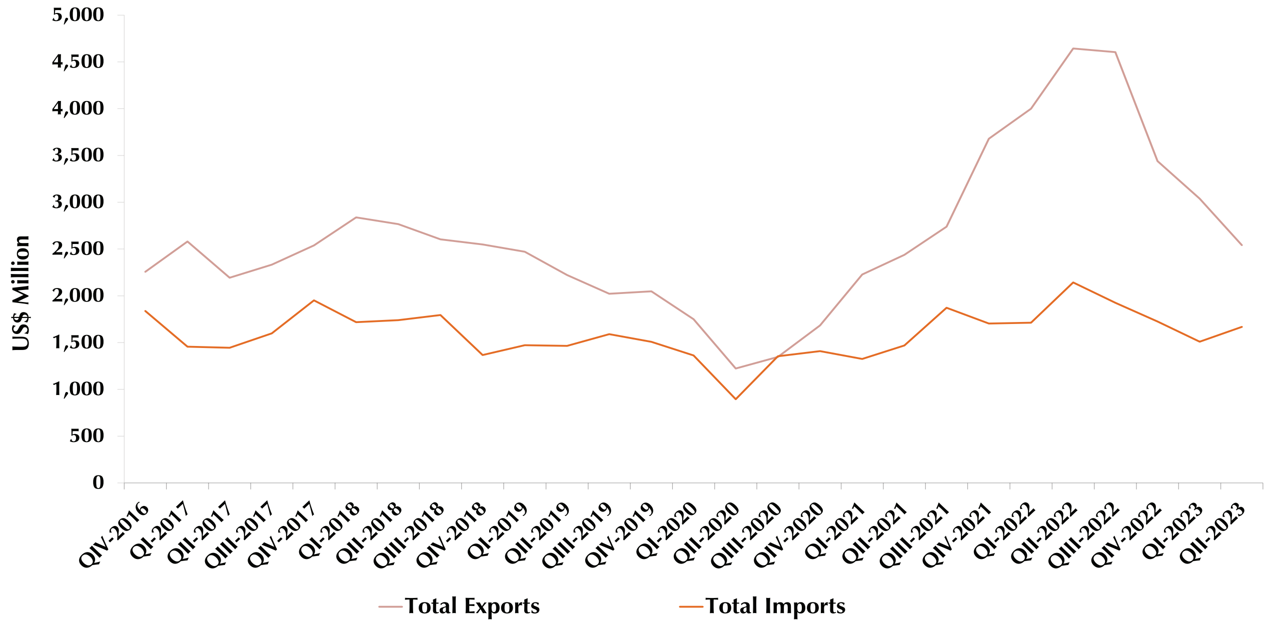
The falloff in exports outstripped the decline in imports

Export earnings dipped in the second quarter of 2023 owing to lower energy prices (Chart 2.3). More specifically, exports contracted by 45.3 per cent to US$2,541.0 million over the reference period, primarily due to a reduction in energy exports underpinned by lower international commodity prices. Energy exports decreased by 47.1 per cent to US$2,068.1 million relative to the similar period one year earlier as a result of lower export earnings from petrochemicals (56.1 per cent), gas (40.6 per cent), and petroleum crude and refined products (38.2 per cent). Compounding this position was a decline in non-energy exports which fell by 35.8 per cent (year-on-year) to US$472.9 million, reflective of lower international demand for domestic products.

Total imports decreased by 22.2 per cent (year-on-year) to US$1,667.5 million during the second quarter of 2023 compared to the same period in 2022. Over the reference period, fuel imports declined by 48.7 per cent, primarily reflecting lower international energy commodity prices. At the same time, non-fuel imports fell by 12.0 per cent (US$186.4 million) to US$1,363.7 million, largely due to lower imports of machinery and transport equipment.

CHART 2.3

Trends in Exports and Imports



Source: Central Bank of Trinidad and Tobago
* Energy goods data comprise estimates by the Central Bank of Trinidad and Tobago.

Portfolio investments picked up

Increased holdings of foreign assets were mainly responsible for a net outflow of US$86.0 million in the portfolio investment account over the period April to June 2023. The rise in portfolio assets of US$85.9 million reflected a combination of increased holdings of foreign equity securities and short-term debt securities primarily by domestic financial institutions. However, this was partially offset by reduced holdings of foreign long-term debt securities by domestic financial institutions.

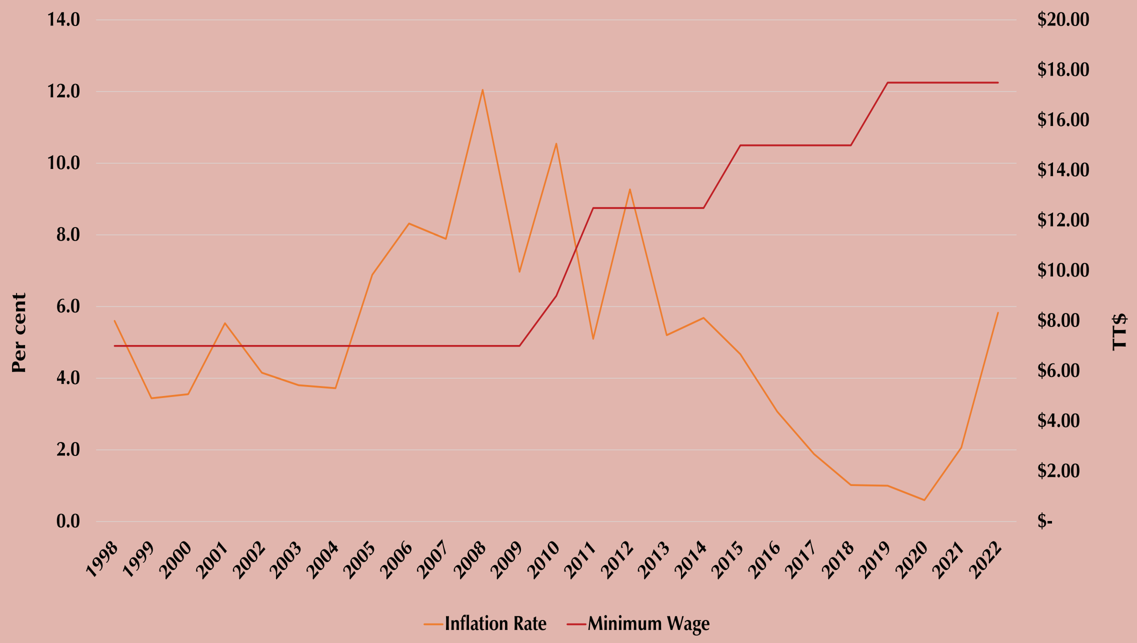
BOX 1
The Impact of the Increase in Minimum Wage on Inflation

The Minimum Wages Act (1976) sets the lowest hourly, daily or monthly wage employers are required to compensate employees. The main objective of the Act is to increase the living standard of workers, especially those at the lower levels of the income and skills hierarchy. A minimum wage was first implemented in Trinidad and Tobago in 1998 at a level of $7.00 per hour. This rate was subsequently increased in 2010 and 2011 to $9.00 per hour and $12.50 per hour, respectively. In January 2015, the rate was further increased to $15.00 per hour, then to $17.50 per hour in 2019. In the FY2023/24 Budget Statement, the Minister of Finance indicated that effective January 1, 2024 a minimum wage order will be effected raising the minimum wage to $20.50 per hour[1]. The increase is expected to benefit 190,000 persons. This note examines the impact of an increase in the minimum wage on inflation since the income group mostly impacted has a high marginal propensity to consume.

Theoretically, the wage-price spiral can be used to explain the causal relationship between rising wages and inflation[2]. The wage-price spiral suggests that rising wages increase disposable income, raising the demand for goods and causing prices to rise. In practice, empirical models have found that the relationship between wages and inflation is generally positive and nominal increases in minimum wages are determined by taking into account the inflation rate realised in previous years. In Trinidad and Tobago, this relationship holds as minimum wages are generally determined by considering past inflation. An analysis of the 25-year trend between the minimum wage and inflation since its introduction in 1998 reveals that in two instances there were increases in the inflation rate in the commensurate period of a minimum wage hike (1998 and 2010), but a general deceleration thereafter **(Chart 1)**. However, inflation in the aftermath of the 2010 and 2011 increases veered away from this trend. In the two years after the introduction of the minimum wage (1999 and 2000) inflation trended below the 5.6 per cent recorded at the time, then climbed to 5.5 per cent in 2001. Subsequently, in 2010 and 2011 the minimum wage was increased to $9.00 and $12.50 per hour, respectively, and inflation was recorded at 10.5 per cent and 5.1 per cent, respectively. During 2012 to 2014, inflation remained elevated before slowing to 4.7 per cent in 2015 when the minimum wage was increased for the third time to $15.00 per hour. More formal approaches such as evaluation of the Pearson correlation between past and future values of inflation and the minimum wage rate along with Granger causality test also reveal that the minimum wage is more correlated with past values of inflation than future inflation[3], implying that the minimum wage responds to changes in inflation as opposed to inflation responding to changes in the minimum wage.

BOX 1 cont'd
The Impact of the Increase in Minimum Wage on Inflation

CHART 1
Minimum Wage and Inflation Rates

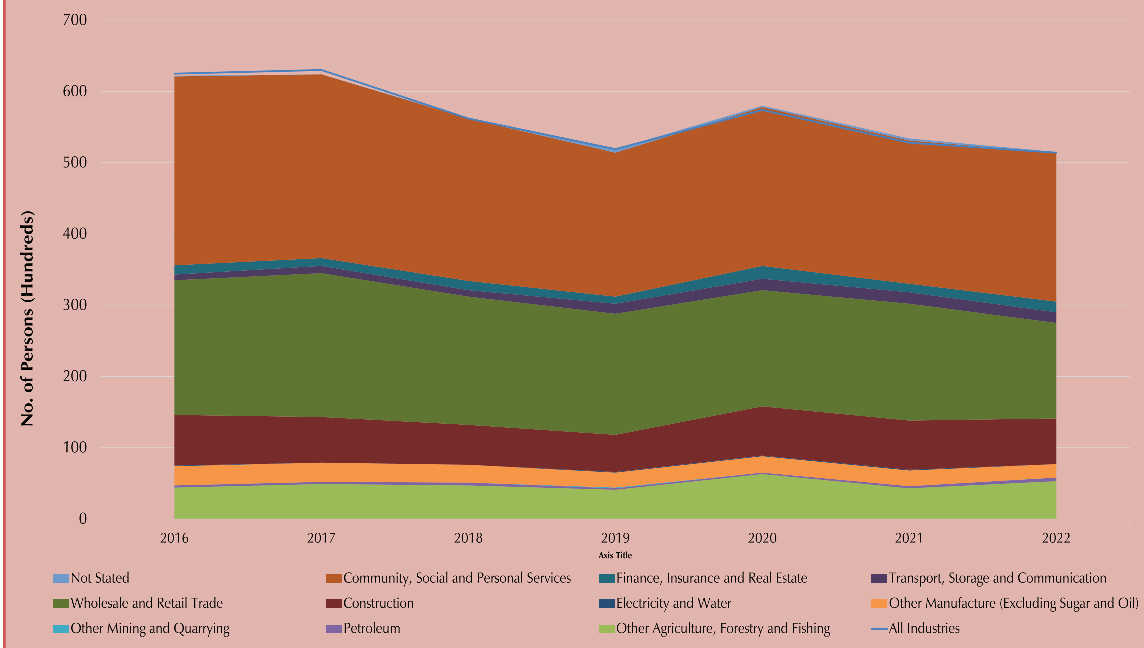


Source: Central Statistical Office

In Trinidad and Tobago, minimum wage earners account for a small share (approximately 16.0 per cent) of the total persons employed.[4] The majority of workers receiving the minimum wage or lower are concentrated in the Community, Social and Personal Services sector, followed by the Wholesale and Retail Trade, Construction and Other Agriculture, Forestry and Fishing[5] sectors **(Chart 2)**. The Community, Social and Personal Services sector records the highest number of minimum wage income earners, especially since a large portion of the sector reflects persons employed under Government employment programs such as the Community-Based Environmental Protection and Enhancement Programme (CEPEP) and the Unemployment Relief Programme (URP). Additionally, **Chart 2** illustrates that over the period 2016 to 2019 there was a gradual decline in the number of minimum wage income earners. However, in 2020 there was a reversal in this trend possibly relating to workers being placed on furlough[6] during the COVID-19 pandemic. Notwithstanding, this trend was short lived as in 2021 and 2022, the number of persons earning the minimum wage declined.

BOX 1 cont'd
The Impact of the Increase in Minimum Wage on Inflation

CHART 2
Minimum Wage Income Earners by Sector[7]



Source: Central Statistical Office

The impact of an increase in the minimum wage on inflation can be assessed in two stages: (i) estimation of the direct effects of the minimum wage on the general price level and (ii) estimation of the spillover or second-round effects from those not directly impacted. This note focuses on the first-round inflationary impact as second-round effects are difficult to estimate and depends on the pricing behavior of firms. Applying an Autoregressive Distributed Lag (ARDL) model[8], the results suggest that an increase in the minimum wage by 17.1 per cent (to $20.50) increases the headline inflation rate instantaneously by an annualised 1.7 per cent. With the number of minimum wage earners currently accounting for 16.0 per cent of total persons employed, the potential total impact on headline inflation is assessed to be moderate. However, should businesses adjust the prices of their goods and services in direct response to higher labour costs, when combined with an imminent increase in electricity tariffs and the implementation of the property tax, headline inflation could be impacted more significantly.

BOX 1 cont'd
The Impact of the Increase in the Minimum Wage on Inflation

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Sellekaerts, Brigitte. 1981. "Impact of Minimum Wage Legislation on Wage and Price Inflation." Eastern Economic Journal 177-190.

1 Budget Statement 2024 themed "Building Capacity for Diversification and Growth" presented to Parliament on October 02, 2023. https://www.finance.gov.tt/wp-content/uploads/2023/10/Budget-Statement-2024-for-web.pdf
2 The wage-price spiral is a macroeconomic theory that explains the cause-and-effect relationship between rising wages and inflation. It suggests that rising wages increase disposable income raising the demand for goods and causing prices to rise. In return, rising prices increase demand for higher wages, which leads to higher production costs and further upward pressure on prices creating a conceptual spiral.
3 Examining the Pearson correlation coefficients between the inflation rate and the minimum wage at time t, t+1 and t-1, reveals the relationship between the two variables is strongest at the current period (t) followed by the previous period (t-1). This implies that the minimum wage variable is more correlated with past values of inflation than future inflation. Granger causality test also verify that past values of inflation are statistically significant in predicting the minimum wage.
4 Based on in-house calculations using Continuous Sample Survey of the Population data for 2022.
5 Sugar Cultivation and Manufacture was excluded from the calculation as this industry closed-down.
6 Furlough employment is a mandatory or temporary leave of absence from work without pay. It is also used to imply a reduction of hours or days worked per week instead of a complete suspension of work.
7 Estimated using data on persons with jobs making a monthly income of TT$3,000 or below. The income level was calculated based on an hourly rate of TT$17.50 (minimum wage) and a 40-hour work week according to the International Labour Organisation (ILO) standards.
8 Available studies in the literature, in general, use different methodological approaches to examine the impact of an increase in the minimum wage on inflation. In this assessment an ARDL methodology was employed using annual data spanning 1980 to 2022.The model assumes inflation measured by the Index of Retail Prices Index (RPI) is influenced by the unemployment rate (UR), the real effective interest rate (RIR) and the minimum wage (W), proxied by a dummy variable. The model was specified with one lag, which addresses the issue of collinearity by allowing the lag of the dependent variable (RPI) and the independent variables to be estimated as explanatory variables.

3. DOMESTIC FINANCIAL CONDITIONS

Domestic monetary policy remained accommodative in 2023, supporting the post-pandemic recovery. At meetings held in June and September 2023, the MPC maintained the Repo rate at 3.50 per cent – unchanged since March 2020. Over the period, excess liquidity was managed to facilitate the smooth operation of financial markets. Nonetheless, increased Central Government borrowing alongside VAT bond repayments helped to dampen liquidity. Notably, liquidity remained ample to facilitate the continued expansion in credit.

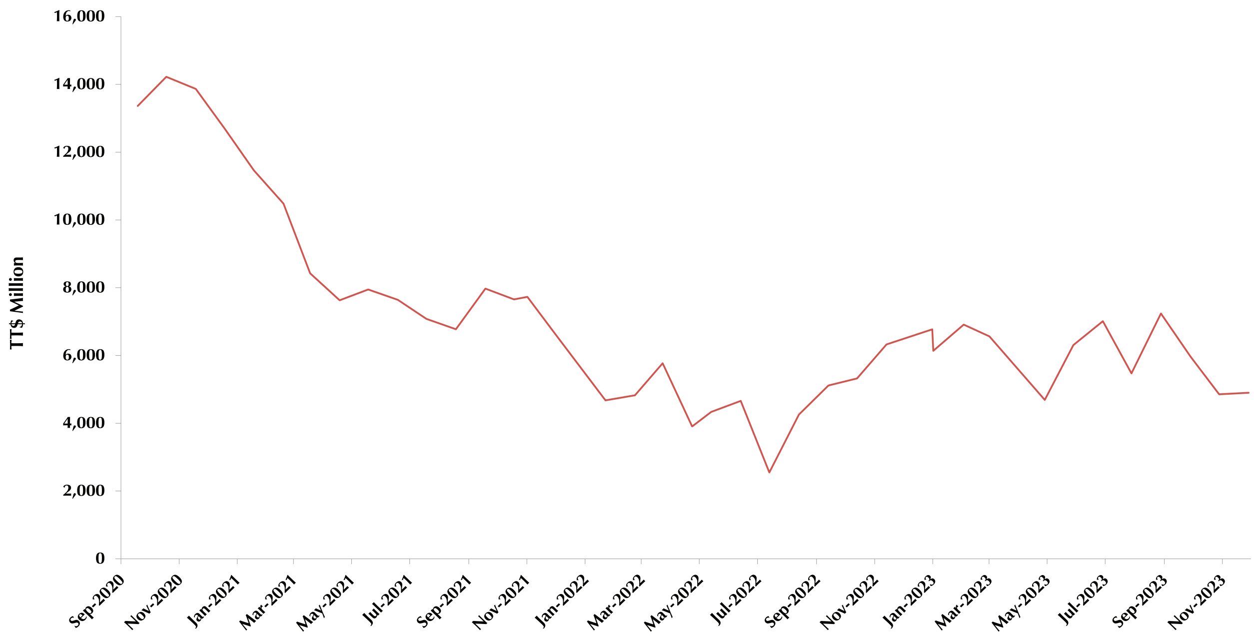
Liquidity Conditions and Interest Rates

Financial system liquidity remained stable, buttressing the supply of credit to the economy

Liquidity levels in the financial system decreased from May to November 2023. Fiscal operations, usually the main driver of excess liquidity, resulted in net fiscal injections of $2,559.6 million over May to November 2023, compared to injections of $7,753.4 million in the same period one year earlier. The Central Bank's OMOs resulted in net injections of $1,991.5 million over May to November 2023 compared to net injections of $1,514.5 million over the same period one year prior. Also, the Central Bank's foreign exchange sales to authorised dealers indirectly removed $5,636.7 million from the system, compared to $5,011.9 million in the same period a year earlier. As a result of these developments, daily average excess liquidity decreased to $4,901.5 million by November 2023 compared to $6,307.5 million in May (Chart 3.1).

CHART 3.1

Commercial Banks' Excess Reserves



Source: Central Bank of Trinidad and Tobago

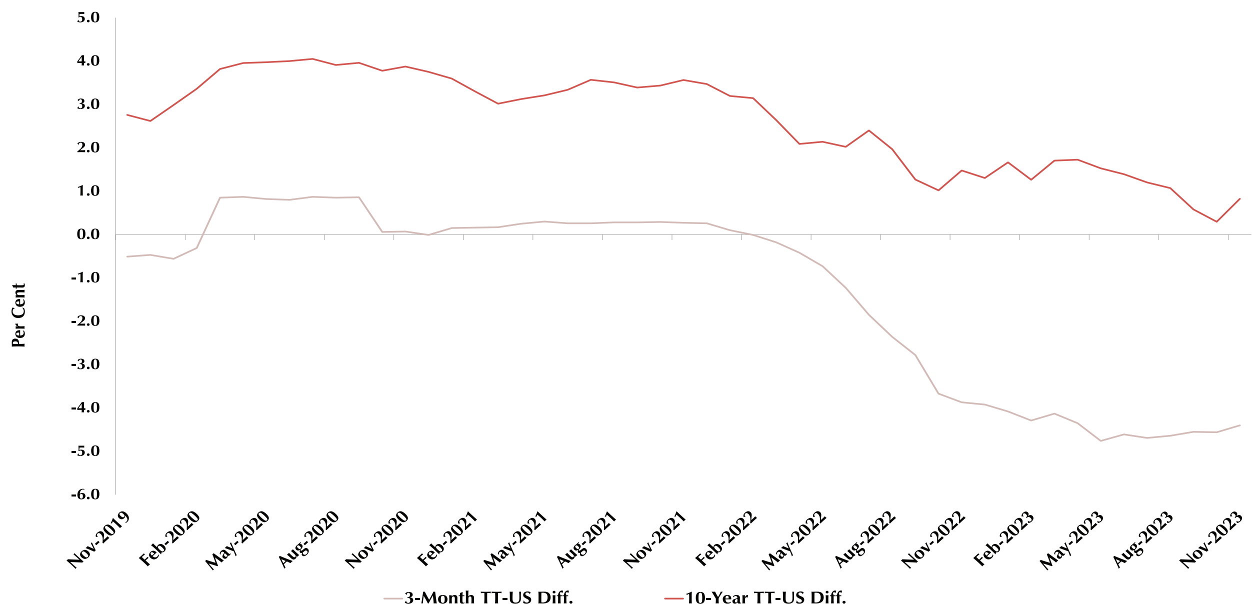
As liquidity declined, daily interbank borrowing averaged $85.0 million over May to November 2023, compared to $28.4 million over the same period a year prior. Over the period, several instances of large fiscal withdrawals related to Central Government borrowing resulted in declining average liquidity. These large withdrawals triggered activity on the interbank borrowing market. The Repurchase Facility extended to banks for overnight liquidity was accessed on one day during the reference period (November 29, 2023) for a total of $78.9 million.

Short-term interest rates increased notably in 2023. Mainly owing to declining liquidity, the TT 91-day OMO Treasury Bill rate increased by 29 basis points over May to November 2023 to reach 1.05 per cent. Withdrawal from acute focus on inflation management by the Federal Reserve resulted in declining yields on US short-term instruments. The US 91-day short-term benchmark yield decreased by 7 basis points over the period to reach 5.45 per cent by the end of November 2023. As a result, the TT-US 91-day differential narrowed to -440 basis points in November 2023 compared with -476 basis points at the end of May (Chart 3.2). The TT 1-year Treasury rate also increased by 33 basis points over the reference period, settling at 1.70 per cent in November 2023. The US 1-year Treasury rate declined by 2 basis points over May to November 2023 to reach 5.16 per cent. The movements resulted in a TT-US 1-year differential of -346 basis points in November 2023, from -381 basis points at the end of May 2023.

While the pause in policy tightening by the Fed reversed the growth in US yields for longer tenors in November 2023, the total change for the period over May to November remained positive. The US 10-year Treasury rate increased by 73 basis points over May to November 2023 to reach 4.37 per cent. The TT 10-year Treasury rate increased by 3 basis points to reach 5.19 per cent over the period, resulting in a narrowing of the 10-year yield differential to 82 basis points in November from 153 basis points at the end of May. Between October and November 2023, the US 10-year Treasury rate declined by 51 basis points, whereas the TT 10-year Treasury rate increased by 1 basis point, meaning the 10-year yield differential improved by 52 basis points between October and November 2023.

CHART 3.2

3-Month and 10-Year TT-US Differentials

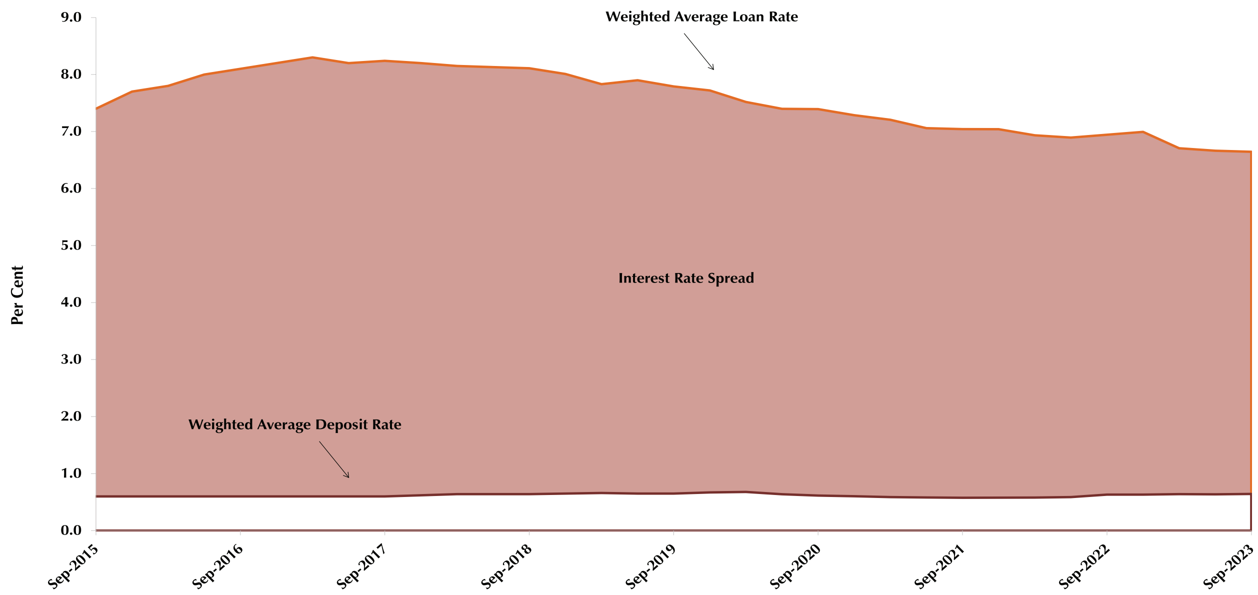


Sources: Central Bank of Trinidad and Tobago and the US Department of Treasury

Commercial banks' interest rates and associated interest spreads declined in mid-2023, reflecting competitive conditions in the context of ample liquidity. The commercial banks' weighted average lending rate (WALR) reached 6.64 per cent in September 2023, 6 basis points lower than in March 2023. The decrease of the WALR reflected the effect of the reversion to more competition among banks to supply private sector credit, after demand conditions drove increasing rates in the latter half of 2022. The weighted average deposit rate remained at 0.64 per cent over the reference period. As a result, the banking interest rate spread decreased by 7 basis points over March to September 2023 to reach 6.00 per cent (Chart 3.3). Over March to September 2023, interest margins-to-gross income increased from 66.8 per cent to 67.5 per cent. Over the same period, non-interest income-to-gross income of commercial banks decreased from 33.2 per cent to 32.5 per cent. The commercial banks' median prime lending rate has remained at 7.50 per cent since March 2020. Over the reference period, the interbank borrowing rate also remained unchanged at 0.50 per cent.

CHART 3.3

Commercial Banks' Interest Rates



Source: Central Bank of Trinidad and Tobago

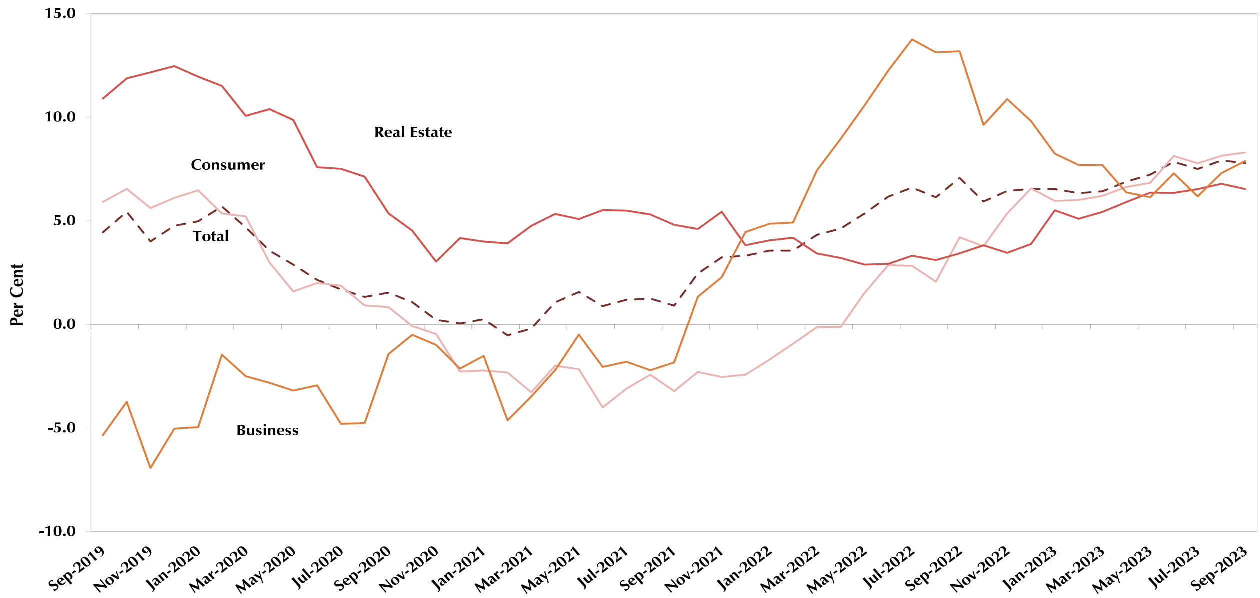
Private Sector Credit

Buttressed by the boost in economic activity, the upward momentum in credit growth persisted

Consolidated system credit grew robustly, reflecting the ongoing uptick in economic activity. Credit to the private sector grew by 7.8 per cent (year-on-year) in September 2023, compared to an increase of 6.4 per cent in March 2023. Over the period, real estate mortgage and consumer lending growth sped up, outpacing business lending (Chart 3.4).

CHART 3.4

Private Sector Credit



Source: Central Bank of Trinidad and Tobago

Business lending remained robust. In September 2023 business credit rose by 7.9 per cent (year-on-year), from 7.7 per cent six months prior. The encashment of VAT bonds, payment of VAT refund arrears and increased local activity may have affected the demand for corporate loans. For non-banks, lending picked up (14.1 per cent) compared to March, while lending for commercial banks, though still high, remained at 7.2 per cent. According to sectoral credit data, overall loan activity picked up for some categories but decelerated for others. The main loan categories that accounted for growth in September 2023 were Finance, Insurance and Real Estate (6.2 per cent), Manufacturing (16.3 per cent), Distribution (6.0 per cent, also at a slower pace), Petroleum (29.4 per cent) and under 'Other Services', Electricity and Water (16.2 per cent, a rebound from March quarter) and Hotel and Guest Houses (33.4 per cent).

Consumer demand remained buoyant, bolstering the acceleration in consumer loan activity. On a year-on-year basis, consumer loans grew by 8.3 per cent in September 2023 compared to 6.2 per cent in March. Unlike business lending, growth rates were higher in September 2023 for both banks and non-banks. Based on sectoral data, the main loan categories that accelerated were Motor Vehicles (7.4 per cent), which rebounded in June 2023 after ten consecutive quarters of contractions. Loans for new and used vehicles expanded by 8.4 per cent and 5.8 per cent, respectively. Additionally, Credit Cards (7.2 per cent), Home Improvement/Renovation (15.9 per cent), Land and Real Estate (9.4 per cent) and Consolidation of Debt (5.7 per cent) all expanded in September 2023.

Real estate mortgage loans, also continued to expand reaching 6.5 per cent in September 2023, up from 5.4 per cent in March 2023. Commercial banks' real estate mortgage lending (6.6 per cent) supported the overall growth in mortgage lending, while non-bank mortgage lending declined by 2.6 per cent. Interest rates on new and outstanding real estate mortgages moderated over the period March to June 2023, contributing to the increase in mortgage loans. However, at the end of September 2023 interest rates on new and outstanding real estate mortgages edged up slightly to 4.97 per cent and 5.23 per cent, respectively. Despite the marginal increase in interest rates, overall real estate mortgage lending remained robust.

Foreign currency credit jumped to double-digits, reflecting the recent constraints on foreign exchange supply and higher foreign currency demand.[4] Temporary supply side pressures stemming from lower foreign currency conversions by energy sector companies contributed to tighter foreign currency market conditions. Higher domestic economic activity resulted in elevated foreign exchange demand from both businesses and consumers, contributing to higher foreign currency loans after a few months of foreign currency deposit drawdown. On a year-on-year basis, foreign currency credit[5] rose sharply by 16.3 per cent in September 2023 compared to 6.3 per cent in March 2023. The spike was on account of higher commercial bank lending. This resurgence was even stronger for foreign currency business loans which rose by 22.0 per cent September 2023, a stark contrast to the 3.1 per cent rise recorded six months prior.

Foreign currency deposit contractions eased. In September 2023, total foreign currency deposits contracted by 2.1 per cent (year-on-year) compared to the 7.4 per cent decline recorded six months prior. Business foreign currency deposits recovered in August 2023 (2.5 per cent) but was unchanged at 0.0 per cent in September 2023 compared to -5.2 per cent in March 2023. On the other hand, consumer foreign currency deposits worsened, declining by 8.2 per cent in September 2023, in comparison to a contraction of 5.8 per cent in March 2023.

The monetary aggregates reflected a transition in preferences to longer-term deposits. On a year-on-year basis, M1-A (which comprises currency in active circulation plus demand deposits) increased by 1.9 per cent in September 2023 compared with a 5.5 per cent increase observed six months prior. A deceleration in currency in active circulation (0.3 per cent) and demand deposits (2.2 per cent) accounted for the slowdown in M1-A. In contrast, M-2 accelerated, growing by 3.4 per cent in September 2023, up from 3.0 per cent in March 2023 supported by large jumps in savings and time deposits (particularly the latter) – increases of 2.0 per cent and 19.7 per cent, respectively, were observed in September 2023.

4 According to a media release form the Ministry of Finance, the current strain on foreign exchange dynamics are driven by businesses and consumers. Foreign-Exchange-Supply-and-Demand-Ministry-of-Finance-Media-Release-September-2023

5 Includes loans and investments to resident individuals and businesses.

Foreign Exchange Market Developments

The local market for foreign currency has remained tight thus far in 2023. Tightness was exacerbated by the deeply disproportionate drop-off in purchases relative to sales.

Purchases of foreign exchange by authorised dealers from the public amounted to US$4,009.8 million over January to November 2023, a decrease of 15.6 per cent relative to the same period a year earlier. Decreased purchases followed a 25.9 per cent decline in conversions by energy companies relative to the same period in 2022. During January to November 2023, purchases from the energy sector accounted for 69.6 per cent of total foreign currency purchases over US$20,000 in value. The injection of liquidity owing to VAT bond repayments during the reference period obviated the need for traditional energy sector convertors to access the financial system for domestic currency at levels the market has become accustomed to. This development coupled with already subdued energy sector activity resulted in declining purchases.

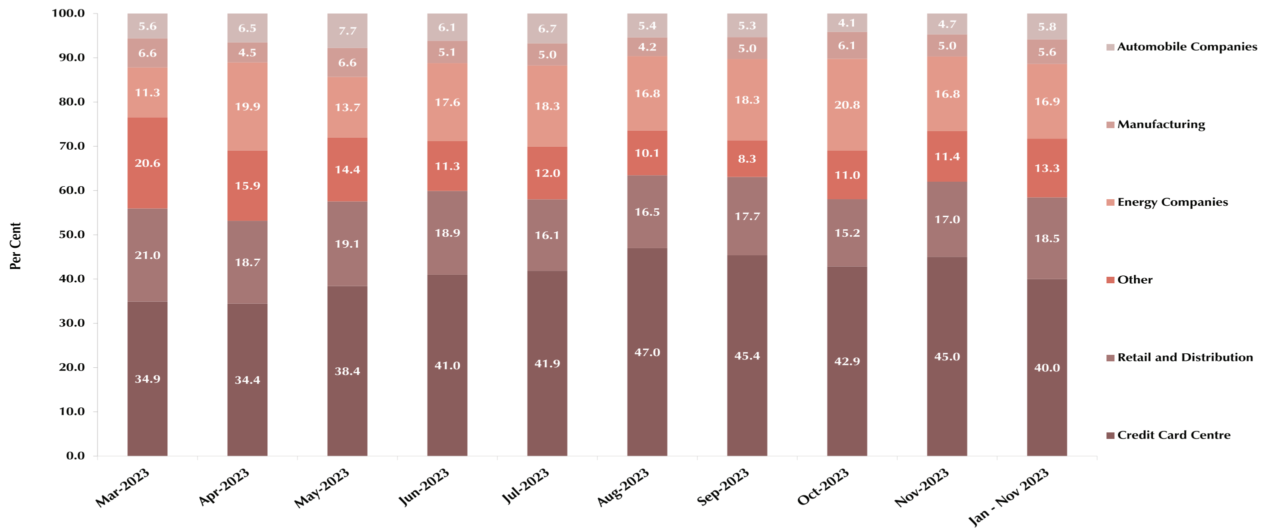
Sales of foreign exchange by authorised dealers to the public reached US$5,701.3 million over January to November 2023, a decrease of 4.6 per cent relative to the same period a year prior. Based on reported data for transactions over US$20,000, credit cards (40.0 per cent), retail and distribution (18.5 per cent), energy companies (16.9 per cent) and automobile companies (5.8 per cent) made up the bulk of foreign exchange sales by authorised dealers to the public. The net sales gap reached US$1,691.4 million during the period. To support the market, the Central Bank sold US$1,241.9 million to authorised dealers (Table 1 and Chart 3.5).

TABLE 1
Authorised Dealers' Foreign Exchange Market Activity
(US$ Millions)

Date	Authorised Dealers Purchases from Public	Authorised Dealers Sales to Public	Authorised Dealers Net sales	Authorised Dealers Purchases from CBTT[1]
2018	4,101.4	5,677.4	1,576.0	1,501.0
2019	4,285.6	5,939.8	1,654.2	1,504.0
2020	3,298.2	4,504.1	1,206.0	1,292.2
2021	4,148.9	4,969.4	820.5	1,212.1
2022	5,528.8	6,551.2	1,022.4	1,270.6
Jan - Nov 2022	4,749.4	5,973.5	1,224.1	1,150.0
Jan - Nov 2023	4,009.8	5,701.3	1,691.4	1,241.9
Y-o-Y Per cent Change	**-15.6**	**-4.6**	**38.2**	**8.0**

Source: Central Bank of Trinidad and Tobago
1 Purchases from the Central Bank of Trinidad and Tobago include transactions under the Foreign Exchange Liquidity Guarantee facility, and excludes sales under the EXIM Bank and Other Public Sector provisional facilities.

CHART 3.5
Sales of Foreign Currency by Authorised Dealers to the Public*



Source: Central Bank of Trinidad and Tobago
* Represent sales in excess of US$20,000.

Capital markets

Activity on the primary Government bond market improved considerably over the first nine months of 2023

Provisional data suggests that during January to September 2023, the primary debt market recorded nine bond issues raising $11,936.0 million (Table 2). Over the period, one state enterprise financed $200.0 million, while the Central Government raised $11,736.0 million via eight private bonds. Excluded from this total is the $702.9 million Government of the Republic of Trinidad and Tobago 2037 (GORTT2037) bond which was part of the CLICO Investment Fund (CIF) distribution of assets, and the US$560.0 million bond issued on the international bond market. The Government bonds were issued for budget support, VAT repayments and the repayment of existing facilities. In comparison, during the same period in 2022 only one bond was issued by the Government, raising $1,500.0 million.

TABLE 2
Primary Debt Market Activity
(January to September 2023)p

Period Issued	Borrower	Face Value (TT$ M)	Period to Maturity	Coupon Rate Per Annum	Placement Type
Jan-23	Government of Trinidad and Tobago	702.9	14.0 years	Fixed Rate 4.25%	Public
Feb-23	Government of Trinidad and Tobago	500.0	7.0 years	Fixed Rate 4.23%	Private
	First Citizens Investment Services Limited	200.0	3.0 years	Fixed Rate 3.40%	Private
Mar-23	Government of Trinidad and Tobago				
	(Tranche 1 of 3)	500.0	5.0 years	Fixed Rate 2.60%	Private
	(Tranche 2 of 3)	400.0	10.0 years	Fixed Rate 4.95%	Private
Apr-23	Government of Trinidad and Tobago (Tranche 3 of 3)	644.0	18.0 years	Fixed Rate 6.15%	Private
	Government of Trinidad and Tobago	US$102.3 Mn (TT$691.43 Mn)	5.0 years	"Fixed Rate 5.65% Amortizing Principal"	Private
May-23	Government of Trinidad and Tobago				
	(Tranche 1 of 2)	600.0	9.0 years	Fixed Rate 4.44%	Private
	(Tranche 2 of 2)	400.0	18.0 years	Fixed Rate 5.74%	Private
Jun-23	Government of Trinidad and Tobago				
	(Tranche 1 of 3)	600.0	5.0 years	Fixed Rate 4.09%	Private
	(Tranche 2 of 3)	400.0	12.0 years	Fixed Rate 4.91%	Private
	(Tranche 3 of 3)	1,000.0	20.0 years	Fixed Rate 6.50%	Private
	Government of Trinidad and Tobago	3,000.0	3.0 years	Fixed Rate 3.15%	Private
Aug-23	Government of Trinidad and Tobago	1,000.0	4.0 years	Fixed Rate 3.71%	Private
	Government of Trinidad and Tobago				
	(Tranche 1 of 3)	1,000.0	6.0 years	Fixed Rate 4.34%	Private
	(Tranche 2 of 3)	400.0	10.0 years	Fixed Rate 4.97%	Private
	(Tranche 3 of 3)	600.0	20.0 years	Fixed Rate 6.15%	Private
Sep-23 *	Government of Trinidad and Tobago (International Bond)	US$560.0 Mn (TT$3,774.8 Mn)	7.0 years	Fixed Rate 5.95%	Public

Sources: Ministry of Finance and Market Participants
p Provisional.
* Bond issued on the international market

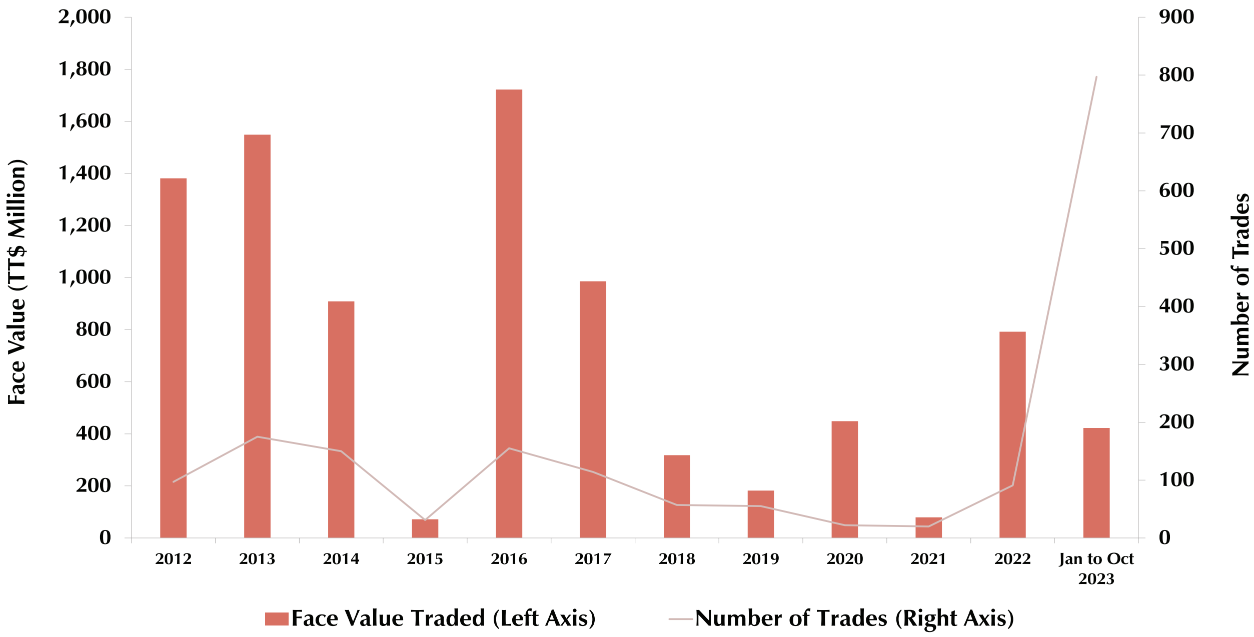
Over the five months ending October 2023, the secondary Government bond market recorded a jump in trade volume, but face value traded was lower

Over the period June to October 2023, the Trinidad and Tobago Stock Exchange (TTSE) secondary Government bond market recorded 262 trades at a face value of $246.7 million while 58 trades at a face value of $301.3 million were recorded over the comparative period one year earlier (Chart 3.6). The jump in trade volume continues to be driven by shareholders trading their allocations of the $702.9 million GORTT2037 bond.

Conversely, activity on the TTSE secondary corporate bond market[6] declined over the five months ending October 2023, with 38 trades at a face value of just under $0.5 million, compared to 75 trades at a face value of $3.4 million over the comparable period one year prior.

CHART 3.6

Secondary Government Bond Market Activity



Source: Trinidad and Tobago Stock Exchange

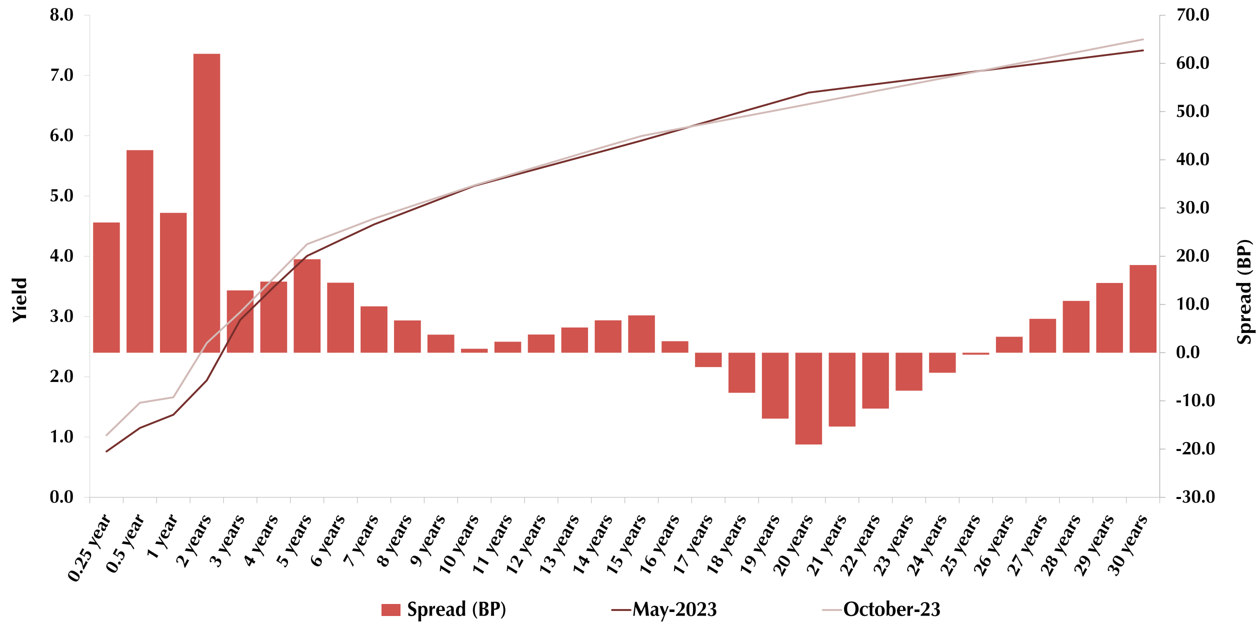
6 Activity on the TTSE corporate bond market records the price and yield movements of the three National Investment Fund Holding Company Limited (NIFHCL) bonds listed in September 2018.

A decline in excess liquidity (monthly average) over May 2023 to October 2023 resulted in the Central Government yield curve mostly displaying an upward trend (Chart 3.7). Over the period, the 3-month rate jumped by 27 basis points to 1.03 per cent, while the 1-year rate gained 29 basis points to 1.66 per cent. Similarly, the medium-term 5-year rate gained 19 basis points to 4.20 per cent, while the long-term 10-year rate gained 1 basis point to 5.18 per cent and the 15-year rate increased by 8 basis points to 6.00 per cent. On the other hand, the 20-year rate declined by 20 basis points to 6.52 per cent. The decline in the longer-term rates suggests that inflation expectations may be tempering.

CHART 3.7

Trinidad and Tobago Central Government Treasury Yield Curve

May 2023 to October 2023



Source: Central Bank of Trinidad and Tobago

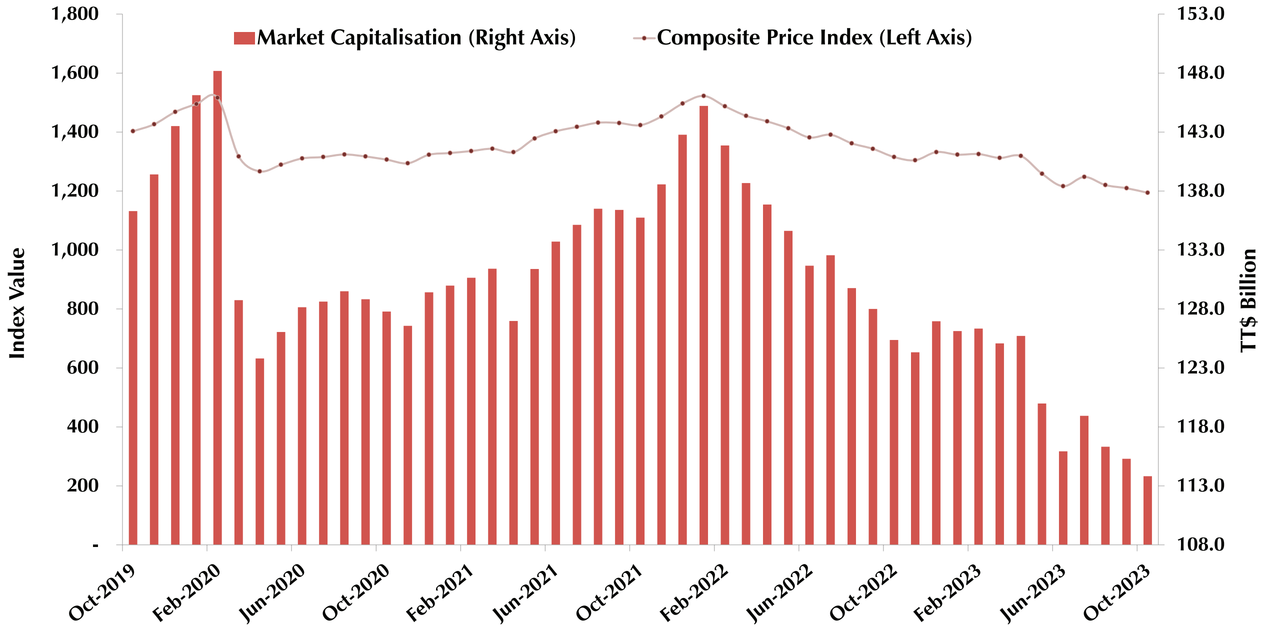
Over June to October 2023 the domestic stock market continued to record a declining trend

Over the five-month period ending October 2023, the Composite Price Index (CPI) declined by 5.1 per cent, resulting in total stock market capitalisation falling by $6.2 billion to end the period at $113.8 billion (Chart 3.8). The market deterioration was driven by a 4.9 per cent drop in the All Trinidad and Tobago Index (ATI) and a 6.2 per cent fall in the Cross Listed Index (CLI). The first tier market reflected weaker performances in most indices including Energy (-40.3 per cent), Manufacturing I (-10.3 per cent), Banking (-5.5 per cent), Non-Banking Finance (-4.7 per cent), Conglomerates (-0.8 per cent), and Trading (-0.7 per cent). Despite an improvement in domestic economic conditions, domestic and regional firms continue to be adversely impacted by elevated inflation. On the other hand, the Property index remained unchanged while the Manufacturing II index recorded an improvement of 8.9 per cent.

The performance of the CLI also reflected the performance of regional exchanges. The Caribbean Exchange Index (CEI)[7] fell by 4.1 per cent over the five months ending October 2023, driven by a 5.3 per cent decline in the Jamaica Stock Exchange (JSE) index, and a reduction of 8.4 per cent in stock market capitalisation of the Guyanese exchange. However, the Barbados Stock Exchange (BSE) index recorded an 8.7 per cent improvement.

CHART 3.8

Movements in the Composite Price Index and Stock Market Capitalisation



Source: Trinidad and Tobago Stock Exchange

7 The CEI was launched in October 2022, as a collaborative effort by five regional stock exchanges: Jamaica, Barbados, The Eastern Caribbean, Guyana, and Trinidad and Tobago. The index consolidates the activity of the main market stocks across the different exchanges into a single performance measure and is intended to be an indicator of the performance of the Caribbean region.

Weaker conditions in domestic and international capital markets resulted in a marginal decline in the domestic mutual funds' industry over the six months ending September 2023

During April to September 2023, aggregate funds under management[8] slipped by 0.6 per cent to $51,869.5 million[9]. The decline was largely driven by a 2.9 per cent fall in Equity funds to $8,162.9 million and a 1.4 per cent decline in Income funds, the largest component, to $28,097.9 million. Additionally, funds classified as 'Other'[10] fell by 1.4 per cent to $448.5 million (Chart 3.9). The movements in these funds have been linked to higher interest rates in AEs and weaker domestic and international equity market performance. On the other hand, the inherent lower interest rate risk in Money Market funds resulted in these funds expanding by 2.4 per cent to $15,160.4 million. Overall, the mutual fund industry was negatively impacted by reduced equity performance, both local and foreign, and increasing interest rates in AEs which negatively impacted fixed income valuations. In comparison, during the same period one year earlier, aggregate funds under management declined by 2.9 per cent, driven by deteriorations in both Income and Equity funds.

In terms of Net Asset Value (NAV), floating NAV funds declined by 4.5 per cent to $12,973.4 million, reflecting the performance of floating Income and Equity funds. Additionally, reflecting the improvement in Money Market funds, fixed NAV funds gained 0.8 per cent to $38,896.1 million. However, the overall market decline resulted in TT dollar funds marginally slipping by 0.1 per cent to $42,369.7 million, while foreign currency funds fell by 2.6 per cent to $9,499.8 million.

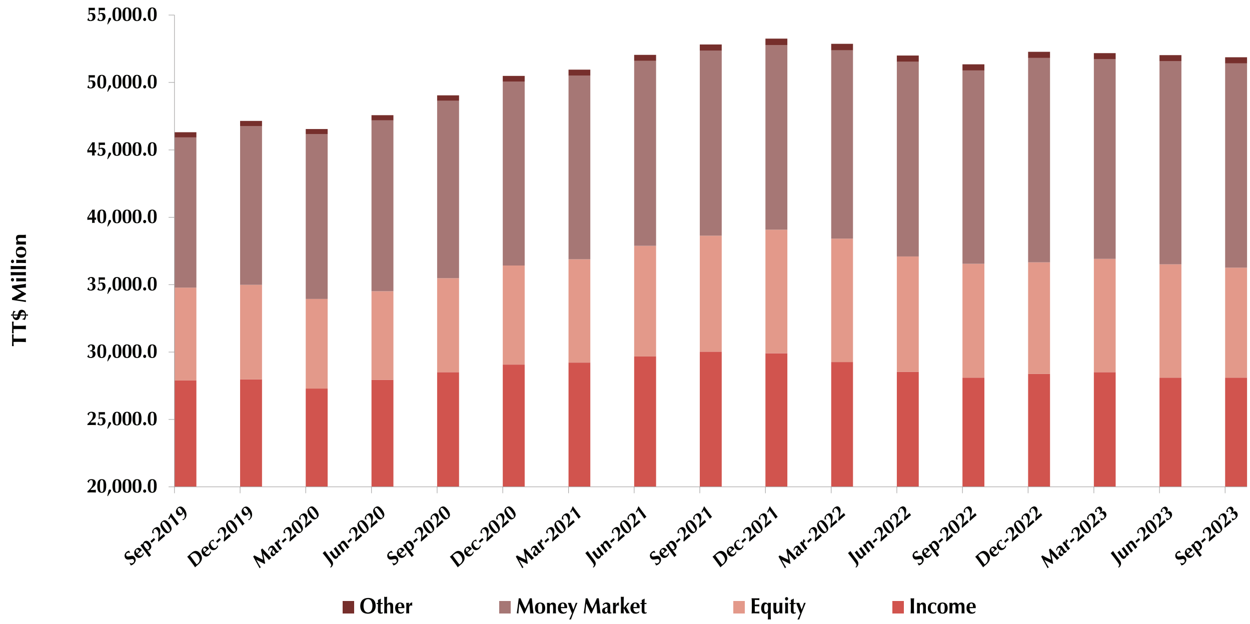
During the six-month period, the industry observed $271.6 million in net withdrawals, comprising $8,715.4 million in sales and $8,987.1 million in redemptions. Comparatively, during the same period in 2022, the mutual fund industry observed $33.0 million in net withdrawals. In light of volatile market conditions, floating NAV funds recorded $328.7 million in net redemptions, while more focused attention on principal protection resulted in fixed NAV funds recording $57.0 million in net sales. Income funds and Equity funds registered withdrawals of $181.9 million and $110.9 million respectively. Conversely, Money Market funds observed $23.0 million in net sales.

Collective Investment Scheme (CIS) data[11] published by the Trinidad and Tobago Securities and Exchange Commission (TTSEC) suggests that over the six months ending September 2023, the total value of Assets Under Management for all registered funds recorded a decline of 0.3 per cent to $61,973.4 million, and net withdrawals amounting to $96.7 million.

8 Aggregate funds under management refer to mutual fund information collected by the Central Bank of Trinidad and Tobago, including funds managed by the Trinidad and Tobago Unit Trust Corporation, Royal Bank of Trinidad and Tobago, Republic Bank Limited and First Citizens Bank Limited.
9 As at the end of September 2023, this value accounted for 83.7 per cent of the total industry assets under management as given by the TTSEC CIS data.
10 Other funds represent high yield funds and special purpose funds.
11 At the end of September 2023, CIS data from the TTSEC represents 79 registered funds from 16 issuers.

CHART 3.9

Trinidad and Tobago Mutual Funds Under Management by Fund Type



Source: Central Bank of Trinidad and Tobago

BOX 2

The Influence of Open Market Operations on Excess Liquidity

Excess liquidity is the quantity of reserves of domestic currency held by commercial banks with the Central Bank over and above the mandated requirement. The level of excess liquidity has implications for inflation, the business cycle and the potency of monetary policy transmission in an economy, thus managing its levels is important to economic outcomes. This Box assesses the effectiveness of the Central Bank's Open Market Operations (OMOs) strategy in managing excess liquidity.

The approach involves an empirical model which incorporates OMOs, foreign currency purchases by authorised dealers and net domestic fiscal injections in order to assess the effectiveness of OMOs in managing excess liquidity. The model is an auto-regressive distributed lag (ARDL[1]) model utilising monthly data from 2006 to 2023[2].

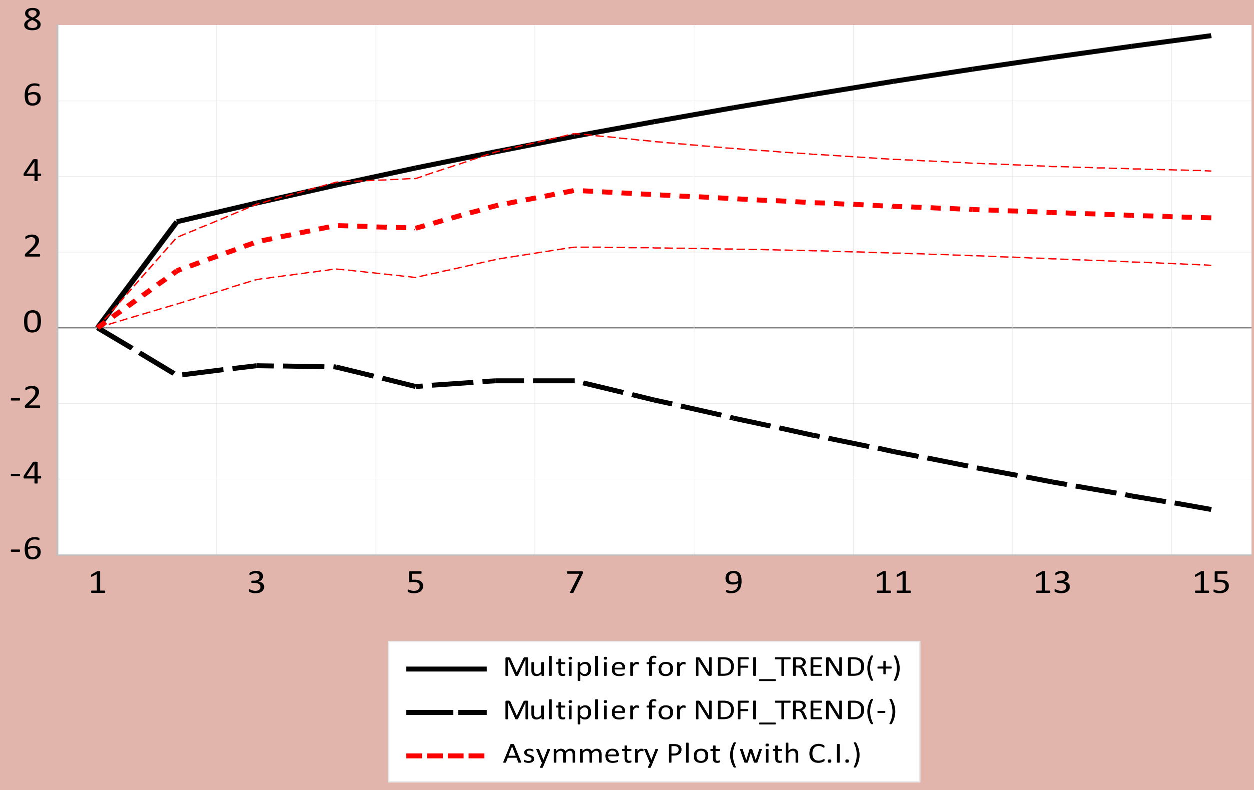
This model is able to decompose the distributed lags of the variables by their partial sum components. This is done in order to account for non-linearities that can arise if the lagged coefficients of a regressor impose asymmetrically positive or negative effects on the dependent variable. More succinctly, positive changes in the lagged independent variables may affect liquidity disproportionately to negative changes, or vice versa, and the partial sum components provide a way to estimate these non-linear effects.

In Trinidad and Tobago, fiscal operations are generally considered the main driver of excess liquidity in the financial system. The Beveridge-Nelson trend component of net domestic fiscal injections (NDFI_TREND) was shown to have net positive effects on excess liquidity. This conforms to the fundamental notion that fiscal operations generate upward pressures on excess liquidity over the period of analysis.

BOX 2 cont'd
The Influence of Open Market Operations on Excess Liquidity

FIGURE 1

Dynamic Multiplier Chart, Effects of NDFI on Excess Liquidity



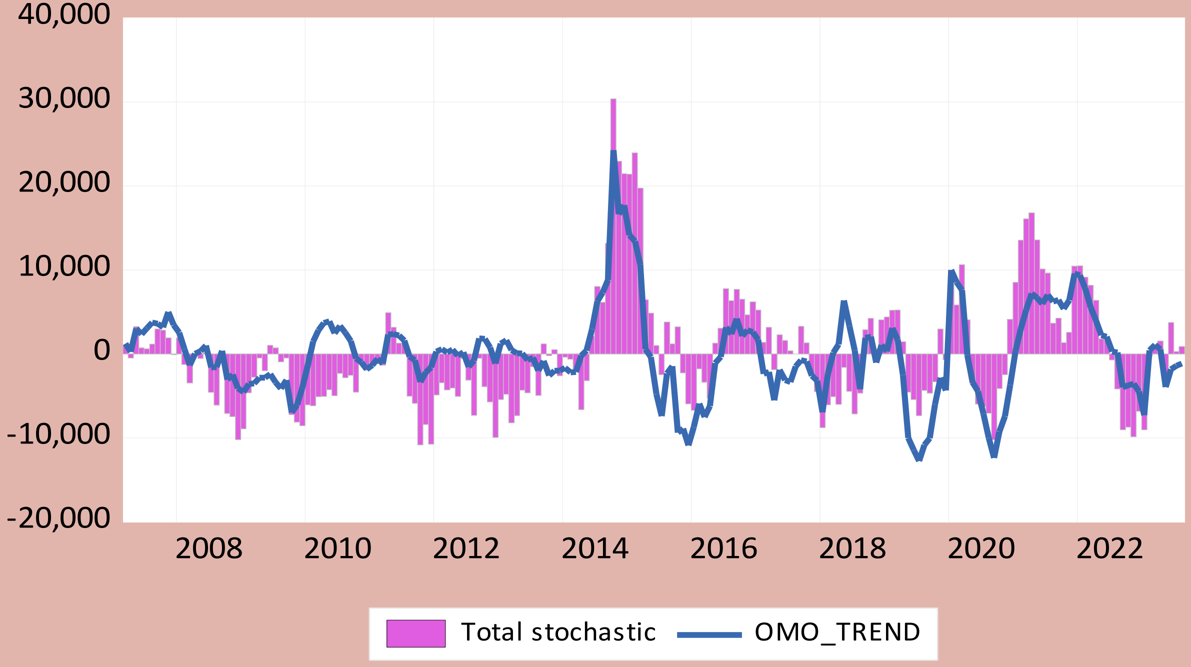
Source: Author's Calculations

The model also provides information concerning cointegration[3] and develops an equation to derive an error correction term[4]. The error correcting equation relates the short-term dynamics that re-establish equilibrium after a disturbance to liquidity. The time series developed from the error correcting equation can be analysed via its variance decomposition[5] to determine which independent variables account for most of its movement. The most significant proportion of the variance of the error correction series was generated by the trend component of open market operations (OMO_TREND).

BOX 2 cont'd
The Influence of Open Market Operations on Excess Liquidity

FIGURE 2

Historical Decomposition of the Error Correction Term of Excess Liquidity



Source: Author's Calculations

OMO's track the direction of the variance of the error correction term quite closely, especially after 2014. This suggests that OMOs are a major factor in re-establishing equilibrium after a disturbance to liquidity. This result supports the use of OMOs to correct money market disequilibrium as an effective liquidity management strategy. This is particularly applicable to the case where liquidity shocks originating from fiscal operations require mitigation. Actively managing Treasury instruments in order to deliver liquidity levels ample enough to facilitate economic recovery, without major trade-offs for the monetary transmission mechanism and inflation will thus remain an important policy measure.

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1 Non-linear ARDL for this note.
2 The data is smoothed using the Beveridge-Nelson filter.
3 The Bounds Test F-Stat=4.633, rejects the null of no cointegration at p<0.01.
4 The error-correction coefficient is negative and significant at p<0.01.
5 Developed from a VAR system modeling the error correction term as a function of its components.

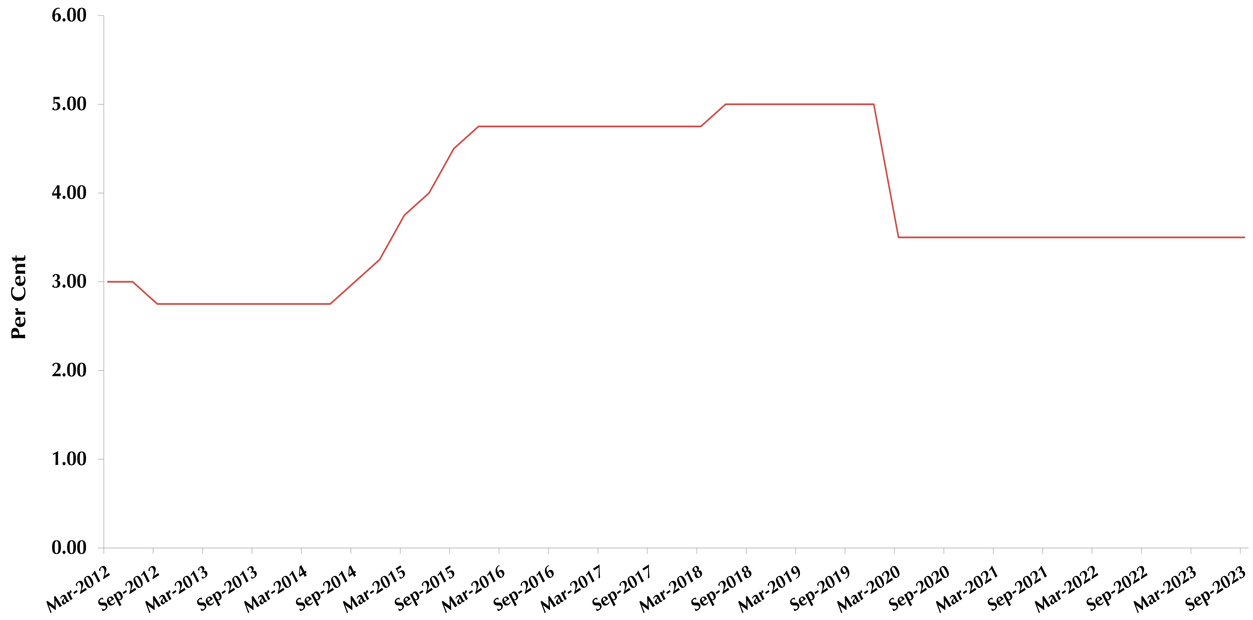
4. MONETARY POLICY ASSESSMENT (MAY-NOVEMBER 2023)

The evolution of monetary policy thus far has been primarily focused on inflation, while supporting domestic economic recovery. In its monetary policy decision in September 2023 the Monetary Policy Committee (MPC) considered the global uncertainty and assessed the domestic economic recovery alongside the sustained deceleration in inflation.

Monetary policy in 2023 has balanced advancing the post-pandemic recovery with managing inflationary pressures. The main policy tool of the Central Bank, the Repo rate, remained at 3.50 per cent after the 150 basis points reduction in March 2020, following the onset of the COVID-19 pandemic (Chart 4.1).

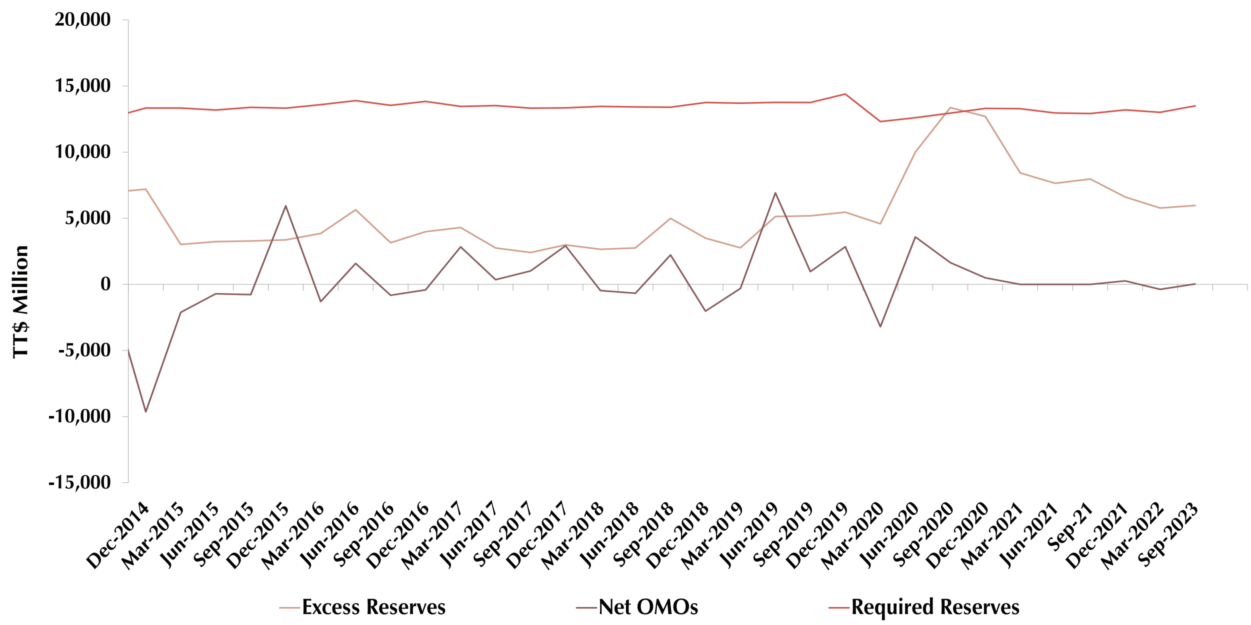
The Central Bank influences the economy by managing changes to the money supply, which affects the economy through real balances. The reserve requirement targets the creation of narrow money through the money multiplier effect and remained at 14.0 per cent since a 300 basis point decline in March 2020. Between November 2022 and October 2023, required commercial bank reserves with the Central Bank fluctuated around an average of $13.4 billion suggesting that narrow money remained stable. OMOs, however, tend to affect broader measures of the money supply than the reserve requirement and over October 2022 to September 2023, the Central Bank's OMO activity resulted in a net injection of $3.0 billion into the financial system. Changes in the money supply originating from adjustments to the reserve requirement and OMOs tend to manifest as changes to excess liquidity. To support the economic recovery following the debilitating effects of the pandemic, the Central Bank amplified liquidity by managing its instruments that applied to both narrow and broad money channels. Current levels of excess liquidity reflect continued efforts to support the economic recovery mainly through broader money channels alongside more recent idiosyncratic market factors which have had a dampening effect on liquidity (Chart 4.2). However, the Central Bank's commitment to ample liquidity drove increased competition to supply credit, and had the effect of lowering the WALR to 6.64 per cent by September 2023.

CHART 4.1
Repo Rate



Source: Central Bank of Trinidad and Tobago

CHART 4.2
Liquidity Management



Source: Central Bank of Trinidad and Tobago

Bank lending rates remain responsive to policy

Based on the interest rate, money supply channels, the size and direction of the combined effect of the Central Bank's monetary policy tools on commercial banking rates can be demonstrated. Chart 4.3 shows the evolution of the historical forecast error variance decomposition (FEVD) derived from a model [12] estimating the effect of the Repo rate and excess liquidity on the WALR against the WALR itself. When the values of the FEVD are positive, policy exerts pressure on the WALR to increase and vice versa. After March 2020, the combined effect of the instruments of monetary policy on the WALR takes negative values, and thus exerts pressure on the WALR to decline. This shows that monetary policy has underpinned the trajectory in commercial banking rates observed after the pandemic and continued to deliver the mitigating effect that drove declining banking rates in 2023.

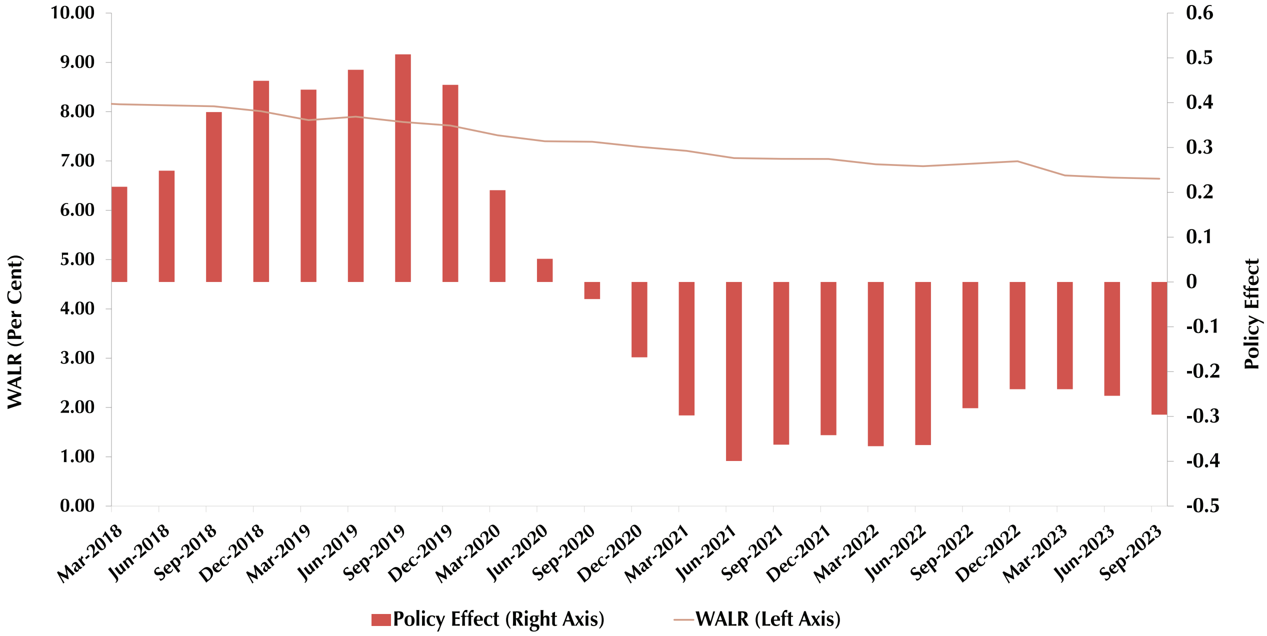
Excess liquidity is expected to remain ample over 2023 and into early 2024, while reflecting a baseline level closer to historical trends. The Central Bank's liquidity management strategy will increasingly emphasise supporting the economic recovery, as domestic headline inflation retreats from elevated levels.

Commercial bank lending rates are expected to remain stable throughout 2023 and into 2024 owing mainly to ample liquidity. As long as the economic recovery is prioritised, policy action regarding lending rates will likely be able to correct any short-term deviations. Treasury rates may experience some upward pressures owing to the likelihood of more frequent capital market activity by the Central Government. The Central Bank's liquidity management strategy however tends to facilitate the Central Government's borrowing activity, with the aim of maintaining stability in short-term financial markets. The implication is that the effect on interest rates may be neutral in the medium-term and that the TT-US long and short-term differentials may not necessarily narrow significantly. However, the trajectory of increase of external benchmark rates is expected to flatten since, despite inflation in AEs generally remaining above expectations, price levels seem to have retreated from pandemic-driven peaks.

In summary, steadily expanding private sector credit will likely support a non-energy sector led economic recovery. Monetary policy will have to balance considerations about facilitating this recovery. As evidenced by their stabilising influence on banking rates in 2023, the management of short-term policy rates as well as narrow and broad money channels are effective in influencing banking system conditions. As such, the Central Bank will continue to closely review domestic and external market developments and remain data-driven in its policy considerations.

12 Vector autoregression utilising data from March 2006 to September 2023.

CHART 4.3
Forecast Error Variance Decomposition



Source: Central Bank of Trinidad and Tobago

FEATURE ARTICLE

PROMOTING GROWTH SUPPORTIVE BANK CREDIT

Natalie Thomas and Tanisha Mitchell[13]

Summary

In the aftermath of the COVID-19 pandemic, this report examines policy options that can be employed to sustain the channelling of credit predominantly for productive purposes (business lending). The use of targeted monetary policy instruments and sectoral macroprudential tools can be less disruptive and distortionary when compared to an earlier regime of selective credit controls

Introduction

The economic repercussions of pandemic lockdowns and geopolitical tensions during the period 2020-2022 have stymied growth across several economies. This protracted recovery was influenced by capital flow volatility, economic slowdowns and supply chain constraints, all of which adversely impacted price levels. Not discounting the need to support growth-seeking policy measures, rising inflation rates have compelled several central banks to engage in monetary policy tightening. On the domestic front, an accommodative policy stance remains[14] in an attempt to support the nascent economic recovery. Credit has also been revitalised, supported by strong business, consumer and real estate mortgage borrowing, following the reopening of the domestic economy. However, anecdotal evidence suggests that demand-side factors, driven by the uptick in consumer lending, have emerged and may add further inflationary pressures.

Credit, though vital to economic growth, can be disruptive at levels significantly above norms. Despite bi-directional causality between growth and credit, inflation can affect transmission channels through impacting variables such as investor returns, household and firm income and credit utilisation rates which can increase default concerns and possibly amplify systemic risks. A closer look at consumer credit in Trinidad and Tobago reinforces these concerns as upticks in loan categories such as 'Bridging Finance', 'Refinancing', 'Credit Cards' and 'Debt Consolidation' hint at possibly higher credit risk, in comparison to business credit where growth may be more closely aligned with an expansion in an economy's productive capacity. The stance taken to maintain the Repo rate at 3.50 per cent has supported overall credit expansion but there has been a noticeable upward drift in market interest rates, possibly due to an increase in uncollateralised consumer loans. With the credit-to-GDP gap already in positive territory, the challenge is how to reorient

13 The authors are economists in the Research Department of the Central Bank of Trinidad and Tobago. The views expressed are those of the authors and not necessarily that of the Central Bank of Trinidad and Tobago.
14 Since March 2020 the policy rate (the Repo rate) stands at 3.50 per cent.

banks' lending squarely in favour of more productive activities should the impact of higher interest rates and tighter lending standards to contain credit excesses take hold. While previous attempts at credit rationing/credit controls were unsuccessful, this policy note seeks to examine the feasibility of using contemporary tools such as macroprudential measures to foster productive lending while containing risks from excessive credit for consumption purposes.

The following section briefly reviews the local history surrounding banking system credit controls, global academic and regulatory views along with country experiences with credit controls. Next, the trends in local credit dynamics and monetary policy actions over the period 1995-2023 are presented followed by an assessment of new methods to help regulate consumer bank credit. The last section summarises the main findings of the study and offers policy recommendations based on the identified methods to better channel lending to productive sectors.

Literature Review

In Trinidad and Tobago, political independence in the 1960s initiated a series of monetary system improvements. Similar to a few other countries in the Caribbean, this came with the establishment of a local central bank. At the time, monetary policy was dictated by the Bretton Woods System of Exchange. Following the system's collapse, direct (administratively-led) monetary control procedures were implemented. These included reserve requirements and selective credit controls (such as caps on loan interest rates and bank credit)[15]. At that point moral suasion was unsuccessful, forcing authorities to amend legislation to improve the efficacy of selective credit controls.[16] Odedokum (1987) describes selective credit policy goals from two perspectives; first as a tool for correcting credit market imperfections in the financial sector by altering the flow of credit; and second as a tool for commodity market imperfections in the real sector by altering the expenditure flow. This report focuses on the former.

Several arguments in favour of selective credit controls have been raised. The most popular is its ability to achieve specific targets directly. As a result, these controls are also able to address unintentional discriminatory effects of aggregate policies, as authorities are able to direct change in specific areas (Kane 1977). Notably, the literature mentions their use in underdeveloped economies, where egalitarianism and diversification were the popular motives for using selective credit controls (Patel 1954). In particular, India, an economy that still employs these tools, during

15 Hilaire (2000), Central Bank of Trinidad and Tobago (2005), Central Bank of Trinidad and Tobago (2016),and Roberts (2012).
16 Selective credit controls include controls on public sector bank lending, codes and guidelines on consumer instalment credit, maximum lending rate caps (4 percentage points higher than the prime lending rate at the time) and caps on incremental loans for non-business purposes Farrell (1990) and Central Bank of Trinidad and Tobago (2005) and (2016).

the 1990s substantive and specific credit controls were initiated to quell bank finance for imports due to balance of payments challenges. In Europe, among the reasons mentioned were financing state debt at lower interest rates, altering private sector credit (without adjusting local interest rates), allocating resources to priority sectors and assisting restrictive monetary policy.

However, several studies have highlighted their weaknesses. Among the literature, many believe heavily regulated monetary tools create significant drawbacks that compromise the efficacy of credit policies. With controls on the cost and supply of credit, according to Kane (1977), Hamburger and Burton (1979), Johnston and Odd (1989), Farrell (1990), Wong (1991), and others, such tools cause markets to become unpredictable, uncompetitive and underdeveloped. According to the authors, transmission mechanisms were likely affected by regulated entities' tactics to evade and avoid authorities' directives. Additionally, on the borrower-end, to fill financing gaps created by the restrictions less reputable alternatives (outside of central banks' remit) may be sought. Consequently, such behaviour patterns on the lender and borrower ends have made these types of tools ineffective overtime. Hence, distortions in the mobilisation of resources and by extension between prices, services and risks were likely outcomes that undermined policy interventions to correct imbalances in the system.

With the onset of trade and financial liberalisation in the 1990s, several changes occurred in the macro-financial system. These included the replacement of administratively-led policies for more indirect or market-determined central bank policies. Locally, interest rates and credit were liberalised while reserve requirements remained. Open market operations and a market rate were also introduced, supplemented by financial soundness indicators and prudential instruments to monitor and manage system entities. Referred to as 'a first line of defence' and a complement to monetary policy, financial stability policies build system resilience by mitigating risk build-ups and spillovers to the real economy. There are two arms of these prudential policies, micro and macro, which focus on individual institutions and the whole financial system, respectively.

Pre-Global Financial Crisis (GFC), more attention was directed to microprudential policies, despite several high-level discussions on the need to focus on aggregate risks. However, after the crisis entities' financial interconnections ("too interconnected to fail") and their dominance/importance ("too big to fail") were brought to the forefront. As a result, the macro perspective of prudential policies gained more prominence, becoming a mainstream topic post-crisis (Kenc 2016). As the literature expanded on the topic, two dimensions were outlined - a time dimension and a cross-section dimension. According to Clement (2010), the former addresses pro-cyclicality concerns, that is the evolution of risk over time. While the latter addresses similar exposures and/or direct linkages between entities. Hence, unlike monetary policy, which is considered more broad-based, macroprudential tools can focus on specific sectors or entities without significantly impacting overall growth (Lim et al (2011), Cerutti et al (2018) and Zhang et al (2018). A benefit selective credit controls offered, despite its many disadvantages.

As the literature on macroprudential policy matured, several studies have provided an account of country experiences and policy effectiveness over time. Lim et al (2011), Cerutti et al (2018) and Zhang et al (2018), in particular, have provided a comprehensive review of the tools employed internationally. Countercyclical capital buffers and caps on loan-to-value ratios appear to be the most used tools. Despite this, compared to macroeconomic policies, macroprudential policy is not as widely applied.

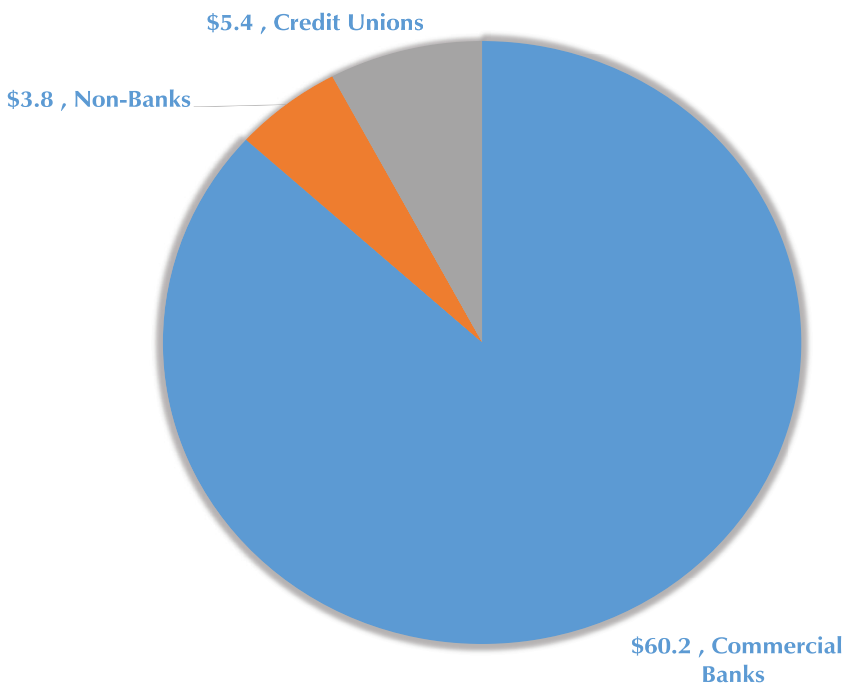
Local Credit Dynamics and Monetary Policy

Prevailing macroeconomic conditions alongside monetary policy actions and their transmission greatly influence borrowing in the private sector. Commercial banks in Trinidad and Tobago are the primary providers of credit (Figure 1) with lending by commercial banks approximating $60.2 billion at end 2019, while credit unions and non-banks facilitated $5.4 billion and $3.8 billion in loans, respectively.

FIGURE 1

Total Loans by Commercial Banks, Non-Banks and Credit Unions as at 2019*

(TT$ Billion)

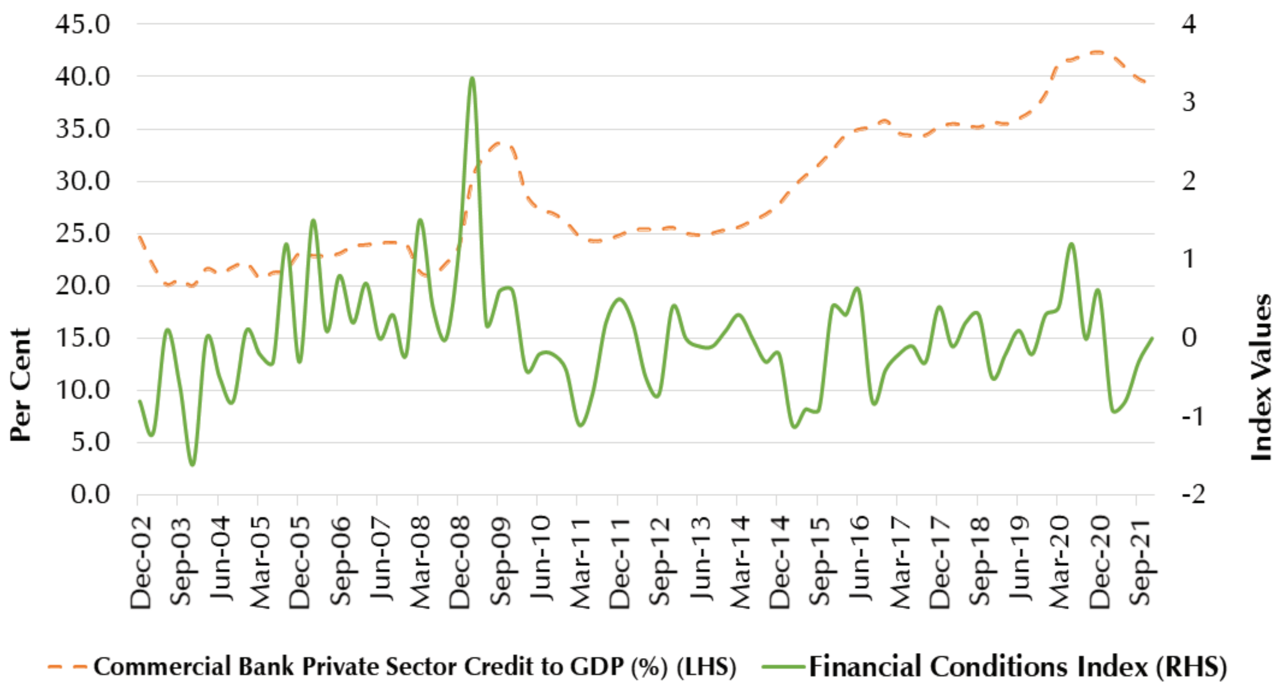


Source: Central Bank of Trinidad and Tobago
*Latest available data for Credit Unions as at 2019.

Credit growth remains a key indicator in an economy, according to Borio and Lowe (2002). The credit-to-GDP ratio is one measure to evaluate credit expansion, which might signify economic recovery or possible instabilities. Together, the financial conditions index (FCI)[17] and the commercial bank credit-to-GDP ratio (Figure 2) are useful tools to discern financial strain in the domestic banking system. A rise in commercial bank loans relative to GDP coincided with the first high in the financial conditions index in 2009, which in turn reflected the effect of the GFC. As the spillover effects of the GFC continued into 2010, overall private sector credit weakened significantly while economic growth was stymied. As the Central Bank engaged in expansionary monetary policy to support an economic recovery, consumer lending rebounded in late 2010 but business lending remained anaemic well into 2011. The FCI marginally increased as the pandemic hit Trinidad and Tobago in the first half of 2020, however, the reaction of the monetary authorities served to dampen the effect, and the FCI declined in the second half of the year. Due in part to a revival in company lending, an upswing in consumer lending, and improvements in real economic activity, the ratio of commercial bank private sector credit-to-GDP rose.

FIGURE 2

Commercial Bank Private Sector Credit to GDP Ratio and Financial Conditions Index



Source: Central Bank of Trinidad and Tobago

17 The Trinidad and Tobago Financial Conditions Index (FCI) is an early warning indicator which detects possible financial fragility. Positive and increasing values are indicative of tightening financial conditions, while negative and decreasing values highlight accommodative conditions.

The health of the onshore economy has a significant bearing on banks' willingness and ability to provide credit. The general macroeconomic climate has a large influence on lending to both individuals and companies. Figure 3A depicts consumer loans having a delayed response to changes in economic growth, with muted responses to changes in inflation. On the other hand, Figure 3B depicts a delayed response of business lending to downturns in the economy, however economic upturns appear to be followed closely by increases in credit to businesses.

FIGURE 3A

Commercial Bank Consumer Loans and Macroeconomic Indicators

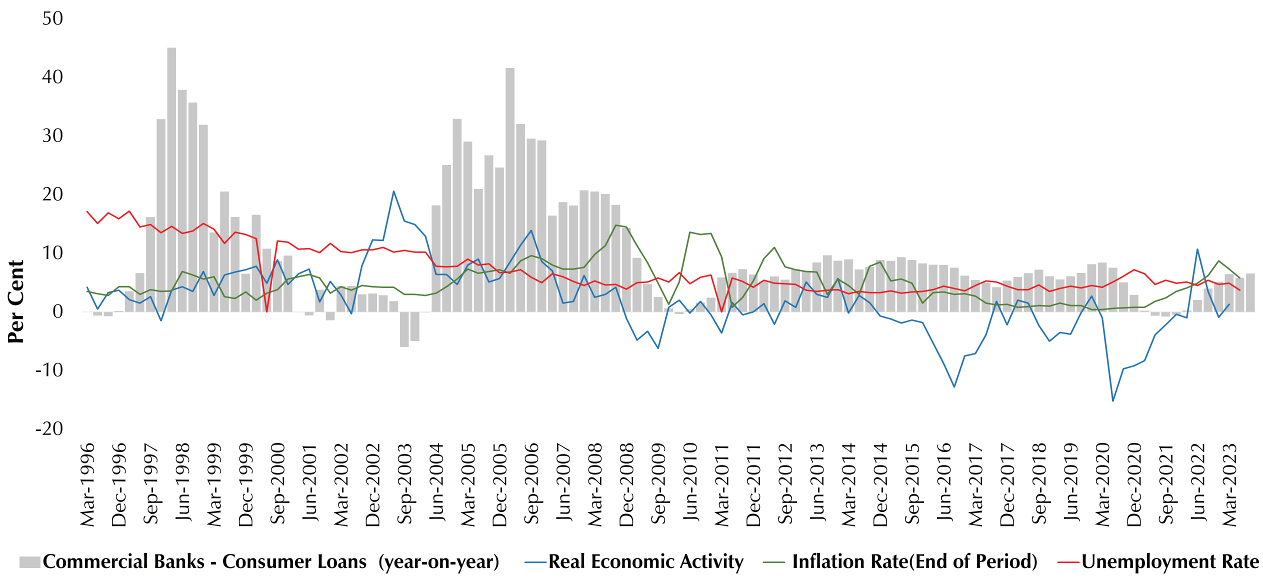
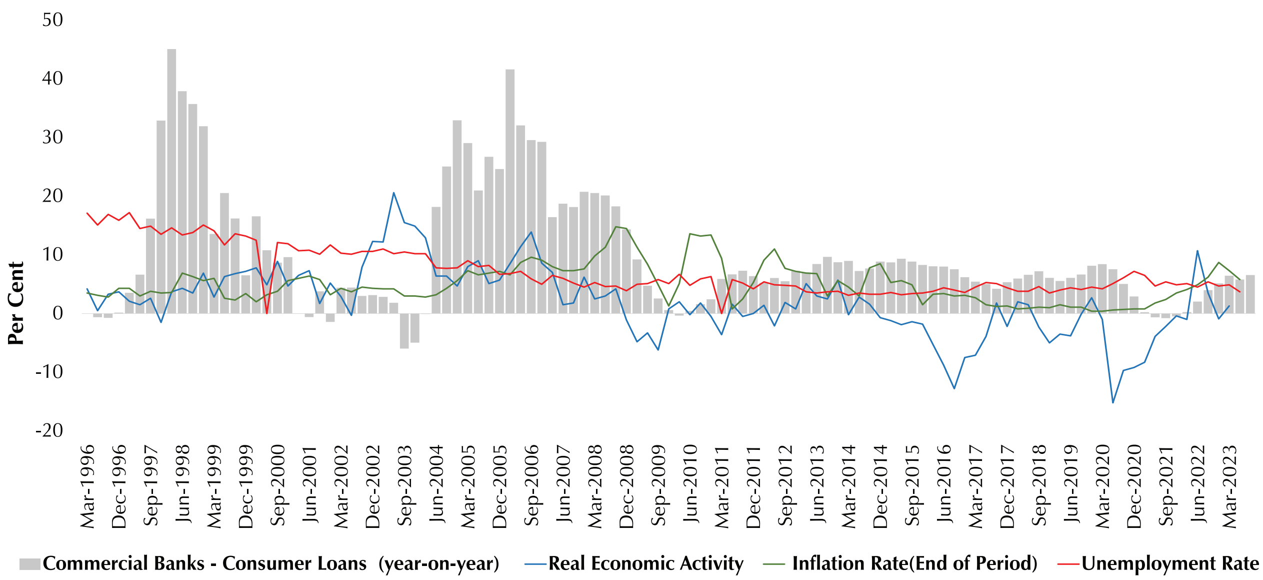


FIGURE 3B

Commercial Bank Business Loans and Macroeconomic Indicators



Source: Central Bank of Trinidad and Tobago

Changes in the local and international landscape fashioned by trade and financial liberalisation in the 1990's provided the cornerstone for changes in the monetary policy framework in Trinidad and Tobago. Following the switch from direct monetary policy tools to indirect tools, in mid-2002 the Central Bank adopted, as its main monetary policy tool, the Repo rate[18]. Adjustments to the policy tool influence the cost of borrowing in the economy which impacts credit demand. However, the structural liquidity overhang impedes the transmission of monetary policy signals to the real economy (Figure 4A and 4B).

FIGURE 4A

Commercial Bank Consumer Loans and Monetary Policy Tools

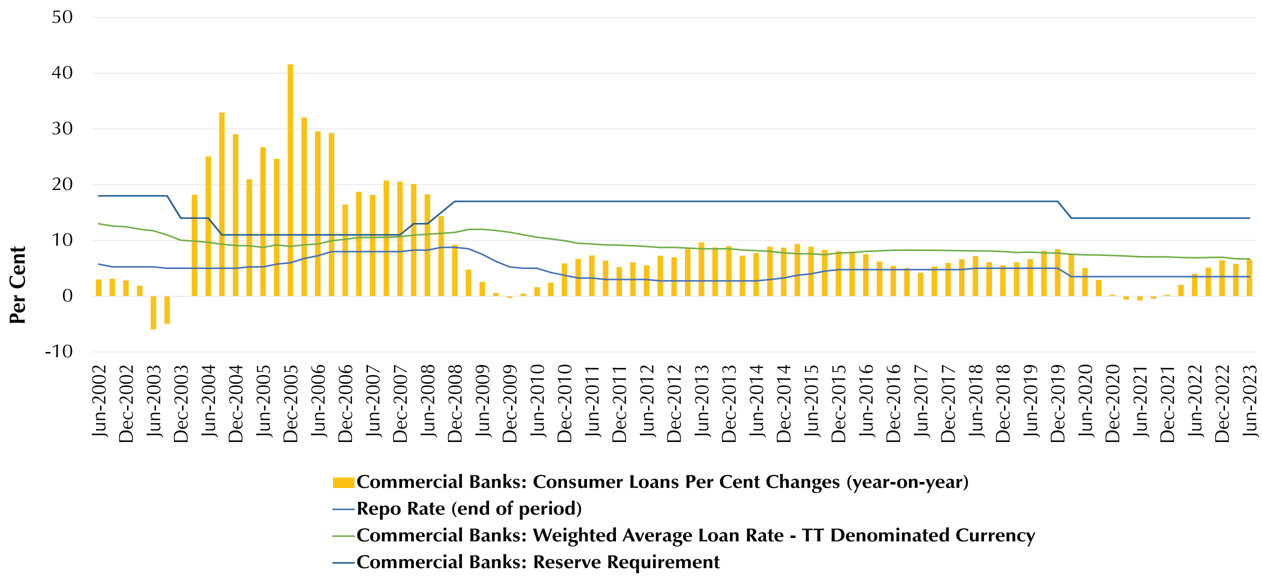
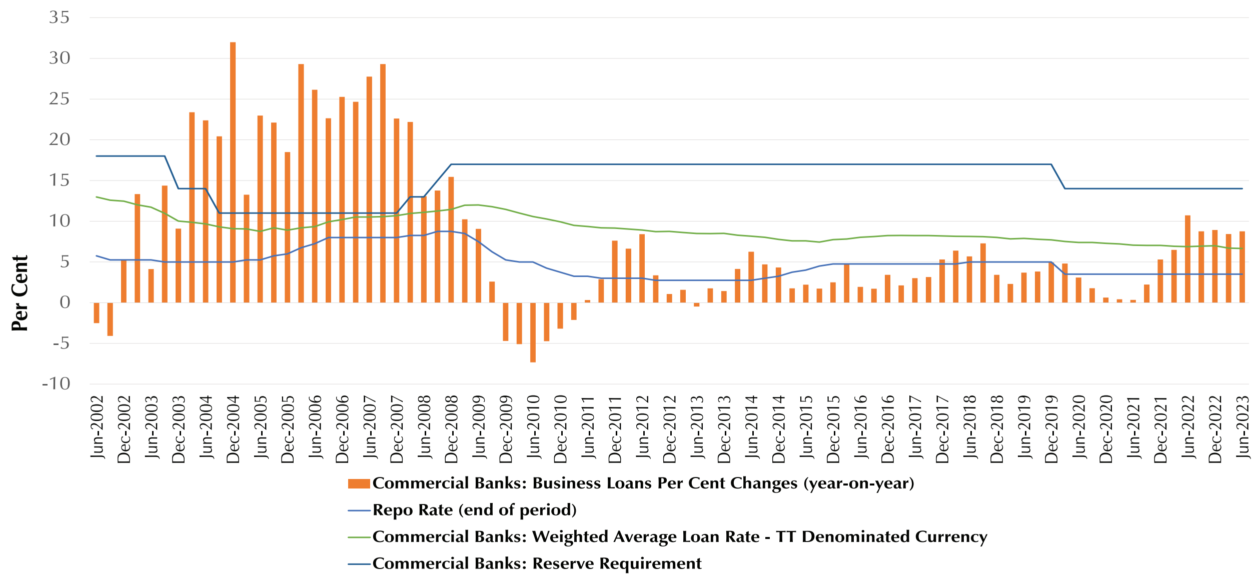


FIGURE 4B

Commercial Bank Business Loans and Monetary Policy Tools



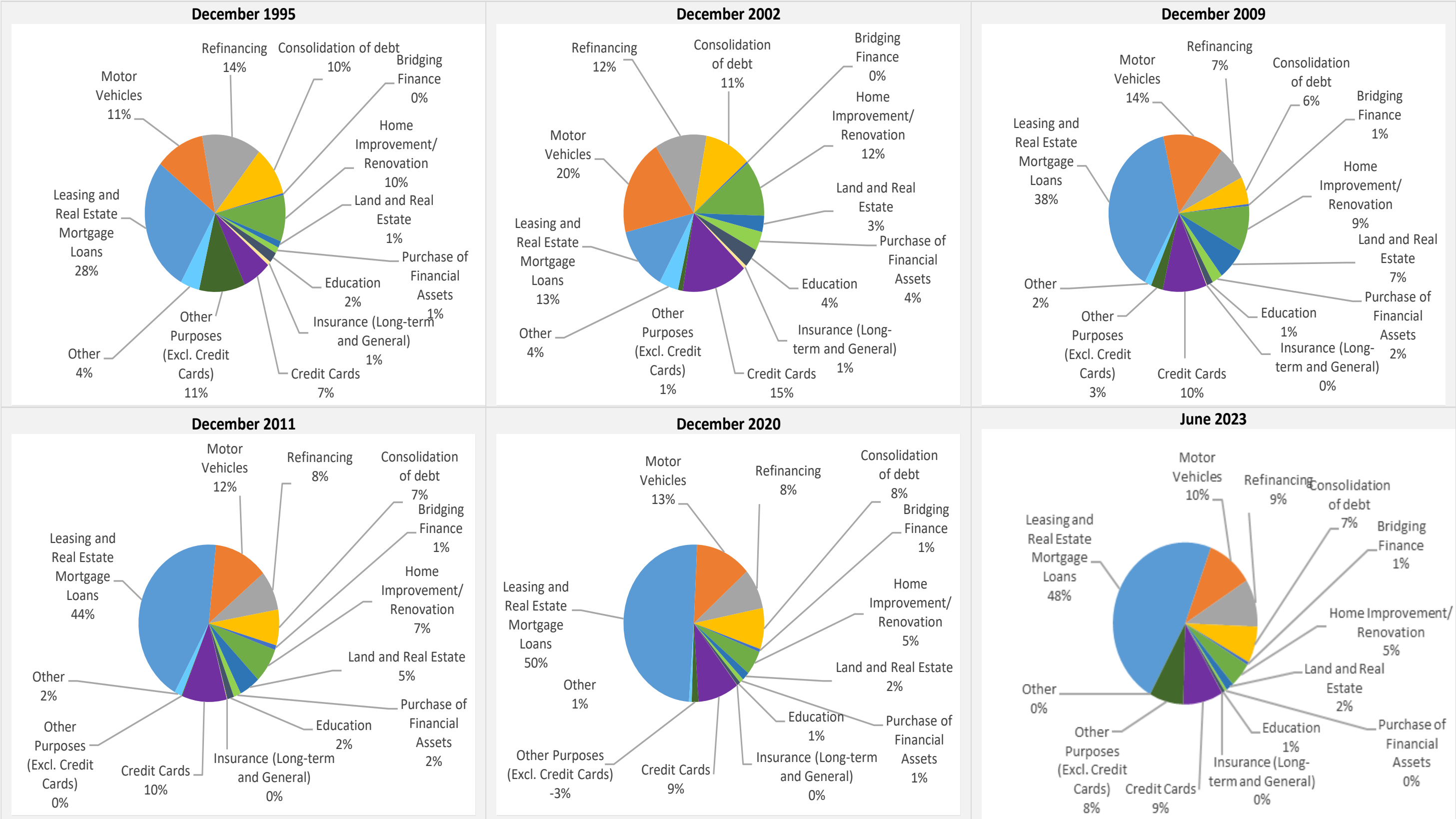
Source: Central Bank of Trinidad and Tobago

18 The rate at which the Central Bank of Trinidad and Tobago provides overnight collateralised funding to commercial banks.

Since 1995, there has been a subtle shift in the relative shares of corporate and consumer loans. Specifically, Leasing and Real Estate Mortgage lending has consistently constituted the bulk of overall consumer lending. Major loan categories since 1995 include 'Motor Vehicle' purchases, 'Refinancing', 'Debt Consolidation' and 'Credit Card' debt (Figure 5). Regarding corporate loans, the 'Finance, Insurance, and Real Estate' sector has always accounted for the lion's share of total loans, but since 2009, 'Leasing' and 'Real Estate Mortgage' loans to the commercial sector have become increasingly significant. Conversely, throughout time, the share of total loans that went to the 'Manufacturing' and 'Distribution' sector gradually decreased (Figure 6). The correlation between business lending and economic growth supports the view that commercial lending boosts a country's ability to produce goods and services, while consumer borrowing and the categories under which it is provided suggest that it is being used for non-productive purposes.

FIGURE 5

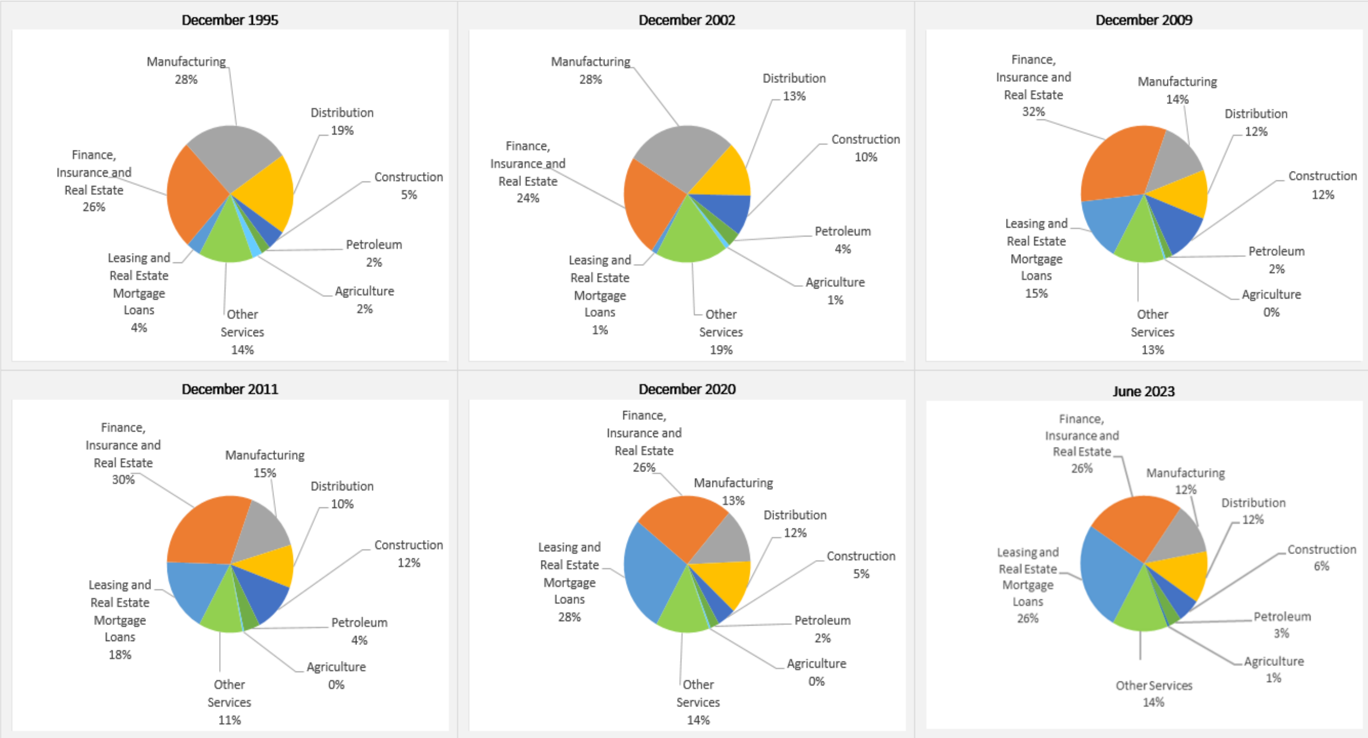
The Composition of Consumer Lending



Source: Central Bank of Trinidad and Tobago
Note: Other includes 'Medical', 'Travel', 'Electrical and Non-Electrical Appliances', 'Radios, Musical Instruments, etc'., 'Other Furniture and Furnishings' and 'Professional Services (Legal, Funeral etc.)'.

FIGURE 6

The Composition of Business Lending



Source: Central Bank of Trinidad and Tobago

Alternative Methods of Influencing Credit Allocation

The reopening of the local economy bolstered the rebound in bank credit. Still fragile from the recent pandemic lockdowns, credit imbalances could easily derail the recovery. Thus far, consumer bank credit has picked up in concerning areas deemed 'unproductive'. Compared to other lines of bank credit, these are more likely to spawn sectoral systemic risks if there are any sudden and deep downturns in the economic cycle. Consequently, for a more sustainable economic recovery, productive sectors should be prioritised. Directing credit to the business sector is expected to have a lower-inflationary effect since aggregate supply would be increased and would likely encourage investment spending and generate employment. Hence, this section of the paper explores instruments that prioritise building resilience via credit allocation management.

Contemporary Credit Management Tools

Starting with macroprudential tools as the first line of defence,[19] capital-based instruments and borrower-based instruments provide avenues for credit management. Compared to broader, traditional policy measures macroprudential tools are able to tackle specific macrofinancial vulnerabilities. Regardless of the tools used, it is likely that an unintentional discriminatory effect would occur as entities outside the Central Bank's purview will be excluded. As shown in Figure 1, locally, loans provided by credit unions are second to commercial banks. Given that credit unions are not regulated by the Central Bank and other shadow banking activity exists, the proposed macroprudential indicators would have no impact on consumer credit generated from those sectors.

Capital-based macroprudential tools tailored to credit management are expected to build loss absorption capacity in the system by smoothing the credit supply. Broad-based versions of capital tools build loss absorption capacity in the system, however smaller weaker sectors may be overlooked or overshadowed by stronger sectors, blinding areas of vulnerabilities in the system. Real estate sector shocks have inspired several works on sectoral-based tools. Across the globe, central banks' efforts to moderate real estate credit bubbles have pushed the adoption and widespread use of sectoral-based tools. With the goal of confining policy interventions to specific problem areas, sectoral countercyclical capital buffers (SCCyBs)[20], sectoral leverage ratios[21] and risk weight add-ons on specific customer loan categories may be more effective capital-based tools at mitigating any unwanted sectoral credit imbalances.[22]

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19 (Galati and Moessner 2013), (Gadanecz and Kaushik 2015), (Lim 2011), (Gadanecz and Kaushik 2015),
20 Jahn and Pirovano (2019) and Basel Committee on Banking Supervision (2019)
21 Common equity tier 1 capital as a ratio of sectoral exposure (Lang and Rusnák 2022).
22 Auer, Raphael, Alexandra Matyunina, and Steven Ongena. "The countercyclical capital buffer and the composition of bank lending." Journal of Financial Intermediation 52 (2022): 100965.https://www.sciencedirect.com/science/article/pii/S1042957322000183

Concentration limits are another tool that could be deployed. Adding limits to consumer loan concentrations could persuade banks to direct lending to other sectors such as the corporate sector. A further breakdown in specific areas of consumer credit can also be used; for example, limits on credit card exposures (unsecured loans) can temper new credit card accounts and/or the raising of consumers' credit card limits. Moreover, limits can be placed on uncollateralised loans granted by banks to consumers. While banks in Trinidad and Tobago do their due diligence and undertake a more conservative business model than some of their international counterparts, the increasing popularity of uncollateralised consumer lending can potentially stimulate credit demand for unproductive purposes.

However, there are potential drawbacks from deploying capital-based macroprudential tools. Firstly, according to Jahn and Pirovano (2019) tools such as countercyclical capital buffers further complicate the macroprudential framework. Secondly, tools such as buffers, ratios and add-ons could present an additional strain on banks. However, given the ample capital headroom (banking sector capital adequacy ratio is 16.7 per cent as at June 2023, with all banks over the 10 per cent minimum regulatory capital benchmark) tools such as buffers and add-ons are feasible, especially if applied to entities that are considered systemic. Additionally, such controls can also cause a shift to less risky assets, thereby circumventing these controls and minimising their impact on overall credit growth (Grace, Hallissey and Woods 2015). Though this may hamper the effect on overall credit supply, a favourable outcome is still achieved given that this may improve the quality of debt in the system.

On the borrower-end, several tools can be used to manage consumer credit while lowering borrower defaults. This approach builds resilience in both banks and borrowers. Popular tools include caps on loan-to-value (LTV) ratios, loan-to-income (LTI) ratios, debt service-to-income (DSTI) ratios and loan terms (namely caps on maturity periods). LTVs, LTIs, DSTIs and maturity caps inhibit unsustainable debt levels, as these ratios limit credit relative to specific variables (such as collateral values, consumer income and time). Similar to the other tools mentioned, central banks have predominantly used these tools to manage vulnerabilities in real estate lending. Among the list, LTIs are considered more stringent given incomes are stickier, particularly in comparison to real estate prices (Grace et al 2015). For Trinidad and Tobago, LTI and DSTI caps can help manage refinancing and debt consolidation lending, especially if a tiered system is applied (for example, different caps can be implemented for first time applicants versus returning clients that care currently utilising this service).

There are also drawbacks to using borrower-based tools. A major downside to these tools is that they have limited reach, given that they are directed to regulated entities only. This may hinder its impact on overall consumer lending as alternative sources would not suffer from these constraints. Also, unsecured lending options and/or excessive debt may be undertaken by borrowers to meet initial collateral requirements. Compared to capital-based measures, resilience is built incrementally as limits are applied to new lending rather than to the stock of loans. But, like sectoral capital tools, authorities are able to target specific areas of the banks' loan portfolio.

For monetary policy instruments, tackling credit imbalances can be taken from the price-end (the policy rate) or the supply-end (reserve requirements). At present, Trinidad and Tobago is at a preliminary stage in implementing a macroprudential framework, hence in the interim these tools will be more readily available to achieve stated objectives. Nonetheless, targeted repo rate reductions is a tool that Bank could consider to promote the allocation of credit. The Central Bank can explore the introduction of a target range for the repo rate, extending a lower repo rate for commercial banks engaged in higher lending to productive business sectors as opposed to excessive consumer lending. In this way the Central Bank incentivises commercial banks to grant more corporate loans. Additionally, targeted reserve requirement reductions are another way to channel credit; in this case, reserve requirements would be lowered for commercial banks that focus more on corporate lending than consumer lending. According to Melville and Persad (2019), the primary reserve requirement can be utilised to temper excessive loan growth, while the authors do not explore targeted reserve requirement reductions this consideration can be beneficial in directing credit, complementing the proposed suite of macroprudential credit management tools. Wei and Han (2020) discuss the use of targeted reserve requirement ratios in China, the authors explain that China utilises this policy to encourage financial institutions to direct credit to small and medium enterprises. Further, Bhimnathwala (1965) mentions the use of reserve requirements in a selective way, where banks could be permitted to include certain types of assets as a part of legal reserve requirements. This policy may induce the banks to invest more funds in directed areas.

Overall, success (balanced consumption spending and system resilience) is hinged on several factors, including business' credit appetite, banks' response, the speed of implementing the necessary regulatory adjustments[23] needed and the timing and amounts set on controls. Among the factors, the borrowing appetite of businesses and the possible reaction of banks' to measures are out of the Central Bank's immediate control.

In general, it should be noted that both macroprudential and monetary policy influence the same channels (Caruana 2015). Hence, careful consideration should be taken when synchronising tools with other macroeconomic policies and with each other. For example, the simultaneous use of certain instruments can overburden banks. This can have consequences for the stability of the system and overall economic growth.

23 (Jansen 2013)

Conclusion and Recommendations

Monitoring credit cycles has been key to avoiding financial imbalances in an economy. Currently, the post-pandemic recovery has stimulated credit in the local economy. Over 2022 to early 2023, business lending soared and consumer lending recovered thereafter. To manage excessive credit growth, the paper explored other policy options the Central Bank of Trinidad and Tobago could take to support the channeling of credit to sectors of strategic importance. To promote more growth-supportive lending in the economy, consumption lending needs to be managed to avoid credit excesses. A thorough analysis of central banks' experiences suggests the use of capital-based and borrower-based macroprudential tools and recalibrated monetary policy tools to alter banks' credit patterns. This approach is expected to moderate pro-cyclicality by building resilience and by influencing the intermediation process (that is, the terms and conditions and the supply of credit).

The assessment's key findings were that macroprudential rules are vital because they serve as a springboard for initiating directed credit lending without having an influence on general interest rates. Historically moral suasion has not succeeded in convincing banks to divert credit to more productive channels, apart from the directives provided to the commercial banks under the legal recourse afforded by the Central Bank Act. As a result, it is essential that macroprudential policies be implemented with the goal of enhancing the Central Bank's capacity to encourage commercial banks to direct funds to more productive uses. Although being readily available, monetary policy instruments are alone inadequate since they cannot be used to target certain lending streams without having a larger macroeconomic impact. Hence, a micro-level approach such as targeted reserve requirements, policy rates and sectoral macroprudential tools, offer hybrid approaches to tackling credit. Therefore, based on the analysis, the proposed credit management tools for Trinidad and Tobago include, sectoral countercyclical capital buffers; sectoral leverage ratios; risk weight add-ons on specific customer loan categories; sectoral concentration limits; caps on loan-to-value ratios; loan-to-income ratios; debt service-to-income ratios and loan terms; and targeted reserve requirements and repo rate.

Developing alternative financing avenues outside of bank-intermediated credit can also be impactful. Developing the local capital market can benefit a wide range of economic stakeholders. For the authorities, efforts to build up productive sectors will be captured, and the systemic importance of banks could be lessened as consumers, businesses and the Government would have new avenues for financing at their disposal.

Lastly, concerted efforts towards financial literacy programmes is also recommended as a more sustainable method to managing consumer credit. Financial literacy training raises the likelihood of borrower resilience, indirectly extending the reach of credit management efforts.

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