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CENTRAL BANK OF
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Monetary Policy Report

May 2021

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MONETARY POLICY REPORT

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

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PART I – OVERVIEW AND OUTLOOK

Overview

The International Monetary Fund (IMF) has forecasted a global expansion of 6.0 per cent for 2021, driven in large measure by expanded COVID-19 vaccination coverage in advanced economies (AEs) and some emerging market and developing economies (EMDEs). In general, the substantial fiscal support by governments across the world continues, alongside medium-term plans for gradual exits from such support. Likewise, broad monetary accommodation to underwrite economic recoveries has also been maintained, although some central banks have started to or signaled the intention to raise interest rates to stave off looming inflation. Overall, financial conditions remained supportive in AEs and EMDEs. However, economic prospects are uneven based on the difficulty faced by many EMDEs to access vaccines, coupled with the growing threats posed by new variants of the virus. In the Caribbean, most countries have experienced sharp declines in economic activity alongside rising unemployment and business closures amidst the ongoing pandemic.

In the first five months of 2021, Saudi Arabia's cut in oil production and improving global growth prospects resulted in significant increases in energy and energy-based commodity prices. Notwithstanding this, global inflation generally remained subdued as aggregate demand remains depressed in many countries.

The pandemic continues to weigh on the domestic economy. Economic activity contracted sharply in the final quarter of 2020. Energy sector performance over the first four months of 2021 was mixed. While the output of several products dipped, particularly natural gas and its related downstream products, prices of some key energy exports improved significantly over the period. Improvements were recorded in a few non-energy sectors, including construction, finance and insurance, real estate, and electricity and water going into 2021. However, the resurgence in construction and manufacturing observed at the start of 2021 was cut short by the imposition of a period of stringent lockdown measures in the second quarter. Preliminary data on economic activity for the first four months of 2021 suggest that a contraction in the non-energy sector is likely during the second quarter of 2021, given the renewed restrictions.

In this environment of restrained economic activity, inflation remained contained. Headline inflation averaged 0.9 per cent over October 2020 to April 2021. On a year-on-year basis to April 2021, both core and headline inflation measured 1.1 per cent. Food inflation slowed over the period, decelerating from 4.4 per cent in October 2020 to 1.5 per cent in April 2021.

Trinidad and Tobago's external accounts recorded an overall deficit of US$352.7 million in the fourth quarter of 2020. Over the period, the current account recorded a deficit – the second consecutive quarterly deficit for 2020 – mainly reflecting a deterioration in export earnings. The financial account recorded a net outflow, primarily owing to transactions in the other investment and portfolio investment categories. At the end of May 2021, gross official reserves stood at US$6,672.1 million, which represented 8.1 months of prospective imports of goods and services **(Table Ia)**.

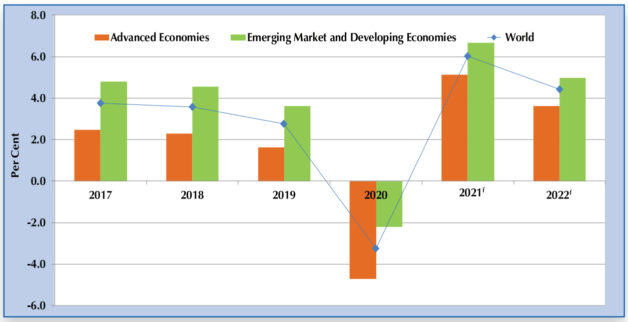
While fallout from the COVID-19 pandemic continues to affect credit conditions, the financial sector remained stable thus far in 2021. Liquidity declined in the first half of 2021, partly owing to financing activity by the Central Government. Although the Bank has held net open market operations (OMO) activity at zero since November 2020, daily average excess liquidity levels, as measured by commercial bank nonremunerated deposits at the Central Bank in excess of the reserve requirements, continue to be elevated at just under $8 billion, but down from $11.5 billion at the start of the year. Nevertheless, generally amplified levels of liquidity resulted in declining weighted average lending rates for commercial banks over late 2020 into early 2021. The rates on domestic short-term Treasury securities gradually increased by mid-2021, resulting in generally stable and positive TT-US short term differentials. However, growth in consolidated financial system credit to the private sector turned negative in early 2021 and has remained that way since, led by continued declines in business lending along with a recent falloff in consumer lending and a deceleration in real estate lending.

Outlook

Ongoing vaccination programmes coupled with the gradual relaxation of restrictions on movement are expected to support a significant pickup in global growth in the second half of 2021 and into 2022 (Chart Ia). However, the IMF noted that the strength of the recovery would vary across countries depending on the impact of the pandemic on health care systems and economic activity, exposure to cross-border spillovers of the virus variants and the effectiveness of policy support to limit economic damage. In EMDEs and low-income countries, delayed access to vaccines could result in further lockdowns and restrictions, thus undermining growth prospects. In the Caribbean, commodity producers are expected to benefit from the uptick in energy prices, but subdued growth is anticipated for tourism-dependent economies given continued soft demand for travel and tourism-related services.

The domestic economic outlook for 2021 will be linked to the pace of the global recovery. Energy commodity prices are expected to improve in the short to medium term, driven by rising global demand. Additional impetus will come from supply-side factors such as production limits from OPEC and partner countries (OPEC+). Local energy production should receive support from rising commodity prices and increased demand for energy-related products as some economies gradually re-open. Moreover, the extent of local COVID-19 containment measures alongside the planned acceleration of vaccinations will affect how fast domestic output recovers in the second half of this year.

Chart Ia
Global Growth: Real GDP
(Annual Per cent Change)



Source: International Monetary Fund, World Economic Outlook, April 2021

Headline inflation is expected to remain contained in the short to medium term. Core inflation should remain low and stable given minimal upward pressure on aggregate demand owing to continued limits on economic activity and ample spare production capacity. Global supply chain challenges following the disruptive effect of the pandemic can provide some upward impetus to international food prices which may pass through to domestic food inflation. In addition, rising inflation in the US, if more intractable than initially envisaged, may influence domestic prices in the periods ahead.

The country's external current account is expected to record a larger surplus in 2021 when compared to the previous year due to a pickup in export earnings. This performance is anticipated to stem from the significant rebound in energy prices compared to the previous year, leading to a shoring up in the value of energy exports. Further complementing this outturn is the anticipated increase in non-energy exports due to an improvement in external demand from export destination markets, as these economies resume economic activity.

Financial sector conditions are expected to remain favourable for the rest of 2021. Policy support will keep liquidity levels in the financial sector high enough to facilitate public and private sector activity. While the rates on short term Treasury instruments increased over the first half of 2021, generally high liquidity may limit this movement going forward to the end of 2021. The short-term TT-US differential is thus expected to remain positive and stable for the remainder of 2021. However, longer-term domestic rates are expected to respond to the pace of Central Government borrowing activity.

Table Ia: Trinidad and Tobago: Summary Economic Indicators

	2019	2020	Jan-May 2020	Jan-May 2021
Real Sector Activity				
Gross Domestic Product (GDP)[1]				
GDP at Current Market Prices (TT$ Billions)	156.8	n.a	n.a.	n.a.
Real GDP Growth (%)	-1.2	n.a	n.a.	n.a.
Energy Sector				
Total Depth Drilled (metres)	91,882.6	55,825.6	11,539.7*	20,471.0*
Crude Oil Production (b/d)	58,862.8	56,480.7	58,029.8*	58,415.3*
Crude Oil Exports (000 bbls)	21,298.4	20,315.9	6,788.0*	6,851.6*
Refinery Throughput (b/d)[2]	n.a.	n.a.	n.a.	n.a.
Natural Gas Production (mmcf/d)	3,587.8	3,044.0	3,518.0*	2,792.8*
Natural Gas Utilisation (mmcf/d)	3,439.1	2,924.9	3,413.3*	2,618.5*
LNG Production (000 cubic metres)	28,882.2	23,803.7	11,764.9	7,177.2
Fertiliser Production (000 tonnes)	6,103.9	5,799.2	1,997.3*	1,798.6*
Fertiliser Exports (000 tonnes)	5,205.9	4,640.2	1,584.5*	1,417.0*
Methanol Production (000 tonnes)	5,671.8	4,258.8	1,851.0*	1,779.3*
Energy Commodity Price Index (ECPI) (Jan 2007 = 100)	83.1	61.4	58.3	101.0
Non-Energy				
Local Sales of Cement (000 tonnes)	486.7	472.7	121.9**	127.6**
Vehicles Registered	25,091.0	20,534.0	5,868.0	6,047.0
Average Daily Job Vacancy Advertisements	320.0	206.0	194.0	181.0
Prices (Average)				
Year-on-Year Per Cent Change				
Producer Prices	0.6	1.8	2.1**	0.4**
Headline Inflation	1.0	0.6	0.5*	0.9*
Food Inflation	0.6	2.8	1.5*	2.3*
Core Inflation	1.1	0.1	0.2*	0.6*
Monetary (End of Period)				
Year-on-Year Per Cent Change				
Private Sector Credit	4.8[r]	0.0[r]	4.7***	-0.2***
Consumer Lending	6.1	-2.3	5.2***	-3.3***
Business Lending	-5.0[r]	-2.1[r]	-2.5***	-3.5***
Real Estate Mortgages	12.5	4.2	10.1***	4.8***
M-1A	-4.3	21.1	2.4***	16.3***
M-2	0.1	10.9	3.3***	8.2***
Commercial Banks' Daily Average Excess Reserves (TT$ Millions)	3,993.8	9,450.6	5,376.9	9,185.8
TT 91-day Treasury Bill Rate (End of Period; Per Cent)	1.08	0.08	0.96	0.31
Fiscal (Fiscal Year)				
Overall Fiscal Balance (TT$ Millions)	-4,028.9[r]	-16,772.0[re]	-6,419.7^	-5,155.9^
Overall Fiscal Balance to GDP	-2.6	-11.2	n.a.	n.a.
Financial Stability - Commercial Banks				
Non-Performing Loans to Gross Loans (Per Cent)	2.9	3.2	2.9***	3.2***
Capital Adequacy Ratio (Per Cent)[3]	21.2	17.1	21.2***	16.4***
Capital Market				
Composite Price Index (1983 = 100; end of period)	1,468.4	1,323.1	1,289.2	1,378.3
Volume of Shares Traded (millions)	76.9	61.3	34.8	24.4
Mutual Funds Under Management (TT$Billions)	48.0	50.5	46.5***	50.9***
Primary Bond Market Issues (TT$ Billions)[4]	11.3	16.8	8.1	7.1[p]
External				
US$ Millions				
Authorised Dealers Sales of Foreign Exchange to Public	5,939.8	4,504.1	1,941.4	1,824.0
Authorised Dealers Purchases of Foreign Exchange from Public	4,285.6	3,298.2	1,496.5	1,394.6
CBTT Sales to Authorised Dealers	1,504.0	1,292.2	585.0	512.1
Net Official Reserves (End of Period)	6,929.0	6,953.8	6,909.3	6,672.1

Sources: Central Bank of Trinidad and Tobago, Central Statistical Office, Trinidad and Tobago Stock Exchange and Ministry of Energy and Energy Industries

1 GDP at current market prices and real GDP growth are sourced from the Central Statistical Office (CSO).

2 Petrotrin's Refinery was closed in November 2018.

3 Effective August 2020, capital adequacy ratios are reported based on the Basel II (and some elements of the Basel III) framework. All capital adequacy ratios prior to August 2020 are based on the Basel I framework. Adjustments related to the new framework seek to raise the quality and quantity of the regulatory capital base and enhance the risk coverage of the capital framework. For further information on Central Bank of Trinidad and Tobago's Basel II/III framework implementation, please view: https://www.central-bank.org.tt/core- functions/supervision/basel-ii-iii-implementation"

4 Provisional data including primary debt securities issued by the Government, state enterprises, and private sector companies. Public refers to bonds offered to the general public, while private placements are non-public offerings to a small group of investors. Data incldes a Central Government issue for May 2021; while data on Table IVc are up to March 2021.

* For the period January to April.

** For the period January to March.

*** As at March.

^ For the period October to April.

n.a. Not Available.

r Revised.

re Revised Estimates.

p Provisional.

PART II – INTERNATIONAL AND REGIONAL MONETARY POLICY DEVELOPMENTS

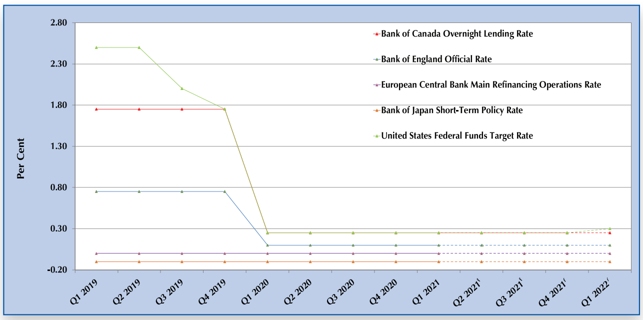
Central banks in advanced economies (AEs) and most emerging markets and developing economies (EMDEs) continued to implement accommodative monetary policies and facilities to mitigate the adverse effects of the pandemic. These policies have been focused mainly on increasing credit and liquidity flows to the private sector and stabilising financial markets. In 2021, a rebound in world output is expected based on an intensification of vaccination programmes, a gradual relaxation of restrictions and continued fiscal and monetary stimuli. However, notwithstanding the aggressive expansionary monetary policies, diverse fiscal support and varied access to vaccines could imply uneven recovery paths across AEs and EMDEs.

The International Monetary Fund (IMF), in its April 2021 World Economic Outlook (WEO), forecasted world growth to recover to 6.0 per cent in 2021 following a contraction of 3.3 per cent in 2020. Commodity prices increased significantly during the first five months of 2021 from their low base in 2020, supported by Saudi Arabia's cut in oil production and improving global growth prospects. Notwithstanding the increase in global energy prices, inflation generally remained subdued. Global financial conditions continued to ease during the latter part of 2020 and early 2021 as fiscal and monetary measures mitigated market disturbance. These measures, along with vaccine rollouts, strengthened prospects of a global economic recovery in 2021. The improved prospects for recovery were reflected in the growth of international equity markets in the United States and China, whilst uncertainty relating to the duration of the pandemic and the slow and uneven distribution of vaccines globally tempered economic prospects and equity market performance in other regions.

Advanced Economies

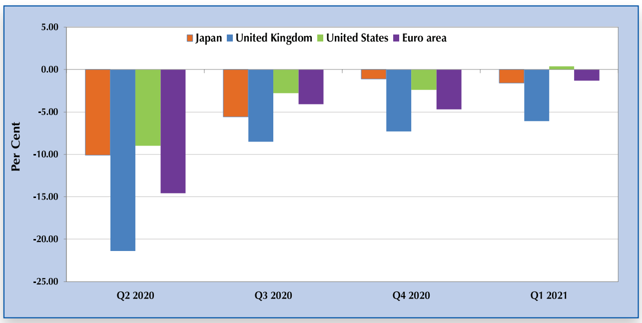
Amidst improving economic conditions, the US Federal Reserve (the Fed) maintained its target range for the federal funds rate at 0 to 0.25 per cent in June 2021 **(Chart IIa)**. The US economy recorded growth of 0.4 per cent (year-on-year) in the first quarter of 2021, underpinned by an increase in household spending on goods along with a pickup in business investment and manufacturing production **(Chart IIb)**. Overall, the Fed revised its GDP projections upwards for 2021 and 2022 due to the approval of a new fiscal support package of US$1.9 trillion[1] and the expansion in the rollout of the COVID-19 vaccination programme. Meanwhile, as measured by the Core Personal Consumption Expenditure (PCE) price index, inflation accelerated to 3.4 per cent (year-on-year) in May 2021, reflecting a rebound in spending associated with the reopening of the economy and transitory supply factors. Over the long-run inflation is expected to return to the Fed's target rate of 2.0 per cent **(Chart IIc)**.

Chart IIa
Selected Advanced Economies: Policy Rates
(Per cent)



Source: Bloomberg

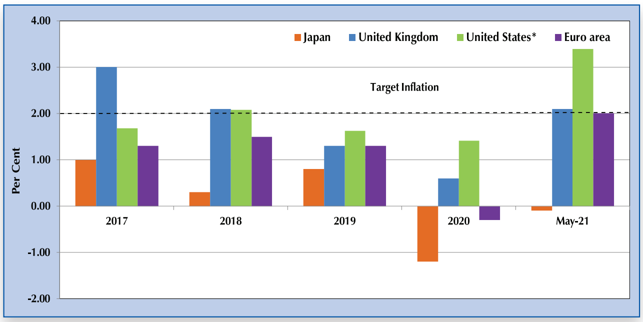
Chart IIb
Selected Advanced Economies: Real GDP Growth
(Year-on-Year Per cent Change)



Source: Bloomberg

[1] The US$1.9 trillion fiscal stimulus plan extends the unemployment benefits programmes (including supplemental unemployment benefits), sends direct stimulus payments of US$1,400 to eligible individuals, provides direct aid to state and local government, adds resources to the vaccination programme and increases funding for school reopening. For further details, see the IMF's Policy Tracker. Available at: https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19.

Chart IIc
Selected Advanced Economies: Headline Inflation
(Year-on-Year Per cent Change)



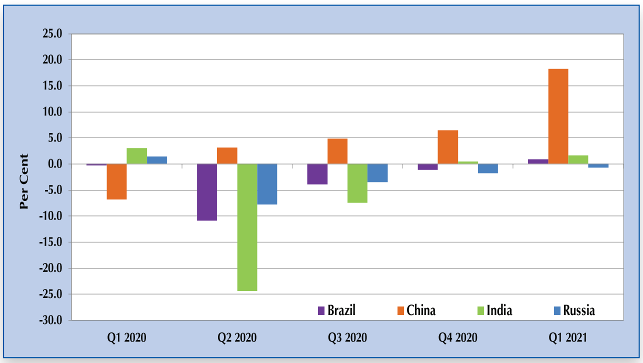
Source: Bloomberg
* Core PCE price index.

Economic activity in the UK and the Euro area was disrupted mainly due to a renewed surge in COVID-19 cases and measures reimposed to control the spread of the virus during the final quarter of 2020 and early 2021. The UK and the Euro area recorded year-on-year contractions in real GDP of 6.1 per cent and 1.3 per cent, respectively, in the first quarter of 2021. Against that backdrop, the Bank of England (BoE) and the European Central Bank (ECB) both kept their policy rates unchanged at 0.1 per cent and 0.0 per cent in June 2021, respectively[2]. In addition, economic activity in the UK and the Euro area is anticipated to rebound in 2021 owing to the ongoing vaccination programmes and easing restrictions. Meanwhile, the UK and the Euro area year-on-year inflation rates rose to 2.1 per cent and 2.0 per cent, respectively, in May 2021 on account of a pickup in demand following the reopening of their economies coupled with a low base effect.

Emerging Market and Developing Economies

Economic conditions displayed signs of improvement in EMDEs, led by the faster-than-expected recovery of China. In June 2021, for the 14th consecutive month, the People's Bank of China (PBoC) kept its benchmark interest rates unchanged to bolster economic activity. The 1-year Loan Prime Rate (LPR) and the 5-year LPR were left unchanged at 3.85 per cent and 4.65 per cent, respectively. Economic growth accelerated to 18.3 per cent (year-on-year) in the first quarter of 2021 from 6.5 per cent in the previous quarter, driven by a strengthening of domestic and global demand and continued fiscal and monetary support **(Chart IId)**. However, this growth performance also reflected the effects of the year 2020 comparison, when the economy contracted due to the COVID-19 pandemic. Inflation remained well below its target of 3.0 per cent, recorded at 1.3 per cent (year-on-year) in May 2021.

Chart IId
BRICS Countries: Quarterly Real GDP Growth
(Year-on-Year Per cent Change)



Source: Bloomberg

Economic recovery is anticipated for the Latin American and Caribbean (LAC) region in 2021. In its April 2021 WEO, the IMF forecasted growth of 4.6 per cent for the region. The recovery is based on a stronger-than-expected performance in the second half of 2020 supported by an expectation of expanding vaccination efforts, a better growth outlook for the United States and higher prices for key exported commodities. However, the growth is forecasted to be uneven across the LAC countries, with growth being revised up in Brazil and Mexico and downgraded for the tourism-dependent Caribbean economies[3]. Tourism-dependent economies in the Caribbean are now expected to grow by 2.4 per cent, down from an earlier forecast of 3.9 per cent, as the resumption of travel and tourism activity has been slower than anticipated. The downside risks to the outlook are the failure to contain new virus infections and delayed access to vaccines.

2 The BoE also maintained the stock of Government bond purchases of £875 billion while the ECB pledged to continue its Pandemic Emergency Purchase Programme at least until March 2022.

3 Antigua and Barbuda, Aruba, The Bahamas, Barbados, Belize, Dominica, Grenada, Haiti, Jamaica, St. Kitts and Nevis, St. Lucia and St. Vincent and the Grenadines.

Against the backdrop of a fragile economic recovery and inflation generally contained, several Central Banks in Latin America – Mexico, Colombia, Chile and Peru – kept their key interest rates unchanged in June 2021 **(Table IIa).** With the exception of Mexico, where consumer prices were recorded at 5.9 per cent in May 2021, inflation generally remained within the target ranges in most Latin American countries[4].

Table IIa: Key Central Bank Policy Rates in the Region (Per Cent Per Annum)

	Current Rate[1]	Last Change	Amount of Change
Chile	0.50	Mar-20	-0.50
Colombia	1.75	Sep-20	-0.25
Peru	0.25	Apr-20	-1.00
Mexico	4.25	Jun-21	+0.25
Brazil	4.25	Jun-21	+0.75

Sources: Banco Central de Chile, Banco Central de Colombia, Central Reserve Bank of Peru, Banco de Mexico and Banco Central do Brasil

1 As at June 29, 2021.

The Caribbean

In June 2021, the Bank of Jamaica (BOJ) kept its key policy rate at 0.5 per cent based on an assessment that inflation will remain within the target of 4.0 per cent to 6.0 per over the next two years. The BOJ's accommodative monetary policy stance also aims to support a speedy economic recovery from the pandemic. The annual headline inflation in Jamaica accelerated to 5.0 per cent (year-on-year) in May 2021 from 3.8 per cent in the previous month due primarily to higher food prices and increased electricity, water and sewerage costs. Jamaica's economy declined by 6.7 per cent (year-on-year) in the first quarter of 2021, as a result of constrained activity in the services industry. The monetary policy stance of the Central Bank of Barbados (CBB) remained unchanged in March 2021, with the deposit rate and the securities ratio for banks at 2.0 per cent and 5.0 per cent, respectively. Real GDP in Barbados contracted by 19.8 per cent (year-on-year) in the first quarter of 2021 as the reimposition of measures to contain the rise in COVID-19 cases weighed heavily on tourism activity and private spending. As of March 2021, the gross international reserves was US$1,288.2 million (43.1 weeks of import cover), down from US$1,331.0 million (40.7 weeks of import cover) recorded at the end of December 2020. The decline in gross official reserves was primarily reflective of a fall in tourism earnings. Notwithstanding the decline in gross official reserves, import cover increased due to a sharp falloff in imports.

The Bank of Guyana's monetary policy remained focused on ensuring price stability and adequate financial system liquidity to facilitate private sector credit and economic growth. The reserve requirement ratio has been temporarily reduced to 10.0 per cent from 12.0 per cent from August 24, 2020 to June 30, 2021, in keeping with an agreement between the Bank of Guyana and the commercial banks concerning COVID-19 supplementary relief measures. Despite a boost from oil production, real GDP growth was held back by mixed performances recorded in the non-oil sectors such as the agriculture and manufacturing sectors in the first quarter of 2021.

4 Central Bank inflation target ranges for selected economies in the Latin America region: Mexico (3.0+/-1.0per cent); Colombia (3.0 +/- 1.0 per cent); Chile (3.0 per cent +/- 1.0 per cent); and Peru (2.0 +/-1.0 per cent).

PART III – DOMESTIC ECONOMIC CONDITIONS

Domestic economic activity contracted in the fourth quarter of 2020 primarily due to sharp declines in the energy sector, and indicators point to continued weak activity in early 2021. Inflation has remained low and stable in early 2021, while labour market slack continues to pervade the economy despite the partial reopening. The Central Government incurred a fiscal deficit over the first seven months of FY 2020/21, which was financed partly by borrowing on the local capital market. The stock of foreign reserves declined in the first five months of 2021, notwithstanding drawdowns from the Heritage and Stabilisation Fund (HSF) and external borrowing to mitigate the impact of the COVID-19 pandemic on the economy.

A) Real Economic Activity

Despite some improvements in a few non-energy sectors, the COVID-19 pandemic continues to negatively impact the domestic economy. According to the Central Bank's Quarterly Index of Real Economic Activity[5] (2012=100)[6], domestic economic activity contracted by 9.0 per cent (year-on-year) in the fourth quarter of 2020. The energy sector[7] was hardest hit, falling by 20.9 per cent due to broad-based contractions, while activity in the non-energy sector slipped by 2.2 per cent.

During the fourth quarter of 2020, natural gas supply constraints and, to a lesser extent, the dampening effect of the pandemic on demand for energy products led to double-digit declines in activity throughout the domestic value chain. Indicators of economic activity monitored by the Central Bank suggest that the Mining and Quarrying sector registered a 19.3 per cent year-on-year decline, with natural gas and crude oil production contracting by 27.5 per cent and 5.0 per cent, respectively. The declines in the upstream energy sector impacted the Refining sub-sector, where activity fell by 39.7 per cent due to a 42.4 per cent collapse in liquefied natural gas (LNG) production and a 29.9 per cent fall in production of natural gas liquids (NGLs). Uncertainties surrounding the continued supply of natural gas to Atlantic LNG's Train 1, given that its long-term contract (20-year) ended in 2019, exacerbated the decline in activity in the LNG industry during the fourth quarter. There was also planned maintenance at Train 3 during the period. The downstream petrochemical sector continued to be negatively affected by several plant closures in 2020, largely resulting from COVID-19-induced unfavourable market conditions and continued maintenance activity. Methanol production declined during the period by 29.4 per cent, while ammonia production experienced a marginal increase of 2.1 per cent due to a base effect[8]. Overall, these issues resulted in a 12.7 per cent fall in the production of petrochemicals for the fourth quarter of 2020.

Data for the first four months of 2021 pointed to a deterioration in energy output compared to the same period of 2020. Natural gas output between January to April 2021 declined by 20.6 per cent **(Chart IIIa)**. The decline in natural gas production filtered through to the midstream sector, with NGLs and LNG production falling by 22.3 per cent and 37.5 per cent, respectively. The large drop in LNG output came about as the limited availability of natural gas resulted in Atlantic Train 1 being taken down at the end of December 2020. The downtime at Train 1 also coincided with scheduled maintenance at Train 3 in March. Further downstream, ammonia production was down 11.2 per cent during January to April, given continued temporary plant closures among downstream operators. Urea production fell by 1.0 per cent over the period, while methanol output declined by 3.9 per cent. Despite these declines, relative resilience was noted in

5 The CSO is the official source of National Accounts (GDP) data in Trinidad and Tobago. The Bank compiles a Quarterly Index of Real Economic Activity (QIEA) to gauge short-term economic activity. 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.

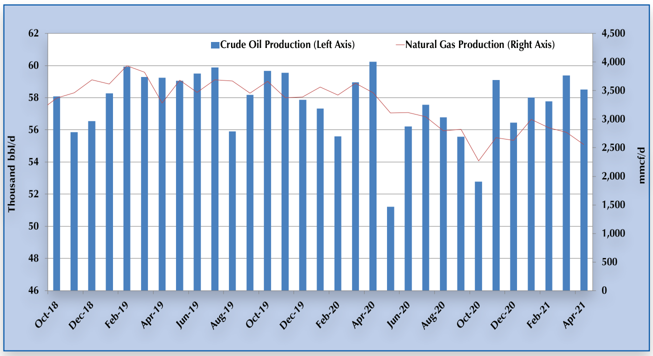
6 The Central Bank of Trinidad and Tobago rebased its Quarterly Index of Real Economic Activity (QIEA) from a base period of 2010 to 2012 and has changed the classification system from the Trinidad and Tobago System of National Accounts (TTSNA) to the International Standard Industrial Classification of All Economic Activities, Revision 4 (ISIC Rev. 4).

7 Energy sector activity comprises the production of crude oil and natural gas, LNG, NGLs and petrochemicals and the retail sale of automotive fuels. Under the ISIC Rev. 4 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.

8 Growth in ammonia production in the fourth quarter of 2020 was led by a 60 per cent increase in output from Nutrien, the largest local producer of ammonia. Production at Nutrien recovered from maintenance-related downtime in the previous year.

crude oil production, registering a growth of 0.6 per cent over the period.

Chart IIIa
Crude Oil and Natural Gas Production



Source: Ministry of Energy and Energy Industries

In the non-energy sector, available indicators show that economic activity continued to be negatively affected by public health restrictions to contain COVID-19. The significant decline in passenger air transport noted since the start of 2020 persisted into the fourth quarter, resulting in a 37.7 per cent (year-on-year) drop in activity in the Transportation and Storage sector. With Christmas festivities curtailed due to virus containment measures, activity in the Manufacturing (excluding Refining and Petrochemicals)[9] sector was estimated to be relatively subdued, registering a marginal decline of 0.3 per cent. Available indicators point to a contraction of activity in the Wholesale and Retail Trade (excluding Energy) sector of 3.3 per cent in the final quarter of the year given subdued demand conditions. The Central Statistical Office's (CSO) Index of Retail Sales (RSI), the main indicator used by the Central Bank to gauge wholesale and retail activity, declined by 2.7 per cent (year-on-year) in the fourth quarter of 2020. This contraction in the RSI was mainly due to reduced sales in several large categories, namely Household Appliances, Furniture and other Furnishings (-28.6 per cent), Petrol Filling Stations (-16.2 per cent), Motor Vehicles and Parts (-5.6 per cent), Textiles and Wearing Apparel (-2.8 per cent) and Construction Materials and Hardware (-1.5 per cent). The negative performance of these sub-categories outweighed increases in Supermarkets and Groceries (5.5 per cent) and Dry Goods Stores (2.9 per cent).

Improvements were recorded in the Construction, Financial and Insurance Activities, Real Estate Activities and Electricity and Water (excluding Gas) sectors. The Construction sector was positively impacted by the resumption of several large public sector infrastructure projects in the previous quarter. The resumption of these projects drove significant increases in the local cement sales and the production of mined aggregates by 19.4 per cent and 24.4 per cent, respectively, in the fourth quarter of 2020. In the Financial and Insurance Activities sector, activity increased by 6.6 per cent in the fourth quarter, with growth emanating from the commercial banking industry. Commercial banks' loan portfolios continued to expand, albeit slower, as credit for real estate mortgages led loan activity. Growth in activity of 2.6 per cent in the Electricity and Water (excluding Gas) sector was mainly attributed to a 4.9 per cent increase in water production that occurred after the harsh dry season and below-average rainfall throughout the wet season in 2019.

Early indicators of economic activity monitored by the Central Bank suggest continued weakness in the non-energy sector in early 2021. Preliminary evidence points to declines in economic activity in several sectors, including Transportation and Storage and Wholesale and Retail Trade (Excluding Energy). The Transportation and Storage sector continues to be negatively affected by the country's closed borders, while restrictions on mobility likely dampened activity in the Wholesale and Retail Trade (Excluding Energy) sector. A decline in the number of new real estate loans suggests a waning of activity in the Real Estate Activities sector. Similarly, though growth in the Financial and Insurance Activities sector remains satisfactory, activity has slowed compared to previous periods and the source of activity, particularly in the banking sector, has shifted partly to deposits from lending. Indicators also suggest that the revival in the Construction and Manufacturing (Excluding Refining and Petrochemicals) sectors observed in the fourth quarter of 2020 continued in early 2021. The Construction sector may have benefitted from ongoing infrastructural works, such as the San Fernando to Point Fortin Highway and the Sangre Grande Hospital, while evidence points to resilience in the food manufacturing sub-sector. However, the initial resurgence in construction and manufacturing at the start of the year is likely to be impeded in the second quarter, given stringent national lockdown measures employed to contain the spread of the virus.

[9] Under the ISIC Rev. 4 classification system, refining and petrochemicals are subsumed within the Manufacturing sector. However, to better understand economic performance of the non-energy sector, Manufacturing is analysed after removing the refining and petrochemicals components.

BOX 1
COVID-19 AND THE ENERGY ENVIRONMENT

The COVID-19 pandemic has led governments worldwide to limit human activity and mobility in an attempt to curb the spread of the virus. As such, cars, buses, aeroplanes and trains had very little to no human or physical cargo to transport, while factories and assembly lines were shuttered and retail business and schools closed their doors. The energy industry was acutely affected by these adjustments, which severely dampened the global demand for fuel. Lower energy demand not only affected the economies of net-energy exporters but had cascading impacts on energy security, commodity prices, geopolitics and the natural environment. With the reopening of several economies globally, together with a massive though uneven vaccination drive across the world, energy demand and prices have since rebounded significantly.

Global Price Environment

The World Health Organisation (WHO) declared COVID-19 a pandemic on March 11, 2020. In the aftermath of the announcement, crude oil demand was notably stymied because of reductions in international trade and travel, and a slowdown in global economic activity, all linked to a virtual lockdown of economies. As a result, energy commodity prices tumbled, pushing Trinidad and Tobago's Energy Commodity Price Index (ECPI) to a historic low of 41.6 in April 2020. The ECPI was significantly affected by West Texas Intermediate (WTI) crude oil prices in April, with futures prices turning negative on April 20, 2020. Prices, which generally remained subdued for most of the year, began to rebound toward the end of 2020 amid the development of COVID-19 vaccines and the settlement on production quotas among OPEC and its non-OPEC partners (together known as OPEC+).

Energy commodity prices continued to show strength over the first half of 2021. The ECPI jumped to 108.5 in May 2021, more than double the value recorded in May 2020. International prices were notably impacted by extended production cuts from OPEC+ and a colder than usual winter period, which bolstered demand for natural gas. Energy markets also gained impetus from the ramp-up in the distribution of COVID-19 vaccines. Commodities captured in the ECPI incurred significant growth in prices in May 2021 compared to a year earlier, with the price of several commodities including WTI crude oil, ammonia and motor gasoline increasing by more than 100 per cent. While this might suggest that the worst is behind us, new strains of the virus have brought further uncertainty to the market. However, in early April 2021, OPEC+ extended production cuts as demand concerns persisted, suggesting that the group remains ready to support the market.

The OPEC Response

The tumultuous effects of the pandemic on the energy price environment have led the 23-country alliance known as OPEC+ to step in and attempt to bring about balance in the market. In December 2019, in response to weakening demand brought on by COVID-19, OPEC+ agreed to 1.7 million barrels of oil per day (b/d) in production cuts from January through to March 2020. Over the months that followed, the alliance continued to adjust production, pushing cuts to 9.7 million b/d in May (approximately 10 per cent of the world's output). In June 2020, output cuts eased to 7.7 million b/d until the end of the year.

The persistent economic threat posed by COVID-19 resulted in the OPEC+ alliance agreeing to a marginal reduction in production cuts to 7.2 million b/d from January 2021 through the end of April 2021. Saudi Arabia voluntarily made an additional supply reduction of 1 million b/d that came into effect on February 1 until the end of April 2021. As the vaccination rollout increased in many countries, the alliance agreed to ease their production cuts by 350,000 b/d in May, by another 350,000 b/d in June and an additional 400,000 b/d in July.

BOX 1 (CONT'D)
COVID-19 AND THE ENERGY ENVIRONMENT

Environmental Consequences

The limited movement of people also had an unprecedented impact on the physical world. During the height of the lockdown in early 2020, many cities began registering significantly lower levels of air pollution and CO2 emissions. PiersForster[1], using lockdown and activity data from around the world, found that CO2 emissions fell by an estimated 7 per cent in 2020 compared to the recorded levels in 2019 (approximately 2.4 billion tonnes of carbon dioxide). Other scientists estimated that the emission declines noted in 2020 were more than four times larger than those recorded in 2008[2] during the global financial crisis.

The most immediate effect was improved air quality in and around the world's busiest and most heavily populated urban areas and metropolitan cities. This was due to the removal of mobile pollution sources such as motor vehicles, and stationary sources such as factories, both of which are usually concentrated in these areas. Scientists caution, however, that the long-term effect of these gains would be quite limited in scope, and to consider lockdowns a solution to the world's dire climate change issues would be unrealistic. Professor Forster explained that the temporary halt to everyday life is not only insufficient to achieve climate change goals, it is also an unsustainable long-term solution. Reducing a country's carbon footprint should not come at the expense of its economic and social progress.

Domestic Production

The decline in international demand for energy products and the resultant collapse in energy markets has also affected Trinidad and Tobago's energy exports. Weaker demand and weaker export prices coupled with an increasing cost of feedstock natural gas over recent years have led to the temporary closure of several downstream petrochemical plants for varying periods during 2020. Some of these plants include the Titan, M2 and M3 methanol plants and a few ammonia plants at the Nutrien complex.This has contributed to significant declines in energy-related products. The Central Bank's Quarterly Index of Economic Activity (QIEA) points to a 13.8 per cent decline, on average, in the production of energy-related products in 2020, with most of the decline occurring in the second half of the year. Preliminary data for the first quarter of 2021 point to further declines in the sector.

Outlook for the Industry

The low-price environment and weak demand that has characterised the global industry since the onset of COVID-19 have negatively affected the domestic energy landscape. While commodity prices have shown recovery in recent months, which may motivate local producers to ramp up production, issues surrounding the availability of affordable natural gas has the potential to stymie any recovery in activity. In addition, given that the pandemic has brought about some lag in the start-up of new projects locally, additional sources of natural gas that were expected in 2021 may be delayed. As a result of these factors, the local industry may be strained in the short term until the issues discussed above are resolved. Nonetheless, the local industry is poised for growth in the medium term as BHP Billiton's Ruby project, which had an early start-up in May 2021, Shell's Barracuda and Colibri projects and bpTT's Cassia Compression and Matapal projects come on stream. This can have positive spillovers to the foreign exchange market as the energy sector,(which accounts for the largest share of foreign exchange conversions, can partially assist in alleviating ongoing market tightness.

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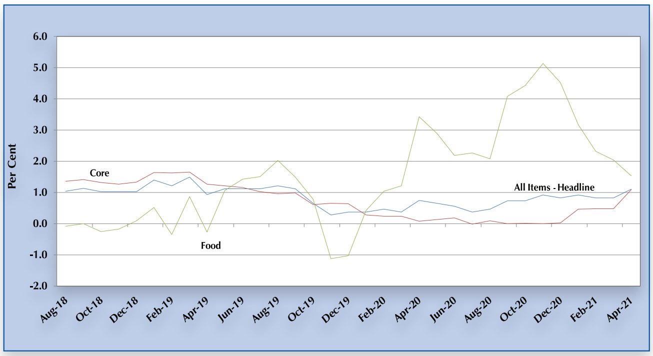
1 Professor of physical climate change and director of the Priestley International Centre for Climate at the University of Leeds. https://www.bbc.com/future/article/20210312-covid-19-paused-climate-emissions-but-theyre-rising-again)

2 Global emissions are down by an unprecedented 7% — but don't start celebrating just yet (theconversation.com)

B) Retail Prices

Over the period October 2020 to April 2021, headline inflation remained low and stable, averaging 0.9 per cent (year-on-year) **(Chart IIIb)**. Inflation was notably impacted by constraints on economic activity arising from the COVID-19 restrictions. Data from the Central Statistical Office showed that headline inflation moved from 0.7 per cent in October 2020 to 1.1 per cent in April 2021. Core inflation, which omits the volatile food component, was contained over the period, moving from 0.0 per cent in October 2020 to 1.1 per cent in April 2021. Meanwhile, food inflation slowed to 1.5 per cent in April 2021, down from 4.4 per cent in October 2020.

Chart IIIb
Index of Retail Prices
(Year-on-Year Per Cent Change)



Source: Central Statistical Office

Core inflation averaged 0.4 per cent over the last seven months (October 2020 to April 2021) due to weak price movements in most sub-indices **(Table IIIa)**. A notable exception was the alcoholic beverages and tobacco sub-index, which accelerated to 3.1 per cent in April 2021 (compared to 1.6 per cent in October 2020) owing to faster price increases associated with tobacco. This movement reflected increased excise duty on locally manufactured tobacco products announced in the FY2020/21 national budget, which took effect in late October 2020. Additionally, a turnaround was noted in the transportation sub-index, which measured 1.4 per cent in April 2021 after declining (0.5 per cent) in October 2020. The acceleration in this sub-index reflected faster price increases for foreign used vehicles and taxi fares. Prices in the housing, electricity, gas and other fuels sub-index also accelerated, measuring 2.4 per cent in April 2021 (compared to 0.0 per cent in October) on account of higher costs for home-ownership[10]. Slower price increases were noted in the health sub-index (3.3 per cent in April 2021 compared to 4.6 per cent in October 2020), weighed down by slower price increases for medical services and prescription medication.

Despite an acceleration in international food prices[11], domestic food price inflation averaged 3.3 per cent over the period, slowing to 1.5 per cent in April 2021 from 4.4 per cent in October 2020. Price movements over the period reflected slower price increases in most sub-indices, coupled with price declines in some others. Prices in the fish sub-index notably slowed to 5.9 per cent in April 2021 (compared to 13.1 per cent in October) as slower price increases were reported for fresh carite and king fish. Vegetable prices declined 2.4 per cent in April (compared to growth of 6.0 per cent in October 2020) due to market oversupply on account of unseasonal rainfall in the dry season. Additionally, price levels in the food products N.E.C sub-index also declined (2.6 per cent) in April 2021 from growth of 6.3 per cent in October 2020 due to price declines for hot peppers, pimento, celery, chive and fresh seasoning. Over the period, food price increases notably slowed in Port of Spain, San Juan, Chaguanas, Sangre Grande and Point Fortin, while food prices declined in Debe and accelerated in Siparia.

International Food Prices

Despite relatively weak price growth in domestic food items, international food prices were notably strong over the first five months of 2021. Data from the United Nations Food and Agriculture Organisation Food Price Index showed that international food prices increased 24.3 per cent over the five months. Substantial price increases were noted in all sub-indices apart from meat, which rose by a negligible 1.3 per cent during the period. Growth in the index was predominantly led by price increases for oils (73.5 per cent), sugar (29.5 per cent), cereals (27.9 per cent), and dairy (16.7 per cent).

[10] Imputed rental cost of owner-occupied dwellings.
[11] See section on international food prices.

Table IIIa: Index of Retail Prices (Per Cent Change)

January 2015 = 100	Year-on-Year		
	Weights	Oct-20	Apr-21
Headline Inflation	***1000***	**0.7**	**1.1**
Food and Non-Alcoholic Beverages	*173*	4.4	1.5
Bread and Cereals	*33*	1.4	1.9
Meat	*31*	5.7	4.7
Fish	*11*	13.1	5.9
Vegetables	*24*	6.0	-2.4
Fruits	*6*	6.3	2.6
Milk, Cheese and Eggs	*21*	2.1	0.7
Butter, Margarine, Edible Oils	*10*	4.2	2.7
Sugar, Jam, Confectionery, etc.	*6*	2.4	3.3
Food Products NEC	*13*	6.3	-2.6
Non-Alcoholic Beverages	*18*	1.4	0.1
Core Inflation	*827*	**0.0**	**1.1**
Alcoholic Beverages and Tobacco	*8.7*	1.6	3.1
Clothing and Footwear	*56.7*	-4.0	-3.5
Furnishings, Household Equipment and Routine Maintenance	*67.2*	0.0	0.5
Health	*40.6*	4.6	3.3
Of which: *Medical Services*	*10.4*	3.4	1.1
Housing, Water, Electricity, Gas and Other Fuels	*274.6*	0.0	2.4
Of which: *Rent*	*21.5*	0.9	0.6
Home Ownership	*193.3*	-0.1	2.9
Education	*9.9*	0.0	0.0
Recreation and Culture	*65.5*	-0.3	0.2
Hotels, Cafes and Restaurants	*24.9*	1.3	0.9
Transport	*147.4*	-0.5	1.4
Communication	*45.1*	-0.1	-0.1
Miscellaneous Goods and Other Services	*85.9*	0.3	-0.3

Source: Central Statistical Office

Producer Prices and Building Material Prices

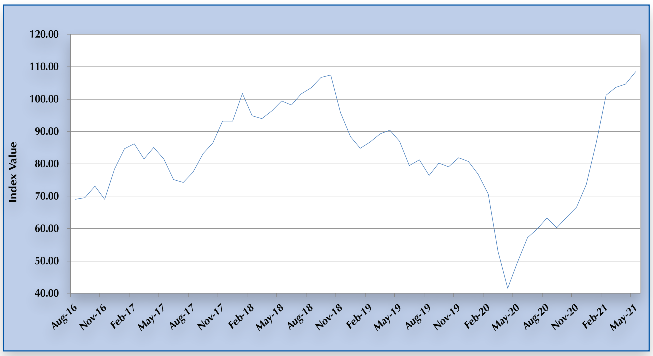
Producer prices, as measured by the CSO's Producer Price Index (PPI), remained low and relatively stable in the first quarter of 2021. The PPI increased 0.4 per cent (year-on-year) in the first quarter of 2021, suggesting that retail prices saw little impetus from the producer price channel. The PPI revealed that prices in the drink and tobacco sub-index decelerated to 2.5 per cent in the first quarter of 2021, a decrease of 4.3 percentage points from the last quarter of 2020. The slowdown in prices was due to much slower growth in the prices of alcoholic beverages (0.5 per cent) in the first quarter of 2021 compared to the previous quarter (19.0 per cent). Price declines were recorded in the chemical and non-metallic products sub-index (3.0 per cent in the first quarter of 2021 compared to 0.3 per cent in the fourth quarter of 2020).

The Index of Retail Prices of Building Materials increased 3.8 per cent (year-on-year) during the first quarter of 2021 compared to 3.2 per cent during the previous quarter. Growth in the index was indicative of increased activity in the domestic construction sector during the period. Higher prices were noted in the walls and roof (4.8 per cent); plumbing and plumbing fixtures (4.6 per cent); site preparation (4.4 per cent); electrical installation and fixtures (3.9 per cent); and finishing, joinery units and painting and external works (1.0 per cent) sub-indices. However, a price decline was recorded in the windows, doors and balustrading sub-index (0.3 per cent).

Energy Commodity Prices

The Energy Commodity Prices Index (ECPI) increased 73.2 per cent (year-on-year) to an average of 100.96 over the first five months of 2021, as the prices of all commodities included in the index rose **(Chart IIIc)**.

Chart IIIc
Energy Commodities Prices Index

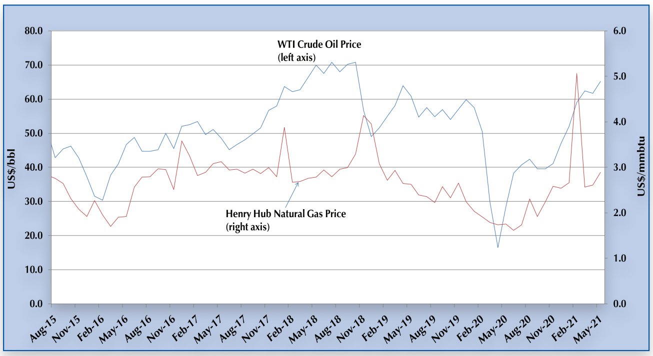


Source: Central Bank of Trinidad and Tobago

Crude oil prices rebounded in the first five months of 2021 compared to the corresponding period in 2020. West Texas Intermediate (WTI) prices rose by 64.1 per cent to US$60.08 per barrel over the first five months of the year and the Brent crude price, 57.0 per cent to US$63.17 per barrel. The market for crude oil was buoyed by strengthened demand in light of the reopening of several economies and production cuts by the Organisation of Petroleum Exporting Countries (OPEC) and their partners. The extension of production cuts among OPEC+ into July 2021, albeit at progressively lower curtailment levels, will likely lend further support to crude oil prices in the short term **(Chart IIId)**.

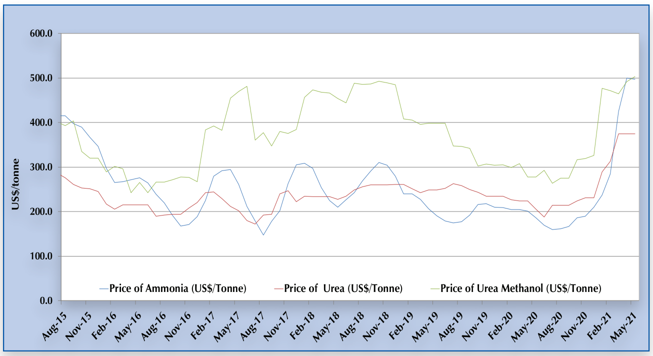
The US Henry Hub natural gas price averaged US$3.16 per million British Thermal Units (mmbtu) over the same period, representing a 71.1 per cent improvement compared to the corresponding period of 2020. The price surge occurred mainly in February 2021, when extremely cold weather patterns in the United States resulted in a significant increase in demand for natural gas and, at the same time, caused mechanical disruptions in operations at several production facilities. Henry Hub prices reached a high of US$23.86 per mmbtu on February 17, 2021, the highest level recorded since the Arctic blast of February 25, 2003. The increased gas prices resulted in higher prices for other commodities during the period, notably propane (132.3 per cent), ammonia (93.1 per cent), methanol (64.2 per cent) and urea (54.8 per cent) **(Chart IIIe)**.

Chart IIId
Crude Oil and Natural Gas Prices



Source: Bloomberg

Chart IIIe
Prices of Ammonia, Urea and Methanol



Sources: Green Markets; Fertiliser week, Monthly Methanol Newsletter (TECNON)

(c) External Accounts

Balance of Payments

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

Trinidad and Tobago's external accounts recorded an overall deficit of $352.7 million in the fourth quarter of 2020 **(Table IIIb)**. This brought the level of gross official reserves to $6,953.8 million, equivalent to 8.5 months of prospective imports of goods and services. Over the period, the current account recorded a minor deficit – the second consecutive deficit for 2020 – mainly reflecting a reduction in export earnings. Simultaneously, the financial account recorded a net outflow, mainly owing to transactions in the other investment and portfolio investment categories.

In the final quarter of 2020, the current account recorded a deficit of $2.0 million (0.0 per cent of GDP), down from a surplus of $42.8 million (0.7 per cent of GDP) in the similar period of 2019. This position was largely due to a deterioration in the net goods trading position as the falloff in exports more than outweighed the reduction in imports. Export earnings declined mainly because of a steep falloff in energy exports of $498.3 million (or 30.9 per cent, year-on-year). Lower international energy prices and reduced energy export volumes (year-on-year) were experienced across most energy commodities. However, non-energy exports increased by an estimated 21.8 per cent (year-on-year) to $530.3 million. Imports declined by $121.9 million to record $1,385.6 million over the fourth quarter of 2020 due to lower fuel imports. Further contributing to this position was a reduction in other imports, which can be attributed to lower economic activity within the domestic economy.

The services account recorded a deficit of $279.0 million (5.1 per cent of GDP) in the fourth quarter of 2020, albeit a narrower deficit of $15.6 million compared to the corresponding period of 2019. More specifically, other business services primarily accounted for the overall movement in the services account, which reflected reduced imports of technical, trade-related and other business services. A smaller deficit was recorded on the primary income account due to lower interest payments and repatriations of earnings to non-residents. In line with the gradual pickup in the global economy during the latter half of 2020, higher private inward transfers contributed to the overall surplus on the secondary income account and was supported by a reduction in private outbound transfers.

The financial account registered a net outflow of $248.7 million in the fourth quarter of 2020, in contrast to the net inflow recorded over a similar period of 2019. Movements in the other investment and portfolio investment categories mainly accounted for the overall net outflow on the financial account. In particular, the reduction in other investment[12] liabilities was primarily reflective of decreases in other accounts and loans owed to non-residents. However, this reduction was partially offset by an increase in trade credit and advances incurred by residents. At the same time, growth in other investment assets largely reflected higher currency and deposits held abroad, loans and other accounts owed to residents.

Further compounding these movements was the moderate net outflow recorded in the portfolio investment category. Financial transactions in this account amounted to a net outflow of $73.7 million over the October to December period, primarily owing to an increase in the holdings of foreign assets in the form of equity securities and short-term debt instruments by domestic financial institutions. However, the increase in the holdings of short-term debt securities in the final quarter of 2020 was substantially less than over the same period in 2019, possibly due to a reversal in the TT-US interest rate differential between the referenced periods[13]. Meanwhile, portfolio investment liabilities recorded a minor decline as foreign investors reduced their holdings of long-term domestic debt securities.

Partially offsetting the net outflow of funds in the financial account was the net inflow registered in the direct investment category. More specifically, direct investment registered a net inflow of $77.3 million. The increase in direct investment liabilities (direct investment in Trinidad and Tobago by foreign investors) of $95.7 million was largely due to inter-company loans. The energy sector largely accounted for these transactions. Direct investment assets registered a small increase, mainly attributable to reinvestment of earnings, which was somewhat tempered by decreased inter-company lending by resident companies to enterprises abroad.

Trinidad and Tobago's gross official reserves amounted to $6,672.1 million at the end of May 2021, $281.7 million lower than the level recorded at the end of 2020. The reduction in the stock of reserves stemmed from the Central Bank's interventions in the domestic foreign exchange market, which outweighed inflows from external borrowing and withdrawals from the Heritage and Stabilisation Fund (HSF). The reserves position at the end of May 2021 represents 8.1 months of prospective imports of goods and services.

[12] 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).

[13] Over the final three months of 2020, the TT-US interest rate differential for the 3 and 6 month Treasuries averaged positive 4 basis points and 12 basis points, respectively. This compared with an average of negative 48 basis points and 13 basis points, respectively, over the same period in 2019.

Table IIIb: Trinidad and Tobago Summary Balance of Payments (US$ Million)

	2019r	2020p	2019r				2020p			
			I	II	III	IV	I	II	III	IV
Current Account	**1,020.1**	**12.6**	**555.2**	**402.3**	**19.8**	**42.8**	**143.0**	**178.0**	**-306.4**	**-2.0**
Goods and Services	**1,605.4**	**-188.7**	**696.8**	**501.4**	**161.1**	**246.1**	**60.0**	**79.3**	**-307.9**	**-20.0**
Goods, net*	2,731.8	968.6	999.3	758.0	433.9	540.6	387.7	327.8	-5.8	259.0
Exports**	8,764.3	5,964.7	2,471.6	2,222.4	2,022.1	2,048.2	1,749.6	1,222.3	1,348.3	1,644.6
Energy	6,973.6	4,357.2	2,081.1	1,756.9	1,522.9	1,612.7	1,320.5	913.7	1,008.6	1,114.3
Non-Energy	1,790.7	1,607.6	390.4	465.5	499.2	435.5	429.1	308.6	339.7	530.3
Imports**	6,032.5	4,996.1	1,472.3	1,464.4	1,588.2	1,507.5	1,361.9	894.5	1,354.1	1,385.6
Fuels***	1,222.1	723.7	314.7	321.2	278.5	307.7	243.8	109.4	166.6	204.0
Other	4,810.4	4,272.4	1,157.5	1,143.2	1,309.7	1,199.9	1,118.1	785.1	1,187.5	1,181.7
Services, net	-1,126.4	-1,157.3	-302.6	-256.5	-272.8	-294.6	-327.7	-248.5	-302.1	-279.0
Primary Income, net	**-607.1**	**136.5**	**-118.4**	**-101.5**	**-189.4**	**-197.8**	**92.8**	**83.8**	**-31.7**	**-8.3**
Secondary Income, net	**21.8**	**64.7**	**-23.2**	**2.4**	**48.0**	**-5.4**	**-9.7**	**14.9**	**33.2**	**26.3**
Capital Account	**10.3**	**0.5**	**4.1**	**0.1**	**6.0**	**0.1**	**0.1**	**0.0**	**0.2**	**0.1**
Financial Account	**574.7**	**-151.4**	**739.0**	**-380.4**	**459.2**	**-243.1**	**629.9**	**-904.1**	**-126.0**	**248.7**
Direct Investment	**-69.8**	**323.4**	**76.4**	**17.7**	**-143.5**	**-20.4**	**254.5**	**177.7**	**-31.4**	**-77.3**
Net Acquisition of Financial Assets	114.2	148.4	47.4	23.8	21.6	21.4	1.1	130.7	-1.8	18.3
Net Incurrence of Liabilities	184.0	-175.1	-29.0	6.1	165.0	41.8	-253.3	-47.0	29.6	95.7
Portfolio Investment	**1,453.9**	**-185.8**	**438.7**	**175.0**	**767.4**	**72.8**	**-156.4**	**-167.2**	**64.3**	**73.7**
Net Acquisition of Financial Assets	1,245.4	-86.6	373.5	141.7	361.9	368.3	-156.2	-47.1	54.3	62.4
Net Incurrence of Liabilities	-208.5	99.2	-65.2	-33.2	-405.5	295.5	0.3	120.1	-10.0	-11.2
Financial Derivatives	**-0.2**	**-8.7**	**0.3**	**2.0**	**-3.5**	**1.1**	**-8.6**	**0.4**	**-0.5**	**0.1**
Net Acquisition of Financial Assets	-0.4	-9.1	1.2	1.2	-2.9	0.0	-7.9	-0.5	-0.5	-0.2
Net Incurrence of Liabilities	-0.2	-0.4	1.0	-0.8	0.7	-1.1	0.7	-0.9	0.0	-0.2
Other Investment****	**-809.1**	**-280.4**	**223.6**	**-574.9**	**-161.3**	**-296.5**	**540.5**	**-915.0**	**-158.3**	**252.3**
Net Acquisition of Financial Assets	329.1	-220.2	179.0	52.3	506.0	-408.2	294.9	-491.2	-126.0	102.1
Net Incurrence of Liabilities	1,138.2	60.2	-44.6	627.2	667.3	-111.7	-245.7	423.8	32.2	-150.1
Net Errors and Omissions	**-1,101.9**	**-139.7**	**-44.9**	**-1,139.7**	**338.7**	**-256.0**	**183.3**	**-394.3**	**173.4**	**-102.1**
Overall Balance	**-646.1**	**24.8**	**-224.5**	**-356.9**	**-94.6**	**30.0**	**-303.5**	**687.8**	**-6.9**	**-352.7**
Per Cent of GDP										
Current Account	**4.4**	**0.1**	**9.6**	**6.9**	**0.3**	**0.7**	**2.6**	**3.3**	**-5.6**	**0.0**
Goods, net	11.8	4.4	17.2	13.1	7.5	9.3	7.1	6.0	-0.1	4.7
Exports	37.8	27.3	42.6	38.3	34.9	35.3	32.0	22.3	24.6	30.1
Imports	26.0	22.8	25.4	25.2	27.4	26.0	24.9	16.3	24.7	25.3
Services, net	-4.9	-5.3	-5.2	-4.4	-4.7	-5.1	-6.0	-4.5	-5.5	-5.1
Primary Income, net	-2.6	0.6	-2.0	-1.7	-3.3	-3.4	1.7	1.5	-0.6	-0.2
Overall balance	**-2.8**	**0.1**	**-3.9**	**-6.2**	**-1.6**	**0.5**	**-5.5**	**12.6**	**-0.1**	**-6.4**
Memorandum Items										
Gross Official Reserves ^	6,929.0	6,953.8	7,350.5	6,993.6	6,898.9	6,929.0	6,625.5	7,313.3	7,306.4	6,953.8
Import Cover (months) ^	7.7	8.5	8.3	7.9	7.7	7.7	7.5	8.5	8.7	8.5

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. Therefore, as additional data from surveys are incorporated upon receipt, estimates may be subject to revisions in the future.

2 GDP prior to 2020 are sourced from the CSO and that for 2020 are Ministry of Finance estimates sourced from 2020/21 original budget.

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 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.

r Revised.

p Provisional.

International Investment Position

The net international investment position (NIIP) was estimated at $3,430.3 million at the end of December 2020, increasing $25.4 million from the previous quarter. The improvement in the NIIP represents an increase in the net creditor position as the fall in liabilities outweighed the decrease in the stock of assets **(Table IIIc)**.

Over the months October to December 2020, the stock of assets decreased primarily due to decreased reserve assets. Reserve assets declined during the period, partly reflecting continued CBTT interventions in the domestic foreign exchange market and ongoing Central Government external payments, which outweighed the inflows from Central Government external borrowings and the HSF and oil and gas receipts. Partially offsetting this reduction were increases in direct, portfolio and other investment assets.

Meanwhile, the decline in the stock of liabilities was mainly due to a decrease in other investment. The downward movement in other investment liabilities stemmed from a reduction in loans and other accounts owed to non-residents. Meanwhile, direct investment liabilities increased mostly because of a rise in the stock of inter-company loans.

Table IIIc: Trinidad and Tobago: International Investment Position (at the end of period) (US$ Millions)

	2019r	2020p	2019r				2020p			
			I	II	III	IV	I	II	III	IV
Net International Investment Position	**4,215.3**	**3,430.3**	**4,676.7**	**4,353.2**	**4,559.2**	**4,215.3**	**3,384.8**	**3,487.0**	**3,404.8**	**3,430.3**
Assets	**24,307.7**	**23,558.5**	**23,795.5**	**23,810.5**	**24,505.6**	**24,307.7**	**23,075.5**	**23,657.8**	**23,598.4**	**23,558.5**
Direct Investment	1,361.3	1,705.1	1,342.6	1,366.5	1,386.3	1,361.3	1,556.1	1,673.2	1,677.9	1,705.1
Portfolio Investment	11,075.1	10,163.1	10,304.4	10,595.6	10,857.3	11,075.1	9,643.0	9,911.7	9,983.2	10,163.1
Financial Derivatives	9.0	0.6	11.6	13.8	10.3	9.0	1.3	0.6	0.3	0.6
Other Investment*	4,933.4	4,735.9	4,786.4	4,841.1	5,352.8	4,933.4	5,249.7	4,759.0	4,630.5	4,735.9
Reserve Assets	6,929.0	6,953.8	7,350.5	6,993.6	6,898.9	6,929.0	6,625.5	7,313.3	7,306.4	6,953.8
Liabilities	**20,092.4**	**20,128.2**	**19,118.8**	**19,457.4**	**19,946.4**	**20,092.4**	**19,690.8**	**20,170.9**	**20,193.6**	**20,128.2**
Direct Investment	8,455.3	8,480.0	8,496.1	8,239.8	8,484.7	8,455.3	8,440.7	8,380.4	8,386.3	8,480.0
Portfolio Investment	3,861.0	3,960.6	4,006.5	3,975.6	3,572.2	3,861.0	3,861.7	3,981.5	3,972.0	3,960.6
Financial Derivatives	0.3	0.0	1.8	1.6	2.0	0.3	1.0	0.5	0.3	0.0
Other Investment*	7,775.8	7,687.7	6,614.5	7,240.4	7,887.5	7,775.8	7,387.4	7,808.5	7,835.0	7,687.7

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. Therefore, as additional data from surveys are incorporated upon receipt, estimates may be subject to revisions in the future.

* 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).

r Revised.

p Provisional.

PART IV – MONETARY AND FINANCIAL SECTOR DEVELOPMENTS

Monetary Developments

Monetary policy in late 2020 and early 2021 has continued to be centred on managing the economic fallout of the COVID-19 pandemic. As the pandemic unfolded domestically in March 2020, the Monetary Policy Committee (MPC) opted to increase liquidity in the financial system by reducing the Repo rate and commercial banks' reserve requirements. A global economic recovery is underway owing to more expansive vaccine rollouts in advanced and some emerging economies. Additionally, energy and energy-related commodity prices increased by mid-2021. Domestically, however, activity in the energy and non-energy sectors remained constrained owing to ongoing lockdown restrictions. These conditions were also reflected in sluggish credit performance over late 2020 into early 2021. At its meetings in December 2020, March 2021 and June 2021, the MPC decided to maintain the Repo rate at the level adopted in March 2020 in support of domestic recovery. Excess liquidity continued to be managed to facilitate the smooth operation of financial markets.

Liquidity levels in the financial system decreased from November 2020 to May 2021. Fiscal operations, usually the main driver of excess liquidity, resulted in net withdrawals of $425.4 million over November 2020 to May 2021 compared to injections of $3,874.3 million in the same period, one year earlier **(Table IVa)**. These withdrawals were associated with Government borrowing activity over the period. Open Market Operations (OMOs) have remained neutral, with no net OMO activity since November 2020, compared to net injections of $3,667.0 million for the same period one year earlier. Also, the Bank's foreign exchange sales to authorised dealers indirectly removed $4,914.6 million from the system, compared to $5,475.5 million in the same period a year earlier. Thus, daily average excess liquidity declined to $7,948.6 million by May 2021, compared to $13,865.4 million in November 2020 **(Chart IVa)**.

Interbank borrowing resumed in March 2021 (driven by the intermittent activity of one institution), following eleven months of inactivity. Daily interbank borrowing averaged $4.9 million over November 2020 to May 2021 compared to $34.0 million over the same period a year prior. Commercial banks did not access the Repurchase Facility over November 2020 to May 2021.

Table IVa: Fiscal Injections and Liquidity Absorption (TT$ Million)

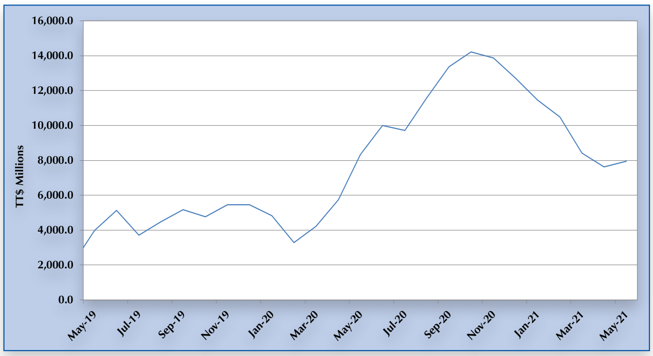
	Nov 2017 - May 2018	Apr 2018 - Oct 2018	Nov 2018 - May 2019	Apr 2019 - Sep 2019	May 2019 - Oct 2019	Nov 2019 - May 2020	Apr 2020 - Sep 2020	May 2020 - Oct 2020	Nov 2020 - May 2021
Fiscal Injections	8,721.7	5,286.0	3,006.0	1,389.4	3,309.1	3,874.3	8,972.9	8,446.8	-425.4
Liquidity Absorption Measures									
Open Market Operations (OMOs)	-254.5	511.6	4,952.6	7,895.2	5,735.2	3,667.0	5,242.0	2,975.0	0.0
Central Gov't Treasury Bond Issues	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Commercial Banks' Fixed Deposits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Memo Item:									
CBTT Sale of Foreign Exchange[1]	6,048.3	6,181.4	5,523.9	5,349.9	5,316.5	5,475.5	3,709.4	3,909.8	4,914.6

Source: Central Bank of Trinidad and Tobago

Note: A negative sign means that there was a net issue of OMOs and commercial banks' fixed deposits resulting in a withdrawal of liquidity and a positive sign means a net redemption of OMOs and maturity of commercial banks' fixed deposits which injects liquidity.

1 CBTT Sale of Foreign Exchange includes transactions under the Foreign Exchange Liquidity Guarantee facility.

Chart IVa
Commercial banks: Excess Reserves



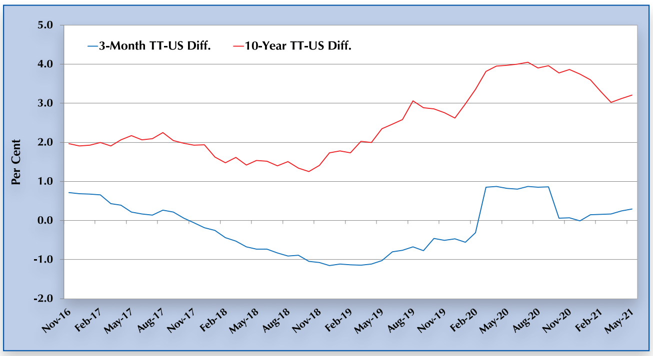
Source: Central Bank of Trinidad and Tobago

Short-term interest rates declined in late 2020 after new OMO bills were issued, before increasing in early 2021. The TT 91-day OMO Treasury Bill rate declined by 81 basis points between September and October 2020 to reach 0.15 per cent. The decline was due to the issuance of OMO bills during the period with actions taken to amplify liquidity following the advent of the pandemic in March 2020. The rate then climbed slightly over November 2020 to May 2021, settling at 0.31 per cent following decreases in liquidity and a readjustment away from the initial downward effect observed in late 2020.

Massive fiscal stimulus and the ongoing vaccine rollout in the US resulted in declining yields on US short-term instruments. The US 91-day short-term benchmark yield reached 0.01 per cent by the end of May 2021, having declined from 0.08 per cent in November 2020. As a result, the TT-US 91-day differential increased to 30 basis points in May 2021 compared with 7 basis points in November 2020 **(Chart IVb)**. The TT 1-year Treasury rate behaved similarly to the 3-Month Treasury rate in late 2020, settling at 0.52 per cent in May 2021. The US 1-year Treasury rate declined by 6 basis points over November 2020 to May 2021 to reach 0.05 per cent. The movements resulted in a TT-US 1-year differential of 47 basis points in May 2021, up 16 basis points from November 2020.

The US 10-year Treasury rate trended upward over November 2020 to May 2021, gaining 74 basis points over the period to reach 1.58 per cent. This movement in the rate mainly reflected increasing concerns about future inflation following the US$1.9 trillion fiscal package passed by Congress in early 2021. The TT 10-year Treasury rate gained 8 basis points over the period to reach 4.79 per cent, resulting in a narrowing of the 10-year yield differential by 66 basis points to 321 basis points over November 2020 to May 2021.

Chart IVb
3-Month and 10-Year TT-US Differentials

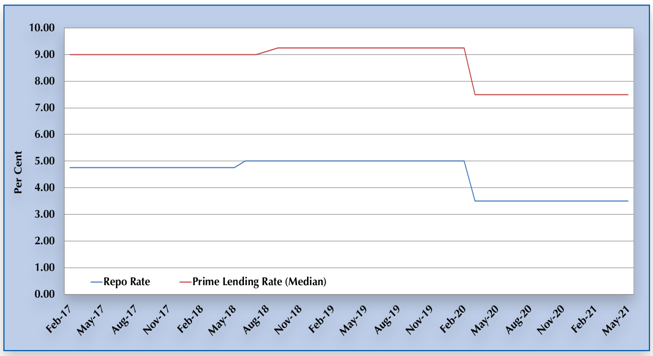


Source: Central Bank of Trinidad and Tobago

Commercial banks' interest rates and associated interest spreads declined further in December 2020, partly reflecting the impact of the Central Bank's policy actions, especially on liquidity, since March 2020. The commercial banks' weighted average lending rate (WALR) reached 7.21 per cent in March 2021, 18 basis points lower than in September 2020. The decline in the WALR reflected the effect of amplified liquidity in response to the fallout from COVID-19. The weighted average deposit rate declined three basis points to 0.59 per cent over the same period. As a result, the banking interest rate spread decreased by 16 basis points over September 2020 to March 2021 to reach 6.62 per cent **(Chart IVc)**. The commercial banks' median prime lending rate declined from 9.25 per cent in February 2020 to 7.50 per cent in March 2020 after policy measures to address COVID-19 were implemented and has since remained at this level. Thus far, in 2021 the interbank borrowing rate remained unchanged at 0.50 per cent.

While amplified liquidity brought down the WALR for all loans, the WALR for new loans increased by 16 basis points between March 2020 and March 2021 to reach 9.23 per cent. This increase was based mainly on a 62 basis points increase in the rate of new overdraft loans over the same period, which settled at 6.39 per cent in March 2021. The rate on bridge financing also increased in the immediate period after the declaration of thepandemic in March 2020. However, it returned to pre-pandemic levels by the third quarter of 2020 as liquidity increased substantially.

Chart IVc
Repo Rate and Commercial Banks' Median Prime Lending Rate



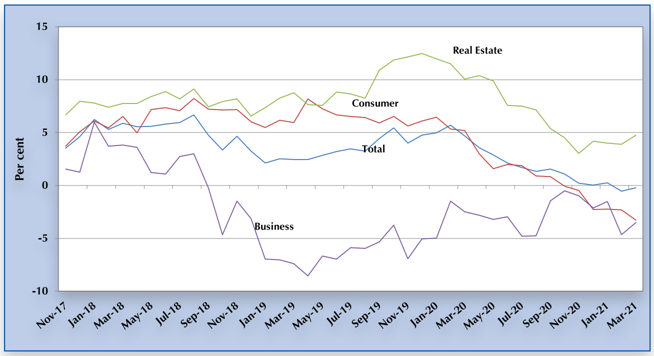
Source: Central Bank of Trinidad and Tobago

The fallout from the COVID-19 pandemic continues to hinder financial system credit growth. Credit granted by the consolidated system decelerated over ten months in 2020 before turning negative in February 2021. On a year-on-year basis, credit granted to the consolidated financial system declined by 0.2 per cent in March 2021 compared to a growth of 4.7 per cent one year earlier. Weakened lending to consumers and slower lending for real estate purchases coupled with the continued declines in business lending contributed to the downtrend in credit **(Chart IVd)**.

On a year-on-year basis, lending to resident businesses declined by 3.5 per cent in March compared to a fall-off of 2.5 per cent in the previous year. Disaggregated data to March showed declines in lending to Distribution (1.8 per cent) and Other Services (10.9 per cent) sectors. After registering a small uptick in December (0.4 per cent), possibly due to increased activity in the Manufacturing sector, Manufacturing credit declined in March 2021 (2.1 per cent year-on-year). On the other hand, lending to the Construction sector registered increases in December 2020 and March 2021 of 7.5 per cent and 12.7 per cent, respectively, in part due to the resumption of government infrastructure projects.

In the environment of labour market disruptions and constrained household incomes, consumer borrowing slowed. On a year-on-year basis, lending to consumers declined by 3.3 per cent in March 2021 compared to growth of 5.2 per cent one year earlier. Disaggregated data available to March 2021 showed that overall weak consumer lending was mainly due to a 4.5 per cent decline in lending for new motor vehicle purchases. On the other hand, loans for used vehicle purchases grew by 1.7 per cent; however, this growth rate represents a deceleration from previous quarters. Lending for Other Purposes also fell by 7.9 per cent in March 2021, compared to a growth of 8.1 per cent one year earlier. Notably, credit card lending declined on a quarterly basis since June 2020. Growth in lending for debt consolidation was subdued (1.4 per cent), while refinancing rose by 17.0 per cent. Real estate mortgage lending growth continued to lose momentum in early 2021. On a year-on-year basis, the growth in real estate mortgage lending decelerated to 4.8 per cent in March 2021 compared to 10.1 per cent one year earlier. Data for March showed that lending for the purchase of new and existing homes grew by 4.6 per cent and 6.1 per cent, respectively, while lending for renovation (-4.6 per cent) and the purchase of land (-3.1 per cent) declined.

Chart IVd
Private Sector Credit by the Consolidated Financial System (Year-on-Year Per Cent Change)



Source: Central Bank of Trinidad and Tobago

The effect of the COVID-19 pandemic on savings and expenditure heavily influenced movements in the monetary aggregates since the demonetisation of the TT$100 note in December 2019. M-1A, which consists of currency in active circulation and demand deposits, expanded by 16.3 per cent in March 2021 compared with 2.4 per cent one year earlier. Currency in active circulation was impacted by the base effect from the demonetisation in December 2019, expanding by 53.0 per cent in December 2020 and 27.1 per cent in March 2021. This compares to a decline of 39.8 per cent in December 2019 and a fall off of 29.7 per cent in March 2020. Demand deposits have grown consistently throughout 2020 and into 2021 as individuals seemed to have chosen to hold funds in easily accessible accounts following the demonetisation and for precautionary purposes following the emergence of COVID-19 pandemic. The broader measure of the money supply (M2), which includes time and saving deposits, grew by 8.2 per cent in March 2021 compared with a growth of 3.3 per cent in March 2020. This suggested that persons opted to place deposits in the banking system. However, time deposits declined by 15.7 per cent in March, but savings deposits grew by 5.9 per cent, suggesting that individuals had a strong preference for demand deposits.

Foreign currency loans outstanding declined significantly in March 2020 and continued throughout 2020 and into 2021, while deposits rebounded. On a year-on-year basis, foreign currency loans decreased by 5.5 per cent in March 2021 compared to a decline of 1.2 per cent one year earlier. In particular, loans by banks declined 0.6 per cent while non-banks narrowed foreign currency lending by 22.5 per cent. Foreign currency loans to businesses fell off (0.3 per cent) and was primarily attributed to the 15.2 per cent contraction in loans from non-banks. Following declines since April 2020, the level of foreign currency deposits was boosted in November 2020 and remained elevated before declining by February 2021 then rebounding in March 2021. Total foreign currency deposits declined by 2.9 per cent in February 2021 before registering a growth of 0.4 per cent in March 2021. The main impetus for the expansion in foreign currency deposits stemmed from increased business and consumer deposits coupled with a slower decline in "other" deposits.

Foreign Exchange Market Developments

The local market for foreign currency has remained tight thus far in 2021. Purchases of foreign exchange by authorised dealers from the public amounted to US$1,394.6 million over January to May 2021, a decline of 6.8 per cent relative to the same period a year earlier. The decline occurred despite a 13.8 per cent increase in conversions by energy companies relative to the same period in 2020. For the months of January to May 2021, purchases from the energy sector accounted for 74.6 per cent of total foreign currency purchases over US$20,000 in value.

Sales of foreign exchange by authorised dealers to the public declined to US$1,824.0 million over January to May 2021, a decline of 6.0 per cent relative to the same period a year prior. Based on reported data for transactions over US$20,000, credit cards (32.8 per cent), retail and distribution (26.8 per cent), energy companies (11.8 per cent) and manufacturing firms (7.5 per cent) made up the bulk of foreign exchange sales by authorised dealers to the public. The net sales gap declined by 3.5 per cent to reach US$429.4 million during the period. To support the market, the Central Bank sold US$512.1 million to authorised dealers **(Table IVb).**

Table IVb: Authorised Dealers: Foreign Exchange Market Activity (US$ Million)

Date	Purchases from Public	Sales to Public	Net Sales	Purchases from CBTT[1]
2015	4,930.8	7,382.2	2,451.4	2,640.9
2016	4,274.7	5,776.8	1,502.1	1,811.6
2017	3,606.9	5,195.3	1,588.4	1,816.0
2018	4,101.4	5,677.4	1,576.0	1,501.0
2019	4,285.6	5,939.8	1,654.2	1,504.0
2020	3,298.2	4,504.1	1,206.0	1,292.2
Jan - May 2020	1,496.5	1,941.4	444.9	585.0
Jan - May 2021	1,394.6	1,824.0	429.4	512.1
Y-o-Y Per cent Change	**-6.8**	**-6.0**	**-3.5**	**-12.5**

Source: Central Bank of Trinidad and Tobago

1 Purchases from the Central Bank of Trinidad and Tobago include transactions under the Foreign Exchange Liquidity Guarantee facility.

BOX 2
THE EFFECT OF OPEN MARKET OPERATIONS ON EXCESS LIQUIDITY

As the COVID-19 pandemic unfolded domestically, it became evident that only a sizeable response to the impact of the pandemic would be optimal. Thus, on March 17, 2020, the Bank reduced the Repo rate by 150 basis points to 3.50 per cent and lowered the primary reserve requirement on commercial bank prescribed liabilities by 300 basis points to 14.0 per cent. This set of actions aimed to significantly increase liquidity in the financial system to avert any likelihood of a credit freeze and facilitate lower lending rates by commercial banks.

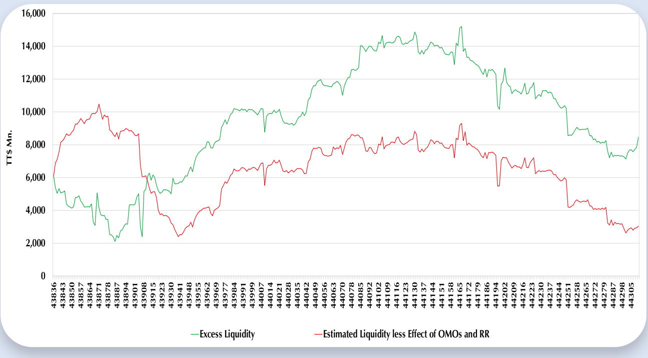
The Bank's main liquidity management instrument is open market operations (OMOs). There were no allotments of OMO bills between March 12 and September 30, 2020, allowing net redemptions to add to system liquidity over the period. Since late 2020, OMOs have remained neutral, with bills being rolled over as they mature, maintaining a sufficient level of liquidity to facilitate financial system stability. In addition, more than $2,600.0 million was added to excess reserves by lowering the reserve requirement. The objective of this Box is to assess the effect of the Bank's liquidity management stance, via changes to OMOs and the reserve requirement, on the level of excess reserves using an autoregressive distributed lag (ARDL) model[1].

The model is estimated using 328 daily observations from January 2020 to April 2021. The model casts liquidity as a function of fiscal operations, the Bank's liquidity management tools and the indirect effect of foreign currency sales (by the Central Bank). The daily change in excess liquidity is regressed against lags of itself and as well as present and lagged values of the daily changes in government balances, net issues of OMO bills, changes to the reserve requirement, and sales of foreign currency by the Central Bank to authorised dealers. Dummy variables that take values of one (zero otherwise) on days of Central Government's borrowing; and roll-over of OMO bills were also included.

The results suggest that the model is stable, and that if there is a sudden change in the liquidity level, its determinants, including the monetary policy variables, drive it back to equilibrium fairly quickly, owing to a negative and significant error correction term.

Using the model's coefficients, a scenario was developed whereby actual excess liquidity was compared with liquidity in the 'policy-off' scenario, i.e., where OMOs and changes to the Reserve Requirement were restricted to zero **(Figure 1)**. Investigating these alternatives is important since OMOs remain the main instrument employed by the Bank to manage liquidity, and lowering the reserve requirement formed an important part of the monetary response to the COVID-19 pandemic.

FIGURE 1
ACTUAL EXCESS LIQUIDITY VS POLICY-OFF ESTIMATE OF EXCESS LIQUIDITY



Source: Author's Calculations

BOX 2 (CONT'D)
THE EFFECT OF OPEN MARKET OPERATIONS ON EXCESS LIQUIDITY

The results show that without the effect of the Bank's OMO and reserve requirement policy, forecasted excess daily liquidity would have been 40.6 per cent lower than actual ($10,461.8 million) from the post-COVID-19 policy actions of March 2020 to April 2021. Consequently, commercial banks would have had considerably less flexibility to adjust to the shocks to their balance sheets on account of the pandemic if the Central Bank did not act to ease liquidity concerns in the financial system.

Liquidity provisioning in response to sudden, large economic shocks and their resultant financial system disruption is generally considered the optimal policy response for a central bank. This is so mainly because liquidity provisioning is usually effective in containing spillovers to the rest of the economy. As commercial banks anticipated deteriorating asset quality, they would likely respond by reducing the growth of their loan book in order to maintain adequacy ratios rather than raise additional regulatory capital. In this respect, amplifying system liquidity appeared an appropriate strategy to maintain the flow of credit to the economy. Furthermore, while excess liquidity declined in early 2021, the functioning of the market remained smooth. This development suggests that the liquidity cushion provided by monetary policy following the effects of the COVID-19 pandemic did contain potential spillovers and bolster financial stability.

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(1) The ARDL model uses lagged values of the dependent variable (yt) and current and lagged values of independent variables (Xt) to model the current period of the dependent variable. It is denoted as follows:

$$y_t = \lambda_0 + \lambda_1 y_{t-1} + \ldots + \lambda_p y_{t-p} + \beta_{10} X_{1t} + \beta_{11} X_{1,t-1} + \ldots + \beta_{1,p1} X_{1,t-p1} + \ldots + \beta_{K0} X_{Kt} + \beta_{K1} X_{K,t-1} + \ldots + \beta_{K,pK} X_{K,t-pK} + \varepsilon_t$$

The lags of the dependent variable subject to the λ_p coefficients provide the autoregressive part of the test equation. The lagged independent variables subject to the βK coefficients provide the distributed lag part of the test equation. The total long-run effect of X_K on y is given by β_K.

ARDL models are estimated by selecting coefficients that minimize the Akaike information criterion (AIC), rather than associated p-values. The model is estimated using Newey-West covariances to limit the potential effects of heteroscedasticity and autocorrelation.

Capital Market Developments

Primary Debt Market Activity

Data for the seven months of FY2020/21 showed a fiscal deficit of $5.2 billion compared with a deficit of $6.4 billion recorded in the comparative period of FY2019/20. The lower deficit was primarily due to higher non-energy receipts and lower aggregate expenditure. The deficit was primarily financed by domestic borrowing and withdrawals, which totalled US$592.7 million, from the HSF.

Provisional data suggests that during the six months ending March 2021, activity on the primary debt market activity was slightly lower in total face value raised than the corresponding period last year (**Table IVc**). Over the period, 16 private placements were observed with a total financing face value of $9,291.8 million. The Central Government was the primary borrower, raising $7,537.1 million via eight issues for budgetary support and the refinancing of outstanding bonds. Furthermore, state enterprise activity recorded seven bonds at $1,474.7 million, while the private sector logged only one bond at $280.0 million. In comparison, the same period one year prior observed 13 private placements raising $9,903.5 million.

Secondary Bond Market Activity

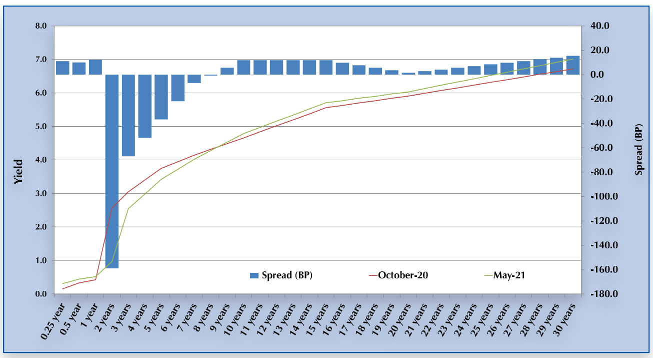
Activity on the secondary government bond market picked up notably during the eight months ending May 2021. Over the period, the market recorded 23 trades at a total traded face value of $103.3 million. The comparison period one year prior recorded 19 trades with a total traded face value of just $16.4 million. Market activity likely jumped because of portfolio rebalancing and the anticipation of additional government borrowing for budgetary support. Additionally, activity on the secondary corporate bond market[14] continued to be strong, recording 114 trades with a total traded face value of $39.4 million over the eight months ending May 2021. Conversely, the comparative period one year earlier registered 70 trades ($10.7 million total traded face value).

Government Yield Curve[15]

Over the seven months ending May 2021, the movements in the Central Government yields generally displayed a mixed trend **(Chart IVe)**. Although excess liquidity conditions remain elevated, government borrowing activity, foreign exchange sales by the Central Bank, and open market operation neutrality resulted in liquidity levels falling from a monthly average of $14.2 billion in October 2020 to just under $8.0 billion in May 2021. As a result, most short-term tenors generally trended up over the period as the 3-month rate increased by 16 basis points to 0.31 per cent and the 1-year rate increased by 10 basis points to 0.52 per cent.

On the other hand, the 2-year rate recorded a decline of 159 basis points to 0.97 per cent due to the issuance of a 2-year Treasury note in January 2021. Before this movement, the 2-year rate remained unchanged at 2.56 per cent since October 2019 as the Bank issued no 2-year treasury securities. On the other hand, medium-term 3-year to 7-year yields observed notable declines, likely due to the liquidity conditions finally working through to these tenors. However, despite the accommodative policy position and elevated liquidity conditions, the long-term yields continued to trend up owing to higher risk and term premiums on long-term government securities due to the Government's increasing financing requirements. Over the period, the 10-year rate increased by 13 basis points to 4.79 per cent, while the 15-year rate increased by 15 basis points to 5.71 per cent.

Chart IVe
Trinidad and Tobago Government Treasury Yield Curve
(October 2020 to May 2021)



Source: Central Bank of Trinidad and Tobago

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

[15] The TT Treasury Yield Curve is constructed monthly by the Central Bank of Trinidad and Tobago and is based on information from Domestic Market Operations, the Trinidad and Tobago Stock Exchange (TTSE) Secondary Government Bond Market, and market reads from market participants.

Table IVc: Primary Debt Security Activity - October 2020 to March 2021 (TT$Millions)

Period issued	Borrower	Face value (TT$ M)	Period to Maturity	Coupon rate Per annum (Per cent)	Placement Type
Oct-20	Central Government of Trinidad and Tobago	115.0	90.0 days	Fixed Rate 0.65%	Private
	Central Government of Trinidad and Tobago	1,000.0	16.0 years	Fixed Rate 5.65%	Private
	Water and Sewerage Authority (WASA) - Tranche 1	200.0	8.0 years	Fixed Rate 5.00%	Private
	Water and Sewerage Authority (WASA) - Tranche 2	220.0	21.0 years	Fixed Rate 7.50%	Private
	The Urban Development Corporation of Trinidad and Tobago (UDECOTT)	213.0	2.0 years	Fixed Rate 3.31%	Private
Nov-20	Asclepius Holdings Limited	280.0	17.1 years	Fixed rate 7.33%	Private
	Central Government of Trinidad and Tobago	1,000.0	20.0 years	Fixed Rate 5.45%	Private
	Trinidad and Tobago Mortgage Finance Company Limited (TTMF) - Tranche 1	216.9	4.0 years	Fixed Rate 4.30%	Private
	Trinidad and Tobago Mortgage Finance Company Limited (TTMF) - Tranche 2	233.1	5.0 years	Fixed Rate 4.75%	Private
	Trinidad and Tobago Mortgage Finance Company Limited (TTMF) - Tranche 3	50.0	6.0 years	Fixed Rate 4.94%	Private
Dec-20	Central Government of Trinidad and Tobago	1,200.0	25.0 years	Fixed Rate 6.60%	Private
	Central Government of Trinidad and Tobago	676.8 (US$100.0 Mn)	4.0 years	Fixed Rate 3.75%	Private
Jan-21	Water and Sewerage Authority (WASA)	115.0	8.0 years	Fixed Rate 5.00%	Private
	Central Government of Trinidad and Tobago	1,000.0	15.0 years	"Fixed Rate 4.80% (5 Yr Moratorium)"	Private
Feb-21	First Citizens Bank	146.7 (US$21.8 Mn)	1.0 year	Fixed Rate 2.00%	Private
	Central Government of Trinidad and Tobago - Tranche 1	400.0	5.0 years	Fixed Rate 3.75%	Private
	Central Government of Trinidad and Tobago - Tranche 2	800.0	8.0 years	Fixed Rate 4.50%	Private
	Central Government of Trinidad and Tobago - Tranche 3	800.0	15.0 years	Fixed Rate 6.75%	Private
Mar-21	Trinidad and Tobago Mortgage Finance Company Limited (TTMF)	40.0	3.0 years	Fixed Rate 4.10%	Private
	Urban Development Corporation of Trinidad and Tobago (UDeCOTT)	40.0	6.0 years	Fixed Rate 3.65%	Private
	Central Government of Trinidad and Tobago	545.3	8.0 years	Fixed Rate 4.70%	Private

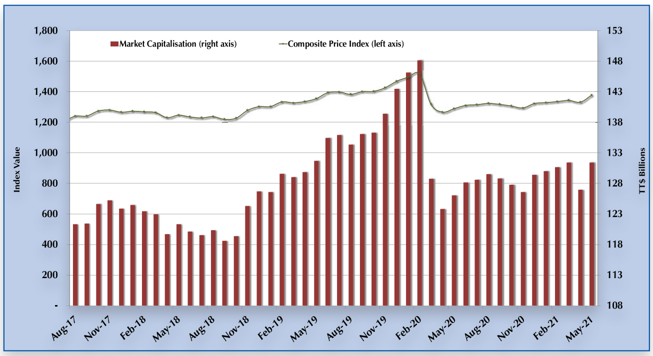
Source: Central Bank of Trinidad and Tobago

p Provisional.

Stock Market Developments

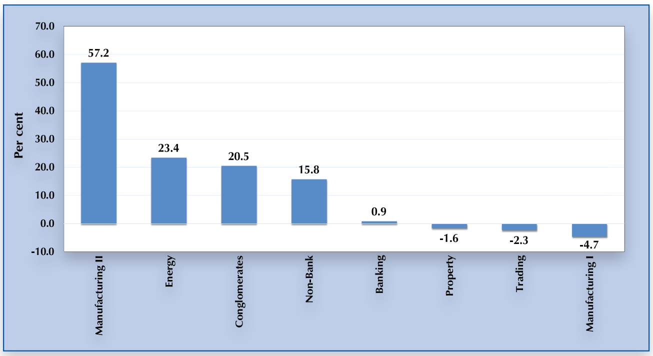
The domestic stock market continued to recover over the seven months ending May 2021 **(Chart IVf)**. Following the COVID-19 market shock in March and April 2020, the Composite Price Index (CPI) declined by 16.5 per cent, a $24.4 billion fall in total market capitalisation. Since then, the domestic market began to display signs of recovery. In the seven months to May 2021, the CPI increased by 5.5 per cent, driven by a 6.9 per cent gain in the All Trinidad and Tobago index (ATI) and a 2.2 per cent increase in the Cross Listed Index (CLI). As a result, total stock market capitalisation increased by 2.8 per cent to end May 2021 at $131.4 billion. Reflecting some of the improvements in cross-listed stocks, the Jamaican Stock Exchange (JSE) recorded a 12.4 per cent increase over the same period. However, the Barbados Stock Exchange (BSE) continued to deteriorate, falling by 7.5 per cent over the seven months to May 2021. Most sub-sectoral indices of the CPI observed an improvement over the seven months ending May 2021 **(Chart IVg and IVh)**.

Chart IVf
Composite Price Index and Stock Market Capitalisation



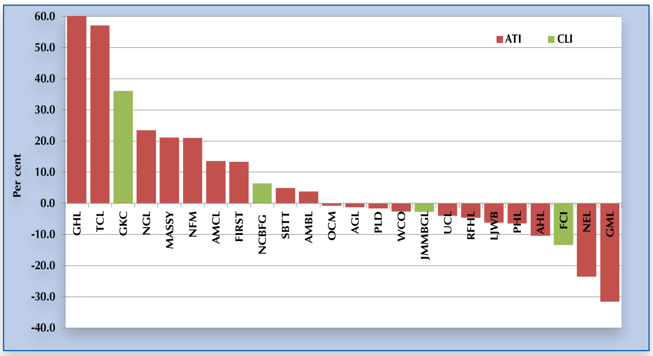
Source: Trinidad and Tobago Stock Exchange (TTSE)

Chart IVg
Trinidad and Tobago Stock Market Sub-Index Returns
(November 2020 to May 2021)



Source: Trinidad and Tobago Stock Exchange (TTSE)

Chart IVh
Trinidad and Tobago Individual Stock Returns
(November 2020 to May 2021)



Source: Trinidad and Tobago Stock Exchange (TTSE)

Trading activity over November 2020 to May 2021 was significantly lower than the same period one year earlier. Over the period, the market volume traded was 32.0 million shares with a total traded value of $614.3 million, resulting in a market-turnover ratio of 0.474. The Non-Banking Finance sub-sectoral index dominated the market's trade volume, accounting for 28.3 per cent (or 9.1 million shares) of total market traded volume, while the Banking sub-index accounted for the highest portion of the total market traded value, 43.4 per cent (or $266.6 million). In comparison, during the same period one year prior[16], total market volume and value traded were 49.1 million shares and $762.6 million, respectively, and the market-turnover ratio was 0.558.

[16] The November 2019 to March 2020 period would include the extraordinary $263.6 million in total value traded in March 2020 during the COVID-19 shock and market sell-off.

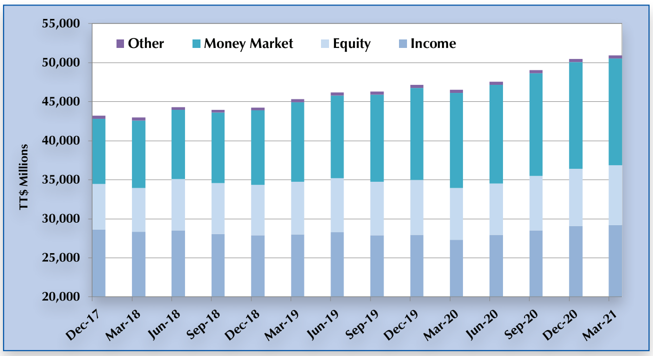
Mutual Fund Industry

The domestic mutual funds industry recorded growth over the nine months ending March 2021 **(Chart IVi).** Aggregate funds under management[17] expanded by 7.1 per cent to $50,952.3 million[18], driven by growth in all fund types. Income funds, the largest component, grew by 4.6 per cent to $29,215.5 million; Money Market funds expanded by 7.6 per cent to $13,641.9 million; Equity funds increased by 16.5 per cent to $7,665.9 million, and funds classified as 'Other'[19] registered a 12.6 per cent increase to $429.1 million. Compared to the same period one year earlier, aggregate funds under management gained just 0.8 per cent, supported only by growth in Money Market funds.

Growth of the industry was also reflected in both Net Asset Value (NAV) structures. Fixed NAV funds increased by 5.9 per cent to $36,995.9 million, while floating NAV funds rose by 10.5 per cent to $13,956.5 million. The industry's advance was supported by net sales of $2,292.1 million, comprising $12,720.5 million in sales and $10,428.4 million in redemptions. In comparison, the same period in 2019 recorded just $581.3 million in net sales. Over the nine months, net sales were observed in Money Market funds ($785.4 million), Income funds ($859.0 million), and Equity funds ($633.2 million). Furthermore, net sales were concentrated in fixed NAV funds ($1,598.8 million), while floating NAV funds witnessed a notable $693.4 million in net sales.

Collective Investment Scheme (CIS) data[20] from the Trinidad and Tobago Securities and Exchange Commission (TTSEC) confirmed that the mutual fund industry continued to expand over the nine months ending March 2021. According to the TTSEC, total assets under management increased by 7.6 per cent to $60,191.4 million over the period, while total sales of $2,739.1 million supported industry expansion.

Chart IVi
Mutual Funds Under Management by Fund Type



Source: Central Bank of Trinidad and Tobago

[17] 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.

[18] As at the end of December 2020, this value accounted for 84.7 per cent of the total industry assets under management as given by the TTSEC CIS data.

[19] Other funds represent high yield funds and special purpose funds.

[20] CIS data from the TTSEC represents 69 registered funds from 15 issuers.

FEATURE ARTICLE: FACTORS INFLUENCING THE MOVEMENTS IN THE CENTRAL GOVERNMENT (SOVEREIGN) YIELD CURVE

*By: Alon Dhanessar**

In December 2014, the Central Bank of Trinidad and Tobago in collaboration with stakeholders in the financial sector, launched a sovereign benchmark yield curve called the TT Treasury Yield Curve (TTTYC) (CBTT 2014). A sovereign yield curve, also known as the term structure of interest rates, is a graphical representation of the interest rates on government debt[1] over a maturity horizon. Since government borrowing costs are generally used as the benchmark for pricing other types of debt, increases in government yields could trickle through the real economy. A steepening TTTYC could therefore tighten financial conditions and undermine economic recovery. This Box, therefore, seeks to examine the factors driving the recent developments in the TTTYC.

The curve can take different shapes during different periods of an economic cycle but is generally upward sloping, meaning the longer the tenor or maturity horizon, the greater the anticipated yield. In this case, the higher tenors add a liquidity or term premium (Keynes 1937), which considers the greater risk of holding long-term debt over short-term debt. Given this dynamic, an observer can use the yield curve as an indicator of economic prospects. Employing a probit model, Dhanessar (2017) determined that the slope of the domestic sovereign yield curve exhibited strong recession and inflation predicting abilities.

The main factors that influence the shape of the yield curve are economic growth and inflation, monetary policy and government debt levels. Strong economic growth often leads to an increase in inflation. Since rising inflation erodes the nominal value of returns and reduces purchasing power, investors would require a higher rate of return on investments to compensate for the rising inflation. Therefore, higher inflation often increases the medium- to long-term sovereign bond yields, causing a steepening curve. Rapid fiscal expansion, which can stimulate economic growth and close output gaps, could lead to a rise in inflation expectations in the long term, resulting in investors demanding higher yields to compensate for the diminishing value of money.

Monetary policy actions can also influence the shape of the curve. Expansionary monetary policy, which reduces short-term rates through an increase in the money supply, can be used to stimulate economic activity. Conversely, contractionary monetary policy increases short-term interest rates through a decline in the money supply, which is often used to slow inflation and an overheating economy. Monetary policy, however, influences short-term rates differently compared to long-term rates. By controlling the money supply, a monetary authority indirectly influences long-term rates through market expectations. If following monetary accommodation, the market anticipates an increase in inflation; long-term rates would rise. Alternatively, if monetary tightening is expected to aggressively slow an economy, then long-term rates would likely fall.

Additionally, in emerging market economies, rising government debt levels could increase risk premiums and yields on government debt. According to Engen and Hubbard (2004), the theoretical framework commonly used to describe the potential effect of government debt on interest rates is based on the aggregate production function for the economy where government debt replaces productive physical capital. Using a Cobb-Douglas production function, the authors determine that an increase in government debt would be expected to increase the long-term real interest rate. Furthermore, using a dynamic general equilibrium model for a panel of 19 industrial countries, Kinoshita (2006) concluded that an increase in the government debt-to-GDP ratio has a small impact on real long-term interest rates. However, if a rise in government debt results from an increase in government consumption, the effect is considerably larger. The relationship between government debt and interest rates is primarily based on the risk of default. If debt levels increase while revenues fall, limiting the ability to repay debt, investors will demand a higher interest premium to compensate for the higher default risk.

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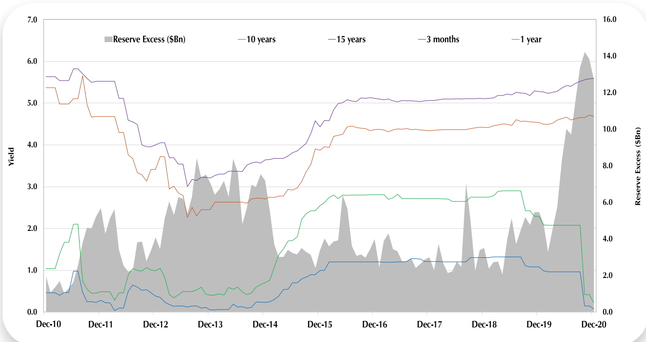
FEATURE ARTICLE (CONT'D): FACTORS INFLUENCING THE MOVEMENTS IN THE CENTRAL GOVERNMENT (SOVEREIGN) YIELD CURVE

Historically, the Trinidad and Tobago Government yield curve has generally followed domestic economic cycles and the Central Bank's monetary policy actions. Following the effects of the global financial crisis, the Central Bank adopted an accommodative policy position, reducing the Repo rate on multiple occasions from 8.75 per cent in December 2008 to 2.75 in September 2012, where it remained until September 2014. Over December 2010 to June 2014, policy accommodation allowed excess reserves in the banking system to climb from $1.9 billion to roughly $7.6 billion (**Figure A**). The increase in liquidity conditions resulted in the short-term 3-month rate declining by 34 basis points to 0.12 per cent, while the 1-year rate fell by 44 basis points to 0.60 per cent. However, the long-term 10-year and 15-year benchmark rates recorded substantial declines, plummeting by 274 basis points to 2.63 per cent and 226 basis points to 3.37 per cent, respectively.

Subsequently, the anticipation of higher interest rates in the US and rising domestic inflation caused the Central Bank to adopt a tightening monetary policy position, increasing the Repo rate to 4.75 per cent by December 2015. The Bank then maintained a neutral position, increasing the Repo rate only once in June 2018 to 5.00 per cent. Over the four years to June 2018, excess liquidity declined to $2.7 billion, apart from a few instances of large increases to accommodate primary capital market activity by the Government. Accordingly, the policy position allowed the short-term 3-month and 1-year rates to increase by 108 basis points to 1.20 per cent and by 205 basis points to 2.65 per cent, respectively. Similarly, the 10-year and 15-year rates jumped by 174 basis points to 4.37 per cent and 173 basis points to 5.10 per cent correspondingly.

FIGURE A
MOVEMENTS IN SELECTED TENORS OF THE TT GOVERNMENT YIELD CURVE
(DECEMBER 2010 TO DECEMBER 2020)



Source: Central Bank of Trinidad and Tobago

Over the next 18 months to December 2019, the Bank facilitated an increase in excess liquidity to a daily average of $5.4 billion. The short-term 3-month rate fell by 12 basis points to 1.08 per cent, and the 1-year rate dropped 36 basis points to 2.29 per cent. Conversely, the long-term 10-year and 15-year rates increased by 17 basis points to 4.54 per cent and 5.27 per cent, respectively. The movements in the longer-term rates suggested that another factor was outweighing the effect of higher liquidity conditions.

During the following year (2020), the impact of the COVID-19 pandemic resulted in domestic economic conditions contracting significantly. The effects of both the COVID-19 shock and the energy price shock exacerbated the growing fiscal and external imbalances. In response to the pandemic, the Central Bank undertook an extraordinary policy action[2], resulting

FEATURE ARTICLE (CONT'D): FACTORS INFLUENCING THE MOVEMENTS IN THE CENTRAL GOVERNMENT (SOVEREIGN) YIELD CURVE

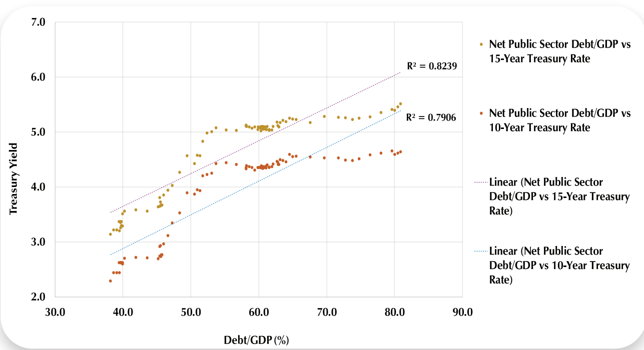
in an amplification of system liquidity, from an annual average of just under $4.0 billion in 2019 to $9.4 billion in 2020, peaking at $15.2 billion in December 2020. Consequently, the 3-month rate fell by 100 basis points to 0.08 per cent and the 1-year rate plummeted by 207 basis points to 0.22 per cent over the same period. The movements in short-term yields, however, were not reflected in the medium to long-term end of the curve. Over the year, the 10-year rate increased by 14 basis points to 4.68 per cent, while the 15-year rate rose by 32 basis points to 5.59 per cent. Despite monetary policy accommodation and the substantial higher excess liquidity levels, medium to long-term rates rose, which was likely due to rising government debt levels.

Since 2014, government revenue has come under pressure due to volatile energy prices and falling domestic energy production. Consequently, the constraints on government revenue resulted in net public sector debt-to-GDP increasing from 50.5 per cent at the end of December 2015 to 82.7 per cent at the end of December 2020.

According to Moody's Investor Services (2020), Trinidad and Tobago Government's balance sheet weakened since the previous oil price shock in 2014. However, the fiscal space has been further curtailed by another severe shock to oil and gas prices stemming from the COVID-19 pandemic. Trinidad and Tobago's credit ratings have deteriorated over the years partly due to challenges with government revenues. Similar observations were made in other emerging market economies. Sifon-Arevalo et al. (2020A) explain that global sovereign credit ratings continue to indicate an overall deterioration of credit quality as a result of a large build-up of sovereign debt, stemming from low interest rates and low inflation expectations. Furthermore, most sovereigns do not pay down their debt but refinance it on maturity. Therefore, the sustainability of debt dynamics relies heavily on the ability to continue to refinance at current low rates.

The notable increase in government debt and debt serviceability risks likely played an essential role in increasing the medium- to long-term yields on the TTTYC[3]. **Figure B**, which incorporates the 2014 oil price shock and the 2020 COVID-19 shock, shows a statistically significant relationship between government debt levels and long-term yields. The reduction in government revenues likely caused investors to become concerned about the Government's ability to service outstanding debt, in addition to new debt, which was being undertaken to finance persistent government budget deficits. Despite monetary policy accommodation and a substantial jump in excess liquidity, which tends to have the opposite effect on short-term yields, this period was marked by rising medium- to long-term yields on the Treasury yield curve, signifying the increase in risk premium placed on central government debt.

Figure B
Net Public Sector Debt to GDP vs Treasury Yields
(September 2013 to September 2020)



Source: Central Bank of Trinidad and Tobago

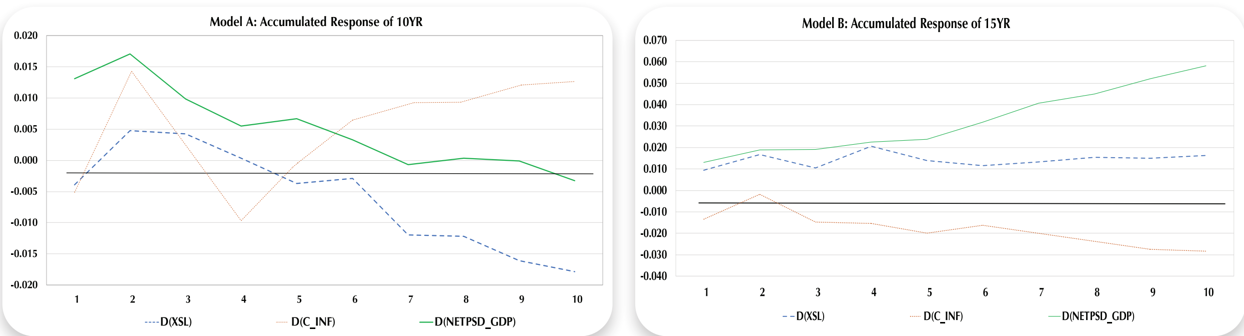
FEATURE ARTICLE (CONT'D): FACTORS INFLUENCING THE MOVEMENTS IN THE CENTRAL GOVERNMENT (SOVEREIGN) YIELD CURVE

To empirically examine the impact of macroeconomic and fiscal factors on the long-term tenors of the Government yield curve, a Vector Error Correction (VEC) model was estimated, as outlined by Sims (1980) and Lütkepohl (2005)[4].

The note examines the impact of a shock to the excess liquidity (XSL), inflation (C_INF), and Net Public Sector Debt to GDP (NETPSD_GDP), on the long-term 10-year (10YR) (empirical model A) and 15-year (15YR) (empirical model B) rates, respectively.

The Impulse Response Functions in **Figure C** indicates that the 10-year rate has a mixed response towards inflation, while the 15-year rate generally reacts negatively. The general upward response of the 10-year rate in the latter periods is likely due to investors seeking higher returns, possibly due to inflation eroding returns. However, the response of the 15-year rate is more likely due to a flattening or inversion of the yield curve, following a contractionary monetary policy response.

FIGURE C
ACCUMULATED RESPONSE OF LONG-TERM YIELDS TO INNOVATIONS USING GENERALISED FACTORS – IMPULSE RESPONSE FUNCTIONS



Source: Author's Estimates Based on Eviews

On the other hand, during monetary policy accommodation, the Central Bank often allows excess liquidity to build, which pushes down short-term rates on the yield curve. Although excess liquidity conditions directly impact short-term Treasury rates, the response on the long-term end of the yield curve is somewhat mixed. The 10-year rate initially increases before declining, while the 15-year rate generally responds positively. The results suggest that accommodation and elevated liquidity levels can take some time to work through the curve. However, the positive response of the 15-year rate also suggests that investors anticipate the high liquidity conditions to support economic growth and steepen the yield curve.

Lastly, a shock to public sector debt results in an initial jump in the 10-year rate before subsiding over the 10 periods, while the 15-year rate continues to trend up. These results confirm that higher government debt levels directly influence the longer-term rates on the government yield curve. Additionally, the difference in response between the 10-year and 15-year rates could be associated with the preferred habitat theory[5]. In this case, investors appear to prefer the 10-year security given by the eventual fall in yield and, therefore, increase in bond price. On the other hand, the increasing 15-year yield response suggests that the 15-year bond price is declining due to reduced demand. Therefore, investors prefer the 10-year as opposed to the 15-year asset, probably due to elevated government debt levels inducing fiscal sustainability concerns and reduced demand for very long-term assets that are at greater risk of default.

FEATURE ARTICLE (CONT'D): FACTORS INFLUENCING THE MOVEMENTS IN THE CENTRAL GOVERNMENT (SOVEREIGN) YIELD CURVE

Against the backdrop of the COVID-19 shock and the downside risks to the domestic economic and fiscal positions, reflected in the weakening of the sovereign credit ratings, the increase in government debt levels has been the main driver in the uptick in medium- to long-term yields on the TT Treasury Yield Curve. Although excess system liquidity is at record high levels, placing downward pressures on short-term rates, this has not translated into a reduction of rates on the longer end of the curve. Instead, investors are pricing in higher risk and term premiums for government debt, triggered by more active Central Government borrowing. While debt and debt servicing levels are anticipated to continue rising, the deployment of reserves from the Heritage and Stabilisation Fund (HSF) can contain the pace of increase in government debt and limit the upward pressures on medium- to long-term rates. Alternatively, if excess liquidity levels are kept elevated for an extended period, this could inflate the demand for government debt, place upward demand pressures on bond prices and lower medium to long term yields. However, this scenario is unlikely to occur in the short term.

During this subdued economic period, an increase in medium- to long-term government bond yields can have two major implications. Firstly, since government debt is often considered a risk free benchmark, an increase in the medium- to long-term government bond yields may also signal higher borrowing rates for the private sector. The increase could further limit private sector borrowing activity and affect private sector debt repayment capacity. Furthermore, despite a decline in short-term rates, the effectiveness of monetary accommodation could be limited by the dampening credit effect of higher medium- to long-term benchmark rates on private sector borrowing. Secondly, the long-term 15-year rate is directly linked to the calculation of the quarterly Mortgage Market Reference Rate (MMRR)[6], which some banks use to price and reprice their residential mortgage rates on variable- and adjustable-rate mortgages (CBTT 2017). A rise in the 15-year rate would increase the MMRR, thus increasing the mortgage interest expense of residential mortgage holders. Given the current economic climate, this counters current policy objectives of creating and maintaining favourable financial conditions.

Notes

[1] The term structure of interest rates on government debt represents the borrowing costs or interest cost for a government.

[2] In March 2020, the Central Bank reduced the repo rate by 150 basis points to 3.5 per cent and to lowered the primary reserve requirement on commercial bank deposits by 3.0 per cent to 14.0 per cent.

[3] Given the inverse relationship between bond price and yields, the increase in medium- to long-term yields on the curve was reflected in the Central Government Price Index which declined by 1.5 per cent over 2020

[4] [4] The basic form of a VAR model consists of a set of ***K*** variables $Y_t=(Y_{1t}, Y_{2t}, \ldots, Y_{kt})$ observed at time $t=0,1,2,\ldots,T)$ and defined with order p as: $Y_t= \omega + A_1 Y_{t-1} + A_2 Y_{t-2} + \ldots + A_p Y_{t-p} + \varepsilon_t$

and A_i are (K×K) coefficient matrices for each $i=1,2,\ldots,p$ (p is a positive integer); $\omega=(\omega_1,\ldots,\omega_k)^\wedge{}'$ is a fixed (K×1) vector of intercept terms; $\varepsilon_t=(\varepsilon_{1t},\ldots,\varepsilon_{Kt})'$ is a K-dimensional white noise with covariance matrix $\sum u$; and n is the number of lags in the VAR system.

The VAR model to be estimated can be denoted as follows:

$$Y_t = \sum_{p=1}^{n} w_t + A_p Y_{t-p} + \varepsilon_t$$

Preconditions of stationarity and cointegration were determined and the estimation of the VEC satisfied statistical diagnostic tests.

[5] The preferred habitat term structure model suggests that even if expected returns are equal, investors generally prefer a specific period-bond (Walsh 2017). For example, pension funds usually prefer long-term bonds, while money-market funds would prefer short-term bonds.

[6] The MMRR is currently calculated as the equally weighted sum of the 15-year rate and commercial bank system cost of funds.

FEATURE ARTICLE (CONT'D): FACTORS INFLUENCING THE MOVEMENTS IN THE CENTRAL GOVERNMENT (SOVEREIGN) YIELD CURVE

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