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BANK OF JAMAICA

Quarterly Monetary Policy Report

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Monetary Policy at the Bank of Jamaica

Bank of Jamaica's monetary policy objective is to achieve an inflation target of 4 – 6 per cent per annum. This low, stable and predictable inflation rate, measured as the change in the consumer price index that is published by the Statistical Institute of Jamaica, will facilitate sustained growth and development in Jamaica.

The inflation target was established by the Minister of Finance and the Public Service in consultation with Bank of Jamaica in September 2017.

The Bank uses a variety of tools to achieve its inflation target, the main one being the interest rate on overnight balances in the current accounts of deposit-taking institutions at Bank of Jamaica. Changes in the Bank's policy rate signals the Bank's policy stance towards achieving its inflation objective, which is transmitted to prices through the financial markets and then through spending and investment decisions.

Monetary policy decisions affect inflation with a lag of between 4 to 8 quarters. For this reason, monetary policy in Jamaica is forward looking and the Bank puts much effort into establishing its view of the economy in the future, and bases its decision on this view. It is also important that the Bank clearly and transparently communicates this view of the future to the Jamaican public. The Bank undertakes an assessment of the economy eight times during each calendar year and publishes its decisions in accordance with a pre-announced schedule. On four of these occasions, when most data on the key macro-economic variables are available, the Bank prepares a comprehensive macroeconomic forecast covering the international economy, the fiscal accounts, balance of payments, money, credit, interest rates, GDP and prices.

This Monetary Policy Report describes the Bank's most recent policy decision by the Bank and outlines the Bank's projections for inflation in Jamaica and the main macroeconomic variables that affect it. The Monetary Policy Report is prepared and published once every three months at the time of four of the Bank's monetary policy announcements.

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Overview

During the March 2019 quarter, Bank of Jamaica reduced the policy interest rate by 25 bps on two occasions, on 21 February and 27 March to end the quarter at 1.25 per cent. The policy actions were aimed at stimulating a pick-up in the rate of expansion in private sector credit, which should lead to higher economic activity and support inflation returning to the target range of 4.0 per cent to 6.0 per cent. The reduction in the signal rate, complemented by the liquidity injection from a 3.0 percentage point (or $17.8 billion) reduction in the cash reserve requirement (CRR), facilitated a reduction in money market interest rates for the March 2019 quarter. In addition, the Bank implemented refinements to the monetary policy operational environment to improve the monetary policy transmission mechanism. In that regard, effective 01 March 2019, the overnight deposit facility for deposit-taking institutions (DTIs) was discontinued and the Bank commenced paying interest on the overnight balances in the current accounts of DTIs. The applicable interest rate on these accounts is the Bank of Jamaica's policy rate.

Annual inflation for March 2019 accelerated to 3.4 per cent from 2.4 per cent at December 2018, but remained below the lower limit of the target band of 4.0 per cent to 6.0 per cent. This acceleration largely reflected the impact of higher prices for agricultural foods, processed foods and other services. The effect of these increases was partly offset by a decline in electricity costs. Over the next eight quarters, inflation is projected to average 4.5 per cent, falling below the lower limit of the target band at various points during the period, then gradually approach the Bank's 5.0 per cent target. This forecast is mainly predicated on low, albeit improving domestic demand, relative to capacity and moderate increases in international commodity prices.

The Jamaican economy is estimated to have grown in the range of 1.0 per cent to 2.0 per cent for the March 2019 quarter, above the 1.4 per cent recorded for the March 2018 quarter. This growth mainly reflected an improvement in net external demand, augmented by increases in investment spending and private consumption. All industries are estimated to have recorded growth for the quarter, in particular Mining & Quarrying, Construction and Tourism. Real GDP growth is projected to trend upwards within the range of 1.5 per cent to 2.5 per cent over the June 2019 to March 2023 quarters but remain below potential output. The forecast horizon reflects growth in foreign demand, more accommodative fiscal policy in the short run and generally accommodative monetary conditions. From the perspective of aggregate supply, GDP growth over the next eight quarters is expected to be buoyed mainly by the Mining & Quarrying, Agriculture, Forestry & Fishing, Hotels & Restaurants and Manufacture sectors.

Global economic growth for the March 2019 quarter is estimated to have decelerated relative to the December 2018 quarter. Global growth projections for the next eight quarters have been revised downwards by 0.1 percentage point to an average of 3.3 per cent and is expected to be maintained at that level over the medium-term. In particular, US GDP growth for the next eight quarters is projected in the range of 1.8 per cent to 2.3 per cent, and to average 1.8 per cent over the medium term.

Given the path for Jamaica's balance of payments, the current account deficit is assessed to be broadly sustainable, supported by more than adequate foreign reserves with non-borrowed reserves projected to be above the programmed floor through to September 2019.

Accommodative monetary conditions as well as increased competition in the market for loanable funds continued to support growth in overall financing in Jamaica. The monetary aggregates (monetary base and broad money) and private sector credit grew faster than anticipated in the March 2019 quarter and are projected to grow at a slightly faster rate than previously anticipated over the next eight quarters. This, however, is not expected to induce significantly higher inflation.

The Bank will maintain an accommodative policy stance aimed at returning inflation to the centre of the target range over the medium-term. However, the Bank will act promptly to address any undesirable risk to inflation that may emerge and will continue to use its policy tools to maximise the benefits of low, stable and predictable inflation expectations in Jamaica

Brian Wynter
Governor

Contents

ABBREVIATIONS & ACRONYMS

B-FXITT	Bank of Jamaica's Foreign Exchange Intervention & Trading Tool
BOJ	Bank of Jamaica
BOP	Balance of Payments
Brexit	British Exit
bps	Basis points
CAD	Current Account Deficit
CDs	Certificates of Deposit
CDI	Credit Demand Index
CIF	Cost, Insurance and Freight
CPI	Consumer Price Index
CPI-AF	Consumer Price Index without Agriculture and Fuel
CPI-F	Consumer Price Index without Fuel
CPI-FF	Consumer Price Index without Food and Fuel
CSI	Credit Supply Index
CY	Calendar Year
DIJA	The Dow Jones Industrial Average
DTIs	Deposit-taking Institutions
EFR	Excess funds rate
EGOF	Electricity, Gas & Other Fuels
EMBI+	JP Morgan Emerging Market Bond Index
e.o.p	End of Period
EPI	Export Price Index
EFR	Excess Funds Rate
Fed	US Federal Reserve System
FNB	Food & Non-Alcoholic Beverages
FTSE	Financial Times Stock Exchange
FY	Fiscal Year
GDP	Gross Domestic Product
GOJ	Government of Jamaica
GOJGBs	Government of Jamaica Global Bonds
HWEG	Housing, Water, Electricity Gas & Other Fuels
IES	Inflation Expectations Survey
IMF	International Monetary Fund
IPI	Import Price Index
IRC	Interest Rate Corridor
JMD	Jamaica Dollar
JSE	Jamaica Stock Exchange

LHS	Left Hand Side
LME	London Metal Exchange
M2J	Broad money supply
M2+	Broad money supply that includes foreign currency deposits
MCI	Monetary Conditions Index
NDA	Net Domestic Assets
NIR	Net International Reserve
NOP	Net Opening Position
o/w	Of which
O/N	Overnight
OMO	Open Market Operations
PMMR	Private Money Market Rates
QoQ	Quarter over Quarter
QPC	Quantitative Performance Criteria
RADA	Rural Agriculture Development Agency
REER	Real Effective Exchange Rate
S&P	Standard & Poor's
SBA	Stand-by Agreement
SCT	Special Consumption Tax
SLF	Standing Liquidity Facility
T-Bill	Treasury Bill
TP	Trading Partners
UR	Unemployment Rate
US	United States
USD	US dollar
WASR	Weighted Average Selling Rate
WTI	West Texas Intermediate

1.0 Inflation

Annual inflation in Jamaica accelerated to 3.4 per cent at March 2019 from 2.4 per cent at December 2018, largely reflecting higher prices for agricultural foods, processed foods and services. The effect of these increases was partly offset by a decline in electricity costs.

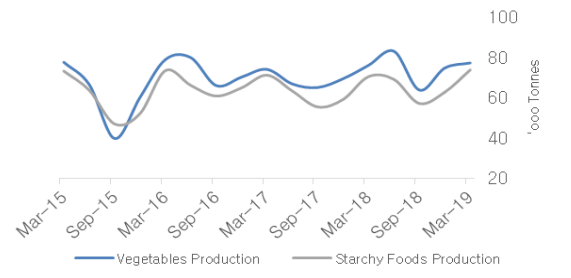
Inflation is projected to average 4.5 per cent over the next eight quarters (June 2019 – March 2021) before gradually approaching the Bank's 5.0 per cent target in the medium term. This outlook reflects slightly higher inflation over the next four quarters, relative to the previous forecast, but relatively lower inflation over the medium term. The inflation forecast is mainly predicated on continued limited pass through of improved domestic demand conditions to prices and moderate increases in international commodity prices. International oil prices are expected to average US$58.82 per barrel over the next eight quarters, representing an average quarter-over-quarter increase of 0.9 per cent, compared with the average of US$56.36 per barrel (or average quarter-over-quarter increase of 1.5 per cent) previously projected.

Recent Developments and Near-term Outlook

The annual point-to-point inflation rate at March 2019 was 3.4 per cent, an acceleration relative to the 2.4 per cent recorded at December 2018 but a deceleration relative to the 3.9 per cent recorded at March 2018. The inflation rate at March 2019, which was lower than the Bank's February 2019 projection of 3.7 per cent, also fell below the Bank's target of 4.0 per cent to 6.0 per cent.

The acceleration in inflation, relative to the preceding quarter, mainly reflected the impact of increases in the prices of agricultural food items, particularly vegetables. The supply of vegetables was seasonally lower in the March 2019 quarter, resulting in price pressures for some of agricultural food items (see **Figure 1**). The year-on-year increase in the vegetables and starchy foods sub-division of the CPI therefore accelerated to 12.1 per cent at March 2019 from 0.1 per cent at December 2018.[1] This was partially offset by a decline in electricity rates, driven by a 15.4 per cent reduction in oil prices during the December 2018 quarter as well as some diversification of the fuel mix in the industry.[2] In the context of the fall in electricity rates, the *Electricity, Gas & Other Fuels* (EGOF) sub-division declined by 1.2 per cent at March 2019 relative to an increase of 5.6 per cent at December 2018.

Figure 1: Vegetables and Starchy Foods Supply (Tonnes)



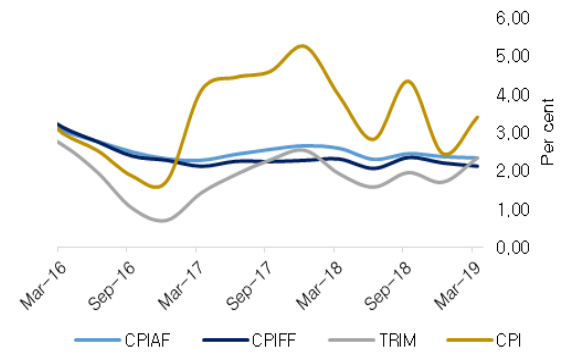
Source: MOA & BOJ Calculations
The graph represents quarterly supply (in tonnes) for vegetables and selected starches provided by Ministry of Agriculture.

The Bank's main measure of core inflation (inflation that excludes the immediate influence of agriculture and energy prices – referred to as CPIAF) remained low during the quarter. CPIAF at March 2019 was 2.3 per cent, a deceleration relative to 2.4 per cent at December 2018 (see **Figure 2**). Relatively low underlying inflation is symptomatic of low (relative to capacity), albeit improving demand conditions over the preceding four quarters, as well as the second round effects of lower oil prices.

[1] The acceleration in agriculture prices for the March 2019 quarter also reflects base effects – the CPI had fallen in the March 2018 quarter due to significant reductions in agriculture prices.

[2] Electricity rates declined by 0.8 per cent during the March 2019 quarter and by 3.1 per cent during the December 2018 quarter.

Figure 2: Core Inflation and CPI
(Annual per cent change)



Source: STATIN & BOJ

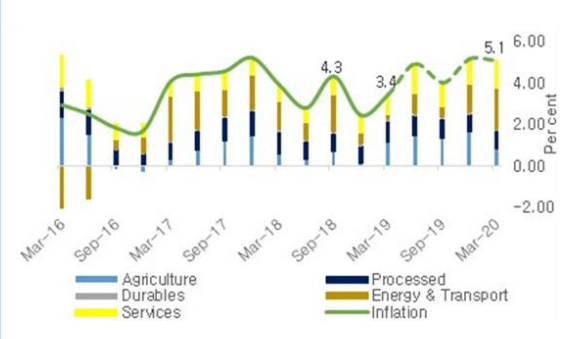
Inflation Outlook & Forecasts

Inflation is projected to average 4.5 per cent over the next eight quarters (June 2019 – March 2021) before gradually approaching the Bank's 5.0 per cent target in the medium term. Bank of Jamaica's projections also indicate that inflation will fall below the lower limit of the 4.0 per cent to 6.0 per cent target at various points over the period April 2019 to March 2020. The projected trajectory for inflation over the next year is driven by, *inter alia*, (1) a normalization (increase) in domestic agricultural prices and (2) the effect of higher economic activity, given the accommodative monetary conditions induced by the central bank over the past year and a slight easing of fiscal policy.

In this context, inflation is projected to accelerate to 4.9 per cent at June 2019 and then decelerate to 4.0 per cent at September 2019 (see **Figure 3**). This forecast is marginally higher relative to the previous forecast and includes minor changes to the timing of some anticipated price increases. The acceleration for the June 2019 quarter partly reflects base effects – the CPI had fallen in the June 2018 quarter due to significant reductions in agriculture prices and electricity rates. Higher inflation for the June 2019 quarter is also expected to reflect accelerations in the *Housing Water Electricity Gas & Other Fuels* (HWEG) and the *Food & Non-Alcoholic Beverages* (FNB) divisions. The acceleration in HWEG primarily reflects the impact of an anticipated increase in water rates.[3] With regard to FNB, agricultural prices are expected to continue to normalise (rise) following the significant declines in December 2018. Lower inflation for the September 2019 quarter is mainly related to a projected deceleration in the pace of increase in electricity rates. This partly reflects the assumed forecast track for international oil prices which envisaged a sharp but short-lived uptick in oil prices over the March 2019 to June 2019 quarters (see **Commodity Prices** in the International Economy section).

Inflation is projected to accelerate to 5.1 per cent at December 2019, driven mainly by the continued normalization in agriculture prices and then average 5.1 per cent over the March 2020 and June 2020 quarters in the context of the support provided by current and prospective monetary accommodation.

Figure 3: Component Contribution to Inflation



Source: STATIN & BOJ

The Bank's Survey of Businesses' Inflation Expectations (IES) at March 2019 indicated that the

[3] The forecast for the water rate incorporates the expected impact of the National Water Commission's (NWC) submission to the Office of Utilities Regulation (OUR) for a tariff increase for the period January 2019 to December 2021. If approved, the tariff adjustment will result in an average increase of approximately 34.8 per cent in the bill for customers with access to water and sewerage services. This is expected to have a direct effect of 0.4 percentage points on inflation in the June 2019 quarter

business sector's one-year-ahead inflation expectations of 4.5 per cent was marginally below the mid-point of the Bank's inflation target of 5.0 per cent and below the results of the previous survey (see **Box 1: Businesses' Inflation Expectations Survey**).

Inflation Risks

The risks to the near term inflation forecast are balanced. With regard to downside risks (i.e. lower inflation), production in the agriculture sector could be better than anticipated given the possibility of more favourable weather conditions, leading to lower rates of increases in food prices. In addition, domestic demand could be lower than forecasted, particularly in the context of an escalation in global trade tensions. On the upside (i.e. higher inflation), there is a possibility that international oil prices could track above the baseline forecast.

The domestic output gap is projected to be less negative for FY2019/20, relative to the previous forecast, due to an anticipated reduction in fiscal consolidation and an assumption of higher investment (construction) growth. A less optimistic outlook for the external environment and an upward revision to the assumption for the long run fiscal surplus however influence a slightly more negative output gap over the medium term.

Inflation is projected to rise gradually to around 5.0 per cent by the June 2024 quarter, a path that continues to carry some risk of a breach of the lower limit of the target in the context of heightened volatility in agricultural prices. Between the June 2020 and the March 2021 quarter, inflation is projected to track below the Bank's 5.0 per cent target (average of 4.4 per cent). While core inflation is expected to trend upwards over this period, it is projected to remain below the level required to attain the inflation at target (see **Figure 4**).

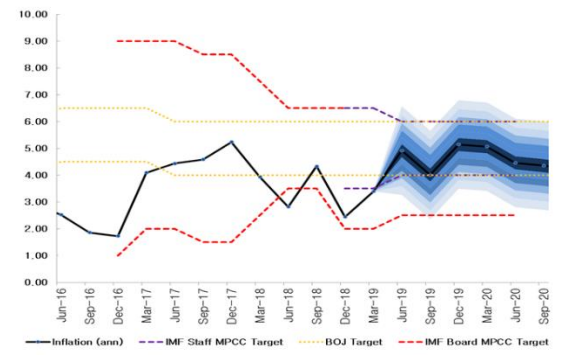
The projected trajectory of inflation over the September 2019 to March 2021 quarters is higher relative to the previous forecast but lower than previously projected over the medium term. The marginally lower medium term inflation path reflects a changed (i.e. lower) assumption about inflation expectations as well as a moderated pace of expansion in domestic demand. The latter change is due to a less positive outlook for external demand and a revised assumption (upwards) about the size of the long term fiscal surplus.

Figure 4: Comparative Core Inflation Forecasts

Note: "Simulated Core" reflects the level of core inflation that is required to maintain inflation at 5.0%

Source: Bank of Jamaica

Figure 5: Annual Inflation Fan Chart (per cent)



Source: STATIN & BOJ

Box 1: Businesses' Inflation Expectations Survey – March 2019

Overview

The Bank's Survey of Businesses' Inflation Expectations (IES) at March 2019 indicated that one-year-ahead inflation expectations of 4.5 per cent, below the mid-point of the Bank's inflation target of 5.0 per cent. As was the case in the previous survey, respondents expect the cost of utilities to reflect the highest increases among input factors over the next twelve months. The proportion of respondents who held this view was largely unchanged relative to the December 2018 survey. On the other hand, Raw Materials was least expected to increase over the next twelve months. There was an increase in the proportion of respondents anticipating higher costs for Wages/Salaries with a corresponding decline in the proportion indicating higher Stock Replacement costs during the year. The expected average increase in wages rose to 6.8 per cent, relative to the 5.9 per cent in the previous survey. Approximately forty-three (43) per cent of the respondents anticipated an increase in wages over the next twelve months, a decline relative to that in the December 2018 survey. Perceptions about present and future business conditions improved in the latest survey.

Inflation Expectations

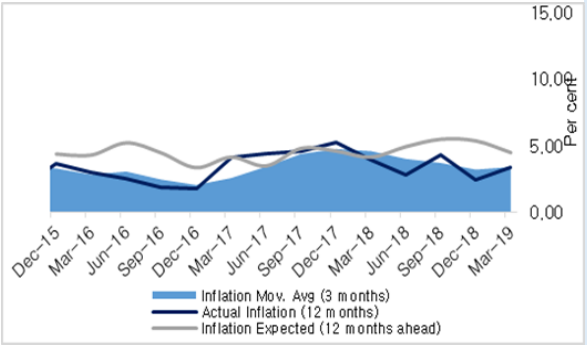
In the March 2019 survey, respondents' expectation of inflation 12 months ahead fell to 4.5 per cent, relative to 5.4 per cent in the December 2018 survey. Furthermore, businesses expected an inflation rate for CY2019 of 4.2 per cent, which is above the CY2018 outturn of 2.4 per cent (see Figure 1).

Perception of Inflation Control

The index of inflation control improved when compared to the December 2018 survey (see Figure 2). This outturn resulted from a decline in the share of respondents who were "neither satisfied nor dissatisfied" and an increase in the share of respondents who were "satisfied" and "very satisfied."

Figure 1: Expected 12-Month Ahead Inflation

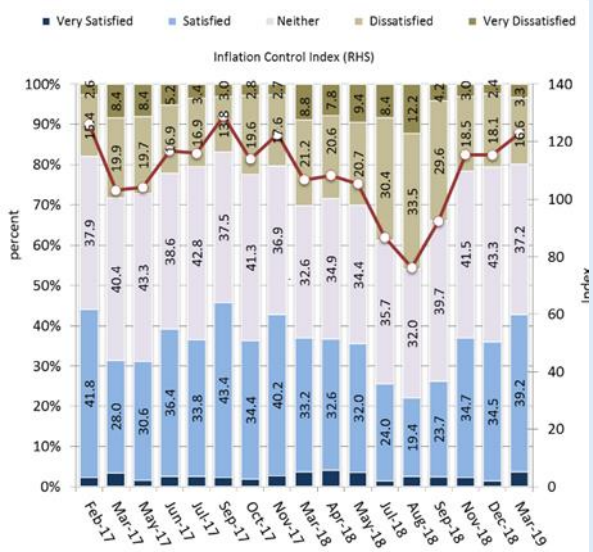
Question: Based on the average monthly inflation for the last 12 months, what do you think the average monthly rate will be for the next 12 months?



Source: Businesses' Inflation Expectations Survey

Figure 2: Perception of Inflation Control

Question: How satisfied are you with the way inflation is being controlled by the Government?



Source: Businesses' Inflation Expectations Survey

Notes: The Index of Inflation Control is calculated as the number of satisfied respondents minus the number of dissatisfied respondents plus 100

Exchange Rate Expectations

Relative to the December 2018 survey, respondents expected the exchange rate to appreciate over the next 3-month, 6-month and 12-month horizons (see Table 1). In addition, relative to the December 2018, respondents expected an increase in the pace of appreciation.

Table 1: Exchange Rate Expectations

Question: : In October 2018 the exchange rate for the Jamaican Dollar (JA$) in respect of the United States Dollar (US$) was $131.75. What do you think the rate will be for the following periods?

	Expected Depreciation (%)			
Periods Ahead	**Sep-18**	**Nov-18**	**Dec-18**	**Mar-19**
3-Month	0.0	-6.1	-2.3	-2.6
6-Month	0.7	-5.6	-1.7	-2.1
12- Month	1.5	-5.2	-0.8	-1.1

Source: Businesses' Inflation Expectations Survey.
Note: The responses have been converted to percentage change.

Interest Rate Expectations

The majority of respondents expected the Bank's policy rate, three months ahead, to remain unchanged. The proportion of respondents of this view increased relative to the previous survey while there was a decline in the proportion who believe it will be "significantly higher." The 90-day Treasury bill (T-Bill) yield, three months ahead, was expected to increase to 2.6 per cent from the expected 1.9 per cent recorded in the December 2018 survey.

Perception of Present and Future Business Conditions

In the March 2019 survey, businesses were more optimistic about present business conditions as the proportion of respondents of the view that conditions are "better" increased. Relative to December, businesses were also more optimistic about the future as the proportion of respondents who believed that conditions will be "better" increased.

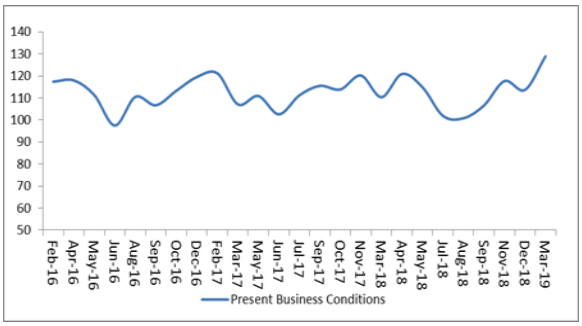
Expected Increase in Operating Expenses

Respondents indicated that they expected the largest increase in production costs over the next 12 months to emanate from utilities. This was followed by stock replacement and costs for fuel/transport. The least was raw material costs (see Table 2).

[4] The 3-month, 6-month and 12-month horizons.

Figure 3: Perception of Present Business Conditions

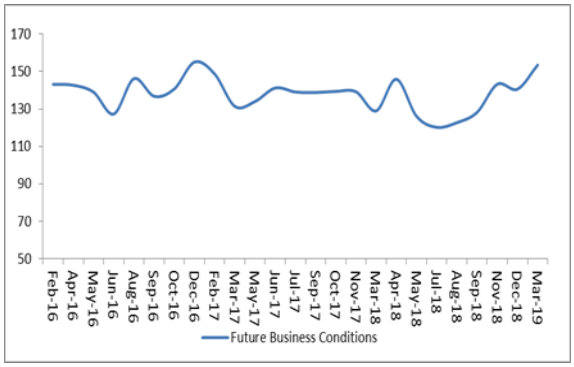
Question: In general, do you think business conditions are better, about the same or worse than they were a year ago in Jamaica?



Source: Businesses' Inflation Expectations Survey
Notes: The Index is calculated using the balance score method (Better – Worse +100)

Figure 4: Perception of Future Business Conditions

Question: Do you think that a year from now business conditions will get better, about the same as present or get worse?



Source: Businesses' Inflation Expectations Survey
Notes: The Index is calculated using the balance score method (Better – Worse +100)

Table 2: Expectations about Operating Expenses

Question: Which input do you think will have the highest price increase over the following time periods?[4]

	Nov-18	Dec-18	Mar-19
Utilities	43.0	30.7	28.9
Wages/Salaries	7.9	7.2	13.0
Fuel/Transport	14.7	18.1	21.6
Stock Replacement	21.1	30.0	24.6
Raw Materials	9.8	8.9	10.6
Other	3.4	5.1	1.3
Not Stated	0.0	0.0	0.0

Source: Survey of Businesses' Inflation Expectations (IES)

2.0 International Economy

Global economic growth for the March 2019 quarter is estimated to have decelerated relative to the December 2018 quarter. Global growth projections for the next eight quarters have been revised downwards by 0.1 percentage point to an average of 3.3 per cent and is projected to average 3.3 per cent over the medium-term.

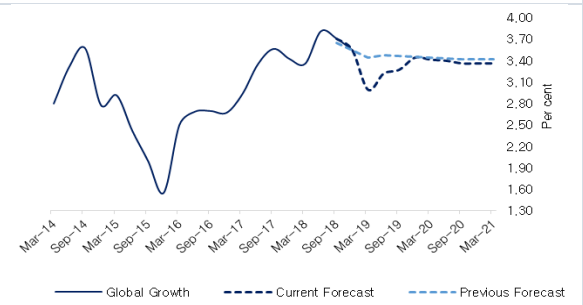
The US Federal Reserve maintained interest rates in May 2019 in the context of global economic and financial developments and muted inflation pressures. In light of the US' patient posture on future interest rate adjustments and a decline in Jamaica's sovereign risk premium, the yields on GOJ global bonds declined over the quarter. BOJ anticipates that there will be a cumulative decline in the Fed Funds rate in the December 2019 and June 2020 quarters, which will support a downward drift in market interest rates, including sovereign bond yields. The spreads on GOJ sovereign bonds are expected to remain relatively stable over the next eight quarters. Jamaica's Terms of Trade (TOT) Index for FY2019/20 is projected to deteriorate relative to the previous projection. This revision mainly reflects the impact of higher crude oil prices.

Trends in the Global Economy

Global economic growth for the March 2019 quarter is estimated at 3.0 per cent, a slowdown of 0.5 percentage point relative to the growth in the December 2018 quarter. This estimate is also 0.4 percentage point below the Bank's previous forecast and reflects weaker growth in a number of economies, including the US, China and Japan. There was, however, stronger growth in Canada (see **Box 2: Global Economic Growth in Selected Economies**).

Global growth is projected to expand at an average pace of 3.3 per cent over the next eight quarters (June 2019 to March 2021), 0.1 percentage point lower than the previous projection. Global growth is projected to average 3.3 per cent over the medium-term (see **Figure 6**).[5] The downward revision to growth mainly reflects (i) the ongoing negative effects of the import tariffs enacted in September 2018 by the US and China, (ii) weaker performance in some economies, in particular China and (iii) a weaker outlook for some key emerging market and developing economies arising from country-specific factors.

Figure 6: Global Growth Projection
(Per cent)



Source: Bloomberg

[5] According to the IMF in the April 2019 World Economic Outlook (WEO), global growth is projected to moderate from 3.6 per cent in 2018 to 3.3 per cent in 2019 and then to return to 3.6 per cent in 2020. The forecast for 2019 is 0.4 percentage point lower than in the October 2018 WEO, while the forecast for 2020 is 0.1 percentage point lower. The forecast assumes a pickup in the second half of 2019 which is predicated on an ongoing buildup of policy stimulus in China, recent improvements in global financial market sentiment, the waning of some temporary drags on growth in the Euro Area and a gradual stabilization of conditions in stressed emerging market economies, including Argentina and Turkey. Beyond 2020 global growth is projected to remain at approximately 3.6 per cent over the medium term, similar to the medium-term forecast of the October 2018 WEO, sustained by the increase in the relative size of economies, such as those of China and India, which are projected to have robust growth by comparison to slower-growing advanced and emerging market economies. The balance of risks to the outlook remains on the downside.

Box 2: Global Economic Growth in Selected Economies

China

Economic growth in the Chinese economy is estimated at 6.4 per cent for the March 2019 quarter, similar to the expansion in the December 2018 quarter. This reflected strong growth in consumption and investment spending. Going forward, a gradual slowdown in China is projected to persist despite increased stimulus measures to counter the negative effect of trade tariffs. [6,7]

For the next eight quarters, GDP growth in China is projected to be in the range of 6.0 per cent to 6.2 per cent.

Japan

Growth in the Japanese economy is estimated to have decelerated to 0.1 per cent in the March 2019 quarter as investments and household spending remained subdued, reflecting the residual impact of severe natural disasters.[8]

For the next eight quarters, the GDP growth in Japan is projected to be in the range of 1.0 per cent to 2.4 per cent.[9]

Canada

The Canadian economy is estimated to have expanded by 0.6 per cent for the March 2019 quarter, an acceleration of 0.2 percentage points compared to the December 2018 quarter.[10]

For the next eight quarters, GDP growth in Canada is projected in the range of 1.7 per cent to 2.0 per cent.

United Kingdom (UK)

The UK economy is estimated to have expanded by 1.5 per cent in the March 2019 quarter, a slightly faster pace of growth when compared to the expansion of 1.4 per cent in the previous quarter. This was mainly driven by an expansion in the services industry.[11] However, prolonged economic uncertainties surrounding BREXIT intensified in March 2019 and will continue to weigh on economic growth.

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[6] Part of the reason for the slowdown in China is demographics given that a declining working age population will prompt the contraction in employment evidenced in 2018 to intensify. However, the main reason for the GDP slowdown is productivity growth. Despite increased optimism about a trade deal, it is projected that the trade surplus with China against the US is likely to be reduced in the next few years. Any potential trade deal will likely involve substantial efforts to reduce bilateral trade imbalances between the US and China, with China importing significantly more US products. In the extreme case of no deal, the US is likely to levy 25 per cent tariffs against all Chinese products, reducing its trade surplus against the US.

[7] On 04 March 2019 Chinese Premier Li Keqiang, in his opening remarks at the annual National People's Congress, announced cuts in taxes and fees worth nearly US$298.00 billion. Li Keqiang also said monetary policy will neither be too tight nor too loose and pledged to keep exchange rate of the Chinese yuan stable. Additionally, China lowered its growth target for 2019 to a range of 6.0 per cent to 6.5 per cent, below the annual expansion of 6.6 per cent in 2018. The lower bound of the target marks a three decade low for China's economic growth.

[8] Japan was affected by several natural disasters during the September 2018 quarter, including one of the country's worst flooding disasters in decades, a magnitude 6.7 earthquake which triggered landslides, a typhoon with winds up to 172km/h (107mph) – the strongest typhoon to hit the country in 25 years, and heatwaves.

[9] Of note, the forecast assumes a contraction in the December 2019 quarter given the Japanese Government's commitment to increase the consumption tax rate to 10.0 per cent from 8.0 per cent in October 2019. The previous tax increase to 8.0 percent from 5.0 percent in April 2014 affected consumers significantly and resulted in a contraction of 7.2 per cent in GDP for the June 2014 quarter.

[10] Canadian GDP expanded by 0.3 per cent in January 2019 relative to December 2018, following monthly contractions in November and December 2018. The growth in the economy was broad-based and included the biggest one-month increase in construction activity in more than five years as well as an increase in manufacturing output. A contraction in the energy sector was partly due to the mandatory oil production curtailments in Alberta.

[11] According to the Office for National Statistics (ONS), monthly GDP growth for January and February 2019 was 0.5 per cent and 0.2 per cent, respectively, as the economy rebounded from the negative growth in December 2018. Services, production, manufacturing and construction all experienced positive month-on-month growth in January 2019 and February 2019, after contracting in December 2018. Some of the pickup in growth may be due to BREXIT stockpiling as the ONS reported anecdotal evidence of companies bringing forward orders before the original 29 March 2019 deadline to leave the European Union.

Growth in the UK economy over the next eight quarters is projected in the range of 1.1 per cent to 1.6 per cent.

Euro Area

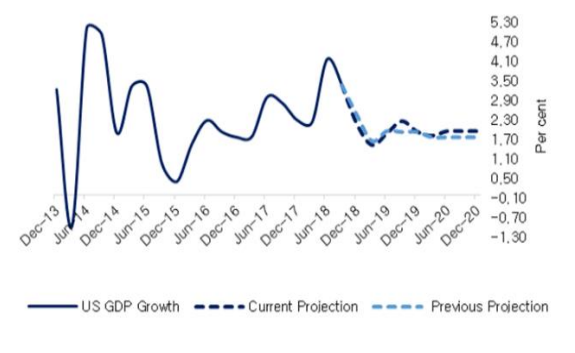
Economic growth for the Euro Area in the March 2019 quarter was estimated at 1.1 per cent, a slightly slower pace of growth when compared to the expansion of 1.2 per cent in the previous quarter.[12] Growth has been lacklustre reflecting weakness in the manufacturing sector mainly due to a slowdown in external demand.

For the next eight quarters, GDP growth in the Euro Area is projected in the range of 1.0 per cent to 1.4 per cent.

The Bureau of Economic Analysis' (BEA's) first estimate indicates that output growth in the US for the March 2019 quarter accelerated to 3.2 per cent, following an expansion of 2.2 per cent in the December 2018 quarter.[13] The acceleration in GDP growth mainly reflected the impact of investment growth, driven by a strong increase in private inventories and an improvement in net exports. There was, however, weaker growth in consumption and business investments.

Between the June 2019 and the March 2021 quarters, real output growth in the US is projected in the range of 1.8 per cent to 2.3 per cent. Growth is projected to improve marginally to 1.9 per cent for the June 2019 quarter and accelerate further to 2.3 per cent for the September 2019 quarter. The near term forecast indicates that US GDP will grow at a slower pace than potential GDP over the next eight quarters (see **Figure 7**). [14]

Figure 7: Comparative US GDP Growth Forecast
(Per cent)



Source: BOJ, CBO

The US output gap is estimated to have been positive since the March 2018 quarter and is expected to remain positive over the forecast horizon (see **Figure 8**).[15] However, the gap has been

[12] According to a preliminary flash estimate published by Eurostat, the statistical office of the European Union, seasonally adjusted GDP rose by 1.2 per cent in the Euro Area for the March 2019 quarter.

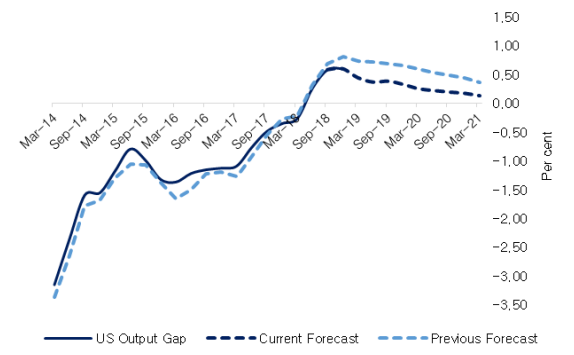
[13] The BEA publication showed that, while the first of three estimates of US real economic output growth for the March quarter was the strongest rate of first-quarter growth in four years, the quality of the growth was weak. The Bank's most recent estimate anticipated that GDP growth for the March 2019 quarter would have slowed to 1.5 per cent. Actual data for the quarter reflected declines in retail and durable goods sales for February 2019, which supports an assessment of slowing consumption and business investment growth. Manufacturing output contracted by 1.0 per cent annualized for the March 2019 quarter, almost reversing the modest 1.3 per cent gain in the December 2018 quarter. Further, manufacturing and non-manufacturing indices of production for the March 2019 quarter were 55.4 and 57.5, respectively, which were lower than those in the December 2018 quarter. Of note, the Institute for Supply Management (ISM) reported that its index of US manufacturing activity for February 2019, reflected the lowest reading since November 2016.

[14] Between the June 2019 and the March 2021 quarters, potential output growth in the US is projected in the range of 2.0 per cent to 2.2 per cent

[15] The output gap equals the difference between historical or projected GDP and the US Congressional Budget Office's (CBO)

revised downwards, given the projection for slower growth in the USA.

Figure 8: US Output Gap
(Per cent of Potential GDP)



Source: BOJ, CBO

The unemployment rate in the US at March 2019 was 3.8 per cent, 0.1 percentage point above the Bank's projection but below the US Federal Reserve's estimate of the natural, longer-term rate of 4.4 per cent.[16] The US unemployment rate is projected to decline over the next eight quarters.[17]

Table 1: Unemployment Rate / Job Seeking Rate for Selected Economies
(Quarterly Average Per Cent)

	USA*	Canada*	Euro
Mar-17	4.5	6.7	9.4
Jun-17	4.3	6.5	9.2
Sep-17	4.3	6.2	9.0
Dec-17	4.1	6.0	8.7
Mar-18	4.1	5.8	8.5
Jun-18	3.9	5.9	8.6
Sept-18	3.8	5.9	8.1
Dec-18	3.8	5.7	8.0
Mar-19	3.9	5.8	7.8

Source: Official statistics offices
* The rates in the table for US and Canada represent job seeking rates. The job seeking rate is the percentage of the labour force actively seeking work. Jamaica's job seeking rate was 5.0 per cent as at January 2019.

The Federal Reserve appears to be at the end of their tightening cycle. On 20 March 2019, the Federal Open Market Committee (FOMC) announced its decision to maintain the US Fed Funds target range of 2.25 per cent – 2.50 per cent, in line with the Bank's projection. In light of global economic and financial developments and muted inflation pressures, the Federal Reserve reiterated its posture to be patient about future adjustments to the target range for the Federal Funds Rate.[18,19] Subsequently, on 01 May 2019, the FOMC announced its decision to maintain the US Fed Funds target range of 2.25 per cent – 2.50 per cent.

estimate of potential GDP and is expressed as a percentage of potential GDP. The US output gap is estimated at 0.6 per cent and 0.4 per cent for the December and March 2019 quarters, respectively. Of note, the CBO revised upwards its historical estimate for US potential GDP, mainly reflecting upward revisions to potential labour force productivity.

[16] The US economy added 196,000 jobs in March 2019, following an increase of 33,000 in February 2019. Job gains occurred in health care and in professional and technical services. However, manufacturing employment declined. Given the global manufacturing slowdown, further US factory job losses are expected over the near term. The number of Americans filing applications for unemployment benefits declined to 202,000 for the week ended 30 March 2019, the lowest level since early December 1969, pointing to sustained labour market strength despite slowing economic growth. Over the year, average hourly earnings have increased by 85 cents, or 3.2 per cent.

[17] The unemployment rate is projected to end FY2019/20 and FY2020/21 at 3.7 per cent and 3.6 per cent, respectively, 0.1 percentage points and 0.2 percentage points below end-FY2018/19.

[18] The "dot plot" suggested that the Federal Open Market Committee anticipated no rate increases in 2019 – a reduction from two increases as at the previous forecast round in December 2018. The FOMC's median forecast for the US Fed Funds rate at end-2019 was consequently revised downward to 2.4 per cent from 2.9 per cent, while the median forecast for the neutral longer-term rate was maintained at 2.8 per cent.

[19] The accompanying policy statement indicated that the Committee viewed the deceleration in growth for the March 2019 quarter as transitory and that future rate adjustments would be determined primarily by incoming economic data. Additionally, the Fed Chairman indicated in his press conference that incoming data did not suggest a movement in either direction for future rate adjustments and that rates may be maintained for some time as global risks continue to weigh on the economic outlook and inflation remains muted.

The Bank anticipates that the Fed will reduce interest rates by a cumulative 50 bps over the ensuing eight quarters (June 2019 to March 2021), with the first 25 bps reduction in December 2019 and the second in June 2020. This is in comparison to the previous projection for further tightening in 2020. The downward revision to the projection reflects (i) mounting downside risks to global economic growth which will impact the demand for US exports, (ii) tight financial conditions and (iii) subdued inflation, even as labour market conditions tighten further.[20]

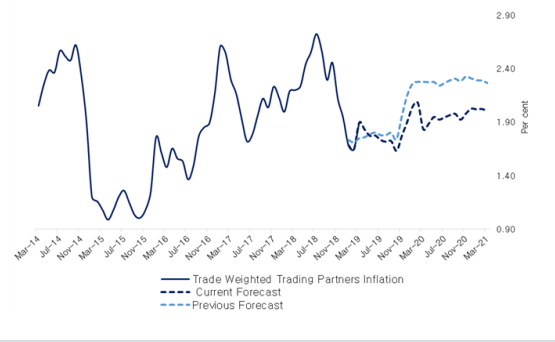
Trading Partners' Inflation

The weighted average of 12-month inflation rates for Jamaica's trading partners' (TP) at March 2019 is estimated at 1.9 per cent. This estimate is above the previous forecast of 1.7 per cent, but in line with the December 2018 outturn. For the US, annual inflation at March 2019 was 1.9 per cent, unchanged from the December outturn but above the previous forecast.[21]

Over the ensuing eight quarters, the Bank projects the inflation rate of Jamaica's main trading partners (TP inflation) in the range of 1.8 per cent to 2.0 per cent, which is lower than the previous forecast given the impact of weaker demand in some economies (see **Figure 9**).[22] The lower TP inflation largely mainly reflects a revised outlook for some commodity prices and weaker global demand conditions. TP inflation is still projected to increase, reflecting the outlook for some commodity prices, particularly fuel.

Figure 9: Trade Weighted Trading Partners' Inflation

(Per cent change)



Source: Bloomberg

Trends in Trading Partners' Exchange Rates

During the review quarter, TP currencies generally appreciated against the US dollar.[23] The weaker US dollar primarily reflected the impact of (i) the US Federal Reserve's 'dovish' stance on the path of future rate increases and (ii) investors' tempered appetite for safe haven assets given optimism about ongoing trade negotiations between the US and China, a favourable resolution of which could positively impact global growth.

Bank of Jamaica projects that, over the next eight quarters, the currencies of Jamaica's major trading partners will, on average, appreciate against the US dollar as domestic growth in the USA slows and the Fed loosens monetary policy (see **Figure 10**). Further, the accumulation of US current account and fiscal deficits is expected to weaken the USD over the forecast horizon.

[20] Reflecting expectations of rate cuts, the two-year Treasury yield has fallen below the current fed funds rate for the first time since the Federal Reserve began publishing policy rate projections in 2012.

[21] A 0.6 per cent rise in headline consumer prices in the US for the month of March 2019, the largest monthly advance since January 2017, was mainly due to continued rebounds in gasoline prices. Excluding food and energy, core CPI inflation however decelerated to a 14-month low of 2.0 per cent. Core PCE inflation decelerated to 1.8 per cent in January 2019 from 2.0 per cent at December 2018. The energy index, a sub-index of the US CPI, declined by 0.4 per cent over the last year, representing the fourth 12-month decline in the energy index.

[22] The inflation rate of Jamaica's main trading partners (TP inflation) for FY2019/20 is projected at 1.9 per cent, below the previous forecast of 2.3 per cent.

[23] There was an average appreciation of 0.3 per cent in the exchange rate of Jamaica's trading partners' vis-à-vis the USD for the March 2019 quarter relative to average for the December 2018 quarter. This compares to the previous forecast for a depreciation of 0.1 per cent. The exchange rate of Jamaica's trading partners' vis-à-vis the USD depreciated, on average, by 2.0 per cent in the March 2019 quarter relative to a year prior. This was generally in line with the Bank's previous forecast for a depreciation of 2.3 per cent.

Figure 10: Trade Weighted Trading Partners' Exchange Rate vis-à-vis USD, May 2013 =100

Source: Bloomberg

Terms of Trade

Jamaica's terms of trade (TOT) index increased at an annual pace of 2.5 per cent at March 2019, following an increase of 11.3 per cent at December 2018.[24] This increase was generally in line with the previous projection. The increase in the index for the period reflected a decline of 2.5 per cent in the import price index (IPI) while the export price index (EPI) remained unchanged. The reduction in the IPI emanated mainly from lower prices for fuel.

Bank of Jamaica projects that Jamaica's TOT will, on average, deteriorate over the ensuing eight quarters (June 2019 quarter to the March 2021 quarter). The projected deterioration is primarily due to higher import prices, driven by fuel. Over the June to September 2019 quarters, the projected deterioration in the TOT reflects smaller declines in import prices relative to declines in export prices. The IPI is projected to decline at an annual rate of 2.7 per cent and 3.1 per cent at June and September 2019, respectively, while export prices are projected to decline, on average by 6.1 per cent and 8.0 per cent over the same period.

Commodity Prices

International commodity prices reflected a general decline during the review quarter. The daily average of West Texas Intermediate crude oil prices for the March 2019 quarter fell by 6.7 per cent, relative to the same measure for the December 2018 quarter and by 12.7 per cent relative to the March 2018 quarter.[25] The decline in crude oil prices mainly emanated from the market's reaction to (i) reports of rising crude production from the US and (ii) heightened concerns about slowing global economic growth stemming from the US-China trade dispute. Notwithstanding the decline in average prices for the March 2019 quarter, there was a general upward trend for crude oil prices during the quarter reflecting the market's reaction to (i) tightening global crude oil supply, driven by OPEC's production cuts; (ii) implementation of sanctions on Venezuela's state-owned oil firm PDVSA, (iii) the possibility of disruption to Libya's crude oil supplies due to increased geo-political tensions and (iv) reports that China pledged to make structural economic changes and eliminate retaliatory tariffs on US goods – increasing optimism that the United States and China would resolve their trade dispute. [26]

Average grains prices for the review quarter were broadly unchanged relative to the December 2018 quarter (a decline of 3.1 per cent on an annual basis). Lower prices for soybean (1.3 per cent decline for the quarter, 11.4 per cent decline on an annual basis) were offset by higher prices for wheat (0.3 per cent increase for the quarter, 11.0 per cent increase on an annual basis) and corn (2.6 per cent increase for the quarter, 2.1 per cent increase on an annual basis). The stability in grain prices for the

[24] At the February 2019 projection the EPI for December 2018 was estimated to have declined at an annual pace of 0.3 per cent. However, actual data for December 2018 showed that the EPI increased at an annual pace of 6.6 per cent.

[25] At end-March 2019, the price of crude oil on the international market was US$60.14 per barrel. The monthly average of West Texas Intermediate crude oil prices for the month of March 2019 increased by 5.8 per cent to US$58.17 per barrel relative to February 2019 – the third consecutive monthly increase and the highest level since October 2018.

[26] OPEC and several non-OPEC countries announced a production reduction of 1.2 million barrels per day (b/d) from their October 2018 production levels for six months beginning in 01 January 2019. The cuts were in response to increasing evidence that oil markets could become oversupplied in 2019. Of note, Saudi Arabia continued to reduce crude production to about 9.8 million bpd in March 2019 from record levels reached in November 2018, below the agreed target of 10.3 million bpd. Furthermore, the Saudi Energy Minister indicated that an end to OPEC-led supply cuts was unlikely before OPEC's scheduled meeting on 25 June 2019.

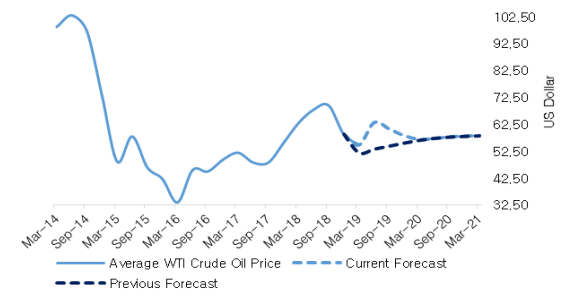
quarter reflected the impact of abundant supplies of soybeans and continued uncertainty about trade tensions which weighed on global commerce.[27] This impact was offset by a depreciation in the US dollar against third currencies, which increased the demand for dollar denominated commodities.

The projected path for crude oil prices has been revised upward for the next eight quarters (June 2019 to March 2021), relative to the last forecast. In particular, oil prices are anticipated to average US$58.82 per barrel over the period, compared to an average of US$56.36 per barrel in the previous projection (see Figure 11).[28] This forecast however implies that the average of the quarter-over-quarter increases in crude oil prices for the period has been revised to 0.9 per cent, compared with the 1.5 per cent previously anticipated. Crude oil price is projected to increase over the June 2019 quarter given the continued implementation of production cuts by OPEC and its allies and then decline during the September 2019 quarter as the slowdown in global growth and the impact of excess supplies weigh on prices. [29]

The risks to the forecast for oil prices are skewed to the upside. In relation to the upside risks (that is oil prices could track above the forecast), OPEC and non-OPEC oil producers could continue to reduce supplies on the global market, supporting prices upwards further. Subsequent to the finalisation of the Bank's forecast, the US indicated that waivers granted to the eight countries originally permitted to import Iranian crude will not be renewed at the expiration date in May 2019. On the downside, OPEC's failure to meet production cuts could lead to a fall in oil prices.[30]

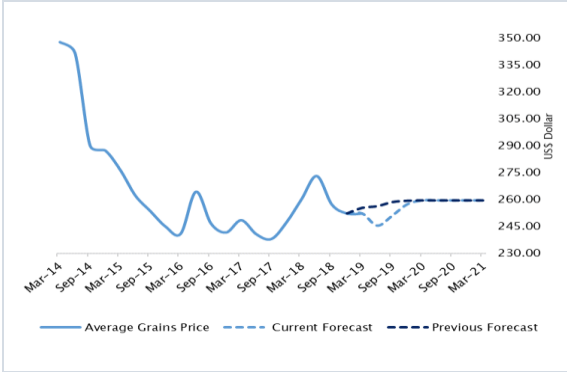
The average price of grains over the ensuing eight quarters (June 2019 to March 2021) is projected to increase at a rate of 0.4 per cent. This projection implies that grains prices will rebound in the September 2019 quarter and in line with the previous forecast by end-2019 (see Figure 12).[31]

Figure 11: Trend in Average WTI Crude Oil Prices



Source: Bloomberg

Figure 12: Trend in Average Grains Prices



Source: Bloomberg

External Financial Markets

The performance of GOJ's sovereign bonds on the international market over the March 2019 quarter was stronger than anticipated. The spread at end-

[27] The trade dispute between the US and China has weighed heavily on prices as China is the world's most populous nation in the world and is a massive importer of US grains. In 2018, China reduced purchases from the US which created oversupplies of many grains as 2018 was reportedly an ideal year for agriculture with regards to weather conditions, which resulted in the fifth consecutive year of significant oversupplies.

[28] Oil prices are anticipated to decline by 4.8 per cent for FY2019/20 to average US$59.75 per barrel, compared to an average of US$54.92 per barrel in the previous projection.

[29] According to the International Energy Agency (IEA), OPEC complied with the deal on production cuts in March 2019 by 153.0 per cent, while non-cartel members' compliance was at 64.0 per cent.

[30] The Russian Minister of Finance has signalled that Russia and OPEC could increase production after their June 2019 meeting in an effort to regain market share lost to the US.

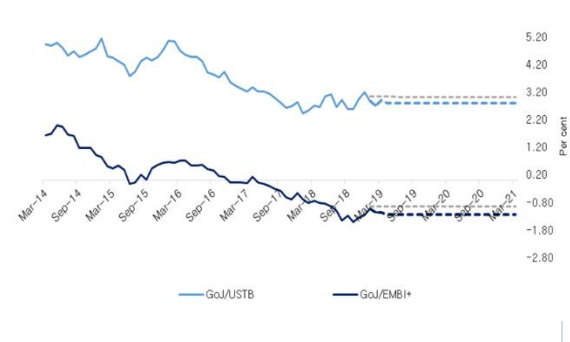
[31] The rebound in grains is supported by a projected ease in trade tensions. China has already resumed some importation of commodities. US exports rose by 0.9 per cent in January 2019 relative to December 2018, approximately half of which was due to an increase in soybean as shipments to China resumed following a near-halt at end-2018.

March 2019 between the indicative yield on Government of Jamaica global bonds (GOJGBs) and the yield on US Treasury Bills improved (declined) by 29 basis points (bps) while the spread between the indicative yields on GOJGBs and the yield on the EMBI+ deteriorated (increased) by 9 bps when compared to end-December 2018. At March 2019, these yield spreads were 291 basis points (bps) and negative 116 bps, respectively (see **Figure 13**). The performance of sovereign bond yield spreads (including Jamaica) over the March 2019 quarter reflected investors' increased appetite for riskier assets such as emerging market bonds given easing concerns about global growth and the depreciation of the US dollar.

The performance of yield spreads over the quarter were reflected in respective declines of 26 bps, 55 bps and 64 bps in the average yields on US Treasuries, GOJGBs and EMBI+ (see **Figure 14**). The decline in the yields on US Treasuries mainly reflected investors' concern about the global economy given ongoing trade tensions as well as uncertainty surrounding the terms of the United Kingdom's exit from the European Union and the expectation of monetary policy expansion in the USA.

Jamaica's sovereign bond yields are projected to decline over the next eight quarters. GOJ bond yields will benefit from looser monetary policy in the US.

Figure 13: Average International Bond Spreads



Source: Bloomberg

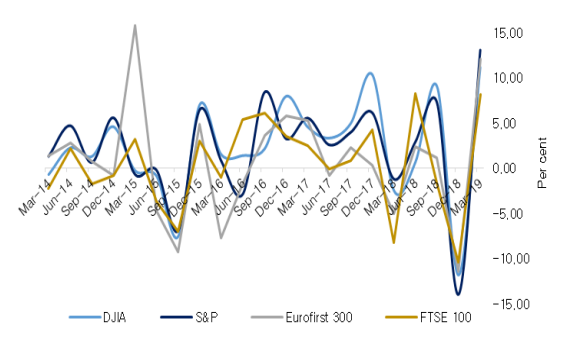
Figure 14: Average International Bond Yields
(Per cent)

Source: Bloomberg

Global Stock Market

The performances of selected global stock market indices were strong during the March 2019 quarter. Relative to the December 2018 quarter, the Dow Jones Industrial Average (DJIA), S&P 500, the Eurofirst 300 and the FTSE 100 advanced by 11.2 per cent, 13.1 per cent, 12.1 per cent and 8.2 per cent, respectively. On a yearly basis, the DJIA, S&P 500, Eurofirst 300 and FTSE 100 advanced by 7.6 per cent, 7.3 per cent, 2.7 per cent and 3.2 per cent, respectively (see **Figure 15**). The rebound in the equity market in the March 2019 quarter occurred in the context of tempered concerns over global trade and slowing economic growth.

Figure 15: Selected Stock Market Indices
(Quarter-over-Quarter Per cent)



Source: Bloomberg

For the US, the Federal Reserve's confirmation that it would adjust planned interest rate increases to compensate for a slowdown in the US economy supported equities for the review quarter.

European equities benefitted from European Central Banks' (ECB) decision to maintain its policy stimulus amid increasing signs of an economic slowdown as well as optimism over global trade as the US suspended planned tariffs increases on Chinese goods.[32] The ECB indicated that rates would remain at current levels at least until the end of the year, an extension relative to a previous statement indicating that rate would be held "at least through the summer of 2019". Additionally, the ECB announced a new series of quarterly targeted longer-term refinancing operations (TLTRO-III) commencing September 2019 and ending in March 2021 in an effort to stimulate economic activity.[33]

[32] The ECB has been reducing its key interest rates steadily since November 2011 and exhausted the limits of conventional monetary policy in March 2016 when the benchmark refinancing rate was lowered to 0 per cent while the deposit rate was reduced to negative 0.40 per cent and the marginal lending rate to 0.25 per cent.

[33] These new operations, each with a maturity of two years, will aid in preserving favourable bank lending conditions and the smooth transmission of monetary policy. Under TLTRO-III, counterparties will be entitled to borrow up to 30 per cent of the stock of eligible loans as at 28 February 2019 at a rate indexed to the interest rate on the main refinancing operations over the life of each operation. The programme will feature built-in incentives for credit conditions to remain favourable.

3.0 Real Sector

Real economic activity is estimated to have expanded in the March 2019 quarter, slightly lower than the growth in the previous quarter. This growth mainly reflected an improvement in net external demand, augmented by increases in investment spending and private consumption. From the perspective of aggregate supply, there was estimated growth in all industries for the quarter. In particular, GDP growth was buoyed by Mining & Quarrying, Construction and Tourism.

GDP Growth and Output Gap

The Jamaican economy is estimated to have grown in the range of 1.0 per cent to 2.0 per cent for the March 2019 quarter, above the 1.4 per cent recorded for the March 2018 quarter and above the Bank's previous forecast, but below the growth of 2.0 per cent for the December 2018 quarter. The estimated growth for the quarter chiefly reflected expansions in *Mining & Quarrying*, *Construction, Hotels & Restaurants* and *Agriculture, Forestry & Fishing* with higher than previously projected growth been assumed for *Hotels & Restaurants*, *Construction* and *Transport*. With regard to *Hotels & Restaurants*, the upward revision to growth largely reflected higher than earlier anticipated foreign national arrivals. The upward revisions to *Construction* and *Transport* is consequent on a greater-than-earlier anticipated impact on economic activity from the road rehabilitation works through the Major Infrastructural Development Programme (MIDP) and increased movements of cargo and persons at the ports, respectively. [34]

In the context of the growth for March 2019 quarter, Bank of Jamaica estimates that a negative output gap for the quarter was larger than the gap in the December 2018 quarter but smaller than the gap in the March 2018 quarter.[35]

Aggregate Supply

All industries are estimated to have grown for the March 2019 quarter. The growth for the quarter chiefly reflected expansions in *Mining & Quarrying*, *Construction, Hotels & Restaurants* and *Agriculture, Forestry & Fishing* (see Table 2).

Following strong growth in the December 2018 quarter, the expansion in value added in *Mining & Quarrying* is estimated to have decelerated for the March 2019 quarter. Growth for the review quarter reflected an increase in alumina production, the impact of which was partly offset by a decline in bauxite production (see Figure 16). The expansion in alumina production largely reflected the effect on output of continued strong performance by one plant, notwithstanding the impact of power outages. This expansion was partly offset by lower production at the remaining plant which experienced boiler problems in the last two months of the quarter. The decline in bauxite production and exports was due to the lack of shipments in the final month of the quarter.

Construction is estimated to have expanded for the review quarter. This performance was largely driven by the continued expansion and upgrade of road infrastructure. Growth in the sector was also supported by an increase in residential construction, attributed to a rise in housing starts by the National Housing Trust (see Figure 17).

[34] The impact on economic activity of the public sector investments was discerned from the December 2018 outturn provided by STATIN which indicated that Construction was buoyed by continued expansion of road infrastructure activities, of which the MIDP was a major contributor. In addition, the transport sub-industry was mainly influenced by growth in the total volume of cargo moving through ports as well an increase of 3.8 per cent in total number of passengers travelling through both international airports.

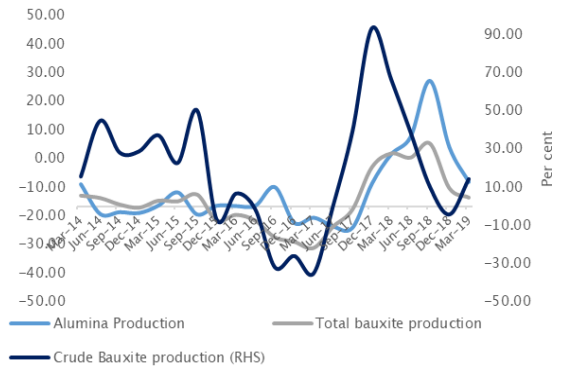
[35] The output gap is the difference between real GDP and the potential output. Expressed in percentage form, the output gap measures the deviation of real GDP from its potential as a fraction of potential output.

Table 2: Industry Contribution to Growth (March 2019 Quarter)

	Contribution	Estimated Impact on Growth
GOODS	*48.8*	3.0 to 4.0
Agriculture, Forestry & Fishing	*11.3*	2.0 to 3.0
Mining & Quarrying	*14.8*	9.5 to 10.5
Manufacturing	*7.5*	1.0 to 2.0
Construction	*15.3*	2.5 to 35
SERVICES	*51.2*	0.5 to 1.5
Electricity & Water Supply	*1.9*	0.0 to 1.0
Wholesale & Retail Trade, Repairs & Installation	*13.3*	0.5 to 1.5
Hotels & Restaurants	*14.9*	2.5 to 3.5
Transport Storage & Communication	*10.2*	1.0 to 2.0
Financing & Insurance Services	*6.6*	0.5 to 1.5
Real Estate, Renting & Business Activities	*4.8*	0.5 to 1.5
Producers of Government Services	*0.7*	−0.5 to 0.5
Other Services	*4.2*	0.5 to 1.5
Financial Intermediation Services Indirectly Measured	*5.5*	1.0 to 2.0
TOTAL GDP	*100.0*	1.0 to 2.0

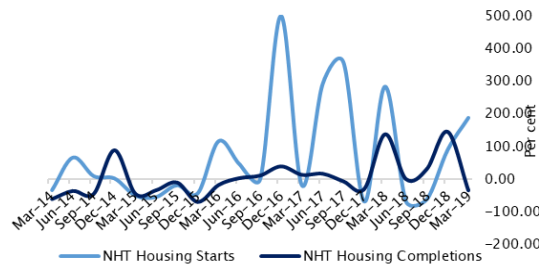
Source: Bank of Jamaica

Figure 16: Trends in Crude Bauxite, Alumina & Total Bauxite Production (12-Month Per cent Change)



Source: Jamaica Bauxite Institute

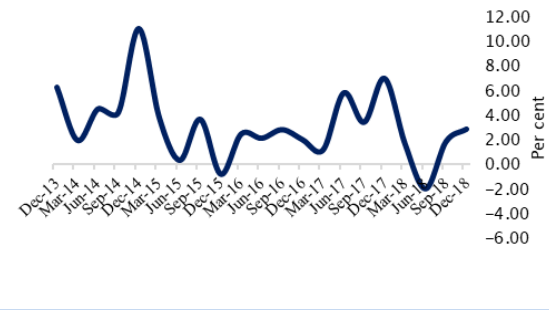
Figure 17: National Housing Trust Housing Starts & Completion (12-Month Per cent change)



Source: The National Housing Trust

Value added for *Hotels & Restaurants* is estimated to have increased in the March 2019 quarter (see Figure 18). This growth is premised on an estimated increase of 9.7 per cent in foreign national arrivals, notwithstanding a fall in the average length of stay of visitors.[36] The increase in foreign national arrivals largely reflected the effects of adverse weather in source markets, new conferences, a reggae concert and new flights.

Figure 18: Growth in Visitor Days (12-Month Per cent change)



Source: The Jamaica Tourist Board

The estimated increase in Transport, Storage & Communication for the March 2019 quarter is mainly attributed to an expansion in the number of air passenger arrivals into Jamaica. Additionally, there was an expansion in domestic cargo movement at the ports.

[36] The phenomenon of a decline in the length of stay of visitors is attributable to an increasing share of visitors from North America who generally stay for shorter periods, relative to visitors from Europe.

Manufacturing is estimated to have grown for the review quarter. This expansion largely reflected growth in Food, Beverages & Tobacco which was mainly associated with an increase in food processing (excluding sugar). The effect of this was supported by an increase in the production of beverages. Other Manufacturing is estimated to have declined consequent on a fall in production at the domestic oil refinery during the quarter, relative to the corresponding period in 2018. The lower production in the review quarter was due to a partial shutdown of the refinery for repairs and maintenance.

The estimated expansion in value added for *Agriculture, Forestry & Fishing* largely reflected growth in both domestic crop production and traditional export crops. In addition, animal farming is estimated to have grown given increases in poultry meat and egg production. The estimate for traditional export crops largely reflects a fall in overseas demand for coffee and the lingering effects of the cocoa frosty pod disease. The impact of these declines was partly offset by increased production of plantains and bananas.

Electricity & Water Supply is estimated to have increased marginally in the review quarter. This growth reflected a weak increase in electricity consumption (proxied by total electricity sales) while water production declined during the period. Water production was adversely affected by frequent lock-offs to deal with the discovery of leaks as well as the impact of road rehabilitation works on the water distribution network.

Both tradable and non-tradable industries are estimated to have expanded with the tradable sector estimated to have registered a faster pace of growth when compared with the non-tradable sector. Growth in the tradable sector was mainly attributed to Mining & Quarrying, Hotels & Restaurants and Agriculture, Forestry & Fishing while growth in the non-tradable sector was chiefly associated with Construction, Wholesale & Retail Trade, Repairs; Installation of Machinery & Equipment and Transport, Storage & Communication.

Aggregate Demand

From the perspective of aggregate demand, the estimated growth for the March 2019 quarter reflected an increase in investment spending.[37] There was, however, a moderation in the growth in net external demand, due largely to an estimated slower growth in exports (see Balance of Payments) and a smaller increase in private consumption.[38]

Labour Market Developments

Jamaica's unemployment rate (UR) at January 2019 fell to 8.0 per cent, 1.6 percentage points (pps) below the rate at January 2018. The fall in the UR reflected growth of 2.4 per cent (28, 600) in the employed labour force, combined with an increase of 0.6 per cent (8,400) in the labour force. In this context, the number of unemployed persons declined by 15.8 per cent, while the labour force participation rate increased by 0.4 pps to 64.2 per cent.

Bank of Jamaica projects that labour market conditions will improve further over the next eight quarters. In this regard, the average unemployment rate over the June 2019 to March 2021 quarters is expected to decline to 7.4 per cent, relative to the 8.7 per cent over the past year. The total labour force and the employed labour force are projected to increase (year over year) by averages of 0.5 per

[37] The growth in investment spending for the March 2019 quarter reflects expansions in public and private domestic investment the effect of which was partly offset by a reduction in real foreign direct investment (FDI). The GOJ's capital expenditure increased significantly by 26.0 per cent for the quarter relative to 4.0 per cent for the preceding quarter and was buoyed by an acceleration of the government's programme of road rehabilitation. Private domestic investment, which reflects the level of spending on investment goods after the influence of FDI and government capital expenditure have been taken into account, is estimated to have grown during the quarter given a stream of projects that have materialized. These projects include the Construction of houses by a major developer at Phoenix Park, St. Catherine and in Montego Bay continued during the quarter as well as the investment in an agro-park by a major food processor. However, there was an estimated decline of 8.1 per cent in real FDI, following a reduction of 36.8 per cent in the previous quarter. The decline in FDI largely reflected the reduction in spending on Tourism projects partly offset by increased expenditure on mining/energy and infrastructure activities.

[38] The growth in consumption is inferred from the lagged increase in GCT on imports.

cent and 1.7 per cent per quarter. The growth in employment is expected to provide a fillip for wage increases, which may lay the basis for higher inflation in the future.

The anticipated continued moderation in the unemployment rate over the medium term remains broadly in line with the previous projection. The expected improvement reflects employment growth in mining & quarrying, manufacturing, finance & insurance and business process outsourcing.

Outlook

Real GDP growth is projected to trend upwards within the range of 1.5 per cent to 2.5 per cent over the June 2019 to March 2023 quarters but remain below potential output. The projected growth in the economy is reflective of positive foreign demand (see International Economy), more accommodative fiscal policy in the short run and an assumption for monetary conditions to remain generally accommodative over the forecast horizon (see Monetary Conditions).

From the perspective of aggregate supply, GDP growth over the next eight quarters (June 2019 – March 2021) is expected to be buoyed mainly by *Mining & Quarrying*, *Agriculture, Forestry & Fishing*, *Hotels & Restaurants* and *Manufacture*. With regard to *Mining and Quarrying*, the Bank anticipates that, to facilitate upgrades to the Alpart alumina plant, production in 2019 will be adversely affected following which there will be strong recovery. Value added in *Agriculture, Forestry & Fishing* is also anticipated to improve given expected investments by two large agro-processors in palm oil production and a new agro-park. For *Hotels & Restaurants*, growth is based on projected expansion in foreign national arrivals in a context where length of stay is assumed to remain unchanged over the forecast horizon. Growth in *Manufacturing* is predicated on the Food, Beverage & Tobacco sub-sector given investments by various companies in the ago-processing industries.

There has been a slight upward revision to GDP growth over the period June 2019 to March 2021, relative to the previous forecast, largely related to *Construction and Wholesale & Retail Trade.* The impact of these revisions was partly offset by an assumed lower projected growth for *Electricity & Water* (see Table 4.2). The upward revision to *Construction* largely reflects a slower than previously anticipated phase-down of the Government's MIDP project. Higher growth in *Wholesale & Retail Trade* also reflects the increased activity in the construction sector. For *Electricity & Water,* the projection envisages a continuation of the substitution of power supply by industrial companies in favour of cheaper sources.

Beyond March 2021, projected GDP growth has been revised downwards. This downward revision to GDP growth reflects the impact of lower foreign demand and an upward revision to the assumption for the long term fiscal surplus, which implies lower than previously assumed demand from this sector.

In the context of the projections for GDP growth, the output gap is projected to narrow over the forecast horizon.[39] In the context of the output gap projections, minimal inflationary pressures from demand conditions are anticipated (see Labour Market Developments for supporting information).

[39] The output gap is the difference between real GDP and the potential output, relative to potential output.

4.0 Fiscal Accounts

For the 12-month period to March 2019, Central Government's operations recorded a cumulative fiscal surplus of $24.4 billion (1.2 per cent of GDP), relative to the surplus of $8.7 billion (0.5 per cent of GDP) for the similar period of 2018. The 12-month cumulative primary surplus at March 2019 was $153.6 billion (7.6 per cent of GDP), compared to the outturn of $143.9 billion (7.5 per cent of GDP) at March 2018.

The GOJ continues to be committed to maintaining its primary surplus and public sector overall balance targets under the SBA. In this context, any slippages in the fiscal accounts will be offset by expenditure containment and/or improved revenues.

Recent Developments

For the 12-month period to March 2019, Central Government's operations recorded a cumulative fiscal surplus of $24.4 billion (1.2 per cent of GDP), relative to the surplus of $8.7 billion (0.5 per cent of GDP) for the corresponding period of the previous year. The 12-month cumulative primary surplus at March 2019 was $153.6 billion (7.6 per cent of GDP), compared to the outturn of $143.9 billion (7.5 per cent of GDP) for the similar period of 2018. The fiscal outturn for the review period reflected a faster pace of growth in revenues & grants, compared with the increase in expenditure.

The performance of Revenues & Grants for the 12-month period to March 2019 was attributed to higher tax receipts, non-tax receipts and grants, relative to the comparable period of 2018. The growth in tax revenues was mainly attributable to greater receipts from international trade, production & consumption and income & profit.[40]

Higher spending during the review period was evident in programmes and capital expenditure as interest payment and compensation of employees were below the outturn for the 12-month period to March 2018. Spending on programmes to reduce arrears, support the country's disaster mitigation fund and improve road infrastructure in the review period benefited from the over performance of tax revenues. The increased outlay for capital expenditure was due to greater road construction projects under the Major Infrastructure Development Programme as well as higher spending for national security.

The cumulative financing requirement for Central Government for the 12-month period to March 2019 was $108.6 billion (5.3 per cent of GDP) reflecting the fiscal surplus noted above and amortization of $133.0 billion (6.5 per cent of GDP). In addition, Central Government reimbursed $25.0 billion (1.2 per cent of GDP) to Bank of Jamaica for operating losses incurred in previous years as well as made early payment of $6.3 billion (0.3 per cent of GDP) towards the recapitalization of Bank of Jamaica. The Government also extended a loan of $1.0 billion (0.1 per cent of GDP) to the Port Authority of Jamaica as well as repurchased Petrojam shares from Petróleos de Venezuela for $2.7 billion (0.1 per cent of GDP).

The above noted expenses were financed, in part, by domestic and external loan receipts of $76.6 billion (3.8 per cent of GDP) and $37.6 billion (1.9 per cent of GDP), respectively. For domestic loans, seven benchmark investment notes (BINs) amounting to $29.7 billion (1.5 per cent of GDP) were issued to the domestic market during the period while $25.0 billion (1.2 per cent of GDP) in

[40] Greater revenues from GCT (imports), customs duty and travel tax facilitated the increase in international trade receipts. These improvements were facilitated, in part, by greater imports, a more depreciated exchange rate and increased visitor arrivals to the Island. Production & consumption receipts reflected, in part, greater inflows from GCT (local), education tax and betting gaming & lottery. The improvement in GCT (local) and betting gaming & lottery was due to greater tax compliance. For education tax, the outturn reflected greater employment levels. With regard to income & profits, the outturn was attributable to greater revenues from PAYE and tax on interest. The higher employment levels, mentioned above, also influenced the intake from PAYE. Lower tax refunds during the period as well as greater transactions in the secondary bond market contributed to the higher than expected outturn for tax on interest, in addition to stronger compliance mechanisms employed by Tax Administration Jamaica.

BINs was issued directly to BOJ. Treasury bills issuances amounted to $21.8 billion (1.1 per cent of GDP). External loan receipts included US$111.7 million (0.7 per cent of GDP) and US$73.6 million (0.5 per cent of GDP) from bi-lateral and multi-lateral agencies for investment projects, respectively. In addition, external loans included US$105.0 million (0.7 per cent of GDP) in policy based loans from the Inter-American Development Bank. Further, there was other income of $27.9 billion (1.4 per cent of GDP), representing loan repayments from the PetroCaribe Development Fund and Petrojam. Against this background, Central Government drew down $1.6 billion (0.1 per cent of GDP) from bank balances to help finance its operation.

Domestic amortization during the review period included a variable rate BIN of $58.4 billion (2.9 per cent of GDP), a fixed rate BIN of $0.1 billion (0.01 per cent of GDP), as well as Treasury bills and commercial bank loans of $19.7 billion (1.0 per cent of GDP) and $1.8 billion (0.1 per cent of GDP), respectively. External amortization included payments of US$191.6 million (1.2 per cent of GDP) and US$97.8 million (0.6 per cent of GDP) to multi-lateral and bi-lateral lending agencies, respectively. In addition, US$93.4 million (0.6 per cent of GDP) was paid on GOJ amortizing global bonds and US$34.5 million (0.2 per cent of GDP) on loans borrowed from international commercial banks.

Near-term Outlook

Central Government is expected to continue its policy of fiscal consolidation over the near-term as well as maintain its commitment to a primary surplus and public sector overall balance targets as indicated under the SBA.

Table 3: Summary of Fiscal Operations (per cent of GDP)

	Quarters		
	Mar-19	Mar-18	Diff
Revenue & Grants	**30.9**	**29.0**	**1.9**
o/w Tax Revenue	26.7	25.7	1.0
Non- Tax Revenue	3.6	2.8	0.8
Grants	0.5	0.3	0.2
Expenditure	**29.7**	**28.6**	**1.1**
Programmes	10.3	9.2	1.1
Compensation of Employees	9.8	10.0	(0.2)
Interest Payment	6.4	7.0	(0.6)
Capital Expenditure	3.3	2.4	0.8
Fiscal Surplus/Deficit	**1.2**	**0.5**	**0.7**
Primary Balance	**7.6**	**7.5**	**0.1**
Current Balance	3.8	2.3	1.5
Total Financing	5.6	11.9	(6.3)
External Loans	1.9	8.1	(6.3)
Domestic Loans	3.8	3.8	(0.0)
Other Inflows	1.4	0.6	**0.8**
Other Outflows	1.7	0.7	**1.0**
Amortisation	6.5	13.0	(6.5)
External	2.6	4.3	(1.7)
Domestic	3.9	8.7	(4.8)
Overall Balance	**(0.1)**	**(0.8)**	**0.7**

Source: Ministry of Finance & the Public Service

5.0 Balance of Payments

The most recent data (December 2018 quarter) indicate that the current account deficit (CAD) recorded an improvement, relative to the corresponding period of the previous year. The improvement was driven by all sub-accounts, with the exception of Income. Over the medium-term, the CAD is assessed to remain broadly sustainable and stable in the range of 2.6 per cent of GDP to 2.9 per cent of GDP.

Recent Developments

Preliminary data on Jamaica's balance of payments (BOP) for the December 2018 quarter reflected a current account deficit (CAD) of US$109.3 million (0.71 per cent of GDP), which represented an improvement of US$62.1 million relative to the corresponding period of 2017. The improvement in the CAD was reflected primarily in the Goods and Services account as well as the Secondary income sub-account, the impact of which was partially offset by deterioration in the Primary income sub-account.

The Goods balance improved by US$43.9 million due to an increase of US$139.7 million in exports, the impact of which was partly offset by growth of US$95.8 million in imports. The rise in overall exports emanated mainly from the export of crude materials (alumina) and chemicals. The increase in imports mainly reflected higher values for machinery and transportation equipment, manufactured goods, chemicals and mineral fuels, partially offset by a decline in miscellaneous commodities as well as animal and vegetable oils. The increase in the value of mineral fuel imports was solely reflected in the price of crude oil as there was a reduction in the volume.

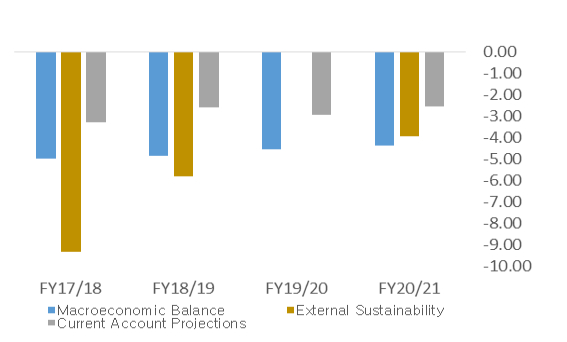
The Services sub-account improved by US$41.0 million, reflecting an increase of 10.6 per cent in tourist expenditure for the quarter.

The financial account recorded a net borrowing balance of US$669.8 million for the review quarter, in comparison to the net borrowing balance of US$680.5 million for the December 2017 quarter.

This higher borrowing balance was primarily reflected in direct investment and portfolio investment of US$183.1 million and US$370.8 million, respectively.

The CAD for FY2020/21 is assessed to remain broadly sustainable. The projected CAD of 2.5 per cent of GDP compares favourably to respective norms of 3.9 per cent of GDP and 4.6 per cent of GDP for the macroeconomic balance and external sustainability approaches (see **Figure 19 and Appendix B**).[41] Importantly, the current account balance, after accounting for FDI-related imports, reflects surpluses of 1.1 cent for both FY2019/20 and FY2020/21 (see **Figure 20**).

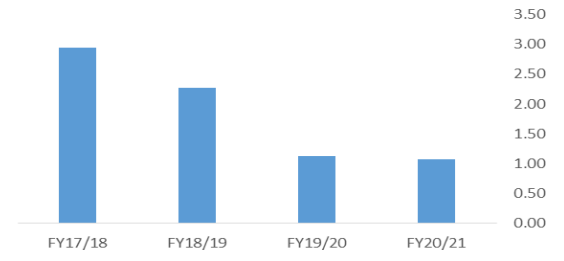
Figure 19: Current Account Sustainability Measures (% of GDP)



Source: Bank of Jamaica

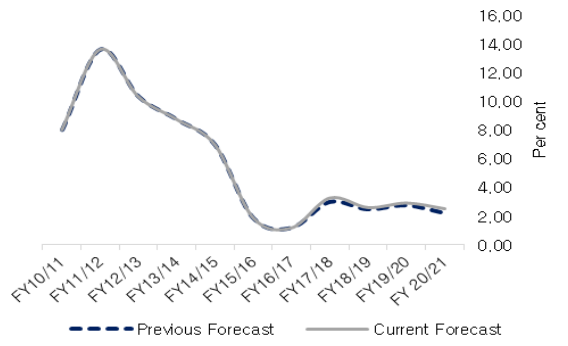
[41] The external sustainability measure, which is at the top of the range, is highly volatile.

Figure 20: Current Account less FDI (% of GDP)



Source: Bank of Jamaica

Figure 21: Medium-Term CAD Forecast (% GDP)



Source: Bank of Jamaica

The CAD (as a per cent of GDP) is projected to be relatively stable (between 2.6 per cent of GDP and 2.9 per cent of GDP) over the medium-term. However, the CAD is projected to average 2.7 per cent of GDP between FY2019/20 and FY2020/21, relative to the previous forecast of 2.5 per cent of GDP (see Figure 21). The projected slight worsening of the CAD is primarily due to a deterioration on the income account in the context of higher direct investment outflows from the mining sector.

6.0 Monetary Policy & Market Operations

BOJ reduced its signal rate by 50 bps during the March 2019 quarter to 1.25 per cent. This reduction was aimed at supporting inflation returning to and remaining within the target of 4.0 per cent to 6.0 per cent by December 2020. The loosening of monetary policy was intended to stimulate a faster pace of credit expansion that would induce an improvement in economic activity.

Notwithstanding the B-FXITT flash sale operations, Jamaican dollar liquidity was buoyed during the March 2019 quarter by (1) a reduction in the cash reserve requirements (CRR), (2) the central bank's net FX purchases and (3) the early repayment of BOJ USD CDs. However, some upside pressure on interest rates emerged from strong liquidity absorption from GOJ Operations in February & March 2019, related to fiscal year-end tax obligations.

BOJ reduced its signal rate by 25 bps on two occasions on 21 February 2019 and 27 March 2019 to end the quarter at 1.25 per cent.[42] The continued fall in the signal rate, in conjunction with liquidity injection from a 3.0 percentage point (or $17.9 billion) reduction in cash reserve requirement (CRR), prompted money market rates to fall for the March 2018 quarter. However, yields on GOJ treasuries increased as investors positioned for fiscal year-end tax obligations.

Liquidity Conditions

Liquidity conditions during the March 2019 quarter tightened slightly relative to the preceding quarter. This was indicated by a fall to $42.9 billion in the average balance maintained by deposit-taking institutions on BOJ current account and overnight (O/N) deposits for the quarter, from an average of $49.7 billion for the preceding quarter. Liquidity conditions were, however, more buoyant than projected at the February 2019 projection as current account and overnight balances at the end of the quarter were higher than projected by $11.2 billion. BOJ operations net injected $34.3 billion during the March 2019 quarter, $8.0 billion above the projected injection of $26.3 billion. This reflected injection from BOJ FX operations of $14.8 billion ($3.6 billion above projection) and other BOJ injections of $28.7 billion ($10.0 billion higher than projected) associated with seasonal currency reflows and the unprogrammed reduction in the CRR. GOJ operations, however, net absorbed $16.9 billion from the system during the quarter, which was $3.1 billion weaker than projected.

Bank of Jamaica conducted 13 auctions of 30-day CDs during the review quarter. The average offer size during the March quarter was $8.0 billion, in line with the average of $8.0 billion during the December 2018 quarter. On average, the auctions were oversubscribed by 90.3 per cent, relative to oversubscriptions of 99.9 per cent in the December 2018 quarter. The average yield on the 30-day CDs for the review quarter was 2.09 per cent, 13 bps above the average for the December 2018 quarter.

BOJ continued to offer its weekly 14-day repo via competitive auctions during the March 2019 quarter. During the quarter, liquidity provided via 14-day repos averaged $6.3 billion relative to $4.8 billion in the December 2018 quarter. A total of 12 auctions were held during the review period compared to 6 in the previous quarter. Offers were oversubscribed by 14.9 per cent on average, and reflected an average rate of 3.37 per cent, 22 bps below the average for the preceding quarter.

Strong foreign currency demand during the March 2019 quarter necessitated BOJ's foreign currency sales of US$100.0 million via B-FXITT flash operations. This occurred in the context of early repayment of USD CDs totalling US$30.0 million that was settled in JMD during the period. This simultaneously reduced the Bank's stock of USD CD

[42] Consequently, the SLF rate and the EFR was reduced by 50bps to 4.25 per cent and 8.25 per cent, respectively, during the review quarter.

liabilities as there were no new issues during the review period (see Table 4).

Table 4: Placements & Maturities of BOJ USD Instruments

	October – December 2018			January – March 2019		
	Placements (US$MN)	Maturities (US$MN)	Average Rate (%)	Placements (US$MN)	Maturities (US$MN)	Average Rate (%)
2-year	–	6.54	–	–	–	–
3-year	–	23.62	–	–	0.04	–
4-year	–	53.97	–	–	2.11	–
5-year	–	–	–	–	–	–
7-year	–	–	–	–	30.00	–
TOTAL	**0.00**	**84.13**	**–**	**0.00**	**32.15**	**–**

Source: Bank of Jamaica

Table 5: BOJ Liquidity Facility (J$ Billions)

BOJ Liquidity Flow (J$ Billions)	Actual Sep-18	Actual Dec-18	Previous Mar-19	Actual Mar-19	Variance Mar-19
Current A/C + OMOs	-9.5	46.2	-9.9	-26.6	-16.7
Current Account + ON Balances	0.0	32.2	-6.2	-17.4	-11.2
Open Market Operations	-9.5	14.0	-3.6	-9.2	-5.6
BOJ Repo	0.0	9.2	-4.6	-1.7	2.9
FR CDs – (include 30d cds)	4.9	4.8	1.0	-7.5	-8.5
VR CDs	-0.7	0.0	0.0	0.0	0.0
USD Indexed Notes	-13.7	0.0	0.0	0.0	0.0
BOJ FX (incl. PSE)	10.4	8.6	11.2	14.8	3.6
BOJ Other	-1.1	-30.5	18.7	28.7	10.0
o.w. Cash Reserve (Com Banks)	-2.9	1.3	0.0	13.4	13.4
Net BOJ Operations (Inject/Absorb)	-0.2	-7.9	26.3	34.3	8.0
GOJ Operations	0.2	-24.3	-20.0	-16.9	3.1

Notes: (+) = Inject; (–) = Absorb

Source: Bank of Jamaica

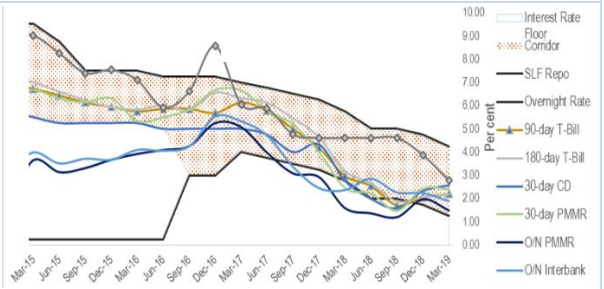
7.0 Financial Markets

There was a general decline in money market rates during the March 2019 quarter, which reflected convergence towards the Bank's policy rate. The estimated yield curve on GOJ domestic JMD bonds in March 2019 was generally unchanged relative to the yield curve at end December 2018. Sovereign risk moderated while exchange rate risk premiums increased over the review period.

Market Interest Rates

There was a general decline in money market rates during the March 2019 quarter relative to the preceding quarter in the context of monetary policy easing and a reduction in the cash reserve requirement (CRR) over the period. The average of overnight interbank rates (O/N), private money market rates (PMMR) and 30-day PMMRs for March 2019 declined by 31 bps, 48 bps and 3 bps, respectively. However, when compared to the yields for December 2018, the yields on GOJ 90-days, 180-days and 270-days Treasuries at end-March 2019 were higher by 15 bps, 10 bps and 11 bps, respectively. This tightening was related to institutions positioning for fiscal-year-end tax commitments (see Figure 22).

Figure 22: Money Market Rates (Nominal)



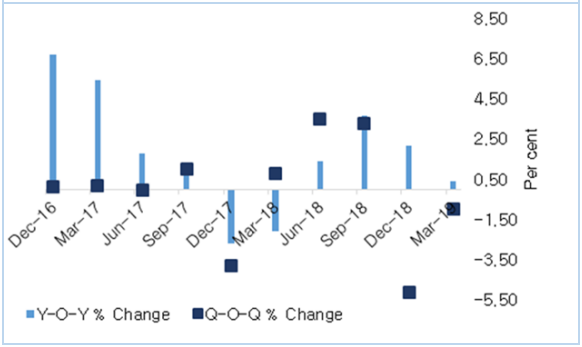
	BOJ SLF Rate	BOJ 30-day CD	BOJ O/N CD	O/N PMMR +	O/N Int. Bank +	30-day PMMR +	90-day T-Bill	180-day T-Bill	270-day T-Bill
Mar-18	5.75	2.76	2.75	1.59	2.37	2.45	2.98	3.17	4.00
Jun-18	5.00	1.99	2.00	1.36	2.85	2.22	2.54	2.66	3.08
Aug-18	5.00	1.47	2.00	0.86	1.92	1.63	1.69	1.88	2.19
Sep-18	5.00	1.58	2.00	1.20	2.26	1.48	1.71	1.87	2.19
Dec-18	4.75	2.33	1.75	1.97	2.24	2.43	2.05	2.07	2.06
Mar-19	4.25	2.57	1.25	1.49	1.93	2.40	2.19	2.17	2.17

Source: Bank of Jamaica
Notes: (i) PMMR is the private money market rate (ii) O/N is the overnight rate in the market accessible by all financial institutions while the interbank rate (I/B) is the overnight rate accessible only by banks.
+ Reflects average rate for the month.
* Rates represent month-to-date

Exchange Rate Developments

The exchange rate appreciated during the March 2019 quarter. The weighted average selling rate of the Jamaica Dollar vis-á-vis the US dollar (WASR) of J$126.47 = US$1.00 at the end of the March 2019 quarter, represented an appreciation of 0.98 per cent relative to the previous quarter and depreciation of 0.38 per cent relative to end-March 2018.

Figure 23: Movements in WASR

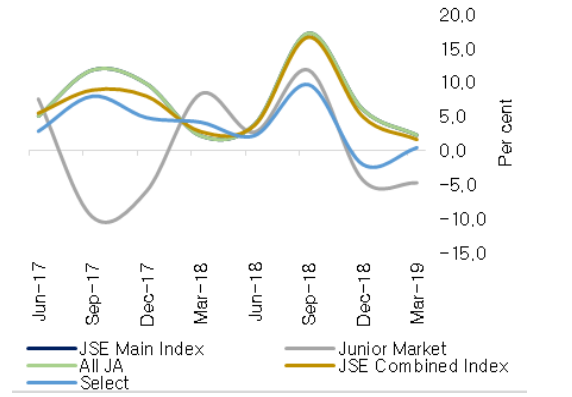


The appreciation in the exchange rate for the March 2019 quarter was largely related to increased earner supply, particularly towards the latter part of the quarter. Conditions were underpinned by buoyant seasonal inflows from the tourism and remittance sectors. In addition, US dollar supplies were augmented through B-FXITT sales of US$100.0 million for the quarter and, in part, through conversions to meet Jamaica Dollar tax obligations. Notwithstanding the appreciation for the quarter, demand impulses were pronounced in January 2019. These impulses were influenced by increased demand from entities seeking to reduce their foreign currency liabilities and by news of the intention of a quasi-government entity to move USD balances into the central bank.

Equities Market

For the March 2019 quarter, all but one of the major Jamaica Stock Exchange (JSE) indices, in particular, the Junior Market Index, recorded growth ranging from 0.4 per cent to 2.2 per cent, albeit lower relative to the previous quarter (see **Figure 24**). More specifically, the JSE Main Index increased by 2.2 per cent compared to the 6.0 per cent growth reported in the prior reporting period. Notwithstanding, the Junior Market Index recorded a decline for the second consecutive quarter. With regards to year-on-year performances, all five JSE indices showed continued growth, with the JSE Main Market and Junior Market Indices recording growth of 31.8 and 4.5 per cent, respectively.

Figure 24: Quarterly Growth of the JSE Indices
(Per cent Change)

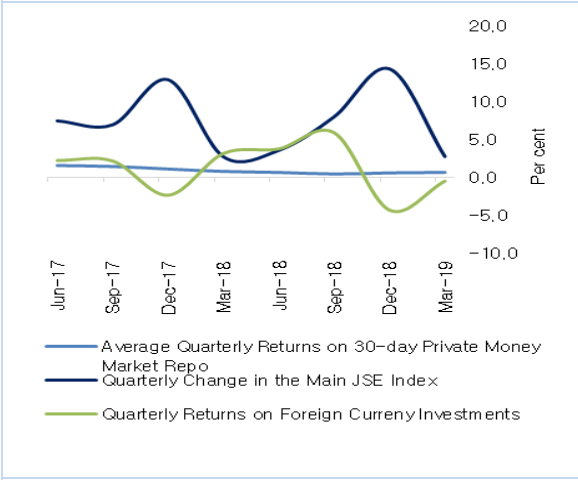


Source: Jamaica Stock Exchange

The generally positive performance of the equities market was largely influenced by further improvements in the domestic macroeconomic environment, in particular, the presence of low inflation and the associated low interest rate environment. Additionally, the oversubscription of one of the two initial public offerings (IPOs) within the first quarter of 2019 is partly reflective of investor's preference for equities given the reduced presence of the Government of Jamaica in the domestic bond market.[43]

Furthermore, investments in equities continued to provide stronger gains when compared to returns from investments in foreign currency and domestic money market instruments.[44] More precisely, equities yielded a quarterly return of 2.7 per cent, while foreign currency investments recorded a negative quarterly average return of 0.5 per cent. Additionally, the quarterly return on the 30-day private money market repo increased to 0.6 per cent during the March 2019 quarter, relative to the 0.5 per cent for the December 2018 quarter (see **Figure 25**).

Figure 25: Returns from Private Money Market, GOJ Global Bonds and Capital Gains/ (Losses) from JSE Main Index
(Per cent)



Source: Jamaica Stock Exchange and Bloomberg

Notwithstanding, these positive developments, the outturn of the equities market was partly influenced by the lacklustre earnings of several companies listed on the Main Exchange and the Junior Market. Additionally, the performance of the indices largely reflected stock price normalization given the sharp increases experienced over the past two years. Notably, the *Mining*, *Construction, Agriculture* and *Tourism* sectors were the main drivers of GDP growth in the economy during the December 2018

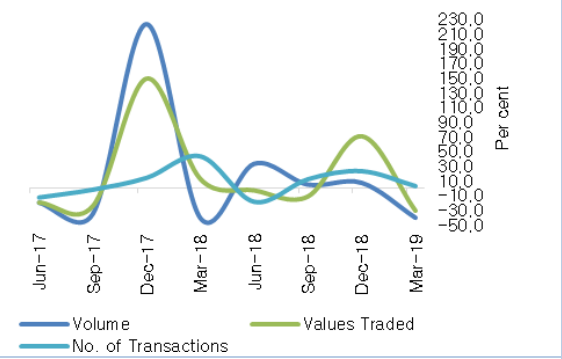
[43]Throughout the review period there were two IPOs. iCreate Limited and Paramount Trading (Jamaica) Limited which offered ordinary and preference shares respectively on the Junior Market.

[44] The return on equities is computed as the change in value of the JSE Main Index for the review quarter relative to the prior period. The return on foreign currency investments is computed as the sum of quarterly foreign currency gains (losses) and the average quarterly returns on GOJ global bonds.

quarter. However, only a few companies from these sectors are currently listed on the JSE.

The slower expansion of the Main JSE Index was also reflected in market activity indicators. Notably, the value and volume of transactions declined by 31.3 per cent and 40.8 per cent, respectively, while the growth in the number of transactions decelerated sharply to 2.4 per cent (see **Figure 26**). The reduction in these measures during the review period, mainly reflected lower market activity during the month of January, following the typically high seasonal activity which occurred in December 2018.

Figure 26: Quarterly Change in the Monthly Volumes, Values Traded & Number of Transactions (Main JSE Index) (Per cent)



Source: Jamaica Stock Exchange

The advance to decline ratio was 16:13 for the December 2018 quarter relative to 20:11 for the previous quarter. During the review period, the number of stocks that traded firm increased to three relative to a single stock in the preceding quarter.

As it relates to stock price appreciation, the Financial and Manufacturing categories dominated the list of top ten advancing stocks, accounting for average price appreciation of 12.6 per cent and 9.8 per cent, respectively, for the review quarter (see **Tables 6** and **7**).

Table 6: Stock Price Appreciation

Advancing	Per cent
Financial	4.0
Jamaica Stock Exchange	65.1
Proven Investments Limited	20.9
Sygnus Credit Investments Limited	12.1
Manufacturing	9.0
Seprod Limited	42.3
Caribbean Cement Company	33.6
Jamaica Broilers Group	8.5
Conglomerates	2.2
Pan Jamaican Investment Trust	12.4
Other	9.2
Supreme Ventures	59.1
Kingston Properties Limited	16.7
Communication	20.2
Radio Jamaica	20.2

Table 7: Stock Price Depreciation

Declining	Per cent
Financial	
Barita Investments Limited	-19.5
Scotia Group Jamaica	-5.1
JMMB Group Limited	-4.6
1834 Investments Limited	-9.5
Mayberry Investments Limited	-9.2
Manufacturing	
Salada Foods Jamaica	-17.0
Kingston Wharves	-7.5
Berger Paints (Jamaica)	-4.5
Conglomerates	
GraceKennedy Limited	-5.9
Other	
Barita Investments Limited	-24.9

8.0 Monetary Aggregates

Growth in monetary aggregates and private sector credit remained strong. Broad money and private sector credit grew faster than anticipated in the March 2019 quarter. Changes in the monetary aggregates are supportive of inflation returning to and being maintained at the inflation target.

Money

Base money, broad money and private sector credit grew faster than anticipated at March 2019. There was annual growth of 25.8 per cent in the monetary base at end-March 2019, above the 17.6 per cent and 22.0 per cent recorded at end-December 2018 and end-March 2018, respectively.[45] The outturn for March 2019 was also higher than the previously projected growth of 10.3 per cent. Broad money supply (M2J) expanded by 13.1 per cent at March 2019, below the 14.5 per cent and 24.5 per cent recorded at end-December 2018 and end-March 2018, respectively. The outturn for March 2019 was, however, slightly above the previous projection of 11.0 per cent. Growth in DTI private sector credit of 15.2 per cent at end-March 2019 was above the 13.7 per cent recorded at end-December 2018, but below the 18.2 per cent recorded at March 2018. The estimated outturn for March 2019 was also above the previously projected expansion of 13.5 per cent.

Regarding the sources of change in the monetary base as at March 2019, there was annual growth of 0.3 per cent in Bank of Jamaica's net international reserves (NIR) and an increase of 19.2 per cent in net domestic assets (NDA) (see **Table 8**). The growth in the NIR was associated with Government of Jamaica inflows and a decline in the gross foreign liabilities associated with Bank of Jamaica US certificate of deposits maturities. These inflows were partially offset by Government of Jamaica debt payments and B-FXITT sales amounting to U$260.5 million as at March 2019. A switching of overnight balances to current accounts contributed to the increase in the NDA.

Table 8: Bank of Jamaica Operating Targets

	Stock (J$MN)			Flow (%)	
	Dec-17	Sep-18	Dec-18	Qtr.-o-Qtr.	Y-o-Y
NIR (US$MN)	**3,074.6**	**3,005.4**	**3,084.8**	**2.6**	**0.3**
NIR(J$MN)	**392,222.8**	**383,399.7**	**393,530.9**	**2.6**	**0.3**
- Assets	466,512.6	450,582.1	459,912.5	2.1	-1.4
- Liabilities	(74,289.8)	(67,182.5)	(66,381.6)	-1.2	-10.6
Net Domestic Assets	**(222,080.6)**	**(180,852.6)**	**(179,515.8)**	**-0.7**	**-19.2**
- Net Claims on Public Sector	137,054.1	137,082.6	122,087.3	-10.9	-10.9
- Net Credit to Banks	(61,546.1)	(63,233.2)	(65,541.9)	3.7	6.5
- Open Market Operations	(93,283.3)	(73,962.1)	(58,532.9)	-20.9	-37.3
- Other	(204,305.4)	(180,740.0)	(177,528.3)	-1.8	-13.1
-o/w USD FR CDs	(70,255.3)	(67,549.5)	(42,076.7)	-9.0	-40.1
Monetary Base	**170,142.3**	**202,547.1**	**214,015.1**	**5.7**	**25.8**
- Currency Issue	104,179.7	133,544.8	116,399.2	-12.8	11.7
- Cash Reserve	63,789.4	67,484.2	54,101	-19.8	-15.2
- Current Account	2,173.2	1,518.1	43,514.9	2766.4	1902.3

Source: Bank of Jamaica

The expansion in M2J was underpinned by growth of 13.9 per cent in local currency deposits, a moderation relative to the 26.5 per cent recorded at end-March 2018 which was reflected in all categories of deposits. Relative to GDP, broad money supply is estimated at 28.1 per cent at March 2019, compared with 24.8 per cent at March 2018.

The measure of broad money supply that includes foreign currency deposits (M2*) recorded annual growth at March 2019 of 11.6 per cent, a moderation relative to 18.9 per cent in the previous year. This deceleration primarily reflected the aforementioned decline in the rate of increase in local currency deposits as foreign currency moderated to 9.1 per cent from 10.2 per cent a year

[45] The strong growth in the monetary base of commercial banks reflected the impact of Bank of Jamaica's policy change regarding Overnight Deposits. Effective 01 March 2019, the Overnight Deposit for deposit-taking institutions (DTIs) is no longer available. Instead, DTI overnight balances at the BOJ are maintained in their current accounts and remunerated at the Bank's policy rate.

earlier. Resulting from the slower growth in foreign currency deposits, coupled with a faster pace of deceleration in total deposits, the private sector deposit dollarization ratio for commercial banks trended slightly downwards to 40.6 per cent as at March 2019 from 41.6 per cent as at March 2018.

Table 9: Components of Money Supply (M2*)

Sources of Money Supply	Percentage Change (%)		
	Mar-18	Dec-18	Mar-19
Total Money Supply (M2*)	18.9	13.9	11.6
Money Supply (M2J)	24.5	14.5	13.1
Money Supply (M1J)	24.0	22.1	13.3
Currency with the public	16.6	13.9	9.5
Demand Deposits	29.8	29.0	15.9
Quasi Money	24.9	8.3	12.9
Savings Deposits	16.5	7.8	9.1
Time Deposits	66.3	10.1	25.9
Foreign Currency Deposits	10.2	13.0	9.1

Source: Bank of Jamaica

Private Sector Credit

Annual growth in private sector credit by deposit taking institutions (DTI) was 14.4 per cent at March 2019. [46] The expansion in credit was underpinned by growth in loans and advances of 15.2 per cent, an acceleration relative to increases of 13.4 per cent and 13.8 per cent recorded at end-December 2018 and end-March 2018, respectively. The acceleration in overall private sector lending mainly resulted from annual growth of 16.7 per cent in lending to the productive sector, relative to 15.4 per cent at December 2018. This was primarily reflected in loans to the *Manufacturing, Distribution, Professional & Other Business Services* and *Electricity* industries. Loans issued to consumers grew by 14.2 per cent, a slight pickup relative to the growth of 12.0 per cent recorded at December 2018. Relative to GDP, the stock of private sector credit at March 2019 was 39.6 per cent, compared with 36.5 per cent a year earlier. In real terms, private sector credit grew by 10.7 per cent over the year to March 2019, compared with 12.1 per cent for the comparable period in 2018.

Table 10: Select Private Sector Financing Indicators

12-month % Change in Stock	Mar-18	Dec-18	Mar-19
Total DTI	13.8	13.4	15.2
o.w. to Businesses	*11.4*	*15.4*	*16.7*
o.w. to Consumers	*15.5*	*12.0*	*14.2*
Stock as a % of Annual GDP			
Total DTI	33.4	35.0	36.5
o.w. to Businesses	*13.7*	*14.5*	*15.1*
o.w. to Consumers	*19.7*	*20.5*	*21.4*

o.w. – of which
Source: Bank of Jamaica

[46] Private sector credit includes domestic and foreign currency denominated loans and advances, loans funded by specialised institutions and other investments.

Box 3: Quarterly Credit Conditions Survey

Overview

Overall credit conditions tightened marginally for the private sector during the December 2018 quarter, relative to the previous quarter. Tightening was evident in both secured and unsecured lending (see Figure 1a and 1b).

Figure 1a: Index of Credit Market Conditions

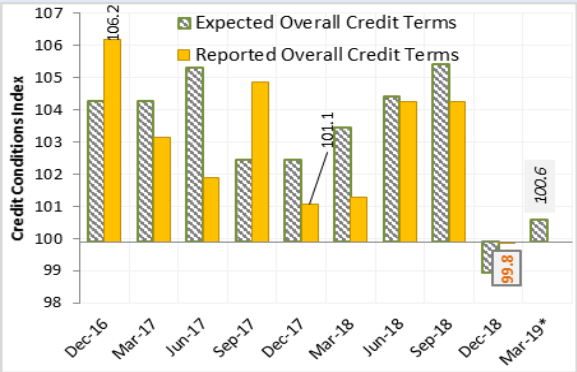
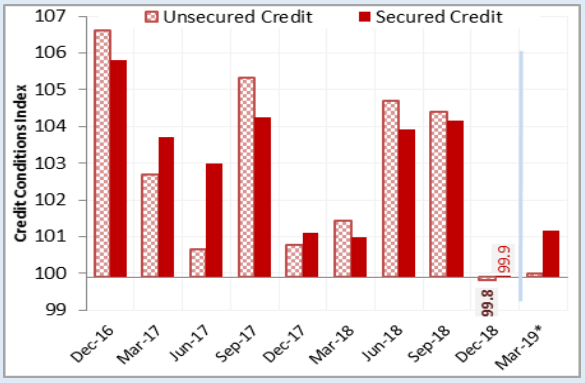


Figure 1b: Index of Credit Market Conditions for Secured and Unsecured Loans



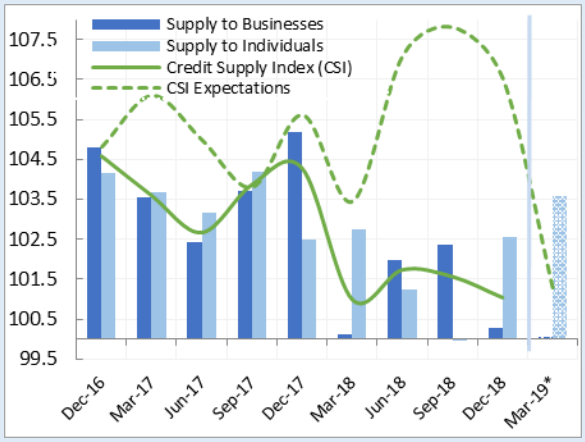
Lenders reported that they expect credit conditions to ease in the March 2019 quarter. This outlook for lower interest rates primarily reflected the expectation for easier conditions for both secured and unsecured loans.

Credit Supply

Growth in credit availability during the December 2018 quarter, as measured by the Credit Supply Index (CSI), remained low when compared to the previous quarter (see Figure 2). The CSI moderated to 101.1 from 101.6 in the previous quarter and primarily reflected a decline in credit made available to businesses, relative to the previous quarter.

The deceleration in the growth in local currency credit made available reflected declines in available credit to all industries except *Transport* and *Construction*. In relation to foreign currency loans, there was also a deceleration in the pace of growth in credit supply, mainly reflected in the *Tourism* and *Distribution* industries.

Figure 2: Components of Credit Supply



1. **Expectations for the upcoming quarter from the current survey.*
2. *Indices greater than 100 indicate an increase while indices less than 100 indicate a decline.*

The allocation of credit between businesses and personal loans remained largely unchanged relative to the previous quarter, with personal loans accounting for the larger share of credit outstanding. Regarding credit distribution to businesses, credit to large businesses continued to account for the largest share of lenders business portfolio at end-December 2018, with the proportion (59%) being slightly less than that which obtained at the end of the previous quarter (see Figure 3a and 3b). There was also a decline in the proportion of credit outstanding to micro and small firms to 8.1 per cent and 13.1 per cent from 8.9 per cent and 14.2 per cent, respectively. The proportion of credit allocated to medium-sized firms however increased to 20.0 per cent from 16.7 per cent during the previous period.

Figure 3a: Distribution of Private Sector Credit[47]

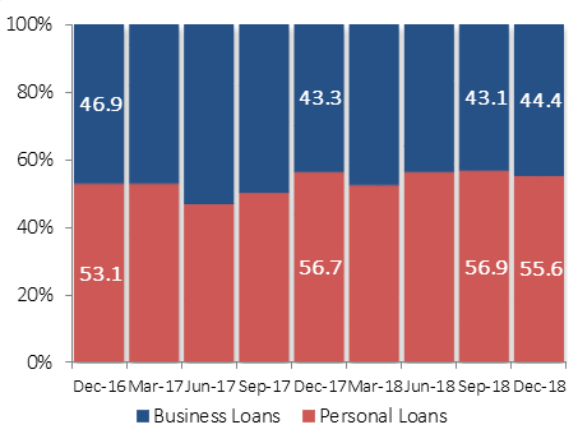
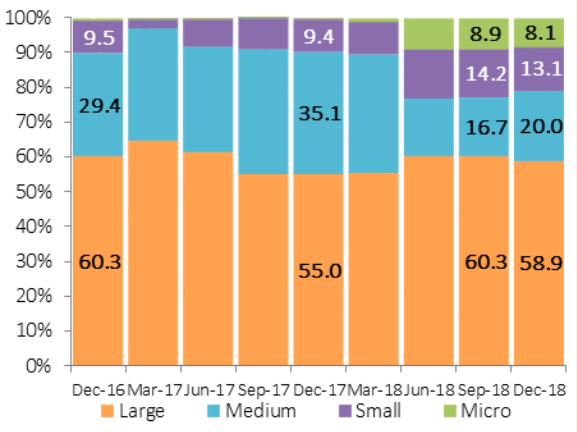


Figure 3b: Distribution of Private Sector Credit by Business Size[48]



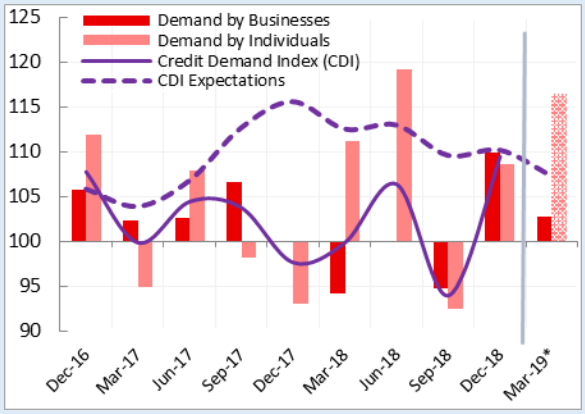
For the March 2019 quarter, lenders reported that they plan to increase the amount of credit made available to both businesses and individuals.

Credit Demand

Growth in credit demand, as measured by the Credit Demand Index (CDI), accelerated sharply for the December 2018 quarter relative to the September 2018 quarter (see Figure 4). The CDI for the quarter rose to 109.5 up from 94.0 in the previous quarter. This expansion stemmed from increases in demand for both personal and business loans). Lenders reported that the increase in the CDI was influenced by changes in business activities and interest rates.

The increase in credit demand in the review quarter was reflected in both local and foreign currency loans. For local currency loans, the increase in demand was mostly evident in the *Distribution*, *Professional & Business Services*, *Transport, Construction* and *Mining* industries while increased demand for foreign currency loans stemmed from the *Professional & Business Services, Distribution, Tourism* and *Construction* industries. With respect to demand by business size, the overall growth was reflected in the demand for credit by micro and small businesses.

Figure 4: Components of Credit Demand



1. *Indices greater than 100 indicate an increase while indices less than 100 indicate a decline.*
2. *The asterisk (*) represents expectations provided by the respondents.*

For the March 2019 quarter, lenders indicated that they are anticipating a slight moderation in the overall demand for credit, particularly from businesses. This decline reflected respondents' expectation of changes in business activities, loan promotion activities and interest rates.

[47] Figure 3 shows the distribution of credit between households and businesses. Credit to businesses is further disaggregated to show total business loans distributed to firms of various sizes.

[48] Figure 3 shows the distribution of credit between households and businesses. Credit to businesses is further disaggregated to show total business loans distributed to firms of various sizes.

Price of Credit

Based on the survey responses, average indicative interest rates on new local currency loans **declined** by approximately **18 bps** to **14.58 per cent** during the review quarter, relative to the previous quarter. This reflected a decline of **51 bps** in rates for business loans, while there was an increase of **117 bps** in the rates for personal loans. Lower rates on business loans primarily reflected the impact of reduced interest rates on loans to medium sized firms (see **Table 1**).

Similarly, the average indicative interest rate on new foreign currency loans declined by **24 bps** to **7.28 per cent**, which reflected lower rates on foreign currency loans to all business sizes.

For the March 2019 quarter, lenders reported that they plan to increase the interest rates on new local and foreign currency loans by **64 bps** and **94 bps** to **15.22 per cent** and **7.99 per cent**, respectively.

Table 1: Overall Average Lending Rates on Local and Foreign Currency Loans

	September 2018 Survey		December 2018 Survey	
	Sep-18	*Dec-18**	Dec-18	*Mar-19**
Local Currency (LC) Loans				
Business loans	14.16	*15.31*	13.65	*14.43*
Personal loans	17.14	*17.30*	18.31	*18.39*
Average LC rates	14.76	*15.34*	14.58	*15.22*
Foreign Currency (FC) Loans				
Business loans	7.52	*7.80*	7.28	*7.99*
Reference rate	7.42	*8.01*	6.43	*8.00*

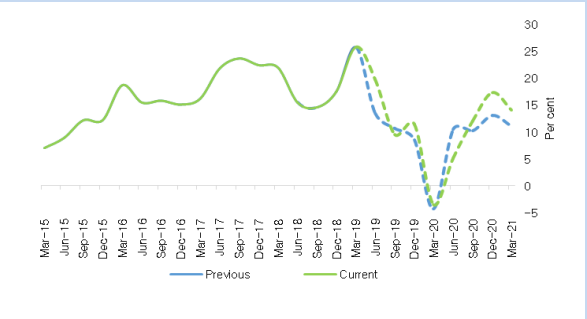
For more detailed analysis of the survey see BOJ Credit Conditions Survey Report.

Monetary Projections

Growth in the monetary aggregates over the next eight quarters is projected to trend slightly higher than previous projections. The monetary base is projected to expand at an average annual growth rate of 10.4 per cent up to March 2021, higher than the 9.1 per cent growth previously projected. This upward revision stems from a revised perspective on the demand for currency.[49] Given these revisions, M2J is now projected to expand at an average annual rate of 12.2 per cent over the next eight quarters, relative to the previous projection of 8.9 per cent.

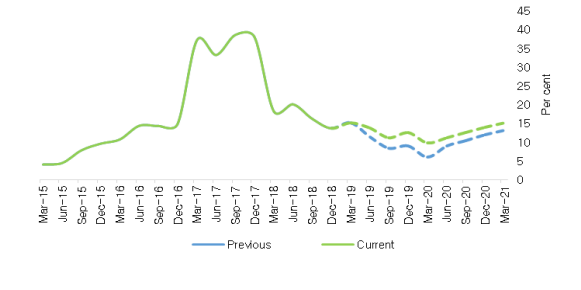
Growth in private sector credit over the next eight quarters is projected to trend higher than the previous projection. Private sector credit is projected to record an annual average growth of 12.5 per cent up to March 2021, compared to a previously forecasted expansion of 9.9 per cent. This revised outlook reflects the upward revision to GDP growth.

Figure 27: Annual Growth in Base Money



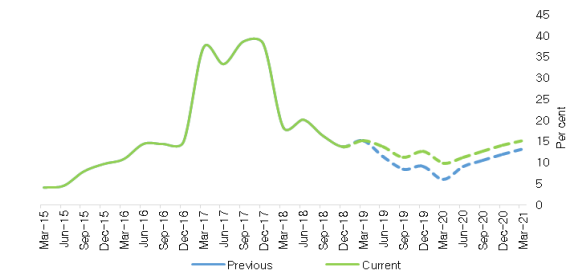
Source: Bank of Jamaica

Figure 28: Annual Growth in M2J



Source: Bank of Jamaica

Figure 29: Private Sector Credit



Source: Bank of Jamaica

[49] Currency issued is expected to accelerate at faster pace than previously expected, primarily reflecting higher currency in circulation driven by the upward revision to GDP growth.

9.0 Monetary Conditions

Bank of Jamaica's Monetary Conditions Index (MCI) reflected marginally accommodative monetary conditions during the March 2019 quarter. The forecast for the MCI suggests accommodative monetary conditions for the June 2019 quarter.

Monetary conditions, as measured by BOJ's monetary conditions index, was less accommodative during the March 2019 quarter, relative to the previous quarter and relative to the forecast.[50] On average, this tightening in monetary conditions occurred in the context of an increase in real interest rates, partly offset by a depreciation in the real exchange rate. The increase in real interest rate was partly related to a rise in nominal treasury bill rates, while the depreciation in the real exchange rate was driven, on average, by a depreciation in the nominal exchange rate. At the end of the March 2019 quarter, real interest rates were 40 bps below equilibrium, compared with the previous forecast for real rates to be 278 bps below equilibrium. The real exchange rate at March 2019 was considered fairly valued.

For the for the 12 months ending March 2019, there was an estimated gain in competitiveness of 0.5 per cent, relative to the 12 months ending December 2018 (a loss of 1.0 per cent on an annual point to point basis). The gain in competitiveness reflected a nominal depreciation of approximately 0.8 per cent in the Jamaican dollar relative to the USD. This impact was partly offset by a higher domestic inflation of 0.7 per cent compared with inflation of 0.4 inflation in the US.

For the for the 12 months ending March 2019, there was an improvement of 13.6 per cent in the real exchange rate, relative to the 12 months ending May 2013 (the start of the country' s IMF-supported reform programme).

At March 2019, there was a point to point improvement of 7.5 per cent in the real exchange rate, relative to May 2013 (the start of the country' s IMF-supported reform programme).

[50] The MCI for the March 2019 quarter was 0.3 per cent below equilibrium compared to the projected gap for the quarter of negative 1.40 per cent.

10.0 Conclusion

Inflation is projected to average 4.5 per cent over the next eight quarters, an acceleration relative the average inflation rate over the past eight quarters. The forecast track over the first four quarters sees inflation rising to 4.9 per cent at June 2019 and then decelerate to 4.0 per cent at September 2019. Inflation is projected to accelerate to 5.1 per cent at December 2019 and remain at that level for the March 2020 quarter. There are, however, months over this period when inflation falls below the lower limit of the Bank's target. This near term forecast is mainly predicated on low, albeit improving demand, relative to capacity. Inflation is projected to subsequently track below the middle of the Bank's 4.0 per cent to 5.0 per cent target before gradually approaching it in the medium term. The forecast track over the first four quarters is higher than previously projected but falls below the previous forecast thereafter.

Global growth projections for the next eight quarters have been revised downwards by 0.1 percentage point to an average of 3.3 per cent and is projected to average 3.3 per cent over the medium-term. Of note, US output growth has been revised downwards to 2.2 per cent for 2019 and is projected to average 1.8 per cent over the medium-term. The US Federal Reserve maintained interest rates in March 2019 in the context of global economic and financial developments and muted inflation pressures. BOJ projects that there will be a cumulative 50 bps decline in the Fed Funds rate in the December 2019 and June 2020 quarters, which will support a downward drift in external market interest rates, including sovereign bond yields.

Over the period June 2019 to March 2020, real output is projected to expand at an average quarterly rate in the range of 1.5 per cent to 2.0 per cent, slightly above the previous projection for growth in the range 1.0 per cent to 2.0 per cent. Over the medium term (June 2020 to March 2023), growth is however projected to average in the range 1.5 per cent to 2.0 per cent, lower than the previous projection for growth in the range of 2.0 per cent to 2.5 per cent. Notwithstanding the higher growth trajectory, the output gap transitions from being less negative over the near term to being more negative over the medium term, relative to the previous forecast. The risks to the growth forecast remain skewed to the downside.

Central Government operations are projected to be less restrictive than previously assessed for the near-term and medium-term. The GOJ continues to be committed to maintaining its primary surplus and public sector overall balance targets under the SBA.

Jamaica's CAD of the BOP improved for the December 2018 quarter, relative to the previous year. Over the medium-term, the CAD is projected to remain generally stable and broadly sustainable. The outlook for gross reserves has improved, relative to the previous projection with non-borrowed reserves forecast above the programme floor through to September 2019, albeit marginally so.

Growth in the monetary aggregates is projected to moderate over the next eight quarters, relative to the previous projections. In this context, the monetary aggregates are not expected to pose a threat to the attainment of the inflation target. Monetary conditions in Jamaica were accommodative in the March 2019 quarter. This was influenced by real depreciation in the exchange rate as well as a reduction in real interest rates. The forecast suggests that continued loose monetary policy and monetary conditions over forecast horizon will be necessary to support inflation returning more quickly to target.

Appendix A: Jamaica's Recent Economic Performance under its IMF SBA-supported Programme

Overview

During the period December 4 to 8, 2017, Jamaica was visited by an IMF staff team which conducted an interim assessment of the progress on Jamaica's economic reform programme under the precautionary Stand-By Arrangement (SBA).The Staff visit was not a formal programme review under the SBA.

The third formal review under the SBA for the September and December quarters of 2017 was held in February 2018. This review was held in conjunction with the 2018 Article IV Consultation. All structural benchmarks for the third review were met. Further, all quantitative performance criteria (QPCs) and indicative targets (ITs) for end-December 2017 were also met. Given this, there was approval of the third review by Executive Board of the IMF which provides the Government of Jamaica with access to an additional SDR 160.8 million (approximately US$234.0 million). The remaining funds under the SBA will become accessible to Jamaica in three tranches upon successful completion of the semi-annual programme reviews.

Background

Jamaica's medium-term macroeconomic programme is supported by the precautionary SBA with the IMF.[51] Formal reviews of the quantitative performance criteria (QPCs) and the structural benchmarks under the SBA are held on a semi-annual basis. Under the precautionary SBA, Jamaica has access to approximately US$1.6 billion (SDR 1,195.3 million, or 312 per cent of quota) under certain conditions.[52] In addition to the commitments to maintaining macroeconomic stability and reducing public debt, by addressing a wide range of structural issues, the SBA incorporates a renewed focus on unlocking Jamaica's growth potential through structural reforms. The key SBA conditionalities are reflected in Table 1.

Table 1: SBA Conditionalities

a) Quantitative Performance Criteria (QPC) floors on (i) the primary balance of the central government, and (ii) the overall balance of the public sector.
b) QPCs ceilings on (i) contracting of new central government-guaranteed debt, and (ii) the accrual of domestic and tax refund arrears. A continuous QPC is also on the non-accumulation of external debt payment arrears.
c) Indicative targets on spending on social programs and tax revenues (both floors), and a ceiling on the total loan value of user-funded PPPs.
d) An indicative target on the contracting of new non-guaranteed debt by public bodies. This extension of conditionality to include public bodies (not covered under the EFF definition) aligns debt conditionality with the definition of public debt in the FRL, which includes all consolidated central government and public bodies' debt, excluding the BOJ.
e) A QPC floor on non-borrowed NIR.
f) A monetary policy consultation clause linked to an inflation band.
g) The former QPC in the extended arrangement on central government direct debt is not retained for the stand-by arrangement, as the QPC on the central government primary balance adequately covers this source of debt accumulation.

Source: Memorandum of Economic and Financial Policies (MEFP) Report

Table 2: Structural Benchmarks – Jan-Dec 2017

	Benchmark	Status
1	Issue consultation paper on the resolution framework with outline of draft legislation for public comment.	Met
2	Establish a financial inclusion council to implement the Cabinet-approved umbrella financial inclusion strategy for the period 2016-20.	Met
3	Undertake measures to ensure full compliance with the provisions of the Securities (Retail Repurchase Agreement) Regulations.	Met
4	Submit to cabinet a proposal for the crisis resolution framework.	Met
5	Submit to Cabinet a proposal for revising the BOJ Act	Met

Source: Memorandum of Economic and Financial Policies (MEFP) Report

[51] The Executive Board of the IMF approved the three-year SBA arrangement for Jamaica on 11 November 2016.

[52] The Stand-By Arrangement (SBA) framework allows the Fund to respond quickly to countries' external financing needs and to support policies designed to help them emerge from crisis and restore sustainable growth. https://www.imf.org/en/About/Factsheets/Sheets/2016/08/01/20/33/Stand-By-Arrangement

Table 3: Quantitative Performance Criteria and Indicative Targets
(In J$ billions unless otherwise stated)

		2017								2018		
		Performance Criteria	Actual	Indicative Target	Actual	Performance Criteria	Actual	Performance Criteria	Actual	Indicative Target	Performance Criteria	Indicative Target
	Fiscal targets	end-Mar	end-Mar	end-Jun	end-Jun	end-Sep	end-Sep	end-Dec	end-Dec	end-Mar	end-Jun	end-Sep
1	Primary balance of the central government (floor)	123.0	135.9	15.0	30.6	37.0	62.3	59.0	96.5	132	18.0	44
2	Overall balance of the public sector (floor)	-17.2	32.8	-39.2	5.6	-36.9	8.0	-48.7	1.5	-14.8	-25.0	-39.2
3	Net Increase in central government guaranteed debt (ceiling)	0.0	-8.3	0.0	-2.5	0.0	-4.5	0.0	-7.2	0.0	0.0	0.0
4	Central government accumulation of domestic arrears (ceiling)	0.0	0.0	0.0	-0.9	0.0	-0.6	0.0	-0.6	0.0	0.0	0.0
5	Central government accumulation of tax refund arrears (ceiling)	0.0	-7.8	0.0	-8.4	0.0	-11.4	0.0	-12.3	0.0	0.0	0.0
6	Consolidated government accumulation of external debt payment arrears (ceiling)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Indicative Targets											
7	Tax Revenues (floor)	440.0	458.3	100.0	117.1	215.0	237.6	328.0	353.1	473.0	110.0	234.0
8	Change in the stock of public bodies non-guaranteed debt (ceiling)	3.3	0.6	2.5	0.1	2.0	-1.0	7.9	-0.1	11.5	16.8	17.2
9	Central government spending on social programmes (floor)	24.3	27.8	6.1	8.9	11.2	16.4	18.3	22.1	26.6	6.4	11.9
10	Total loan value of all user funded PPPs (ceiling, per cent of GDP)	3.0	0.7	3.0	0.9	3.0	1.1	3.0	1.3	3.0	3.0	3.0
	Monetary targets											
11	Stock of Non-borrowed NIR (floor) 1/2/	1,475	1,936	1,521	1,820	1,637	1,641	1,781	2,533.7	1,917	2075	2,140
12	Monetary Policy Consultation clause (in per cent)											
	Upper band	9.0		9.0		8.5		8.5		7.5	6.5	6.5
	Centre inflation target	5.5	4.1	5.5	4.4	5.0	4.6	5.0	5.2	5.0	5.0	5.0
	Lower band	2.0		2.0		1.5		1.5		2.5	3.5	3.5

Source: Bank of Jamaica

Note:

1/ In millions of US dollars

2/ Stock of BOJ NIR minus all foreign currency CDs to domestic residents

Appendix B:
Current Account Sustainability Measures

External sustainability approach

The external sustainability approach (*ES*) calculates the current account balance or "CA norm" that would stabilize the International Investment Position (IIP) of the country relative to real GDP. The external sustainability approach requires that the growth rate of real GDP be sufficient to offset the growth of the country's liabilities.

Equation:

$$ca^s = \frac{g + \pi(1+g_t)}{(1+g)(1+\pi)} b^s$$

Where:

ca^s is the sustainable current account balance (ES) approach

g_t is the growth rate of real GDP

π is the exchange rate adjusted inflation rate

b^s is the benchmark level of IIP

In order to estimate the IIP-stabilizing current account balance, assumptions about the country's medium-term growth and inflation rate are made.

Macroeconomic balance (MB) approach

The macroeconomic balance (MB) approach compares the current account balance projected over the medium-term and an estimated equilibrium current account balance, or "CA norm." The equilibrium current account balance "CA norm" is represented as a function of fundamental variables, inter-alia, the fiscal balance; demographics; net foreign assets (NFA); relative income squared; openness and financial deepening. The current account norm for the macroeconomic balance approach is calculated using medium-term projections of all variables against estimated coefficients published by the IMF for developing countries. The macroeconomic balance (MB) approach assumes that the output gap between domestic and partner countries are closed and the lagged effects of past exchange rate movements have been realized.

Additional Tables

1: INFLATION RATES

		CPI (End of Point)	Headline Inflation	Core Inflation*
FY06/07	Jun-06	97.68	9.81	10.42
	Sep-06	99.76	6.59	9.71
	Dec-06	100.00	5.49	8.13
	Mar-07	102.50	7.44	9.49
FY07/08	Jun-07	105.10	7.60	9.65
	Sep-07	108.90	9.16	10.39
	Dec-07	116.82	16.82	15.62
	Mar-08	122.94	19.94	17.32
FY08/09	Jun-08	130.29	23.97	20.27
	Sep-08	136.45	25.30	20.99
	Dec-08	136.50	16.84	16.61
	Mar-09	122.94	12.43	12.98
FY09/10	Jun-09	141.95	8.95	10.29
	Sep-09	146.30	7.22	9.77
	Dec-09	150.44	10.21	10.28
	Mar-10	156.64	13.33	11.60
FY10/11	Jun-10	160.70	13.21	10.99
	Sep-10	162.77	11.26	9.40
	Dec-10	168.10	11.74	8.65
	Mar-11	168.92	7.84	6.57
FY11/12	Jun-11	172.28	7.20	6.67
	Sep-11	175.91	8.07	6.99
	Dec-11	178.21	6.01	6.86
	Mar-12	168.92	7.26	6.97
FY12/13	Jun-12	183.83	6.71	6.91
	Sep-12	187.61	6.65	5.59
	Dec-12	192.47	8.00	5.44
	Mar-13	197.72	9.13	6.30
FY13/14	Jun-13	199.93	8.76	6.26
	Sep-13	207.24	10.46	6.95
	Dec-13	210.70	9.47	7.38
	Mar-14	214.21	8.34	6.54
FY14/15	Jun-14	215.86	7.97	6.10
	Sep-14	225.86	8.99	6.72
	Dec-14	224.09	6.36	5.97
	Mar-15	214.21	3.96	5.51
FY15/16	Jun-15	225.30	4.37	4.81
	Sep-15	229.97	1.82	4.00
	Dec-15	232.30	3.66	3.51
	Mar-16	229.29	2.96	3.04
FY16/17	Jun-16	230.98	2.52	2.76
	Sep-16	234.23	1.86	2.49
	Dec-16	236.30	1.72	2.31
	Mar-17	238.66	4.09	2.27
FY17/18	Jun-17	241.22	4.43	2.43
	Sep-17	244.97	4.58	2.55
	Dec-17	248.67	5.24	2.65
	Mar-18	248.05	3.94	2.58
FY18/19	Jun-18	248.01	2.82	2.29
	Sep-18	255.58	4.33	2.44
	Dec-18+	254.74	2.44	2.36
	Mar-19	256.47	3.39	2.33

* Core inflation is measured as headline inflation excluding agriculture and fuel related components of the CPI Basket (CPI-AF)

2: ALL JAMAICA INFLATION – Point-to-Point (March 2019)

Divisions, Classes and Groups	Weight (%)	Inflation (%)	Weighted Inflation	Contribution
FOOD & NON-ALCOHOLIC BEVERAGES	37.46	5.29	1.98	58.44
Food	35.12	5.43	1.91	56.26
Bread and Cereals	6.10	2.09	0.13	3.75
Meat	7.66	3.21	0.25	7.25
Fish and Seafood	5.33	1.77	0.09	2.78
Milk, Cheese and Eggs	3.11	2.08	0.06	1.91
Oils and Fats	1.64	3.58	0.06	1.73
Fruit	1.14	10.78	0.12	3.62
Vegetables and Starchy Foods	6.85	12.07	0.83	24.38
Sugar, Jam, Honey, Chocolate and Confectionery	1.72	12.65	0.59	17.31
Food Products n.e.c.	1.55	10.68	0.24	6.96
Non-Alcoholic Beverages	2.35	4.16	0.07	2.11
Coffee, Tea and Cocoa	0.66	3.52	0.05	1.61
Mineral Waters, Soft Drinks, Fruit and Vegetable Juices	1.69	2.66	0.06	1.84
ALCOHOLIC BEVERAGES AND TOBACCO	1.38	2.81	0.02	0.55
CLOTHING AND FOOTWEAR	3.33	2.60	0.04	1.29
Clothing	2.12	1.50	0.02	0.61
Footwear	1.22	2.32	0.08	2.28
HOUSING, WATER, ELECTRICITY, GAS AND OTHER FUELS	12.76	2.46	0.05	1.54
Rentals for Housing	3.52	2.10	0.03	0.75
Maintenance and Repair of Dwelling	0.80	0.16	0.02	0.60
Water Supply and Miscellaneous Services Related to the Dwelling	1.32	0.37	0.01	0.39
Electricity, Gas and Other Fuels	7.12	4.03	0.03	0.95
FURNISHINGS, HOUSEHOLD EQUIPMENT AND ROUTINE HOUSEHOLD MAINTENANCE	4.93	3.61	0.05	1.40
Furniture and Furnishings	0.69	-1.22	-0.09	-2.55
Household Textiles	0.32	4.62	0.23	6.72
Household Appliances	0.56	2.00	0.01	0.41
Glassware, Tableware and Household Utensils	0.05	2.13	0.01	0.20
Tools and Equipment for House and Garden	0.15	3.10	0.02	0.51
Goods and Services for Routine Household Maintenance	3.16	1.89	0.00	0.03
HEALTH	3.29	1.70	0.00	0.08
Medical Products, Appliances and Equipment	1.22	5.89	0.19	5.48
Health Services	2.07	1.55	0.05	1.50
TRANSPORT	12.82	1.75	0.02	0.63
COMMUNICATION	3.99	1.42	0.03	0.86
RECREATION AND CULTURE	3.36	1.69	0.22	6.38
EDUCATION	2.14	0.06	0.00	0.07
RESTAURANTS & ACCOMMODATION SERVICES	6.19	1.71	0.06	1.69
MISCELLANEOUS GOODS AND SERVICES	8.37	4.22	0.09	2.67
ALL DIVISIONS	100.00	3.39	3.39	100.00

3: BANK OF JAMAICA OPERATING TARGETS

	Actual Mar-17	Actual Jun-17	Actual Sep-17	Actual Dec-17	Actual Mar-18	Actual Jun-18	Actual Sep-18	Actual Dec-18	Actual Mar-19
Net International Reserves (US$)	**2,769.17**	**2,616.81**	**3,137.14**	**3,208.29**	**3,074.57**	**3,135.49**	**3,026.72**	**3,005.41**	**3,084.83**
NET INT'L RESERVES (J$)	**353,263.3**	**333,826.3**	**400,204.7**	**409,475.0**	**392,223.8**	**399,995.0**	**386,118.0**	**383,190.7**	**393,530.9**
Assets	424,029.0	406,393.5	473,914.5	482,557.5	466,512.6	470,401.6	455,276.4	450,373.2	**459,912.5**
Liabilities	-70,765.8	72,567.2	73,709.9	73,082.5	74,289.8	70,406.6	69,158.4	67,182.5	66,381.6
NET DOMESTIC ASSETS	**-221,414.2**	**-186,807.0**	**-247,053.8**	**-239,082.4**	**-224,296.9**	**-230,166.2**	**-208,752.4**	**-180,643.6**	**-179,515.8**
-Net Claims on Public Sector	118,459.5	181,221.1	127,479.9	125,095.7	136,864.5	132,042.6	167,156.1	137,291.6	122,087.2
-Net Credit to Banks	-51,835.4	-59,333.2	-60,976.3	-63,635.0	-61,546.1	-63,547.9	-65,665.8	-63,233.2	-65,541.9
-Open Market Operations	-48,385.7	-87,050.2	-96,355.9	-93,493.0	-93,283.3	-95,857.1	-117,584.7	-73,962.1	-58,532.9
-Other	-239,652.6	-221,644.7	-217,053.8	-207,050.2	-206,332.1	-202,803.8	-192,657.9	-180,740.0	-177,528.3
MONETARY BASE	**131,849.1**	**147,019.3**	**153,150.9**	**170,392.6**	**167,925.9**	**169,828.8**	**177,365.6**	**202,547.1**	**214,015.1**
- Currency Issue	88,071.1	91,642.8	92,167.4	110,920.3	104,179.7	103,673.9	108,264.9	133,544.8	116,399.2
- Cash Reserve	43,574.5	54,277.9	57,498.2	58,759.1	61,645.7	65,944.4	68,815.3	67,484.2	54,101.0
- Current Account	203.5	1,098.6	3,485.3	713.2	2,100.5	210.5	258.5	1,518.1	43,514.88
GROWTH IN MONETARY BASE [F-Y-T-D]	**-**	**11.5**	**16.2**	**29.2**	**-**	**1.1**	**5.6**	**20.6**	**-**

4: MONETARY AGGREGATES

		BASE	M1J	M1*	M2J	M2*	M3J	M3*
	Dec-13	103633.38	122884.67	122884.67	267936.36	418628.15	374695.17	525386.96
	Mar-14	94428.02	119019.10	119019.10	262328.5	422293.20	373800.60	533765.30
FY14/15	Jun-14	95944.45	114410.60	114410.60	256212.30	418589.90	369666.90	532044.50
	Sep-14	96249.59	114321.90	114321.90	255533.40	417063.70	371626.90	533157.20
	Dec-14	108882.53	132667.25	132667.25	276864.33	446540.66	396051.52	565727.85
	Mar-15	101081.30	127331.43	127331.43	273286.91	444356.87	398263.53	569333.49
FY15/16	Jun-15	104475.63	142761.90	142761.90	292242.71	471576.37	422968.84	602302.50
	Sep-15	107998.61	137336.80	137336.80	288215.89	475790.09	421278.58	608852.79
	Dec-15	122211.75	160268.64	160268.64	317745.81	517788.53	453436.26	653478.99
	Mar-16	120011.93	155348.7	180719.1	313587.6	530398.8	460873.6	677684.8
FY16/17	Jun-16	120682.00	152152.3	176967.0	315129.2	542936.3	468354.8	696162.0
	Sep-16	125112.90	162012.8	183699.4	327364.0	554814.8	485596.6	713047.4
	Dec-16	140698.1	184887.8	210703.5	356709.1	586686.9	514906.4	744884.2
	Mar-17	139,460.80	177,728.24	205,405.77	385,130.22	636,350.53	545,141.71	796,362.01
FY17/18	Jun-17	147,019.31	176,880.50	206,834.55	390,658.46	661,159.67	555,312.55	825,813.77
	Sep-17	154,764.51	183,754.61	213,187.22	425,524.34	699,679.21	601,465.45	875,620.33
	Dec-17	172,290.94	205,967.44	233,487.21	457,905.02	718,529.75	633,487.37	894,112.10
	Mar-18	170,142.28	220,372.56	250,633.11	479,452.65	756,399.23	657,857.33	934,803.92
FY18/19	Jun-18	169,828.80	216,289.92	251,603.73	482,485.41	770,885.09	673,782.30	962,181.99
	Sep-18	177,365.64	230,629.81	266,659.06	496,418.25	804,064.91	693,490.11	1,001,136.77
	Dec-18	202,547.07	251,413.40	283,542.66	524,339.37	818,748.06	731,302.94	1,025,711.62
FY19/20	Mar-19	214,015.10	249,673.01	285,367.63	542,149.88	844,420.19	753,617.10	1,055.887.41

5: COMMERCIAL BANKS' SELECTED INTEREST RATES (%)

		Fixed Deposits *		Savings Deposits	Lending Rate	Fixed Deposits Rate	Loan Rate	Inter-bank Lending Rate
		3-6 months	6-12 months	(Average)	(Average)	(Wgt. Average)	(Wgt. Average)	(Average)
FY12/13	Jun-12	2.00 – 5.25	2.00 – 6.00	2.10	17.46	3.59	17.36	4.95
	Sep-12	2.25 – 5.25	2.00 – 6.00	2.07	17.55	3.82	17.40	6.71
	Dec-12	2.25 – 6.10	2.25 – 6.40	2.07	17.23	3.92	18.44	4.02
	Mar-13	0.90 – 5.00	0.90 – 5.25	1.94	17.23	3.55	17.97	4.77
FY13/14	Jun-13	0.90 – 5.30	0.90 - 6.10	1.51	16.72	3.21	17.66	3.89
	Sep-13	0.90 – 5.70	0.90 – 5.90	1.62	16.47	3.88	17.45	5.23
	Dec-13	1.00 – 7.10	1.25 – 7.20	1.23	14.56	4.26	17.49	7.59
	Mar-14	1.00 – 7.10	1.25 – 7.20	1.40	14.74	4.50	17.57	9.42
FY14/15	Jun-14	1.00 – 7.10	1.25 – 7.20	1.40	14.76	5.03	17.50	8.08
	Sep-14	1.00 – 6.88	1.25 – 7.00	1.18	14.99	4.47	16.91	4.19
	Dec-14	1.00 – 6.88	1.15 – 7.00	1.44	14.99	3.98	17.18	3.90
	Mar-15*	0.75 –7.00	0.95 – 7.50	0.70	18.50	3.80	17.10	3.94
FY15/16	Jun-15*	0.75 –6.75	0.95 – 7.25	0.60	18.50	4.01	17.17	..
	Sept-15*	0.75 –6.70	0.95 – 7.25	0.60	18.00	3.89	17.00	..
	Dec-15*	0.75 –6.70	0.95 – 7.25	0.60	18.00	3.76	16.47	..
	Mar-16	0.75 –6.00	0.95 – 6.60	0.57	18.00	3.54	16.67	..
FY15/16	Jun-16	0.75 –6.00	0.95 – 6.60	0.57	18.00	3.51	16.44	..

6: GOJ TREASURY BILL YIELDS
(End of Period)

		1-month	3-month	6-month	9-month	12-month
FY12/13	Sep-12	6.16	6.36	6.57	…	…
	Dec-12	6.31	7.67	7.18	…	…
	Mar-13	5.37	5.82	6.22	…	…
	Jun-13	6.02	6.76	7.12	…	…
FY13/14	Sep-13	6.32	7.42	7.95	…	…
	Dec-13	6.25	7.53	8.25	…	…
	Mar-14	6.76	8.35	9.11	…	…
	Jun-14	6.80	7.66	8.37	…	…
FY14/15	Sep-14	6.89	7.47	8.00	…	…
	Dec-14	6.38	6.96	7.14	…	…
	Mar-15	6.30	6.73	7.00	…	…
	Jun-15	6.23	6.48	6.63	…	…
FY15/16	Sep-15	6.23	6.20	6.35	…	…
	Dec-15	5.97	5.96	6.04	…	…
	Mar-16	5.38	5.75	5.83	…	…
	Jun-16	5.47	5.86	6.01	…	…
FY16/17	Sept-16	5.84	5.86	5.81	…	…
	Dec-16	5.64	5.68	6.56	…	…
	Mar-17	6.10	6.13	6.32	…	…

	Jun-17	…	5.77	6.13	…	…
FY17/18	Sept-17	…	4.98	5.45	…	…
	Dec-17	…	4.18	4.63	…	…
	Mar-18	…	2.98	3.17	…	…
	Jun-18	…	2.54	2.66	…	…
FY19/20	Sep-18	…	1.71	1.87	…	…
	Dec-18	…	2.05	2.07	…	…
	Mar-19	…	2.19	2.17	…	…

7: BANK OF JAMAICA OPEN MARKET INTEREST RATES
(End of Period)

		30 days	60 days	90 days	120 days	180 days	270 days	365 days
	Dec-11	6.25	…	…	…	…	…	…
	Mar-12	6.25	…	…	…	…	…	…
FY11/12	Jun-12	6.25	…	…	…	…	…	…
	Sep-12	6.25	…	…	…	…	…	…
	Dec-12	6.25	…	…	…	…	…	…
	Mar-13	5.75	…	…	…	…	…	…
FY12/13	Jun-13	5.75	…	…	…	…	…	…
	Sep-13	5.75	…	…	…	…	…	…
	Dec-13	5.75	…	…	…	…	…	…
	Mar-14	5.75	…	…	…	…	…	…
FY13/14	Jun-14	5.75	…	…	…	…	…	…
	Sep-14	5.75	…	…	…	…	…	…
	Dec-14	5.75	…	…	…	…	…	…
	Mar-15	5.75	…	…	…	…	…	…
FY14/15	Jun-15	5.50	…	…	…	…	…	…
	Sep-15	5.25	…	…	…	…	…	…
	Dec-15	5.25	…	…	…	…	…	…
	Mar-16	5.25	…	…	…	…	…	…
FY15/16	Jun-16	5.00	…	…	…	…	…	…
	Sep-16	5.00	…	…	…	…	…	…
	Dec-16	5.00	…	…	…	…	…	…
	Mar-17	5.00	…	…	…	…	…	…
FY16/17	Jun-17	4.75	…	…	…	…	…	…
	Sep-17	4.50	…	…	…	…	…	…
	Dec-17	4.00	…	…	…	…	…	…
	Mar-18	3.50	…	…	…	…	…	…
FY17/18	Jun-18	3.00	…	…	…	…	…	…
	Sep-18	3.00	…	…	…	…	…	…
	Dec-18	3.00	…	…	…	…	…	…
	Mar-19	3.00	…	…	…	…	…	…

8: Placements and Maturities* in BOJ OMO Instruments

	July – September 2018			October – December 2018			January –March 2019		
	Maturities (J$MN)	Placements (J$MN)	Average Yield (%)	Maturities (J$MN)	Placements (J$MN)	Average Yield (%)	Maturities (J$MN)	Placements (J$MN)	Average Yield (%)
30-day CD	105.25	105.25	1.75	111.3	103.75	1.96	92.5	100	2.1
272-day VR CD	0.0	0.67	2.00	0.0	0.0		0	0	
365-day VR CD	0.0	0.0		0.0	0.0		0	0	
548-day VR CD	0.0	0.0		0.0	0.0		0	0	
729-day VR CD	0.0	0.0		0.0	0.0		0	0	
365-day FR CD	1.0	0.0		0.0	0.0		0	0	
272-day FR USD IB	0.0	0.0		0.0	3.77	2.70	0	0	
365-day FR USD IB	0.0	13.74	2.63	0.0	0.0		0	0	
Repos	7.99	7.99		78.14	87.34		131.4	129.2	
	Maturities (US$MN)	Placements (US$MN)	Average Yield (%)	Maturities (US$MN)	Placements (US$MN)	Average Yield (%)	Maturities (US$MN)	Placements (US$MN)	Average Yield (%)
1-year FR USD CD	0.0	0.0		0.0	0.0		0	0	
2-year FR USD CD	0.0	0.0		6.54	0.0		0	0	
3-year FR USD CD	0.04	0.0		23.62	0.0		0.04	0	
4-year FR USD CD	82.24	0.0		53.97	0.0		2.11	0	
5-year FR USD CD	0.0	0.0		0.0	0.0		0	0	
7-year FR USD CD	0.0	0.0		0.0	0.0		30.00	0	
TOTAL	82.28	0.0		84.13	0.0		32.15	0	

9: EXTERNAL TRADE – GOODS EXPORTS (f.o.b)

(Flows – US$MN)

	Bauxite	Alumina	Sugar	Bananas	Other Traditional	Non-Traditional	Other	Total Goods Exports
Dec-10	29.6	146.0	0.0	0.0	13.5	101.0	53.3	343.4
Mar-11	34.9	130.0	26.9	0.0	18.3	127.0	70.4	407.6
FY11/12	138.3	578.8	91.5	0.1	76.5	509.3	275.3	1669.7
Jun-11	33.5	163.2	28.9	0.0	22.7	134.2	66.9	449.4
Sep-11	38.7	141.8	6.4	0.0	19.9	117.1	73.9	397.8
Dec-11	34.8	145.8	0.0	0.0	14.7	111.0	62.7	368.9
Mar-12	31.3	128.0	56.2	0.0	19.2	147.0	71.8	453.6
FY12/13	131.8	516.7	54.7	0.1	80.8	707.1	252.9	1744.1
Jun-12	31.8	132.4	37.5	0.0	22.3	126.8	66.7	417.5
Sep-12	34.7	130.7	0.5	0.0	20.4	162.3	58.6	407.1
Dec-12	32.4	117.2	0.0	0.0	19.3	223.5	57.9	450.3
Mar-13	33.0	136.4	16.8	0.0	18.8	194.5	69.7	469.2
FY13/14	125.0	526.1	53.7	0.1	70.9	455.8	260.3	1491.9
Jun-13	31.6	127.0	36.3	0.0	23.5	104.0	62.4	384.8
Sep-13	30.6	117.6	0.0	0.0	18.5	120.3	75.8	362.8
Dec-13	32.8	142.7	0.0	0.0	13.8	118.7	55.4	363.4
Mar-14	30.0	138.7	17.4	0.0	15.1	112.9	66.8	381.0
FY14/15	136.5	522.9	55.5	0.2	65.8	395.6	225.6	1402.2
Jun-14	34.4	108.6	26.5	0.0	21.0	96.1	69.2	355.9
Sep-14	33.4	151.6	11.9	0.1	16.6	99.3	62.1	375.0
Dec-14	33.4	130.4	0.0	0.1	13.6	106.8	49.2	333.5
Mar-15	35.3	132.3	17.1	0.1	14.5	93.4	45.1	337.9
FY15/16	116.4	479.8	36.9	0.3	69.9	317.8	158.3	1178.7
Jun-15	32.0	143.8	23.6	0.1	21.9	80.4	45.2	347.0
Sep-15	33.8	114.5	13.1	0.1	19.2	71.0	31.9	283.6
Dec-15	23.9	116.4	0.2	0.1	13.4	84.2	38.8	277.0
Mar-16+	26.6	105.1	0.0	0.1	15.4	82.2	42.3	271.1
FY16/17	83.6	465.6	17.7	0.4	75.7	408.4	193.9	1245.2
Jun-16+	26.7	126.6	9.0	0.1	26.9	90.7	55.2	335.3
Sep-16	20.6	102.7	4.8	0.1	20.6	93.0	41.0	282.7
Dec-16	17.9	109.6	0.3	0.1	13.0	108.4	49.9	299.1
Mar-17+	15.3	133.4	3.6	0.1	16.5	115.2	44.9	328.9
FY17/18+	94.5	638.2	11.3	0.6	65.9	434.4	189.2	1434.2
Jun-17+	19.7	129.9	8.8	0.1	18.7	107.3	56.3	340.8
Sep-17+	19.4	142.5	1.7	0.1	18.9	95.8	43.8	322.3
Dec-17+	29.4	148.2	0.3	0.1	15.1	119.0	46.7	358.8
Mar-18+	25.9	217.7	0.5	0.2	13.3	112.3	42.4	412.3
FY18/19+	74.1	824.1	13.2	0.3	54.5	318.8	73.4	1358.5
Jun-18+	25.0	229.1	3.9	0.1	19.1	97.3	33.4	408.0
Sep-18+	23.2	325.8	9.1	0.1	21.3	102.5	-30.0	451.9
Dec-18	25.9	269.2	0.2	0.1	14.0	119.0	70.0	498.5

+ Revision

10: BALANCE OF PAYMENTS QUARTERLY SUMMARY
(US$MN)

	Sep-16	Dec-16	Mar-17	Jun-17	Sep-17	Dec-17	Mar-18+	Jun-18+	Sep-18+	Dec-18
1. Current Account	**-130.4**	**-51.5**	**28.8**	**44.0**	**-287.0**	**-171.4**	**-79.6**	**-36.2**	**-238.5**	**-109.3**
A. Goods Balance	-761.7	-797.2	-781.4	-832.6	-967.0	-972.5	-872.1	-840.7	-901.4	-928.6
Exports (f.o.b)	282.7	299.1	328.9	340.8	322.3	358.8	428.5	433.2	534.4	498.5
Imports (f.o.b)	1044.4	1096.3	1110.3	1173.5	1289.3	1331.2	1300.6	1273.9	1435.7	1427.0
B. Services Balance	198.6	191.9	403.5	316.8	232.1	244.3	435.4	340.9	253.8	285.3
Transportation	-133.5	-145.4	-140.0	-149.7	-158.2	-170.7	-161.7	-152.8	-183.3	-183.0
Travel	513.4	531.7	702.0	622.6	577.6	636.2	794.4	666.7	642.3	709.5
Other Services	-181.4	-194.4	-158.4	-156.0	-187.2	-221.2	-197.3	-173.0	-205.2	-241.3
Goods & Services Balance	-563.1	-605.3	-377.9	-515.8	-734.9	-728.2	-436.7	-499.9	-647.6	-643.3
C. Income	-174.3	-56.5	-157.8	-61.4	-164.0	-37.8	-210.8	-143.2	-236.7	-97.4
Compensation of employees	14.4	55.6	14.0	10.7	15.3	48.0	15.0	9.0	21.1	50.6
Investment Income	-188.6	-112.1	-171.9	-72.1	-179.3	-85.9	-225.8	-152.2	-257.8	-148.0
D. Current Transfers	607.0	610.3	564.5	621.3	611.9	594.6	568.0	606.9	645.8	631.5
General Government	43.3	45.3	39.8	48.5	40.3	44.2	45.4	44.0	74.3	43.6
Other Sectors	563.7	565.0	524.7	572.8	571.6	550.5	522.6	562.9	571.5	587.9
2. Capital & Financial Account	212.7	636.2	567.1	39.3	1405.1	450.3	1720.3	52.3	569.5	836.3
A. Capital Account	4.4	0.0	2.4	-6.1	-9.8	-6.1	3.3	-3.7	-4.8	-6.5
Capital Transfers	4.4	0.0	2.4	-6.1	-9.8	-6.1	3.3	-3.7	-4.8	-6.5
General Government	12.0	7.3	2.4	2.2	2.3	3.8	11.8	4.7	2.8	0.7
Other Sectors	-7.6	-7.2	0.0	-8.3	-12.1	-9.9	-8.5	-8.5	-7.6	-7.2
Acq/disp of non-produced non- fin assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B. Financial Account	208.3	636.1	564.8	45.4	1414.9	456.4	1717.1	56.0	574.4	842.8
Direct Investment	239.4	175.7	189.7	166.6	233.0	265.2	243.1	151.1	169.0	183.1
Portfolio Investment	-21.5	104.9	284.4	-145.3	725.9	-14.9	1606.6	-328.7	199.6	129.8
Other official investment	13.3	9.1	11.7	-210.9	836.7	-63.1	-4.4	-22.8	15.2	-120.4
Other private Investment	175.0	602.8	128.7	82.7	139.8	340.3	-261.9	317.3	81.8	629.0
Reserves	-197.9	-256.4	-49.8	152.4	-520.3	-71.1	133.7	-60.9	108.8	21.3
Errors & Omissions	-82.3	-584.7	-595.9	-83.3	-1118.0	-278.9	-1640.8	-16.1	-331.1	-727.0

+ Revised

11: FOREIGN EXCHANGE SELLING RATES
(J$ per unit of foreign currency – end of period)

		US$	Can$	GBP £
	Dec-11	86.6000	84.2000	134.4400
	Mar-12	87.3000	87.6500	139.2800
FY12/13	Jun-12	88.7000	86.7100	138.6600
	Sep-12	89.9300	91.4200	145.3900
	Dec-12	92.9800	93.3100	152.6400
	Mar-13	98.8900	97.9900	151.9000
FY13/14	Jun-13	101.3800	96.7000	154.4800
	Sep-13	103.6000	100.7100	167.1600
	Dec-13	106.3800	99.7200	175.8400
	Mar-14	109.5700	98.9300	181.7700
FY14/15	Jun-14	112.2022	103.1802	191.8988
	Sep-14	112.6662	101.0142	180.2393
	Dec-14	114.6607	97.6896	177.6759
	Mar-15	115.0435	90.6202	169.9738
FY15/16	Jun-15	116.9832	93.8399	183.7774
	Sep-15	119.0553	88.6177	180.1478
	Dec-15	120.4150	84.9062	177.1179
	Mar-16	122.0421	92.5223	173.4625
FY16/17	Jun-16	126.3835	97.8795	169.8517
	Sept-16	128.2704	97.3084	166.7776
	Dec-16	128.4404	95.8778	157.4208
	Mar-17	128.6672	97.1686	159.5670
FY17/18	Jun-17	128.6228	99.3865	166.5811
	Sep-17	129.9127	105.0988	173.8791
	Dec-17	125.0004	97.3947	167.0275
	Mar-18	125.9850	97.1994	178.1109
FY18/19	Jun-18	130.3918	100.0079	172.9757
	Sep-18	134.6486	103.7023	178.1844
	Dec-18	127.7162	91.5382	159.0355
	Mar-19	126.4666	95.8862	165.5342

12: BANK OF JAMAICA: NET INTERNATIONAL RESERVES
(End-of-Point)

		(US$MN)	(US$MN)	(US$MN)	Weeks of Imports	
		Gross Foreign Assets	Gross Foreign Liabilities	International Reserves (Net)	Goods	Goods & Services
	Dec-11	2,820.40	854.30	1,966.10	25.50	19.20
	Mar-12	2,638.90	861.80	1,777.10	23.20	17.50
FY12/13	Jun-12	2,385.10	844.70	1,540.40	21.10	15.90
	Sep-12	2,115.90	858.10	1,257.80	18.90	14.10
	Dec-12	1,980.80	855.20	1,125.60	17.70	13.20
	Mar-13	1,718.40	834.10	884.30	15.40	11.50
FY13/14	Jun-13	1,881.10	877.90	1,003.20	16.70	12.60
	Sep-13	1,713.50	803.40	910.10	15.80	11.90
	Dec-13	1,817.60	769.70	1,047.90	17.30	12.80
	Mar-14	2,048.60	745.00	1,303.60	19.10	14.40
FY14/15	Jun-14	2,016.53	640.40	1,376.13	20.19	14.57
	Sep-14	2,715.25	514.68	2,200.57	27.79	19.66

	Dec-14	2,473.01	471.92	2,001.09	26.31	18.41
	Mar-15	2,689.74	396.06	2,293.68	28.61	20.02
FY15/16	Jun-15	2,537.27	420.76	2,116.51	29.00	19.83
	Sep-15	2,890.45	448.57	2,441.88	32.34	22.39
	Dec-15	2,890.45	479.82	2,437.01	34.61	23.45
	Mar-16	2,894.31	478.77	2,415.53	34.38	23.30
FY16/17	Jun-16	2,819.90	554.77	2,265.13	32.66	19.36
	Sep-16	3,056.16	593.15	2,463.01	36.30	24.60
	Dec-16	3,291.47	-572.10	2,719.37	38.40	22.27
	Mar-17	3,323.89	-554.72	2,769.17	38.78	22.49
FY17/18	Jun-17	3,185.65	-568.84	2,616.81	35.44	20.54
	Sep-17	3,714.94	-577.80	3,137.14	40.87	23.70
	Dec-17	3,781.17	-572.88	3,208.29	38.83	22.78
	Mar-18	3,656.91	-582.35	3,074.57	35.83	21.29
FY18/19	Jun-18	3,687.40	-551.91	3,135.49	32.49	19.80
	Sep-18	3,568.84	-542.12	3,026.72	33.14	19.67
	Dec-18	3,532.04	-526.63	3005.41	32.80	19.47
	Mar-19	3,605.18	-520.35	3,084.83	35.54	20.50

13: VALUE ADDED BY INDUSTRY AT CONSTANT (2007) PRICES (% CHANGE)

Sep 2016 – Jun 2018 + (Seasonally Unadjusted)

(Percentage Change (%) Over the Corresponding Quarter of Previous Year)

	Mar-17	Jun-17+	Sep-17	Dec-17	Mar-18	Jun-18	Sep-18+	Dec-18
Total Value Added at Basic Prices	0.3	0.1	1.0	1.2	1.4	2.2	1.8	1.9
Agriculture, Forestry & Fishing	-3.4	-9.0	-0.2	-0.5	0.6	12.5	-0.0	3.1
Mining & Quarrying	-10.0	-10.9	-7.9	14.6	25.9	31.6	52.9	25.0
Manufacturing	3.4	1.4	2.8	0.4	0.8	0.2	-0.3	2.0
Food, Beverages & Tobacco	5.6	0.6	3.6	0.4	-1.3	2.5	0.1	2.0
Other Manufacturing	0.2	2.5	1.6	0.5	4.0	-3.2	-0.8	2.0
Construction	0.9	1.2	1.2	0.7	1.1	2.9	3.8	3.7
Electricity & Water	1.0	0.2	2.5	0.5	1.0	1.0	-0.1	-0.3
Wholesale & Retail Trade; Repairs; Installation Of Machinery	0.4	0.7	0.7	0.7	0.5	0.6	0.8	1.6
Hotels and Restaurants	1.2	5.1	4.0	5.9	1.9	0.4	2.1	2.8
Transport, Storage & Communication	0.8	0.8	1.7	0.8	1.4	1.6	1.4	1.9
Finance & Insurance Services	1.4	1.5	1.2	0.8	1.2	1.1	0.7	0.8
Real Estate & Business Services	0.4	0.5	0.8	0.8	0.8	0.6	0.5	0.7
Government Services	0.0	0.1	0.2	0.3	0.1	0.0	-0.0	0.1
Other Services	0.7	1.7	1.1	1.7	1.3	0.3	1.2	0.8
Less Financial Intermediation Services Indirectly Measured (FISIM)	0.5	1.5	0.8	0.8	1.1	2.1	2.1	4.0

14: USD LONDON INTERBANK OFFER RATE–LIBOR (End– of–Period)

		1-month	3-month	6-month	12-month
FY11/12	Sep-11	0.2394	0.3743	0.5578	0.8649
	Dec-11	0.2953	4.9075	0.8085	1.1281
	Mar-12	0.2413	0.4682	0.7334	1.0485
FY12/13	Jun-12	0.2458	0.4606	0.7344	1.0680
	Sep-12	0.2143	0.3585	0.6359	0.9730
	Dec-12	0.2087	0.3060	0.5083	0.8435
	Mar-13	0.2037	0.2826	0.4449	0.7315
FY13/14	Jun-13	0.1958	0.2731	0.4144	0.6902
	Sep-13	0.1789	0.2489	0.3685	0.6294
	Dec-13	0.1677	0.2461	0.3480	0.5831
	Mar-14	0.1520	0.2306	0.3289	0.5581
FY14/15	Jun-14	0.1552	0.2307	0.3268	0.5451
	Sep-14	0.1565	0.2351	0.3304	0.5786
	Dec-14	0.1713	0.2556	0.3628	0.6288
	Mar-15	0.1763	0.2708	0.4007	0.6942
FY15/16	Jun-15	0.1865	0.2832	0.4449	0.7715
	Sep-15	0.1930	0.325	0.534	0.8511
	Dec-15	0.4300	0.613	0.846	1.1780
	Mar-16	0.4370	0.6290	0.900	1.2100
FY16/17	Jun-16	0.4650	0.6540	0.9240	1.2300
	Sept-16	0.5311	0.8537	1.2397	1.5518
	Dec-16	0.7717	0.9979	1.3177	1.6857
	Mar-17	0.9828	1.1496	1.4232	1.8018
FY17/18	Jun-17	1.2239	1.2992	1.4477	1.7384
	Sep-17	1.2322	1.3339	1.5060	1.7823
	Dec-17	1.5640	1.6940	1.8370	2.1070
	Mar-18	1.8831	2.3118	2.4524	2.6626
FY18/19	Jun-18	2.0903	2.3358	2.5013	2.7641
	Sep-18	2.2606	2.3984	2.6039	2.9186
	Dec-18+	2.5027	2.8076	2.8756	3.0054
	Mar-19	2.4945	2.5998	2.6595	2.7106

15: PRIME LENDING RATES (End-of-Period)

		EURO-ZONE	UNITED STATES			UNITED KINGDOM
		Repo rate	Fed Funds Rate	Discount Rate	Prime Rate	Repo rate
FY11/12	Jun-11	1.25	0 – 0.25	0.75	3.25	0.50
	Sep-11	1.50	0 – 0.25	0.75	3.25	0.50
	Dec-11	1.00	0 – 0.25	0.75	3.25	0.50
	Mar-12	1.00	0 - 0.25	0.75	3.25	0.50
FY12/13	Jun-12	1.00	0 - 0.25	0.75	3.25	0.50
	Sep-12	0.75	0 - 0.25	0.75	3.25	0.50
	Dec-12	0.75	0 - 0.25	0.75	3.25	0.50
	Mar-13	0.75	0 - 0.25	0.75	3.25	0.50
FY13/14	Jun-13	0.50	0 - 0.25	0.75	3.25	0.50
	Sep-13	0.50	0 - 0.25	0.75	3.25	0.50
	Dec-13	0.25	0 - 0.25	0.75	3.25	0.50
	Mar-14	0.25	0 - 0.25	0.75	3.25	0.50
FY14/15	Jun-14	0.15	0 - 0.25	0.75	3.25	0.50
	Sep-14	0.05	0 - 0.25	0.75	3.25	0.50
	Dec-14	0.05	0 - 0.25	0.75	3.25	0.50
	Mar-15	0.05	0 - 0.25	0.75	3.25	0.50
FY15/16	Jun-15	0.05	0 - 0.25	0.75	3.25	0.50
	Sep-15	0.05	0 - 0.25	0.75	3.25	0.50
	Dec-15	0.05	0 - 0.50	1.00	3.50	0.50
	Mar-16	0.00	0 - 0.50	1.00	3.50	0.50
FY16/17	Jun-16	0.00	0 - 0.50	1.00	3.50	0.50
	Sept-16	0.00	0 – 0.50	1.00	3.50	0.25
	Dec-16	0.00	0 .50– 0.75	1.25	3.75	0.25
	Mar-17	0.00	0.75–1.00	1.50	4.00	0.25
FY17/18	Jun-17	0.00	1.00–1.25	1.75	4.25	0.25
	Sep-17	0.00	1.00–1.25	1.75	4.25	0.25
	Dec-17	0.00	1.25-1.50	2.00	4.50	0.50
	Mar-18	0.00	1.50-1.75	2.25	4.75	0.50
FY18/19	Jun-18	0.00	1.75-2.00	2.50	5.00	0.50
	Sep-18	0.00	2.00-2.25	2.75	5.25	0.75
	Dec-18	0.00	2.25–2.50	3.00	5.50	0.75
	Mar-19	0.00	2.25–2.50	3.00	5.50	0.75

16: INTERNATIONAL EXCHANGE RATES

		Sterling vs. US$	Canadian $ vs. US$	Yen vs. US$	Euro vs. US$
	Mar-12	0.6256	0.9991	82.4340	0.7500
FY12/13	Jun-12	0.6376	1.0191	79.8040	0.7894
	Sep-12	0.6199	0.9837	77.9480	0.7779
	Dec-12	0.6150	0.9949	86.6630	0.7584
	Mar-13	0.6588	1.0156	94.0370	0.7787
FY13/14	Jun-13	0.6575	1.0512	99.1700	0.7687
	Sep-13	0.6181	1.0285	98.3270	0.7389
	Dec-13	0.6034	1.0636	105.2030	0.7258
	Mar-14	0.6012	1.1053	103.0100	0.7259
FY14/15	Jun-14	0.5846	1.0676	101.2900	0.7305
	Sep-14	0.6168	1.1196	109.6491	0.7917
	Dec-14	0.6418	1.1614	119.8035	0.8264
	Mar-15	0.6737	1.2679	119.9472	0.9321
FY15/16	Jun-15	0.6737	1.2483	122.1001	0.8966
	Sep-15	0.6609	1.3394	119.6745	0.8943

	Dec-15	0.6786	1.3837	120.2501	0.9206
	Mar-16	0.6964	1.3004	112.5746	0.8787
FY16/17	Jun-16	0.7513	1.2925	103.1779	0.9004
	Sept-16	0.7709	1.3127	101.3377	0.8901
	Dec-16	0.8104	1.3439	117.0001	0.9508
	Mar-17	0.7968	1.3317	111.3958	0.9388
FY17/18	Jun-17	0.7677	1.2963	112.3469	0.8752
	Sep-17	0.7464	1.2470	112.5239	0.8465
	Dec-17	0.7400	1.2571	112.6888	0.8330
	Mar-18	0.7135	1.2895	106.2812	0.8114
FY18/19	Jun-18+	0.7572	1.3134	110.6929	0.8559
	Sep-18	0.7601	1.3043	111.8443	0.8559
	Dec-18	0.7841	1.3639	109.6131	0.8721
	Mar-19	0.7672	1.3349	110.8525	0.8914

17: WORLD COMMODITY PRICES (Period Averages)

		CRUDE OIL PRICES		FOOD	
		North Sea Brent (US$/barrel – f.o.b.)	West Texas Intermediate (US$/barrel – f.o.b.)	Wheat (US$/mt, Average Winter)	Coffee (USc/kg, Arabica brand)
	Mar-12	118.60	102.94	268.88	486.95
FY12/13	Jun-12	108.86	93.50	260.39	400.35
	Sep-12	109.95	92.22	341.46	399.96
	Dec-12	110.45	88.19	346.48	357.12
	Mar-13	112.91	94.40	309.51	335.49
FY13/14	Jun-13	103.01	94.23	294.50	319.86
	Sep-13	110.10	105.83	281.76	298.23
	Dec-13	109.41	97.48	292.20	276.82
	Mar-14	107.88	98.67	280.67	382.67
FY14/15	Jun-14	109.78	102.98	292.86	467.06
	Sep-14	102.08	97.07	238.17	455.92
	Dec-14	76.01	73.16	248.61	464.59
	Mar-15	53.93	48.63	231.09	389.21
FY15/16	Jun-15	62.10	57.97	210.64	354.39
	Sep-15	50.03	51.52	189.86	336.22
	Dec-15	43.41	42.18	190.10	327.74
	Mar-16	34.36	33.45	190.23	330.86
FY16/17	Jun-16	45.95	45.50	183.79	346.71
	Sept-16	45.80	44.94	156.02	378.80
	Dec-16	50.08	49.29	156.18	385.71
	Mar-17	54.12	51.91	165.66	364.09
FY17/18	Jun-17	50.25	48.28	177.79	329.68
	Sep-17	51.74	48.20	183.94	327.83
	Dec-17	61.47	55.40	177.43	307.79
	Mar-18	66.95	62.87	190.71	301.42
FY18/19	Jun-18*	74.49	67.88	210.30	295.21
	Sep-18	75.48	69.50	215.61	301.42
	Dec-18	67.37	58.81	211.01	295.09
	Mar-19	63.27	54.90	212.06	279.84

*based on Bloomberg's indicative daily prices.

Glossary

Amortization: The repayment of a loan in installments over an agreed period of time.

Base Money: The sum of notes and coins held by the public and the cash reserves of commercial banks (including both their holding of cash and their deposits at the central bank). The monetary base is the operating target used in the BOJ monetary policy framework and can be controlled through open market operations. Changes in the monetary base emanate from sources within the net domestic assets (NDA) as well as the net international reserves (NIR).

Basis Point (bp): This is a unit of percentage measure which is equal to one hundredth of one percent (0.01% = 1bp). Basis points is commonly used when discussing interest rates and fixed income securities.

Bond Market: The domestic bond market primarily captures debt instruments offered by the Central Government to fund its budgetary needs.

Brexit: Brexit has become the abbreviated way of refering to the United Kingdon (UK) leaving the European Union (EU) it combines the words British and exit. The referndum where citizens of the UK voted to exit the EU took place on the June 23, 2016.

Cash Reserve Requirement: The requirement by law that a percentage of deposit liabilities of deposit-taking institutions must be held as interest free deposits at the Central Bank.

Core Inflation: Also called Underlying Inflation. It is that part of overall inflation that can be attributed to changes in base money. Central Banks typically try to control core inflation because there are some parts of inflation that are outside of their control. One example of this is the effect of changes in oil prices.

Credit: Loans extended by banks, building societies and other financial institutions.

Currency Issue: refers to Jamaican notes and coins in the hands of the public (currency in circulation) in addition to notes and coins held by financial institutions in their vaults (vault cash). Bank of Jamaica redeems (buys) or issues (sells) notes and coins to financial institutions when institutions have a demand for cash. The difference between currency issued and that which is redeemed during a period of time is referred to as net currency issue.

Exchange rate (nominal): The number of units of one currency offered in exchange for another. For example a Jamaica dollar/ United States dollar exchange rate of 'forty two dollars to one' indicates that forty-two Jamaican dollars are needed to obtain one United States dollar.

Exchange rate pass-through: The effect of exchange rate changes on one or more of the following: import and export prices, consumer prices, investments and trade volumes.

Export Price Index: The export price index (EPI) is a weighted index of the prices of goods and services sold by residents of a country to foreign buyers.

Foreign exchange cash demand/supply: The amount of foreign exchange purchased by market participants from the authorized dealers and cambios, while cash supply/inflows is the amount sold to the Bank of Jamaica, authorized dealers and cambios by market participants, private institutions and multilateral agencies.

Financial Programme: An integrated system of macroeconomic accounts and behavioural relationships defining the set of monetary, fiscal and exchange rate policy measures designed to achieve specified macroeconomic targets.

Financial Asset: An instrument issued by an institution (e.g. BOJ) that provides economic benefits, by (1) generating interest income or net profits and (2) acting as a store of value. These benefits are created through a formal/informal borrowing/lending relationship. Most common types of financial assets are money and credit.

Fiscal deficit: The excess of the Government's expenditure over its revenue for a given period of time.

Fiscal Year: The twelve months beginning in April. Thus fiscal year 2000/2001 refers to the period April 2000 to March 2001.

Government Securities: Debt instruments issued by the Ministry of Finance either to bridge timing gaps between revenue and expenditure or to cover any excess of expenditure over revenue. These securities include short-term instruments such as Treasury Bills and more long-term ones like Local Registered Stock, or Debentures.

Gross Domestic Product (GDP): This is the total value of all goods and services produced within an economy over a particular time period –either a year or three months.

Import Price Index: The import price index (IPI) is a weighted index of the prices of goods and services purchased by residents of a country from foreign sellers.

Inflation: refers to the change in the general price level. In Jamaica, this is defined as the change in the Consumer Price Index (CPI) calculated and published by the Statistical Institute of Jamaica.

Intermediate Target: An intermediate target of policy. e.g. the money supply or the exchange rate, has three main characteristics. It is not directly determined by the Central Bank, it responds, however, to a stimulus that the Central Bank can vary, and its behaviour should be closely related to the ultimate target–inflation.

Jamaica Central Securities Depository (JCSD): The Principal function of the JCSD is to provide for relatively risk-free settlement of share transactions. It accomplishes this by employing an electronic, book-entry system for registering changes of ownership of securities which eliminates the need for physical certificates. The JCSD also provides vaulting facilities for the safekeeping of certificates.

JSE Indices: The JSE Index comprises all Ordinary Companies on the Main Market. The JSE Combined Index comprises all Ordinary Companies on the Main Market and Junior Market. The JSE All Jamaican Composite Index comprises of only Jamaican Companies on the Main Market. The JSE Select Index comprises the JSE's 15 most liquid Securities on the Main Market. The JSE Cross Listed Index is comprised of only foreign companies on the Main Market. The Junior Index comprises all Ordinary Companies on the Junior Stock Market.

Liquid Asset: An asset is considered liquid if it can be easily and with little or no loss converted to cash. The liquid assets of commercial banks in Jamaica include notes and coins, short-term deposits at the Bank of Jamaica, GOJ Treasury Bills, Local Registered Stock maturing within 270 days and any GOJ security designated by the Ministry of Finance.

Money: Anything that is generally accepted in exchange for goods and services and for the payment of debt. (e.g. example, notes and coins.). Hence money is said to be a medium of exchange. Money also serves as a means of storing wealth as well as a standard of and unit of accounting for financial values and flows.

Money Multiplier: This defines the relationship between the monetary base (M0) and the money supply and is usually calculated as the ratio of M3 to M0. It measures the maximum amount of money that can be created by the banking system given the provision of an additional dollar to the system by the central bank. The money multiplier implies that when the central bank conducts monetary policy in such a way as to increase the monetary base, the overall expansion in the money supply is a multiple of this initial increase. This is also true if the central bank reduces the monetary base.

Money Supply: This is the stock of instruments or assets formally designated as money in a particular economy. There are alternative measures of money supply both within and between countries. In Jamaica, the measurements of money that are calculated and published are:

M1: Notes and coins in circulation + Demand Deposits
M2: M1+ Time and savings deposits
M3: M2 + Other Deposits.

A 'J' indicates that the components are Jamaican dollar liabilities only and an '*' indicates that the components also include foreign currency liabilities of the banking system.

Monetary Base: See Base Money

Monetary policy framework: This defines the transmission process through which policy actions taken by the Central Bank make an impact on the final target – inflation. The components of a monetary policy framework are policy instruments, operating targets, intermediate targets, and the ultimate goal/objective.

Monetary Policy Instruments: These are instruments used by the Central Bank to influence the money supply and credit. They include open market operations and the reserve requirement ratio.

Net Domestic Assets: The difference between the monetary base and the NIR. It is comprised of the Bank's net claims on the public sector, mainly Central Government, open market operations liabilities and net claims on commercial banks and other financial institutions.

Open Market Operations (OMO): Money market trading between the Bank of Jamaica and authorized dealers with the intention of influencing money and credit in the financial system. OMO involves outright sale or purchase of GOJ securities from the stock of securities held by BOJ, and/or repurchase and reverse repurchase transactions.

Operating Rate: The percentage of total production capacity of some entity, such as a country or a company that is being utilized at a given time.

Operating Target: An operating target of policy e.g. the monetary base and interest rates, is influenced directly by the Central Bank and is adjusted by the Bank in order to bring about the desired impact on its policy target.

Primary Dealer (PD): The set of intermediaries through which BOJ conducts open market operations. In developed country markets, PD's underwrite government issues as well as participate in block transactions with the central bank.

Public Sector Entities (PSE) Foreign Exchange Facility: A foreign exchange surrender facility for public sector entities which seeks to centralize foreign currency demand. Under this facility Commercial Banks, Authorized Dealers and Cambios agreed to surrender amounts in addition to the pre-existing requirements.

Quasi-Fiscal Costs: The cost to the central bank of sterilizing the liquidity effects of capital inflows.

Quasi-money: Savings Deposits plus Time Deposit.

Real Appreciation: An increase in the volume of foreign goods that can be bought with a unit of domestic currency; alternatively it is a decrease in the volume of domestic goods that can be purchased with a unit of foreign currency. Thus, a real appreciation makes exports less attractive and imports relatively cheaper. This may ensue from a nominal appreciation, which is the rise in the unit price of the currency, or a greater increase in domestic prices relative to foreign prices, or both.

Real Exchange Rate: The price of one country's currency in terms of another, adjusted for the inflation differential between the countries.

Real interest rate: This represents the rate of return on assets after accounting for the effects of inflation on the purchasing power of the return. It is calculated by adjusting the nominal interest rate by the inflation rate.

Repurchase Agreement (repo): The purchase of a security from a primary dealer who agrees to repurchase the same at a specified rate and an agreed future date.

Reserve Requirement: refers to the portion of deposit liabilities that financial institutions may not lend and have to retain either as liquid assets or on deposit at the Bank of Jamaica.

Reverse Repurchase Agreements: An agreement whereby the Central Bank sells a security that it owns and agrees to buy back same at a specified rate at an agreed future date.

Securities: Legal documents giving entitlement to property ownership, or claim on income e.g. bonds and stocks.

Signal Rate: Effective 1 July 2017, the Bank of Jamaica policy rate is the interest rate paid on overnight deposits held by deposit-taking iinstitutions ("DTIs") at Bank of Jamaica.

Special Drawing Right: The SDR is an interest-bearing international reserve asset created by the IMF to supplement the official reserves of member countries.

Statutory Cash Reserves: That portion of deposit liabilities of deposit-taking institution, which by a statutorily based stipulation, must be held as interest-free deposits at the Central Bank.

Sterilization: The use of open market operations to prevent intervention in the foreign exchange market from changing the monetary base. With sterilization, any purchase of foreign exchange is accompanied by an equal-value sale of domestic bonds and vice versa.

Time deposit: A bank account based on a contractual arrangement between the deposit taking institution and the depositor where both parties agree to a pre-determined interest rate and maturity date, on which deposits earn interest and premature withdrawals from which require advance notice.

Terms of Trade: An index of the ratio of export prices to the index of import prices. An improvement in the terms of trade follows if export prices rise more quickly than import prices.

Tourism Implicit Price Index: a measure of prices in the tourism industry as reflected by average daily expenditure per tourist.

List of Boxes

	44	Exploring the Jamaican Foreign Exchange Market Dynamics: 2001 – 2004 (Special Feature)
Jan – Mar 2005	45	The BOJ Macroeconomic Stress Testing Programme and Financial Stability
	46	Issues of Foreign Reserve Adequacy
Apr – Jun 2005	47	Credit Bureaux and Financial Market Efficiency
	48	Trends in Labour Productivity
Jul – Sep 2005	49	Inflation in Selected Caribbean Countries
	50	International Developments (Special Feature)
Oct – Dec 2005	51	Payment Systems Reform
Jan – Mar 2006	52	The IMF's Code of Good Practices on Transparency on Monetary policy: A Summary of the IMF's Assessment Report on Jamaica
Apr – Jun 2006	53	Trends in Private Sector Credit: FY2001/02 to FY2005/06
	54	Exploring the Interest Rate Differential between Jamaica Dollar and US Dollar Denominated Assets: Jan 2001 – June 2006
	55	Jamaica Labour Market: Trends and Key Indicators – 1996 to 2005
Jul – Sep 2006	56	Labour Market Update – June 2006
	57	The Special (Upper Income) Consumer Price Index
	58	Jamaica Interim Staff Report Under Intensified Surveillance: Executive Summary
Oct – Dec 2006	59	Factors Influencing the Demand for Currency Issued by the BOJ & the Impact of Currency Demand on the Balance Sheet of Financial Institutions
Jan – Mar 2007	60	Jamaica's Financial Programme
	61	Inflation Expectation Survey
	62	The Producer's Price Index
Apr – Jun 2007	63	Measuring Core Inflation: Emerging Issues
Jul – Sep 2007	64	The Turbulence in the US Subprime Mortgage Market
	65	The Revised Consumer Price Index
Oct – Dec 2007	66	Trends in Jamaica's Fuel Demand
	67	Trends in Inflation
	68	The EU-CARIFORUM Economic Partnership Agreement
Jan – Mar 2008	69	Impact of a Potential US Recession on the Jamaican Economy
	70	Recent Trends in International Commodity Prices
Apr – Jun 2008	71	Global Monetary Policy Response to Spiralling Commodity Prices
Jan – Mar 2009	72	BOJ's Monetary Policy Response to the Global Financial Crisis
	73	The Transmission of Monetary Policy in Jamaica
	74	Monetary Policy, Economic Growth and Inflation
Apr – Jun 2009	75	The International Monetary Fund (IMF) and Jamaica's Experience with the IMF
Jul – Sep 2009	76	Fiscal Responsibility Frameworks/Fiscal Rules
Oct – Dec 2009	77	Bank of Jamaica Liquidity Support to the Government: November 2009 – January 2010
	78	The Dynamics of Jamaica's Interest Rate
	79	Jamaica's Medium-Term Economic & Financial Programme: FY2009/10 – FY2013/14
Jan – Mar 2010	80	Jamaica's Inflation: How Much is Enough?
	81	The Jamaica Debt Exchange
Apr – Jun 2010	82	Exchange Rates and External Price Competitiveness
	83	Adequacy of the BOJ's Gross International Reserves
Jul – Sep 2010	84	Preserving Financial Stability (revisited)
	85	Credit Bureaux and the Efficiency of Credit Markets (updated)
Oct – Dec 2010	86	An Inflation Targeting Framework for Jamaica
Jan – Mar 2011	87	The Middle East and North Africa (MENA) Crisis and its Implication for the Jamaican Economy
Apr – Jun 2011	88	Evolution of the European Debt Crisis & its Impact on Jamaica
Jul – Sep 2011	89	Electronic Small-Value Retail Payments: Recent Trends and the Relationship with Economic Growth
Oct – Dec 2011	90	Productivity and Growth
Jan – Mar 2012	91	External Competitiveness in Jamaica
Apr – Jun 2012	92	The Importance of Managing Inflation Expectations

Jul – Sep 2012	93	A Preliminary Assessment of the Impact of Hurricane Sandy on Prices – Results from a Field Survey
Oct – Dec 2012	94	Fiscal Expenditure Multipliers and Economic Growth
Jan – Mar 2013	95	Jamaica's Medium-Term Economic & Financial Programme: FY2013/14 – FY2017/18
Apr – Jun 2013	96	The Evolution of the Jamaica Dollar Liquidity and its Impact on Money Market Rates: January to June 2013
	97	Recent Trends and Developments in Remittances
Jan – Mar 2014	98	The Bank of Jamaica's Quarterly Credit Conditions Survey (recurrent)
Apr – Jun 2014	99	Jamaica's Macroeconomic Programme under the EFF (recurrent)
	100	Monetary Policy Transmission Mechanism (recurrent)
Jul – Sept 2014	101	Changes to the Liquidity Management Framework for Deposit-taking Institutions
Oct – Dec 2014	102	Recent Developments in Crude Oil Prices
Jan – Mar 2014	103	An Examination of Current Account Financing from the BPM6 Perspective
Jul – Sept 2015	104	Inflation Differential
	105	Trends in selected measures of Labour Productivity
Oct – Dec 2015	106	Impact of Increases in the Federal Funds Rate on the Jamaican Economy
	107	A technical examination of the recent stock market appreciation
Jan – Mar 2016	108	Macroeconomic Model (MonMod) Component Contribution to Inflation (recurrent)
	109	Businesses' Inflation Expectations Survey (recurrent)
Apr – Jun 2016	110	Implication of "Brexit on the Jamaican Economy"
	111	Corporate Securities
Jul – Sep 2016	112	Strengthening Monetary Transmission, Fine-tuning BOJ Interest Rate Corridor
	113	Developments and Trends in Credit Reporting in Jamaica
Oct – Dec 2016	114	Recent Developments and Prospects for the International Oil Market
	115	Jamaica's Macroeconomic Programme under the new SBA (recurrent)
Jan – Mar 2017	116	A Review of the Performance of Government of Jamaica Global Bonds
	117	BOJ Signals Upgrade of FX Market Operations
Apr – Jun 2017	118	BOJ's New Foreign Exchange Intervention & Trading Tool
	119	Analysis of the improving Trend in DTIs' Non-Performing Loans for the Five Years ended December 2016
Oct – Dec 2017	120	Global Economic Growth in Selected Economies
Apr – Jun 2018	121	Why Inflation was Lower than Target
	122	Moody's Investors Service Rating Action
Oct – Dec 2018	123	Recent Developments and Prospects for the International Oil Market