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ANNUAL ECONOMIC Survey

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Central Bank of Trinidad and Tobago
ANNUAL ECONOMIC SURVEY 2022

Review of Economic and Financial Developments

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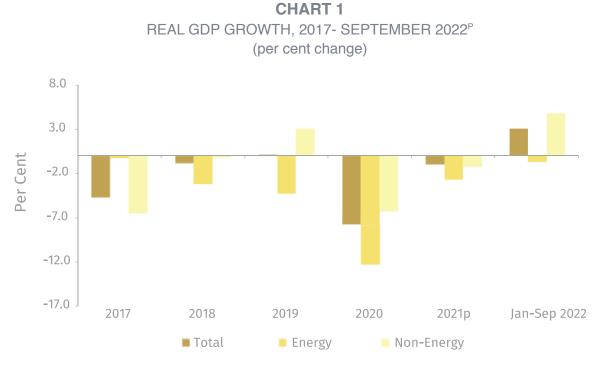
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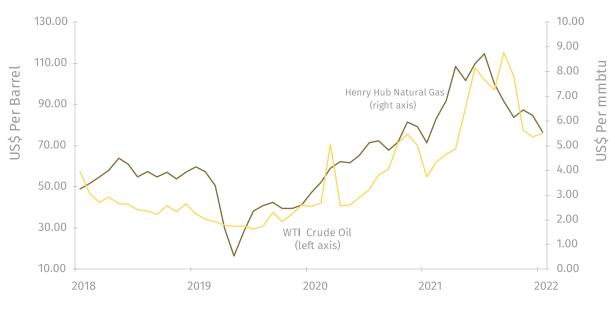
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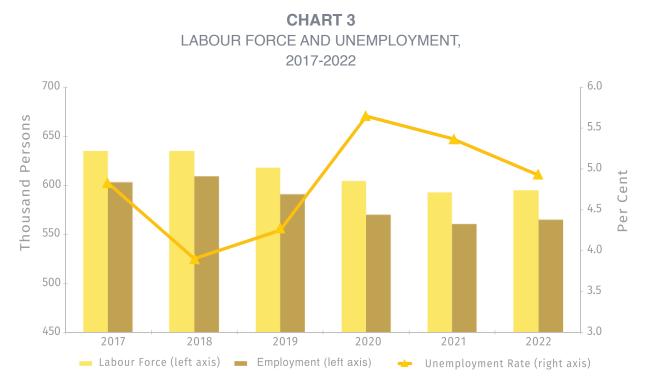


Source: Central Statistical Office; Annual data are compiled at Purchaser Prices, Quarterly data at Producer Prices p Provisional.

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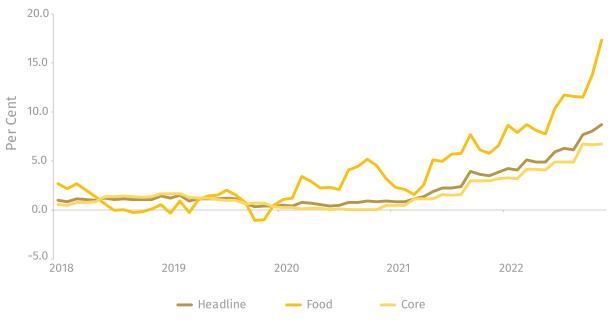


Source: Bloomberg

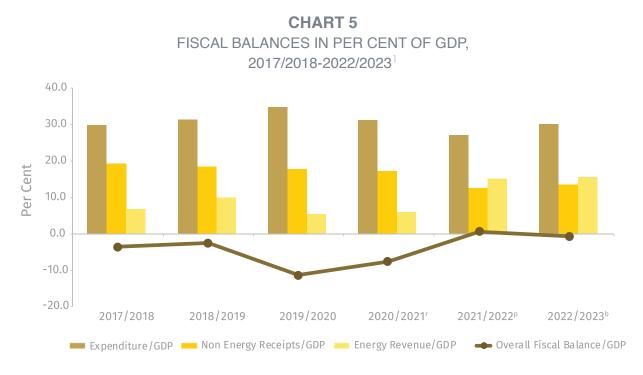


Source: Central Statistical Office

CHART 4 PER CENT CHANGES IN THE INDEX OF RETAIL PRICES, 2018-2022 (year-on-year per cent change)



Source: Central Statistical Office



Source: Ministry of Finance

1 GDP data used for ratios to GDP prior to FY2022 are sourced from the CSO; data for FY2022 are Central Bank estimates; data for FY2023 are based on Budget Estimates from the Ministry of Finance.

r Revised.

re Revised Estimates.

b Budgeted.

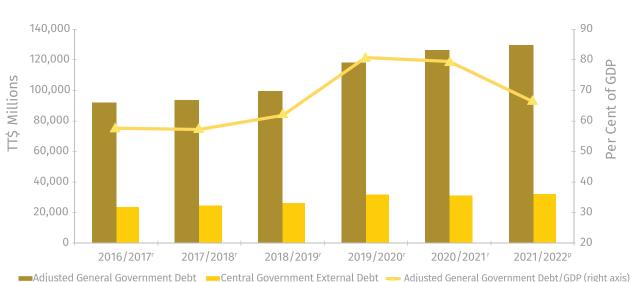


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Sources: Ministry of Finance and Central Bank of Trinidad and Tobago

NOTE: Adjusted General Government debt excludes all sterilised debt (OMO Bills, Treasury Notes and Treasury Bonds).

p Provisional.

r Revised.

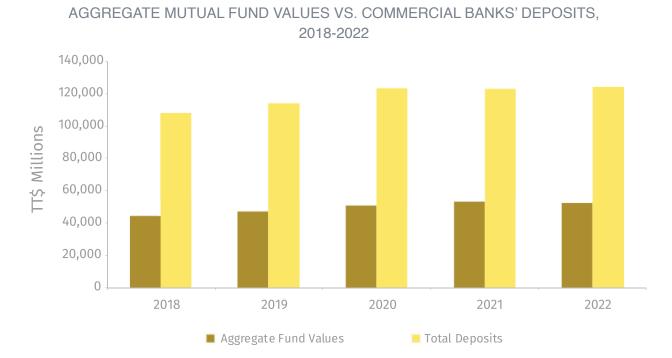
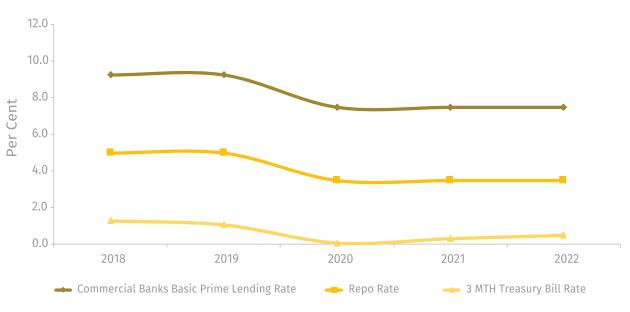


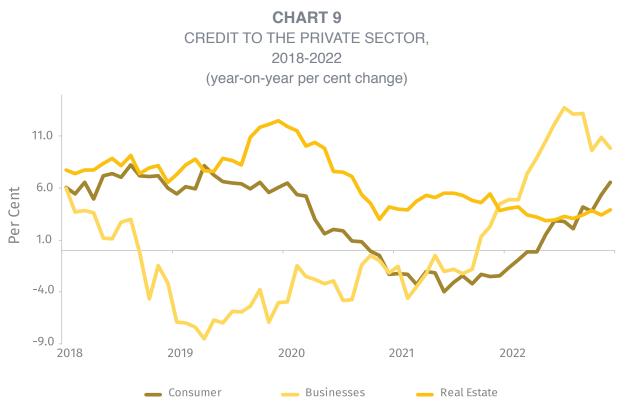
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Source: Central Bank of Trinidad and Tobago

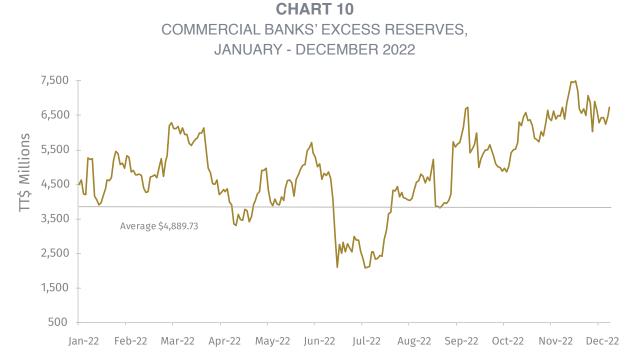
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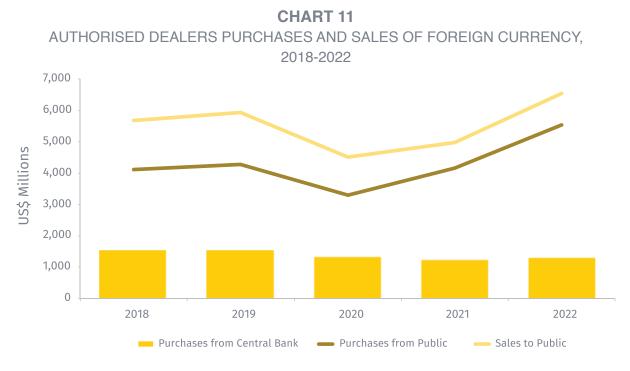
Source: Central Bank of Trinidad and Tobago



Source: Central Bank of Trinidad and Tobago



Source: Central Bank of Trinidad and Tobago



Source: Central Bank of Trinidad and Tobago

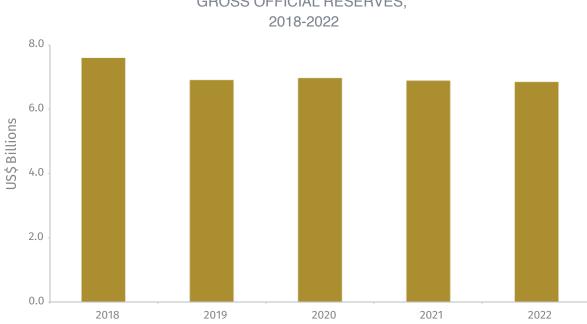


CHART 12 GROSS OFFICIAL RESERVES, 2018-2022

Source: Central Bank of Trinidad and Tobago

CHART 13 MONETARY POLICY ACTIONS, 2018-2022

Liquidity Management Measures

August 2018	The secondary reserve requirement was discontinued.			
March 2020	The primary reserve requirement on commercial bank deposits was decreased			

by 3 per cent to 14 per cent.

Central Bank Policy Rate Decisions

Jan 2018:	Repo rate maintained at 4.75 per cent.
Mar 2018:	Repo rate maintained at 4.75 per cent.
Jun 2018:	Repo rate increased to 5.00 per cent.
Sep 2018:	Repo rate maintained at 5.00 per cent.
Dec 2018:	Repo rate maintained at 5.00 per cent.
Mar 2019:	Repo rate maintained at 5.00 per cent.
Jun 2019:	Repo rate maintained at 5.00 per cent.
Sep 2019:	Repo rate maintained at 5.00 per cent.
Dec 2019:	Repo rate maintained at 5.00 per cent.
Mar 2020:	Repo rate decreased to 3.50 per cent.
Jun 2020:	Repo rate maintained at 3.50 per cent.
Sep 2020:	Repo rate maintained at 3.50 per cent.
Dec 2020:	Repo rate maintained at 3.50 per cent.
Mar 2021:	Repo rate maintained at 3.50 per cent.
Jun 2021:	Repo rate maintained at 3.50 per cent.
Sep 2021:	Repo rate maintained at 3.50 per cent.
Dec 2021:	Repo rate maintained at 3.50 per cent.
Mar 2022:	Repo rate maintained at 3.50 per cent.
Jun 2022:	Repo rate maintained at 3.50 per cent.
Sep 2022:	Repo rate maintained at 3.50 per cent.
Dec 2022:	Repo rate maintained at 3.50 per cent.

CHAPTER 1 Overview of Economic Conditions

ECONOMIC DEVELOPMENTS IN 2022

Global growth lost momentum in 2022 as the world economy navigated conflict in Eastern Europe. Russia's invasion of Ukraine in February 2022 and the ensuing war contributed considerable downward impetus, somewhat thwarting previous optimism for a strong rebound in global economic activity post the COVID-19 shock. Beyond the humanitarian crisis inflicted by the conflict, economic setbacks reverberated throughout the world economy, impacting commodity markets as well as trade and financial flows. In its April 2023 World Economic Outlook (WEO), the International Monetary Fund (IMF) estimated global output expanded by 3.4 per cent in 2022, 2.8 percentage points lower than the outturn in 2021.

In 2022, tensions in Eastern Europe helped to drive consumer prices which soared to record highs, driven especially by food and energy prices. Inflation rates were particularly high in Advanced Economies (AEs) but gradually trended downward by the second half of the year, with rates for Emerging Market and Developing Economies (EMDEs) also enduring significant upward pressures over the course of the year. The mounting inflationary pressures and the danger of a de-anchoring of inflation expectations prompted central banks to engage in aggressive monetary policy tightening, pushing borrowing costs to levels not seen since 2007. The tightened financial conditions in AEs had adverse spillover effects on EMDEs in the form of higher sovereign borrowing costs, increased debt servicing and an acceleration of capital outflows.

Slower growth was recorded in several AEs and EMDEs in 2022 as aggressive monetary policy to contain inflationary pressures constrained demand. The slowdown in growth primarily stemmed from the AEs, with the United States (US) (2.1 per cent), Euro area (3.5 per cent) and United Kingdom (UK) (4.0 per cent) all registering significant decelerations in growth in 2022 compared to 2021. Meanwhile, growth among the EMDEs also slowed, led by China, as these economies steered the added headwind of tightened financial conditions in addition to the dampening effects of the COVID-19 pandemic, which was yet to fully subside in a few countries. Growth in China eased to its second slowest pace in almost four decades amid renewed COVID-19 lockdowns. increased unemployment and continued challenges in the property sector. Regionally, economic recovery continued in Latin America and the Caribbean in 2022, albeit at a slower pace than in 2021, driven by elevated global commodity prices, a rebound in the services sector and growth in the region's main trading partners.

The Trinidad and Tobago economy was on a recovery path over the course of 2022, following two years of economic

contraction. Official data from the Central Statistical Office (CSO) indicate that Gross Domestic Product (GDP) at constant prices (real GDP) grew by 3.0 per cent during the first three quarters of 2022 compared to the corresponding period of the previous year. Growth was driven by increased output from the non-energy sector (4.7 per cent) which overshadowed a falloff in energy sector output (-0.7 per cent). Activity in the non-energy sector was boosted by strong performances in several sub-sectors including Manufacturing (Excluding Refining and Petrochemicals) and Wholesale and Retail Trade (Excluding Energy). On the other hand, reductions in the Condensate Extraction and Asphalt sub-sectors drove the decline in output from the energy sector. The Central Bank estimates that the momentum in economic activity slowed during the fourth quarter of 2022. However, the economy's job creation capacity improved during the year. The unemployment rate declined to 4.9 per cent in 2022 compared with 5.4 per cent in 2021 with new hires mainly in the Community, Social and Personal as well as the Construction (including Electricity and Water) sectors. Labour retrenchments also declined by 38.1 per cent in 2022, while the placement of job advertisements in the print media increased by 13.0 per cent (Table 1).

Inflationary pressures grew significantly as the year progressed owing mainly to external supply-side impulses. Food and energy prices were particularly impacted. Regarding food prices, the United Nations Food and Agriculture Organization (FAO) Food Price Index increased 14.3 per cent in 2022 led by significant increases in the Dairy (19.5 per cent) and Cereals (17.9 per cent) sub-indices. West Texas Intermediate (WTI) crude oil prices increased by 38.9 per cent to average US\$94.43 per barrel while US Henry Hub natural gas prices increased by 65.6 per cent to average US\$6.38 per million British Thermal Units (mmbtu). Following a relatively low average of 2.1 per cent in 2021, headline inflation increased to 5.8 per cent in 2022. The uptick in headline inflation was primarily driven by food inflation which increased by 10.4 per cent in 2022 compared to 4.4 per cent in 2021, while core inflation accelerated to 4.7 per cent from 1.5 per cent.

The Central Bank continued to adopt an accommodative monetary policy stance in 2022. The Bank maintained the Repo rate at 3.50 per cent throughout 2022. Credit demand expanded in 2022 following the rollback of COVID-19 pandemic restrictions and this caused interest rates to drift upwards. The TT 91-day OMO Treasury Bill rate and the commercial banks' weighted average lending rate both gained momentum in 2022. Liquidity in the domestic banking system declined over the year given strong growth in domestic borrowing and a pick-up in economic activity.

Strengthened energy prices boosted energy revenues, leading to an improved fiscal performance for the fiscal year (FY) ending September 2022. Provisional estimates from the Ministry of Finance indicate that the Central Government fiscal accounts recorded a surplus of \$1.1 billion in FY2021/22, a much better outturn compared to the budgeted deficit of \$9.1 billion and the deficit of \$12.4 billion recorded in the previous year. Despite a notable fall-off in non-energy receipts, energy revenue more than tripled in FY2021/22, reaching its highest level since 2014. While Adjusted Government Debt outstanding grew in nominal terms to \$129.7 billion at the end of September 2022, from \$126.7 billion at the end of September 2021, debt as a share of GDP fell from 79.5 per cent of GDP to 66.5 per cent of GDP over the same period.

In the first nine months of 2022, Trinidad and Tobago's current account recorded a surplus of US\$4.4 billion, indicative of the strength in international commodity prices which resulted in healthy energy export

earnings. The net goods trading position more than doubled in value over the first nine months of 2022 when compared to the same period of 2021, primarily due to the increase in export earnings which outweighed the simultaneous growth in imports. Meanwhile, the financial account recorded a net outflow, largely on account of higher intercompany lending and to a lesser extent, increased holdings of foreign debt securities. Over the course of the year, the country's gross official reserves declined by US\$47.2 million to US\$6,832.4 million, equivalent to 8.6 months of import cover. The local market for foreign currency remained tight in 2022 despite a large increase (33.3 per cent) in foreign currency purchases from the energy sector.

	2018	2019	2020	2021	2022
Real GDP Growth (%) (2012 = $100)^1$	-0.9	0.1	-7.7	-1.0	3.0*
Energy Sector	-3.2	-4.3	-12.2	-2.7	-0.7*
Non-Energy Sector	-0.2	3.0	-6.2	-1.2	4.7*
Agriculture, Forestry and Fishing	-9.6	-35.6	31.1	-16.5	-9.2*
Trade and Repairs	-3.0	5.6	-11.4	-4.7	3.8*
Construction	-1.2	-5.8	-12.9	3.9	-1.1*
Financial and Insurance Activities	0.1	8.5	3.9	3.0	-0.8*
Inflation Rate (%) ²					
(period average)	1.0	1.0	0.6	2.1	5.8
(end of period)	1.0	0.4	0.8	3.5	8.7
Unemployment Rate (%) ³	3.9	4.3	5.7	5.4	4.9
(Per Ce	ent of GD	P)			
Overall Central Government Operations Surplus(+)/Deficit(-), (end of fiscal year)	-3.5	-2.5	-11.4	-7.7	0.6
Adjusted General Government Debt, (end of fiscal year) ⁴	57.3 ^r	61.9 ^r	80.7 ^r	79.5 ^r	66.5°
Central Government External Debt, (end of fiscal year)	15.1 ^r	16.3 ^r	21.5 ^r	19.5 ^r	16.4 ^p
Balance of Payments Current Account Balance Surplus(+)/Deficit(-)	6.9	4.3	-6.4	11.9	20.3*
Memorandum Items:					
Central Government External Debt in US\$Mn (end of fiscal year)	3,695.8	3,939.4	4,707.3	4,659.4	4,782.0
Debt Service Ratio (fiscal year; %) ⁵	2.2	2.9	9.7	2.8	1.8
W.T.I. (US\$/barrel, annual average)	64.8	57.0	39.3	68.0	94.4
Henry Hub (US\$/mmbtu, annual average)	3.2	2.6	2.0	3.9	6.4
Net Official Reserves (US\$ Mn) ⁶	7,575.0	6,929.0	6,953.8	6,879.6	6,832.4

TABLE 1 TRINIDAD AND TOBAGO SELECTED ECONOMIC INDICATORS

Sources: Central Bank of Trinidad and Tobago, Central Statistical Office and Ministry of Finance

1 Real GDP growth rates are sourced from the Central Statistical Office.

2 Changes in the Index of Retail Prices (RPI), January 2015 = 100.

3 This represents the average of the four quarters.

4 Includes the external and internal debt of the Central Government (net of sterilised debt), as well as non self-serviced guaranteed debt of public entities.

5 This is defined as the ratio of external Central Government debt service to exports of goods and non-factor services.

6 International reserves have been revised to include Trinidad and Tobago's reserve position in the IMF. International reserves are defined as external assets that are readily available to and controlled by monetary authorities for direct financing of payments imbalances, for indirectly regulating the magnitudes of such imbalances through intervention in exchange markets and for other purposes. Typically, they include securities, gold, IMF special drawing rights (SDRs), a country's holding of foreign currency and deposits, reserve position in the IMF, and other claims (Balance of Payments Manual 6th Edition Paragraph 6.64).

* For the period January to September 2022.

r Revised.

p Provisional.

OUTLOOK FOR 2023

Global economic growth is expected to be subdued in 2023. Continued social and economic turbulence emanating from the war in Ukraine, ongoing monetary policy tightening to combat inflationary pressures and rising financial vulnerabilities, evidenced by the failure of a few US banks in early 2023, are expected to weigh on growth over the coming months. The IMF, in its April 2023 WEO Update, forecasts a slowdown in economic activity in 2023 to 2.8 per cent, roughly half a percentage point lower than the previous year. EMDEs are poised to be the main engines of growth, with an expansion of 3.9 per cent, boosted by the ramp up of activity in China in the last two months of 2022 following the abandonment of the zero-COVID policy. In AEs, output is projected to fall from 2.7 per cent in 2022 to 1.3 per cent in 2023. However, cooling inflationary pressures and improving labour market conditions toward the end of 2022 and into 2023 provide some basis for cautious optimism for global prospects. Also, as focus oscillates to safeguarding US financial stability, there is growing expectation that the pace of US monetary policy tightening will ease in the coming months. In the face of these factors, policymakers, especially in the AEs, face the task of balancing monetary tightening to combat inflation while supporting economic recovery in their economies. However, key sources of economic distress can stem from an escalation of the war in Ukraine, persistently high inflation rates and second-round implications for wage growth, building systemic risks, and a stalling of China's economic recovery.

The domestic economy is expected to improve in the short run, bolstered by activity in both the energy and non-

energy sectors. The energy sector is likely to be boosted by a few recent project startups while the non-energy sector is expected to benefit from increased business activity and continued resurgence of consumer demand. Growing aggregate demand is also likely to foster a gradual improvement in labour market conditions in 2023. However, inflationary stimuli are likely to persist locally in the nearterm given lingering supply-side issues and lagged transmission effects from key source markets. Both the fiscal and external accounts are expected to benefit from elevated, albeit softening energy prices and increased diversification of markets for non-energy products. Meanwhile, Trinidad and Tobago's net official reserves are expected to remain resilient against external vulnerabilities, staying above conventional thresholds of reserve adequacy.

Though there is generally a positive outlook for the local economy over the coming months, downside risks persist. These risks include an escalation of the war in Ukraine which can further hamper global supply chains and give renewed impetus to domestic inflation, a rapid softening in commodity prices if global growth falters and a volatile industrial relations climate given a number of outstanding collective bargaining agreements. Despite these risks, improving economic prospects, the expected deceleration in domestic inflation by the latter months of 2023 and the country's significant financial buffers provide some degree of space for adjustment. In order to remain competitive in the global environment, a focused and decisive approach to tackling long-standing structural reforms is required.

CHAPTER 2 Domestic Economic Activity

Quarterly Gross Domestic Product

Domestic economic activity showed signs of recovery over the course of 2022. According to data from the Central Statistical Office (CSO), Gross Domestic Product (GDP) at constant prices (real GDP) grew by 3.0 per cent during the first three quarters of 2022 compared to the corresponding period of the previous year (Table 2). Growth was led by activity in the non-energy sector which overshadowed a falloff in energy sector activity. Non-energy sector output grew 4.7 per cent over the period, compared to a marginal decline of 0.7 per cent in energy sector output over the same period. In the non-energy sector, growth came from several sub-sectors including Wholesale and Retail Trade (Excluding Energy) and Manufacturing (Excluding Refining and Petrochemical), while energy sector output was weighed down by declines in the Condensate Extraction, Asphalt and Manufacture of Petrochemicals sub-sectors.

Preliminary data from the Central Bank's Quarterly Index of Real Economic Activity (QIEA)1 suggest that energy sector activity experienced marginal improvements in the fourth guarter of 2022. During the period, activity in the energy sector was supported by improved natural gas production (1.2 per cent), as production continued to benefit from the recent start-up of several projects. Shell delivered first gas from its Colibri project in the first half of 2022, following the start-up of the Barracuda project in the second half of 2021. Production was further enhanced by bpTT's Matapal project which came onstream in September 2021, and DeNovo's Zandolie project which produced first gas in July 2022. Despite the improved natural gas output, activity in the Refining sector declined marginally, reflecting a falloff in the production of natural gas liquids (NGLs) (20.7 per cent) which overshadowed an uptick in the production of liquefied natural gas (LNG) (7.6 per cent). The production of petrochemicals improved over the period however, as a fall in ammonia production (7.3 per cent) was outweighed by improved methanol output (14.1 per cent).

Meanwhile, QIEA estimates suggest that non-energy sector economic activity declined in the fourth quarter of 2022.

¹ The CSO is the official source of National Accounts (GDP) data in Trinidad and Tobago. Separately, the Bank compiles a Quarterly Index of Real Economic Activity (QIEA) to gauge short-term economic activity. The industry classification conforms to the International Standard Industrial Classification Revision 4 (ISIC Rev.4). The QIEA differs from the CSO's national accounts statistics in terms of methodologies and coverage. The QIEA is based on production indicators, excludes price effects and does not comprehensively cover all sub-industries measured by the CSO. In 2019, the QIEA was rebased from a 2010 to 2012 base year and the classification system was migrated from the Trinidad and Tobago System of National Accounts to the International Standard Industrial Classification, Revision 4. Under this classification, the output of crude oil and natural gas are included in Mining and Quarrying, the production of LNG, NGLs and petrochemicals are included in Manufacturing, and the retail sale of automotive fuels is included in Wholesale and Retail Trade. For comparison purposes, the sectoral breakdown of real economic activity into Energy and Non-energy, presented previously is maintained. For further details on the QIEA methodology and differences in the data see Box 2 of the January 2020 Economic Bulletin (pages 15-17); Box 2 of the March 2017 Economic Bulletin (pages 19-20); and Public Education Statement – November 2016. See link to the CSO's quarterly National Accounts (GDP) data – National Accounts: https://cso.gov.tt/wpcontent/uploads/2021/09/Quarterly-GDP-Summary-Statistics.xlsx.

Significant declines in local sales of cement and production of mined aggregates in the fourth quarter suggest reduced economic activity in the Construction sector compared to the corresponding quarter of the previous year. Indicators also suggest that the Manufacturing (Excluding Refining and Petrochemicals) sector saw lower activity in the fourth quarter of 2022. The Manufacturing sector remained with significant spare capacity throughout 2022. Capacity utilization within the industry averaged 61.1 per cent in 2022, a marginal decline from the previous year (Table 3). While improvements were noted in the Food, Beverages and Tobacco Products (2.5 per cent) and Other Manufactured Products (1.7 per cent) sub-sectors, they were offset by declines in the Textiles, Clothing, Leather, Wood, Paper and Printing (5.9 per cent) and Chemical Products (2.1 per cent) sub-sectors. Elsewhere, indicators point to declines in the Electricity and Water (Excluding Energy) and Agriculture sectors. The reduced activity in the Agriculture sector was on account of a falloff in production of non-perennial crops such as cabbage, cucumber, melongene and pumpkin. The Financial and Insurance Activities sector is also estimated to have declined, reflecting a reduction in the stock of investments in the banking sector.

Expansion was evident in a few non-energy sectors despite the decline in overall activity. The Transportation and Storage sector continued to display strong year-onyear improvements, reflecting an uptick in air transport. Increases were also estimated in the Real Estate and Wholesale and Retail Trade (Excluding Energy) sectors. This was supported by an improvement in the Central Statistical Office Index of Retail Sales in the fourth quarter of 2022 (9.5 per cent). Growth in the Retail Sales Index was driven by increases in the Textiles and Wearing Apparel (18.5 per cent); Supermarkets and Groceries (14.6 per cent); and Construction Materials and Hardware (7.3 per cent) sub-sectors.

TABLE 2GROSS DOMESTIC PRODUCT AT CONSTANT 2012 PRICES/ PER CENT CHANGE /

	2018	2019	2020	2021	Jan to Sep 2022 ^p
GDP	-0.9	0.1	-7.7	-1.0	3.0
Energy	-3.2	-4.3	-12.2	-2.7	-0.7
Non-Energy	-0.2	3.0	-6.2	-1.2	4.7
Construction	-1.2	-5.8	-12.9	3.9	-1.1
Wholesale and Retail Trade (Exc. Energy)	-3.4	6.0	-11.3	-8.4	4.4
Manufacturing (Exc. Refining and Petrochemical)	7.4	7.8	-5.2	8.5	16.7
Financial and Insurance Activities	0.1	8.5	3.9	3.0	-0.8

Source: Central Statistical Office

Note: Annual GDP are compiled at Purchaser Prices; Quarterly GDP at Producer Prices. p Provisional.

TABLE 3 MANUFACTURING SECTOR CAPACITY UTILISATION RATE

	2018	2019	2020	2021	2022
Manufacturing	64.6	64.8	63.3	61.2	61.1
Food, Beverages and Tobacco Products	69.3	71.1	69.1	65.0	66.6
Textiles, Clothing, Leather, Wood, Paper and Printing	59.8	59.5	55.4	56.6	53.2
Chemical Products	58.8	57.3	54.5	55.5	54.3
Other Manufactured Products	64.8	62.1	70.0	64.8	65.9

Source: Central Bank of Trinidad and Tobago p Provisional.

BOX 1: Energy Sector Developments

Domestic Fuel Price Adjustments

In 2022, the price of domestic fuel was increased on two separate occasions. In April, the Minister of Finance announced the partial liberalisation of fuel prices to take effect from April 19. As a result, the price of premium gasoline was increased by \$1 to \$6.75 per litre; super gasoline by \$1 to \$5.97 per litre; diesel fuel by 50 cents to \$3.91 per litre and kerosene by \$2 to \$3.50 per litre. Subsequently on September 26, the price of premium gasoline was increased by \$1 to \$7.75 per litre; super gasoline by \$1 to \$6.97 per litre; diesel fuel by 50 cents to \$4.41 per litre; and kerosene by \$1 to \$4.50 per liter. The increase in fuel prices was intended to curb Government's spending on the fuel subsidy in light of escalating crude oil prices.

NGC Forged Significant Strategic Partnerships

In January, the National Gas Company of Trinidad and Tobago (NGC) signed a Heads of Agreement with Shell to start the pre-Front End Engineering Design (pre-FEED) phase for the processing of Manatee gas via NGC's Beachfield Facility. The field, part of the Loran-Manatee field which straddles the maritime borders of Trinidad and Tobago and Venezuela, has an estimated 2.7 trillion cubic feet of natural gas reserves. Parties involved indicated that production could begin as early as 2025 with output starting at 350 million standard cubic feet per day (mmscf/d), ramping up to 700 mmscf/d thereafter.

In February, NGC and Proman entered into a partnership to lift methanol from the Methanol Holdings Trinidad Ltd (MHTL) complex on the Point Lisas Industrial Estate. The arrangement gave NGC access to MHTL's methanol which bolstered the company's commodity and trading portfolio as well as expanded its reach into international methanol markets. The NGC also deepened its cooperation with NewGen Energy in August with the signing of a non-binding Heads of Agreement (HOA). The agreement outlined the framework for the establishment of Binding Definitive Agreements between the relevant parties, to work collaboratively to further evaluate the development of NewGen's hydrogen production facility. This will support the development of the US\$250 million NewGen hydrogen production facility in Point Lisas.

In September, NGC signed a gas supply contract with bpTT. According to bpTT officials, the contract will underpin future upstream investment decisions and help contribute to the longevity of the country's petrochemical industry.

New Natural Gas Production

In July, DeNovo Energy announced the delivery of first gas from its Zandolie field in the Gulf of Paria. The unmanned facility is DeNovo's second offshore development to be completed in Block 1(a). At a cost of US\$52 million, Zandolie is a single-well platform with a nameplate capacity of 40 million standard cubic feet per day (mmscf/d). The platform was fabricated locally, and incorporates integrated wind and solar power technology which supplies 100 per cent of the facility's power requirement.

BOX 1: Energy Sector Developments (Continued)

In October, Touchstone Exploration started producing gas from its on-shore Coho facility. The facility is capable of producing 24 mmscf/d, which will be sold to NGC pursuant to a natural gas sales agreement executed in December 2020. Through a combination of additional drilling and well optimisation, the Coho-1 well has the potential to add incremental production volumes to domestic natural gas supplies. Then, in November, bpTT announced that its Cassia C development delivered first gas. This project enabled the company to access low pressure gas resources from the Greater Cassia Area. The facility is expected to produce, at peak, 200 to 300 mmscf/d of gas, which will go towards meeting the company's gas supply commitments.

Investment and Activity Show Promise

The Trinidad and Tobago deep water bid round closed on June 2, 2022 after its launch on December 3, 2021. Seventeen offshore blocks were offered with four receiving bids from a consortium of BP Exploration Operating Company Limited and BG International Limited. Successful bidders were expected to be announced in the second half of 2022, but negotiations between the Government and the bidders are still ongoing. In July, the Ministry of Energy launched the 2022 onshore and nearshore competitive bid round. A total of 11 blocks, located in the central range, the southern range as well as in the southern basin, were put on offer with a closing date of January 9, 2023 and successful bidders are expected to be announced in April 2023.

In September, bpTT confirmed its intent to proceed with developing its Cypre offshore gas project. Following a decision to accelerate the sanctioning of this project, drilling is due to commence in 2023 and first gas from the facility is expected in 2025. At peak, the development is expected to deliver 250-300 mmscf/d of gas, which will go towards satisfying bpTT's existing gas supply commitments.

In November, bpTT announced the start of a drilling programme in its Mango acreage. The first phase of the programme involves development drilling of three wells in the Mango field and one well in the Savonette field. If successful, these gas resources will be processed through the existing Mango and Savonette production platforms and could add production in early 2023. The second phase of the drilling programme includes the potential for three additional wells in the Angelin field.

Proman pledged to invest US\$1.1 billion in Trinidad and Tobago over the next decade. The company is the largest local producer of methanol and its operations in Trinidad and Tobago include 14 petrochemical plants. The company indicated that the pledged investment will be targeted towards various objectives including major plant maintenance turnarounds at the Point Lisas Estate as well as safety, reliability and greenhouse-gas-reduction initiatives.

CHAPTER 3 Labour Market

UNEMPLOYMENT

Concomitant with improved domestic economic activity, the unemployment rate dipped slightly in 2022. The unemployment rate decreased to an average of 4.9 per cent in 2022, down from an average of 5.4 per cent in 2021 (Table 4). Notably, the average number of persons with jobs increased by 4.9 thousand persons over the period. The labour force also expanded in 2022 (by 2.4 thousand persons), contributing to a labour force participation rate² of 55.0 per cent, a marginal increase from 54.8 per cent in 2021. Employment grew in the Community, Social and Personal Services (5.3 thousand jobs), Construction (including Electricity and Water) (3.9 thousand jobs), Wholesale and Retail Trade and Restaurants and Hotels (1.3 thousand jobs) and Transport, Storage and Communication (1.7 thousand jobs) sectors (Table 5). Job losses were however recorded in 2022, with most occurring in the Agriculture (5.0 thousand jobs), Petroleum and Gas (2.3 thousand jobs), Finance, Insurance and Real Estate (1.4 thousand jobs), and Manufacturing (including Mining and Quarrying) (1.2 thousand jobs) sectors. In terms of gender, the female unemployment rate averaged 5.6 per

cent in 2022 (with a participation rate of 47.6 per cent), while the male unemployment rate was 4.4 per cent (with a participation rate of 62.7 per cent). The youth (persons aged 15-24 years old) unemployment rate (14.1 per cent) continued to be disproportionately higher than the national average.

Trends in supplemental labour market data also pointed to generally improved labour market conditions in 2022. According to retrenchment notices³ reported to the Ministry of Labour, 905 persons were retrenched during 2022, compared to 1,462 persons during 2021, a reduction of 557 persons. Although this signals an improvement, it should be noted that reported retrenchments do not include job losses due to business closures. Notably in 2022, the Telecommunications Services of Trinidad and Tobago (TSTT) announced the retrenchment of over 400 workers in May as part of a restructuring exercise, and Unilever Caribbean Limited (UCL) retrenched 100 workers in July when the company closed its local manufacturing plant. Most of the reported retrenchments during 2022 occurred in the Transport, Communication and Storage (457 persons), Finance, Insurance and Real Estate (239 persons) and Manufacturing (149 persons) sectors. Meanwhile, the daily average job advertisements published in the print media⁴ (an indicator of labour demand) increased 13.0 per cent in 2022, implying a potential recovery in labour demand conditions.

² The CSO defines the labour force participation rate as the proportion of the non-institutional population that is economically active (i.e., the proportion of the working-age population (15 years and older) that is either employed or actively seeking employment).

³ Retrenchment refers to the termination of employment of a worker at the initiative of an employer for the reason of redundancy according to the Retrenchment and Severance Benefits Act (No. 32 of 1985). The Act states that, "where an employer proposes to terminate the services of five or more workers for the reason of redundancy, he shall give formal notice of termination in writing to each involved worker, to the recognised majority union and the Minister of Labour". If fewer than five employees are terminated, employers are not obligated to report to the Ministry. This indicator for job separation is therefore limited insofar as it only includes registered retrenchment notices, and does not capture other forms of job separation, especially the non-renewal of contracts of temporary or short-term workers. Furthermore, reports of job losses at establishments cannot be equated with an equal rise in the unemployment rate. Data on the labour market are not collected from firms and other establishments, but households via the Continuous Sample Survey of Population (CSSP). Moreover, persons who have been retrenched or who have lost their jobs otherwise (expired contract, retired, etc.) and have not sought re-employment during the reference period are not classified as unemployed.

TABLE 4LABOUR STATISTICS, 2018-2022/ THOUSANDS /1

	2018	2019	2020	2021	2022
Non-Institutional Population					
- 15 years and over	1,072.4	1,076.4	1,079.7	1,080.2	1,080.7
Labour Force	633.9	617.3	603.8	592.2	594.6
Persons with Jobs	609.1	591.1	569.8	560.4	565.3
Persons without Jobs	24.9	26.3	34.1	31.8	29.3
Participation Rate (%)	58.7	57.4	55.9	54.8	55.0
Male	68.2	66.1	64.8	63.1	62.7
Female	49.3	48.4	47.2	46.8	47.6
Unemployment Rate (%)	3.9	4.3	5.7	5.4	4.9
Male	3.2	3.7	5.4	4.8	4.4
Female	4.9	5.0	6.0	6.1	5.6

Source: Central Statistical Office

1 Numbers may not sum due to rounding.

TABLE 5 THE SECTORAL DISTRIBUTION OF EMPLOYMENT¹

	2018		2019		20	2020		2021		2022	
	(000 s)		(000 s)		(000 s)		(000 s)		(000 s)	%	
Agriculture	23.1	3.8	20.3	3.4	28.1	4.9	26.8	4.8	21.9	3.9	
Petroleum and Gas	13.7	2.2	11.3	1.9	12.8	2.2	12.1	2.2	9.8	1.7	
Manufacturing (including Mining and Quarrying)	48.2	7.9	44.9	7.6	35.9	6.3	40.8	7.3	39.6	7.0	
Construction (including Electricity and Water)	88.7	14.6	83.2	14.1	69.9	12.3	68.7	12.3	72.7	12.9	
Transport, Storage and Communications	38.6	6.3	37.5	6.3	35.4	6.2	33.1	5.9	34.8	6.1	
Other Services	396.7	65.1	393.9	66.6	387.7	68.0	379.0	67.6	386.8	68.4	
Of which:											
Wholesale and Retail	121.7	20.0	111.6	18.9	111.2	19.5	104.7	18.7	106.0	18.8	
Community, Social and Personal Services	207.2	34.0	212.4	35.9	212.6	37.3	207.6	37.1	215.1	38.1	
Finance, Insurance and Real Estate	64.1	10.5	64.8	11.0	60.1	10.6	63.4	11.3	62.0	11.0	
Not Classified	3.7	0.6	5.3	0.9	3.8	0.7	3.3	0.6	3.6	0.6	
Total Employment	609.0	100.0	591.1	100.0	569.8	100.0	560.4	100.0	565.3	100.0	

Source: Central Statistical Office

1 Numbers may not sum due to rounding.

⁴ This indicator is constructed by the Central Bank using the number of employment vacancies (both in the main pages and the classifieds) advertised in the Daily Express, Newsday and Guardian newspapers.

LABOUR PRODUCTIVITY

During the first three quarters of 2022, labour productivity in the non-energy sector improved 157.1 per cent (year-on-year), reflecting higher domestic production levels alongside a slight increase in 'man-hours' worked. Domestic production in the non-energy sector, as measured by the Index of Domestic Production, increased by 160.9 per cent (yearon-year) for the first three quarters of 2022. This occurred alongside a marginal increase (1.5 per cent) in the Index of Hours Worked (Appendix Table A.8 and A.9). The largest domestic production increases over the period occurred in the assembly-type and related products⁵ (1,067 per cent), drink and tobacco (102.9 per cent) and food processing (53.0 per cent) industries. More specifically, these increases were driven by significant growth in the production of metal furniture (1,622.4 per cent), alcoholic beverages (95.6 per cent), grain and feed (13.9 per cent), and processed fruit and vegetables (96.1 per cent), respectively. However, lower levels of production in the textiles and garments (4.0 per cent) and printing and publishing (9.8 per cent) industries tempered these increases. Meanwhile, the increase in hours worked was concentrated in the water generation (6.7 per cent), chemicals (3.0 per cent), food processing (2.5 per cent), and textiles and garments (1.3 per cent) industries.

Conversely, productivity in the energy sector declined, driven mainly by a drop in domestic production in both the midstream and downstream industries. During the first nine months of 2022, the Index of Domestic Production recorded declines of 22.7 per cent and 5.0 per cent in the petrochemicals (downstream) and natural gas refining (midstream) industries, respectively (Appendix Table A.9). Meanwhile, 'manhours' worked in the petrochemicals industry increased 7.5 per cent, while reductions were recorded in the exploration and production of oil and natural gas industry (4.3 per cent). 'Man-hours' worked in the oil and natural gas refining industry remained stable over the period.

SECTORAL WAGES

Wage growth remained modest in 2022. Collective agreements registered with the Industrial Court of Trinidad and Tobago showed that the median wage increase measured 2.0 per cent in 2022, the same as in 2021. This was also a deceleration from 2.8 per cent recorded in 2020, and 3.0 per cent in each of the previous three years (2017 - 2019). Wage increases for 2022 ranged between 2.0 per cent and 3.0 per cent compared with a range of 1.0 per cent to 3.0 per cent in 2021. The manufacturing sector received

⁵ The assembly-type and related products sub-industry comprises motor vehicle parts; batteries, mufflers and tyres; office machinery and electrical apparatus; ship boat building and repairs; metal building materials; iron, steel and related products; metal furniture; metal containers; and all other metal products. The production of metal furniture saw significant growth in 2022, particularly for filing cabinets, cupboards, bookcases, lockers, chairs, tables, desks and credenzas.

the highest average wage increase of 2.8 per cent, while the financial and insurance activities, wholesale and retail trade, and other service activities sectors all registered increases of 2.0 per cent (**Table 6**).

The Index of Average Weekly Earnings (AWE)⁶ reflected a minor increase in nominal wages during the first nine months of 2022. The AVVE Index increased by 2.2 per cent compared with a decrease of 0.2 per cent in the corresponding period of 2021. In the energy sector, earnings in the petrochemicals sub-industry increased by a sizable 12.0 per cent during the first nine months of 2022. However, this growth was tempered by a 10.0 per cent decline in earnings in the exploration and production of oil and gas sub-industry. In the non-energy sector, earnings increased by 2.0 per cent during the first three quarters of 2022. On a sectoral basis, the largest wage hikes were recorded in the printing and publishing (11.2 per cent), food processing (4.4 per cent), assembly-type and related products (3.4 per cent), drink and tobacco (3.0 per cent) and water (2.9 per cent) sub-industries. These increases were tempered by lower earnings in the wood and related products (8.7 per cent), chemicals (2.2 per cent), miscellaneous manufacturing (1.4 per cent) and textiles and garments (1.6 per cent) industries (Appendix Table A.10).

Sector	No. of Agreements Analysed	Duration of Agreements	Range of Yearly Increases for 2022	Average Wage Increase for 2022	Median Wage Increase for Agreements Analysed
Financial and Insurance Activities	5	2019-2024	1.00-3.00	2.00	
Manufacturing	6	2020-2024	2.00-4.00	2.83	
Wholesale and Retail Trade	2	2019-2025	2.00	2.00	2.00
Administrative Support and Services	1	2022-2024	0.00	0.00	
Other Service Activities	1	2021-2023	2.00	2.00	

TABLE 6WAGE AGREEMENTS REGISTERED FOR 2022

Source: Industrial Court of Trinidad and Tobago

⁶ The Index of Average Weekly Earnings, computed by the Central Statistical Office, is based on surveyed companies' employment and wage bill. The average of weekly earnings is calculated as the earnings (total amount paid to employees) divided by the number of employees.

CHAPTER 4 Prices

INFLATION

After a prolonged period of benign inflationary conditions, price increases accelerated in 2022 primarily on account of supply-side pressures. Headline inflation averaged 5.8 per cent in 2022, up from 2.1 per cent in 2021 (Table 7). Food inflation increased to an average of 10.4 per cent in 2022, displaying significant upward momentum during the year (increasing year on year from 6.6 per cent in January to 17.3 per cent in December). Core inflation averaged 4.7 per cent during 2022, moving from 3.2 per cent in January to 6.7 per cent in December. Figure 1 illustrates a geographical distribution of price increases in 2022 compared to 2021.

Food inflation accelerated in 2022, averaging 10.4 per cent compared to 4.4 per cent in 2021. Despite a deceleration in international food prices⁷ in the latter half of 2022, as measured by the United Nations Food and Agriculture Organisation (FAO) index, the lagged transmission effects of elevated

international food-commodity prices earlier in the year continued to influence domestic food inflation throughout the year. International food prices were generally impacted by disruptions to global supply chains due to the COVID-19 pandemic. This resulted in higher freight costs, global labour shortages and international transportation delays in 2021 which spilled over into 2022. Adverse weather locally and the resultant bouts of flooding in several areas towards the end of 2022 also contributed to domestic food inflation. These cost-push factors led to an acceleration in prices in all categories of food in 2022, notably, Oils and Fats (13.8 per cent compared to 6.7 per cent in 2021); Meat (12.4 per cent compared to 5.7 per cent in 2021); Bread and Cereals (13.1 per cent compared to 2.9 per cent in 2021); Vegetables (11.3 per cent compared to 5.8 per cent in 2021) and Fish (7.8 per cent compared to 4.4 per cent in 2021). The Bread and Cereals sub-index was also influenced by increases in the wholesale and retail prices of flour by the National Flour Mills (NFM) Limited which impacted the final prices of bread products⁸.

Core inflation, which omits the effect of food prices, gained momentum in 2022. Core inflation accelerated to an average of

⁷ The FAO Food Price Index reached an all-time high in March 2022 following the emergence of the Russia/Ukraine conflict. Since April 2022 the FAO Food Price Index has been decelerating, recording its ninth monthly decline in December 2022 of 1.9 per cent.

⁸ The National Flour Mills Limited (NFM) announced a 17.0 per cent hike in the retail price of its flagship product (Ibis flour), while Nutrimix announced retail price increases ranging between 8.0 and 20.0 per cent on its range of flour products, effective January 2022. The company announced a further increase of 33.0 per cent in the wholesale price of flour in June 2022, with a suggested increase of 28.0 per cent in retail prices.

4.7 per cent in 2022, up from 1.5 per cent in 2021. The uptick in core inflation reflected faster price increases in most sub-indices, notably the Transport; Furnishings, Household Equipment and Routine Maintenance; Housing, Water, Electricity, Gas and Other Fuels; and Hotels, Cafes and Restaurants sub-indices. Higher fuel prices⁹ and resultant increases in several maxi taxi and taxi fares during the year saw transport prices increase by 7.9 per cent on average in 2022 compared to 1.8 per cent in 2021. The Furnishings, Household Equipment and Routine Maintenance subindex also experienced a faster momentum in price increases (6.2 per cent compared to 0.8 per cent in 2021), reflecting higher prices for furniture, appliances and other miscellaneous items. The Housing, Water, Electricity, Gas and Other Fuels sub-indices also saw faster price increases during the year (6.0 per cent compared to 3.2 per cent in 2021), reflecting a pickup in prices in most housing sub-components (mainly the cost of homeownership¹⁰, electrical and general carpentry, painting and masonry). Meanwhile, higher prices of food and drinks served at restaurants and cafés as well as drinks served at bars influenced an uptick in the Hotels, Cafes and Restaurants sub-index of 5.5 per cent compared to 0.9 per cent in 2021.

⁹ In April and October 2022, the Government of Trinidad and Tobago increased the prices of premium gasoline, super gasoline and diesel fuel to curtail expenditure on the petroleum subsidy.

¹⁰ Imputed rent of owner-occupied housing.

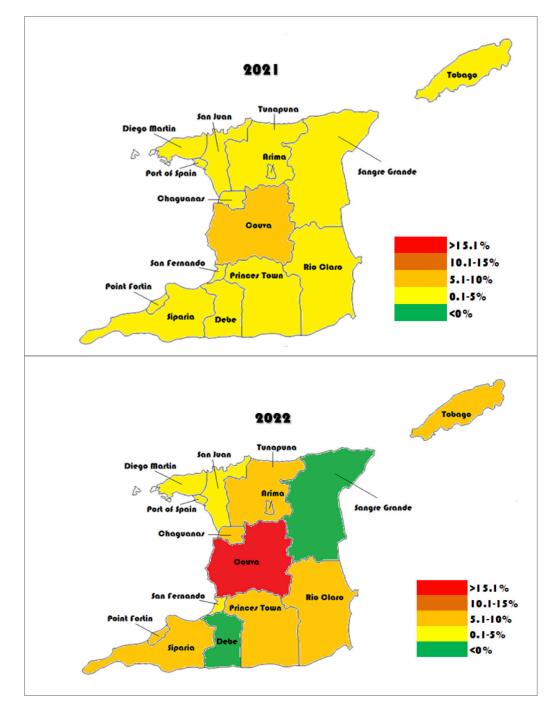


FIGURE 1 THE INDEX OF RETAIL PRICES ACROSS ADMINISTRATIVE AREAS /ANNUAL PERCENTAGE CHANGE/

Green reflects an inflation rate that is less than or equal to 0 per cent,

yellow reflects an inflation rate between 0.1 and 5.0 per cent,

light orange reflects an inflation rate between 5.1 per cent and 10.0 per cent, dark orange reflects an inflation rate between 10.1 per cent and 15.0 per cent, red reflects an inflation rate greater than 15.1 per cent.

Sources: Central Statistical Office and Central Bank of Trinidad and Tobago

TABLE 7

ANNUAL AVERAGE MOVEMENT OF SELECTED CATEGORIES OF THE INDEX OF RETAIL PRICES

/ PER CENT CHANGE /

	2018	2019	2020	2021	2022
Headline Inflation	1.0	1.0	0.6	2.1	5.8
Food Inflation	1.1	0.6	2.8	4.4	10.4
Fish	2.6	0.3	6.0	4.4	7.8
Food Products NEC	-2.3	4.4	4.2	5.2	11.7
Meat	-0.8	0.8	3.5	5.7	12.4
Milk, Cheese and Eggs	5.0	-0.0	2.0	3.4	6.9
Vegetables	0.8	1.1	4.3	5.8	11.3
Bread and Cereals	0.7	-0.5	1.1	2.9	13.1
Sugar, Jam, Confectionery, etc.	1.3	-1.6	1.2	4.7	5.1
Non-Alcoholic Beverages	1.3	1.1	1.6	1.2	5.6
Oils and Fats	3.6	0.2	2.4	6.7	13.8
Fruits	3.5	-1.8	1.3	6.1	8.6
Core Inflation	1.0	1.1	0.1	1.5	4.7
Communication	-1.3	0.3	-0.1	0.2	2.4
Education	0.0	0.0	0.0	0.0	0.0
Miscellaneous Goods and Other Services	0.6	2.7	1.0	-0.1	3.0
Hotels, Cafes and Restaurants	2.6	2.0	1.8	0.9	5.5
Health	1.6	5.5	2.7	2.9	2.2
Transport	1.9	1.4	-1.0	1.8	7.9
Recreation and Culture	0.8	0.3	-0.5	0.2	0.5
Alcoholic Beverages and Tobacco	-0.1	1.9	2.4	3.2	2.4
Clothing and Footwear	-4.5	-2.6	-3.8	-2.8	0.5
Housing, Water, Electricity, Gas and Other Fuels	2.4	1.0	0.5	3.2	6.0
Furnishings, Household Equipment and Routine Maintenance	-0.5	-0.1	0.7	0.8	6.2

Sources: Central Statistical Office and Central Bank of Trinidad and Tobago

PRODUCERS' PRICES

Producers' prices, as measured by the Producers' Prices Index (PPI), accelerated in 2022. The PPI rose by 1.3 per cent in 2022 compared with an increase of 0.5 per cent in 2021 (Appendix Table A.13). The increase was mainly attributed to higher prices in the Food Processing (5.0 per cent compared to 0.1 per cent in 2021), Assembly-type and Related Industries (1.0 per cent compared to 0.3 per cent in 2021) and Printing and Publishing (0.9 per cent compared to 0.6 per cent in 2021) industry groupings. The uptick in prices in the Food Processing industry was driven by an increase in flour prices on account of higher wheat prices and shipping costs as announced by NFM. All other sub-indices recorded marginal price increases except the Textiles, Garments and Footwear sub-index which remained unchanged over the period and the Drink and Tobacco sub-index which recorded a marginal decline.

BUILDING MATERIAL PRICES

Building material prices remained robust consistent with heightened 2022 in construction activity. The Index of Retail Prices of Building Materials increased by 9.5 per cent in 2022 compared to 10.7 per cent in 2021. A slight ease in momentum was recorded in the Walls and Roof (7.7 per cent compared to 14.0 per cent in 2021), Plumbing and Plumbing Fixture (9.8 per cent compared to 12.2 per cent in 2021) and Finishing, Joinery Units and Painting and External Works (7.2 per cent compared to 8.7 per cent in 2021) sub-indices. However, several sub-indices recorded faster price increases including the Site Preparation, Structure and Concrete Frame (9.4 per cent compared to 7.9 per cent in 2021); Electrical Installation and Fixtures (21.3 per cent compared to 8.7 per cent in 2021); and Windows, Doors and Balaustrading (5.1 per cent compared to 3.3 per cent in 2021) sub-indices. Prices in theses sub-categories were likely driven by higher international prices for steel products as wire rods and billet prices rose 11.5 per cent and 12.2 per cent, respectively in 2022.

BOX 2: Measures Implemented to Mitigate the Rise in Domestic Inflation

The emergence of the COVID-19 pandemic and more recently the Russia/Ukraine conflict created unusual price pressures globally. Supply-side factors, including a reduced labour supply, disruptions to global manufacturing supply chains, higher shipping and freight costs, and greater price-cost margins by suppliers have contributed to global inflation. Also, the crisis in Eastern Europe added to global inflationary pressures, particularly within energy and food. Trinidad and Tobago, as a major importer of food, manufactured goods and machinery and transport equipment¹, has been impacted by the surge in international prices. This box briefly reviews the trajectory of domestic inflation and outlines the measures implemented in Trinidad and Tobago to mitigate inflationary pressures.

Domestic inflation, fueled by ongoing supply-side impulses, has accelerated since the second half of 2021 when the economy began to emerge from the COVID-19 pandemic. The transmission of higher international prices to local prices continues to weigh on domestic inflation. Headline inflation, which comprises food and core inflation, accelerated in 2021 and 2022, largely driven by significantly higher international food prices. In 2021, the United Nations Food and Agriculture Organization's (FAO) Food Price Index increased 28.1 per cent compared with 3.2 per cent in 2020. In 2022, international food prices remained elevated with the FAO Food Price Index picking up by 14.3 per cent. Higher international food prices impacted a cross-section of local food items with high import content; notably, oils and fats; bread and cereals; and dairy products. Domestic food inflation increased to an average of 10.3 per cent in 2022, up from 4.4 per cent in 2021. Core inflation also gained momentum in 2022, increasing to an average of 4.7 per cent compared to 1.5 per cent in 2021. The uptick in core inflation in 2022 reflected faster price increases in transport, housing sub-components, gasoline and other fuels.

Several measures have been implemented domestically to mitigate the rise in inflation. These measures were largely driven by the public sector and included strategies to address ongoing supply-side disruptions. During the pandemic, the Government increased the number of zero-rated food items, suspended the Common External Tariff (CET) on selected food products² and increased the supply of foreign exchange to the Export-Import Bank (EximBank) for manufacturers **(Table 1)**. Other measures implemented include the introduction of an agriculture stimulus package; the development of linkages between industry and agriculture; and food price monitoring. The Government also held discussions with key stakeholders, such as the Trinidad and Tobago Manufacturers' Association (TTMA) and the National Agricultural and Marketing Development Corporation (NAMDEVCO), to develop supply-chain networks; and with the National Flour Mills Limited (NFM) to consider appropriate pricing strategies (Ministry of Trade and Industry 2021).

¹ In 2021, the share of imports of food to total imports amounted to 15.4 per cent, manufactured goods (18.3 per cent) and machinery and transport equipment (32.0 per cent). In the nine months to September 2022, food accounted for 16.6 per cent of total imports, manufactured goods (16.2 per cent) and machinery and transport (32.6 per cent).

² These items include salted and canned fish, apple juice, cheddar cheese, canned corned beef, milk and cream, refined sugar, preparations for infant use and soybean and other types of oil for cooking.

BOX 2: Measures Implemented to Mitigate the Rise in Domestic Inflation (Continued)

These measures appeared to have been successful at helping moderate domestic food price increases. For example, the NFM, after consultation with the Government, adjusted its price-cost margins, offering discounts on flour to consumers following increases in the wholesale and retail prices of flour in 2022 (Ministry of Trade and Industry 2021). Similarly, the zero-rating of certain food items and the suspension of the Common External Tariff (CET) would have had direct offsetting effects on domestic prices³. In addition, continuous monitoring and reporting of prices by the Ministry of Trade and Industry can help consumers adjust their purchasing decisions in response to evolving domestic prices. Over the short to medium term, effective supply side policies will be important to maintain a low and stable rate of inflation.

Box 2 Table 1:

Measures Implemented by the Government to Address the rise in Domestic Inflation

Measures	Details
Zero-Rating of Basic Food Items	Value Added Tax (VAT) was removed on an expanded list of food items, reducing the final prices of certain food items.
Suspension of the Common External Tariff (CET)	The Government suspended its Common External Tariff (CET) on a list of basic food items, reducing their final price to consumers.
Increased Supply of Forex via the EXIM Bank Facility	A total of US\$650.0 million was made available under two (2) facilities namely, the FOREX Facility for Manufacturers and the Forex Allocation System (FAS) to ensure the availability of foreign exchange for the importation of raw materials, and basic food items.
Agriculture Stimulus Package	A \$300.0 million Agriculture Stimulus Package was implemented to support the rapid expansion in production and marketing of selected high-demand commodities.
Development of a working group between Industry and Agriculture	A working group inclusive of the Ministry of Trade and Industry (MTI), the TTMA, the Ministry of Agriculture, Land and Fisheries (MALF) and NAMDEVCO was established to encourage the development of supply chain linkages between manufacturers and the Agricultural sector.
Food Price Monitoring Mechanism	The Ministry of Trade and Industry (MTI) implemented monthly and quarterly price surveys to monitor prices at key retail outlets, namely supermarkets, poultry shops, hardware stores and pharmacies.
Food Price Monitoring Mechanism	Government representatives held discussions with the board of the NFM as well as other stakeholders such as the Supermarket Association of Trinidad and Tobago (SMATT) to encourage effective pricing strategies to mitigate the rise in domestic food prices.

Sources: Ministry of Trade and Industry and Central Bank of Trinidad and Tobago

³ Approval was granted by the 47th Meeting of the Caribbean Community (CARICOM) Council for Trade and Economic Development (COTED) for the suspension of the CET on selected food items. These items were approved and initially implemented for the period January 01, 2021 to December 31, 2021.

BOX 2: Measures Implemented to Mitigate the Rise in Domestic Inflation (Continued)

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CHAPTER 5 Fiscal Operations

FISCAL OPERATIONS

Provisional estimates for the period October 2021 to September 2022 (FY2021/22) showed a considerable improvement in the fiscal outturn (Table 8). The Central Government recorded a fiscal surplus of \$1.1 billion for FY2021/22, a much better outturn compared to the budgeted deficit of \$9.1 billion and the deficit in the previous fiscal year of \$12.4 billion. The fiscal surplus, the first since FY2009/10, was on account of significantly higher energy revenues which outpaced both the fall-off in non-energy revenue and the increase in expenditure. Concomitantly, the non-energy fiscal deficit widened over the period, reaching \$28.2 billion in FY2021/22 from \$21.7 billion in the FY2020/21 (Table 9).

Improved commodity prices impacted Central Government revenue during FY2021/22. Revenue grew by 45.5 per cent year-on-year to \$54.2 billion in FY2021/22, \$10.9 billion higher than budgeted. Energy receipts (Table 10) more than tripled when compared to the same period one year earlier,

as prices for all major energy commodities – crude oil, natural gas, ammonia, urea and methanol – increased significantly¹¹. In contrast, non-energy revenues remained subdued owing mainly to reduced net Value Added Tax (VAT) receipts. Receipts from the non-energy sector totaled \$24.3 billion, lower than the collections from the previous year of \$27.0 billion. Declines occurred in the goods and services and non-tax revenue subcategories. In particular, the sharp rise in the payout of outstanding VAT refunds accounted for a reduction in goods and services taxes by 3.5 billion to 6.5 billion in FY2021/22 12 while non-tax revenue fell by \$566.7 million, largely due to a decline in the net income of the Central Bank. Meanwhile capital revenue was recorded at \$679.9 million, or 26.2 per cent lower than the previous year, due to lower sales of assets.

Total expenditure amounted to \$53.1 billion, 7.1 per cent (or \$3.5 billion) higher than in the previous fiscal year (Table 11). Most of the expansion in spending was reflected in transfers and subsidies, which grew by \$3.1 billion to \$30.0 billion. The figure included a deposit of \$1.1 billion into the Heritage and Stabilisation Fund (HSF)¹³ and an additional \$1.0 billion in household transfers. The increased transfers to households were partly driven by the petroleum subsidy,

¹¹ See Chapter 10 – International Commodity Markets.

¹² During the FY2021/22, Gross VAT was recorded at \$8.7 billion, while \$4.0 billion was paid in refunds. Net VAT for the period amounted to \$4.7 billion. In comparison, in FY2020/21, Gross VAT collections amounted to \$9.0 billion, while refunds totalled \$897.5 million. Net VAT for the period therefore approximated at \$8.1 billion.

¹³ The HSF is governed by legislation specifying deposit and withdrawal rules related to oil and gas prices. Latest official reports show that the end of period balance in the HSF as at June 2022 was US\$4,771.5 million.

which amounted to \$310.0 million in FY2021/22, up from \$18.1 million one year earlier. This increase came despite attempts to restrain expenditure on the petroleum subsidy (See Box 1) as international crude oil prices increased during the year. The transfer to the HSF, the first since 2013, was facilitated by the improvement in energy collections from the upward trajectory of crude oil and natural gas prices by more than 10.0 per cent above the budgeted level. The West Texas Intermediate (WTI) crude oil price averaged US\$93.05 per barrel, which was above the budgeted level (US\$65 per barrel). Natural gas prices (US\$6.19) were also above the budgeted level of US\$3.75 per million British Thermal Units (mmbtu). Spending increases were also registered, albeit on a lesser scale, in the transfers to State Enterprises (\$235.9 million) and transfers to Statutory Boards and Similar Bodies (\$215.5 million). Moreover, during FY2021/22, Central Government expended \$3.2 billion on its capital development programme, \$71.4 million higher than the previous year.

Budget estimates for FY2022/23 show an overall deficit of \$1.5 billion¹⁴. Total revenue is projected to increase to \$56.2 billion, comprising energy revenue of \$29.5 billion, non-energy revenue of \$25.6 billion and capital revenue of \$1.0 billion. Total expenditure is budgeted at \$57.7 billion, representing an increase of \$4.6 billion, with current and capital expenditure anticipated at \$51.5 billion and \$6.2 billion, respectively. An acceleration of the capital programme is expected in FY2022/23 owing to a pickup in activity for ongoing projects, such as the construction and rehabilitation of roads and bridges, the construction and upgrades to community centres and youth and sporting facilities, the construction of the new Terminal for the Arthur Napoleon Raymond (ANR) Robinson Airport and airfield renovation, and infrastructure upgrades related to the National Information and Communications Technology (ICT) and Digital Transformation agenda. The deficit is expected to be financed through funds sourced from both domestic and international markets as well as available facilities from international financial institutions.

¹⁴ The National Budget of Trinidad and Tobago for fiscal year FY2022/23 was presented to the Parliament on Monday 26 September, 2022. The fiscal package was based on an estimated crude oil price of US\$92.50 per barrel and a natural gas price of US\$6.00 per mmbtu.

TABLE 8SUMMARY OF CENTRAL GOVERNMENT FINANCES, 2018/2019 - 2022/20231/ TT\$ MILLIONS /

	2018/2019	2019/2020	2020/2021 ^r	2021/2022 ^p	2022/2023 ^b
Current Revenue	45,768.8	33,842.4	36,345.6	53,530.4	55,168.9
Current Expenditure	46,986.8	47,081.2	46,482.3	49,924.0	51,520.3
Current Surplus (+)/ Deficit (-)	-1,218.0	-13,238.8	-10,136.7	3,606.4	3,648.6
Capital Receipts	979.8	526.6	921.0	679.9	1,006.5
Capital Expenditure and Net Lending	3,790.7	3,977.7	3,135.0	3,206.4	6,164.3
Overall Surplus(+)/ Deficit (-)	-4,028.9	-16,689.9	-12,350.7	1,079.9	-1,509.2
Financing	4,028.9	16,689.9	12,350.7	-1,079.9	1,509.2
External (Net)	1,094.0	13,261.9	4,890.0	467.5	133.5
Domestic (Net)	2,934.9	3,428.0	7,460.7	-1,547.4	1,375.7
(Per Cent of GDP)					
Current Surplus (+)/ Deficit (-)	-0.8	-9.0	-6.4	1.8	1.9
Overall Surplus(+)/ Deficit (-)	-2.5	-11.4	-7.7	0.6	-0.8

Source: Ministry of Finance

1 GDP data used for ratios to GDP prior to FY2022 are sourced from the CSO; data for FY2022 are Central Bank estimates; data for FY2023 are based on Budget Estimates from the Ministry of Finance.

r Revised.

p Provisional.

b Budgeted.

SUMMARY OF CENTRAL GOVERNMENT FISCAL OPERATIONS, 2018/2019 - 2022/2023¹ / TT\$ MILLIONS /

	2018/2019	2019/2020	2020/2021 ^r	2021/202 <u>2</u> °	2022/ <u>2023</u> ^b
Revenue	46,748.6	34,369.0	37,266.6	54,210.3	56,175.4
Current	45,768.8	33,842.3	36,345.6	53,530.4	55,168.9
Energy*	15,874.3	7,901.5	9,341.3	29,267.1	29,538.5
Non-Energy*	29,894.5	25,940.8	27,004.3	24,263.3	25,630.5
Capital	979.8	526.6	921.0	679.9	1,006.5
Expenditure	50,777.5	51,058.9	49,617.3	53,130.4	57,684.6
Current	46,986.8	47,081.2	46,482.3	49,924.0	51,520.3
Wages and Salaries	9,137.2	9,248.0	9,093.6	9,156.9	9,457.3
Goods and Services	6,426.4	5,861.6	5,570.9	5,891.6	6,412.4
Interest Payments	5,045.5	5,062.0	4,938.1	4,852.8	5,373.3
Transfers and Subsidies ²	26,377.7	26,909.5	26,879.7	30,022.6	30,277.3
Capital Expenditure and Net Lending	3,790.7	3,977.7	3,135.0	3,206.4	6,164.3
Overall Non-Energy Balance	-19,903.2	-24,591.5	-21,692.0	-28,187.2	-31,047.6
Overall Balance	-4,028.9	-16,689.9	-12,350.7	1,079.9	-1,509.2
Total Financing (Net)	4,028.9	16,689.9	12,350.7	-1,079.9	1,509.2
Net Foreign Financing	1,094.0	13,261.9	4,890.0	467.5	133.5
Net Domestic Financing	2,934.9	3,428.0	7,460.7	-1,547.4	1,375.7
Of Which: Transfers to Heritage and Stabilisation Fund	0.0	-6,635.4	-6,040.6	1,111.3	0.0
	(Per Cent of	GDP)			
Revenue	28.9	23.4	23.4	27.8	29.5
Current	28.3	23.0	22.8	27.4	29.0
Energy	9.8	5.4	5.9	15.0	15.5
Non-Energy	18.5	17.7	16.9	12.4	13.5
Capital	0.6	0.4	0.6	0.3	0.5
Expenditure	31.3	34.8	31.1	27.2	30.3
Current	29.0	32.0	29.1	25.6	27.1
Wages and Salaries	5.6	6.3	5.7	4.7	5.0
Goods and Services	4.0	4.0	3.5	3.0	3.4
Interest Payments	3.1	3.4	3.1	2.5	2.8
Transfers and Subsidies	16.3	18.3	16.8	15.4	15.9
Capital Expenditure and Net Lending	2.3	2.7	2.0	1.6	3.2
Overall Non-Energy Balance ³	-12.3	-16.7	-13.6	-14.4	-16.3
Overall Balance	-2.5	-11.4	-7.7	0.6	-0.8
Total Financing (Net)	2.5	11.4	7.7	-0.6	0.8
Net Foreign Financing	0.7	9.0	3.1	0.2	0.1
Net Domestic Financing	1.8	2.3	4.7	-0.8	0.7
Of which: Transfers to Heritage and Stabilisation Fund	0.0	-4.5	-3.8	0.6	0.0
Memo:	0.0	-4.0	-0.0	0.0	0.0
Primary Fiscal Balance (TT\$Mn)	1,016.6	-11,627.9	-7,412.6	5,932.8	3,864.1
Cyclically Adjusted Balance (TT\$Mn)4	-3,291.0	-12,537.6	-10,013.9	812.6	-184.4
Structural Fiscal Balance (TT\$Mn)⁵	544.6	1,687.7	3,035.4	5,485.2	3,782.6

Sources: Ministry of Finance and Central Bank of Trinidad and Tobago

1 GDP data used for ratios to GDP prior to FY2022 are sourced from the CSO; data for FY2022 are Central Bank estimates; data for FY2023 are based on Budget Estimates from the Ministry of Finance.

2 Adjusted for transfers to the Infrastructure Development Fund, Government Assisted Tertiary Education Fund and CARICOM Petroleum Fund.

3 Computed as the sum of non-energy revenue and capital revenue less total expenditure.

4 The cyclically adjusted balance provides an estimate of the fiscal position net of cyclical effects by adjusting revenue and expenditure for business cycle effects.

5 The structurally fiscal balance is an estimate of the fiscal position after excluding the effects of the business cycle and fluctuations in commodity prices, as well as one-off factors that temporarily affect revenue and expenditure.

* Energy and Non-Energy revenues for FY2022/23 have been estimated by the Central Bank.

r Revised.

p Provisional.

b Budgeted.

ENERGY-BASED GOVERNMENT REVENUES, 2017/2018 - 2021/2022¹ / PER CENT OF GOVERNMENT REVENUE /

	2017/2018	2018/2019	2019/2020	2020/2021 ^r	2021/2022 ^p
Energy Sector	23.6	34.0	23.0	25.1	54.0
Petroleum Profit Tax (PPT)	2.5	5.3	3.5	6.9	16.5
Supplemental Petroleum Tax (SPT)	2.3	2.7	1.6	1.4	4.6
Corporation tax	11.0	9.2	5.7	6.6	14.0
Royalties	5.3	8.8	8.2	5.4	10.7
Unemployment Levy	0.4	1.5	0.6	0.9	3.5
Withholding Tax	1.1	2.0	1.4	1.5	1.0
Exercise Duty	0.2	0.0	0.0	0.0	0.0
Oil Impost ²	0.3	0.2	0.3	0.3	0.1
Signature Bonus	0.3	0.0	0.0	0.1	0.2
Production Sharing Contracts	0.1	0.0	0.0	0.0	0.0
Extraordinary Revenue from Oil and Gas Companies	0.0	4.0	0.3	0.7	3.2
Surplus Income - Sale of Pet. Products	0.1	0.2	1.3	1.2	0.0
(1	Per Cent of	GDP)			
Energy Sector	6.2	9.8	5.4	5.9	15.0
Petroleum Profit Tax (PPT)	0.7	1.5	0.8	1.6	4.6
Supplemental Petroleum Tax (SPT)	0.6	0.8	0.4	0.3	0.3
Corporation tax	2.9	2.7	1.3	1.5	3.9
Royalties	1.4	2.5	1.9	1.3	3.0
Unemployment Levy	0.1	0.4	0.1	0.2	1.0
Withholding Tax	0.3	0.6	0.3	0.4	0.3
Exercise Duty	0.1	0.0	0.0	0.0	0.0
Oil Impost ²	0.1	0.1	0.1	0.1	0.0
Signature Bonus	0.1	0.0	0.0	0.0	0.1
Production Sharing Contracts	0.0	0.0	0.0	0.0	0.0
Extraordinary Revenue from Oil and Gas Companies	0.0	1.2	0.1	0.2	0.9
Surplus Income - Sale of Pet. Products	0.0	0.0	0.3	0.3	0.0

Sources: Ministry of Finance and Central Bank of Trinidad and Tobago

1 GDP data used for ratios to GDP prior to FY2022 are sourced from the CSO; data for FY2022 are Central Bank estimates.

2 Oil Impost refers to a tax on petroleum producing companies to cover the administration expenses of the Ministry of Energy and Energy

Industries.

r Revised.

p Provisional.

CENTRAL GOVERNMENT RECURRENT EXPENDITURE¹: A FUNCTIONAL CLASSIFICATION, 2018/2019 - 2022/2023 / TT\$ MILLIONS /

	2018/2019	2019/2020	2020/2021 ^r	2021/2022 ^{re}	2022/2023 ^b
Economic Services	2,961.9	2,981.2	3,281.7	3,784.7	4,359.9
Energy	85.4	320.4	510.4	794.4	1,494.0
Agriculture, Land and Fisheries	726.1	648.7	592.7	759.6	634.7
Works and Transport	2,150.4	2,012.1	2,178.6	2,230.7	2,231.3
Social Services	19,961.1	19,792.0	19,829.1	20,788.4	20,982.7
Education	5,297.4	5,211.1	4,649.2	5,032.5	5,186.4
Health	4,727.6	4,617.2	5,041.4	5,472.7	5,505.7
Housing and Urban Development	1,410.2	1,346.0	742.5	565.9	798.9
Labour	332.9	370.3	375.5	388.3	437.4
Public Utilities	2,932.1	2,592.4	2,802.5	2,873.9	2,450.0
Social Services ²	5,491.4	5,892.9	6,218.1	6,455.2	6,604.2
Public Services	5,128.3	5,263.8	5,411.1	5,432.9	5,444.2
National Security	5,128.3	5,263.8	5,411.1	5,432.9	5,444.2
Other ³	21,079.2	21,459.5	19,432.9	21,688.8	23,550.6
Total Recurrent Expenditure ⁴	49,130.5	49,496.5	47,954.9	51,694.9	54,337.5

Sources: Ministry of Finance and Central Bank of Trinidad and Tobago

1 Classified according to recurrent expenditure allocated to the respective ministry head.

2 Includes Ministry of Sport and Community Development, Ministry of Tourism, Culture and the Arts, Ministry of Social Development and Family Services, Ministry of Youth Development and National Services and Ministry of Planning and Development.

- 3 Includes Office of the President, Auditor General, Judiciary, Industrial Court, Parliament, Service Commissions, Statutory Authorities, Elections & Boundaries Commission, Tax Appeal Board, Registration, Recognition and Certification Board, Public Service Appeal Board, Office of the Prime Minister, Tobago House of Assembly, Central Administrative Services, Tobago and all other Ministries. Other excludes Charges on Account of the Public Debt.
- 4 Represents Recurrent Expenditure from the Consolidated Fund only.
- r Revised.
- re Revised Estimates.
- b Budgeted.

GENERAL GOVERNMENT DEBT¹⁵

General Government debt¹⁶ stood at \$139.4 billion (71.5 per cent of GDP) at the end of September 2022, up from \$137.2 billion (86.1 per cent of GDP) recorded at the end of September 2021. Adjusted General Government debt (which excludes sterilised debt) increased by 2.4 per cent to reach \$129.7 billion (66.5 per cent of GDP) at the end of September 2022 compared to \$126.7 billion (79.5 per cent of GDP) at the end of September 2021¹⁷ (Table 12). This compares with an average annual increase of 12.6 per cent during the previous two fiscal years at the height of the COVID-19 pandemic.

Central Government domestic debt outstanding (excluding debt issued for sterilisation purposes) rose by 2.7 per cent or \$1.8 billion over the 12-month period to reach \$66.2 billion (33.9 per cent of GDP) at the end of September 2022. This increase in domestic debt resulted from borrowings outstripping repayments over the 12-month period. However, new Central Government borrowings of \$4.6

billion on the domestic capital market in FY2021/22 were significantly less than the \$13.3 billion contracted in FY2020/2118. New borrowings in FY2021/22 comprised three bonds with multiple tranches issued at an average interest rate of 5.0 per cent and average tenor of 12 years¹⁹. The bonds were private placements arranged by First Citizens Bank and Republic Bank Limited. In addition, other disbursements to the Central Government included \$1.0 billion from a bond²⁰ contracted in the previous fiscal year, \$140.0 million from an ongoing Build-Own-Lease-Transfer (BOLT) facility²¹ for the construction of the Ministry of Health Administrative Building and additional Debt Management Bills of \$500 million. With the inclusion of new borrowings, Debt Management Bills outstanding increased to \$6.6 billion at the end of September 2022, representing 94.8 per cent of the statutory limit²². Overall, the proceeds were used for budget support (\$5.8 billion) and debt refinancing (\$3.2 billion)

Debt service on Central Government domestic bonds and loans was recorded at \$7.2 billion during the fiscal year, lower than payments recorded in the previous

¹⁵ In June 2021, as part of its overall Debt Reform Strategy, the Ministry of Finance in collaboration with its technical consultants, revised the debt measurement parameters to bring them into alignment with International Standards. In the Review of the Economy 2022, see Box 4 Re-Alignment of the Government Debt Measurement Approach to International Standards: <u>Review-of-the-Economy-2021.pdf (finance.gov.tt)</u>

¹⁶ General Government Debt is defined as the sum of all domestic and external direct obligations of the Central Government as well as the Non-Self Serviced Government Guaranteed debt of State Enterprises and Statutory Authorities. It includes instruments of Open Market Operations (OMOs) such as Treasury Bills, Treasury Notes and Treasury Bonds; proceeds of which are held or sterilised at the Central Bank.

¹⁷ The debt to GDP ratios were lower in FY2021/22 owing to a higher estimate of nominal GDP.

¹⁸ During FY2020/21, the Government issued 14 new bonds on the domestic capital market.

¹⁹ For additional information on the Government's financing activity on the domestic capital market during 2022, see Chapter 7 – Primary Debt Market.

²⁰ A \$2.0 billion triple tranche fixed-rate bond contracted in FY2021, of which \$1.0 billion was disbursed in FY2021, and \$1.0 billion was disbursed in November 2021 (FY2021/22).

²¹ The BOLT is a Public Private Partnership (PPP) agreement between the Government and a private contractor. The current agreement for the construction of the Ministry of Health Administrative Building was arranged in FY2019/20.

²² The limit for Debt Management Bills (under the Treasury Bill Act) is \$7.0 billion.

fiscal year (\$7.8 billion). Principal repayments amounted to \$4.6 billion, of which a total of \$4.1 billion was repaid on bonds and loans contracted under the Development Loans Act, while repayments on CLICO and HCU zerocoupon bonds amounted to \$469.3 million and \$18.5 million, respectively. Central Government domestic interest payments (excluding interest paid on sterlised debt) amounted to \$2.6 billion during FY2021/22.

Central Government external debt outstanding stood at US\$4.7 billion (16.4 per cent of GDP) at the end of September 2022, reflecting a marginal increase of 2.9 per cent from the end of September 2021 (Appendix A.17 (A)). During FY2021/22, one new loan from the Corporación Andina de Fomento (CAF) in the amount of US\$175.0 million, was disbursed for the modernisation of transportation infrastructure. Loan disbursements from previously contracted facilities totaling US\$114.8 million comprised inflows from the Inter-American Development Bank (US\$54.4 million) for various projects, including support for vulnerable persons affected by the COVID-19 pandemic, the Multi-phase Wastewater Rehabilitation Programme, the Single Electronic Window for Trade and Business Facilitation

and the Health Services Support Programme; the Export-Import Bank of China (US\$30.9 million) for the Phoenix Park Industrial Project; and CAF (US\$24.5 million) for the COVID-19 pandemic. Central Government external debt service totaled US\$313.7 million for the year, of which US\$169.9 million was earmarked for principal repayments.

For the year ending September 2022, non-self-serviced guaranteed debt, which comprise borrowings by state-owned enterprises and statutory bodies, amounted to \$3.9 billion. Disbursements during the year mainly comprised \$1.4 billion to the National Insurance Property Development Company Limited (NIPDEC), \$1.1 billion to the Housing Development Corporation (HDC), \$500.0 million to the Urban Development Corporation of Trinidad and Tobago (UDeCOTT) and \$457.7 million to the Water and Sewerage Authority of Trinidad and Tobago (WASA). Approximately \$1.5 billion of total borrowings was used to refinance maturing obligations. Total debt service by state enterprises and statutory boards amounted to \$4.7 billion, of which \$3.3 billion represented principal repayments.

GENERAL GOVERNMENT DEBT OUTSTANDING, SEPTEMBER 2018 - SEPTEMBER 2022 / TT\$ MILLIONS /

	, ττφτνι	LEIONO /			
	Sep-18 ^r	Sep-19 ^r	Sep-20 ^r	Sep-21 ^r	Sep-22 ^p
General Government Debt	117,175.3	118,037.7	130,663.2	137,317.2	139,421.6
Of which; Sterilisation1	23,367.7	17,802.8	12,070.3	10,570.3	9,676.3
Adjusted General Government Debt ²	93,807.6	100,234.9	118,592.9	126,746.9	129,745.4
Central Government Domestic	65,695.4	64,779.0	68,560.5	74,978.1	75,841.4
General Development Bonds	23,313.8	27,059.2	31,295.2	39,722.8	41,358.1
CLICO and HCU Bonds	16,961.7	16,455.1	15,963.7	15,482.0	14,981.0
VAT Bonds ³	0.0	0.0	3,000.0	3,000.0	3,000.0
BOLTS and Leases	130.6	105.4	78.6	50.3	190.1
Debt Management Bills	1,905.0	3,340.0	6,136.0	6,136.0	6,636.0
Open Market Operations	23,367.7	17,802.8	12,070.3	10,570.3	9,676.3
Treasury Bills	18,273.4	14,061.5	8,479.0	8,479.0	7,585.0
Treasury Notes	2,785.0	1,432.0	2,132.0	1,632.0	1,632.0
Treasury Bonds	2,309.3	2,309.3	1,459.3	459.3	459.3
Liquidity Absorption Bonds	0.0	0.0	0.0	0.0	0.0
Central Government External	24,742.8	26,349.5	31,620.4	31,167.3	32,070.9
Non Self-Serviced Guaranteed Debt ⁴	26,737.1	26,909.3	30,482.2	31,171.7	31,509.4
State Owned Enterprises	16,738.2	17,498.7	20,078.3	20,212.3	19,946.4
Statutory Authorities	9,999.0	9,410.6	10,403.9	10,959.4	11,562.9
	(Per Cen	t of GDP)⁵			
General Government Debt	71.5	72.9	88.9	86.1	71.5
Adjusted General Government Debt	57.3	61.9	80.7	79.5	66.5
Central Government Domestic Debt ²	25.8	29.0	38.5	40.4	33.9
External Debt	15.1	16.3	21.5	19.5	16.4
Non-Self Serviced Guaranteed Debt	16.3	16.6	20.8	19.5	16.2
Memo:					
Self-Serviced Guaranteed Debt	1,913.7	3,134.6	3,082.2	3,160.9	3,178.4
Of which; State Enterprises	1,802.5	3,065.9	3,055.9	3,156.0	3,173.9
Statutory Authorities	111.1	68.7	26.3	4.9	4.5

Sources: Ministry of Finance and Central Bank of Trinidad and Tobago

1 Comprise Treasury Bills and Treasury Notes issued for Open Market Operations (OMOs) and Treasury Bonds issued for liquidity management.

2 Excludes debt issued for sterilisation purposes.

3 Refers to bonds issued by the Government under the Value Added Tax Act for the settlement of VAT refunds owed to businesses in Trinidad and Tobago

4 Refers to Government-guaranteed debt of public entities that are directly serviced by the Central Government.

5 Debt ratios prior to FY2022 are based on Nominal GDP data from the Central Statistical Office. Ratios for FY2022 are computed using Nominal GDP estimates from the Central Bank.

r Revised.

p Provisional.

GOVERNMENT AND GOVERNMENT-GUARANTEED BORROWINGS UNDERTAKEN IN FY2021/22*

/ TT\$ MILLIONS /

Date	Borrower	Amount (\$Mn)	Source of Financing	Purpose of Financing	Borrowing Act Utilised
1-Oct-21	HDC	\$475.0	Domestic	Debt Refinancing	Guarantee of Loans (Companies Act)
1-Nov-21	AATT	\$80.0	Domestic	Capital Works & Operational Expenses	Guarantee of Loans (Statutory Authorities Act)
1-Nov-21	Central Government	\$2,000.0	Domestic	Budget Support	Development Loans Act
1-Dec-21	Central Government	\$1,100.0	Domestic	Budget Support	Development Loans Act
1-Dec-21	WASA	US\$25.0	Domestic	Settlement of Overdraft Facility	Guarantee of Loans (Statutory Authorities Act)
1-Dec-21	PCML	\$100.0	Domestic	Programme Funding	Guarantee of Loans (Companies Act)
17-Dec-21	Central Government	US\$175.0	External	Project (Roads & Bridges)	CAF Act
1-Jan-22	NIPDEC	\$267.4	Domestic	Procurement of Medical Supplies	Guarantee of Loans (Companies Act)
1-Jan-22	UDECOTT	\$51.2	Domestic	Street Urbanisation Project	Guarantee of Loans (Companies Act)
1-Feb-22	WASA	US\$60.0	Domestic	Payments to DESALCOTT	Guarantee of Loans (Statutory Authorities Act)
1-Apr-22	UDECOTT	\$36.0	Domestic	Construction Works (Family Court Building)	Guarantee of Loans (Companies Act)
22-Jul-22	UDECOTT	\$100.0	Domestic	Works at POS General Hospital	Guarantee of Loans (Companies Act)
22-Jul-22	NMTS	\$200.0	Domestic	Debt Refinancing	Guarantee of Loans (Companies Act)
22-Jul-22	NCC	\$100.0	Domestic	Debt Refinancing	Guarantee of Loans (Companies Act)
22-Jul-22	NIPDEC	\$682.0	Domestic	Debt Refinancing	Guarantee of Loans (Companies Act)
22-Jul-22	CAL	US\$50.0	Domestic	Settlement of Outstanding Liabilities	Guarantee of Loans (Companies Act)
22-Aug-22	NIPDEC	\$403.0	Domestic	Procurement of Medical Supplies	Guarantee of Loans (Companies Act)
22-Sep-22	HDC	\$500.0	Domestic	Housing Projects	Guarantee of Loans (Companies Act)
22-Sep-22	NIPDEC	\$250.0	Domestic	To Finance P.U.R.E	Guarantee of Loans (Companies Act)
22-Sep-22	Central Government	\$1,500.0	Domestic	Budget Support	Development Loans Act

Sources: Ministry of Finance and Central Bank of Trinidad and Tobago

* Excludes Government-guaranteed borrowings not directly serviced by the Central Government.

CHAPTER 6 Monetary and Financial Developments

MONETARY POLICY

Central Bank The maintained an accommodative monetary policy stance in 2022. The Repo rate was kept at 3.50 per cent throughout 2022, unchanged since the downward adjustment in March 2020 following the onset of the COVID-19 pandemic. During 2022, the Monetary Policy Committee (MPC) balanced concerns about externally generated inflationary pressures and the concomitant policy reaction in advanced economies with supporting a durable economic recovery. Credit demand expanded in 2022 following the rollback of pandemic restrictions and this, coupled with elevated inflation levels, provided an upward impetus to interest rates. At the same time, liquidity levels declined in 2022, but remained ample enough to facilitate a continuous supply of credit to the economy.

LIQUIDITY

Robust credit demand and a pick-up in economic activity contributed to a reduction of liquidity in the domestic banking system during 2022. Commercial banks' holdings of excess reserves at the Central Bank decreased to a monthly average of \$4,876.1 million in 2022 from \$8,116.9 million in 2021. Net

domestic fiscal injections (NDFI) - the main driver of liquidity – climbed to \$8,205.9 million during 2022 compared to a withdrawal of \$1,136.4 million over 2021. The Central Bank also added \$2,806.5 million to the system via the net maturity of open market operations (OMOs). Although not a liquidity absorption tool, Central Bank sales of foreign exchange to authorised dealers indirectly removed \$8,493.2 million from the system in 2022, compared to \$8,101.3 million in 2021. Declining excess liquidity resulted in an increase in interbank activity to a daily average of \$30.4 million in 2022 compared with a daily average level of \$10.9 million in 2021. The repurchase facility was accessed once during the year, in January 2022 following a sudden downturn of liquidity at the end of 2021. As a result, daily average activity on the repurchase facility reached \$1.3 million in 2022.

INTEREST RATES

In the face of declining excess liquidity, short term interest rates generally increased during the year. The TT 91-day OMO Treasury Bill rate increased by 18 basis points over 2022, settling at 0.50 per cent. However, aggressive tightening of monetary policy in the US led to increased yields on US short-term instruments. The yield on the US 91day short-term benchmark gained 436 basis points over 2022 to reach 4.42 per cent by the end of December. As a result, the TT-US 91-day differential broadened to -392 basis points in December 2022 compared with 26 basis points in December 2021.

The commercial banks' weighted average lending rate (WALR) reached 6.99 per cent in December 2022, 5 basis points lower than a year prior. The decrease in the WALR reflected the accommodative interventions taken by the Bank in early 2020 as well as increased competition among financial institutions in the context of the COVID-19 pandemic. The weighted average deposit rate increased by 5 basis points to 0.63 per cent over the same period. As a result, the commercial bank interest rate spread increased by 9 basis points over the period December 2021 to December 2022 to reach 6.36 per cent. The weighted average interest rate on outstanding mortgage loans declined from 5.37 per cent in December 2021 to 5.24 per cent in December 2022. Despite decreased interbank activity levels throughout 2022, the interbank borrowing rate remained at 0.50 per cent. Consistent with the steady Repo rate over 2022, the median prime lending rate remained at 7.50 per cent throughout the year.

Other measures of profitability suggest an improved performance of commercial banks in 2022. Commercial banks' return on assets increased from 2.0 per cent in December 2021 to 2.5 per cent in December 2022. Over the same period, return on equity increased from 16.0 per cent to 18.7 per cent while non-interest income-to-gross income increased from 34.6 per cent to 35.4 per cent. However, the ratio of interest margins-to-gross income declined from 65.4 per cent to 64.6 per cent over the period.

CONSOLIDATED²³ FINANCIAL SYSTEM CREDIT DEVELOPMENTS

The post-lockdown resumption of activity in the economy drove the increased momentum in credit demand. Consolidated system credit growth ended December 2022 at 6.5 per cent (year-on-year), roughly double the growth reported in December 2021. The uptick was mainly driven by the commercial banking sector, as non-banking sector credit growth gradually slowed over the year. Business lending soared, recording double-digit growth in six out of the twelve months of 2022, and consumer lending rebounded in the last eight months of 2022 after 19 consecutive months of decline. However, there was a deceleration in real estate lending.

In 2022, there was a strong resurgence in business credit, fuelled by the revival of activity in the economy after two years of COVID-19 pandemic-related restrictions. Business credit growth soared to 9.8 per cent year-on-year in December 2022, compared with growth of 4.5 per cent in December 2021. According to sectoral business lending data²⁴, all categories of business loans registered increases over the year. The largest increases in business lending occurred in the Finance, Insurance and Real Estate (24.2 per cent); Agriculture (21.1 per cent); and Construction (18.0 per cent) sectors, significantly higher than rates recorded in the previous year. Other categories registering strong growth in credit in 2022 include Manufacturing (11.0 per

²³ Refers to the commercial banks and other deposit-taking institutions (excluding credit unions).

²⁴ Includes lending to both resident and non-resident businesses.

cent) and Distribution (11.2 per cent). This surge in credit demand represents a marked improvement from the previous year when most of these categories recorded declines in credit growth.

Stronger economic activity, as economic uncertainty receded, fuelled consumer credit demand in 2022. Consumer credit posted declines in the first four months of 2022 but returned to growth by May 2022. Overall, consumer lending expanded by 6.6 per cent in December 2022, up from a 2.4 per cent fall off in December 2021. Large categories such as "Other Purposes" (which includes credit card debt) and Consolidation of Debt experienced greater momentum over 2022 (ending December 2022 with growth of 8.6 per cent and 6.7 per cent, respectively) as aggregate demand improved. However, not all loan categories registered growth in 2022. In particular, Motor Vehicles, a major loan category accounting for 21.1 per cent of total loans in December 2022, was among the loan categories that contracted. The Motor Vehicles category declined by 2.9 per cent in December 2022 after a decline of 9.7 per cent one year earlier.

Real estate mortgage lending continued to expand, albeit at a slower pace, during the year. Real estate mortgage lending increased by 3.9 per cent in December 2022, compared to 3.8 per cent in December 2021. The deceleration in real estate lending was led by a considerable slowdown in commercial real estate mortgages, which expanded by 1.1 per cent in December 2022, down from 5.5 per cent in December 2021. On the other hand, as residential interest rates receded, residential real estate mortgage loans rose by 5.5 per cent in December 2022, up from 3.0 per cent one year prior. Loans for land purchases rebounded by 2.7 per cent at the end of December 2022, compared with a decline of 0.5 per cent in December 2021. Lending for existing houses expanded 8.8 per cent at the end of December 2022, up from 6.1 per cent one year prior while loans for new houses expanded by 1.5 per cent compared to 1.4 per cent in December 2021.

MONETARY AGGREGATES

The monetary aggregates strengthened in 2022, despite four consecutive months of contraction at the beginning of 2022 (Appendix Table A.23). Narrow money, M1-A, which consists of currency in active circulation plus demand deposits, expanded by 4.5 per cent at the end of December 2022 compared to a fall of 0.5 per cent one year prior. Currency in active circulation expanded by 0.8 per cent in December 2022, compared to growth of 2.5 per cent in December 2021, as the base effect caused by the demonetisation of the TT\$100 cotton note in 2019 and 2020 subsided. Conversely, demand deposits accelerated over 2022, expanding by 5.1 per cent in December 2022, compared with a 1.0 per cent fall a year earlier. Broad money, M2, which consists of M1-A plus time and savings deposits, gained momentum, rising by 2.1 per cent in December 2022 after registering a marginal decline in December 2021. Saving deposits increased at a slower rate of 1.7 per cent in December 2022 (compared to 4.3 per cent one year prior) while time deposits declined by 9.8 per cent in December 2022 (compared with a decline of 13.5 per cent in December 2021).

FOREIGN CURRENCY CREDIT AND DEPOSITS

Foreign currency credit displayed considerable recovery in 2022. Growth in foreign currency credit rose by 8.9 per cent year-on-year in December 2022 (5.4 percentage points higher than the growth recorded in December 2021), with doubledigit growth rates in credit from commercial banks in seven out of the twelve months of the year. Of note, foreign currency lending for investments turned positive in June 2022, bolstering foreign currency business lending.

Conversely, foreign currency deposits contracted in 2022. On a year-on-year basis, foreign currency deposits declined by 1.9 per cent in December 2022, compared to an expansion of 8.9 per cent one year earlier. The sharp drop in foreign currency deposits was mainly attributed to a contraction in business sector deposits, which decreased by 4.7 per cent in December 2022 compared to a 17.4 per cent upsurge one year earlier. This decline stemmed from the businesses drawing down on deposits to fund business activity as conditions improved. On the other hand, consumer deposits grew by 1.7 per cent in December 2022, slightly below the growth recorded in December 2021.

FOREIGN EXCHANGE MARKET

Despite a large increase in foreign currency purchases from the energy sector, the local market for foreign currency remained tight in 2022. Purchases of foreign exchange from the public by authorised dealers amounted to US\$5,528.8 million over January to December 2022, an increase of 33.3 per cent relative to the same period a year earlier. Increased purchases followed a 37.7 per cent increase in conversions by energy companies relative to 2021. Over 2022, purchases from the energy sector accounted for 78.9 per cent of total foreign currency purchases over US\$20,000 in value.

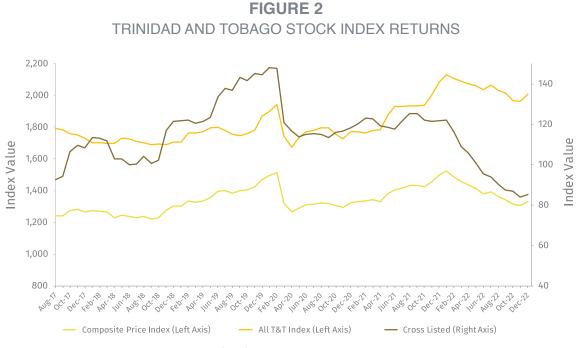
Sales of foreign exchange by authorised dealers to the public reached US\$6,551.2 million over 2022, an increase of 31.8 per cent relative to the previous year. Based on reported data for transactions over US\$20,000, credit cards (31.6 per cent), retail and distribution (21.7 per cent), energy companies (18.0 per cent) and manufacturing firms (7.3 per cent) made up the bulk of foreign exchange sales by authorised dealers to the public. The net sales gap reached US\$1,022.4 million during the period. To support the market, the Central Bank sold US\$1,270.6 million to authorised dealers. The weighted average TTD/USD selling rate appreciated slightly from TT\$6.7827/US\$1 in December 2021 to TT\$6.7782/US\$1 in December 2022.

CHAPTER 7 Capital Markets

STOCK MARKET

Despite an improvement in domestic economic conditions, the domestic stock market recorded significant declines in 2022 following a strong recovery in the previous year (Figure 2). Over 2022, the Composite Price Index (CPI) declined by 11.0 per cent, driven primarily by substantial deterioration in regional stocks which resulted in the Cross Listed Index (CLI) recording a tumble of 29.9 per cent. Mixed movements in local stocks however led to a much smaller decline

(3.7 per cent) in the All T&T Index (ATI) over the year. The deterioration in market conditions over 2022 was largely due to underperforming regional equities, while local businesses would have been negatively impacted by domestic inflationary pressures^{25,26}. The overall market performance resulted in total stock market capitalisation falling by 11.1 per cent to just under \$127.0 billion. In comparison, during 2021, the market observed a notable recovery as the CPI expanded by 13.1 per cent, driven by a 17.6 per cent jump in the ATI and a 3.0 per cent increase in the CLI. In terms of the performance of regional markets, the Jamaican Stock Exchange (JSE) declined by 10.2 per cent, while the Barbados Stock Exchange (BSE) recorded an expansion of 5.5 per cent.



Source: Trinidad and Tobago Stock Exchange (TTSE)

²⁵ See Chapter 4 – Prices.

²⁶ Inflation can have either a positive or negative effect on stock prices. A positive effect often occurs when a stock is considered a hedge against inflation. This is not the case locally. The domestic market is often negatively impacted as inflation erodes equity gains. Many listed firms, especially within the trading, conglomerates, and manufacturing sub-sectors would have indicated higher import prices stemming from supply constraints, elevated energy prices, etc. in addition to increases in domestic prices. These factors would have impacted company financials and placed pressures on returns.

The sub-indices of the ATI recorded mixed movements over 2022 (Figures 3 and 4).

The strongest performance was recorded in the Trading index (43.2 per cent), supported by expansions of 53.8 per cent and 27.7 per cent for Agostini Limited (AGL) and LJ Williams Limited (LJWB), respectively. Both of these firms recorded improved financial performances over the period. Other indices to record positive growth were Energy (11.1 per cent), Manufacturing II (8.9 per cent), and Property (8.2 per cent). On the other hand, the remaining four indices logged declines over the year. The Conglomerates index declined significantly (-16.7 per cent), driven by deteriorations in all listed firms: GraceKennedy Limited (GKC) (-26.4 per cent), MASSY Holdings Limited (MASSY) (-14.3 per cent), and ANSA McAL Limited (AMCL) (-13.4 per cent). GKC was largely affected by inflationary pressures and supply chain challenges, in addition to increasing interest and distribution costs. While ANSA recorded improvements in most business segments, substantial portfolio valuation losses within its banking and insurance segments, caused by volatility in international financial markets, negatively affected its share price.

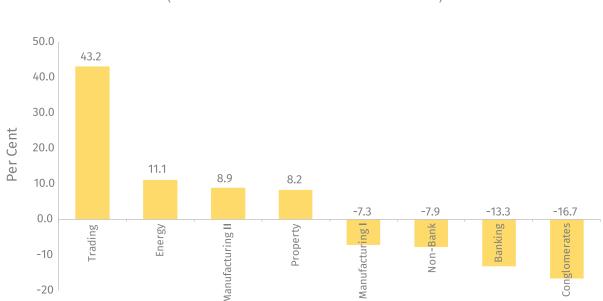


FIGURE 3 TRINIDAD AND TOBAGO STOCK MARKET SUB-INDEX RETURNS (DECEMBER 2021 TO DECEMBER 2022)

Source: Trinidad and Tobago Stock Exchange (TTSE).

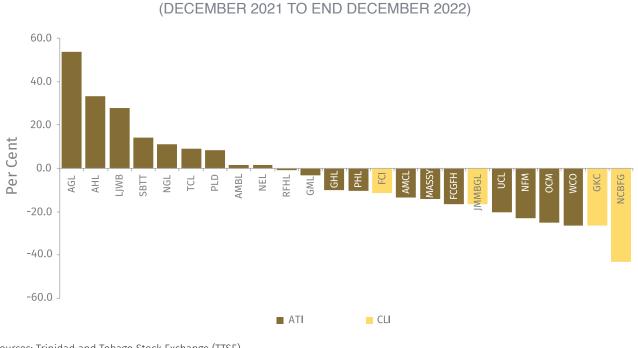


FIGURE 4 TRINIDAD AND TOBAGO INDIVIDUAL STOCK RETURNS

Sources: Trinidad and Tobago Stock Exchange (TTSE).

Weakening market conditions resulted in some sell-offs and substantially higher trading activity in 2022. During the year, the first tier market observed 184.3 million shares being exchanged at a value of \$1,706.9 million, corresponding to a turnover ratio of 1.283. Trading volume was dominated by the Conglomerates index, accounting for 38.8 per cent or 71.5 million shares, while the Banking index captured 39.2 per cent of total trading value, amounting to \$669.1 million. In comparison, during 2021, the market recorded 94.8 million shares traded at a value of \$1,314.7 million, corresponding to a turnover ratio of 0.980.

PRIMARY DEBT MARKET

Provisional information suggests that primary debt market activity in 2022 was notably lower than in 2021 (Figure 5 and Table 14). During the year, the market recorded only four primary issues at a face value of \$3,100.0 million. In comparison, during 2021, the market observed 20 placements financing \$14,951.2 million, of which the Government accounted for just under 90.0 per cent. During 2022, the Government was the primary borrower, issuing two privately placed securities at \$2,500.0 million for budgetary support. One state enterprise accessed the market, financing \$600.0 million, while the private sector was absent over the year.

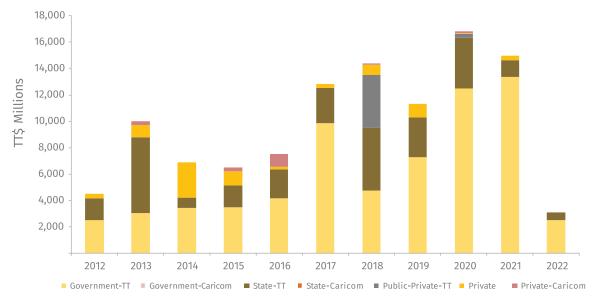


FIGURE 5 PRIMARY DEBT SECURITY ACTIVITY 2012 – 2022^p

Sources: Ministry of Finance and market participants p Provisional

TABLE 14 PRIMARY DEBT SECURITY ACTIVITY, JANUARY-DECEMBER 2022^p

Period Issued	Borrower	Face Value (TT\$ Mn)	Period to Maturity	Coupon Rate Per Annum	Placement Type
	Government of Trinidad and Tobago				
San 00	Tranche 1	400.0	5.0 years	Fixed Rate 4.29%	Private
Sep-22	Tranche 2	500.0	15.0 years	Fixed Rate 5.95%	Private
	Tranche 3	600.0	21.0 years	Fixed Rate 6.75%	Private
	Home Mortgage Bank (HMB)				
Oct-22	Tranche 1	150.0	4.0 years	Fixed Rate 4.00%	Private
	Tranche 2	150.0	4.0 years	Fixed Rate 4.50%	Private
	Government of Trinidad and Tobago				
D 00	Tranche 1	200.0	2.0 years	Fixed Rate 1.90%	Private
Dec-22	Tranche 2	800.0	10.0 years	Fixed Rate 4.24%	Private
	Home Mortgage Bank (HMB)	300.0	5.0 years	Floating Rate starts at 3.50%	Private

Source: Central Bank of Trinidad and Tobago

p Provisional.

SECONDARY DEBT MARKET

Despite a decline in primary activity by the Government, the secondary Government bond market recorded a notable increase in trading activity (Figure 6). The market recorded 91 trades in 2022 at a face value of \$792.2 million, compared to 20 trades at a face value of just \$79.4 million in 2021. The increase in market activity was likely due to the rebalancing of portfolios as a hedge against inflationary pressures and higher yields on the government yield curve. Conversely, activity on the secondary corporate bond market²⁷ recorded a decline in 2022, recording 183 trades at a face value of \$24.8 million, compared to 258 trades at a face value of \$133.7 million during 2021.



FIGURE 6 SECONDARY GOVERNMENT DEBT SECURITY ACTIVITY

Source: Trinidad and Tobago Stock Exchange (TTSE)

²⁷ The secondary corporate bond market records the trading activity of the three bonds issued by the National Investment Fund Holding Company Limited (NIFHCL) which were listed in September, 2018.

CENTRAL GOVERNMENT SECONDARY BOND MARKET, YIELD CURVE AND BOND INDEX

The Central Government standardised yield curve exhibited a steepening trend over 2022 (Figure 7). Over the year, the short-term 3-month rate jumped by 18 basis points to 0.50 per cent, the 6-month increased by 29 basis points to 0.67 per cent, and the 1-year rate gained 69 basis points to 1.06 per cent. The uptick in short-term rates was partly driven by a substantial decline in excess liquidity conditions during the middle of 2022 (down from a monthly average of \$6.6 billion in December 2021 to \$2.5 billion in July 2022). However, rising inflation may have also contributed to the increase. Similarly, inflationary pressures may have contributed towards the increase in medium to long-term rates. The 5-year rate increased by 26 basis points to 4.06 per cent, while the benchmark 10-year and 15-year rates gained 19 basis points to 5.18 per cent, and 17 basis points to 6.02 per cent, respectively. In comparison, during 2021, movements in the yield curve were mixed as elevated liquidity levels kept some short to medium-term rates restrained, while long-term rates experienced higher risk premiums, driven up by expansionary fiscal policy and increasing Government debt levels.

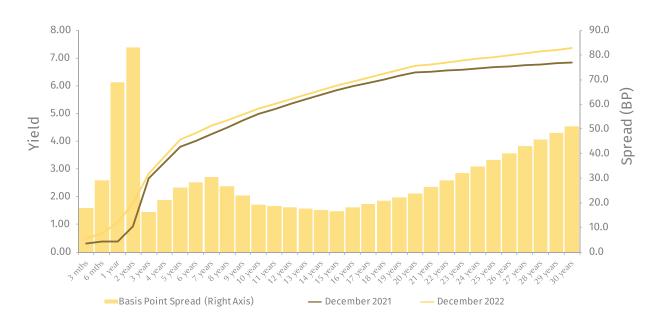


FIGURE 7 TRINIDAD AND TOBAGO GOVERNMENT YIELD CURVE

Source: Central Bank of Trinidad and Tobago

MUTUAL FUNDS INDUSTRY

During 2022, the domestic mutual fund industry recorded a decline, reflecting monetary policy tightening in the US and financial market volatility both locally and internationally (Figure 8). Aggregate funds under management²⁸ slipped by 1.8 per cent to \$52,272.0 million²⁹ compared to a 5.5 per cent increase in 2021. The industry downturn was driven by declines in most fund types. Equity funds fell by 9.8 per cent to \$8,272.9 million, while Income funds decreased by 5.1 per cent to \$28,379.7 million. Funds classified as 'Other'³⁰ recorded a fall of 6.2 per cent to \$449.2 million. In most cases, these fund types were negatively impacted by valuation changes due to monetary policy tightening in advanced economies, in addition to volatility in foreign and local equity markets³¹. On the other hand, in light of the financial market challenges, money market funds expanded by 10.7 per cent to \$15,170.3 million as investors sought to protect principal investments and minimise interest rate risks.

Reflective of the unsettled financial markets, floating Net Asset Value (NAV) funds recorded a reduction of 14.1 per cent to end the year at \$13,388.4 million, while the relatively insulated fixed NAV funds gained 3.2 per cent to \$38,883.6 million. Additionally, in terms of currency composition, TT dollar-denominated mutual funds observed a 1.4 per cent slip to \$42,865.5 million while foreign currency denominated funds declined by 3.6 per cent to \$9,406.5 million.

Despite the decline in aggregate funds under management, the industry was supported by net sales of \$1,133.2 million in 2022, comprising of \$16,962.1 million in sales and \$15,828.8 million in redemptions. However, this was a decline when compared to net sales of \$1,715.2 million recorded in the previous year. Reflective of the drive towards safety, fixed NAV funds recorded \$1,734.0 million in net sales, while market volatility resulted in floating NAV funds recording \$600.8 million in net redemptions. Echoing the position of fixed NAV funds, money market funds observed \$1,280.9 million in net sales. Conversely, both equity and income funds recorded net redemptions of \$94.2 million and \$58.5 million, respectively. Conversely, 'Other' funds logged just under \$5.0 million in net sales. Additionally, both TT dollar and foreign currency denominated funds observed net sales amounting to \$441.4 million and \$691.8 million, respectively.

Collective Investment Scheme (CIS) data published by the Trinidad and Tobago Securities and Exchange Commission (TTSEC)³² suggests that during 2022, the total value of Assets Under Management (AUM) for all

²⁸ 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.

²⁹ As at the end of December 2022, data collected by the Central Bank accounted for 84.2 per cent of the industry's 79 TTSEC registered funds.

³⁰ Other funds represent high yield funds and special purpose funds.

³¹ Within the domestic equity market, the CPI fell by 13.1 per cent over 2022. Internationally, the major S&P500 index in the US plummeted by 19.4 per cent while the VIX volatility index averaged 25.6 per cent, indicative of heightened volatility.

³² CIS data from the TTSEC represents 79 registered funds from 16 issuers at the end of 2022.

registered funds recorded a fall of 1.8 per cent to \$62,045.6 million. Despite the decline, the industry was supported by net sales of \$1,132.4 million over the year, encompassing \$20,276.9 million in sales and \$19,144.5 million in redemptions.



FIGURE 8 MUTUAL FUNDS – AGGREGATE FUND VALUE

Sources: Central Bank of Trinidad and Tobago and Trinidad and Tobago Securities and Exchange Commission (TTSEC).

CHAPTER 8 International Trade and Payments

(Data in this section are in US dollars unless otherwise indicated)

BALANCE OF PAYMENTS

Trinidad and Tobago's external accounts recorded an overall deficit of \$110.6 million in the first nine months of 2022 (Table 15A). This position was reflective of the combined surplus on the current account and a net outflow on the financial account. The improvement in the current account surplus during the first nine months of 2022, compared to one year earlier, reflected buoyant energy commodity prices which resulted in solid growth in energy export earnings. Meanwhile, the financial account recorded a net outflow over the reference period, largely reflective of movements in direct investment, due mainly to higher intercompany lending, and to a lesser extent portfolio investment owing to increased holdings of foreign debt securities.

Elevated international energy commodity prices³³ **remained the key driver or Trinidad and Tobago's current account balance**. The current account recorded a surplus of \$4,425.6 million over the period January to September 2022, a sizeable increase from the surplus of \$1,054.7 million in the similar period of 2021. This outturn was primarily attributed to an improvement in the net goods trading position, reflective of higher export earnings. More specifically, the net goods trading position improved to \$7,408.0 million during the first nine months of 2022, more than double in value (170.6 per cent) when compared to the same period of 2021. The outturn largely stemmed from an increase in export earnings which outstripped the simultaneous growth in imports. The improved performance reflected increased exports to major traditional destination markets of the United States (US), European Union (EU) and CARICOM. Exports rose by 78.1 per cent (year-on-year) to roughly \$13.2 billion over the reference period driven mainly by increased energy exports on account of higher international commodity prices³⁴. More specifically, energy exports grew by 93.4 per cent (year-on-year) to \$11.3 billion during the first nine months of 2022. Increases were recorded in all commodity sub-categories; gas (175.9 per cent), petrochemicals (75.8 per cent), and petroleum crude and refined products (55.2 per cent). Non-energy exports increased to \$1,909.0 million over the reference period, up from \$1,573.4 million in the same period of 2021, reflective of increased external demand. In particular, exports of manufactured goods, machinery and transport equipment, and beverages and tobacco were mainly responsible for the rise in non-energy exports.

Total imports grew by 23.8 per cent (yearon-year) to \$5,775.2 million over the first nine months of 2022 owing to expansions in both fuel and non-fuel imports. Fuel imports rose by \$736.2 million to \$1,519.4

³³ See Chapter 10 – International Commodity Markets.

³⁴ West Texas Intermediate (WTI) oil prices averaged US\$98.29 per barrel over the period January to September 2022 compared to US\$64.84 per barrel in the similar period one year earlier. Similarly, Henry Hub natural gas prices averaged US\$6.67 per mmtbu during the first nine months of 2022, compared to US\$3.55 per mmtbu in the same period in 2021.

million over the review period on account of the impact of higher international oil prices. At the same time, non-fuel imports increased by 9.6 per cent or \$373.0 million to \$4,255.8 million. Increased domestic demand for machinery and transport equipment, food and live animals, and chemical products were responsible for the rise in non-fuel imports. However, the value of capital imports decreased by 7.0 per cent (year-on-year) to \$1,176.0 million over the first three quarters of 2022, compared to \$1,264.7 million registered in the same period of 2021. It was noted that although the US, China, and EU were Trinidad and Tobago's main source markets for imports over the period January to September 2022, the year-on-year expansion in the value of imports primarily reflected increased demand for imported goods from the US (39.2 per cent) and China (25.6 per cent) while imports from the EU declined (-1.8 per cent). Meanwhile, imports from CARICOM increased by 29.7 per cent (year-on-year) during the nine-month period in 2022.

Services trade recorded a larger deficit of \$1,987.9 million over the first nine months of 2022, compared to a deficit of \$1,463.9 million over the same period of 2021, primarily due to financial services. Financial services recorded the largest deficit across all sub-categories, owing to increased resident spending on financial services abroad. The deficit on the transport services sub-account decreased by 8.2 per cent (year-on-year) to \$316.5 million, mainly attributable to an increase in external demand for domestic transport services. Meanwhile, an easing of travel restrictions helped to boost travel receipts in the first nine months of 2022, which recovered from the falloff recorded in the similar period of the previous year. In particular, travel services recorded a surplus of \$176.9 million over the reference period, a reversal from a deficit of \$6.3 million in 2021. Despite the rebound in the travel sub-account, the surplus remained below its pre-pandemic level of \$273.1 million in the first nine months of 2019.

The primary account recorded a larger deficit of \$1,043.4 million over the period January to September 2022, compared to a deficit of \$298.8 million registered in the previous year. This outturn was a result of increased repatriation of earnings abroad by energy sector companies, likely stemming from the improvement in energy sector performance during 2022. Meanwhile, a narrowed surplus of \$48.9 million was recorded on the secondary income account over the review period compared to \$80.0 million one year earlier, owing to higher outbound private transfers.

The financial account recorded a net outflow of \$1,851.5 million over the first nine months of 2022, a larger outturn compared to the net outflow of \$1,183.0 million over the same period in 2021. This outcome was mainly driven by transactions in the direct investment and portfolio investment categories. Net outflows in the direct investment category registered \$1,239.9 million due to a simultaneous increase in assets and a reduction in liabilities over the reference period. The rise in direct investment assets of \$872.8 million stemmed largely from intercompany lending abroad primarily by associated enterprises in the energy sector. Compounding this was a reduction of direct investment liabilities (direct investment in Trinidad and Tobago by foreign investors) of \$367.0 million, mainly due to repayments on intercompany borrowings owed to associated enterprises in the energy sector. To a lesser extent, the falloff in equity capital holdings by non-residents, primarily within the domestic energy sector, also contributed to the lower direct investment liabilities.

Simultaneously, portfolio investment registered a net outflow of \$443.3 million over the first nine months of 2022, primarily owing to increased holdings of foreign assets. The outturn in the portfolio investment category reflected a rise in long-term debt securities held abroad, mainly by domestic financial institutions. Notwithstanding, this outturn was somewhat tempered by a reduction in the holdings of foreign equity securities by non-financial institutions over the reference period.

Meanwhile, "other investment" registered a net outflow of \$133.9 million over the first three quarters of 2022, largely driven by a pickup in foreign asset holdings. Over the review period, the uptick in "other investment" assets resulted from an increase in currency and deposits, trade credits and advances, and other accounts receivable owed by non-residents, which in part can be attributed to the pickup in global economic activity, coupled with an increase in loan assets. Concurrently, the rise in currency and deposits, other accounts payable and trade credit and advances owed to non-residents underpinned the rise in "other investment" liabilities. However, this was partially offset by loan repayments by the Central Government and financial institutions.

At the end of December 2022, gross official reserves amounted to \$6,832.4 million (equivalent to 8.6 months of import cover), \$47.2 million lower when compared to the end of December 2021. This suggests that the external accounts registered an overall deficit over 2022. The reduction in the level of reserves largely stemmed from the increase in Central Bank and Government payments, which more than outweighed the growth in oil and gas receipts. Apart from the official reserves as a measure of the country's external position, the import capacity indicator is used as a gauge of Trinidad and Tobago's external vulnerability. Based on available data for the first nine months of 2022, the import capacity indicator³⁵ averaged 1.6, signalling that the level of financial inflows was able to cover 160.0 per cent of import demand over the period. However, over the same period in 2021, the import capacity indicator was recorded at 0.9 (or 90.0 per cent). The significant improvement in export earnings over the three quarters of 2022, largely owing to higher international energy prices, primarily accounted for the improvement in Trinidad and Tobago's import capacity ratio.

³⁵ The import capacity indicator, which encompasses a mixture of variables such as the purchasing power of exports, national funds and foreign financial flows (which cumulatively provide the net inflows of foreign exchange resources), relative to the size of import demand over a given period of time, represents an additional indicator of external vulnerability for Trinidad and Tobago. A ratio of 1.0 (or 100 per cent) or above represents an ideal coverage position, while below 1.0 represents an insufficient coverage position to meet the domestic economy's level of import demand over a specified period of time. See <u>January 2022 Economic Bulletin</u> for a more detailed explanation of the import capacity indicator.

TABLE 15A

TRINIDAD AND TOBAGO: SUMMARY BALANCE OF PAYMENTS / US\$ MILLIONS /

	/ 05\$	SMILLIONS /			
	2018	2019	2020	2021	Jan-Sep 2022 ^p
Current Account	1,625.8	1,020.1	-1,356.4	2,900.2	4,425.6
Goods and Services	2,426.3	1,605.4	-344.8	2,875.4	5,420.1
Goods, net*	4,138.4	2,731.8	984.1	4,711.8	7,408.0
Exports**	10,755.6	8,764.3	6,002.9	11,082.0	13,183.2
Energy	9,089.9	6,973.6	4,357.2	8,962.1	11,274.2
Non-Energy	1,665.7	1,790.7	1,645.7	2,119.9	1,909.0
Imports**	6,617.2	6,032.5	5,018.8	6,370.2	5,775.2
Fuels***	1,755.3	1,222.1	723.3	1,160.8	1,519.4
Other	4,861.9	4,810.4	4,295.5	5,209.4	4,255.8
Services, net	-1,712.1	-1,126.4	-1,328.9	-1,836.4	-1,987.9
Primary Income, net	-700.5	-607.1	-1,055.6	-90.6	-1,043.4
Secondary Income, net	-100.0	21.8	44.0	115.4	48.9
Capital Account	2.4	10.3	0.5	6.6	0.1
inancial Account	174.8	574.7	-1,513.3	2,054.1	1,851.5
Direct Investment	765.2	-69.8	-958.0	1,481.6	1,239.9
Net Acquisition of Financial Assets	65.0	114.2	98.0	386.8	872.8
Net Incurrence of Liabilities	-700.2	184.0	1,056.0	-1,094.7	-367.0
ortfolio Investment	418.1	1,453.9	-184.6	-3.8	443.3
Net Acquisition of Financial Assets	350.4	1,245.4	-85.5	-2.5	363.3
Net Incurrence of Liabilities	-67.7	-208.5	99.2	1.3	-80.0
inancial Derivatives	5.3	-0.2	-8.7	137.4	34.4
Net Acquisition of Financial Assets	5.2	-0.4	-9.1	176.3	20.0
Net Incurrence of Liabilities	-0.2	-0.2	-0.4	38.9	-14.5
Other Investment****	-1,013.8	-809.1	-362.1	439.0	133.9
Net Acquisition of Financial Assets	-309.9	329.1	-267.1	705.0	523.9
Net Incurrence of Liabilities	703.9	1,138.2	95.0	266.1	390.0
et Errors and Omissions	-2,248.1	-1,101.9	-132.6	-926.9	-2,684.8
verall Balance	-794.7	-646.1	24.8	-74.2	-110.6
	· · · · · ·	ent of GDP)	0.4	11.0	00.0
urrent Account	6.9	4.4	-6.4	11.9	20.3
Goods, net	17.4	11.8	4.7	19.3	34.0
Exports	45.3	37.8	28.5	45.3	60.5
mports	27.9	26.0	23.8	26.0	26.5
Services, net	-7.2	-4.9	-6.3	-7.5	-9.1
Primary Income, net verall Balance	-3.0 -3.3	-2.6 -2.8	-5.0 0.1	-0.4 -0.3	-4.8 -0.5
emorandum Item	-3.3	-2.0	0.1	-0.3	-0.5
ross Official Reserves^	7,575.0	6,929.0	6,953.8	6,879.6	6,769.0
1055 Official Heselves.	1,010.0	0,323.0	0,300.0	0,079.0	0,709.0

Source: Central Bank of Trinidad and Tobago

Notes:

Due to COVID-19 related restrictions implemented by the Government and the resulting work-from-home measures employed by some companies, survey
response rates have been below historical levels for 2020 and 2021. Therefore, as additional data from surveys are incorporated upon receipt, estimates
may be subject to revisions in the future.

2. GDP data used for ratios to GDP prior to 2022 are sourced from the CSO; data for 2022 are Central Bank estimates.

3. This table is an analytical presentation of the Balance of Payments and is presented in accordance with the IMF's Balance of Payments and International Investment Position Manual, Sixth Edition (BPM6). Refer to Box 3 of the Economic Bulletin, March 2017 for a Technical Note on the Transition to BPM6.

The following financial account movements are represented with a negative sign:

- A decrease in assets (inflow)
- A decrease in liabilities (outflow)
- A net inflow in net balances
- The following financial account movements are represented with a positive sign:
- An increase in assets (outflow)
- An increase in liabilities (inflow)
- A net outflow in net balance
- Energy goods data comprise estimates by the Central Bank of Trinidad and Tobago.
- ** Exports and imports are reported on a FOB (Free on Board) basis. Energy exports include exports of petroleum, petroleum products and related materials and the exports of petrochemicals.
- *** Includes petroleum, petroleum products and related materials.
- ^ End of Period.
- p Provisional.

INTERNATIONAL INVESTMENT POSITION

(Data in this section are in US dollars unless otherwise indicated)

Trinidad and Tobago's net international investment position (NIIP) was estimated at \$5,115.5 million at the end of September 2022, \$612.9 million lower when compared to the end of 2021. This decrease in the NIP represents a deterioration in the country's net lending position owing to an increase in the stock of external liabilities, which more than outweighed the small build-up in the stock of external financial assets. More specifically, the rise in external liabilities reflected an increase in sources of financing or inflows of foreign capital into the domestic economy, while the increase in foreign assets reflects higher capital holdings abroad by residents of Trinidad and Tobago.

Over the reference period, the holdings of external assets increased by \$452.2 million to roughly \$25.4 billion mainly as a result of movements in direct investment and other investment. In particular, the growth in direct investment by \$869.8 million (to roughly \$3.1 billion) was underpinned by an increase in intercompany lending abroad primarily within the energy sector. Compounding this was an uptick in "other investment", largely due to increased holdings of currency and deposits abroad, and to a lesser extent trade credits and advances, and other accounts receivable owed to residents. Partially offsetting this improvement was a reduction in portfolio investment. The decrease in portfolio investment by \$943.0 million to \$9.2 billion, stemmed mainly from a reduction in foreign equity held by residents.

At the same time, liabilities rose by \$1,065.1 million to \$20.2 billion at the end of September 2022 largely due to movements in "other investment" (\$1,225.2 million). More specifically, the increase in "other investment" liabilities to \$7.5 billion was reflective of a pickup in other accounts payable, and currency and deposits. Meanwhile, the reduction in direct investment liabilities (by \$116.5 million to \$8.8 billion) was mainly on account of repayments of intercompany borrowings. Over the review period, portfolio investment liabilities also recorded a small decrease (\$28.3 million) due to a reduction in non-resident holdings of domestic long-term debt securities. Despite the deterioration in the NIIP, Trinidad and Tobago remained a net creditor at the end of September 2022.

TABLE 15B

TRINIDAD AND TOBAGO: INTERNATIONAL INVESTMENT POSITION (AT END OF PERIOD)

/ US\$ MILLIONS /

	2018	2019	2020	2021	Sep 2022 ^p
Net International Investment Position	3,685.9	4,215.3	2,238.7	5,728.4	5,115.5
	00.050.0	04.007.7	00.001.0	04.005.5	05 057 7
Assets	22,852.3	24,307.7	23,681.9	24,905.5	25,357.7
Direct Investment	913.1	1,361.3	1,842.2	2,272.0	3,141.8
Portfolio Investment	9,692.0	11,075.1	10,162.5	10,171.0	9,228.0
Financial Derivatives	10.1	9.0	0.6	136.5	143.9
Other Investment*	4,662.0	4,933.4	4,722.9	5,446.5	6,075.0
Reserve Assets	7,575.0	6,929.0	6,953.8	6,879.6	6,769.0
Liabilities	19,166.4	20,092.4	20,178.3	19,177.1	20,242.2
Direct Investment	8,452.4	8,455.3	10,495.8	8,882.8	8,766.3
Portfolio Investment	4,064.1	3,861.0	3,960.6	3,962.4	3,934.1
Financial Derivatives	0.7	0.3	-0.0	38.9	23.7
Other Investment*	6,649.1	7,775.8	6,986.8	6,292.9	7,518.1

Source: Central Bank of Trinidad and Tobago

Note:

Due to COVID-19 related restrictions implemented by the Government and the resulting work-from-home measures employed by some companies, survey response rates have been below historical levels for 2020 and 2021. Therefore, as additional data from surveys are incorporated upon receipt, estimates may be subject to revisions in the future.

* Other investment comprises currency and deposits, loans, insurance, pension, and standardised guarantee schemes, trade credit and advances, other accounts receivable/payable and special drawing rights (liabilities).

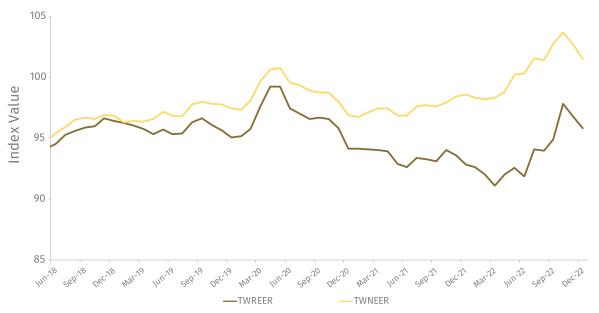
p Provisional.

EFFECTIVE EXCHANGE RATES

Trinidad and Tobago's international price competitiveness, as measured by the tradeweighted real effective exchange rate (TWREER)³⁶, declined by a modest 0.3 per cent over the twelve months of 2022 (Figure 9). Movements in the TVVREER were largely influenced by the exchange rate effect, as measured by the trade-weighted nominal effective exchange rate (TVVNEER) which outweighed the inflation effect, as measured by an index of relative prices. Over the review period, the reduction in competitiveness was due to the appreciation of the domestic currency vis-à-vis the US dollar when compared

to the currencies of Trinidad and Tobago's major trading partners. However, domestic prices remained lower (5.8 per cent) when compared to the country's main trading partners (8.8 per cent). In 2022, the global impact of the Russia/Ukraine war on commodity prices coupled with the persistent supply and demand imbalances stemming from the COVID-19 pandemic resulted in historically high inflation rates among Trinidad and Tobago's main trading partners. While there were varying Government initiatives to boost export earnings during the year, recent data on the TWREER suggests that Trinidad and Tobago's exports were somewhat less price competitive in some external markets.





Source: Central Bank of Trinidad and Tobago

³⁶ An increase (decrease) in the TWREER implies that Trinidad and Tobago's exports are more expensive (cheaper) and imports are cheaper (more expensive) when compared to the country's main trading partners, therefore indicating a deterioration (improvement) in trade competitiveness.

CHAPTER 9

International and Regional Economic Developments

INTERNATIONAL ECONOMIC DEVELOPMENTS

In recent years, the global economy has navigated successive shocks – the emergence of the COVID-19 pandemic in 2020 and the Russia/Ukraine war in 2022 - from which it is yet to fully recover. These episodes have created a pronounced period of uncertainty and disruptions amid slow or negative growth in some cases, elevated inflation rates, tightened financial conditions and increased indebtedness. One of the unexpected consequences was the rapid and sustained increase in consumer prices, particularly for food and energy products. Mounting inflationary pressures and the danger of a de-anchoring of inflation expectations prompted central banks to engage in aggressive monetary policy tightening actions, pushing borrowing costs to the highest levels seen in decades. Faced with these challenges, world growth lost momentum in 2022 after a relatively strong rebound from the COVID-19 shock in 2021. In its April 2023 WEO, the IMF estimated global output to expand by 3.4 per cent in 2022, 2.8 percentage points lower than the outturn in 2021. The slowdown primarily stems from the AEs – such as the US, Euro area and UK – registering a significant deceleration in growth. Meanwhile, growth

among the EMDEs also declined, as these economies steered the additional headwind of tightened financial conditions due to adverse spillover effects from monetary policy tightening in the AEs.

Global economic activity slowed in 2022, as aggressive monetary policy to contain inflationary pressures constrained demand. Among the AEs, growth in the US slowed by more than half to 2.1 per cent over 2022 (from 5.9 per cent in 2021) as inflationary pressures constrained consumer demand and higher interest rates negatively impacted private inventory and residential investment (Table 16). Similarly, the UK and the Euro area recorded slower growth of 4.0 per cent and 3.5 per cent, respectively, in 2022 as high inflation and rising borrowing costs stymied consumer spending and business investment. In Japan, elevated energy prices and supply bottlenecks which weighed on purchasing power and consumption, alongside a weakened terms of trade position, limited growth to 1.1 per cent in 2022 from 2.1 per cent in 2021. Meanwhile, the slowed pace of recovery among the EMDEs largely stemmed from a weak economic performance in China, alongside the adverse effects of ongoing geopolitical tensions between Russia and Ukraine. Growth in China eased to its second slowest pace in almost four decades amid renewed COVID-19 lockdowns, rising unemployment and challenges in the property sector. Real GDP in China expanded by 3.0 per cent in 2022, a sharp falloff from growth of 8.5 per cent in 2021 (Table 17). Economic activity in Russia contracted by 2.1 per cent in 2022, a reversal from an expansion of 5.6 per cent recorded in the previous year. Geopolitical tensions also negatively affected capital outflows from EMDEs during 2022, as the country group recorded a net outflow of \$607.6 billion in 2022 compared to a smaller net outflow of \$154.9 billion in 2021 (IMF April 2023 WEO).

In 2022, inflation remained well above target³⁷ in many jurisdictions but signs of deceleration began to emerge in the second half of the year. Consumer prices soared to rates not experienced since the early-1980s³⁸, driven by elevated food and energy prices and supply bottlenecks. However, aggressive monetary policy tightening together with a softening of global commodity prices led to a slowdown in inflation during the latter half of 2022. Inflation in the US, as measured by the Personal Consumption Expenditure (PCE) price index, slowly trended downward, from a high of 7.0 per cent (year-on-year) in June 2022 to a low of 5.3 per cent in December, largely reflective of a tempering of gasoline prices. Headline inflation also eased in the UK to 10.5 per cent in December (after peaking at 11.1 per cent in October) while inflation in the Euro area decelerated to 9.2 per cent in December 2022 (from a high of 10.6 per cent in October). Turning to the EMDEs, the slowdown in economic activity and sluggish demand kept China's inflation rate contained below the People's Bank of China's (PBoC) target of 3.0 per cent over the 12-month period. In Russia, in the immediate

aftermath of its invasion of Ukraine, inflation skyrocketed to double-digits in March 2022. Despite a gradual deceleration thereafter (April to December 2022), inflation remained above the Central Bank of Russia's (CBR) inflation target of 4.0 per cent³⁹.

To anchor inflation expectations and return inflation within target, central banks employed restrictive monetary policy actions. The US Federal Reserve (Fed) engaged in an aggressive monetary policy tightening cycle, cumulatively increasing the federal funds rate by 425 basis points to 4.25 to 4.5 per cent - the highest level since 2007. Further, the Fed also lowered its holdings of Treasury securities and agency mortgage-backed securities. The Bank of England (BoE) instituted eight interest rate hikes in 2022, bringing borrowing costs to 3.5 per cent at the end of 2022 - the highest level since 2008 - from 0.25 per cent at the start of the year. In Europe, the European Central Bank (ECB) exited its neutral policy stance (0.0 per cent) for the first time since March 2016, increasing its benchmark interest rate by a cumulative 250 basis points to reach 2.5 per cent at the end of 2022 - its highest borrowing costs since 2008. In contrast, the Bank of Japan (BoJ) maintained a divergent policy path to other major AE central banks, holding its key short-term interest rate at -0.1 per cent in 2022. Further, the Bol modified its yield curve tolerance level with the aim of improving the functioning of the domestic bond

³⁷ Central Bank inflation target rates for selected economies: US - 2.0 per cent; UK - 2.0 per cent; Euro area - 2.0 per cent; Japan - 2.0 per cent; China - 3.0 per cent; India - 4.0 +/- 2.0 per cent; and Russia - 4.0 per cent.

³⁸ According to the IMF's April 2023 WEO database, Advanced Economies recorded an average inflation rate of 7.3 per cent in 2022, the highest rate since 1982.

³⁹ Russia's inflation rate gradually decelerated to 11.9 per cent (year-on-year) in December 2022 from 17.8 per cent (year-on-year) in April 2022.

market in order to better facilitate monetary policy transmission⁴⁰. Meanwhile among EMDEs, the PBoC loosened monetary policy during 2022 to stimulate economic activity and ease financial stress among some highly indebted real estate companies. The PBoC lowered its benchmark interest rate – the 1-year Loan Prime Rate (LPR) – twice and reduced its 5-year LPR three times over the year⁴¹. Notwithstanding the loosened policy stance taken by Chinese authorities, consumer and business sentiment remained subdued in the second half of 2022. Meanwhile, in response to the elevated inflation environment, the CBR tightened its monetary policy stance – more than doubling its benchmark interest rate (from 9.5 per cent in February to 20.0 per cent in March 2022) to support the Russian economy and offset heightened currency depreciation pressures⁴². The CBR lowered its interest rate in consecutive monetary policy meetings⁴³ to 7.5 per cent in December amid subdued economic activity and a slowdown in consumer prices.

TABLE 16ADVANCED ECONOMIES: REAL GDP GROWTH/ PER CENT /

	2018 ^r	2019 ^r	2020 ^r	2021 [,]	2022 ^r	2023 ^e	2024 ^f	2025 ^f
United States	2.9	2.3	-3.4	5.9	2.1	1.6	1.1	1.8
United Kingdom	1.7	1.7	-9.3	7.6	4.0	-0.3	1.0	2.2
Euro Area	1.8	1.6	-6.4	5.4	3.5	0.8	1.4	1.9
Japan	0.6	-0.2	-4.5	2.1	1.1	1.3	1.0	0.6

Source: International Monetary Fund, World Economic Outlook Database (April 2023)

r Revised.

e Estimate.

f Forecast.

⁴⁰ The range on the 10-year Japanese Government Bond yield was expanded to fluctuate from its current +/- 0.25 percentage points to +/- 0.5 percentage points.

⁴¹ The People's Bank of China (PBoC) cut its 1-year Loan Prime Rate (LPR) by a cumulative 15 basis points. Adjustments were made in January (by 10 basis points) and August (by 5 basis points), and remained unchanged at 3.65 per cent by the end of 2022. Meanwhile, the 5-year LPR was reduced by a cumulative 35 basis points. Adjustments were made in January (by 5 basis points), May (15 basis points) and August (15 basis points) and remained unchanged at 4.3 per cent by the end of 2022.

⁴² The Russian ruble (against the US dollar) lost approximately 40.0 per cent of its value in the aftermath of Russia's invasion of Ukraine and subsequently fell to its lowest daily value of ₽138.93 per US\$ on March 7, 2022. However, the currency recovered thereafter.

⁴³ The Central Bank of Russia lowered its benchmark interest rate on 6 occasions (twice in April, May, June, July and September) following its sharp interest rate hike in the February 2022 in the wake of its country's invasion of Ukraine.

TABLE 17
EMERGING ECONOMIES: REAL GDP GROWTH
/ PER CENT /

	2018 ^r	2019 ^r	2020 ^r	2021 ^r	2022 ^r	2023 ^e	2024 ^f	2025 ^f
China	6.8	6.0	2.2	8.5	3.0	5.2	4.5	4.1
India*	6.5	3.7	-6.6	9.1	6.8	5.9	6.3	6.2
Russia	2.8	2.2	-2.7	5.6	-2.1	0.7	1.3	1.0
Brazil	1.8	1.2	-3.9	5.0	2.9	0.9	1.5	1.9

Source: International Monetary Fund, World Economic Outlook Database (April 2023)

* Data are presented on a fiscal year basis.

- r Revised.
- e Estimate.
- f Forecast.

REGIONAL ECONOMIC DEVELOPMENTS

Economic recovery continued in the Latin American and Caribbean (LAC) region in 2022, albeit at a slower pace than in 2021. The IMF's April 2023 WEO estimated growth of 4.0 per cent for 2022, driven by elevated global commodity prices, a rebound in the services sector and the recovery in the region's main trading partners. At the same time, inflation soared to record-highs, reflecting the impact of the Russia/Ukraine war on food and energy prices together with ongoing supply disruptions caused by the COVID-19 pandemic. In an effort to curb surging consumer prices, central banks continued to tighten monetary policy in 2022. By the final quarter of 2022, inflationary pressures began to ease in several LAC countries, helped by a softening of international commodity prices and the effect of higher domestic and external interest rates on aggregate demand.

In 2022, economic growth accelerated in the Caribbean region, primarily driven commodity-exporting economies. by According to the IMF's WEO April 2023, real GDP in the Caribbean expanded by 13.4 per cent in 2022, more than double its outturn of 5.1 per cent in 2021⁴⁴. Furthermore, in its April 2023 Regional Economic Outlook (REO), the IMF forecasts real GDP in commodity-exporting economies to expand by 25.5 per cent in 2022, while growth in tourism-dependent economies is anticipated to record a modest expansion of 7.2 per cent⁴⁵. High international energy commodity prices along with an expansion in domestic oil production resulted in improved growth performances in commodityexporting economies. In particular, Guyana recorded robust growth of 62.3 per cent in 2022, driven by activities within the oil and gas sector (Table 18). Non-energy growth also improved, largely due to positive outturns in agriculture, manufacturing, construction and services sectors over the 12-month period.

⁴⁴ Sourced from the IMF's October 2022 WEO.

⁴⁵ In 2021, commodity exporting economies expanded by 4.7 per cent while tourism-dependent economies expanded by 7.8 per cent.

Economic prospects in Guyana's energy sector remained buoyant as ExxonMobil made additional offshore oil discoveries during the year⁴⁶.

A resurgence in tourism activity contributed to modest economic growth in tourismdependent Caribbean economies. The Jamaican economy continued to recover in 2022 but at a slower pace than the previous year. The expansion in real GDP of 4.0 per cent in 2022 was underpinned by activity in the tourism sector and associated services such as manufacturing and agriculture. Meanwhile, Jamaica's inflation remained above the Bank of Jamaica's (BOJ) target range⁴⁷ in 2022, driven by increases in the categories of Food and Non-Alcoholic Beverages; Restaurants and Accommodations Services; and Housing, Water, Electricity, Gas and Fuels. In response to persistently high inflation, the BOJ tightened its monetary policy for most of 2022. The policy interest rate was maintained at 7.0 per cent in December 2022 following 10 consecutive rate hikes amidst a slowdown in consumer prices and a decline in inflation expectations.

The Barbadian economy rebounded in 2022, bolstered by activity in the tourism sector and its spillover to ancillary sectors. Economic growth accelerated to 10.0 per cent in 2022 compared with a contraction of 0.2 per cent recorded in the previous year. The relaxation of COVID-19 restrictions on travel and a rebound in business activity contributed to the improved outturn. Labour market conditions also improved, marked by reduced unemployment in the economy. Meanwhile, inflation rose sharply in 2022, reflecting the impact of the Russia/Ukraine conflict on food and energy prices and ongoing supply disruptions. However, the pace of price increases slowed in the second half of 2022, mainly on account of easing global inflationary pressures and Government policy intervention on energy prices. Following the successful completion of a four-year (2018-2022) Extended Fund Facility (EFF), the IMF approved access for a new EFF of approximately US\$110 million over three years and US\$183 million under the Resilience and Sustainability Trust (RST)⁴⁸. These facilities are geared toward strengthening the macroeconomic stability of the Barbadian economy, while supporting structural reforms and increasing resilience to climate change.

Economic activity in the Eastern Caribbean Currency Union (ECCU) continued to rebound in 2022. Boosted by increased tourism activity, albeit below pre-pandemic levels, the Eastern Caribbean Central Bank (ECCB) estimates economic growth of 8.9 per cent in 2022, compared to 5.8 per cent in 2021. The ECCB anticipates continued growth in tourism, particularly for cruise arrivals, due to further easing of COVID-19 restrictions in member countries. However, the regional bloc continues to grapple with the effects of high inflation and challenges related to air and

⁴⁶ In October 2022, ExxonMobil made two new oil discoveries at the Sailfin-1 and Yarrow-1 wells in the Stabroek block offshore Guyana, bringing the total estimated recoverable resources for the Stabroek Block to over 11 billion oil-equivalent barrels. The total number of discoveries in Guyana now stands at more than 30.

 $^{^{\}scriptscriptstyle 47}$ Jamaica's inflation target range is 4.0 to 6.0 per cent.

⁴⁸ The IMF Resilience and Sustainability Trust (RST) was established to assist low-income and vulnerable middle-income countries build resilience to external shocks and ensure sustainable growth, contributing to their longer-run balance of payments stability.

sea connectivity. In support of the economic recovery, the ECCB 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, throughout 2022.

TABLE 18SELECTED LAC: REAL GDP GROWTH/ PER CENT /

Country	2018 ^r	2019 ^r	2020 ^r	2021 ^r	2022 ^r	2023 ^e	2024 ^f	2025 ^f
Argentina	-2.6	-2.0	-9.9	10.4	5.2	0.2	2.0	2.0
The Bahamas	2.8	0.7	-23.8	13.7	11.0	4.3	1.8	1.6
Barbados	-0.6	-1.3	-13.7	-0.2	10.0	4.9	3.9	2.8
Belize	2.0	2.0	-13.7	15.2	11.4	3.0	2.0	2.0
Chile	4.0	0.8	-6.1	11.7	2.4	-1.0	1.9	2.2
Colombia	2.6	3.2	-7.0	11.0	7.5	1.0	1.9	2.9
Eastern Caribbean Currency Union	3.8	2.8	-15.1	5.8	8.9	n.a.	n.a.	n.a.
Guyana	4.4	5.4	43.5	20.1	62.3	37.2	45.3	3.4
Haiti	1.7	-1.7	-3.3	-1.8	-1.7	0.3	1.2	1.5
Jamaica	1.8	1.0	-10.0	4.6	4.0	2.2	2.0	1.7
Mexico	2.2	-0.2	-8.1	4.7	3.1	1.8	1.6	1.9
Suriname	4.9	1.1	-15.9	-2.7	1.3	2.3	3.0	3.0

Source: International Monetary Fund, World Economic Outlook Database (April 2023)

r Revised.

e Estimate.

f Forecast.

n.a. Not Available.

CHAPTER 10 International Commodity Markets

ENERGY COMMODITY PRICE INDEX

The Energy Commodity Price Index (ECPI)⁴⁹ rose to an average of 174.2 in 2022, representing an increase of 45.0 per cent from the previous year. Prices of all commodities captured in the index increased over the course of the year given geopolitical tensions in major energy-exporting territories, coupled with increased energy demand. These factors facilitated elevated crude oil and natural gas prices, which subsequently filtered to other energy commodity prices within the index.

international crude oil The market remained tight, with elevated prices in 2022. West Texas Intermediate (WTI) crude oil prices averaged US\$94.43 per barrel in 2022, representing a 38.9 per cent increase from the average price of the previous year. Meanwhile, the price of Brent crude oil increased 42.6 per cent to an average US\$100.78 per barrel in 2022. At the beginning of the year, geopolitical tensions in Eastern Europe alongside the progressive reopening of economies in the aftermath of the pandemic drove energy commodity prices. In the first half of the year, US attempts to reduce

market prices (with releases from its strategic oil reserves), coupled with gradual increases in OPEC+ production, failed to have a significant impact on energy markets. Crude oil prices peaked at US\$114.59 per barrel in June before a slight moderation ensued in the second half of the year. This moderation in prices stemmed from reduced economic activity and refinery output in China - due to coronavirus-related lockdowns - along with global recessionary concerns. Prices fell below the US\$100.00 per barrel mark in the third quarter and continued a moderating trend through to the close of the year. The overall increase in crude oil prices also passed through to the prices of other commodities captured in the index including motor gasoline (43.0 per cent), jet fuel (81.6 per cent) and gas oil (73.9 per cent).

Natural gas prices were also bolstered by the war and other demand fundamentals in 2022. US Henry Hub prices averaged US\$6.38 per million British Thermal Units (mmbtu) in 2022, an increase of 65.6 per cent compared to 2021. High demand for natural gas, due to the global move toward cleanerburning hydrocarbons coupled with warmerthan-expected summer temperatures, placed upward pressure on market prices. This was exacerbated by supply disruptions associated with the Russia/Ukraine conflict, global sanctions on Russian commodities and low European gas inventory levels in the second half of the year. The increased gas price had

⁴⁹ The ECPI is a summary measure of the price movements of Trinidad and Tobago's top ten energy-based commodity exports. Developed in a collaborative effort between the Energy Chamber and the Central Bank, the series is based on export values in 2007 and complements other available price indicators, including individual commodities and sectoral export price indices prepared by the Central Statistical Office. For further details on the computation of the Energy Commodity Prices Index (ECPI), see Finch, K. and Cox, D. 2010. The Energy Commodity Price Index. Central Bank of Trinidad and Tobago, Economic Bulletin, Volume XII No. 2. pp.84.

knock-on effects for other commodities during the period including ammonia (103.6 per cent), urea (33.4 per cent), natural gasoline (23.0 per cent), methanol (10.7 per cent) and propane (5.9 per cent).

INTERNATIONAL FOOD PRICES

International food commodity prices continued to increase in 2022, exacerbated by the Russia/Ukraine conflict. Russia's invasion of Ukraine helped global food prices reach an all-time high in March 2022. The United Nations Food and Agriculture Organisation's (FAO) Food Price Index surged 34.0 per cent in March 2022 (year-on-year) after a similar surge of 28.3 per cent in March 2021. The increase in March 2022 was driven

by growth in Oils (58.1 per cent) as Ukraine is the world's leading exporter of sunflower seed oil, the supply of which was adversely affected by the conflict. Notable increases were also recorded in the global price of commodities such as sugar, meat and dairy products in March 2022. For the year as a whole, the FAO food price index increased 14.3 per cent. Although this growth was notable, this is down from growth of 28.1 per cent in 2021. Despite the slower growth, the increase in the index was bolstered by marked increases in the Dairy (19.5 per cent) and Cereals (17.9 per cent) sub-indices. Significant increases were also recorded in the Oils (13.9 per cent), Meat (12.9 per cent) and Sugar (4.7 per cent) sub-indices.



APPENDIX 1

Economic Statistics

TABLES A.1 - A.36



TABLES A.1 - A.36

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p - Provisional	r - Revised	re - Revised Estimates
n.a - Not Available	c - Confidential	n/a - Not Applicable

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REAL GDP GROWTH¹ BY SECTOR OF ORIGIN, 2018-2022 / PER CENT /

SECTOR	2018	2019	2020	2021 ^p	Jan to Sep 2022 ^p
Agriculture, Forestry and Fishing	-9.6	-35.6	31.1	-16.5	-9.2
Mining and Quarrying	-4.0	-3.5	-11.4	-5.2	0.7
Manufacturing	0.3	-2.3	-10.6	0.1	4.5
Electricity, Gas, Steam and Air Conditioning Supply	-0.5	1.8	-10.3	6.8	-2.8
Water Supply; Sewerage, Waste Management and Remediation Activities	7.5	-2.8	3.2	4.0	2.2
Construction	-1.2	-5.8	-12.9	3.9	-1.1
Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles	-3.0	5.6	-11.4	-4.7	3.8
Transportation and Storage	4.0	-2.3	-27.9	1.0	26.8
Accommodation and Food Service Activities	0.3	-0.1	-18.5	-5.9	20.1
Information and Communication	2.1	2.3	-1.1	-0.5	-0.5
Financial and Insurance Activities	0.1	8.5	3.9	3.0	-0.8
Real Estate Activities	0.5	0.4	0.4	0.5	0.4
Professional, Scientific and Technical Activities	9.0	4.8	0.8	-2.1	61.9
Administrative and Support Service Activities	-0.7	0.1	-1.8	-0.2	1.2
Public Administration and Defence; Compulsory Social Security	-1.2	4.3	1.4	-2.7	0.9
Education	-0.2	0.7	-0.3	-0.3	-0.3
Human Health and Social Work Activities	0.2	0.3	0.2	0.1	-0.1
Arts, Entertainment and Recreation	0.3	0.2	0.2	0.1	-0.1
Other Service Activities	0.6	2.8	-1.2	13.7	1.9
Activities of Households as Employers; Undifferentiated Goods- and Services-Producing Activities of Households for Own Use	1.1	1.2	1.1	1.0	0.8
FISIM ²	2.1	5.4	8.8	-0.3	0.6
GDP At Basic Prices ³	-1.3	0.5	-8.5	-1.7	3.0
Taxes Less Subsidies on Products	13.5	-10.5	19.4	16.3	n.a.
GDP At Purchasers Prices/Market Prices	-0.9	0.1	-7.7	-1.0	n.a.

SOURCE: Central Statistical Office

1 In 2017, the CSO changed the base year to 2012 and the industry breakdown now conforms to the International Standard Industrial Classification of All Economic Activities, Revision 4 (ISIC. Rev 4). Annual GDP are compiled at purchaser prices; Quarterly GDP at producer prices.

2 Financial Intermediation Services Indirectly Measured.

3 For the period January to June 2022, Quarterly GDP at producer prices is used. The producer price is the amount receivable by the producer inclusive of taxes on products, except deductible value added tax, and exclusive of subsidies on products. The basic price is the amount receivable by the producer exclusive of taxes payable on products and inclusive of subsidies receivable on products.

GROSS DOMESTIC PRODUCT AT CURRENT MARKET PRICES¹ BY SECTOR OF ORIGIN, 2018-2022

/ TT\$ Millions /

SECTOR	2018	2019	2020	2021 [,]	Jan to Sep 2022 ^p
Agriculture, Forestry and Fishing	1,691.3	1,323.6	1,663.9	1,592.6	1,174.1
Mining and Quarrying	22,124.9	20,686.3	12,812.5	23,030.2	31,405.7
Manufacturing	29,642.0	26,518.9	21,685.5	32,204.2	34,524.8
Electricity, Gas, Steam and Air Conditioning Supply	3,360.2	3,036.4	2,798.2	4,271.0	4,010.6
Water Supply; Sewerage, Waste Management and Remediation Activities	2,093.1	2,175.9	2,127.9	2,189.5	1,479.5
Construction	9,033.3	8,577.6	7,552.5	8,118.7	7,027.7
Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles	38,370.7	38,991.2	36,697.4	35,045.2	28,621.4
Transportation and Storage	5,717.9	5,879.4	4,249.6	4,344.1	4,339.7
Accommodation and Food Service Activities	2,629.0	2,674.7	2,291.2	2,202.7	1,955.9
Information and Communication	3,967.1	4,088.1	4,012.5	3,962.6	3,006.2
Financial and Insurance Activities	11,588.8	12,767.1	10,587.1	11,411.3	8,900.5
Real Estate Activities	3,232.6	3,296.3	3,349.7	3,379.3	2,561.9
Professional, Scientific and Technical Activities	3,542.6	3,799.1	3,843.8	3,794.9	3,215.3
Administrative and Support Service Activities	5,293.0	5,337.9	5,294.6	5,329.7	4,105.9
Public Administration and Defence; Compulsory Social Security	13,707.8	13,661.5	13,667.0	13,284.2	10,024.9
Education	4,111.0	4,260.6	4,209.0	4,177.1	3,124.7
Human Health and Social Work Activities	777.2	891.2	921.9	940.2	700.2
Arts, Entertainment and Recreation	425.2	427.3	426.3	427.6	322.3
Other Service Activities	605.0	626.6	625.6	709.5	519.4
Activities of Households as Employers; Undifferentiated Goods- and Services-Producing Activities of Households for Own Use	290.7	294.3	297.5	300.4	226.8
FISIM ²	-4,098.6	-4,173.7	-4,085.3	-3,876.0	-2,996.5
GDP At Basic Prices ³	158,104.6	155,140.1	135,028.4	156,838.8	148,251.0
Taxes Less Subsidies on Products	6,576.0	5,947.6	7,145.0	8,476.1	n.a.
GDP At Purchasers Prices/Market Prices	164,680.6	161,087.7	142,173.3	165,315.0	n.a.

SOURCE: Central Statistical Office

1 In 2017, the CSO changed the base year to 2012 and the industry breakdown now conforms to the International Standard Industrial Classification of All Economic Activities, Revision 4 (ISIC. Rev 4). Annual GDP are compiled at purchaser prices; Quarterly GDP at producer prices.

2 Financial Intermediation Services Indirectly Measured.

3 For the period January to June 2022, Quarterly GDP at producer prices is used. The producer price is the amount receivable by the producer inclusive of taxes on products, except deductible value added tax, and exclusive of subsidies on products. The basic price is the amount receivable by the producer exclusive of taxes payable on products and inclusive of subsidies receivable on products.

SECTORAL COMPOSITION OF G.D.P.¹ AT CURRENT MARKET PRICES, 2018-2022 / PER CENT /

SECTOR	2018	2019	2020	2021 ^p	Jan to Sep 2022 ^p
Agriculture, Forestry and Fishing	1.0	0.8	1.2	1.0	0.8
Mining and Quarrying	13.4	12.8	9.0	13.9	21.2
Manufacturing	18.0	16.5	15.3	19.5	23.3
Electricity, Gas, Steam and Air Conditioning Supply	2.0	1.9	2.0	2.6	2.7
Water Supply; Sewerage, Waste Management and Remediation Activities	1.3	1.4	1.5	1.3	1.0
Construction	5.5	5.3	5.3	4.9	4.7
Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles	23.3	24.2	25.8	21.2	19.3
Transportation and Storage	3.5	3.6	3.0	2.6	2.9
Accommodation and Food Service Activities	1.6	1.7	1.6	1.3	1.3
Information and Communication	2.4	2.5	2.8	2.4	2.0
Financial and Insurance Activities	7.0	7.9	7.4	6.9	6.0
Real Estate Activities	2.0	2.0	2.4	2.0	1.7
Professional, Scientific and Technical Activities	2.2	2.4	2.7	2.3	2.2
Administrative and Support Service Activities	3.2	3.3	3.7	3.2	2.8
Public Administration and Defence; Compulsory Social Security	8.3	8.5	9.6	8.0	6.8
Education	2.5	2.6	3.0	2.5	2.1
Human Health and Social Work Activities	0.5	0.6	0.6	0.6	0.5
Arts, Entertainment and Recreation	0.3	0.3	0.3	0.3	0.2
Other Service Activities	0.4	0.4	0.4	0.4	0.4
Activities of Households as Employers; Undifferentiated Goods- and Services-Producing Activities of Households for Own Use	0.2	0.2	0.2	0.2	0.2

SOURCE: Central Statistical Office

1 In 2017, the CSO changed the base year to 2012 and the industry breakdown now conforms to the International Standard Industrial Classification of All Economic Activities, Revision 4 (ISIC. Rev 4). Annual GDP are compiled at purchaser prices; Quarterly GDP at producer prices.

MAJOR AGRICULTURAL COMMODITIES, 2017-2021

PRODUCT	2017	2018	2019	2020	2021
VEGETABLES (000 kgs)					
Tomato	2,645	1,678	1,700	2,624	2,190
Cabbage	435	755	365	741	1,367
Cucumber	804	741	973	1,227	1,223
Dasheen	3,224	2,511	2,097	2,085	2,547
Rice	1,619	585	536	n.a.	n.a.
Pigeon Peas	2,043	2,601	1,223	623	1,611
Pumpkin	1,884	4,533	2,410	1,792	741
Melongene	913	488	1,467	2,325	1,333
MEAT PRODUCTION (000 kgs)					
Beef and Veal	226	97	153	167	168
Pork	2,178	2,278	2,036	1,729	1,972
Mutton	156	49	41	117	96
Broilers (000 birds)	33,267	31,889	33,651	32,686	30,345
Table Eggs (000 doz)	6,910	7,496	8,023	7,258	6,394
Milk (000 litres)	2,428	3,456	2,934	2,184	1,708

SOURCE: Central Statistical Office

PRODUCTION AND UTILISATION OF CRUDE OIL AND RELATED PRODUCTS AND PETROCHEMICALS, 2018-2022

COMMODITY GROUP	2018	2019	2020	2021	2022
CRUDE OIL					
Exploration (meters)					
Depth Drilled	110,182	91,883	55,826	60,400	76,187
Production (000 barrels)					
Crude Oil and Condensates	23,176	21,481	20,669	21,845	21,329
Of which: Condensates	3,338	3,279	3,086	2,810	2,334
Daily Average (b/d)	63,533	58,863	56,481	59,838	58,441
Imports (000 barrels)					
Crude Oil Imports	22,886	0	0	0	0
Of which: u.p.a.	0	0	0	0	0
Refining (000 barrels) ¹					
Refinery Throughput	36,000	0	0	0	0
Refinery Output	35,631	0	0	0	0
Capacity Utilisation (%)	59	n/a	n/a	n/a	n/a
Exports (000 barrels)					
Crude Oil Exports	8,047	21,298	20,316	21,681	19,661
Petroleum Products	29,039	6,727	6,414	7,018	5,331
Natural Gas (Mn cubic feet/day)					
Production	3,585	3,588	3,044	2,579	2,683
Utilisation ²	3,378	3,439	2,925	2,460	2,585
Of which: Petrochemicals	1,061	1,124	965	1,071	1,020
Electricity Generation	242	254	237	248	262
LNG	1,921	1,972	1,645	1,051	1,219
Natural Gas Liquids (000 barrels)					
Production	8,695	8,530	7,165	6,112	5,585
Exports	7,668	8,119	6,453	5,226	4,955
Local Sales	1,308	876	866	865	859
Stock Change	-280	-465	-154	22	-228
Fertilisers (000 tonnes)					
Production	5,431	6,104	5,799	5,648	4,926
Exports	4,924	5,206	4,640	4,607	3,958
Local Sales	5	4	2	2	2
Stock Change	501	894	1,157	1,040	965
Methanol (000 tonnes)					
Production	5,081	5,672	4,259	5,510	5,494
Exports	5,010	5,722	4,358	5,451	5,272
Local Sales	7	7	10	9	6
Stock Change	64	-58	-109	50	216

SOURCES: Ministry of Energy and Energy Industries and Central Bank of Trinidad and Tobago

1 Petrotrin's Refinery was closed in November 2018. Therefore, refinery capacity (estimated at 168,000 barrels per day prior to its closure) and capacity utilisation are not applicable from 2019.

2 Utilisation refers to gas sales and does not include natural gas used in own consumption.

PRODUCTION AND SALES OF CEMENT, 2018-2022

PRODUCT	2018	2019	2020	2021	2022
CEMENT (000 TONNES)					
Production	662.6	678.3	631.9	723.4	707.1
Local Sales	483.8	486.7	472.7	410.4	427.0
Exports	270.9	309.5	313.4	303.0	288.0

SOURCE: Central Bank of Trinidad and Tobago

TABLE A.7

PRICES OF SELECTED EXPORT COMMODITIES, 2018-2022

СОММОДІТУ	2018	2019	2020	2021	2022
Crude Oil (WTI ¹ ; US\$/bbl ²)	64.8	57.0	39.3	68.0	94.4
Crude Oil (Brent; US\$/bbl ²)	71.6	64.2	41.8	70.7	100.8
Natural Gas (Henry Hub; US\$/mmbtu3)	3.2	2.6	2.0	3.9	6.4
Ammonia (FOB Caribbean; US\$/tonne)	268.3	206.1	187.6	546.7	1,113.2
Urea (FOB Caribbean; US\$/tonne)	245.4	249.1	219.3	483.1	644.5
Methanol (FOB Rotterdam; US\$/tonne)	474.2	363.0	294.8	502.6	556.4
Billets (FOB Latin America; US\$/tonne)	500.0	426.7	390.5	616.9	692.5
Wire Rods (FOB Latin America; US\$/ tonne)	579.8	532.9	498.1	755.2	841.8

SOURCE: Bloomberg; Green Markets; Fertiliser Week; European Chemical News; Monthly Methanol Newsletter (TECNON); Metal Bulletin; Platts

All prices are monthly averages of published quotations and not necessarily realised prices.

- 1 West Texas Intermediate.
- 2 US dollars per barrel.
- 3 US dollars per million British thermal units.

INDEX OF DOMESTIC PRODUCTION, 2018-2022 / 1995=100 /

INDUSTRY		2018	2019	2020	2021	Jan to Sep
INDUSTRY	WEIGHT	2018	2019	2020	2021	2022
Food Processing	58	1,445.2	1,871.9	2,394.3	2,977.4	4,642.3
Drink and Tobacco	63	1,121.4	1,270.9	1,019.8	1,729.4	2,831.2
Textiles, Garments and Footwear	6	1,333.8	1,360.3	1,378.5	1,349.4	1,314.9
Printing, Publishing and Paper Converters	27	229.7	205.9	183.1	162.5	147.2
Wood and Related Products	7	685.0	669.9	670.9	674.4	683.3
Chemicals and Non-Metallic Minerals	43	320.3	331.2	362.5	379.4	390.8
Assembly-Type and Related Industries	61	231.9	258.6	320.7	709.6	6,743.1
Miscellaneous Manufacturing Industries	10	175.3	173.2	171.2	177.0	177.0
Electricity	40	71.4	70.5	67.6	70.9	75.8
Water	6	112.7	108.8	113.1	119.5	120.3
All Industry Index						
(Excluding Petrochem, Oil and Natural Gas, Explor., Product. and Refining)	320	646.3	757.7	817.2	1,137.8	2,809.0
Explor., and Product. of Oil, Natural Gas, etc.	445	112.6	108.1	98.9	95.5	96.7
Petrochemicals	182	219.7	225.4	204.0	214.2	162.0
Oil and Natural Gas Refining ¹	53	731.9	206.4	173.0	147.5	139.0
All Industry Index						
(Including Petrochem, Oil and Natural Gas, Explor., Product. and Refining)	1,000	335.8	335.6	346.0	448.5	974.0

SOURCE: Central Statistical Office

ANNUAL CHANGES IN THE INDICES OF PRODUCTION AND HOURS WORKED (ALL EMPLOYEES), 2020-2022¹ / PER CENT /

INDUSTRY	DOME	STIC PROI (1995=100		INDEX OF HOURS WORKED (1995=100)			
	2020	2021	Jan to Sep 2022	2020	2021	Jan to Sep 2022	
Food Processing	27.9	24.4	53.0	2.1	2.0	2.5	
Drink and Tobacco	-19.8	69.6	89.4	-15.8	-10.8	-3.3	
Textiles, Garments and Footwear	1.3	-2.1	-4.0	0.6	0.9	1.3	
Printing, Publishing and Paper Converters	-11.1	-11.2	-9.8	2.5	1.4	0.9	
Wood and Related Products	0.2	0.5	1.2	-3.1	-4.1	-2.7	
Chemicals and Non-Metallic Minerals	9.4	4.7	3.9	-0.6	1.7	3.0	
Assembly-Type and Related Industries	24.0	121.3	1,067.7	-9.1	2.9	-1.7	
Miscellaneous Manufacturing Industries	-1.2	3.4	0.3	-0.8	-15.8	-4.5	
Electricity	-4.0	4.8	9.1	0.1	7.0	-1.2	
Water	3.9	5.7	2.3	-2.2	-1.0	6.7	
All Industry Index							
(Excluding Petrochem, Oil and Natural Gas, Explor., Product. and Refining)	7.8	39.2	160.9	-2.3	-0.8	1.5	
Explor., and Product. of Oil, Natural Gas, etc.	-8.5	-3.4	1.8	-4.7	-4.5	-4.3	
Petrochemicals	-9.5	5.0	-22.7	-8.1	0.4	7.5	
Oil and Natural Gas Refining ²	-16.2	-14.8	-5.0	0.0	0.0	0.0	
All Industry Index							
(Including Petrochem, Oil and Natural Gas, Explor., Product. and Refining)	3.1	29.6	127.7	-2.6	-0.8	1.5	

SOURCE: Central Statistical Office

1 Percentage changes over the corresponding period.

ANNUAL CHANGES IN THE INDICES OF AVERAGE WEEKLY EARNINGS AND EMPLOYMENT (ALL EMPLOYEES), 2020-2022¹ / PER CENT /

INDUSTRY	AVERAGE WEEKLY EARNINGS (1995=100)					ENT 0)
	2020	2021	Jan to Sep 2022	2020	2021	Jan to Sep 2022
Food Processing	2.1	1.7	4.4	0.8	0.6	0.4
Drink and Tobacco	-1.4	-8.7	3.0	-6.0	-3.7	1.6
Textiles, Garments and Footwear	-3.6	-3.1	-1.6	0.0	-2.5	-1.3
Printing, Publishing and Paper Converters	10.9	10.6	11.2	-1.7	-1.4	-0.9
Wood and Related Products	-17.0	-12.2	-8.7	5.9	3.6	2.1
Chemicals and Non-Metallic Minerals	3.4	1.0	-2.2	-4.4	-2.0	-1.0
Assembly-Type and Related Industries	5.8	9.7	3.4	-8.7	-5.4	-4.8
Miscellaneous Manufacturing Industries	3.0	6.1	-1.4	-4.1	-4.0	-1.7
Electricity	3.8	6.3	-0.5	-1.6	2.4	-1.5
Water	1.7	-3.2	2.9	-1.9	-3.0	-2.1
All Industry Index						
(Excluding Petrochem, Oil and Natural Gas, Explor., Product. and Refining, etc)	2.5	1.4	2.0	-2.3	-1.7	-0.8
Explor., and Product. of Oil, Natural Gas, etc.	-9.2	-11.1	-10.0	3.6	0.8	1.0
Petrochemicals	6.8	1.5	12.0	-5.3	-7.7	0.9
Oil and Natural Gas Refining ²	0.0	0.0	0.0	0.0	0.0	0.0
All Industry Index						
(Including Petrochem, Oil and Natural Gas, Explor., Product. and Refining)	2.2	0.9	2.2	-1.9	-1.6	-0.7

SOURCE: Central Statistical Office

1 Percentage changes over the corresponding period.

ANNUAL CHANGES IN THE INDICES OF REAL EARNINGS AND OUTPUT PER MAN HOUR WORKED (ALL EMPLOYEES), 2020-2022¹ / PER CENT /

INDUSTRY	RE	AL EARNI (1995=10(INDEX OF OUTPUT PER MAN HOUR WORKED (1995=100)			
	2020	2021	Jan to Sep 2022	2020	2021	Jan to Sep 2022	
Food Processing	1.4	-0.4	-0.6	25.2	22.0	49.1	
Drink and Tobacco	-2.0	-10.5	-1.9	-4.8	87.7	97.5	
Textiles, Garments and Footwear	-4.2	-5.1	-6.3	0.8	-3.0	-3.6	
Printing, Publishing and Paper Converters	10.3	8.4	5.9	-13.2	-12.5	-10.6	
Wood and Related Products	-17.5	-14.0	-13.1	3.1	4.8	4.0	
Chemical and Non-Metallic Minerals	2.8	-1.0	-6.8	10.1	2.9	0.8	
Assembly-Type and Related Industries	5.2	7.5	-1.5	35.4	114.7	1,099.3	
Miscellaneous Manufacturing Industries	2.4	3.9	-6.1	-0.3	23.2	4.6	
Electricity	3.2	4.0	-5.2	-4.2	-1.3	10.4	
Water	1.1	-5.2	-2.1	6.2	6.8	-4.2	
All Industry Index							
(Excluding Petrochem, Oil and Natural Gas,	1.9	-0.6	-2.9	10.3	40.2	157.1	
Explor., Product. and Refining)							
Explor., and Product. of Oil, Natural Gas, etc.	-9.7	-12.8	-14.3	-4.1	1.2	6.6	
Petrochemicals	6.2	-0.5	6.5	-1.2	4.2	-28.0	
Oil and Natural Gas Refining ²	n.a.	n.a.	n.a.	-16.1	-14.8	-5.0	
All Industry Index							
(Including Petrochem, Oil and Natural Gas, Explor., Product. and Refining)	1.6	-1.2	-2.7	5.8	30.6	124.3	

SOURCE: Central Statistical Office

1 Percentage changes over the corresponding period.

INDEX OF RETAIL PRICES FOR MAJOR EXPENDITURE CATEGORIES, 2018-2022 / JANUARY 2015=100 /

ITEM	WEIGHTS	2018	2019	2020	2021	2022
Inflation Rate (%) ¹						
All Sections	1,000	1.0	1.0	0.6	2.1	5.8
Food	173	1.1	0.6	2.8	4.4	10.4
Core ²	827	1.0	1.1	0.1	1.5	4.7
Retail Price Index						
All Sections	1,000	107.4	108.5	109.2	111.4	117.9
Food	173	114.4	115.0	118.2	123.4	136.3
Core	827	106.0	107.2	107.3	108.9	114.0
Per cent Contribution To Change	e in Index					
Food	173	20.4	10.3	86.0	40.1	34.3
Core	827	79.6	89.7	14.0	59.9	65.7

SOURCE: Central Statistical Office

1 Annual figures represent the percentage change over the average for the previous year; quarterly figures represent the percentage change from the corresponding quarter of the previous year.

2 The component of measured inflation that has no medium to long term-run impact on real output in Trinidad and Tobago. This measure excludes food prices.

ТЕМ	WEIGHTS	2018	2019	2020	2021	2022
Food Processing	191	725.1	726.9	727.5	728.4	757.7
		0.5	0.2	0.1	0.1	4.0
Drink and Tobacco	121	1,575.3	1,600.8	1,695.0	1,734.3	1,743.6
		0.5	1.6	5.9	2.3	0.5
Textiles, Garments and Footwear	101	303.5	303.5	303.5	303.5	303.5
		0.0	0.0	0.0	0.0	0.0
Printing, Publishing and Paper Converters	93	400.0	401.7	399.3	401.9	405.4
		2.3	0.4	-0.6	0.6	0.9
Wood and Related Products	89	348.3	348.3	348.3	348.6	349.0
		0.0	0.0	0.0	0.1	0.1
Chemicals and Non-Metallic Minerals	148	583.3	582.2	577.1	561.4	562.5
		-5.5	-0.2	-0.9	-2.7	0.2
Assembly-Type and Related Industries	257	348.2	348.5	349.0	350.1	352.8
		0.6	0.1	0.2	0.3	0.8
All Industry	1,000	603.8	607.3	617.9	621.1	629.0
		-0.3	0.6	1.8	0.5	1.3

TABLE A.13 INDEX OF PRODUCERS' PRICES, 2018-2022 / OCT. 1978=100 /

SOURCE: Central Statistical Office

CENTRAL GOVERNMENT FISCAL OPERATIONS, 2018-20221

/ TT\$ Millions /

Current Revenue 42,331.9 45,768.8 33,842.4 36,345.6 53,530. Current Expenditure ² 45,374.4 46,986.8 47,081.2 46,482.3 49,924.3 Current Account Surplus(+)/Deficit(-) -3,042.5 -1,218.0 -13,238.8 -10,136.7 3,606. Capital Revenue 837.8 979.8 526.6 921.0 679.3 Capital Expenditure and Net lending ³ 3,492.1 3,790.7 3,977.7 3,135.0 3,206.3 Overall Surplus(+)/Deficit(-) -5,696.8 -4,028.9 -16,689.9 -12,350.7 1,079.3 Total Financing (Net) 5,696.8 4,028.9 16,689.9 12,350.7 -1,079.3 External Financing (Net) 1,239.4 1,094.0 13,261.9 4,890.0 467.3
Current Account Surplus(+)/Deficit(-) -3,042.5 -1,218.0 -13,238.8 -10,136.7 3,606. Capital Revenue 837.8 979.8 526.6 921.0 679. Capital Expenditure and Net lending ³ 3,492.1 3,790.7 3,977.7 3,135.0 3,206. Overall Surplus(+)/Deficit(-) -5,696.8 -4,028.9 -16,689.9 -12,350.7 1,079. Total Financing (Net) 5,696.8 4,028.9 16,689.9 12,350.7 -1,079.
Capital Revenue 837.8 979.8 526.6 921.0 679.2 Capital Expenditure and Net lending ³ 3,492.1 3,790.7 3,977.7 3,135.0 3,206.2 Overall Surplus(+)/Deficit(-) -5,696.8 -4,028.9 -16,689.9 -12,350.7 1,079.2 Total Financing (Net) 5,696.8 4,028.9 16,689.9 12,350.7 -1,079.2
Capital Expenditure and Net lending ³ 3,492.1 3,790.7 3,977.7 3,135.0 3,206. Overall Surplus(+)/Deficit(-) -5,696.8 -4,028.9 -16,689.9 -12,350.7 1,079. Total Financing (Net) 5,696.8 4,028.9 16,689.9 12,350.7 -1,079.
Overall Surplus(+)/Deficit(-) -5,696.8 -4,028.9 -16,689.9 -12,350.7 1,079. Total Financing (Net) 5,696.8 4,028.9 16,689.9 12,350.7 -1,079.
Total Financing (Net) 5,696.8 4,028.9 16,689.9 12,350.7 -1,079.
External Financing (Net) 1,239.4 1,094.0 13,261.9 4,890.0 467.
Net External Borrowing 1,239.4 1,094.0 6,626.5 -1,150.6 467.
Disbursements 1,935.3 1,951.0 7,654.9 11.9 1,620.
Repayments 695.9 857.0 1,028.4 1,162.5 1,152.
Divestment Proceeds 0.0
Transfers from HSF (Withdrawals) 0.0 0.0 6,635.4 6,040.6 0.0
Domestic Financing (Net) 4,457.4 2,934.9 3,428.0 7,460.7 -1,547.4
Debt Management Treasury Bills (Net) 0.0 1,435.0 2,796.0 0.0 500.1
Bonds(Net) 1,165.9 3,240.9 898.0 7,620.6 651.
Disbursements 6,349.1 6,405.5 8,899.7 13,354.1 5,592.
Repayments 5,183.2 3,164.6 8,001.7 5,733.5 4,941.1
Divestment Proceeds 0.0 0.0 0.0 0.0 0.0
Uncashed Balances (Net) ⁴ 3,291.5 -1,741.0 -266.0 -159.9 -2,698.
Memo Items:
Primary Balance ⁵ -910.0 1,016.6 -11,627.9 -7,412.6 5,932.
Surplus(+)/Deficit(-) as a Percentage of GDP (current market prices)6
Current Account Surplus(+)/Deficit(-) -1.9 -0.8 -9.0 -6.4 1.
Overall Surplus(+)/Deficit(-) -3.5 -2.5 -11.4 -7.7 0.
Primary Surplus(+)/Deficit(-) -0.6 0.6 -7.9 -4.6 3.

SOURCES: Ministry of Finance and the Central Bank of Trinidad and Tobago

Refers to accounts of Consolidated Fund, Unemployment Fund, Road Improvement Fund and the Infrastructure De-1 velopment Fund.

Data are in fiscal years (October 1st - September 30th).

2 Includes an adjustment for transfers to the Heritage and Stabilisation Fund and funds expended from the Infrastructure Development Fund.

 Includes an adjustment for Repayment of Past Lending in the years prior to 2016.
 Includes errors and ommissions, advances from the Central Bank and drawdowns from the treasury deposit accounts. Negative numbers

represent an increase in deposits at the Central Bank.

The primary balance, also known as the non-interest balance, is equal to the overall balance exclusive of interest 5 payments.

CENTRAL GOVERNMENT REVENUE, 2018-2022¹ / TT\$ Millions /

EXPENDITURE	2018	2019	2020	2021'	2022 ^p
A. Oil Sector	6,276.0	11,577.3	5,951.8	6,878.0	21,667.7
Corporation ²	3,126.2	5,717.8	2,314.4	3,865.0	13,329.2
Withholding Tax	495.7	927.2	487.8	561.1	547.9
Royalties	2,288.2	4,091.1	2,834.8	2,004.1	5,802.5
Oil Impost	114.3	100.1	97.9	108.6	76.5
Unemployment Levy	153.3	717.9	211.0	339.0	1,911.3
Excise Duties	98.2	23.2	6.1	0.3	0.3
B. Non Oil Sector	33,801.1	35,613.5	27,279.0	29,467.5	31,862.7
Taxes on Income	17,482.0	17,902.4	13,527.9	13,983.7	20,010.4
Companies	8,858.4	8,693.7	5,641.4	6,291.6	11,413.5
Individuals	6,598.7	6,915.2	5,947.8	5,555.5	5,954.7
Unemployment Levy	0.0	0.0	0.0	0.0	0.0
Health Surcharge	183.6	190.6	170.1	165.7	180.6
Other ³	1,841.4	2,102.9	1,768.6	1,970.9	2,461.7
Taxes on Property	3.9	49.6	1.8	2.0	2.3
Lands and Buildings Taxes	3.9	49.6	1.8	2.0	2.3
Taxes on Goods and Services	6,830.2	9,084.9	7,662.9	9,958.4	6,530.6
Purchase Tax	0.0	0.0	0.0	0.0	0.0
Excise Duties	660.9	627.6	652.3	648.7	676.8
Motor Vehicles	333.7	291.0	221.1	251.5	265.2
Value Added Tax	7,244.8	5,847.5	6,682.3	8,296.1	4,720.0
Other	845.5	896.8	718.6	762.1	868.7
Taxes on International Trade	2,732.5	2,672.3	2,301.2	2,287.2	2,649.7
Import Duties	2,732.1	2,671.9	2,300.7	2,287.0	2,649.7
Other	0.4	0.4	0.4	0.2	0.0
Non-Tax Revenue	6,752.5	5,904.3	3,785.2	3,236.3	2,669.6
National Lottery	213.6	272.2	205.2	192.6	226.7
Interest	28.5	25.3	15.3	17.4	3.9
Central Bank	1,046.6	1,471.9	1,884.0	1,428.2	756.5
Other	5,463.8	4,134.9	1,680.7	1,598.1	1,682.5
TOTAL CURRENT REVENUE	42,331.9	45,768.8	33,842.3	36,345.5	53,530.4
Capital Revenue	837.8	979.8	526.6	921.0	679.9
TOTAL REVENUE	43,169.7	46,748.6	34,368.9	37,266.5	54,210.3

SOURCES: Ministry of Finance and Central Bank of Trinidad and Tobago

1 Refers to accounts of Consolidated Fund, Unemployment Fund, Road Improvement Fund and the Infrastructure Development Fund. Data are in fiscal years (October 1st - September 30th).

2 Includes receipts from Supplemental Petroleum Tax (SPT), Petroleum Profit Tax (PPT), signature bonuses, surplus sale of petroleum products, Extraordinary Revenue from Oil and Gas Companies and for the award of Production Sharing Contracts (PSC).

3 Includes witholding tax from the non-oil sector, insurance surrender tax, business levy, income tax surcharge and Green Fund rceipts.

CENTRAL GOVERNMENT EXPENDITURE, 2018-2022¹ / TT\$Millions /

EXPENDITURE		2019	2020	2021 [,]	2022 ^p
Current Expenditure	45,374.4	46,986.8	47,081.2	46,482.3	49,924.0
Wages and Salaries	9,094.4	9,137.2	9,248.0	9,093.6	9,156.9
Goods and Services	6,102.1	6,426.4	5,861.6	5,570.9	5,891.6
Interest	4,786.8	5,045.5	5,062.0	4,938.1	4,852.8
External	991.2	1,126.5	1,101.7	955.7	964.0
Domestic	3,795.6	3,919.0	3,960.3	3,982.4	3,888.9
Transfers and Subsidies	25,391.1	26,377.7	26,909.5	26,879.7	30,022.6
Of which:					
Statutory Boards and State Enterprises	8,699.1	9,465.8	5,877.1	5,751.4	5,965.9
Households	8,741.0	9,396.9	10,087.1	9,696.0	9,903.2
Capital Expenditure and Net-Lending ²	3,492.1	3,790.7	3,977.7	3,135.0	3,206.4
TOTAL EXPENDITURE	48,866.5	50,777.5	51,058.9	49,617.3	53,130.4
(in % of GDP at current market prices)	29.8	31.3	34.8	31.1	27.2
Memo Items (% of Expenditure):					
Current Expenditure	92.9	92.5	92.2	93.7	94.0
Capital Expenditure and Net-Lending	7.1	7.5	7.8	6.3	6.0

SOURCES: Ministry of Finance and Central Bank of Trinidad and Tobago

1 Refers to accounts of Consolidated Fund, Unemployment Fund, Road Improvement Fund and the Infrastructure Development Fund. Data is in fiscal years (October 1st - September 30th).

2 See footnote 3 on Table A.14.

TABLE A.17 (A)

CENTRAL GOVERNMENT EXTERNAL DEBT, 2018-2022¹ / US\$ Millions /

SECTOR	2018	2019	2020	2021	2022 ^p
CENTRAL GOVERNMENT					
Receipts	263.2	365.4	1,269.1	123.0	289.8
Amortisation	103.1	125.3	505.6	171.5	169.9
Interest	147.4	167.1	167.8	142.7	143.9
Balance Outstanding (end of period)	3,695.8	3,939.4	4,707.3	4,659.5	4,782.0
Balance Outstanding/GDP (%)	15.1	16.3	21.5	19.5	16.4
External Debt Service/Exports (%)	2.2	2.9	9.7	3.3	1.8

SOURCE: Central Bank of Trinidad and Tobago

1 Data are in Fiscal Years (October 1st -September 30th).

TABLE A.17 (B)

CENTRAL GOVERNMENT INTERNAL DEBT, 2018-20221

/ TT\$ Millions /

SECTOR	2018	2019	2020	2021 ^r	2022 ^p
BONDS & NOTES					
Issue	6,275.0	6,325.4	11,805.5	13,325.5	5,652.1
Redemption	4,424.4	2,331.3	4,103.2	5,420.4	4,074.3
Outstanding	37,507.6	41,253.1	48,489.0	56,916.6	58,551.9
CLICO AND HCU ZERO-COUPON BONDS					
Issue	1.7	0.3	0.0	0.0	0.0
Redemption ²	503.2	507.0	491.4	500.3	501.0
Outstanding	2,767.9	2,261.3	1,769.9	1,269.7	787.2
BOLTS AND LEASES					
Issue	0.0	0.0	0.0	76.2	115.2
Redemption	28.7	25.2	26.8	28.3	21.0
Outstanding	130.6	105.4	78.6	126.5	190.1
OTHER ³					
Issue	0.0	0.0	0.0	0.0	0.0
Redemption	0.2	0.0	0.0	0.0	0.0
Outstanding	16.7	16.7	16.7	16.7	16.7
DEBT MANAGEMENT BILLS					
Issue	3,875.0	4,140.0	6,762.0	6,109.0	6,589.0
Redemption	3,875.0	2,705.0	3,966.0	6,109.0	6,089.0
Outstanding	1,905.0	3,340.0	6,136.0	6,136.0	6,636.0
Total Internal Debt Outstanding	42,327.9	46,976.5	56,490.2	64,465.5	67,013.7
Internal Debt Outstanding/GDP (%)	26.8	29.0	38.5	40.4	34.4
Internal Debt Service/Revenues (%)	15.4	100.5	164.4	173.0	129.8

SOURCES: Ministry of Finance and Central Bank of Trinidad and Tobago

1 Data is in Fiscal Years (October 1st -September 30th) and excludes all securities issued for sterilisation purposes (OMO Bills, Treasury notes, Treasury Bonds and other liquidity absorption bonds).

2 Includes the exchange of bonds for shares in the CLICO Investment Fund (CIF).

3 Comprises tax-free saving bonds, central bank fixed interest rate bonds and public sector emolument bonds.

TABLE A.18 (A)

COMMERCIAL BANKS: SELECTED DATA, 2018-2022

/ TT\$ Millions /

	END OF PERIOD								
ITEM	2018	2019	2020	2021	2022				
A. OUTSTANDING									
1. Aggregate Deposits (adj.)	105,901.1	108,916.5	116,724.9	117,627.1	119,840.0				
Demand Deposits (adj.)1	37,035.6	38,254.4	44,786.6	44,324.8	46,604.1				
Time Deposits (adj.) ²	10,231.1	11,470.9	10,341.6	8,946.4	8,065.9				
Savings Deposits (adj.) ³	34,218.0	34,967.6	36,783.6	38,351.3	38,999.2				
Foreign Currency Deposits (adj.) ⁴	24,416.5	24,223.6	24,813.1	26,004.7	26,170.7				
2. Gross Bank Credit ⁵	66,483.2	70,542.8	69,973.2	70,398.4	74,926.5				
Of which:									
Business Purposes	25,143.4	25,130.5	25,244.2	26,500.5	28,439.3				
Corporate	23,314.0	23,384.2	23,560.8	24,673.4	26,598.1				
Non-Corporate	1,829.4	1,746.3	1,683.4	1,827.1	1,841.3				
3. Investments	34,450.7	31,112.7	36,365.4	40,890.2	34,732.1				
Government Securities	18,446.6	14,491.0	19,364.3	21,874.5	16,032.4				
Other Investments ⁶	16,004.1	16,621.8	17,001.1	19,015.7	18,699.7				
Of which:									
Interest-bearing Special Deposit Facility	0.0	0.0	0.0	0.0	0.0				
B. ANNUAL CHANGE									
1. Aggregate Deposits (adj.)	3,264.5	3,015.4	7,808.4	902.2	2,212.9				
Demand Deposits (adj.)	1,126.9	1,218.8	6,532.2	-461.8	2,279.3				
Time Deposits (adj.)	67.5	1,239.8	-1,129.3	-1,395.2	-880.4				
Savings Deposits (adj.)	1,639.7	749.7	1,815.9	1,567.7	648.0				
Foreign Currency Deposits (adj.)	430.4	-193.0	589.5	1,191.5	166.0				
2. Gross Bank Credit	1,509.2	4,059.6	-569.6	425.2	4,528.1				
Of which:									
Business Purposes	-7.6	-12.8	113.6	1,256.4	1,938.8				
Corporate	-183.3	70.2	176.6	1,112.7	1,924.6				
Non-Corporate	175.7	-83.0	-62.9	143.7	14.2				
3. Investments	1,113.2	-3,338.0	5,252.7	4,524.8	-6,158.1				
Government Securities	739.7	-3,955.6	4,873.3	2,510.2	-5,842.1				
Other Investments	373.5	617.7	379.4	2,014.5	-316.0				
Of which:									
Interest-Bearing Special Deposit Facility	0.0	0.0	0.0	0.0	0.0				

SOURCE: Central Bank of Trinidad and Tobago

1 Total demand deposits minus non-residents' and Central Government's demand deposits, cash items in process of collection on other banks, and branch clearings, plus cashiers and branch clearings.

2 Total time deposits minus Central Government's deposits and deposits of non-residents.

3 Total savings deposits minus Central Government's deposits and deposits of non-residents.

4 Total demand, savings and time deposits in foreign currency minus those of non-residents.

5 Total loans excluding loans to non-residents and Central Government.

6 Interest-bearing deposits at the Central Bank, other local and foreign securities, and equity in subsidiaries and affiliates.

TABLE A.18 (B)

SUMMARY ACCOUNTS OF THE MONETARY SYSTEM, 2018-2022

/ TT\$ Millions /

ITEM		ENI	D OF PERI	OD	
ITEM	2018	2019	2020	2021	2022
Net Foreign Assets Monetary Authorities Commercial Banks	<mark>66,647</mark> 47,816 18,832	61,796 43,579 18,217	66,372 43,689 22,683	<mark>65,941</mark> 39,027 26,914	67,129 39,042 28,087
Net Domestic Assets Net Claims on Public Sector Central Government (net) Treasury Bills Other Government Securities Other Credit (net) Local Government (net) Statutory Bodies (net) Public Enterprises (net) Official Capital and Surplus Credit to Other Financial Institutions (net) Credit to Private Sector Interbank Float Other Assets (net)	43,971 4,721 2,619 11,298 7,347 -14,683 -617 -2,363 5,083 -7,823 -10,880 58,326 597 -970	48,378 8,173 8,767 7,373 7,281 -4,660 -550 -3,166 3,123 -7,456 -11,480 60,938 3,523 -5,320	53,106 14,702 16,572 11,502 7,977 -1,510 -445 -4,293 2,868 -7,550 -13,757 60,599 3,759 -5,139 ^r	57,037 14,885 17,424 12,444 9,529 -3,253 -474 -5,074 3,009 -136 -11,998 62,249 2,424 -10,386	57,151 8,415 12,913 9,536 6,770 -2,214 -1,177 -4,036 714 -6,728 -11,677 66,511 2,104 -1,474
Liabilities to Private Sector (M3) Money and Quasi-Money Money Currency in Circulation Demand Deposits Quasi-Money Time Deposits Savings Deposits Securitised Instruments Private Capital and Surplus	110,618 92,094 37,870 7,941 29,929 54,223 7,743 46,480 312 18,212	110,174 90,477 36,714 4,783 31,931 53,763 8,211 45,552 177 19,520	119,478 98,471 42,989 6,740 36,249 55,482 7,903 47,579 538 20,468	122,977 100,712 44,126 7,504 36,622 56,586 7,218 49,368 212 22,053	124,279 101,562 44,732 7,551 37,180 56,830 6,740 50,090 83 22,635
	Changes	as a per co	ent of begi	inning-of-p	period M3
Net Foreign Assets Net Domestic Assets Net Claims on Public Sector <i>Of which: Central Government</i> Credit to Private Sector Other Assets (net)	-4.7 5.2 2.5 <i>1.7</i> 2.1 0.3	-4.4 4.0 3.1 5.6 2.4 -3.9	4.2 4.3 5.9 7.1 -0.3 0.6	-0.4 3.3 0.2 0.7 1.4 -4.4	1.0 0.1 -5.3 -3.7 3.5 1.7
Liabilities to private sector (M3)	0.5	-0.4	8.4	2.9	1.1
Memorandum items: Net Domestic Assets Net Claims on Public Sector Central Government Credit to the Private Sector (12-month increase in per cent) M3 Velocity	43,971 4,721 2,619 58,326 1.4	48,378 8,173 8,767 60,938 1.4	53,106 14,702 16,572 60,599 1.3	57,037 14,885 17,424 62,249 1.2	57,151 8,415 12,913 66,511 1.2

SOURCE: Central Bank of Trinidad and Tobago

LIQUIDITY POSITION OF COMMERCIAL BANKS, 2021-2022

/ TT\$ Millions /

ITCM		20)21			20)22	
ITEM	1.1	II.	ш	IV	l.	Ш	ш	IV
Legal Reserves Position								
Required Reserves ¹	13,286.6	12,964.3	12,917.4	13,197.4	13,006.0	12,998.1	12,894.6	13,296.0
Cash Reserves	20,828.5	20,948.3	20,667.0	17,659.1	17,540.5	15,770.2	18,885.0	20,039.1
Excess (+) or Shortage (-) ²	7,541.9	7,984.0	7,749.6	4,461.7	4,534.5	2,772.1	5,990.4	6,743.1
Average Excess(+) or Shortage(-) ³	10,122.2	7,739.9	7,276.0	7,349.7	5,091.5	4,299.8	3,972.8	6,140.3
Liquid Assets								
Total Deposits at Central Bank	20,828.5	20,948.3	20,667.0	17,659.1	17,540.5	15,770.2	18,885.0	20,039.1
Local Cash in Hand	1,404.2	1,265.0	1,371.4	1,738.8	1,285.2	1,348.6	1,434.2	1,736.1
Treasury Bills	4,260.9	4,519.0	4,590.5	4,853.6	5,070.9	4,800.5	4,820.3	4,616.7
Total Liquid Assets	26,493.6	26,732.3	26,628.9	24,251.5	23,896.6	21,919.3	25,139.5	26,391.9
Total Deposit Liabilities (adj.)	94,904.6	92,602.1	92,267.4	94,267.2	92,899.7	92,843.4	92,104.4	94,971.4
		As a	at Percenta	ge of Total	Deposit L	iabilities (Adj.)	
Legal Reserves Position								
Required Reserves	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0
Actual Reserves	21.9	22.6	22.4	18.7	18.9	17.0	20.5	21.1
Cash Reserves	21.9	22.6	22.4	18.7	18.9	17.0	20.5	21.1
Excess (+) or Shortage (-)	7.9	8.6	8.4	4.7	4.9	3.0	6.5	7.1
Average Excess(+) or Shortage(-)	10.7	8.4	7.9	7.8	5.5	4.6	4.3	6.5
Liquid Assets								
Total Deposits at Central Bank	21.9	22.6	22.4	18.7	18.9	17.0	20.5	21.1
Local Cash in Hand	1.5	1.4	1.5	1.8	1.4	1.5	1.6	1.8
Treasury Bills	4.5	4.9	5.0	5.1	5.5	5.2	5.2	4.9
TOTAL LIQUID ASSETS	27.9	28.9	28.9	25.7	25.7	23.6	27.3	27.8

SOURCE: Central Bank of Trinidad and Tobago

1 Required reserves comprise the statutory cash reserves requirement which was reduced from 17 per cent to 14 per cent on March 17, 2020. A secondary reserve requirement of 2 per cent, which was introduced, on a temporary basis, on October 04, 2006 was suspended effective August 02, 2018.

2 Represents the excess/shortage as at the end of the quarter.

3 Represents the excess/shortage as an average through the quarter.

COMMERCIAL BANKS: DISTRIBUTION OF LOANS AND ADVANCES BY SECTOR, 2018-2022 / TT\$ Millions /

SECTOR	END OF PERIOD							
Sector	2018	2019	2020	2021	2022			
Central and Local Government	632.2	556.5	610.0	443.4	334.5			
Agriculture	201.2	200.5	160.6	158.1	167.0			
Petroleum	3,578.9	3,726.5	3,116.3	3,287.6	3,327.8			
Manufacturing	3,495.2	3,857.7	3,875.7	3,766.8	4,037.4			
Construction	2,836.6	1,882.5	2,610.9	2,655.1	3,337.2			
Distributive Trades	3,876.6	4,068.3	3,817.5	3,802.3	4,272.0			
Hotels and Guest Houses	904.6	1,649.5	1,668.5	1,738.1	2,085.5			
Transport, Storage and Communication	2,135.0	1,578.8	1,301.6	1,301.1	1,633.2			
Finance, Insurance and Real Estate	10,870.5	12,091.5	11,757.8	11,758.7 ^r	13,131.3			
Education, Cultural and Community Services	227.9	317.6	312.5	279.4	171.2			
Personal Services	912.7	1,351.1	1,227.8	1,207.4	1,243.4			
Electricity and Water	1,439.3	1,491.6	1,249.5	1,128.8	1,052.2			
Consumers	18,349.0	19,388.1	18,802.6	18,391.4	19,712.6			
TOTAL (Excluding Real Estate Mortgage Loans)	49,459.8	52,160.2	50,511.2	49,918.2 ^r	54,505.4			
Real Estate Mortgage Loans and Lease Financing	21,019.0	23,683.0	24,816.4	25,744.1	26,830.1			
TOTAL LOANS	70,478.8	75,843.2	75,327.6	75,662.3 ^r	81,335.5			

SOURCE: Central Bank of Trinidad and Tobago

COMMERCIAL BANKS: PERCENTAGE DISTRIBUTION OF LOANS AND ADVANCES BY SECTOR, 2018-2022¹ / PER CENT /

SECTOR	END OF PERIOD						
Sector	2018	2019	2020	2021	2022		
Central Government	0.9	0.7	0.8	0.6	0.4		
Agriculture	0.3	0.3	0.2	0.2	0.2		
Petroleum	5.1	4.9	4.1	4.3	4.1		
Manufacturing	5.0	5.1	5.1	5.0	5.0		
Construction	4.0	2.5	3.5	3.5	4.1		
Distributive Trades	5.5	5.4	5.1	5.0	5.3		
Hotels and Guest Houses	1.3	2.2	2.2	2.3	2.6		
Transport, Storage and Communication	3.0	2.1	1.7	1.7	2.0		
Finance, Insurance and Real Estate	15.4	15.9	15.6	15.5	16.1		
Education, Cultural and Community Services	0.3	0.4	0.4	0.4	0.2		
Personal Services	1.3	1.8	1.6	1.6	1.5		
Electricity and Water	2.0	2.0	1.7	1.5	1.3		
Consumers	26.0	25.6	25.0	24.3	24.2		
TOTAL (Excluding Real Estate Mortgage Loans)	70.2	68.8	67.1	66.0	67.0		
Real Estate Mortgage Loans and Lease Financing	29.8	31.2	32.9	34.0	33.0		
TOTAL LOANS	100.0	100.0	100.0	100.0	100.0		

SOURCE: Table A.20

1 Figures may not sum to 100 due to rounding.

COMMERCIAL BANKS: INTEREST RATES, 2020-2022¹ / PER CENT /

	EREST RATES		2020	2021	2022		20	022	
			2020	2021	2022	1.1	Ш	ш	IV
Α.	LOAN RATES (MARKET)								
	(i) Installment	Range	0.00-29.00	0.00-20.75	0.00-20.75	0.00-20.75	0.00-20.75	0.00-20.75	0.00-20.75
		Median	6.28	4.50	4.25	4.25	4.25	4.25	4.25
	(ii) Demand	Range	0.00-20.00	0.00-20.00	0.00-16.00	0.00-12.50	0.00-13.50	0.00-16.00	0.00-13.50
		Median	7.25	7.25	5.13	5.53	5.13	5.09	5.09
	(iii) Overdraft	Range	0.00-29.00	0.00-29.00	0.00-29.00	0.00-29.00	0.00-29.00	0.00-29.00	0.00-29.00
		Median	7.56	7.50	7.50	7.50	7.50	7.50	7.50
	(iv) Basic Prime Rate	Range	7.25-9.75	7.25-7.80	7.25-7.80	7.25-7.80	7.25-7.80	7.25-7.80	7.25-7.80
		Median	7.50	7.50	7.50	7.50	7.50	7.50	7.50
	(v) Real Estate Mortgage	Range	3.00-17.25	1.25-13.00	1.00-16.00	3.00-12.00	1.00-11.50	3.00-16.00	3.00-11.50
		Median	6.50	7.25	4.50	4.50	4.50	4.50	4.50
В.	DEPOSIT RATES (Announce	ed)							
	(i) Ordinary Savings	Range	0.00-1.10	0.00-1.75	0.00-0.20	0.00-0.20	0.00-0.20	0.00-0.20	0.00-0.20
		Median	0.11	0.07	0.04	0.04	0.04	0.04	0.04
	(ii) Special Savings	Range	0.00-2.00	0.00-1.75	0.00-2.00	0.00-2.00	0.00-2.00	0.00-2.00	0.00-2.00
		Median	0.15	0.08	0.08	0.08	0.08	0.08	0.08
	(iii) 3-Months Time	Range	0.00-1.35	0.00-0.65	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50
		Median	0.30	0.23	0.10	0.10	0.10	0.10	0.10
	(iv) 3-6 Months Time	Range	0.00-1.85	0.00-0.75	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50
		Median	0.43	0.28	0.14	0.14	0.14	0.14	0.14
	(iv) 6-Months Time	Range	0.04-0.80	0.00-0.45	0.00-0.45	0.00-0.45	0.00-0.45	0.00-0.45	0.00-0.45
		Median	0.43	0.28	0.05	0.05	0.05	0.05	0.05
	(v) 1-Year Time	Range	0.00-2.85	0.00-1.85	0.00-1.85	0.00-1.85	0.00-1.85	0.00-1.85	0.00-1.85
		Median	0.95	0.65	0.58	0.58	0.58	0.58	0.58

SOURCE: Central Bank of Trinidad and Tobago

Note: The Central Bank of Trinidad and Tobago (the Central Bank) undertook an exercise to review both TT dollar and foreign currency interest rate data submitted by the licensed reporting institutions over a two-year period. The Central Bank identified inconsistencies and required institutions to re-evaluate all data submitted for the period January 2020 to present. Resubmitted amendments resulted in a structural break in data trends which is reflected in selected series.

1 Annual data represent the rates for the twelve (12) months of the year and quarterly data represent the rates for the three (3) months of the quarter.

MONEY SUPPLY, 2018-2022 / TT\$ Millions /

	END OF PERIOD							
ITEM	2018	2019	2020	2021	2022			
A. Narrow Money Supply (M-1A)	44,976.8	43,036.7	52,104.7	51,828.4	54,166.8			
Currency in Active Circulation	7,941.2	4,782.3	7,318.1	7,503.6	7,562.7			
Demand Deposits (adj.)	37,035.6	38,254.4	44,786.6	44,324.8	46,604.1			
B. Factors Affecting Changes in Money Supply								
1. Net Bank Credit to Central Government	-26,287.5	-20,149.8	-22,243.8	-13,878.3	-20,256.7			
(a) Central Bank	-44,276.0	-34,138.5	-41,119.6	-35,223.5	-35,748.8			
(b) Commercial Banks	17,988.5	13,988.7	18,875.8	21,345.2	15,492.1			
2. Bank Credit	70,503.4	74,429.0	73,132.3	73,872.7	77,878.5			
(a) Public Sector	11,292.6	12,586.5	11,507.3	10,569.9	10,216.7			
(b) Private Sector ²	59,210.8	61,842.4	61,625.0	63,302.8	67,661.8			
3. External Assets (net)	83,597.3	49,182.9	50,196.1	62,787.1	57,163.4			
4. Quasi-Money ³	-44,449.0	-46,438.5	-47,125.2	-47,297.6	-47,065.2			
5. Foreign Currency Deposits (Adj.)	-24,416.5	-24,223.6	-24,813.1	-26,004.7	-26,170.7			
6. NFIs Foreign Currency Deposit (Adj.)	-906.0	-656.0	-676.8	-1,766.5	-1,069.9			
7. Other Items (Net)	-13,970.8	10,236.6	22,958.4	2,349.2	4,458.2			
C. Broad Money Supply (M-2)	89,425.8	89,475.2	99,229.8	99,126.0	101,232.0			
D. Broad Money Supply (M-2*) ⁴	113,842.4	113,698.8	124,043.0	125,130.7	127,402.6			
Memorandum Items:⁵								
Money Supply M-3	90,886.5	91,251.8	101,133.2	102,228.7	104,526.7			
Money Supply M-3*	116,209.0	116,131.0	126,622.9	129,999.5	131,692.0			

SOURCE: Central Bank of Trinidad and Tobago

1 Includes Central Bank's and commercial banks' loans and holdings of public sector securities.

2 Includes commercial banks' loans and holdings of private sector securities.

3 Excludes foreign currency deposits of residents which are shown separately below.

4 Includes foreign currency deposits of residents.

5 In addition to M-2, M-3 includes the time deposits of non-bank financial institutions (NFIs), while in addition to M-2*, M-3* includes foreign currency deposits of residents at NFIs.

FINANCE COMPANIES AND MERCHANT BANKS: SUMMARY OF ASSETS AND LIABILITIES, 2018-2022 / TT\$ Thousands /

	EVTEDNAL	CASH AND	BALANCES DUE	DOMESTIC CREDIT		IT
END OF PERIOD	EXTERNAL ASSETS (NET)	DEPOSITS AT CENTRAL BANK	FROM BANKS (NET)	INVESTMENTS	LOANS (GROSS)	TOTAL
	(1)	(2)	(3)	(4)	(5)	(6)
2018	119,506	219,656	728,218	2,337,738	3,688,482	6,026,220
2019	71,691	228,411	758,891	3,052,717	3,522,071	6,574,788
2020	141,350	181,123	1,140,032	2,604,531	3,565,264	6,169,795
2021	180,822	261,993	1,685,811	3,506,489	3,702,140	7,208,629
2022	507,096	293,132	1,057,207	4,188,357	3,843,579	8,031,936
2021						
I	101,101	197,865	1,210,267	2,513,325	3,837,107	6,350,432
II	162,356	227,136	944,406	2,888,082	3,970,812	6,858,894
111	219,063	225,661	1,067,518	3,297,137	4,189,585	7,486,722
IV	180,822	261,993	1,685,811	3,506,489	3,702,140	7,208,629
2022						
I	184,306	264,639	1,459,033	3,660,836	3,713,595	7,374,431
II	104,842	264,191	913,502	3,823,742	3,611,389	7,435,131
111	148,506	274,614	946,493	3,949,155	3,954,893	7,904,048
IV	507,096	293,132	1,057,207	4,188,357	3,843,579	8,031,936
END OF PERIOD	TOTAL ASSETS/ LIABILITIES	DEPOSITS	BORROWINGS ¹	PROVISIONS	CAPITAL AND RESERVES	(NET)
END OF PERIOD		DEPOSITS (8)	BORROWINGS ¹ (9)	PROVISIONS (10)		
END OF PERIOD	LIABILITIES	DEPOSITS			RESERVES	(NET)
END OF PERIOD	LIABILITIES (7)	(8)	(9)	(10)	RESERVES (11)	(NET) (12)
2018	(7) 6,943,833	(8) 2,731,783	(9) 1,036,372	(10) 149,767	(11) 3,328,274	(NET) (12) -134,374
2018 2019	(7) 6,943,833 7,478,021	(8) 2,731,783 2,843,156	(9) 1,036,372 1,028,815	(10) 149,767 155,762	(11) 3,328,274 3,633,872	(NET) (12) -134,374 -13,352
2018 2019 2020	(7) 6,943,833 7,478,021 7,450,320	(8) 2,731,783 2,843,156 2,520,957	(9) 1,036,372 1,028,815 1,022,874	(10) 149,767 155,762 181,985	(11) 3,328,274 3,633,872 3,922,229	(NET) (12) -134,374 -13,352 -5,973
2018 2019 2020 2021	(7) 6,943,833 7,478,021 7,450,320 9,135,041	(8) 2,731,783 2,843,156 2,520,957 4,021,040	(9) 1,036,372 1,028,815 1,022,874 883,435	(10) 149,767 155,762 181,985 202,214	(11) 3,328,274 3,633,872 3,922,229 3,962,641	(NET) (12) -134,374 -13,352 -5,973 284,950
2018 2019 2020 2021 2022	(7) 6,943,833 7,478,021 7,450,320 9,135,041	(8) 2,731,783 2,843,156 2,520,957 4,021,040	(9) 1,036,372 1,028,815 1,022,874 883,435	(10) 149,767 155,762 181,985 202,214	(11) 3,328,274 3,633,872 3,922,229 3,962,641	(NET) (12) -134,374 -13,352 -5,973 284,950
2018 2019 2020 2021 2022 2021	(7) 6,943,833 7,478,021 7,450,320 9,135,041 9,710,188	(8) 2,731,783 2,843,156 2,520,957 4,021,040 4,249,065	(9) 1,036,372 1,028,815 1,022,874 883,435 571,969	(10) 149,767 155,762 181,985 202,214 179,183	(11) 3,328,274 3,633,872 3,922,229 3,962,641 4,347,320	(NET) (12) -134,374 -13,352 -5,973 284,950 618,379
2018 2019 2020 2021 2022 2021 I	(7) 6,943,833 7,478,021 7,450,320 9,135,041 9,710,188 7,666,464	(8) 2,731,783 2,843,156 2,520,957 4,021,040 4,249,065 2,658,618	(9) 1,036,372 1,028,815 1,022,874 883,435 571,969 1,033,462	(10) 149,767 155,762 181,985 202,214 179,183 193,202	(11) 3,328,274 3,633,872 3,922,229 3,962,641 4,347,320 3,940,437	(NET) (12) -134,374 -13,352 -5,973 284,950 618,379 44,363
2018 2019 2020 2021 2022 2021 I I	(7) 6,943,833 7,478,021 7,450,320 9,135,041 9,710,188 7,666,464 7,992,439	(8) 2,731,783 2,843,156 2,520,957 4,021,040 4,249,065 2,658,618 3,144,908	(9) 1,036,372 1,028,815 1,022,874 883,435 571,969 1,033,462 1,044,197	(10) 149,767 155,762 181,985 202,214 179,183 193,202 200,352	(11) 3,328,274 3,633,872 3,922,229 3,962,641 4,347,320 3,940,437 3,843,986	(NET) (12) -134,374 -13,352 -5,973 284,950 618,379 44,363 -24,737
2018 2019 2020 2021 2022 2021 I II III	(7) 6,943,833 7,478,021 7,450,320 9,135,041 9,710,188 7,666,464 7,992,439 8,788,563	(8) 2,731,783 2,843,156 2,520,957 4,021,040 4,249,065 2,658,618 3,144,908 3,734,153	(9) 1,036,372 1,028,815 1,022,874 883,435 571,969 1,033,462 1,044,197 1,032,335	(10) 149,767 155,762 181,985 202,214 179,183 193,202 200,352 210,403	(11) 3,328,274 3,633,872 3,922,229 3,962,641 4,347,320 3,940,437 3,843,986 3,876,017	(NET) (12) -134,374 -13,352 -5,973 284,950 618,379 44,363 -24,737 156,452
2018 2019 2020 2021 2022 2021 I II III IV	(7) 6,943,833 7,478,021 7,450,320 9,135,041 9,710,188 7,666,464 7,992,439 8,788,563	(8) 2,731,783 2,843,156 2,520,957 4,021,040 4,249,065 2,658,618 3,144,908 3,734,153	(9) 1,036,372 1,028,815 1,022,874 883,435 571,969 1,033,462 1,044,197 1,032,335	(10) 149,767 155,762 181,985 202,214 179,183 193,202 200,352 210,403	(11) 3,328,274 3,633,872 3,922,229 3,962,641 4,347,320 3,940,437 3,843,986 3,876,017	(NET) (12) -134,374 -13,352 -5,973 284,950 618,379 44,363 -24,737 156,452
2018 2019 2020 2021 2022 2021 I II III IV 2022	(7) 6,943,833 7,478,021 7,450,320 9,135,041 9,710,188 7,666,464 7,992,439 8,788,563 9,135,041	(8) 2,731,783 2,843,156 2,520,957 4,021,040 4,249,065 2,658,618 3,144,908 3,734,153 4,021,040	(9) 1,036,372 1,028,815 1,022,874 883,435 571,969 1,033,462 1,044,197 1,032,335 883,435	(10) 149,767 155,762 181,985 202,214 179,183 193,202 200,352 210,403 202,214	(11) 3,328,274 3,633,872 3,922,229 3,962,641 4,347,320 3,940,437 3,843,986 3,876,017 3,962,641	(NET) (12) -134,374 -13,352 -5,973 284,950 618,379 44,363 -24,737 156,452 284,950
2018 2019 2020 2021 2022 2021 I II III IV 2022 2021 I I	(7) 6,943,833 7,478,021 7,450,320 9,135,041 9,710,188 7,666,464 7,992,439 8,788,563 9,135,041 9,073,147	(8) 2,731,783 2,843,156 2,520,957 4,021,040 4,249,065 2,658,618 3,144,908 3,734,153 4,021,040 3,976,147	(9) 1,036,372 1,028,815 1,022,874 883,435 571,969 1,033,462 1,044,197 1,032,335 883,435 880,918	 (10) 149,767 155,762 181,985 202,214 179,183 193,202 200,352 210,403 202,214 209,260 	(11) 3,328,274 3,633,872 3,922,229 3,962,641 4,347,320 3,940,437 3,843,986 3,876,017 3,962,641	(NET) (12) -134,374 -13,352 -5,973 284,950 618,379 44,363 -24,737 156,452 284,950 222,067

SOURCE: Central Bank of Trinidad and Tobago

1 Borrowings from all sources other than commercial banks. Borrowings from commercial banks are reflected in Column 3.

FINANCE COMPANIES AND MERCHANT BANKS: DISTRIBUTION OF LOANS AND ADVANCES BY SECTOR, 2018-2022 / TT\$ Millions /

	END OF PERIOD						
SECTOR	2018	2019	2020	2021	2022		
Public Sector	230.3	70.1	198.8	460.1	471.9		
Private Sector	3,046.9	3,132.3	3,076.7	2,969.4	3,123.1		
Agriculture	33.9	31.6	37.0	32.3	28.1		
Petroleum	6.6	7.5	9.9	10.3	8.6		
Manufacturing	77.0	57.3	62.0	56.9	143.2		
Construction	135.7	142.7	188.7	220.6	207.2		
Distributive Trades	105.5	112.8	131.5	129.5	99.3		
Hotels and Guest Houses	56.0	44.4	44.7	48.8	46.9		
Transport, Storage and Communication	118.4	115.8	126.4	114.3	128.2		
Finance, Insurance, Real Estate and Services	626.3	472.4	464.5	479.2	689.1		
Education, Cultural and Community Services	0.4	0.3	0.1	0.0	0.2		
Personal Services	157.5	333.6	147.7	135.4	104.9		
Consumers	1,729.5	1,813.9	1,864.1	1,741.9	1,667.4		
TOTAL (Excluding Real Estate Mortgage Loans and Leases)	3,277.3	3,202.4	3,275.5	3,429.5	3,595.0		
Real Estate Mortgage Loans	56.0	59.0	75.5	91.7	87.1		
Leases	222.9	222.6	195.3	169.3	156.2		
TOTAL LOANS	3,556.2	3,484.1	3,546.3	3,690.4	3,838.4		

SOURCE: Central Bank of Trinidad and Tobago

FINANCE COMPANIES AND MERCHANT BANKS: PERCENTAGE DISTRIBUTION OF LOANS AND ADVANCES BY SECTOR, 2018-2022 / PER CENT /

SECTOR	END OF PERIOD						
SECTOR	2018	2019	2020	2021	2022		
Public Sector	6.5	2.0	5.6	12.5	12.3		
Private Sector	85.7	89.9	86.8	80.5	81.4		
Agriculture	1.0	0.9	1.0	0.9	0.7		
Petroleum	0.2	0.2	0.3	0.3	0.2		
Manufacturing	2.2	1.6	1.7	1.5	3.7		
Construction	3.8	4.1	5.3	6.0	5.4		
Distributive Trades	3.0	3.2	3.7	3.5	2.6		
Hotels and Guest Houses	1.6	1.3	1.3	1.3	1.2		
Transport, Storage and Communication	3.3	3.3	3.6	3.1	3.3		
Finance, Insurance, Real Estate and Business Services	17.6	13.6	13.1	13.0	18.0		
Education, Cultural and Community Services	0.0	0.0	0.0	0.0	0.0		
Personal Services	4.4	9.6	4.2	3.7	2.7		
Consumers	48.6	52.1	52.6	47.2	43.4		
TOTAL (Excluding Real EstateMortgage Loans and Leases)	92.2	91.9	92.4	92.9	93.7		
Real Estate Mortgage Loans	1.6	1.7	2.1	2.5	2.3		
Leases	6.3	6.4	5.5	4.6	4.1		
TOTAL LOANS	100.0	100.0	100.0	100.0	100.0		

SOURCE: Table A.25

TRUST AND MORTGAGE FINANCE COMPANIES: SUMMARY OF ASSETS AND LIABILITIES, 2018-2022 / TT\$ Thousands /

	CASH AND	BALANCES DUE	DOM	DOMESTIC CREDIT			
END OF PERIOD	DEPOSITS AT CENTRAL BANK	FROM BANKS (NET)	INVESTMENTS	LOANS (GROSS)	TOTAL	ASSETS/ LIABILITIES	
	(1)	(2)	(3)	(4)	(5)	(6)	
2018	14,485	588,444	459,127	201,710	1,237,244	1,251,729	
2019	45,067	576,103	461,475	393,295	1,413,320	1,458,387	
2020	85,987	746,908	517,952	498,365	1,739,812	1,825,799	
2021	93,120	625,029	1,227,548	629,700	2,451,841	2,544,961	
2022	67,223	476,465	2,916,074	718,020	4,085,846	4,153,069	
2021							
I	505,008	718,425	622,666	492,117	1,809,293	2,314,301	
II	485,034	554,237	957,164	484,384	1,970,381	2,455,415	
III	145,335	789,735	1,096,632	552,781	2,409,589	2,554,924	
IV	93,120	625,029	1,227,548	629,700	2,451,841	2,544,961	
2022							
I	100,111	586,303	1,457,901	659,779	2,672,641	2,772,752	
II	108,076	728,610	1,623,174	664,000	2,985,378	3,093,454	
111	95,068	629,719	2,453,557	713,317	3,771,153	3,866,221	
IV	67,223	476,465	2,916,074	718,020	4,085,846	4,153,069	
	DEBOSITS	BOBBOWINGS	DROVISIONS	CAPITAL A	ND OTH	HER ITEMS	

END OF PERIOD	DEPOSITS	BORROWINGS	PROVISIONS	RESERVES	(NET)
	(7)	(8)	(9)	(10)	(11)
2018	110,976	-68	12,037	1,288,915	-148,093
2019	207,477	-68	17,553	1,421,192	-156,581
2020	390,866	39,932	24,392	1,437,309	-3,088
2021	1,251,756	-68	31,466	1,423,628	-131,385
2022	2,940,937	0	25,742	1,279,175	-68,072
2021					
I	1,008,197	-67	24,900	1,404,226	-98,832
II	1,186,656	-67	26,383	1,399,492	-131,645
III	1,113,245	-68	30,531	1,410,631	30,144
IV	1,251,756	-68	31,466	1,423,628	-131,385
2022					
I	1,458,221	-68	32,367	1,406,480	-92,906
II	1,754,024	-68	31,431	1,421,272	-82,799
III	2,459,799	0	26,465	1,420,439	-15,043
IV	2,940,937	0	25,742	1,279,175	-68,072

SOURCE: Central Bank of Trinidad and Tobago

DEVELOPMENT BANKS: SUMMARY OF ASSETS AND LIABILITIES, 2018-2022 / TT\$ Thousands /

	NET DOMESTIC ASSETS					TOTAL			
END OF PERIOD	EXTERNAL ASSETS (NET)	DEPOSITS IN LOCAL BANKS	PUBLIC SECTOR CREDIT	PRIVATE SECTOR CREDIT	TOTAL	TOTAL ASSETS/ LIABILITIES	CAPITAL AND RESERVES	OTHER ITEMS (NET)	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
2018	0	-699,915	-399,200	4,024,546	2,925,432	2,925,432	1,692,917	1,232,515	
2019	0	-143,717	-10,000	4,342,300	4,188,583	4,188,583	1,759,748	2,428,834	
2020	0	-138,581	0	4,483,608	4,345,027	4,345,027	1,774,604	2,570,423	
2021	0	-6,721	0	4,600,455	4,593,734	4,593,734	1,897,745	2,695,989	
2022	0	7,767	0	4,892,273	4,900,040	4,900,040	1,956,090	2,943,950	
2018									
I	0	-348,620	-582,853	4,246,103	3,314,629	3,314,629	1,637,866	1,676,763	
П	0	-352,549	-572,314	4,364,971	3,440,108	3,440,108	1,626,728	1,813,380	
111	0	-306,363	-537,514	3,895,389	3,051,512	3,051,512	1,645,197	1,406,315	
IV	0	-699,915	-399,200	4,024,546	2,925,432	2,925,432	1,692,917	1,232,515	
2019									
I	0	-816,230	-376,200	4,124,249	2,931,819	2,931,819	1,721,236	1,210,583	
11	0	-145,909	-20,000	4,256,996	4,091,087	4,091,087	1,697,435	2,393,652	
111	0	-146,051	-10,000	4,120,033	3,963,982	3,963,982	1,728,300	2,235,682	
IV	0	-143,717	-10,000	4,342,300	4,188,583	4,188,583	1,759,748	2,428,834	
2020									
I	0	-146,645	-10,000	4,263,857	4,107,212	4,107,212	1,780,532	2,326,680	
11	0	-143,643	-10,000	4,216,267	4,062,624	4,062,624	1,774,830	2,287,794	
111	0	-142,110	0	4,291,584	4,149,473	4,149,473	1,745,061	2,404,411	
IV	0	-138,581	0	4,483,608	4,345,027	4,345,027	1,774,604	2,570,423	
2021									
I	0	-141,518	0	4,512,550	4,371,032	4,371,032	1,806,569	2,564,463	
11	0	-116,255	0	4,510,271	4,394,016	4,394,016	1,860,529	2,533,486	
111	0	-143,725	0	4,616,717	4,472,992	4,472,992	1,882,337	2,590,656	
IV	0	-6,721	0	4,600,455	4,593,734	4,593,734	1,897,745	2,695,989	
2022	0	5 70 1	-					0 7 40 000	
	0	5,794	0	4,666,775	4,672,569	4,672,569	1,923,300	2,749,269	
	0	8,926	0	4,670,875	4,679,801	4,679,801	1,949,119	2,730,683	
	0	9,598	0	4,794,920	4,804,518	4,804,518	1,925,920	2,878,598	
IV	0	7,767	0	4,892,273	4,900,040	4,900,040	1,956,090	2,943,950	

SOURCE: Central Bank of Trinidad and Tobago

THRIFT INSTITUTIONS: SUMMARY OF ASSETS AND LIABILITIES, 2018-2022 / TT\$ Thousands /

		NET	DOMEST	IC ASSET	S			DEPOSITS	5		
END OF PERIOD	EXTERNAL ASSETS (NET)	NET DEPOSITS IN LOCAL BANKS		PRIVATE SECTOR CREDIT		TOTAL ASSETS/ LIABILITIES	TIME	SAVINGS	TOTAL	SHARES	OTHER ITEMS (NET)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
2018	0	1,610	9,745	106,897	118,252	118,252	25,840	9,398	35,238	21,946	61,068
2019	0	401	5,880	120,107	126,388	126,388	32,679	8,548	41,227	23,768	61,393
2020	0	2,733	6,820	114,065	123,618	123,618	29,920	8,339	38,259	22,011	63,349
2021	0	8,557	11,527		126,422	126,422	26,181	8,590	34,771	23,506	68,143
2022	0	12,673	9,204	102,241	124,118	124,118	23,787	8,836	32,623	21,337	70,157
2018											
Ι	0	9,172	9,562	93,443	112,177	112,177	23,506	9,128	32,634	21,309	58,234
11	0	9,993	9,850	97,538	117,381	117,381	24,600	10,919	35,519	21,064	60,798
111	0	4,330	9,944	102,363	116,637	116,637	25,440	9,299	34,739	21,247	60,651
IV	0	1,610	9,745	106,897	118,252	118,252	25,840	9,398	35,238	21,946	61,068
2019											
I	0	243	7,309	111,364	118,916	118,916	26,696	8,911	35,607	22,161	61,148
11	0	-3,065	9,130	113,233		119,298	26,318	,	35,317	22,980	61,001
	0	-2,270	6,553	114,641	118,924	118,924	26,206	8,521	34,727	23,015	61,182
IV	0	401	5,880	120,107	126,388	126,388	32,679	8,548	41,227	23,768	61,393
2020											
I	0	300	5,992	120,919	127,211	127,211	30,406	8,096	38,502	23,977	64,732
11	0	3,737	5,992	117,233	126,962	126,962	29,798	8,030	37,828	24,513	64,622
111	0	3,858	7,992	116,271	128,121	128,121	29,777	7,761	37,538	24,743	65,839
IV	0	2,733	6,820	114,065	123,618	123,618	29,920	8,339	38,259	22,011	63,349
2021											
I	0	6,359	7,778	111,704	125,841	125,841	29,862	7,882	37,744	22,104	65,994
	0	8,845	8,443	109,382	126,670	126,670	30,079	7,975	38,054	22,308	66,306
111	0	8,962	11,563	107,822	128,347	128,347	30,117	8,042	38,159	22,909	67,279
IV	0	8,557	11,527	106,338	126,422	126,422	26,181	8,590	34,771	23,506	68,143
2022											
	0	8,249	10,375	105,689	124,313	124,313	25,044	7,906	32,950	21,585	69,778
	0	9,309	9,133	104,962		123,404	24,919		32,715	22,024	68,665
	0	12,984	9,045	102,148		124,177	24,701	7,786	32,487	20,480	71,211
IV	0	12,673	9,204	102,241		124,118	23,787		32,623	21,337	70,157

SOURCE: Central Bank of Trinidad and Tobago

NON-BANK FINANCIAL INSTITUTIONS INTEREST RATES, 2020-2022¹ / PER CENT /

		0000		0000		20	22	
IN	TEREST RATES	2020	2021	2022				IV
1.	Thrift Institutions							
	(a) Savings Deposits							
	Range Median	0.50-0.50 0.50	0.50-0.50 0.50	0.50-0.50 0.50	0.50-0.50 0.50	0.50-0.50 0.50	0.50-0.50 0.50	0.50-0.50 0.50
	(b) Time Deposits	0.50	0.50	0.50	0.50	0.50	0.50	0.50
	(i) I - 3 years							
	Range	0.50-3.75	0.50-3.75	0.50-3.75	0.50-3.75	0.50-3.75	0.50-3.75	0.50-3.75
	Median (c) Mortgage Loans (Resident	2.13	2.13	2.13	2.13	2.13	2.13	2.13
	(c) Mortgage Loans (Resident Range	7.00-9.00	7.00-9.00	7.00-9.00	7.00-9.00	7.00-9.00	7.00-9.00	7.00-9.00
	Median	8.00	8.00	8.00	8.00	8.00	8.00	8.00
2.	Trust and Mortgage Finance (Companies						
	(a) Time Deposits							
	(i) 1 - 3 years							
	Range Median	1.00-4.00 2.88	0.00-4.00 0.55	0.00-4.00 0.55	0.00-4.00 0.55	0.00-4.00 0.55	0.00-4.00 0.55	0.00-4.00 0.55
	(ii) Over 3 years	2.00	0.55	0.55	0.55	0.55	0.55	0.55
	Range	1.00-6.00	0.00-3.00	0.00-3.00	0.00-3.00	0.00-3.00	0.00-3.00	0.00-3.00
	Median	3.50	0.78	1.00	1.00	1.00	1.00	0.78
	(b) Mortgage Loans(i) Residential							
	Range	-	-	-	-	-	-	-
	Median	-	-	-	-	-	-	-
3.	Finance Companies and Mercha	nt Banks						
	(a) Time Deposits							
	(i) 1 - 3 years Range	0.50-6.00	0.25-6.00	0.25-4.50	0.25-4.50	0.25-4.50	0.50-4.05	0.50-4.05
	Median	2.90	2.89	2.78	2.89	2.78	2.78	2.85
	(b) Installment Loans							
	Range Median	3.19 -59.24 10.47	2.39-59.52 9.57	0.00-59.75 9.75	3.17-59.24 9.75	0.03-59.75 9.75	0.00-59.75 9.63	3.17-59.56 9.88
	IVIEUIAII	10.47	9.07	9.70	9.70	9.70	9.03	9.00

SOURCE: Central Bank of Trinidad and Tobago

Note: The Central Bank of Trinidad and Tobago (the Central Bank) undertook an exercise to review both TT dollar and foreign currency interest rate data submitted by the licensed reporting institutions over a 2-year period. The Central Bank identified inconsistencies and required institutions to re-evaluate all data submitted for the period January 2020 to present. Resubmitted amendments resulted in a structural break in data trends which is reflected in selected series.

1 Annual and quarterly data represent the rates for the twelve (12) months of the year and the three (3) months of the quarter, respectively.

MONEY AND CAPITAL MARKET ACTIVITY, 2018-20221

	NEW IS	SUES (\$MN	l)	SECONDARY MARKET TURNOVER ²						
END OF					RNMENT RITIES ³	TREASU	RY BILLS	PUBLIC	COMPANY	SHARES
PERIOD	GOVERNMENT SECURITIES	TREASURY BILLS	OTHER ⁴	FACE VALUE (\$MN)	NO. OF TRANS- ACTIONS	FACE VALUE (\$MN)	NO. OF TRANS- ACTIONS	MARKET VALUE (\$MN)	NO. OF TRANS- ACTIONS	VOLUME OF SHARES TRADED (\$MN)
2018	4,740.0	0.0	5,554.0	318.1	57	148.9	17	1,148.4	11,721	72.3
I	1,200.0	0.0	812.2	123.3	12	22.9	3	230.0	2,979	16.4
П	750.0	0.0	3,138.3	0.7	3	25.2	1	271.2	2,740	17.3
	450.0	0.0	996.0	182.8	30	68.9	6	302.9	2,769	17.8
IV	2,340.0	0.0	607.5	11.2	12	31.9	7	344.3	3,233	20.8
2019	7,285.4	2,570.0	4,715.7	182.0	55	461.4	57	1,102.3	12,054	76.9
Ι	642.4	0.0	200.0	57.8	20	193.8	23	287.4	2,848	18.0
П	2,500.0	815.0	1,015.7	31.6	12	205.6	31	250.8	3,114	16.3
111	843.0	620.0	375.0	79.0	7	37.5	2	264.0	3,161	23.6
IV	3,300.0	1,135.0	3,125.0	13.6	16	24.6	1	300.2	2,931	19.0
2020	12,504.1	1,661.0	6,700.3	448.7	22	218.4	21	1,042.9	11,668	61.3
Ι	2,250.0	1,561.0	1,615.2	2.0	1	126.3	15	422.9	3,804	23.7
Ш	4,261.1	100.0	2,471.5	0.9	2	91.9	5	238.6	2,736	15.5
111	2,000.0	0.0	1,000.0	416.7	10	0.0	0	187.3	2,457	10.7
IV	3,993.0	0.0	1,613.6	29.1	9	0.2	1	194.1	2,671	11.3
2021	13,370.3	500.0	5,034.1	79.4	20	35.2	4	1,314.7	14,936	94.8
I	3,545.3	0.0	439.2	74.0	12	0.0	0	325.7	3,312	13.5
11	3,725.0	0.0	799.1	0.2	2	0.0	0	417.8	3,841	27.4
	3,000.0	0.0	2,651.3	3.4	3	0.1	1	302.6	3,694	26.1
IV	3,100.0	500.0	1,144.5	1.9	3	35.2	3	268.5	4,089	27.8
2022	2,500.0	0.0	6,003.6	792.2	91	359.6	56	1,706.9	20,944	184.3
Ι	0.0	0.0	824.5	0.0	0	0.3	3	472.9	5,716	46.5
П	0.0	0.0	373.8	0.0	0	141.5	17	445.7	5,372	50.9
111	1,500.0	0.0	3,079.5	293.1	39	147.5	30	372.2	5,071	42.2
IVp	1,000.0	0.0	1,725.8	499.2	52	70.3	6	416.1	4,785	44.8

SOURCES: Central Bank of Trinidad and Tobago and Trinidad and Tobago Stock Exchange

Totals may not add due to rounding.
 Data refer to the double transactions of buying and selling.

3 Trading in Government securities and treasury bills was conducted under the aegis of the Investment Division, Central Bank of Trinidad and Tobago. From 1993 trading in Government securities has been conducted by the Stock Exchange of Trinidad and Tobago.

Data include domestic bonds issued by public entities which have been guaranteed by the Government of Trinidad and Tobago. 4

SELECTED INTEREST RATES, 2020-2022¹ / PER CENT PER ANNUM /

	2020	2021	20220		20	22	
INTEREST RATES	2020	2021	2022 ^p	1	II.	ш	IV ^p
A. Central Bank							
(i) Bank Rate	5.50	5.50	5.50	5.50	5.50	5.50	5.50
(ii) Special Deposits Rate	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(iii) Repo Rate ²	3.50	3.50	3.50	3.50	3.50	3.50	3.50
(iv) Reverse Repo Rate ²	3.00	3.00	3.00	3.00	3.00	3.00	3.00
(v) Mortgage Market Reference Rate (MMRR) ³	3.00	3.00	3.00	3.00	3.00	3.00	3.00
B. Government							
(i) Treasury Bills	0.08	0.32	0.50	0.34	0.49	0.55	0.50
C. Commercial Banks - Local Currency							
(i) Weighted Average Rate on Loans	7.40	7.09	6.94	6.93	6.89	6.94	6.99
(ii) Weighted Average Rate on Deposits	0.63	0.58	0.61	0.58	0.59	0.63	0.63
(iii) Interest Spread (i - ii)	6.77	6.51	6.33	6.35	6.31	6.31	6.36
D. Non-Bank Financial Institutions ⁴ - Local Curren	су						
(i) Weighted Average Rate on Loans	10.65	10.41	10.33	10.61	10.57	9.84	10.32
(ii) Weighted Average Rate on Deposits	2.80	2.04	2.33	2.09	2.25	2.41	2.57
(iii) Interest Spread (i - ii)	7.84	8.37	8.00	8.52	8.32	7.44	7.76

SOURCE: Central Bank of Trinidad and Tobago

1 Annual data refer to the average of the quarterly averages for the respective years, except for the Bank Rate, Repo Rate, the Reverse Repo Rate and the Treasury Bill Rate which reflect the end of quarter/year position.

2 In May 2002, the Central Bank introduced a system of announced overnight repurchase or 'repo' rates for short-term government paper. The repo rate is the Bank's key policy interest rate and applies to collaterised overnight financing provided to commercial banks. The reverse repo rate is paid on occasions that the Central Bank offers to take overnight funds from commercial banks and is set as the repo rate less 50 basis points.

3 The Mortgage Market Reference Rate (MMRR) was introduced by the Central Bank on December 01, 2011 and represents a reference mortgage rate against which residential mortgages can be priced and re-priced. Following representation by the Bankers Association of Trinidad and Tobago (BATT), the Central Bank agreed to suspend the calculation of the MMRR for a two-year period commencing October 01, 2021. Over this period, the MMRR will remain at 3.00 per cent. Refer to the Circular Letter for more details at <u>https://www. central-bank.org.tt/sites/default/files/circular_letters/circular-letter-covid-19-relief-measures-restructuring-and-mortgage-marketrates-sep2021.pdf.</u>

4 Includes Finance Houses and Trust and Mortgage Finance Companies and represents rates for licensed institutions only.

TABLE A.33 (A)

BALANCE OF PAYMENTS, STANDARD PRESENTATION 2018-2022^{1,2,3}

/ US\$ Millions /

	/ US\$ Mil	lions /				
ITEM	2018	2019	2020	2021	Jan-Sep 2021 ^p	Jan-Sep 2022 ^p
Current Account Goods and Services Goods, net* Exports** Petroleum Crude and Refined Gas Petrochemicals Other Imports** Fuel*** Capital Other Services, net Transport Travel Telecommunications, Computer, and	1,625.8 2,426.3 4,138.4 10,755.6 2,933.9 2,899.4 3,256.6 1,665.7 6,617.2 1,755.3 1,408.0 3,453.9 -1,712.1 -431.3 331.5 -35.8	1,020.1 1,605.4 2,731.8 8,764.3 2,016.2 2,350.0 2,607.4 1,790.7 6,032.5 1,222.1 1,233.0 3,577.3 -1,126.4 -449.6 349.9 -31.8	-1,356.4 -344.8 984.1 6,002.9 1,287.6 1,242.7 1,827.0 1,645.7 5,018.8 723.3 1,191.8 3,103.7 -1,328.9 -363.4 105.6 -47.1	2,900.2 2,875.4 4,711.8 11,082.0 2,238.6 2,321.8 4,401.7 2,119.9 6,370.1 1,160.8 1,584.3 3,625.0 -1,836.4 -469.1 18.1 -2.3	1,054.7 1,273.6 2,737.4 7,403.6 1,578.5 2,903.1 1,573.4 4,666.1 783.2 1,264.7 2,618.2 -1,463.9 -344.6 -6.3 -2.3	4,425.6 5,420.1 7,408.0 13,183.2 2,450.3 3,720.1 5,103.8 1,909.0 5,775.2 1,519.4 1,176.0 3,079.8 -1,987.9 -316.5 176.9 -10.0
Information Services Insurance and Pension Services Other Services^ Primary Income, net Secondary Income, net Capital Account	-180.9 -1,395.5 -700.5 -100.0 2.4	-154.1 -840.9 -607.1 21.8 10.3	-209.0 -650.4 -1,055.6 44.0 0.5	-214.8 -1,156.2 -90.6 115.4 6.6	-176.3 -922.5 -298.8 80.0 6.5	-158.8 -1,678.2 -1,043.4 48.9 0.1
Financial Account Direct Investment Net Acquisition of Financial Assets Net Incurrence of Liabilities Portfolio Investment Net Acquisition of Financial Assets Net Incurrence of Liabilities Financial Derivatives Net Acquisition of Financial Assets Net Incurrence of Liabilities Other Investment^^ Net Acquisition of Financial Assets Net Incurrence of Liabilities Net Acquisition of Financial Assets Net Incurrence of Liabilities Net Errors and Omissions	174.8 765.2 65.0 -700.2 418.1 350.4 -67.7 5.3 5.2 -0.2 -1,013.8 -309.9 703.9 -2,248.1	574.7 -69.8 114.2 184.0 1,453.9 1,245.4 -208.5 -0.2 -0.4 -0.2 -809.1 329.1 1,138.2 -1,101.9	-1,513.3 -958.0 98.0 1,056.0 -184.6 -85.5 99.2 -8.7 -9.1 -0.4 -362.1 -267.1 95.0 -132.6	2,054.1 1,481.6 386.8 -1,094.7 -3.8 -2.5 1.3 137.4 176.3 38.9 439.0 705.0 266.1 -926.9	1,183.0 938.8 220.9 -717.9 -137.8 -102.4 141.1 141.1 141.1 0.0 240.8 460.2 219.3 240.7	1,851.5 1,239.9 872.8 -367.0 443.3 363.3 -80.0 34.4 20.0 -14.5 133.9 523.9 390.0 -2,684.8
Overall Balance Memorandum Items: Current Account/GDP (per cent) Gross Official Reserves (US\$Mn) ^^^ Debt Service Ratio Net International Investment Position (US\$Mn)^^^	- 794.7 6.9 7,575.0 2.1 3,685.9	-646.1 4.4 6,929.0 2.8 4,215.3	-6.4 6,953.8 9.6 2,238.7	-74.2 11.9 6,879.6 3.3 5,728.4	119.0 17.2 7,072.7 3.3 5,210.6	-110.6 20.3 6,879.6 1.7 5,115.5

SOURCE: Central Bank of Trinidad and Tobago

NOTES:

1 Due to COVID-19 related restrictions implemented by the Government and the resulting work-from-home measures employed by some companies, survey response rates have been below historical levels for 2020 and 2021 . Therefore, as additional data from surveys are incorporated upon receipt, estimates may be subject to revisions in the future. GDP prior to 2022 are sourced from the CSO and that for 2022 are Central Bank estimates.

2 3 This table is an analytical presentation of the Balance of Payments and is presented in accordance with the IMF's Balance of Payments and International Investment Position Manual, Sixth Edition (BPM6). Refer to Box 3 of the Economic Bulletin, March 2017 for a Technical Note on the Transition to BPM6.

The following financial account movements are represented with a negative sign:

A decrease in assets (inflow)

A decrease in liabilities (outflow)

A net inflow in net balances

The following financial account movements are represented with a positive sign:

An increase in assets (outflow)

An increase in liabilities (inflow)

A net outflow in net balances

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

** Exports and imports are reported on a FOB (Free on Board) basis. Energy exports include exports of petroleum, petroleum products and related materials and the exports of petrochemicals.

*** Includes petroleum, petroleum products and related materials.

Other Services consists of manufacturing services on physical inputs owned by others, maintenance and repair services n.i.e., construction, financial services, charges for the use of intellectual property n.i.e., other business services and government goods and services n.i.e. \sim

Other investment comprise currency and deposits, loans, insurance, pension, and standardised guarantee schemes, trade credit and advances, other accounts receivable/payable and special drawing rights (liabilities).

End of Period.

TABLE A.33 (B.1)

DIRECT INVESTMENT: NET INCURRENCE OF LIABILITIES (BY SECTOR)

/ US\$ Millions /

ITEM	2016	2017 [,]	2018 ^p	2019 ^p
Petroleum Industries	-431.9	-566.7	-716.4	-231.1
Petroleum Industries	75.2	-544.9	-366.9	18.8
Mining, Exploration and Production and Refineries	-534.0	-30.4	-384.1	-261.4
Petrochemicals	26.9	8.7	34.5	11.5
Food, Drink and Tobacco	47.6	23.6	-7.4	4.7
Chemicals and Non-Metallic Minerals	4.0	26.1	-7.8	-2.7
Assembly Type and Related Industries	65.2	32.5	28.9	-4.8
Distribution	88.2	-4.8	23.7	12.4
All Other Sectors ¹	203.3	18.3	-21.1	405.5
TOTAL	-23.6	-470.9	-700.2	184.0
Memorandum Items:				
Energy Sector	-431.9	-566.7	-716.4	-231.1
Non-Energy Sector	408.3	95.8	16.2	415.1

SOURCE: Central Bank of Trinidad and Tobago

NOTE: This table shows net changes (increases less decreases) in direct investment liabilities (direct investment in Trinidad and Tobago). A decrease in liabilities (outflow) is represented with a negative sign. An increase in liabilities (inflow) is represented with a positive sign.

1 "All Other Sectors" include Textiles, Garments, Footwear, Headwear, Printing, Publishing and Paper Converters, Wood and Related Products, Miscellaneous Manufacturing, Electricity and Water, Construction, Hotels and Guest Houses, Transportation, Communication and Storage, Finance, Insurance, Real Estate and Business Services, Educational and Cultural Community Services, Personal Services and Other sectors.

TABLE A.33 (B.2)

DIRECT INVESTMENT: NET INCURRENCE OF LIABILITIES (BY SECTOR)

/ US\$ Millions /

ITEM	2020	2021	Jan-Sep 2021	Jan-Sep 2022 ^p
Mining and Quarrying	1,185.7	-1,275.8	-1,043.0	-772.1
Manufacturing	-121.5	159.7	311.8	434.9
Wholesale and Retail Trade	-10.5	14.3	9.1	3.9
Financial and Insurance Activities	21.9	-29.2	-32.1	-3.1
Other Sectors	-19.7	36.3	36.4	-30.7
TOTAL Memorandum Items:	1,056.0	-1,094.7	-717.9	-367.0
Energy Sector	1,067.5	-1,188.0	-845.6	-443.7
Non-Energy Sector	-11.5	93.2	127.7	76.7

SOURCE: Central Bank of Trinidad and Tobago

NOTES:

- 1 This table shows net changes (increases less decreases) in direct investment liabilities (direct investment in Trinidad and Tobago). A decrease in liabilities (outflow) is represented with a negative sign. An increase in liabilities (inflow) is represented with a positive sign.
- 2 Effective 2020 data, the industry breakdown now conforms to the International Standard Industrial Classification of All Economic Activities, Revision 4 (ISIC. Rev 4).
- 3 "Other Sectors" include Agriculture, forestry and fishing, Electric power generation, transmission and distribution, Construction, Transportation and storage, Manufacture of gas; distribution of gaseous fuels through mains, Steam and air conditioning supply, Water supply; sewerage, waste management and remediation activities, Accommodation and food service activities, Information and communication, Real estate activities, Professional, scientific and technical activities, Administrative and support service activities, Public administration and defence; compulsory social security, Education, Human health and social work activities, Arts, entertainment and recreation and Other service activities.
- 4 Due to COVID-19 related restrictions implemented by the Government and the resulting work-from-home measures employed by some companies, survey response rates have been below historical levels for the first three quarters of 2020. Therefore, as additional data from surveys are incorporated upon receipt, estimates may be subject to revisions in the future.

Netherlands

St. Lucia

Other

TOTAL

TABLE A.33 (C)

U.S.A. -206.1 -116.7 1,007.8 -1,258.1-1,097.7 269.1 -1,086.3 U.K. -281.8 314.5 257.0 46.2 68.8 Canada 58.3 -32.8 23.5 91.8 0.6 -8.8 Barbados -259.1 -173.3 -201.0 175.5 269.4 364.6

1.9

4.8

-5.8

1,056.0

-22.8

-17.2

14.5

-1,094.7

2.9

58.7

129.0

184.0

-7.6

46.7

-21.2

-717.9

5.3

-119.5

108.0

-367.0

DIRECT INVESTMENT: NET INCURRENCE OF LIABILITIES (BY COUNTRY) / US\$ Millions /

SOURCE: Central Bank of Trinidad and Tobago

-3.2

17.2

-57.2

-700.2

NOTE: This table shows net changes (increases less decreases) in direct investment liabilities (direct investment in Trinidad and Tobago). A decrease in liabilities (outflow) is represented with a negative sign. An increase in liabilities (inflow) is represented with a positive sign. Data are presented in accordance with the International Monetary Fund's Balance of Payments and International Investment Position Manual, Sixth Edition (BPM6) which prescribes that geographical distribution of direct investment is based on the immediate investing country.

WEIGHTED AVERAGE TT DOLLAR EXCHANGE RATES FOR SELECTED CURRENCIES 2018-2022¹

PERIOD		STATES LAR		ADIAN _LAR		OUND RLING	JAPANE	ESE YEN	EU	RO
	BUYING	SELLING	BUYING	SELLING	BUYING	SELLING	BUYING	SELLING	BUYING	SELLING
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2018	6.7321	6.7813	5.1438	5.4918	8.9231	9.5572	0.0609	0.0642	7.9261	8.4500
2019	6.7306	6.7800	5.0538	5.3813	8.5342	9.1294	0.0617	0.0653	7.5445	8.0224
2020	6.7204	6.7803	5.0261	5.3627	8.6183	9.2182	0.0630	0.0666	7.7617	8.2307
2021	6.7333	6.7811	5.3779	5.7525	9.2204	9.8850	0.0613	0.0649	8.1154	8.5767
2022	6.7298	6.7776	5.2092	5.5522	8.2883	8.8909	0.0515	0.0547	7.2622	7.6332
2022										
January	6.7448	6.7820	5.3965	5.7368	9.0902	9.7402	0.0587	0.0619	7.8546	8.1761
February	6.7283	6.7756	5.3369	5.6826	9.1137	9.7528	0.0583	0.0620	7.8384	8.2368
March	6.7384	6.7779	5.3667	5.6960	8.8458	9.4998	0.0568	0.0600	7.6269	7.9958
I.	6.7373	6.7786	5.3672	5.7053	9.0123	9.6603	0.0579	0.0613	7.7699	8.1324
April	6.7312	6.7791	5.3733	5.7164	8.7141	9.3468	0.0534	0.0561	7.5488	7.8731
May	6.7254	6.7719	5.2577	5.6071	8.3107	8.9041	0.0521	0.0558	7.3605	7.6291
June	6.7404	6.7762	5.3038	5.6456	8.2610	8.8750	0.0501	0.0537	7.2586	7.6587
II	6.7323	6.7757	5.3106	5.6553	8.4238	9.0368	0.0518	0.0552	7.3866	7.7177
July	6.7335	6.7771	5.2178	5.5697	8.0156	8.6276	0.0492	0.0524	7.1124	7.3710
August	6.7183	6.7798	5.2252	5.6044	7.9642	8.6035	0.0496	0.0530	6.9355	7.3502
September	6.7318	6.7803	5.1328	5.4328	7.5727	8.1470	0.0470	0.0501	6.8230	7.1818
III	6.7279	6.7791	5.1910	5.5340	7.8465	8.4545	0.0486	0.0518	6.9549	7.2991
October	6.7101	6.7740	4.9108	5.2595	7.5647	8.0925	0.0456	0.0488	6.6481	7.1261
November	6.7243	6.7790	5.0423	5.3612	7.8773	8.4164	0.0473	0.0499	6.9180	7.3875
December	6.7306	6.7782	4.9524	5.3269	8.1977	8.7535	0.0497	0.0525	7.2724	7.6582
IV	6.7218	6.7771	4.9709	5.3173	7.8798	8.4206	0.0475	0.0504	6.9453	7.3905

SOURCE: Central Bank of Trinidad and Tobago

1 Monthly and quarterly rates are an average of daily rates.

TRINIDAD AND TOBAGO - INTERNATIONAL RESERVES, 2018-2022¹ / US\$ Millions /

			CENTRAL BA	NK			
END OF PERIOD	FOREIGN ASSETS	Of w IMF RESERVE TRANCHE POSITION	vhich SDR HOLDINGS	FOREIGN LIABILITIES	NET INTERNATIONAL RESERVES (1+4)	CENTRAL GOVERNMENT	NET OFFICIAL RESERVES (5+6)
2018 2019 2020 2021 2022	 (1) 7,571.4 6,924.7 6,949.1 6,874.6 6,827.4 	(2) 117.1 131.7 161.6 173.9 178.0	(3) 336.5 334.4 348.6 1,079.7 1,027.8	(4) 0.0 0.0 0.0 0.0 0.0	(5) 7,571.4 6,924.7 6,949.1 6,874.6 6,827.4	 (6) 3.6 4.3 4.7 5.0 5.0 	(7) 7,575.0 6,929.0 6,953.8 6,879.6 6,832.4
2021 V	6,700.0 6,633.7 7,067.7 6,874.6	159.0 168.6 166.6 173.9	343.0 348.1 1,086.8 1,079.7	0.0 0.0 0.0 0.0	6,700.0 6,633.7 7,067.7 6,874.6	4.6 4.9 5.0 5.0	6,704.7 6,638.6 7,072.7 6,879.6
2022 V	6,647.0 6,751.8 6,764.0 6,827.4	171.7 164.9 167.3 178.0	1,066.5 1,024.4 987.7 1,027.8	0.0 0.0 0.0 0.0	6,647.0 6,751.8 7,067.7 6,827.4	5.0 5.0 5.0 5.0	6,652.0 6,756.8 6,769.0 6,832.4
END OF PERIOD	CON FOREIGN ASSETS	IMERCIAL BA FOREIGN LIABILITIES	NKS NET FOREIGN POSITION (8-9)	GROSS FOF ASSET (1+6+8	S LIABIL	ITIES R	T FOREIGN ESERVES (11-12)
2018 2019 2020 2021 2022	(8) 3,520.2 3,698.9 4,060.4 4,643.3 4,806.6	(9) 647.2 918.6 706.0 663.6 640.8	(10) 2,873.0 2,780.3 3,354.4 3,979.7 4,165.7	(11) 11,095. 10,627. 11,014. 11,522. 11,639.	8 918 1 706 9 663	7.2 3.6 5.0 3.6	(13) 10,448.1 9,709.3 10,308.1 10,859.3 10,998.1
2021 I II IV	4,017.2 4,370.4 4,426.9 4,643.3	663.8 690.9 654.6 663.6	3,353.4 3,679.6 3,772.3 3,979.7	10,721. 11,009. 11,499. 11,522.	1 690 6 654	0.9 4.6	10,058.0 10,318.2 10,845.0 10,859.3
2022 V	4,626.7 4,719.4 4,541.7 4,806.6	676.8 630.7 588.9 640.8	3,949.9 4,088.7 3,952.7 4,165.7	11,278. 11,476. 11,310. 11,639.	2 630 6 588	0.7 8.9	10,601.9 10,845.5 10,721.7 10,998.1

SOURCE: Central Bank of Trinidad and Tobago

1 International reserves have been revised to include Trinidad and Tobago's reserve position in the IMF. International reserves are defined as external assets that are readily available to and controlled by monetary authorities for direct financing of payments imbalances, for indirectly regulating the magnitudes of such imbalances through intervention in exchange markets and for other purposes. Typically, they include securities, gold, IMF special drawing rights (SDRs), a country's holding of foreign currency and deposits, reserve position in the IMF, and other claims (Balance of Payments Manual 6th Edition Paragraph 6.64).

SUMMARY ACCOUNTS OF THE CENTRAL BANK, 2018-2022 / TT\$ Millions /

ITEM	2018	2019	2020	2021	2022
Net Foreign Assets	47,815.6	43,579.0 ^r	43,689.0	39,026.6	39,041.8
Net International Reserves	51,338.2	46,827.0 ^r	46,984.1	46,489.6	46,026.4
Assets	51,338.2	46,827.0 ^r	46,984.1	46,489.6	46,026.4
Liabilities	0.0	0.0	0.0	0.0	0.0
Other Foreign Assets	-3,522.7	-3,248.6	-3,295.2	-7,463.0	-6,984.6
Other External Assets	56.7	31.6	2.2	1.1	59.5
Medium and Long-Term Foreign Liabilities	-575.3	-287.2	-158.0	-169.7	-174.3
SDR Allocation	-3,004.0	-2,993.0	-3,139.3	-7,294.4	-6,869.7
Net Domestic Assets	-22,279.7	-13,648.0	-11,571.5	-11,749.5	-9,340.9
Net Credit to the Public Sector	-15,415.0	-5,274.0	-2,348.4	-3,989.0	-2,659.4
Central Government (net)	-15,370.0	-5,222.0	-2,303.9	-3,921.6	-2,579.2
Treasury Bills	0.0	0.0	0.0	0.2	194.5
Other Government Securities	198.1	163.1	114.2	98.1	78.8
Loans to Government	51,970.3	42,300.7	45,100.9	46,320.1	56,651.2
Use of Reserves (-addition)	-67,538.0	-47,686.0	-47,519.0	-50,340.0	-59,503.6
Rest of Public Sector	-44.7	-52.3	-44.5	-67.4	-80.2
of which: Public Enterprises	0.0	0.0	0.0	0.0	0.0
Net Claims on Financial Institutions	0.0	0.0	0.0	0.0	0.0
Other Items (net)	-6,865.0	-8,373.0 ^r	-9,223.1	-7,760.5	-6,681.6
Reserve Money	25,535.9	29,931.1	32,117.5	27,277.0	29,700.9
Currency in Circulation	9,386.9	8,799.1	8,412.0	9,253.1	9,301.1
Deposits of Commercial Banks	15,965.7	20,862.0	23,448.4	17,659.1	20,039.1
Deposits of Non-Bank Financial Institutions	183.3	269.9	257.0	364.9	360.7
	Changes as	s a Per Cent o	f Beginning-of-	Period Reserv	e Money
Net Foreign Assets	-19.3	-17.2	0.4	-14.5	0.1
Net Domestic Assets	14.5	34.4	6.9	-0.6	8.8
Of which: Central Government	5.2	39.7	9.7	-5.0	4.9
Reserve Money	-4.8	17.2	7.3	-15.1	8.9
Memorandum Item:					
Government Blocked Account	24,958.6	14,756.8	11,459.6	10,265.7	7,465.3

SOURCE: Central Bank of Trinidad and Tobago



APPENDIX 2

FEATURE ARTICLE

Examining the Role of Fiscal and Monetary Policies in Climate Change in Trinidad and Tobago: The Effects of these Policies on Carbon Dioxide Emissions

FEATURE ARTICLE

Examining the Role of Fiscal and Monetary Policies in Climate Change in Trinidad And Tobago: The Effects of these Policies on Carbon Dioxide Emissions

by: Avinash Ramlogan and Andell Nelson⁵⁰

SUMMARY

Climate change has become a real and pressing issue globally, and urgent action is needed to avoid significant economic and social consequences. Economic activity related to fossil fuel combustion that produces greenhouse gases has been the predominant cause of ongoing climate change. The last two decades have seen a growing body of literature considering fiscal and monetary policies as novel influencers of environmental emissions given their influence on economic activity. This article empirically examines the effects of these policies on CO₂ emissions in Trinidad and Tobago. The analysis employs a Non-linear Autoregressive Distributed Lag (NARDL) model using data from 1970 to 2020. The paper also uses Principal Component Analysis (PCA) to develop fiscal and monetary policy indices to inform the estimation. Consistent with much of the literature, fiscal policy significantly affects CO₂ emissions in the short and long run. However, monetary policy has negligible to no effects on CO₂ emissions in the short and

long run. The findings suggest greater scope for macroeconomic policies to contribute to climate change mitigation.

1. INTRODUCTION

The rise in emissions in many countries has led researchers to increasingly probe the role of various contributing factors, such as macroeconomic policies, in the emissionsgenerating process. An interesting area of this research is the possible use of monetary and fiscal policies to manage and mitigate the effects of climate change and climate-related risks. The central argument is that fiscal and monetary policies play vital roles as drivers of economic activity by influencing resource allocations. Hence, these policies can be used to alter the emission trajectories of both climate-relevant non-climate-relevant and economic sectors. Exploring the influence of macroeconomic policies on environmental emissions, therefore, may be integral to achieving sustainable development.

Trinidad and Tobago is a small, open, fossilbased economy that exports crude oil, liquefied natural gas and petrochemicals. The country is also a key exporter of manufactured goods to the Caribbean (e.g. cement). These activities translate to significant CO_2 emissions as such policy measures to curb CO_2 emissions are crucial domestically. On the one hand, fossil fuel resources drive domestic economic growth which induces CO_2 emissions. On

⁵⁰ The authors are Economists in the Research Department of the Central Bank of Trinidad and Tobago. The views expressed in this article are those of the authors and not necessarily that of the Central Bank.

the other, the country needs to transition to low-carbon status to meet its commitments under international agreements. All in all, it is important that the country decouple fossil fuels from models of growth and development in order to meet its international commitments and build a sustainable, low carbon economy. In the Trinidad and Tobago context, therefore, exploring the links between macroeconomic policies and CO_2 emissions is more than just an academic exercise.

The primary purpose of this article is to empirically estimate the effect of fiscal and monetary policy expansion and contraction on CO₂ emissions in Trinidad and Tobago. The analysis employs a Non-linear Autoregressive Distributed Lag (NARDL) model covering data from 1970 to 2020. Principal Component Analysis (PCA) is also used to develop fiscal and monetary policy indices to inform the investigation. Using the NARDL bound testing approach, we find that fiscal policy has significant effects on CO₂ emissions in both the short and long run. Meanwhile, monetary policy has negligible to no effects on CO₂ emissions in either the short run or long run. The findings suggest that greening of fiscal and monetary policies could reduce their effects on CO₂ emissions. The study offers a foundation for future research, such as investigating how the components of public spending affect CO₂ emissions and how green fiscal policy instruments (such as a carbon tax) can impact CO₂ emissions. These policies will also have implications for monetary policy as they can affect overall prices.

2. STYLISED FACTS

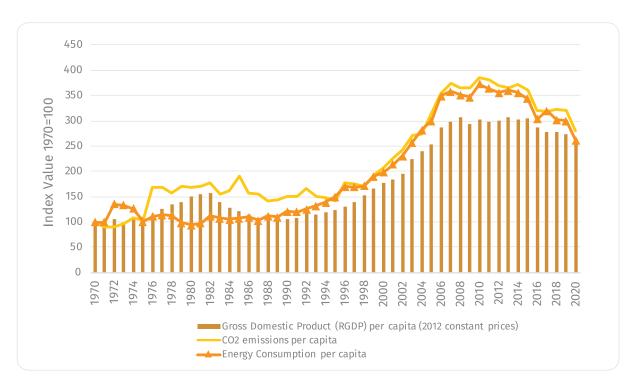
Trinidad and Tobago's contribution to global CO₂ emissions is considered low in absolute terms. However, the country is a significant contributor to global emissions in per capita terms. In 2018, Trinidad and Tobago ranked 2^{nd} in the world in terms of CO₂ emissions per capita, and there is clear evidence of an upward slope in emissions over time (Chart 1)⁵¹. Per capita emissions experienced an upsurge since the late 1990s and peaked in 2010. Even though there was a decline after 2010, emission levels remained elevated. The high level of per capita emissions stems from the industrialised petroleum-based nature of the economy. The country's economic activity is dominated by crude oil and liquefied natural gas production by exploiting its large natural gas and crude oil resources. The country also exports manufactured goods such as food and beverages and construction materials like cement to the Caribbean. These activities make the economy a significant contributor to global CO₂ emissions. Therefore, given the high per capita status and Trinidad and Tobago being among the small island states most vulnerable to climate change, the country should join global efforts to address climate change by tackling emissions.

It is observable from **Chart 1** that there is clear direct association between CO_2 emissions per capita, energy consumption per capita and real GDP per capita. The decline in CO_2 emissions and energy consumption in 2009 and 2014

⁵¹ World Bank Global Carbon Project Report 2019.

was primarily because of the financial crisis and the freefall in energy commodity prices⁵². Additionally, the downward movement in CO₂ emissions and energy consumption from 2019 onwards was primarily a result of the COVID-19 pandemic, which affected economic activity. This pattern suggests that as per capita income increases in Trinidad and Tobago, so does the level of CO_2 emissions, indicating that the country's economic development is not yet fully aligned with green technology.

CHART 1 ANNUAL CARBON DIOXIDE (CO₂) EMISSIONS, GDP AND ENERGY CONSUMPTION



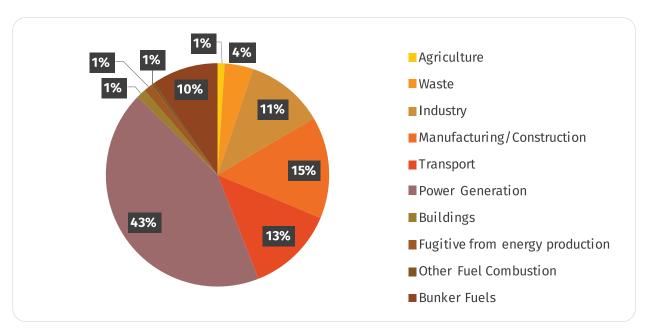
Sources: Global Carbon Project, Our World in Data and Central Statistical Office

Note: Carbon dioxide (CO₂) emissions from fossil fuels and industry. Land use change is not included. Data used refers to production-based CO2 or territorial emissions. In Chart 2, the data were converted into index values to aid comparison.

⁵² The freefall in energy commodity prices resulted in the Government making a deliberate effort to consolidate aggregate expenditure. There was a 7.0 per cent cut in expenditure across government ministries.

Chart 2 provides a sectoral decomposition of GHG emissions for Trinidad and Tobago for 2020, the majority of which is CO_2 emissions⁵³. Power generation for use in energy production plants (such as liquefied natural gas and refined energy products) and industrial and manufacturing activities require burning fossil fuels which contribute significantly to CO_2 emissions. The latest data show that power generation accounts for 43.0 per cent of GHG emissions. **Chart 2** also shows that manufacturing/construction (15.0 per cent), transportation (13.0 per cent), and industrial activity (11.0 per cent) are three sectors that are significant contributors. These emissions are generated either through burning fossil fuels or as a by-product of production activities.

CHART 2 GHG (MTCO₂E) EMISSIONS BY SECTOR (2020)*



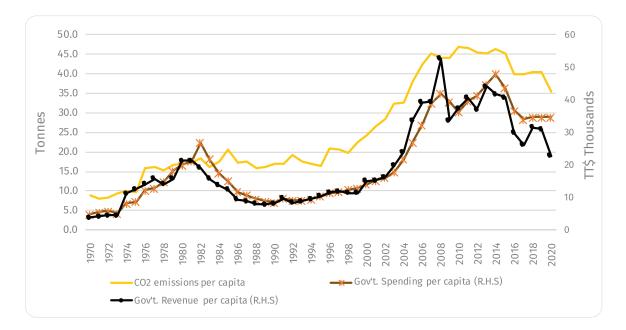
Sources: CAIT Climate Data Explorer via Climate Watch and Our World in Data CO2 and Greenhouse Gas Emissions Database

 $\ast\,$ Tonnes of Carbon Dioxide-Equivalents (CO_2e).

⁵³ The authors were unable to obtain sectoral data for CO2 emissions. However, Chart 3 shows GHG emissions for 2020 converted to carbon dioxide equivalent.

Chart 3 demonstrates the trends in government fiscal policy and CO_2 emissions in Trinidad and Tobago over the period 1970 to 2020. It is observable that increases in government expenditure per capita frequently coincided with enhanced revenue (revenue per capita) and vice versa, supporting the procyclical nature of fiscal policy (Cotton et al., 2013). CO_2 per capita also follows a similar trend increasing with government spending and falling with lower outlays. More recently, the downward movement in CO_2 emissions in 2020 also saw a reduction in government revenue due to the closure of activity in several economic sectors to address the COVID-19 pandemic. The overall trend suggests a strong link between government fiscal policy and CO_2 emissions. This link may result from the impact of government spending on generating economic activity and social spending (such as transfers and subsidies) on energy consumption and CO_2 emissions. It is also likely that government revenue is also emission-generating since the energy sector is a key revenue source. The chart suggests that fiscal policy needs to carefully balance climate mitigation concerns while improving GDP per capita.

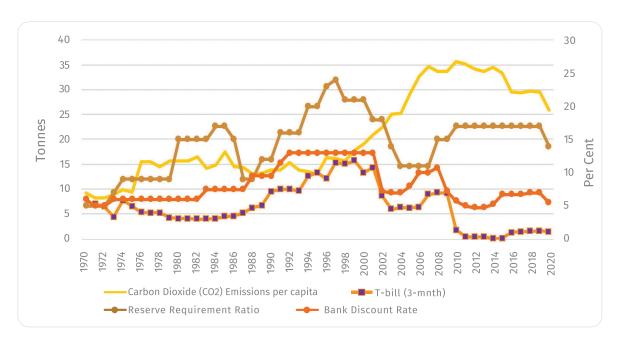
CHART 3 TRENDS IN GOVERNMENT EXPENDITURE, REVENUE AND CO2 EMISSIONS



Sources: Our World in Data and Central Bank of Trinidad and Tobago

Chart 4 presents the trends in monetary policy and CO_2 emissions. The chart shows no clear association between monetary policy variables and CO_2 emissions for Trinidad and Tobago. It can be seen from the chart that among the monetary policy variables, the 3-month treasury bill rate and the bank discount rate⁵⁴ show a relatively high co-movement with each other. It could also be seen that there is a fair degree of co-movement between the reserve requirement ratio and the bank discount rate. However, there appears to be a low degree of co-movement between the reserve requirement ratio and the 3-month treasury bill rate. However, monetary policy in the Trinidad and Tobago context needs to be explored further to determine its impact on CO_2 emissions as several studies in other countries have already concluded that interest rates can significantly influence credit, investment and consumption spending and aggregate demand channels and can result in changes in production-based CO_2 emissions.





Sources: Our World in Data and Central Bank of Trinidad and Tobago

⁵⁴ The bank discount rate was utilised instead of the repo rate due to the unavailability of data prior to 2002. The bank rate is set at 200 basis points above the repo rate.

3. A SURVEY OF THE LITERATURE

The economic literature on the role of fiscal and monetary policies in climate change is large and complex. High and rising CO_2 emissions require policy actions to engender a largescale transition to a low-carbon economy. As a result, policy authorities are increasingly exploring the role of monetary and fiscal policies in reducing GHGs, such as CO_2 emissions. Thus, our literature review focuses on the role of fiscal and monetary policies in (i) influencing climate change through their impact on GHG emissions like CO_2 and (ii) climate change mitigation efforts.

Conventional fiscal policy targets macroeconomic outcomes and can have unintended environmental spillover effects. Halkos and Paizanos (2012) indicated that the impact depends on the interaction of incomepollution and government spending-economic growth relations. The income-pollution part of this mechanism has been explored in the strand of literature that investigates the Environmental Kuznets Curve (EKC) hypothesis. The hypothesis postulates an inverted U-shaped relationship between environmental pollution and per capita income, i.e., environmental pressure increases as income increases to a certain threshold; after that, it decreases (Grossman and Krueger 1995).

Regarding the government spending-growth relationship, the economic literature has described various channels through which fiscal policy may impact economic growth. These channels are subject to interferences of various factors, which could complicate the potential impacts of government spending on economic growth. Some studies found that public expenditure may reduce economic growth by crowding out the private sector, increasing government inefficiencies, distorting tax systems and incentives, and intervening in free markets. Others found that government spending may positively affect economic growth due to positive externalities, providing a socially optimal level of growth, and offsetting market failures⁵⁵.

On the monetary policy front, central banks have not traditionally been considered relevant for climate change mitigation efforts. The economic literature has established that monetary policy frameworks of central banks seek to stabilise output and inflation. In doing so, central banks attempt to influence the level of interest rates or money supply by adopting expansionary or contractionary monetary policy actions. Monetary policy actions can transmit through complex but effective economic processes to impact environmental emissions. Interest rates or money supply changes can alter the patterns of energy consumption, aggregate demand, innovation activities and income per capita, impacting CO₂ emissions. For instance, monetary policy actions could exacerbate emissions in countries and undermine the efforts of other government policy measures, such as environmental and fiscal policies.

⁵⁵ See Katircioglu and Katircioglu (2018), Halkos and Paizanos (2012), Halkos and Paizanos (2016), Ullah, Majeed and Chishti (2020) and Yilanci and Pata. (2021).

Prior studies have led to mixed conclusions about the effects of monetary policy actions on emissions. For instance, Qingquan et al. (2020) found that expansionary monetary policy intensifies CO₂ emissions; but contractionary monetary policy appeared to contract emissions in 14 Asian economies. Isiksal et al. (2019) found a negative relationship between monetary policy (the real interest rate) and CO₂ emissions in Turkey. The paper further revealed that the impact of the monetary policy was supported through the energy consumption channel in Turkey.

The economic literature has suggested using climate-related green fiscal and monetary policies as an alternative to avoid the potential adverse impacts of conventional policy on emissions. Green fiscal policy can fall into four broad categories: public spending and investment, public-private partnerships (PPPs), price policies (taxation and incentives), and public guarantees, which are targeted to reduce emissions like CO₂. Regarding monetary policy, proposals have been put forward for central banks to provide financial resources for green economic activities. For instance, central banks could use their balance sheets to provide guarantees for loans to boost the financing of green investments to promote a structural shift in the economy to a lowcarbon status (Dasgupta et al., 2019). Central banks could also utilise their balance sheets to ensure better access to funding schemes for commercial banks to invest in low-carbon projects or to provide loan financing to firms to invest in green projects (Aglietta et al., 2015). These policies, however, can be controversial, as conveyed in Krogstrup et al. (2019), and would require a rethinking of the role of central banks. Table 1 summarises the key pros and cons of various climate-related fiscal and monetary policy measures.

TABLE 1

PROS AND CONS OF CLIMATE-RELATED FISCAL AND MONETARY POLICIES

Example of Policy Tools	Pros	Cons
Public investment and spending	*Reduces fossil fuel energy consumption (e.g. electricity generation). * More climate-friendly public goods.	*Public finances may be challenged. * Transparency and accountability.
Public Private Partnerships	 * Improves green infrastructure investment while reducing public spending. * Sharing of project risks (e.g. financial risks, timeframe). * Increases efficiency, technology and innovation expertise from the private sector. 	 *Requires proper PPP capacity such as appropriate legal framework not present in many countries. * Onus is on governments to create the appropriate enabling framework. * Can result in projects becoming more expensive compared to standard procurements due to the higher borrowing costs faced by the private sector compared to government rates.
Carbon Pricing	 * Leverages the market mechanism to improve resource allocation. * Revenue generating. * Internalises the externalities. 	 * Market price set may not impact emissions. *Can be ineffective if political interference. * Firms may shift production to other countries. * Administration cost of measuring firms' emissions. * Encourage tax evasion and methods to circumvent the policy by firms.
Public Guarantee	* Provides an upfront 'reward' for low- carbon options while maximizing the efficiency of using public finances. * Calibrating the guarantees on the agreed social value of climate mitigation actions (SV/NA) will ensure the economic efficiency of project selection.	* Public finances may be challenged.
Integrating climate- related risks analysis in central banks' collateral frameworks	Improves liquidity and reduces costs for financial institutions engaging in green projects.	* Requires a reorientation of central banks' objectives towards long-term sustainability rather than short-term liquidity. Only a limited number of central banks globally have an objective to promote or support sustainable economic growth.
Green QE	*Improves liquidity and cash flow of green investment projects.	*The emergence of trade-off relations between short-term monetary stability considerations and environmental sustainability.
Climate Change Credit Scheme (Monetary Policy)	*Improves financial institutions' costs and access to funds for green projects subject to an assessment of project risks. * Sectors declared as environmental priorities can be the target of direct credit policy instruments, such as subsidized loan rates.	*Central bank's resources may already be stretched with monetary policy and financial stability issues.

4. EMPIRICAL ANALYSIS

Empirical studies have only recently begun exploring the impact of various macroeconomic policies on CO² emissions. Based on several environmental-related studies for other countries, a Cobb-Douglas production-based pollution function is augmented and estimated using the NARDL methodology. The NARDL model estimated is denoted below:

$LCO_{2}K_{t} = \delta_{0} + \delta_{1}LECK_{t} + \delta_{2}LCIN_{t} + \delta_{3}LFPI_{t} + \delta_{4}MPI_{t} + \delta_{5}LIMC_{t} + \epsilon_{t} \quad Eq[1]$

where t represents the year and L logarithm. LCO_2K_t denotes CO_2 emissions per capita, $LECK_t$ is fossil fuel consumption per capita, $LCIN_t$ is carbon intensity, LFPI_t is the fiscal policy index (a measure of fiscal policy), MPI_t is the money policy index (a measure of monetary policy), and $LIMC_t$ is a measure of import capacity⁵⁶. Finally, ϵ_t is an error term. We divide the quantity variables by population to control for the effects of population growth on CO_2 emissions. Short- and long-run effects are incorporated in the model based on Pesaran et al. (2001) ARDL approach to the error correction and cointegration framework. It is possible that CO_2 emissions may respond differently to monetary and fiscal policy expansions and contractions⁵⁷, therefore, we adjust the model to detect possible asymmetric effects of monetary and fiscal policy on CO_2 emissions in the short and long run^{58, 59}.

The NARDL model was estimated by employing annual time series data from 1970 to 2020. The data was obtained from various sources. Data on total CO₂ emissions, fossil fuel consumption, and carbon intensity were sourced from Our World in Data (Global Carbon Project)⁶⁰. The data for the total population was obtained from the Central Statistical Office. Import capacity (LIMC), calculated by dividing total exports by total imports, was obtained from trade data housed at the Central Bank of Trinidad and Tobago. We obtained total government revenue and expenditure data from the Ministry of Finance. All data were taken in their logarithmic form (except for the interest rates and reserve requirement). Also, all data expressed in

⁵⁶ Recent studies infer that fiscal policy (FP) plays a vital role in polluting the environment. Fiscal policy includes the government changing its spending and taxation to increase or decrease aggregate economic activities. Fiscal policy can be either expansionary (EFP) or contractionary (CFP) depending on the different policy objectives. In the above equation, money plays an important role as a factor input in facilitating production as firms hold money balances to ensure they can purchase capital and meet daily expenses. From a theoretical standpoint, a central bank's monetary policy can significantly influence the money balances firms hold, and variations in monetary policy (money supply) can result in firms reducing or increasing their cash balances, thereby, affecting production activities. Further, Qingquan et al. (2020) explain that the central bank's monetary policy can have a wide-ranging impact on the economy, including changes in aggregate production, consumption, foreign direct investment, financial development and economic growth. Expansionary (EMP) and contractionary monetary policy (CMP) changes can widely impact an economy through various channels, influencing consumer spending and firms' investment decisions, and leading to changes in CO2 levels in a country.

⁵⁷ The symmetry assumption can lead to incorrect inferences and policy conclusions, leading to ineffective policy prescription.

⁵⁸ Our specification follows the Shin et al. (2014) asymmetric error correction modelling approach. In this approach, we decompose fiscal policy and monetary policy fluctuations into two time series variables, one signifying increases in fiscal and monetary policy and the other signifying decreases in monetary and fiscal policy.

⁵⁹ Granger et al. (2002) state that if two-time series positive and negative components are cointegrated, they have hidden cointegration and linear cointegration is a particular case of this hidden cointegration which is a simple case of non-linear cointegration.

⁶⁰ See for further details: https://ourworldindata.org/co2-emissions.

monetary terms (government revenue and expenditure) were converted into 2015 constant prices using the core inflation rate obtained from the CSO and the Central Bank of Trinidad and Tobago.

To capture fiscal and monetary policy in an efficient way, we construct a fiscal policy index and a monetary policy index using the method of Principal Component Analysis (PCA). Government revenue (GREVK) and expenditure (GSK) were used to construct the fiscal policy index while the Bank Discount Rate, the 3-month Treasury bill rate, and the reserve requirement ratio are used to construct the monetary policy index.

5. DISCUSSION OF RESULTS

The estimated results can be used to understand macroeconomic policy effects on CO_2 emissions in Trinidad and Tobago. The estimated short-run and long-run elasticity coefficients for the CO_2 emission regression model are presented in **Table 2**. The results show that fossil fuel energy consumption, carbon intensity and import capacity are positive and statistically significant in both the short run and long run. A key feature is that the long-run coefficients for each of these variables are larger than the short-run coefficients.

Regarding the fiscal policy variable, the shortrun estimates showed a positive value (0.27) for government fiscal policy – implying that a 1.0 per cent increase in fiscal spending

and revenues (or fiscal expansion) increases CO₂ emissions by 0.27 per cent. This finding infers that expansionary fiscal policy increases CO₂ emissions. A possible explanation is that higher fiscal spending increases output through the aggregate demand channel, increasing CO₂ emissions. Additionally, different classes of expenditure, including spending on construction projects and capital imports may impact CO₂ emissions differently, especially if they are not eco-friendly technologies. Further, spending on transfers and subsidies such as fuel subsidies can lead to more CO₂ emissions⁶¹. In contrast, the model shows results for the short-run coefficient (0.29) for negative fiscal policy (or fiscal contraction). The longrun estimates show a positive value (0.45) for the expansionary fiscal policy, which is significant at the 1.0 per cent level. The results suggest that expansionary fiscal policy of 1.0 per cent would raise CO_2 emissions by 0.45 per cent. However, the long-run estimate for contractionary fiscal policy (0.48) is positive and statistically significant at the 1.0 per cent level, implying that a 1.0 per cent fiscal contraction would lead to a reduction in CO_2 emissions of 0.48 per cent over the long term. A possible explanation is that the reduction in spending reduces employment and economic activity, decreasing CO₂ levels. The overall finding is that fiscal policy is not oriented toward long-term climate mitigation.

In the case of monetary policy, the short-run estimate shows a negative value (0.01) which was significant at the 5.0 per cent level,

⁶¹ The results are consistent with Yuelen et al. (2019).

suggesting that a monetary policy contraction of 1.0 per cent could adversely impact CO_2 emissions by 0.01 per cent. Also, the coefficient of the expansionary monetary policy is negative (0.0006) but statistically insignificant. The small size of these coefficients implies that monetary policy has negligible short-run effects on CO_2 emissions. Similarly, the long-run coefficient for contractionary monetary policy (-0.02) though significant at the 5.0 per cent level (indicating that a contraction in monetary policy by 1.0 per cent reduces CO_2 emissions by 0.02 per cent), has a marginal impact on CO_2 emissions, similar to Ullah et al. (2020). This finding is consistent with the mixed results found in the literature, reflecting the challenge of monetary policy through rather complex channels to the real economy.

Variables	Short-run Coeffic	ients	Std. Error	t-Statistic
D(LECK)	0.353	***	0.117	3.003
D(LECK(-1))	-0.259	*	0.135	-1.911
D(LCINT)	0.444	***	0.078	-5.687
D(LFPI_POS)	0.272	***	0.077	-0.519
D(LFPI_NEG)	0.293	***	0.067	4.378
D(MPI_POS)	-0.011	**	0.005	-2.171
D(MPI_NEG)	-0.0006		0.003	-0.159
D(LIMC)	0.122	***	0.047	2.566
ECT(-1)	-0.611	***	0.103	-5.884
Variables	Long-run Coeffici	ents	Std. Error	t-Statistic
C	-3.729	***	1.149	-3.245
LECK	0.607	***	0.199	3.036
LCIN	0.726	***	0.180	4.037
LFPI_POS	0.445	***	0.076	5.833
LFPI_NEG	0.480	***	0.127	3.773
MPI_POS	-0.018	**	0.007	-2.284
MPI_NEG	-0.0009		0.0005	-0.158
LIMC	0.199	**	0.089	2.242
Model Diagnostics Tests $R^2=0.767$ Adj- $R^2=0.757$ $\chi^2_{JB} = 1.232[0.540]$	χ^{2}_{LM} = 1.99 [0.151] χ^{2}_{RS} = 0.431[0.668]	X ² _{BPC}	5 = 1.98 [0.080] D.W = 2.17	

TABLE 2 ESTIMATED NARDL SHORT-TERM AND LONG-TERM COEFFICIENTS

Note: *, ** and *** indicate a 10% level, 5% level and 1% level of significance, respectively.

χ2LM, χ2 BPG, χ2JB and χ2RS are parameters of the LM test for serial correlation, Brush–Pagan Godfrey test for heteroscedasticity, Jarque–Bera normality test, and Ramsey Reset test for model specification, respectively. Probability values in [].

asymmetric dynamic relationships The between the policy variables and CO₂ emissions were further analysed by plotting the multiplier effects (Charts 5(a) and 5(b)). The solid black line (dashed black lines) in **Chart 5(a)** describes the adjustment of CO_2 emissions to positive/expansionary (negative/ contractionary) shocks to the fiscal policy index over 15 years. The asymmetry lines (red dashed lines) reflect the difference between the positive and negative impact multipliers over a 15-year period. Chart 5(a) shows that a positive shock to fiscal policy (or fiscal expansion) has a strong increasing effect on $\mathrm{CO}_{\scriptscriptstyle 2}$ emissions while a negative shock (or fiscal contraction) decreases CO₂ emissions over the forecast horizon. It can also be seen that expansionary and contractionary fiscal policy display some symmetric behaviour, as the magnitude of the effect of a fiscal expansion

on $\rm CO_2$ emissions is almost the same as a fiscal contraction.

In the case of monetary policy, the solid black line (dashed black lines) in Chart 5(b) describes the adjustment of CO₂ emissions to positive/contractionary (negative/ expansionary) shocks to the monetary policy index over a 15-year period. Chart 5(b) shows that a positive shock (or contractionary monetary policy) has a decreasing effect on $\rm CO_2$ emissions over the 15-year period. A negative monetary policy (or expansionary) shock has a small increasing effect on CO₂ emissions, but the magnitude of the effect is relatively much weaker when compared to a positive shock. This finding could shed further light on the design of policies to contribute further to climate change mitigation in Trinidad and Tobago.

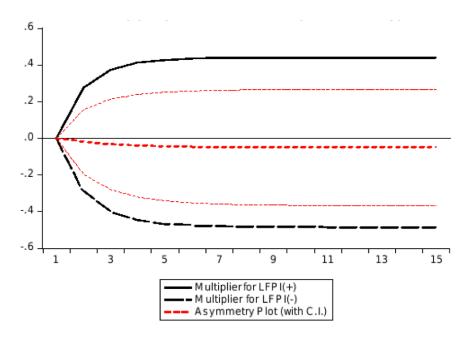
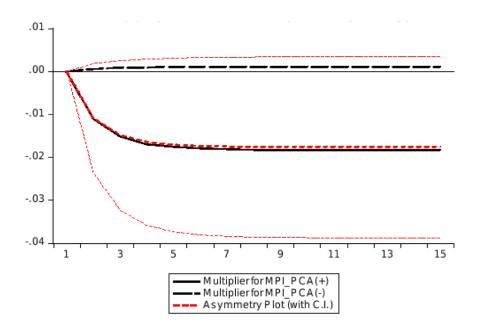


CHART 5(A): DYNAMIC MULTIPLIER (FISCAL POLICY)

CHART 5(B) DYNAMIC MULTIPLIER (MONETARY POLICY)



6. CONCLUSION AND RECOMMENDATION

This article's primary purpose was to examine the effects of fiscal and monetary policies on CO₂ emissions in Trinidad and Tobago. The finding contributes to the mixed results found in the literature. The results can shed light on useful policy prescriptions. Firstly, since higher fiscal spending leads to greater CO₂ emissions and is also a major requisite for improving growth and employment outcomes, there is a need for climate-sensitive green policies to promote efficient use of fossil fuels energy and greater use of renewable energy to maximise output while keeping CO₂ emissions down, especially in major emitting sectors⁶². The industry, power generation, and transport sectors have been identified as the larger contributing sectors to CO₂ emissions in Trinidad and Tobago; therefore, tailoring policies to reduce fossil fuel consumption in these sectors can contribute to climate change mitigation. For example, encouraging public spending that promotes cleaner energy consumption in the transportation sector may reduce CO₂ emissions. In Trinidad and Tobago, the use of compressed natural gas (CNG) as an alternative and cost-effective fuel in public and private transportation is already being exploited⁶³. In addition, there are incentives for efficient energy use and the production of renewable energy⁶⁴. However, there is greater potential to increase industry usage of renewable energy consumption within the energy mix. In the 2023 national budget statement, the Government stated its intention to develop a renewable energy policy as well as explore green hydrogen as a fuel.

Apart from ensuring a greater composition of green public spending, the Government could also consider a mix of instruments such as an emissions trading system (ETS), a carbon tax and public guarantees to reduce CO_2 emissions. Although there is widespread support for carbon taxes or ETS, these policies have their advantages and disadvantages which should be assessed in the Trinidad and Tobago context to ensure their success. Similarly, public guarantees can incentivise firms to invest in clean technologies if implemented successfully.

⁶² Trinidad and Tobago became a signatory to the Paris Agreement in 2018. Under this Multilateral Environmental Agreement (MEA), the country has agreed to cut its GHG emissions in the power generation, transportation and industrial sectors and has developed a Carbon Reduction Strategy to achieve the target. This commitment is known as our Nationally Determined Contribution (NDC) which has two parts: (i) a 15.0 per cent reduction in cumulative emissions from the major contributing sectors and (ii) an unconditional 30.0 per cent reduction in emissions from public transportation.

⁶³ The use of Compressed Natural Gas (CNG) as a transport fuel is widely used across the world. Although compressed natural gas is a fossil fuel, it is the cleanest burning fuel at the moment in terms of its emission of GHGs. See the United Nations Climate Change and Technology Network website for additional information: Compressed Natural Gas (CNG) as fuel | Climate Technology Centre & Network | 1184949 (ctc-n.org)

⁶⁴ Efficient energy use and reduction in GHG emissions is being encouraged through the provision of an increase in electricity rebates to households whose electricity bill is lower than \$300.00, the removal of custom duties, motor vehicle tax and Value Added Tax (VAT) on battery powered electric vehicles and a number of fiscal incentives through the CNG programme. Additionally, the Government is advancing its renewable energy goals with plans for the construction of two solar Photo Voltaic plants through build-own-operate schemes, feeding 92.2 megawatts and 20.0 megawatts of solar power onto the national grid at Couva and Trincity, respectively.

These measures along with incentives such as the removal of taxes on hybrid and electric motor vehicles, can contribute to reducing fossil fuel energy consumption and, by extension, CO_2 emissions.

Given the dual causation, that is, both revenue and expenditure contributing to carbon dioxide emissions⁶⁵, a shift towards diversified revenue streams is highly recommended. Therefore, to reconfigure growth, revenue must come from diversified and sustainable economic sources to decouple growth from fossil fuel consumption. Expenditure should be directed to renewable energy production and transforming economic sectors into low-carbon status. Further, spending on strengthening the development, enforcement and effectiveness of environmental regulations can reduce CO_2 emissions and improve environmental quality through the environmental regulation channel.

This study suggests monetary policy has a role to play in reducing CO₂ emissions despite little to no impact in the short and long run. Monetary policy can support climate change adaptation and mitigation. Central Banks can utilise their balance sheets to mobilise climate financing to ensure easy and cost-effective access to funding for commercial banks to provide low interest rates and encourage investment in green technologies and activities. The Central Bank of Trinidad and Tobago could investigate the use of a policy interest rate mechanism such as a "green interest rate" to indicate the funding costs available to commercial banks to finance private sector green investments⁶⁶. Some policymakers note that green monetary policy instruments can convolute the role of central banking and, by extension, monetary policy objectives. However, some central banks are recognising the urgency of climate change action and are taking steps to implement green monetary policy. Additionally, several central banks have already started integrating climaterelated shocks (physical and transition risks) into their financial frameworks. The NGFS has been successful in scaling up green finance and helping central banks strengthen their analytical orientation to model the impact of climate change on the financial system.

⁶⁵ Since increases in revenue is associated with higher fossil fuel consumption and generally leads to higher expenditure (given the procyclical nature of fiscal policy) which is also emissions generating (produces carbon dioxide emissions), channelling expenditure into areas of renewable energy production can transition the economy away from fossil fuel energy consumption so that renewable energy can support the demand for energy in the future.

⁶⁶ The proposed central bank green interest rate is a policy rate set below the Bank's traditional policy rate, which can be utilised for short-term borrowing by commercial banks that re-lend for private sector green projects. The use of a central bank policy green interest rate could ensure that financing cost green investment for the private sector is not adversely impacted by strong monetary policy contractions and will also facilitate low-cost liquidity flows to commercial banks wishing to commit funds for long-term green projects.

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APPENDIX 3 CALENDAR OF KEY ECONOMIC EVENTS JANUARY TO DECEMBER 2022



CENTRAL BANKING

25 Mar

The Central Bank of Trinidad and Tobago maintained the Repo rate at 3.50 per cent.

24 Jun

The Central Bank of Trinidad and Tobago maintained the Repo rate at 3.50 per cent.

30 Sep

The Central Bank of Trinidad and Tobago maintained the Repo rate at 3.50 per cent.

30 Dec

The Central Bank of Trinidad and Tobago maintained the Repo rate at 3.50 per cent

ENERGY SECTOR

21 Jan

Phoenix Park Gas Processors Limited (PPGPL), through its wholly owned subsidiary Phoenix Park Energy Marketing LLC (PPEM), completed its acquisition of a NGLs terminal in Hull, Texas, USA. The terminal was purchased from Keyera Energy Inc. (KEI), a subsidiary of Keyera Corporation (Keyera), one of the largest midstream oil and gas operators in Canada, with headquarters in Calgary. Operating under the Phoenix Park brand, PPEM is engaged in the business of marketing, trading and transporting natural gas liquids in Canada, USA and Mexico. PPGPL is a state controlled company and is owned by NGC NGL Company Limited (51.0 per cent), Trinidad and Tobago NGL Limited (39.0 per cent) and Pan West Engineers & Constructors LLC (10.0 per cent).

25 Jan

The Government of Trinidad and Tobago and Atlantic LNG (ALNG) shareholder companies have executed a Heads of Agreement to restructure the Point Fortin-based liquefied natural gas producer. Shell Trinidad and Tobago Ltd, the major shareholder of ALNG, stated that the Heads of Agreement allowed for further discussions between Government and ALNG shareholders. The agreement provided a framework for continued cooperation among all stakeholders, creating a more straightforward commercial structure to support more efficient utilisation of the LNG trains and improve value to Trinidad and Tobago. In December 2022, the shareholders revealed that commercial principles for the restructuring of the company were agreed upon. Final agreement on the new arrangement was expected by the end of March 2023.

18 Feb

The National Gas Company of Trinidad and Tobago Limited (NGC) and Proman have entered into a new partnership to lift methanol from the Methanol Holdings (Trinidad) Limited (MHTL) Complex in Point Lisas Industrial Estate for NGC's methanol trading group. The arrangement, effective January 01 2022, provides NGC with access to methanol produced at MHTL's plants in the Point Lisas Industrial Estate and will be used to boost the Company's commodity and trading portfolio plus expand its reach into international methanol markets.

26 Feb

BHP has revealed that its Ruby field will produce

much less oil than initially believed. The company was expected to produce 16,000 barrels of oil per day (b/d) from Ruby but has averaged closer to 4,000 b/d, a quarter of the expected production. The Ruby development is located in Block 3(a), immediately east of the Greater Angostura Field.

31 Mar

Shell Trinidad and Tobago (through BG International, a subsidiary of Shell plc) announced that production has started on Block 22 and NCMA-4 in the North Coast Marine Area (NCMA) in Trinidad and Tobago. The Shell-operated Colibri development is coowned with the Trinidad and Tobago national oil company Heritage Petroleum Company Limited, which has a working interest of 10.0 per cent and 20.0 per cent, respectively, in Block 22 and NCMA-4 in the North Coast Marine Area (NCMA).

12 Apr

Hydrogène de France (HDF Energy) announced the acquisition of a 70.0 per cent majority stake in the NewGen project in Trinidad, led by the local company Kenesjay Green Ltd (KGL). KGL, the project developer, will retain the remaining 30.0 per cent of the share capital of NewGen, which will be jointly owned by KGL and an investment vehicle that will allow for the inclusion of additional local investors. The US\$200+ million NewGen plant will be its largest clean hydrogen-producing facility when completed. It will competitively generate carbon-free hydrogen to meet 20.0 per cent of the hydrogen requirement for an existing world scale ammonia plant in the petrochemical hub of Point Lisas, Trinidad.

22 Aug

The NGC Group recorded a profit of \$2.6 billion for the financial year ended December 31, 2021, compared to \$12.2 billion recorded for the same period in 2020. The significant increase in revenues and margins reflected the rebound in commodity prices as global prices increased for ammonia (190.0 per cent), methanol (92.0 per cent) and natural gas (112.0 per cent). Additionally, there were several operational achievements by NGC which secured the sale and supply of natural gas contracts after negotiations with DeNovo, TRINGEN and Methanol Holdings. NGC also increased its shareholding in Block 3(a) from 11.0 per cent to 31.0 per cent with the acquisition of Heritage Petroleum's Non Operated Joint Venture participating interest.

11 Oct

Touchstone Exploration Inc. announced that the Coho facility delivered first natural gas safely. This is the first onshore natural gas project to come on-stream in Trinidad and Tobago in over 20 years. The Coho area is located in the Ortoire block, where Touchstone has an 80.0 per cent operating working interest and Heritage Petroleum Company Limited holds the remaining 20.0 per cent. NGC Petrochemicals Limited (NPL), a subsidiary of NGC, completed negotiations with Gulf Coast Methanol 1, LLC and its parent IGP Methanol LLC, USA, for a Purchase and Sale Agreement that will allow NGC to acquire blue methanol from IGP's Gulf Coast Methanol project. The new agreement will enable NGC to purchase blue methanol, low-carbon petrochemical commodity, a for trading through its energy marketing and trading portfolio.

12 Oct

NGC and bp Trinidad and Tobago LLC (bpTT) signed a Collaboration Agreement to explore opportunities for cooperation in several focus areas of mutual interest within the energy industry. This agreement strengthens the relationship and leverages synergies between the two companies.

29 Nov

bpTT confirmed that its Cassia C development safely delivered first gas. Cassia C is bpTT's first offshore compression platform and its biggest offshore facility. It enables bpTT to access and produce low pressure gas resources from the Greater Cassia Area. The platform, bpTT's 16th offshore facility, is connected to the existing Cassia hub which lies approximately 35 miles off Trinidad's Southeast coast. Cassia C is expected to produce, at peak, about 200 - 300 million standard cubic feet of gas a day (mmscf/d).

08 Dec

PPGPL, through its wholly-owned subsidiary Phoenix Park Energy Marketing LLC (PPEM), completed its acquisition of a propane terminal in Rush City, Minnesota, USA. The terminal was purchased from Interstate Fuel and Energy, LLC. (Interstate), a subsidiary of Interstate LLC.

13 Dec

NGC signed a milestone gas supply contract with bpTT, securing future domestic gas supplies for Trinidad and Tobago. This contract is a renewal of an existing NGC/ bpTT arrangement and governs the terms and conditions under which bpTT will continue to supply gas to the NGC.

FINANCIAL LEGISLATION

31 Jan

An Act to provide for the designation, development, operation and management of Special Economic Zones, the establishment of the Special Economic Zones Authority, the repeal of the Free Zones Act, Chap. 81:07, the regulation of Special Economic Zones and matters related thereto was assented. This Act may be cited as the Trinidad and Tobago Special Economic Zones Act, 2022. (Act No. 1 of 2022)

28 Jan

An Act to vary the appropriation of sums, the issue of which was authorised by the Appropriation (Financial Year 2021) Act, 2020 and varied by the Finance (Supplementation and Variation of Appropriation) (Financial Year 2021) Act, 2021 was assented. This Act may be cited as the Finance (Variation of Appropriation) (Financial Year 2021) Act, 2022. (Act No. 2 of 2022)

24 May

An Act to supplement the appropriation of the sum, the issue of which was authorised by the Appropriation (Financial Year 2022) Act, 2021 was assented. This Act may be cited as the Finance (Supplementary Appropriation) (Financial Year 2022) Act, 2022. (Act No. 8 of 2022)

30 Jun

An Act to amend the Insurance Act, 2018 was assented. This Act may be cited as the Insurance (Amendment) Act, 2022. (Act No. 13 of 2022)

01 Jul

An Act to amend the Bills of Exchange Act, Chap. 82:31 was assented. This Act may be cited as the Bills of Exchange (Amendment) Act, 2022. (Act No. 12 of 2022)

21 Oct

An Act to provide for the service of Trinidad and Tobago for the financial year ending on September 30, 2023 was assented. This Act may be cited as the Appropriation (Financial Year 2023) Act, 2022. (Act No. 20 of 2022)

14 Nov

An Act to make provisions of a financial nature and other related matters was assented. This Act may be cited as the Finance Act, 2022. (Act No. 21 of 2022)

20 Dec

An Act to make provisions of a financial nature and other related matters was assented. This Act may be cited as the Finance (No. 2) Act, 2022. (Act No. 23 of 2022)

FINANCIAL SECTOR

02 Aug

The First Citizens Group announced a profit before tax of \$248.5 million for the quarter ending June 30, 2022. In the group's unaudited financial report, the year-to-date profit before tax for the nine-month period to June 30, 2022 was \$717.8 million, while the profit after tax amounted to \$518.6 million. This represented an increase of 6.4 per cent compared to the corresponding nine months to June 2021. In June 2022, First Citizens launched an Additional Public Offering (APO) of 10,869,565 of its Government-owned shares, which were old at \$50 per share and were oversubscribed by \$100 million.

07 Nov

The Chairman of Republic Financial Holdings Limited (RFHL), Vincent Pereira, announced profits of \$1.15 billion for the nine months ended 30 June 2022. This is an increase of \$109.7 million or 10.6 per cent over the \$1.04 billion reported in the corresponding period of the last financial year. Mr. Pereira announced a profit attributable to equity holders of \$1.5 billion for the year ended 30 September, 2022. This represented an increase of \$218 million or 16.7 per cent over the 2021 reported profits of \$1.3 billion, and \$55 million or 3.5 per cent below the 2019 reported profits of \$1.6 billion.

GOVERNMENT TRANSACTIONS

2 Mar

The Corporación Andina de Fomento (CAF), the Development Bank of Latin America, approved a US\$175 million loan for Trinidad and Tobago to modernize the transportation infrastructure through actions related to the development of plans, regulatory and strategic changes, and initiatives to improve processes and investments in the sector. The loan aims to advance institutional strengthening, mainly updating plans and strategies and improving the regulatory framework of process management, such as updating laws related to land transport, developing a policy for the maritime sector, as well as plan strategies for public transport and the air sector. The Minister of Trade and Industry announced the creation of a Grant Fund Facility of TT\$10 million for the Micro and Small Enterprises within the yachting sector. This facility will also be available for those involved in other services such as hospitality, haul-out and storage facilities, dock spaces, retail shops, travel agencies and yacht brokerage.

03 Jun

On June 01, 2022, S&P Global Ratings removed its ratings on Trinidad Petroleum Holdings Limited from CreditWatch with developing implications and raised its Issuer Credit Rating on the Company with a two (2) notch upgrade to 'BB' from 'B+'. S&P Global also assigned a final 'BB' issuer credit and issuelevel rating to Heritage Petroleum Company Limited (Heritage), the primary operating subsidiary of TPHL. The outlook for both TPHL and Heritage is "Negative" to mirror that of the sovereign rating of T&T (BBB- / Negative / A-3).

21 Jul

Standards & Poor's (S&P), confirmed Trinidad and Tobago's credit rating at BBB- an Investment Grade rating. As a positive development, S&P also changed its outlook from negative to stable in light of the recent and prospective economic developments and its resiliency against multiple shocks.

26 Jul

CAF approved a loan of US\$120 million for Trinidad and Tobago, which will be used to accelerate the digitalisation of the state and productive sectors, to help ease the impacts of the COVID-19 pandemic and to close the digital gap in the country. The funds would be managed by the Ministry of Finance, with technical support from the Ministry of Digital Transformation. The programme aims to promote actions in the fields of digital government, digital economy and digital society. CAF will also support technical assistance for digital transformation in the financial, educational, agricultural, and tax collection sectors.

15 Dec 2022

The Inter-American Development Bank (IDB) approved a US\$80 million loan to boost the efficiency, quality, sustainability, and resilience of Trinidad and Tobago's drinking water supply and water security. As part of a US\$315 million conditional credit line for the Trinidad and Tobago National Water Sector Transformation Programme, this initial operation will include institutional strengthening and capacity building to help the country's Ministry of Public Utilities and its executing agency, the Water and Sewerage Authority (WASA), improve their governance and sustainable management of water resources

