2015

BANK OF JAMAICA

Quarterly Monetary Policy Report

July to September 2015 • Volume 16 • Number 2

Overview

During the September 2015 quarter, the Bank of Jamaica (BOJ) reduced the rate on the 30-day Certificate of Deposit (CD) to 5.25 per cent from 5.50 per cent at end June 2015, the second adjustment since the beginning of the fiscal year. The easing of the monetary policy stance continued to reflect the lowering of inflation expectations, improvements in the country's macroeconomic conditions and the Bank's outlook for lower domestic inflation in the near- and medium-term. In addition, and consistent with the more accommodative monetary policy stance, the Bank reduced the spread on its lending facilities relative to the 30-day CD rate by a further 75 basis points (bps) over the review quarter.

Headline inflation at end-September 2015 decelerated to 1.8 per cent relative to 4.4 per cent at the end of the preceding quarter. This reduction was in line with the general trend decline that has been observed since the September 2013 quarter. The reduction largely reflected declines in the cost associated with energy and transport, while agriculture and processed foods prices increased at a slower pace. Notably, core inflation continued to decelerate in September 2015 quarter, representing the fourth consecutive quarter of moderation. Inflation is expected to pick-up in both the December 2015 and March 2016 quarters to end the fiscal year within the target range of 5.5 per cent to 7.5 per cent. This outlook is predominantly informed by the projection of moderate increases in international commodity prices for the remainder of the fiscal year.

Real economic output for the September 2015 quarter is assessed to have expanded within the range of 1.0 per cent to 2.0 per cent, following two consecutive quarters of expansion. The estimated outturn for the review quarter mainly reflects the performance of the goods producing industries, in particular Agriculture, Forestry & Fishing and Manufacture. In addition, Hotels & Restaurants is assessed to have been the driver for growth within the services industry. With regard to aggregate demand the improvement is primarily associated with net external demand. Real GDP growth for FY2015/16 is projected to remain in the range of 1.0 per cent to 2.0 per cent, with the pace of expansion increasing over the medium-term. This outlook is predicated on the continued recovery in the economies of Jamaica's major trading partners, expected improvements in business and consumer confidence as well as further gains in external competitiveness, which is expected to stimulate net external demand.

For the September 2015 quarter, private sector expectations for inflation 12 months ahead remain well anchored in single digit territory. In the context of relatively low inflation expectations coupled with the strong evidence of reduced exchange rate pass-through to inflation, it is anticipated that movements in the exchange rate will gradually decline in importance as a nominal anchor for inflation. Further, as the benefits of the current economic reform programme become entrenched, as is being observed in low and stable nominal interest rates, the pick-up in private sector credit and expansion in the stock market, this should continue to bolster the prospects for new investments and overall output expansion. Concurrently, improvements in the current account and private capital inflows including foreign direct investments should continue to underpin stability in Jamaica's external accounts. In this regard, against the backdrop of the significantly lowered risks to meeting the monetary targets over the near-term, the Bank will continue to implement policy to support the entrenchment of low and stable inflation over the near- to- medium term.

Brian Wynter
Governor

CONTENTS

ABBREVIATIONS

ARMI	Agricultural Raw Materials Index
BOC	Bank of Canada
BOJ	Bank of Jamaica
BoJ	Bank of Japan
BRO	Bi-monthly repurchase operations
bps	Basis points
CDI	Credit Demand Index
ECB	European Central Bank
EFF	Extended Fund Facility
EFR	Excess funds rate
EMBI+	JP Morgan Emerging Market Bond Index
EPI	Export Price Index
Fed	Federal Reserve Bank
FOMC	Federal Open Market Committee
FY	Fiscal Year
GDP	Gross Domestic Product
GOJ	Government of Jamaica
GOJGBs	Government of Jamaica Global Bonds
IES	Inflation Expeactations Survey
IMF	International Monetary Fund
IPI	Import Price Index
JCC	Jamaica Chamber of Commerce
JSE	Jamaica Stock Exchange
LME	London Metal Exchange
NDA	Net Domestic Assets
NIR	Net International Reserve
OMO	Open Market Operations
PBOC	People's Bank of China
QCCS	Quarterly Credit Condition Survey
QPC	Quantitative Performance Criteria
SCT	Special Consumption Tax
SDRs	Special Drawing Rights
SLF	Standing Liquidity Facility

SMEs	Small and Medium-sized Enterprises
TAJ	Tax Administration of Jamaica
TOT	Terms of Trade
USA	United States of America
USDA	United States Department of Agriculture
WTI	West Texas Intermediate

1.0 Inflation

Consistent with the Bank's forecast, inflation decelerated for the September 2015 quarter relative to the June 2015 quarter. This reduction mainly reflected a decline in energy and transport prices as well as a moderation in price changes among processed food items. Inflation for the FY2015/16 will be within the 5.5 per cent – 7.5 per cent target range. Over the next four quarters, the Bank is projecting inflation to be within the range of 4.5 per cent to 6.5 per cent. This forecast is largely predicated on international commodity prices remaining at moderate, though increasing, levels throughout the rest of the fiscal year. Inflationary impulses are also expected to emanate from a measured improvement in domestic demand conditions over this period. This improvement is underpinned by an anticipated increase in consumption during the upcoming quarter which is expected to continue in subsequent quarters. Adverse weather conditions remain the main upside risk to the inflation outturn over the next four quarters. The downside risks principally relate to lower than anticipated international commodity prices and weaker than expected domestic demand conditions. In light of these factors the near-term risks to the forecast are considered to be balanced.

Inflation Developments

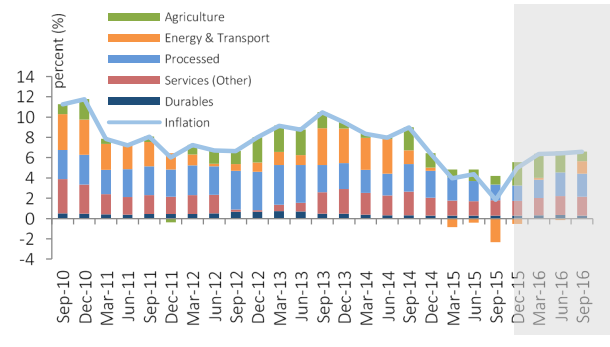
At end-September 2015 headline inflation decelerated to 1.8 per cent, the lowest since 1967, relative to 4.4 per cent at the end of the preceding quarter. The outturn is below the target range of 5.5 per cent to 7.5 per cent for the current fiscal year (see **Table 1** and **Box 1**). This reduction in inflation was in line with the general trend decline that has been observed since the September 2013 quarter. The reduction largely reflected declines in the cost associated with energy and transport. The cost for agriculture and processed food increased at a slower pace relative to the preceding quarter (see **Figure 1**). With regard to core inflation, the outturn of 4.0 per cent represents the fourth consecutive quarter of deceleration.

Table 1 Inflation and Major Components
(Annual point-to-point per cent change)

	Headline	Core*	FNB**	HWEG**
Sep-14	9.0	*6.7*	*12.5*	*6.2*
Dec-14	6.4	*6.0*	*10.1*	*-2.0*
Mar-15	4.0	*5.5*	*7.9*	*-9.5*
Jun-15	4.4	*4.8*	*7.8*	*-7.5*
Sep-15	1.8	*4.0*	*5.5*	*-10.9*
FY15/16	5.5-7.5			

Source: STATIN & BOJ
Notes: [*] Core inflation represents that portion of headline inflation that excludes the influence of agriculture and energy related services such as electricity and transport. [**] FNB (*Food & Non-Alcoholic Beverages)* and HWEG *(Housing, Water, Electricity Gas & Other Fuels)* are major components of the Consumer Price Index (CPI) basket.

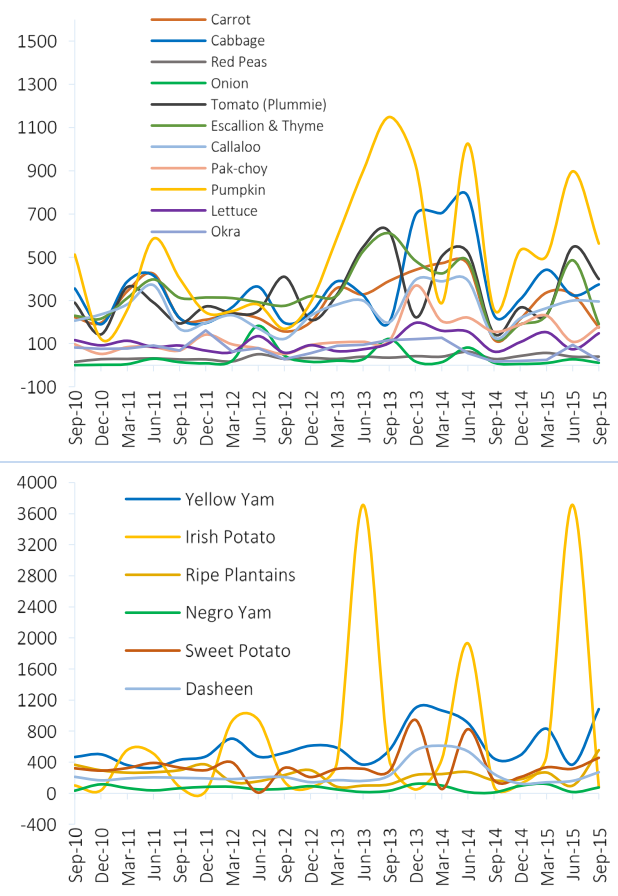
Figure 1 Component Contributions to Inflation
(Annual point-to-point per cent change)



Source: STATIN & BOJ

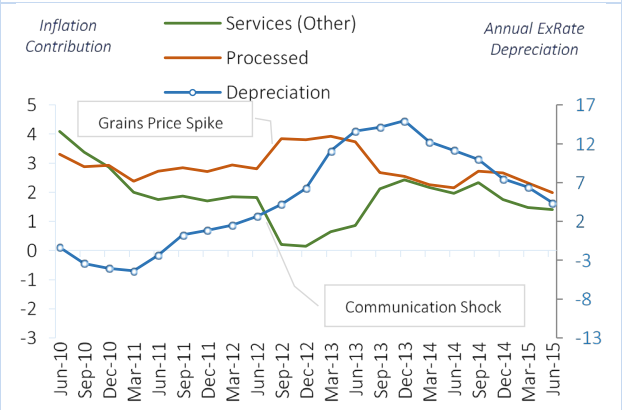
Inflation among agricultural food items moderated relative to the June quarter, in spite of reductions in the supplies of most domestic agricultural commodities (see **Figure 2**). This is notwithstanding the marked increases in the prices of vegetables and starchy foods in the review quarter, as a result of the decline in supplies.

Figure 2 Estimated Vegetable & Starchy Foods Supplies (Tonnes)



Source: RADA

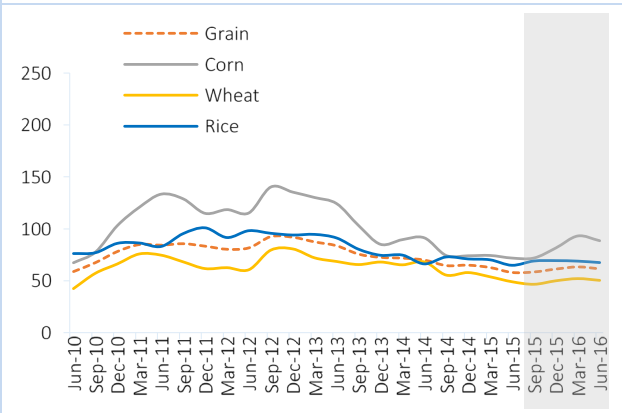
Figure 3 Inflation from Processed Foods and Non-Energy Services relative to annual depreciation (per cent)



Source: Bank of Jamaica

Exchange rate depreciation up to one year (4-quarters) in the past has displayed a positive correlation with processed food inflation and other services inflation (non-energy related). With respect to non-energy related services there was a correlation of 0.72 at a lag of four (4) quarters. When matched against inflation from processed foods, exchange rate depreication reflects its largest correlation of 0.56 which occurred within three (3) months.

Figure 4 Imported Agriculture Price Indices (Base year = March 2008)



Source: Bloomberg & BOJ Calculations

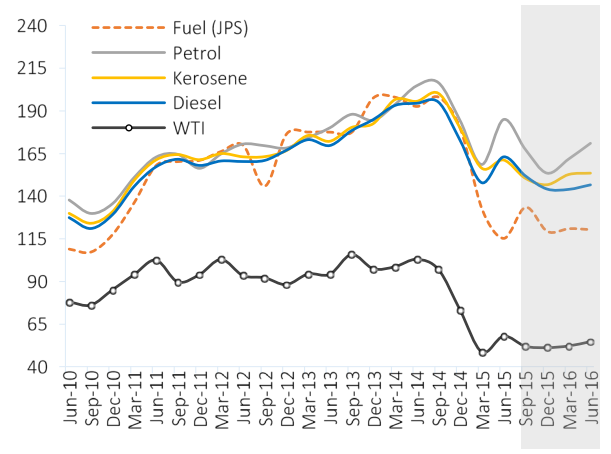
Grain prices represent a weighted average of wheat, corn and rice.

Declines in international grains prices underpinned the abatement in inflation among processed foods for the fourth consecutive quarter. The decline in international grains prices was largely due to the increase in crop yield in major harvesting regions arising from favourable weather conditions. Notwithstanding the moderation in processed food inflation, this category has remained the major contributor to inflation since the September 2014 quarter (see **Figures 1** and **4**).

Inflation emanating from other services was marginally higher when compared to the previous quarter. This outturn for the review quarter mainly reflected the seasonal impact of demand related to back-to-school expenses as well as the impact of some pass-through from exchange rate depreciation (see **Figure 3**).

Price declines in electricity and fuel resulted in deflation in energy and transport for the September 2015 quarter, largely reflecting the impact of the reduction in crude oil prices (see **Figure 5** and **International Economy**). It should be noted that these declines were in contrast to the increases in

Figure 5 Energy Price Indices
(Base year = March 2008)

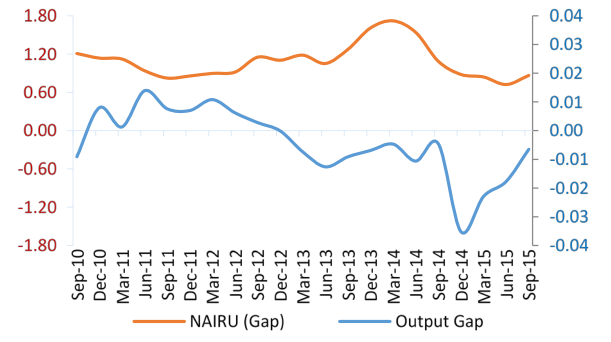


Source: Bank of Jamaica

crude oil prices in the previous quarter.

Similar to the previous eleven quarters, there were no inflationary pressures from capacity utilization or the labour market during the quarter under review (see **Figure 6**). In particular, the output gap remained negative for the September 2015 quarter. Furthermore, the gap between the unemployment rate and the Non-Accelerating Inflation Rate of Unemployment (NAIRU) suggested no inflationary pressures from the labour market. In light of the aforementioned, there were no inflationary pressures from factor prices, especially wages during the quarter.

Figure 6 Output Gap and Gap between Unemployment and NAIRU



Source: Bank of Jamaica
The above chart presents the output gap, the gap between actual output and potential, and the NAIRU gap, the gap between Unemployment and the Non-Accelerating Inflation Rate of Unemployment (NAIRU). When output is below potential (negative output gap) inflationary pressures are negative due to economic slack. When unemployment exceeds the NAIRU (positive NAIRU gap), there is also slack in the labour market contributing to low wages and by extension, low inflationary pressures.

Inflation Outlook & Forecasts

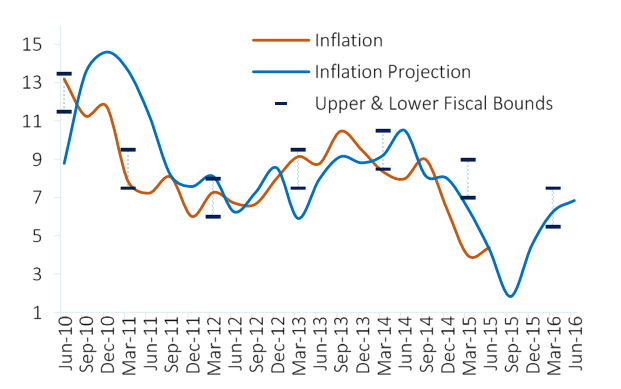
Inflation is expected to pick-up in both the December 2015 and March 2016 quarters to end fiscal FY2015/16 within the target range of 5.5 per cent to 7.5 per cent. This forecast is predicated on increases in the prices of domestic agricultural commodities due to the recent dry conditions as well as an uptick in the price of crude oil. However, inflation from agricultural commodities is expected to abate in the latter part of the December 2015 quarter with price reversals in the March 2016 quarter as the Island recovers from the drought conditions.

The prices of international commodities, particularly crude oil, are projected to reflect some modest increases, starting in the December 2015 quarter, contributing to an increase in domestic inflation over the near-term. This projected rise is predicated on a gradual improvement in global demand conditions as well as a reduction in shale production by the United States of America.

The output gap is projected to narrow over the near-term despite remaining negative. In this regard, minimal inflationary pressures are likely to emanate from domestic demand conditions. Likewise, growth in the monetary aggregates continue to pose no substantial threat to inflation over the short term (see **Monetary Developments**). In addition, continued low inflation expectations as reflected in the Bank's most recent Inflation Expectations Survey (IES) of businesses, should assist in tempering price increases (see **Box 1.1: BOJ's Inflation Expectations Survey (IES)**).

Inflation over the subsequent four quarters is projected, on average, to be within the range of 4.5 per cent to 6.5 per cent. This forecast is

Figure 7 Inflation Forecast Performance
(Annual Inflation forecast for each fiscal year)



Source: Bank of Jamaica
The graph reflects how well the Bank's forecasts of inflation compare to the actual inflation outturn for each quarter ahead. Fiscal year targets are also provided to indicate what the targets were at any given point in time.

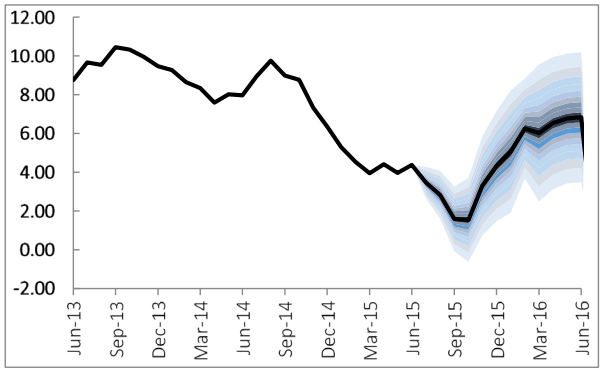
predicated on the

projection for modest increases in international commodity prices, a strengthening in domestic economic growth and the impact of continued fiscal discipline in addition to a supportive monetary policy stance. It should be noted that the forecast range was unchanged from the end-June 2015 quater.

Inflation Risks

The upside risks to inflation over the next four quarters include an intensification of adverse weather conditions and higher than anticipated international commodity prices. The downside risks relate to lower than projected international commodity prices and weaker domestic demand conditions. In this regard, the BOJ perceives the near-term risks to this forecast to be balanced (see Figure 8).

Figure 8 Inflation Fan
(Annual Inflation forecast)



Source: Bank of Jamaica

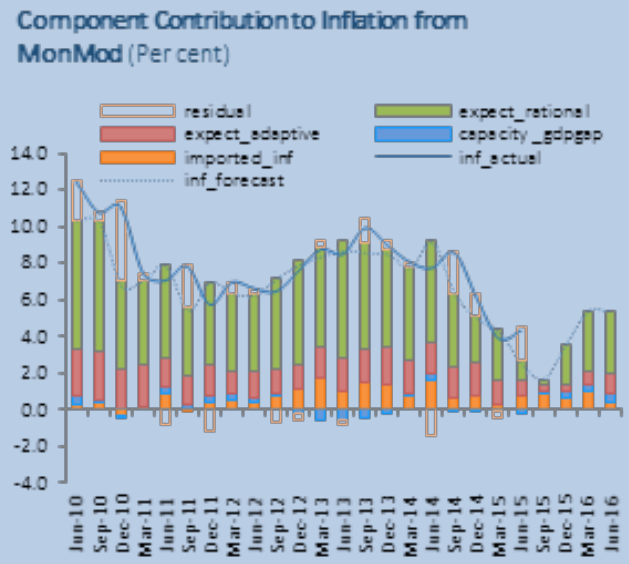
Box 1.0: BOJ's Macroeconomic Model (MonMod) Component contribution to Inflation implied by the Phillips Curve

The Bank's Macroeconomic Model (MonMod) evaluates the determination of inflation in the economy using the theoretical underpinnings of a forward looking open economy Phillips Curve. In that regard, the key determinants include (1) the surplus or shortage of aggregate supply (output GAP); (2) the impact of imported inflation and (3) expectations among consumers and businesses. Notably, expectations are modeled as both adaptive (backward looking) and rational (forward looking) (see **Phillips Curve equation** below).

$$\pi_t = \alpha\pi_{t-1} + (1-\alpha)\pi_{t+1} + \beta_1 GAP_t + \beta_2 S_t + \epsilon_t$$

Where π_t is the Inflation rate at a given point in time, GAP_t is the corresponding output gap and S_t is a composite of the exchange rate change and US inflation. Unexplained inflation is captured in ϵ_t.

The Bank's MonMod was reestimated in October 2015 taking into account the inflation outturn of 1.8 per cent for the September 2015 quarter (see **Figure below**). The results from the model suggested that inflation would have accelerated during the quarter due primarily to an uptick in inflation expectations. However, imported inflation remained largely



unchanged while domestic demand conditions continued to be weak evidenced by the negative output gap. In addition the results from the model showed a substantial decline in the residual for the September 2015 quarter. This result primarily reflected the non-reoccurence of the transport shock in the comparable quarter of 2014.

In the December 2015 quarter, inflation is projected to accelerate, primarily reflecting a normalization. Consequent on an uptick in inflation expectations and a narrowing in the output gap, inflation is projected to increase over the remaining quarters of FY2015/16.

Box 1.1: BOJ's Inflation Expectations Survey (IES)

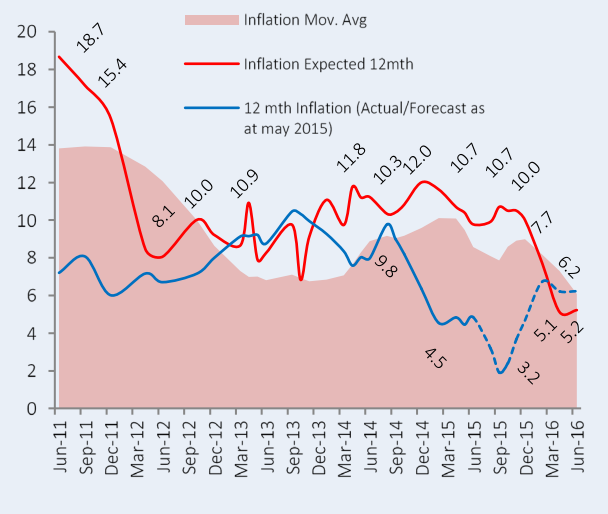
Overview

In September 2015, the results from the IES showed a decline in expected inflation 12 months ahead relative to the June 2015 survey. The perception of inflation control also declined relative to the previous quarter. Despite this, there has been a general upward trend in the index which has been observed since the March 2014 quarter. With regard to the exchange rate, respondents expected an acceleration in the pace of currency depreciation over all three horizons. The majority of businesses surveyed believed that the Bank's OMO rate will remain the same over the next three months. Relative to June 2015, the perception of present and future business conditions both declined. Notably, perceptions of both present and future business conditions have generally trended upwards since the June 2013 quarter.

Inflation Expectations

In the September 2015 survey, there was an uptick in the expected inflation for CY2015 to 7.3 per cent from the 7.2 per cent that was recorded in the June 2015 survey. Expected inflation for the calendar year was above the BOJ's forecast. Respondents' expectation of inflation 12 months ahead, however, declined to 4.6 per cent in the September 2015 survey from 5.2 per cent recorded in June 2015 (see **Figure 1**). In particular respondents' expectation of inflation for September 2016 was below the Bank's

Figure 1: Expected 12-Month Ahead Inflation

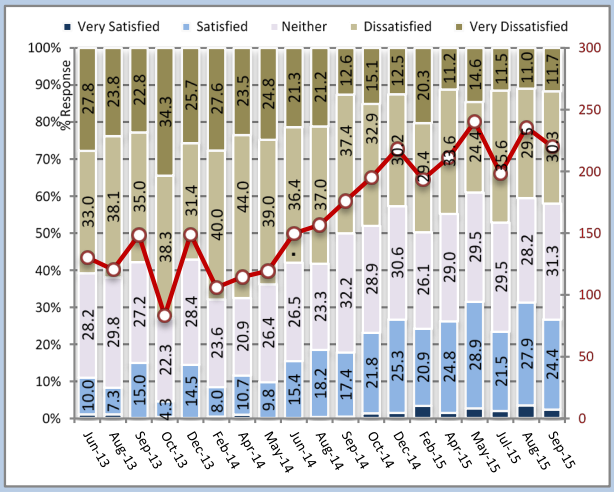


Perception of Inflation Control

The index of inflation control declined to 220.0 from 235.8 in the June 2015 survey (see **Figure 2**). This result mainly reflected a decline in the number of respondents who were 'satisfied' and 'very satisfied' with the authorities' control of inflation. Additionally, there was a rise in the number of respondents who were neither 'satisfied' nor 'dissatisfied'.

Figure 2: Perception of Inflation Control

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



Source: Bank of Jamaica's 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 June 2015 survey, the respondents expected an increase in the pace of currency depreciation over the 3-month and 6-month horizons while anticipating a slow down in the pace of depreciation over the 12-month time horizon (see **Table 1**).

Table 1: Exchange Rate Expectations

Question: In July 2015 the exchange rate was J$117.42=US$1.00. What do you think the rate will be for the following time periods ahead, 3 months, 6 months and 12 months?

Periods Ahead	Expected Depreciation			
	Dec-14	Mar-15	Jun-15	Sep-15
3 Months	1.4	1.7	1.0	1.7
6 Months	2.1	3.0	1.5	2.7
12 Months	3.0	3.8	4.3	3.5

Source: Bank of Jamaica's Inflation Expectations Survey.
Note: the survey responses to question have been converted to per cent change.

Interest Rate Expectations: OMO Rate

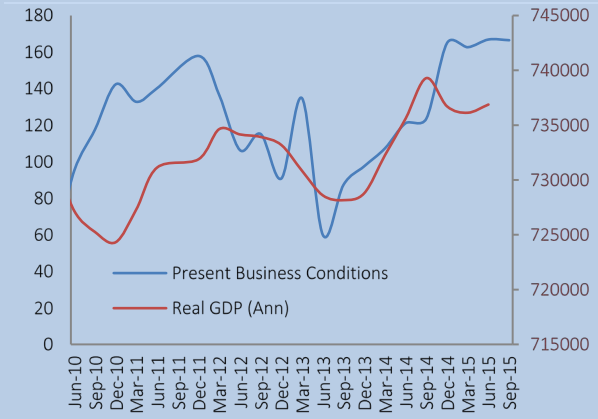
The expected 180-day Treasury Bill (T-Bill) rate, three months hence, declined to 6.5 per cent from 6.6 per cent reported in the June 2015 survey. This expectation was slightly above the actual 180-day T-Bill rate for August 2015

Perception of Present and Future Business Conditions

In the most recent survey the perceptions of present business conditions improved while the perception of future business conditions declined relative to the June 2015 survey. However, since the June 2013 quarter, perceptions of both present and future business conditions have generally trended upwards (see **Figures 3** and **4**)

Figure 3: Present Business Conditions and Real GDP growth

(Index- LHS and Per cent - RHS)

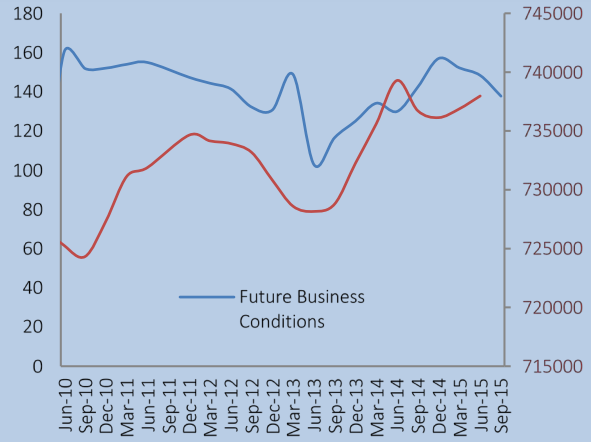


Source: Bank of Jamaica's Inflation Expectations

Expected Increase in Operating Expenses

Respondents indicated that they expect the largest increase in production costs over the next 12 months to emanate from higher costs for utilities. The cost of stock replacement was expected to be the second largest contributor to higher production costs over the next 12 months. Also, the cost of raw materials was expected to contribute to higher production costs for the year ahead. Wages & salaries continued to be the input cost least expected to increase over the next 12 months.

Figure 4: Future Business Conditions and Real GDP growth (Index)



Source: Bank of Jamaica's Inflation Expectations Survey
Note: Rates on foreign currency personal loans were not collected.

Box 1.2: Inflation Differential

Background

In April 2013, Jamaica entered into an Extended Fund Facility (EFF) with the IMF. A medium-term goal of the economic programme is to bring inflation in line with that of our main trading partners, particularly the USA. At the start of the programme, annual inflation was 9.1 per cent as at end-March 2013 and was forecast to gradually decline to 8.5 per cent at end-March 2017. Concurrently, US inflation was 1.5 per cent and the IMF forecast inflation of 2.3 per cent. In that context, the inflation differential was 7.6 per cent at end-March 2013 and was forecast to gradually decline to 6.2 per cent at end-March 2017.

Developments

Domestic and Foreign Inflation

Since April 2013, domestic inflation has fallen much faster than had been expected. This has been mainly due to favourable supply shocks to oil and other commodities which contributed to a significant decline in commodity prices, particularly towards the end of 2014. In addition, sustained fiscal consolidation under the EFF programme, a slow-down in the pass-through of exchange rate depreciation to domestic prices and weaker GDP growth than previously expected also contributed to a faster than expected decline in inflation. Consequently, annual inflation at end-September 2015 was 1.8 per cent.

Inflation in the USA, Jamaica's main trading partner, has also declined sharply consequent on the fall in commodity prices. At end-September 2015, the USA recorded annual inflation of 0.0 per cent relative to 1.5 per cent at end-March 2013.

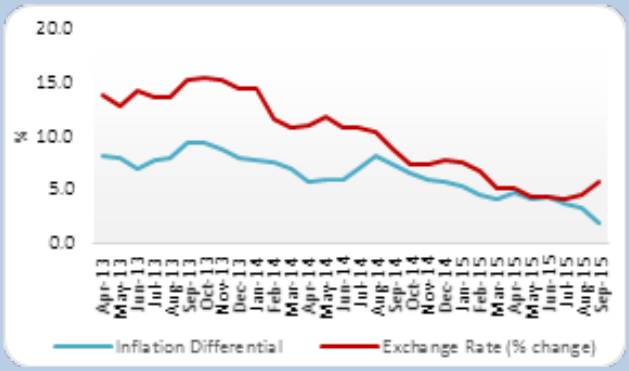
Inflation Differential

The faster fall in domestic inflation, relative to foreign inflation, resulted in a narrowing of the inflation differential to 1.8 percentage points as at September 2015 from 7.6 percentage points as at the start of the EFF programme (see **Figure 1**). The differential is, however, expected to normalize to approximately 5.0 percentage points at end-March 2016, consistent with the projections for domestic inflation.

Exchange Rate Response

Concurrent with the fall in the inflation differential, the annual depreciation of the exchange rate has slowed to approximately 6.0 per cent at end-September 2015 from 13.2 per cent at the start of the EFF programme (see **Figure 1**). Although, the rate of depreciation of the exchange rate was above the inflation differential as at September 2015, the depreciation should moderate as the inflation differential continues to trend downwards (see **Foreign Exchange Market**).

Figure 1: Inflation Differential and Exchange Rate Depreciation



2.0 International Economy

For the September 2015 quarter, growth in the world economy is estimated to have decelerated relative to the June 2015 quarter. This weaker performance mainly reflected a deceleration in growth within the US economy and major emerging market economies such as China. Notably, concerns regarding slower growth in China had a significant adverse impact on global financial markets throughout the quarter. In particular, heightened uncertainty led to increased demand for safe haven assets such as US Treasury bonds, contributing to a further strengthening of the US dollar and a fall in dollar-denominated commodity prices. Lower commodity prices also emanated from a continued increase in global supplies and expectations of weaker global demand. These developments led the central banks of most major economies to maintain an accommodative policy stance with some central banks implementing additional measures to stabilize financial markets and stimulate growth.

Trends in the Global Economy

Global economic output for 2015 is expected to moderate further to 3.2 per cent, relative to previous forecasts (see **Table 2** and **Figure 9**). The downward revision to world growth is largely underpinned by slower growth in some large economies for the September quarter, which is anticipated to persist for the remainder of 2015. Notably, global growth during the quarter was restrained by the impact of economic and financial sector weaknesses in China on several developed and emerging market economies. Global growth was also affected by the impact of lower commodity prices on commodity exporting economies. Against this background, world growth is estimated to have moderated to 3.3 per cent in the September quarter from 3.6 per cent in the June quarter.

Notwithstanding the slowdown in global growth, there was an acceleration in the 12-month point-to-point inflation for several of Jamaica's major trading partners during the quarter, albeit well below respective inflation targets. For 2015, most of Jamaica's trading partners are expected to record lower inflation, consistent with lower global demand and the fall in commodity prices, particularly oil.

In terms of monetary policy, the central banks of most major economies maintained an accommodative stance. In particular, the People's Bank of China (PBOC), as well as the Bank of Canada (BOC) implemented additional

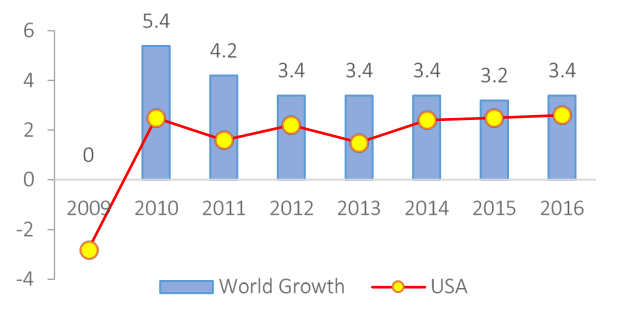
Table 1: Overview of Selected Variables (Per Cent)

	2014	2015	
GDP	Actual	Current Forecast	Previous Forecast as at 24 Jul. 2015
World	3.4	3.2	3.3
USA	2.4	2.5	2.3
Canada	2.4	1.1	1.3
Japan	-0.1	0.7	1.0
UK	3.0	2.6	2.6
Euro	0.9	1.5	1.5
China	7.4	6.8	7.0
Inflation (eop)			
USA	0.8	0.5	0.9
Canada	1.5	1.0	1.4
Japan	2.4	0.5	0.8
UK	0.5	0.4	0.9
Euro	-0.2	0.5	0.8
China	1.5	2.1	2.5

Source: Bank of Jamaica and Bloomberg

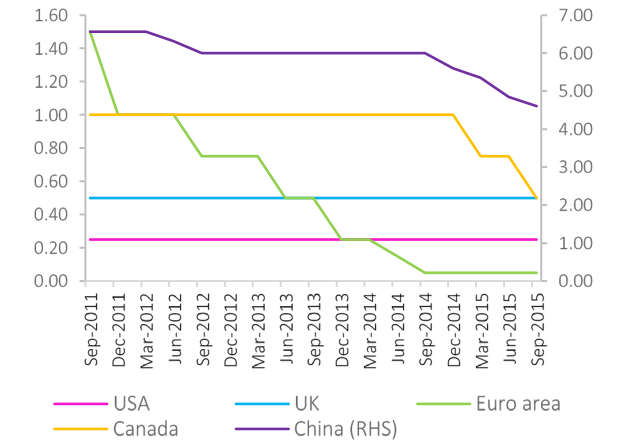
expansionary policy measures in an effort to stimulate growth and stabilize economic and financial conditions (see **Figure 10**). In contrast, the Central Bank of Brazil tightened monetary policy in response to inflationary pressures. In this context, the Bank of Jamaica (BOJ) anticipates continued growth of the global economy over the forthcoming quarters of 2015 and 2016, albeit at a slower pace than previously envisioned.

Figure 9: Global Economic Growth



Source: Bank of Jamaica

Figure 10: Policy Interest Rates, monthly data (Per Cent)



Source: Bloomberg

Advanced Economies

United States of America

Preliminary estimates published by the Bureau of Economic Affairs, indicate that for the September 2015 quarter USA real output expanded by 1.5 per cent on an annualized basis, which is lower than the Bank's estimated growth of 2.2 per cent and the previous quarter's outturn of 3.9 per cent. The deceleration in real output was underpinned by a reduction in private inventory investment, exports, non-residential fixed investment, personal consumption expenditure, the spending of state and local government and residential fixed investment. Notably, export growth for the USA remains a challenge given the continued strengthening of the US dollar relative to other major currencies and weak external demand conditions. In addition, the impact of low commodity prices curtailed investment expenditure, particularly in the energy sector.

Labour market conditions continued to reflect an improvement as evidenced in a quarterly decline of 0.2 percentage point in the average unemployment rate to 5.2 per cent (see **Table 3**). The Bank anticipates that as the labour market improves, this effect should translate to increased consumer spending in the US economy. However, net exports may exert a downward pull to growth in the near-term against the background of the relatively strong US dollar and weak external demand conditions. In addition, relatively low oil prices could continue to adversely affect investments. Overall, the Bank is projecting quarterly annualized growth to be within the range of 2.2 per cent to 2.8 per cent over the next four quarters. This should translate to GDP growth of 2.5 per cent and 2.6 per cent for 2015 and 2016, respectively.

Table 3: Unemployment Rate for Selected Economies
(Quarterly Average Per Cent)

	USA	Canada	Euro
Sep-2014	6.1	6.9	11.5
Dec-2014	5.7	6.6	11.5
Mar-2015	5.5	6.7	11.2
Jun-2015	5.3	6.8	11.1
Sep-2015	5.2	6.9*	11.0*

Source: Official statistics offices, * Bloomberg forecast

In terms of inflation, at end-September 2015, the 12-month change in the consumer price index increased to 0.2 per cent, from 0.1 per cent as at end-June 2015. The outturn reflected higher prices

for recreational activities, the impact of which was partly offset by continued declines in energy costs. In a context where the Fed's outlook for inflation remained below the target rate of 2.0 per cent, the central bank maintained an accommodative monetary policy stance during the September quarter. The BOJ is forecasting that inflation in the USA for the next four quarters will be within the range of 0.1 per cent and 0.7 per cent. This is consistent with the latest projection by the Federal Open Market Committee (FOMC) for inflation to remain below its target.

Euro Area

Real output in the Euro area expanded by 1.6 per cent on an annualized basis, in the review period, following growth of 1.5 per cent in the June 2015 quarter. The growth for the September 2015 quarter reflected the impact of expansionary monetary policy measures implemented by the European Central Bank (ECB) aimed at improving demand conditions in the region. The easing of monetary policy in the Euro area has facilitated a reduction in bank lending rates and increased access to credit by Small and Medium-Sized Enterprises (SMEs), which has resulted in growth in credit to the private sector. Further, the unemployment rate in the Euro area moderated marginally to 11.0 per cent for the September 2015 quarter.

The Bank anticipates that economic activity in the region will increase marginally for the remainder of 2015 as domestic demand conditions continue to improve. In light of this, the Euro area is expected to record growth of 1.5 per cent and 1.6 per cent in 2015 and 2016, respectively.

Headline CPI inflation in the Euro area was -0.1 per cent at end-September 2015 in contrast to inflation of 0.2 per cent as at June 2015. This outturn largely reflected the impact of the decline in energy prices. The Bank expects inflation to trend below the target rate of 2.0 per cent for the next four quarters. It should be noted that the ECB has indicated its committment to maintain an expansionary monetary policy stance until this target is met.

Canada

Real output in Canada is estimated to have expanded by 2.2 per cent on an annualized basis, for the September 2015 quarter, following a contraction of 0.5 per cent in the June 2015 quarter. The resumption of growth in the September quarter was largely driven by increased household spending while exchange rate-sensitive exports gained momentum due to the depreciation in the Canadian dollar. It should be noted that on 15 July 2015, the BOC reduced the target for the overnight rate by 25 bps to 0.5 per cent. This monetary policy initiative occurred against the background of the negative impact that the decline in oil prices has had on investment spending and employment in the Canadian economy. The policy change is aniticipted to stimulate growth in Canada in the near-term.

In the context of lower transportation and energy costs, headline inflation in Canada is estimated to have decelerated to 0.9 per cent at end-September 2015 from 1.0 per cent at end-June 2015. The Bank expects inflation to trend within the range of 0.9 per cent to 1.8 per cent over the next four quarters, as growth in the Canadian economy accelerates within the range of 2.0 per cent to 2.2 per cent.

China

For China, the expansion in real output for the September 2015 quarter decelerated to 6.9 per cent on an annualized basis from 7.0 per cent in the June 2015 quarter. During the review quarter, lower growth was largely underpinned by the impact of continued financial market volatility and weaker global demand. The slowdown in growth was mainly reflected in a decline in factory activity.

In an effort to further stimulate growth in the Chinese economy, the government devalued the Yuan on 11 August 2015 to facilitate a more

market-determined exchange rate. However, this coincided with the heightened volatility in the global equity and currency markets amidst concerns of a slowdown in the world's second largest economy. In response, the PBOC made several interventions in the foreign exchange market to stabilize the Yuan and reduce capital outflows. On 26 August 2015, the PBOC further reduced interest rates and announced a reduction in the required reserve ratio to facilitate increased investment in the stock market and promote economic activity. Specifically, the PBOC cut its 1-year lending rate and 1-year deposit rate by 25 bps each to 4.60 per cent and 1.75 per cent, respectively. The PBOC announced a reduction in the required reserve ratio by 50 bps to 18.0 per cent on 06 September 2015.

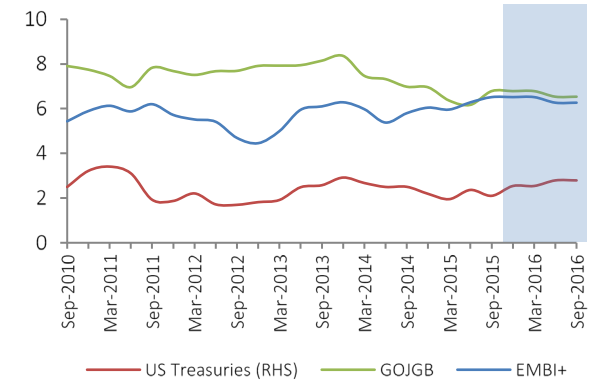
Against this background, the Bank of Jamaica projects that economic growth in China for the next four quarters will be within the range of 6.5 per cent and 6.8 per cent while inflation is forecast to be within the range of 1.8 per cent to 2.9 per cent.

International Financial Markets

For the September 2015 quarter, increased volatility in the global financial market reduced investor appetite for risk. Notably, there was increased demand for US Treasury bonds (USTBs) in the context of the prospects of a slowdown in global growth associated with adverse developments in China and expectations of an impending increase in the Fed Funds rate. In this context, the average yield on USTBs fell by 26 bps to 1.56 per cent, on an annual basis mainly reflecting lower yields on long-term bonds (see **Figure 11**). On a quarterly basis, the average yield on USTBs declined by 18 bps. In the context of the foregoing, the quarterly spread between the 3-month USD LIBOR and the 3-month USTB (TED spread) increased by 4.4 bps to average 30.5 bps (see **Table 4**).

With respect to emerging market bonds, the upward trend in the JP Morgan emerging market bond index (EMBI+) continued for the quarter. Relative to the September 2014 quarter, the average yield on the EMBI+ increased by 72 bps to 6.52 per cent. On a quarterly basis, the average yield on the EMBI+ rose by 23 bps.

Figure 11: Selected Average Sovereign Bond Yields
(Per Cent)



Source: Bloomberg

Table 3: Average spread between the 3-month USD LIBOR and the 3-month USTB (TED spread)

Sep - 14	21.5
Dec - 14	21.6
Mar - 15	23.3
Jun - 15	26.1
Sep - 15	30.5

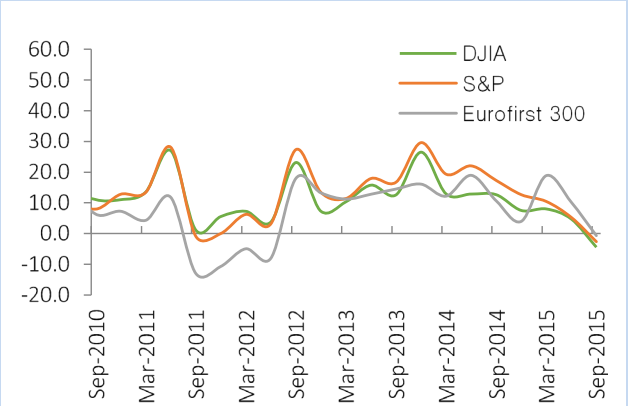
Source: Bloomberg

The average yield on Government of Jamaica global bonds composite index (GOJGBs) reflected a reversal in the downward trend observed since December 2013. Notably,the average yield on the index increased by 61 bps to 6.79 per cent for the September 2015 quarter. However, the outturn was 19 bps lower than the average yield for the September 2014 quarter. The increase in average yields for the September quarter largely reflected the impact of reduced preference for risky assets as well as the impact of the inclusion of the indicative yields of two GOJ global bonds issued during the quarter. Against this background, the spread between GOJGBs and USTBs widened by 5 bps to 4.69 per cent when compared to the September 2014 quarter. However, the spread between the GOJGBs and the EMBI+ narrowed by 92 bps to 0.27 per cent relative to a year ago,

which is reflective of the higher average yields on emerging market bond also observed over the review quarter.

During the quarter, there was a decline in selected stock market indices largely underpinned by financial market volality in China. This was the first reduction recorded since the June 2012 quarter (see **Figure 12**). The declines in the September quarter translated to annual declines of 4.4 per cent, 2.6 per cent and 0.7 per cent, in the Dow Jones Industrial Average, the S&P 500 and the Eurofirst 300 indices, respectively.

Figure 12: Selected Stock Market Indices (Per cent)



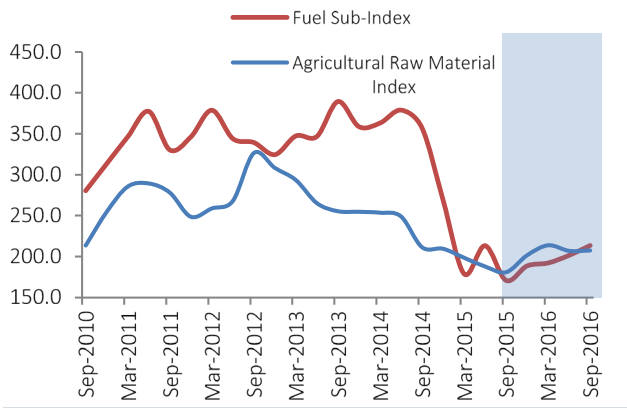
Source: Bloomberg

With respect to the performance of selected currencies, there was a general depreciation of most of the major currencies against the US dollar on both an annual and quarterly basis. For the September 2015 quarter, the US dollar index increased by 0.9 per cent and 15.7 per cent when compared to the June 2015 quarter and the September 2014 quarter.[1] This was sparked by the devaluation of the Chinese Yuan by the PBOC in August 2015. This subsequently led to significant depreciations in the currencies of other emerging market countries given fears of a slowdown in China and the possible spillover effect on these economies. Further, there was reduced demand for emerging market curriences as the adverse financial and economic developments in China led to capital outflows from these economies. As a result, the currencies of some advanced economies such as the USA, Euro area and Japan appreciated in the review quarter, as investors sought safe haven assets.

Commodity Prices

Selected commodity prices declined during the September 2015 quarter, largely reflecting the impact of buoyant supplies, relatively weak global economic and market fundamentals coupled with a stronger US dollar. The Bank's Fuel Sub-Index felll by 52.2 per cent on an annual basis to an average price of US$46.44 per barrel.[2] Lower prices for West Texas Intermediate (WTI) crude oil were largely as a result of the persistent oversupply of crude oil on the international market. The downward pressure on oil prices during the quarter stemmed largely from the continued growth in shale oil production in the USA. Record crude oil production and exports from Iraq. The expectation of additional supplies from Iran by January 2016 also contributed to lower prices. The growth in

Figure 13: The Bank's Commodity Price Indices



Sources: Bloomberg, World Bank and BOJ

1 The US Dollar Index (USDX) is computed by the Intercontinental Exchange Futures, U.S., which uses the euro, Japanese yen, Canadian dollar, British pound, Swedish krona and Swiss franc exchange rates relative to the US dollar, supplied by approximately 500 banks.

2 Relative to the previous quarter, prices fell by 19.9 per cent.

crude oil production in the USA was supported by increased drilling activities as a number of oil rigs that were idle over previous quarters were returned to the fields.[3]

Similarly, the Bank's Agricultural Raw Material Index (ARMI) reflected lower prices across all categories of grains against the background of buoyant supplies and weaker global demand conditions during the review quarter. Reports from the United States Department of Agriculture (USDA) explained that the robust supplies of grains in the market were supported by excellent growing conditions for corn and soybean in the USA, as well as increased wheat production from the European Union (EU) and the Former Soviet Union area. In addition, the expectation of increased productivity in Brazil was anticipated to further add to supplies of soybean in the near term following the implementation of structural reforms and the conversion of some pasture land for use as cropland. In terms of demand, lower agricultural commodity prices were also underpinned by the expectation that the slower growth in China, the second largest commodity importing country, would result in excess grains on the market. In addition, demand for commodities, which are denominated in US dollars, fell against the background of the appreciation of the US dollar, which made investments in these commodities more expensive. In the context of the foregoing, the ARMI declined by 14.5 per cent and 3.7 per cent when compared to the September 2014 and June 2015 quarters, respectively (see **Figure 13**).

Aluminium prices on the London Metal Exchange (LME) declined by 19.4 per cent relative to September 2014 and fell by 9.5 per cent on a quarterly basis. These declines were largely influenced by the relatively weaker demand conditions and buoyant supplies during the quarter. In particular, lower prices were largely attributed to (i) persistent stock overhang of aluminium, (ii) appreciation of the US dollar, (iii) reduced cost of production given the lower energy prices and (iv) softer demand from China.

In terms of the outlook for commodity prices for the next four quarters, crude oil prices are projected to increase, but remain below US$60.00 per barrel, on average. This trajectory is primarily informed by the expected gradual improvement in global demand conditions and the forecast from the International Energy Agency for a reduction in shale oil production. However, this impact is anticipated to be partly constrained by the expectation of additional supplies of crude oil, particularly from Iran in early 2016.

Similarly, aluminium prices are projected to trend upwards, albeit at a slower pace than previously projected. This is primarily associated with the anticipated pick-up in demand from some advanced economies such as the Euro area. However, this impact is expected to be partly offset by the anticipation of buoyant supplies as China, the world's largest producer, maintains its production levels in the context of an already oversupplied market.

In terms of agricultural commodities, prices are forecast to increase over the next four quarters but at a more tempered pace relative to previous projections. This downward revision takes into account the current oversupply of grains and the prospect of further buoyant yields. In addition, the relative strength of the US dollar is expected to have a restraining impact on commodity prices for the remainder of the fiscal year. However, as the global economy strengthens, improved demand conditions should place some upward pressure on prices to facilitate a slight upward trend in the average price of grains by mid-2016. In addition, the adverse impact of El Niño weather conditions on supplies from major grain-producing countries may contribute to higher prices.

3 Rig count data for the USA, as published by Baker Hughes, indicated that July and August 2015 were the only months that accounted for an increase since the start of 2015.

The Implications for the Jamaican Economy

Jamaica's terms of trade (TOT) index strengthened for the September 2015 quarter as the developments in the global economic and financial environments continued to support strong declines in import prices. For the review quarter, the index increased by 33.8 per cent and 2.6 per cent relative to the comparable period in 2014 and the June 2015 quarter, respectively. This improvement mainly reflected a reduction of 28.6 per cent in the Import Price Index (IPI), the impact of which was partially offset by a decline of 4.4 per cent in the Export Price Index (EPI).

When compared to the previous quarter, the estimated decline in the IPI was largely attributed to the impact of the continued decline in the prices of crude oil and grains. The lower EPI mainly reflected a weakening of alumina prices supported by lower implicit tourism prices due to reduced tourism travel, the impact of which was partly offset by higher coffee and sugar prices.[4]

The TOT is projected to maintain its increasing trend over the next four quarters, albeit at a moderate pace. This continued improvement is underpinned by the assumption for a notable recovery in the EPI for the March 2016 quarter, supported by a mild upward trend in import prices. Consistent with the expectation that a number of advanced and emerging market economies will continue to expand into 2016, prices in the international commodities market are expected to rise, though slowly, as global demand strengthens.

In light of the forecast of relatively higher international commodity prices, domestic inflation is expected to trend upwards over the next four quarters. Further, growth in the Jamaican economy is expected to strengthen against the background of continued improvement in the US labour market, which should support continued growth in inflows from tourism and remittances. In addition, the successful economic performance of the Government is expected to continue to attract foreign direct investments, which should bode well for growth in the domestic economy.

4 The price of aluminium is used as a proxy for alumina prices.

3.0 Jamaican Economy

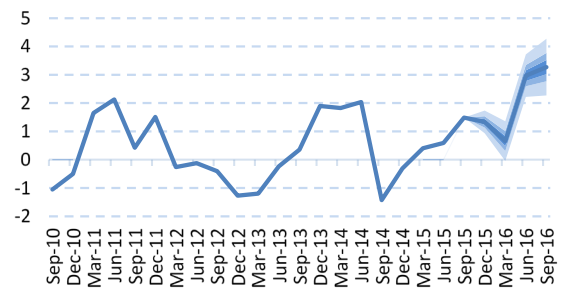
Real economic output for the September 2015 quarter is estimated to have increased for the third consecutive quarter. The estimated expansion in the economy primarily reflected the recovery from production disruptions experienced in the comparable period of 2014 as well as continued improvements in the economies of Jamaica's major trading partners. These developments have positively influenced the performance of Agriculture, Forestry & Fishing, Hotels & Restaurants, Transport, Storage & Communication and Construction industries for the review period. Further, demand has improved, evidenced by growth in Final Consumption, Net External Demand as well as Gross Capital Formation. For the FY2015/16, real economic activity is projected to grow within the range of 1.0 per cent to 2.0 per cent reflecting the impact of growth-inducement projects as well as recovery in Agriculture, Manufacturing and Mining Industries. Over the next four quarters, average growth in the economy is expected to be within the range of 1.5 per cent to 2.5 per cent.

Real Sector Developments

Aggregate Supply

Estimates of real economic activity indicated a pick-up in economic growth for the September 2015 quarter, with most industries assessed to have expanded, with the exception of Mining & Quarrying. Growth for the review period was assessed within the range of 1.0 per cent to 2.0 per cent, following an expansion of 0.6 per cent for the June 2015 quarter (see **Figure 14** and **Table 5**).

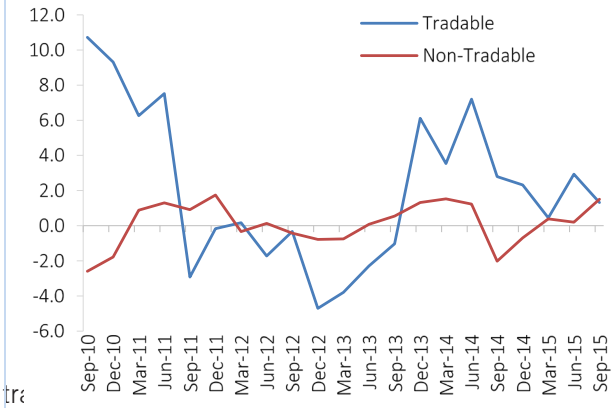
Figure 14: Real GDP Growth
(12-Month Per cent Change)



Source: STATIN and Bank of Jamaica

The expansion in the economy reflected growth in both tradable and non-tradable industries for the review period (see **Figure 15**). For the quarter, a faster pace of expansion was registered in non-tradable industries when compared to growth in non-tradable industries represented the third consecutive quarter of improvement. Growth in non-tradable industries was mainly reflected in *Electricity, Gas and Water*, domestic crop production within Agriculture and Refined Petroleum products within *Manufacture*.

Figure 15: GDP Growth: Tradable vs. Non-Tradable Industries. (12-Month Per cent Change)



Source: Bank of Jamaica

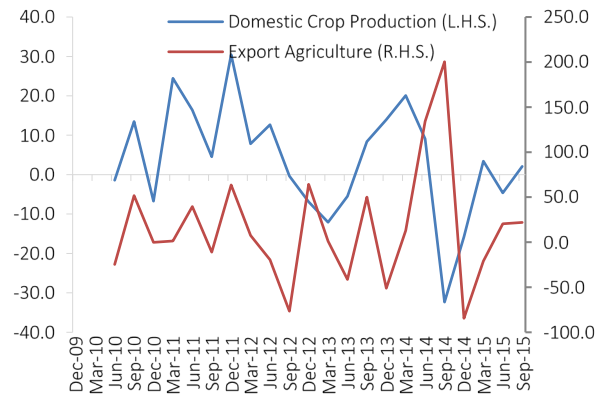
The tradable industries recorded its eighth consecutive quarter of expansion reflecting greater external demand. In particular, for the September 2015 quarter, *Mining & Quarrying*, *Transport, Storage & Communications*, as well as *Hotels & Restaurants* were estimated to have expanded.

Table 1.0: Industry Contribution to Growth (September 2015 Quarter)

	Contribution	Estimated Impact on Growth
GOODS	*58.9*	2.5 to 3.5
Agriculture, Forestry & Fishing	*9.9*	*1.5 to 2.5*
Mining & Quarrying	*1.2*	*0.0 to 1.5*
Manufacture	*42.7*	*6.5 to 7.5*
Construction	*5.1*	*0.5 to 1.5*
SERVICES	*40.5*	*0.0 to 0.5*
Electricity & Water Supply	*7.5*	*0.0 to 0.5*
Wholesale & Retail Trade, Repairs & Installation of Machinery & Equipment	*4.7*	0.0 to 0.5
Hotels & Restaurants	*7.7*	0.0 to 1.5
Transport Storage & Communication	*7.6*	0.0 to 0.5
Financing & Insurance Services	*5.4*	0.0 to 0.5
Real Estate, Renting & Business Activities	*3.8*	0.5 to 1.5
Producers of Government Services	*-1.0*	0.0 to 0.5
Other Services	*4.8*	0.5 to 1.5
Financial Intermediation Services Indirectly Measured	*-0.6*	-0.5 to 0.5
TOTAL GDP	*100.0*	1.0 to 2.0

Source: Bank of Jamaica

Figure 16: Domestic & Export Crop Production (12-Month Per cent Change)



Source: Bank of Jamaica & Ministry of Agriculture

For the September 2015 quarter, *Agriculture, Forestry & Fishing* is assessed to have recorded a second consecutive quarter of growth. The industry's performance reflected recovery in domestic crop production which was partially offset by a decline in export agriculture (see **Figure 16**). With regard to domestic production, there were estimated expansions in the output of fruits and root crops mainly reflecting some recovery relative to the drought period experienced in the September 2014 quarter. The estimated contraction in traditional export crops was mainly driven by declines in the output of cocoa and plantain, the impact of which was partly offset by estimated increases in exports of bananas, coffee and sugar.

Value added in *Hotels & Restaurants* is estimated to have expanded in the September 2015 quarter at a slower pace than average growth of 3.8 per cent for the preceding four quarters. Notwithstanding the deceleration in growth, this expansion represents the tenth consecutive quarter of expansion since the March 2013 quarter. The industry's performance was mainly driven by a slower growth in Hotels, largely attributed to a deceleration in the growth of stop-over visitor arrivals and visitor expenditure (see **Figure 17**). The pace of stop-over visitor

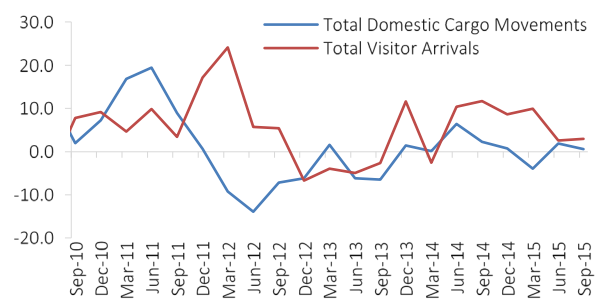
Figure 17: Total Stop-over Visitor Arrivals & Visitor Expenditure. (12-Month Per cent Change)

Source: Jamaica Tourist Board

arrivals was inferred from a slower pace of growth in major source markets as well as estimates of the average daily expenditure. Value added within the Restaurants sub-industry remained stable for the review period.

For the review quarter, *Transport, Storage & Communication* is assessed to have expanded for the ninth consecutive quarter, albeit marginally. This performance reflected growth in both the Transport and Communication sub-industries. Growth in Communication, mainly emanated from the expansion in the provision of telecommunication services, in particular mobile data subscriptions. Notably, the estimated growth in Transport largely reflected an expansion in domestic cargo movement, albeit at a slower pace relative to the September 2014 quarter. This sub-industry was also impacted by the estimated growth in visitor arrivals (see **Figure 18**).

Figure 18: Visitor Arrivals & Domestic Cargo Movement. (12-Month Per cent change)



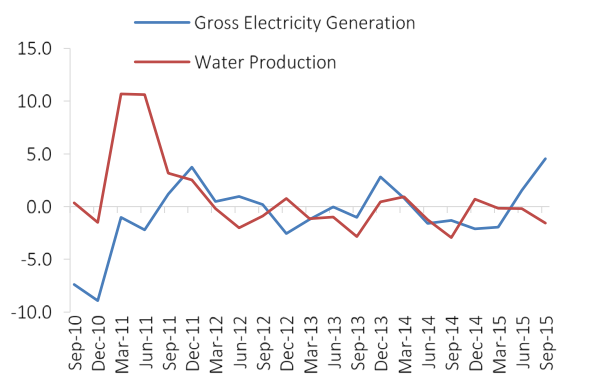
Source: The Port Authority of Jamaica & Jamaica Tourist Board

Construction is assessed to have grown in the September 2015 quarter, the eleventh consecutive quarter of expansion. The industry's positive performance largely reflected increases in commercial projects, the impact of which was tempered by contractions in residential construction. The continued growth of commercial projects was associated with ongoing infrastructural developments such as the Government's Major Infrastructural Development Programme, Highway 2000, projects funded by the Tourism Enhancement Fund as well as on-going hotel projects. Notwithstanding these developments, growth in the industry slowed due to the decline in housing starts by the National Housing Trust.

Value added for *Wholesale & Retail Trade, Repairs, Installation of Machinery & Equipment* during the review period, is primarily inferred from an increase in manufacturing and construction related activities. Further, growth in the industry would have been supported by an estimated expansion in capital goods and raw materials imports.

The estimated expansion in *Electricity & Water Supply* was chiefly reflective of an increase in electricity consumption which was partly offset by a contraction in water production (see **Figure 19**). For the September 2015 quarter, higher electricity consumption largely reflected continued growth in residential electricity sales as households increased their usage. The estimated fall in water production for the review quarter reflected the impact of drought conditions in 2015.

Figure 19: Electricity Consumption & Water Production. (12-Month Per cent Change)

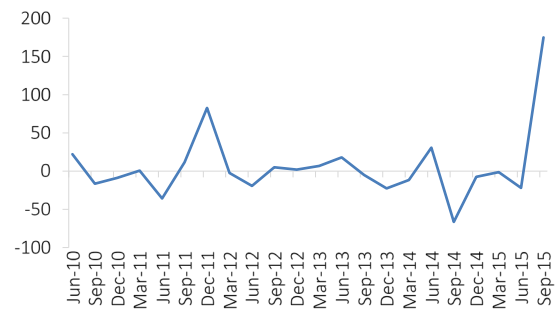


Source: Jamaica Public Service and National Water Commission

For the September 2015 quarter, *Manufacture* is estimated to have registered its second consecutive quarter of growth since the March 2015 quarter. The performance of the industry primarily reflected growth in the Other Manufacturing sub-industry. The estimated expansion in Other Manufacturing

was mainly driven by growth in petroleum refining reflecting recovery from disruptions in production in the corresponding period of the previous year. For the Food & Beverages sub-industry, expansions were mainly reflected in Food excluding Sugar and Alcoholic Beverages. With regard to Food excluding Sugar, the expansion reflected an increase in the processing of poultry meat.

Figure 20: Petroleum refining. (12-Month Per cent Change)



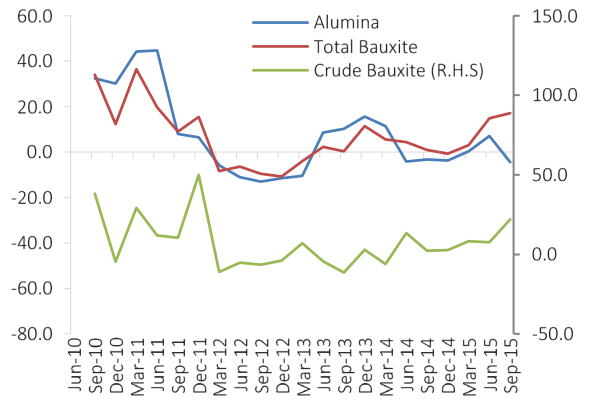
Source: Petrojam Ltd.

Mining & Quarrying is assessed to have expanded for the review period. The performance of the industry was mainly driven by growth in crude bauxite production, the impact of which was partly offset by a marginal contraction in alumina production (see **Figure 21**). The increase in bauxite production reflected the increased capacity utilization at one bauxite plant as well as the re-commissioning of bauxite mining operations at another plant. In relation to alumina production, the output for the review period relative to the September 2014 quarter mainly stemmed from lower capacity utilization within the industry, arising from disruptions in production at an alumina plant.

Aggregate Demand

Preliminary estimates of aggregate spending indicated that *Aggregated Demand* continued to strengthen. This assessment was premised on improvements in all components of aggregate demand for the September 2015 quarter.

Figure 21: Trends in Crude Bauxite, Alumina & Total Bauxite Production. (12-Month Per cent Change)

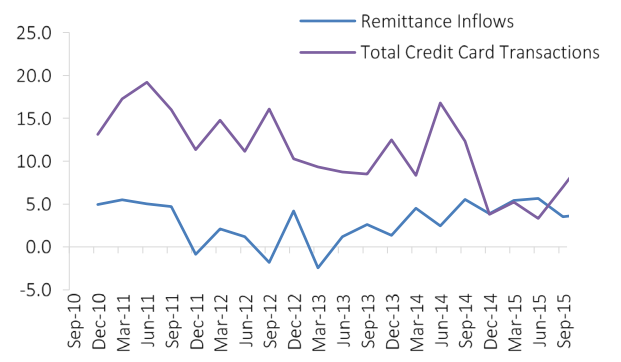


Source: Jamaica Bauxite Institute

With regard to the assessed expansion in *Final Consumption*, both Private and Public Consumption are estimated to have grown. The estimated expansion in Private Consumption was inferred from growth in real remittance inflows and total credit card transactions (see **Figure 22**).This marginal expansion in household spending was consistent with the JCC Survey of Consumer Confidence which reflected the continued improvement in consumer confidence, albeit at a slower pace (see **Figure 23**). For Public Consumption, the expansion was inferred from the continued rise in non-interest government spending during the review period. In particular, Programmes & Wages increased at a faster pace relative to the comparable period of last year.

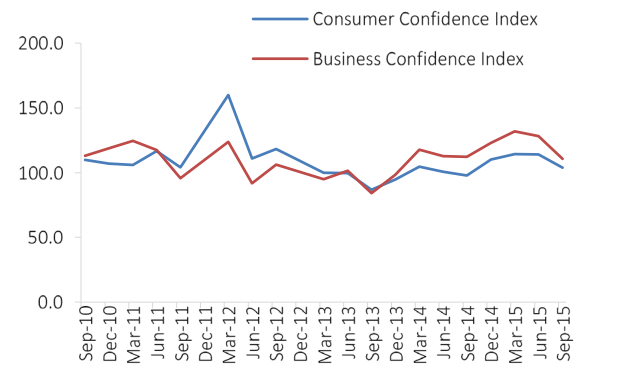
The estimated improvement in *Net External Demand* occurred in the context where the contractions in imports of goods and services outweighed the decline in export goods and services (see **Figure 24**). Of note, the reduction in imports was attributable to an estimated contraction in the volumes of non-fuel raw materials, the impact of which was partly offset by a marginal expansion in the volumes of consumer goods imports. The performance of exports primarily reflected contractions in citrus and alumina, partly offset by

Figure 22: Real Total Credit Card Transactions and Remittances Inflows: Effects on Domestic Demand (12-Month Per cent Change)



Source: Bank of Jamaica and STATIN

Figure 23: Business and Consumer Confidence Index (12-Month Per Cent Change)



Source: Bank of Jamaica and Jamaica Chamber of Commerce

an expansion in the volumes of coffee, bauxite and mineral fuel exports.

The estimated expansion in G*ross Capital Formation* was mainly inferred from increased capital and raw material goods imports as well as greater foreign direct investment (FDI).The expansion in FDI for the September 2015 quarter was mainly related to infrastructural developments such as the North-South leg of Highway 2000 as well as hotel expansion and rehabilitation. Notably, the expansion in *Gross Capital Formation* was estimated to have been tempered by the decelerated pace of improvement in the index of businesses' future expectations reported by JCC's Business Confidence Survey.

Real Sector Outlook

Real GDP growth for FY2015/16 is projected to remain within the range of 1.0 per cent to 2.0 per cent while average quarterly growth over the near-term is expected to be within the range of 1.5 to 2.5 per cent. Further, the pace of expansion in economic activity is expected to increase over the medium-term. It is envisaged that growth for FY2015/16 will occur in the context of continued recovery in the economies of Jamaica's major trading partners, improvements in business and consumer confidence as well as a further improvement in Net External Demand. Furthermore, the domestic economy is projected to benefit from the ongoing reforms under the IMF-EFF programme which are expected to improve the business environment.

On balance, risks to the growth outlook are tilted to the downside, amid uncertainty about slowing growth in the economies of Jamaica's major trading partners as well as concerns about the possibility of a further decelerations in investor expectations. Further, unfavourable weather conditions could mar the economic growth forecast.

Figure 24: Trends in Exports & Imports of Goods and Services (US$ Millions)

Source: Bank of Jamaica and STATIN

Box 2: Trends in selected measures of Labour Productivity

Introduction

In the context of an increasingly interconnected global environment, the success of Jamaica's economic reform programme (ERP) is hinged on, amongst other things, its ability to enhance its competitiveness. For a small open developing economy, such as Jamaica, a crucial factor for improving competitiveness is closely connected to the country's ability to improve overall productivity. In general, this involves creating greater output through enhanced allocation of production inputs including labour, technology, energy and raw materials. In practice, productivity increases when a higher (or the same) level of output is produced with the same (or fewer) resources.

Why is labour productivity important?

Higher levels of productivity are particularly important as it is the most fundamental determinant of the standard of living. More specifically, increased productivity expands supply leading to higher incomes. In turn, higher incomes reduce poverty. Further, an increase in the overall productivity is highly correlated with improvements in the business environment which augurs well for economic growth. This approach of increasing labour productivity towards improving external competitiveness is desirable as it improves living standards at the same time.[5]

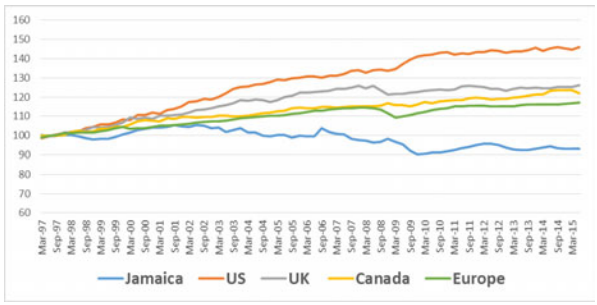
Measuring Labour Productivity

There are several ways of measuring labour productivity. These include output per hour worked, output per worker and unit labour cost. Notably, productivity can be influenced by non-price factors such as adequate business infrastructure and social welfare, low levels of crime and bureaucracy. In addition, strong labour relations, which involves a harmonious relations between management and employees, is known to improve productivity.

Recent Developments in Productivity

The degree of external competitiveness is illustrated by the comparison of the level of productivity in one country relative to another. The indices of labour productivity as measured by the output per hour worked shows that Jamaica's labour productivity has lagged behind that of the US, UK, Canada and Europe (See **Figure 1**). It should be noted that Jamaica displayed a downward trend in labour productivity which was negatively impacted by the global financial crisis in 2008 and has remained relatively constant in the aftermath of the crisis. The widening gap is indicative of losses in Jamaica's competitiveness vis-à-vis the US, a trend which has slowed after the crisis. Between the June 2010 and June 2015 quarters, average quarterly productivity per hour worked increased by 0.3 per cent in Jamaica. This compares to increases of 0.7 per cent, 0.5 per cent, 1.1 per cent and 0.9 per cent in US, UK, Canada and Europe, respectively. With respect to the output per worker measure of labour productivity, Jamaica's productivity has also lagged behind a set of selected countries from Latin America and the Caribbean (See **Figure 2**). During the period 2010 and 2013, the average increase in output per worker in Jamaica was 0.3 per cent. In contrast, the average increase in productivity per worker over the same period was 0.7 per cent, 2.9 per cent, 2.4 per cent, 1.5 per cent and 0.3 per cent in Barbados, Costa Rica, Dominica Republic, US and Mexico respectively.

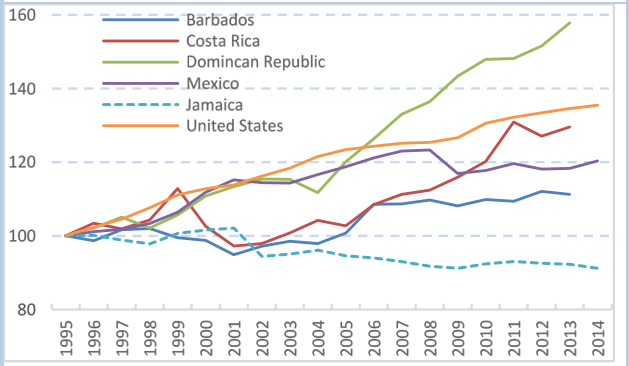
Figure 1: Labour Productivity (Output per Hour worked)



Source: International Financial Statistics database and Bank of Jamaica

5 There are several approaches to improving external competitiveness including relative-price and non-price adjustments.

Figure 2: Labour Productivity (Output per Worker)



Source: International Financial Statistics database and Bank of Jamaica

Conclusion and Implications

Notwithstanding the focus on one factor of production, the assessment underscores the need for diligence in pursuing the structural reforms embodied in the ERP as well as other reforms geared towards improving the business environment and overall levels of productivity. Moreover, an active process of identifying and eliminating impediments to the productivity of labour, capital and technology will remain integral to Jamaica's economic growth prospects.

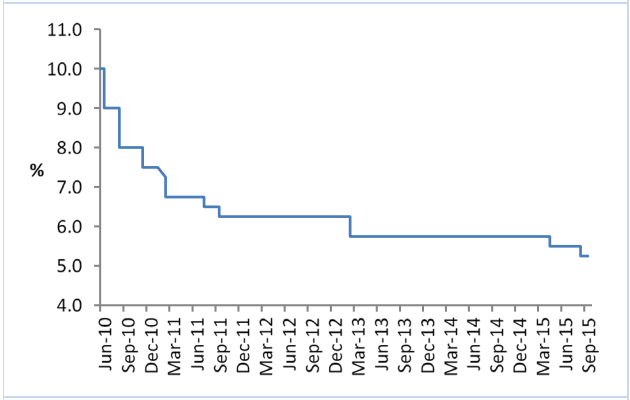
Monetary Policy, Money and Financial Markets

Monetary Policy

During the September 2015 quarter, the Bank of Jamaica (BOJ) reduced the signal rate, the rate on the 30-day Certificate of Deposit (CD), to 5.25 per cent from 5.50 per cent (see **Figure 25**).[5] The easing of the monetary policy stance, the second adjustment since the beginning of the fiscal year, continued to reflect the Bank's outlook for lower near and medium-term domestic inflation. Improvements in the country's macroeconomic conditions also supported the decision for a further reduction in the policy rate. Other favourable developments that supported the lowering of the policy rate included the growth in the net international reserves and a strengthening in the current account position of the balance of payments.

In addition, during the review quarter, the Bank reduced the spread relative to the 30-day CD rate by 75 basis points (bps) for its lending facilities. In this context, the rates on the standing liquidity facility (SLF), bi-monthly repurchase operations (BRO) and excess funds rate (EFR) were reduced to 7.50 per cent, 7.00 per cent and 9.55 per cent. The adjustment during the quarter was the third for the fiscal year resulting in a cumulative decline of 175 bps for the fiscal year to September.

Figure 25: Interest rate on BOJ's 30-day Certificate of Deposit



Source: Bank of Jamaica

The Bank's policy actions facilitated an easing of the tight liquidity conditions that prevailed in the June 2015 quarter. Liquidity was injected through net foreign currency purchases via the Surrender facility, net issues of repurchase agreements and to a lesser extent, maturing OMO instruments (see **Table 6**). Notably, there was an injection of $6.9 billion via the BOJ's repurchase operations as institutions continued to utilize the BRO, SLF and EFR facilities to satisfy some of their liquidity needs. The overall Jamaica Dollar liquidity impact of the Bank's operations for the quarter was a net injection of $22.2 billion relative to $13.1 billion in the June 2015 quarter. The injection by the BOJ's operations for the September 2015 quarter was partially offset by an absorption $16.4 billion from Government's operations, primarily due to tax receipts.

5 The Bank maintained the domestic currency cash reserve and liquid assets requirements at 12.0 per cent and 26.0 per cent, respectively.

For the September 2015 quarter, the coupons on the 3- to 7-year BOJ US dollar CDs were reduced by an average of 12 to 26 bps. In spite of lower rates, there was a rollover rate of 74 per cent primarily reflecting increased placements on the 3-year instrument (see **Table 7**).

Table 6: BOJ Liquidity Operations

	April - June 2015				July - September 2015			
	Injection	Absorption	Net	Average	Injection	Absorption	Net	Average
				Rate				Rate
	(J$BN)	(J$BN)		(%)	(J$BN)	(J$BN)		(%)
30-day	48.30	47.30	1.00	5.63	44.98	46.23	-1.26	5.63
365-day VR CD	6.00	3.00	3.00	6.82	6.41	1.15	5.26	6.82
548-day VR CD	0.00	0.00	0.00		0.43	0.00	0.43	
729-day VR CD	0.00	3.80	-3.80	7.25	0.00	1.04	-1.04	7.25
365-day FR USD IB	0.00	0.00	0.00		0.00	0.21	-0.21	
Repos (net)	0.00	19.20	-19.20		8.92	0.00	8.92	
FX (Trading Room &PSE)	66.76	34.68	32.08		63.70	51.53	12.17	
Net Injection			13.08				24.26	
Other'	0.00		0.00		0.00	0.00	0.00	
GOJ operations	88.01	107.85	-19.84		103.00	119.40	-16.40	
Net Injection (All Operations)			-6.76				7.86	

Source: Bank of Jamaica
Notes: (i) FR USD IB denotes Fixed Rate US dollar Indexed Bond (ii) Injections reflect maturities of instruments while absorptions reflect new issues of these instruments in each time period, and (iii) Average rates on VR CDs reflect average initial coupons.

Table 7: Placements & Maturities of BOJ USD Instruments

	April - June 2015			July - September 2015		
	Placements (US$MN)	Maturities (US$MN)	Average Yield (%)	Placements (US$MN)	Maturities (US$MN)	Average Yield (%)
1-year				0	19.12	
2-year	10.1	0.0	-	0.0	0.0	-
3-year	11.2	0.0	3.13	74.0	0.0	2.87
4-year	12.1	0.0	-	2.5	0.0	-
4.5-year	0.0	1.6	-	0.0	97.3	-
5-year	0.0	0.0	4.16	0.5	0.0	3.95
7-year	23.1	0.0	4.69	8.7	0.0	4.57
TOTAL	56.5	1.6		85.8	116.5	

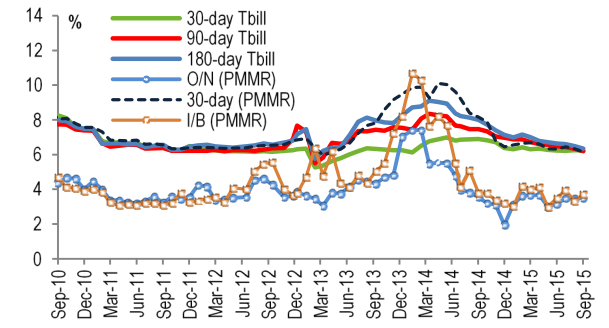
Source: Bank of Jamaica

Money Markets

Despite the policy actions, there were periods of tight liquidity in the private money market during the September 2015 quarter. These periods were partly due to a narrow distribution of funds among banks as well as the BOJ's intervention in the foreign exchange market to meet increased demand for foreign currency. In this context, the average overnight private money market rate and interbank rates rose by 36 bps and 20 bps to 3.49 per cent and 3.70 per cent, respectively. In contrast, the average 30-day private money market rate fell by 17 bps to 6.14 per cent.

Notwithstanding the periods of tight liquidity, the 90- and 180-day Treasury bill rates both declined by 28 bps to 6.20 per cent and 6.35 per cent, respectively. However, the rate on the 30-day Treasury Bill was unchanged. The performance of the instruments reflected the continued positive outlook for inflation and market participant's favourable outlook for liquidity over the near term (see **Figure 26**). In particular, with the exception of Treasury Bills, there were no other issues of GOJ instruments in the domestic market during the quarter.

Figure 26: Average Selected Market Interest Rates



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.

Foreign Exchange Market

The weighted average selling rate of the Jamaica Dollar vis-á-vis the US dollar closed the September 2015 quarter at J$119.06 = US$1.00 reflecting an increased pace of depreciation to 5.67 per cent from 4.26 per cent at the end of the previous quarter (see **Figures 27** and **28**).The faster pace of depreciation reflected a reversal of the trend observed since the September 2013 quarter.

The uptick in the pace of depreciation against the US dollar for the September 2015 quarter occurred in the context of higher net demand for

foreign currency to satisfy Balance of Payments current account transactions (see **Figure 11**). The higher net demand reflected increased payments as well as lower receipts. Higher payments were associated with increased demand for non-fuel imports. Lower receipts reflected a decline in non-traditional exports, in particular, mineral fuel the impact of which was partly offset by higher inflows from tourism and remittances. Private capital inflows were also estimated to have been lower for the same period. During the September 2015 quarter, demand pressures in the foreign exchange market were tempered by BOJ net sales of US$297.9 million.

There was an estimated gain of 3.3 per cent in Jamaica's external price competitiveness, as measured by the real effective exchange rate (REER) at end-September 2015, compared to the estimated gain of 1.1 per cent at the end of the previous quarter (see Figure 11). The gain in competitiveness reflected the faster pace of depreciation of the domestic currency as well as a lower rate of domestic inflation, relative to Jamaica's major trading partners. Specifically, Jamaica's rate of inflation declined by 2.4 per cent, in contrast to the increase of 0.4 per cent in the weighted average inflation rate of Jamaica's major trading partners.

Figure 27: WASR of Select Major Currencies (e.o.p.) (12 – month point-to-point)

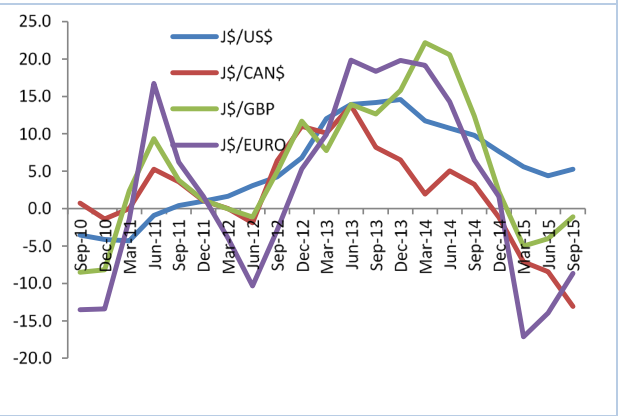
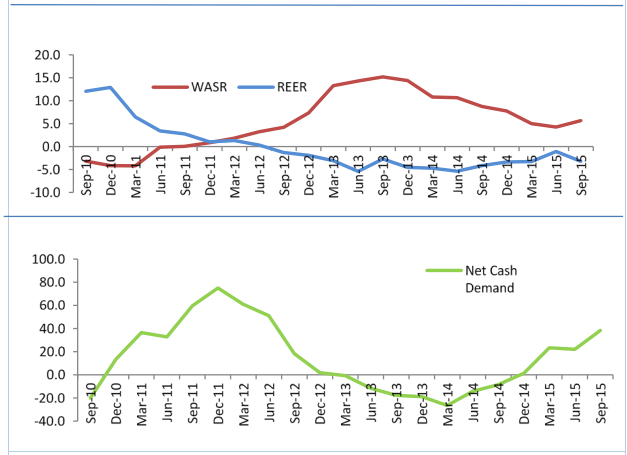


Figure 11: The Real Effective Exchange Rate (REER), WASR and Net Demand* (12- month point-to-point percentage change)



Source: Bank of Jamaica

Notes: (i) A decline in the level of the REER (a negative change) implies an improvement in external price competitiveness

*Net demand is referred to as the overall cash demand for balance of payments current account transactions and is calculated as the difference between estimated current account cash inflows and outflows.

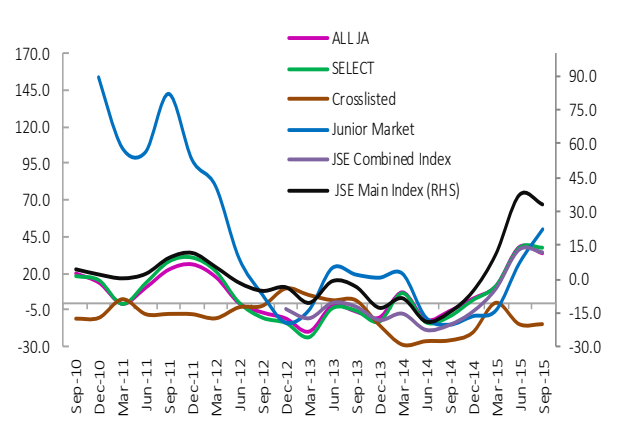
Equities Market

With the exception of the Cross Listed Index, all the Jamaica Stock Exchange (JSE) indices rose at end-September 2015 relative to the annual change as at end-June 2015. Notably, both the JSE Main Index and the Junior Market Index grew by 33.3 per cent and 49.9 per cent, respectively, for the year ended September 2015. The outturn for the JSE Main compared favourably to average growth of 4.1 per cent for the last five years (see **Figure 29**).

The performance of the equities market during the review period reflected improved investor sentiments. This improvement was in the context of positive macroeconomic developments including relatively low inflation, enhanced liquidity conditions and the continued reduction in the Bank's policy rate. These positive developments were complemented by Jamaica's continued positive performance under the EFF programme. In addition to the improved investor sentiment, higher company profit earnings by large corporates listed on the JSE also contributed to the favourable performance of equities. Furthermore, investments in equities provided a more attractive option

relative to foreign currency and domestic money market investments. More specifically, equities offered a return of 33.3 per cent for the review period, while capital gains due to depreciation on foreign currency investments were 5.3 per cent and interest rates in the 30-day money market declined by 1.9 percentage points to 6.3 per cent at end-September 2015 (see **Figure 30**).[6]

Figure 29: Annual Growth of the JSE Indices
(12-Month Per cent Change)

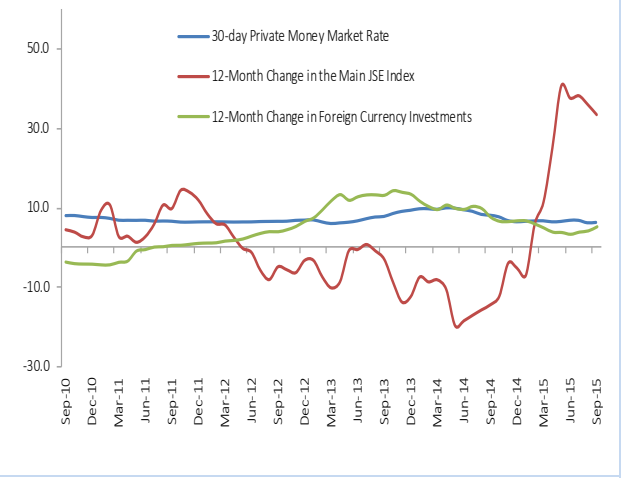


Source: Jamaica Stock Exchange

There was a general increase in the values of key market indicators for the year ended September 2015. In particular, the value of transactions, volume of stocks traded and number of transactions for the main JSE Index recorded respective growth rates of 24.4 per cent, 7.0 per cent and 5.9 per cent (see **Figure 31**).

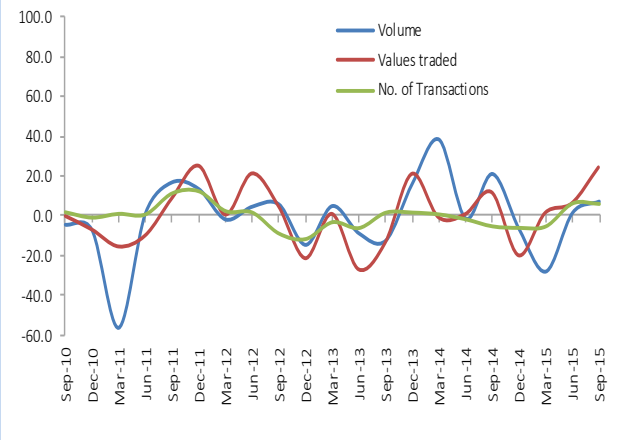
The improved outturn in the equities market was also reflected in the advance to decline ratio which increased to 28:3 for the year ended September 2015 relative to 8:20 for the year ended September 2014. Price appreciation was broad-based and reflected the performance of stocks within all seven sectors. The Communication and Financial sectors accounted for six of the top ten advancing stocks based on recorded average price appreciations

Figure 30: Returns from Private Money Market and Gains from JSE Main Index and Foreign Currency Investments
(Per cent)



Source: Jamaica Stock Exchange and Bank of Jamaica

Figure 31: Annual Movement in Volumes, Values Traded & Number of Transactions (Main JSE Index)
(12-Month Per cent Change)



Source: Jamaica Stock Exchange

of 113.1 per cent and 79.5 per cent, respectively (see **Table 8**).[7] Notably, only three stocks declined for the review period (see **Table 9**).

6 Capital gains are calculated as the 12-month point-to-point change. Returns on equities reflect price appreciation/depreciation and is computed based on the JSE Main Index.

7 During the September 2015 quarter, within the Communication sector, Radio Jamaica Limited announced a proposed amalgamation with the Gleaner Company Limited.

Table 8: Stock Price Appreciation

Advancing	Per cent
Financial	
Jamaica Stock Exchange Ltd.	298.9
Mayberry Investment Limited	82.0
National Commercial Bank	54.6
Manufacturing	
Caribbean Cement Company	232.9
Communication	
Radio Jamaica	196.2
LIME	72.4
Gleaner Company	70.8
Other	
Supreme Ventures	100.6
Kingston Properties Ltd.	68.8
Retail	
Hardware & Lumber	69.2

Source: Jamaica Stock Exchange

Table 9: Stock Price Depreciation

Declining	Per cent
Other	
Palace Amusement	-3.6
Manufacturing	
Trinidad Cement	-14.8
Mobay Ice Company	-2.4

Source: Jamaica Stock Exchange

Private Sector Credit and Lending Rates

At end-September 2015, the annual growth in the stock of private sector credit was 7.8 per cent, relative to 4.5 per cent at end-June 2015 (see **Table 10**).[8] This expansion in credit was consistent with the relative improvement in liquidity conditions for the review quarter and was consistent with lenders' expectations for an increase in both the demand and supply of credit as indicated by the Bank's survey of credit conditions for the June 2015 quarter (see Box: **BOJ's Quarterly Credit Conditions Survey**). Despite the improved credit performance relative to June 2015, the outturn remained below the annual average growth of 9.1 per cent for the last five Septembers.

8 Private sector credit includes total loans & advances and corporate securities less loans to overseas residents.

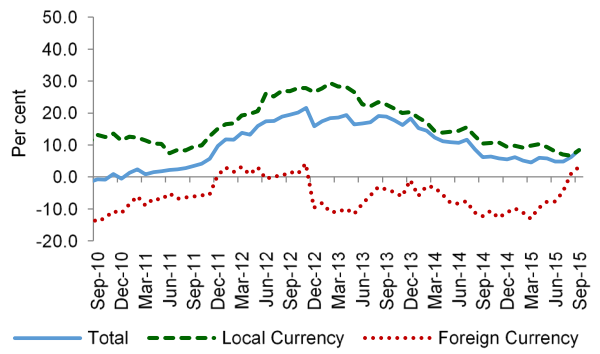
Table 10: Credit to the Private Sector by Commercial Banks

Annual Flows (J$ mn)	Sept-14	Jun-15	Sept-15
Private Sector Credit	15 213.6	14 783.9	26 159.1
Percentage Change (%)	4.8	4.5	7.8
Loans & Advances	19 909.3	16 328.2	29 009.9
Less Overseas Residents	3 799.0	1 040.4	2 700.9
Add Corporate Securities	(896.7)	(503.9)	(246.7)

Source: Bank of Jamaica

The expansion in private sector credit for the review period was due to an acceleration in loans and advances. This acceleration reflected increases in both local and foreign currency denominated loans (see **Figure 32**). Notably, foreign currency denominated loans reflected the first increase since November 2012. Additionally, growth in loans and advances was reflected in lending to both businesses and households, with loans to businesses accounting for the sharper pace of increase (see **Table 11**).

Figure 32: Growth in Private Sector Loans and Advances
(12-month percentage changes)



Source: Bank of Jamaica

Growth in business lending for the September quarter was mainly attributed to the Electricity, Gas & Water, Professional & Other Services, and Manufacturing sectors. However, the impact on growth in business lending was moderated by net repayments in the Transport, Storage & Communication, Entertainment and Agriculture & Fishing. With respect to households, there was an increase across the all loan categories with the exception of insurance premiums, which recorded

a marginal net repayment. Specifically, there were notable increases in instalment and terms loans for the review period. Notably, the faster pace of growth in mortgage and instalment loans occurred against the background of the trend decline in lending rates to these market segments.

Table 11: Distribution of Total Loans & Advances to the Private Sector by Commercial Banks

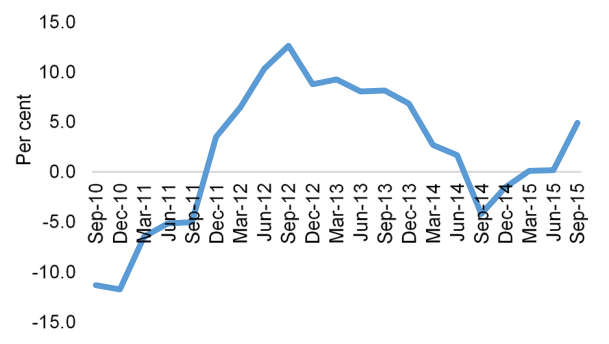
Annual Flows	Jun-14	Sep-14	Jun-15	Sep-15
Business Lending	9 445.8	5 003.9	4 499.6	13 552.4
Agriculture & Fishing	3 455.5	1 138.2	(1 107.2)	86.6
Mining & Quarrying	115.6	36.8	250.5	152.7
Manufacturing	1 533.9	1 812.0	1 671.8	3 091.3
Construction & Land Development	1 458.5	1 099.2	434.6	687.3
Transport, Storage & Communication	799.3	1.0	(1 867.9)	(2 070.2)
Tourism	304.9	253.1	2 535.2	2 008.2
Distribution	3 299.9	3 260.5	1 879.5	2 619.7
Electricity, Gas & Water	(1 685.3)	(2 842.4)	(1 976.6)	3 116.1
Entertainment	491.5	283.1	(898.4)	(811.6)
Professional & Other Services	(327.9)	(37.6)	3 578.3	4 672.3
Household & Other Lending	23 086.1	14 905.3	11 828.6	15 457.5
Personal	20 447.6	11 106.4	10 788.2	12 756.6
o/w Demand loans	(40.2)	3 280.5	3 783.9	2 695.2
o/w Term loans	5 697.5	3 603.6	337.7	4 352.4
o/w Mortgage	8 529.8	2 315.4	1 986.3	2 179.5
o/w Installment	7 467.0	4 658.6	4 784.5	5 612.2
o/w Overdraft loans	24.4	10.4	(80.7)	110.6
o/w Insurance premiums	(0.4)	(15.7)	(13.5)	(2.8)
Overseas Residents	2 638.5	3 799.0	1 040.4	2 700.9
Net Lending	32 531.9	19 909.3	16 328.2	29 009.9
Annual Growth	10.7%	6.2%	4.8%	8.5%

Source: Bank of Jamaica
Notes: (i) Loans & Advances include local and foreign currency loans extended to businesses and individuals.

Real growth in private sector credit at end-September 2015 continued the trend improvement evident since August 2014 (see **Figure 33**). This sharp growth in real credit largely reflected the faster pace of decline in annual inflation which was supported by growth in nominal private sector credit (see **Inflation**).

The overall weighted average lending rate of commercial banks declined relative to end June 2015. However, relative to end September 2014, there was an increase of 28 bps in the overall lending rate (see **Table 12**). This increase was predominantly driven by personal loans, which recorded an increase of 261 bps relative to September 2014. Notwithstanding this, lending rates in most of the other loan categories declined in the context of the Bank's policy actions during the review quarter (see **Monetary Policy**). Notably, lending rates to the local government sector recorded the sharpest decline.

Figure 33: Real Growth in Private Sector Credit
(12-month percentage changes)



Source: Bank of Jamaica

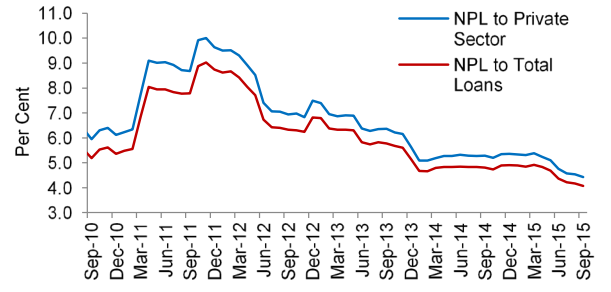
Against this background, the quality of the loan portfolio improved to record lows for the review period. In particular, the ratios of non-performing loans (NPL) to private sector loans and total loans at end-September 2015 declined by 75 bps and 64 bps to 4.54 per cent and 4.17 per cent, respectively, relative to end-September 2014 (see **Figure 34**). The declines in the NPL ratios reflected a sharper reduction in total past due loans relative to the growth in private sector loans and total loans. This was attributable to the faster pace of loan recoveries relative to the decline in gross loans charged off.

Table 12: Commercial Bank: Domestic Currency Lending Rates by Loan Type

	Jun-14	Sep-14	Jun-15	Sep-15
OVERALL	17.50	16.71	17.17	16.99
Public Sector	16.10	10.28	10.30	8.85
Local Govt. & O.P.E	11.47	11.35	12.65	8.14
Central Government	16.61	10.10	9.74	9.17
Private Sector	17.53	16.82	17.30	17.15
Instalment	16.29	16.41	15.79	15.55
Mortgage	9.79	9.76	9.69	9.66
Personal	25.53	23.48	26.26	25.85
Commercial	12.98	12.85	12.75	12.79
Annual Change (Basis Points)				
	Jun-14	Sep-14	Jun-15	Sep-15
OVERALL	22	-74	-33	28
Public Sector	7	8	-581	-143
Local Govt. & O.P.E	45	78	118	-321
Central Government	10	-4	-687	-93
Private Sector	18	-78	-23	33
Instalment	-121	-45	-50	-86
Mortgage	-51	-17	-10	-10
Personal	258	-154	73	237
Commercial	-130	19	-23	-6

Source: Bank of Jamaica

Figure 34: Commercial Bank Loan Quality (percentages)



Source: Bank of Jamaica

Money

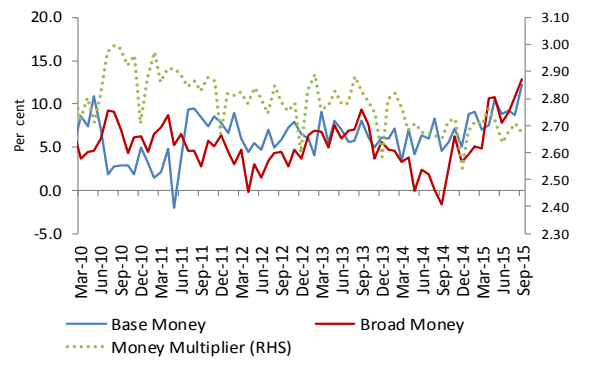
The monetary base grew by 12.2 per cent on an annualised basis at end-September 2015 relative to 8.9 per cent and 4.5 per cent as at end-June 2015 and end-September 2014, respectively. The annual growth at end September 2015, mainly reflected an increase of the currency stock of 14.7 per cent, which was higher than the 9.5 per cent and 5.8 per cent recorded at end-June 2015 and end-September 2014, respectively (see **Table 13** and **Figure 35**).

Table 13: Bank of Jamaica Operating Targets

	Stock			Flow	
	Sep-14	Jun-15	Sep-15	Q –o- Q	Y-o-Y
NIR (US$MN)	2 200.6	2 116.5	2 441.9	325.4	241.3
NIR(J$MN)	234 096.3	242 679.0	279 986.1	37 307.1	45 889.8
- Assets	288 848.3	290 923.5	331 419.2	40 495.7	42 570.9
- Liabilities	-54 752.0	-48 244.5	-51 433.1	-3 188.6	3 318.9
Net Domestic Assets	-137 846.8	-138 203.4	-171 987.5	-33 784.1	-34 140.7
- Net Claims on Public Sector	110 474.8	140 317.0	101 215.6	-39 101.4	-9 259.2
- Net Credit to Banks	-22 606.0	-24 229.3	-24 897.5	- 668.2	-2 291.5
- Open Market Operations	-35 206.8	-51 609.4	-48 743.7	2 865.7	-13 536.9
- Other	-190 508.7	-202 681.7	-199 561.8	3 119.9	-9 053.1
-o/w USD FR CDs	-91 040.8	-99 089.1	-95 937.5	3 151.6	-4 896.7
Monetary Base	96 249.6	104 475.6	107 998.6	3 523.0	11 749.0
- Currency Issue	61 573.4	67 916.9	70 635.1	2 718.2	9 061.7
- Cash Reserve	34 271.2	35 852.7	36 680.4	827.7	2 409.2
- Current Account	405.0	706.1	683.2	- 22.9	278.2

Source: Bank of Jamaica

Figure 35: Money Multiplier vs Growth in Base and Broad Money (Annual percentage changes)



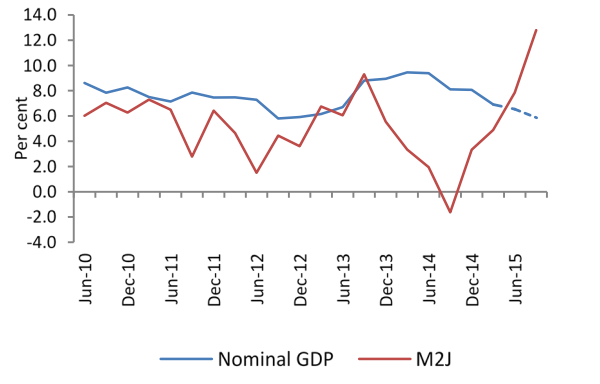
Source: Bank of Jamaica

With regard to the sources of the change in the monetary base, there was an increase of $37.3 billion (US$325.4 million) in the NIR stock relative to end-June 2015, the impact of which was partially offset by a contraction of $33.8 billion in the net domestic assets (NDA) (see **Table**

13).[9] The increase in the NIR mainly reflected the purchase of the US dollar proceeds of GOJ debt raising on the international capital markets in July as well as market purchases which more than offset the payment of GOJ debt and market sales during the period. The contraction in the NDA mainly reflected the build-up of Government deposits at the Bank. The growth in the NIR in the review quarter contributed to the year on year increase in the NIR which influenced the annual expansion in base money. This annual growth in the NIR more than offset a year on year decline in the NDA. The NDA decline was largely as a result of growth in open market liabilities and net public sector liabilities, with the latter arising mainly from the build-up in Central Government deposits at the Bank.

At end-September 2015, the money multiplier, as measured by the ratio of broad money (M2J) to base money, was 2.67 per cent relative to 2.64 per cent at end-June 2015. The increase in the money multiplier resulted from the faster annual growth of 12.8 per cent in broad money relative to the expansion in the monetary base. For the review quarter, the growth in M2J was faster than the 7.8 per cent recorded at end-June 2015. Notably, the expansion in broad money for the September 2015 quarter was also faster than the average annual growth of 4.4 per cent for the last five years. The growth in broad money was reflected in faster growth in all categories of deposits and currency in circulation relative to end-June 2015 and a year earlier. Against this background, growth in broad money outpaced the estimated expansion in nominal Gross Domestic Product (GDP), which is indicative of possible emerging risks to inflation (see **Figure 36**).

Figure 32: Broad Money and Nominal GDP Growth
(percentage changes)



Source: Bank of Jamaica

With respect to the measure of broad money supply that includes the Jamaica Dollar value of foreign currency deposits, M2*, there was annual growth of 14.1 per cent at end-September 2015. This compares with annual growth of 9.2 per cent and 2.0 per cent at end-June 2015 and end-September 2014, respectively. The growth in M2* at end-September 2015 was influenced by depreciation of 5.67 in the WASR of the Jamaica Dollar vis-à-vis the US dollar, as well as an increase of 10.1per cent in the US dollar stock of private sector deposits. Despite the growth in the Jamaica Dollar value of foreign currency deposits, the dollarization ratio declined to 45.3 per cent from 45.4 per cent at end-June 2015.

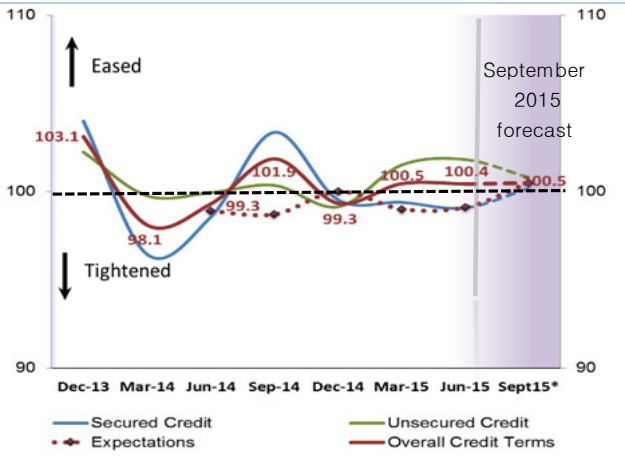
9 At end-September 2015, gross reserves amounted to US$2 890.5 million, representing 22.4 weeks of goods and services imports.

Box 3: Credit Conditions Survey

Overview

The results of the BOJ's QCCS for the June 2015 quarter indicated that credit conditions eased marginally, similar to the March 2015 quarter (see Figure 1). This performance in June was in contrast to an expected tightening in credit conditions that was indicated by respondents in the March 2015 survey for the June quarter.

Figure 1: Index of Credit Market Conditions



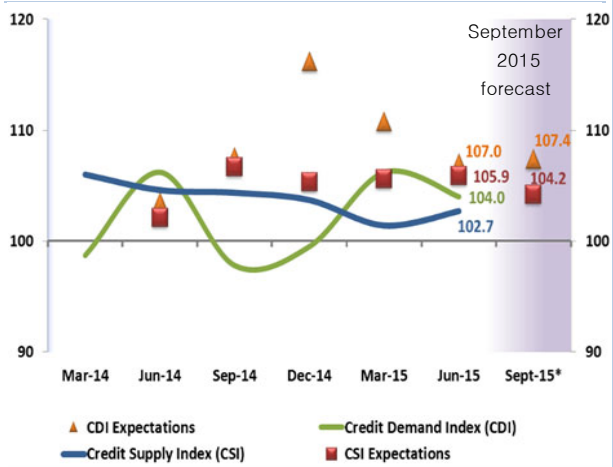
Source: Bank of Jamaica's Quarterly Credit Conditions Survey
Notes: (i) The asterisk (*) represents forward looking expectations provided by the respondents for the June quarter. (ii) The index is the average response for changes in eight credit terms reported in the Credit Conditions Survey. (iii) An index greater than 100 indicates an easing of credit market conditions while an index below 100 indicates a tightening of market conditions.

The marginal but steady easing in credit market conditions was underpinned by improvements in lending policies applied to unsecured loans. Lenders highlighted that the activation of the credit bureau and the current downward trend in market interest rates have increased their risk appetite. As a result, lenders extended the maximum size of credit lines and reduced the fees applicable to unsecured loans during the review quarter. For the September 2015 quarter, lenders anticipate credit market conditions will continue to ease marginally, reflecting less stringent policies for secured loans and policies associated with unsecured loans are expected to continue to ease but at a slower pace than in the June quarter.

Credit Supply

For the June 2015 quarter, the supply of credit remained robust as reflected in the Credit Supply Index (CSI) of 102.7, although lower than the 105.9 anticipated in the previous survey (see Figure 2). The outturn for the review quarter reflected increases for both local and foreign currency lending facilities, which were made accessible to both businesses and households. Although personal loans continued to account for the greater proportion of the credit supplied, there was an increase in credit made available to businesses during the review quarter (see Figure 3). Of the credit allocated to businesses, there was a marginal redistribution of credit from medium businesses to small firms while credit supplied to large and micro businesses remained unchanged relative to the March 2015 survey results.

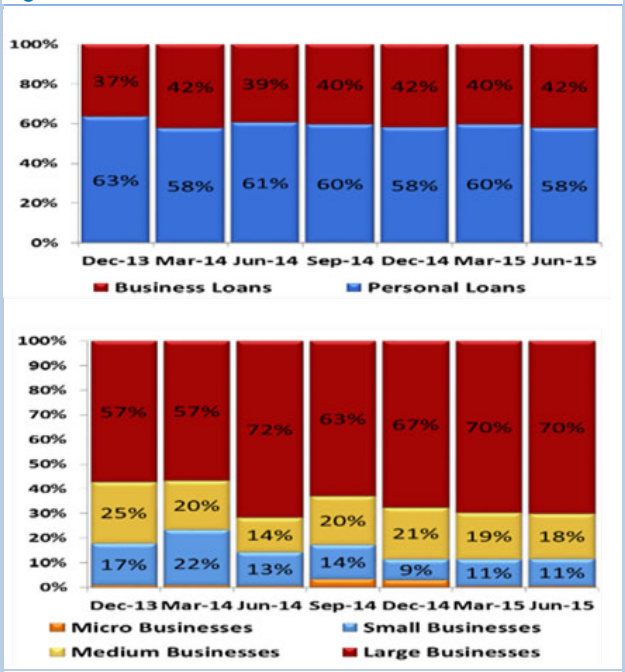
Figure 2: Credit Supply and Demand Indices



Source: Bank of Jamaica's Credit Conditions Survey
Notes: (i) *-Expectations for the upcoming quarter indicated by respondents in the previous survey and (ii) Indices greater than 100 indicate an increase in the variable while an index less than 100 indicates a decline.

Lenders indicated that activity in the market was low but extremely competitive, which has made generating new loans difficult, particularly among large corporations. Consequently, there was a general thrust among creditors to explore initiatives to improve lending to micro-business markets. In addition, lenders suggested that public education on entrepreneurship could assist with attracting the public to consider business opportunities.

Figure 3: Distribution of Private Sector Loans



Source: Bank of Jamaica's Quarterly Credit Conditions Survey
Notes: (i) Figure 2 shows the distribution of credit between households and businesses. Credit to businesses was further disaggregated to show to total business loans distributed firms of various sizes.

Some lenders highlighted that the expansion in credit supply for the review quarter was largely influenced by aggressive loan promotion activities as well as the perception of a stable macro-economic environment. Notwithstanding, lenders continued to report that the pace of depreciation of the exchange rate have affected their ability to respond to credit requests.

For the September 2015 quarter, lenders anticipate a stronger increase in overall credit availability, reflecting expansions in all loan categories. This expansion should be underpinned by an improvement in economic outlook as well as positive changes in sector-specific risks.

Credit Demand

The overall demand for credit remained robust in the June 2015 quarter as reflected in the Credit Demand Index (CDI) of 104.0 (see Figure 2). The demand for credit during the review quarter predominantly reflected strong requests for personal loans. Notably, the increase in demand for personal loans was reflected in all loan categories with the exception of loans for debt consolidation and credit cards. In particular, there were strong requests for unsecured personal loans and personal motor vehicle loans. The reduction in fees applicable to unsecured loans may have contributed to the uptick in demand for this loan type.

With regard to business loans, the survey results indicated that overall demand for local currency loans declined. This outturn primarily reflected tightness in demand across most economic sectors, particularly Manufacturing and Transport, Storage & Communication in medium, small and micro businesses while demand for local currency loans from large firms increased across all economic sectors with the exception of Electricity, Gas & Water. Lenders reported that during the review quarter large corporations took advantage of the relatively stable market interest rates to fund business expansions and restructure their business activity. On the other hand, overall demand for foreign currency business loans increased during the review quarter. This expansion was predominantly reflected in the Distribution, Agriculture & Fishing and Professional & Other Services sectors. The increase in demand for foreign currency business loans may have been influenced by the slower pace of exchange rate depreciation for the quarter.

For the September 2015 quarter, it is anticipated that the demand for credit will increase further as reflected in the CDI of 107.4 (see **Figure 2**). It is anticipated that this uptick will emanate from both households' and businesses' demand for local currency credit.

Price of Credit

Based on the survey responses, average interest rates on local currency loans decreased for the June 2015 quarter relative to the March 2015 quarter, largely reflecting a decline in lending rates on personal loans (see **Table 1**).

With respect to interest rates on foreign currency loans, the survey results indicate an overall increase, consistent with the rise in demand for these loans. The higher interest rates were due to a significant increase in lending rates applied to business loans, which could reflect the impact of tight US dollar liquidity on the cost of these funds.

Table 1: Interest Rates on Local and Foreign Currency Loans

	June 2014 Survey		March 2015 Survey		June 2015 Survey	
	Jun-14	Sep-14*	Mar-15	Jun-15*	Jun-15	Sept-15*
Local Currency (LC) Loans						
Business loans	16.52	16.66	14.61	15.63	15.03	15.83
Personal loans	19.25	18.86	20.02	20.30	18.96	18.86
Prime rate	17.03	17.22	16.47	16.31	16.50	18.20
Average LC rates	**17.89**	**17.76**	**17.32**	**17.97**	**17.00**	**17.35**
Foreign Currency (FC) Loans						
Business loans	9.02	9.74	8.31	8.81	13.15	8.70
Prime Rate	9.42	9.45	10.60	8.96	9.25	8.84

Source: Bank of Jamaica's Credit Conditions Survey
Notes: * Expectations for interest rates indicated by respondents of the survey.

Against this background, average rates on local currency loans fell by 0.20 percentage points (pps) for the June 2015 quarter (see **Table 1**). Notably, rates on personal loans declined by 1.06 pps to 18.96% while rates on local currency business loans increased to 15.03% from 14.61% during the review quarter. With respect to foreign currency denominated loans, lenders reported that interest rates on foreign currency business loans increased by 4.84 pps to 13.15%.

Lenders expect a general increase in local currency interest rates in the September 2015 quarter. More specifically, interest rates on local currency personal loans and the prime rate are expected to increase. Lenders indicated that they expect interest rates to increase for Jamaica Dollar facilities as liquidity challenges persist. Consistent with anticipated slowdown in demand for foreign currency loans, interest rates on these loans are expected to fall in the September 2015 quarter.

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

Fiscal Developments

Information for the September 2015 quarter indicated that the Central Government recorded a fiscal deficit of $3.7 billion, relative to the budgeted deficit of $12.9 billion (see **Table 14**). The outturn for the quarter reflected lower than anticipated Expenditure, the impact of which was partially offset by lower than budgeted Revenue & Grants. In relation to the overall balance there was a surplus of $44.6 billion, $35.4 billion higher than the targeted surplus. For the fiscal year (FY) to September 2015, the Central Government performance resulted in a primary surplus of $50.8 billion, $10.8 billion above the targeted surplus under the EFF-programme. Similarly, tax revenue was $10.1 billion above the indicative EFF target.

Revenue & Grants, for the review quarter was $567.9 million below budget. The outturn emanated mainly from lower grants and bauxite levy receipts as the other categories of revenue were relatively in line with budget. The underperformance of grants largely reflected delayed funding due to the slower than expected execution of some capital projects. Notably, there were greater tax receipts from Income & Profits and Production & Consumption consequent on the over-performance of corporate taxes, 'tax on Interest' and SCT (local). The tax revenue outturn was facilitated by an improvement in compliance due to increased administrative efforts by the Tax Administration of Jamaica (TAJ). In addition, lower payments of refunds and higher receipts arising from the tax on alcohol aided the

over-performance in 'tax on interest' and SCT (local), respectively. However, there were, reduced tax receipts from International Trade largely reflected in SCT (imports) and customs duty, due to weaker than expected imports.

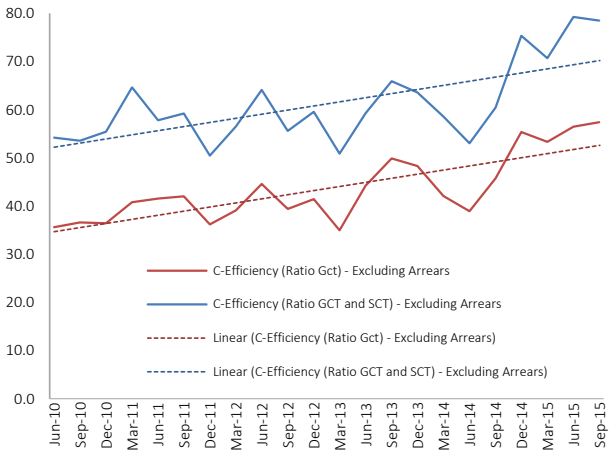
Table14: Summary of Fiscal Operations
($J billions)

	September 2015 Quarter			FY15/16
	Prov.	Budget	Diff	Budget
Revenue & Grants	109.2	109.8	-0.6	458.1
o/w Tax Revenues	99.7	98.2	1.5	411.9
Non- Tax Revenue	7.3	7.0	0.4	31.0
Grants	1.6	3.4	-1.8	9.5
Expenditure	113.0	122.7	-9.7	463.0
Programmes	34.3	35.0	-0.7	135.7
Wages & Salaries	40.6	44.3	-3.8	165.2
Interest Payment	34.6	35.9	-1.3	131.6
Capital Investment	3.5	7.5	-3.9	30.4
Budget Surplus/Deficit	-3.7	-12.9	9.2	-4.9
Primary Balance	30.9	23.0	7.9	126.7
Current Balance	-2.0	-9.0	7.1	15.0
Total Financing	257.0	51.4	205.6	128.9
Foreign Loans	253.5	33.2	220.3	72.6
Domestic Loans	3.4	18.2	-14.7	56.3
Amortisation	208.7	29.3	179.4	178.6
Foreign	204.5	5.2	199.3	178.6
Domestic	4.2	24.1	-19.9	95.1
Overall Balance	44.6	9.2	35.4	-54.5

Source: Ministry of Finance and Planning

In the context of the newly implemented tax revenue measures in FY2015/16 and the increased administrative efforts of the TAJ, tax receipts in the review period were 14.4 per cent above the outturn for the September 2014 quarter. The increased administrative efforts contributed to a higher C-Efficiency (GCT & SCT) ratio of 78.5 per cent, for the September 2015 quarter relative to an implicit budget target of 70.8 per cent.[5] The efficiency outturn was 17.4 percentage points above the average ratio for the previous three September quarters driven largely by increased compliance (see **Figure 36**).

Figure 36: C-Efficiency Ratio
(Per cent)



Expenditure for the September 2015 quarter was $9.7 billion below budget, arising largely from lower than planned recurrent and capital spending (see **Table 14**). In particular, lower than budgeted payments for capital expenditure, wages & salaries and interest cost primarily influenced the outturn. Delays in the settlement of new wage agreements for FY2015/16 and FY2016/17 impeded the payment of new salaries as budgeted. The slower pace of depreciation as well as the lower interest rates contributed to the deviation in interest payments.

The Government's financing requirement for the September 2015 quarter was $212.4 billion arising from the fiscal deficit of $3.7 billion and amortization payments of $208.7 billion. The Government operations during the quarter were financed by borrowing of $257.0 billion, which was more than sufficient to offset the financing

5 The C-Efficiency ratio captures the efficiency of Government's tax collection and is defined as the ratio of the share of value-added tax (VAT) revenue to consumption divided by the standard VAT rate. The generally accepted benchmark for the C-efficiency for small countries is 83.0 percent. Factors linked to a high C-efficiency are a relatively high ratio of trade to GDP (presumably because it is relatively easier to collect the VAT at the point of import tan domestically); high literacy rates and the age of the VAT..

requirement. Consequently, the Government built-up balances of $44.6 billion during the quarter. Loan inflows over the period reflected the receipts of US$2.0 billion and US$130.0 million from the international capital markets and the Inter-American Development Bank, respectively, as well as the issue of Treasury Bills. Amortization during the review period mainly reflected the payment of US$1.5 billion to Venezuela for the pay down of outstanding PetroCaribe Development Fund liabilities.

Box 4: Jamaica's Macroeconomic Programme under the EFF

Overview

Jamaica's medium-term macroeconomic programme is supported by a four-year Extended Fund Facility (EFF) from the International Monetary Fund (IMF). Performance under the programme is assessed based on quarterly quantitative performance criteria (QPCs) and structural benchmarks over the period of the EFF. The achievement of these targets unlocks financing from multilateral financial institutions including the IMF.[6] [7] This programme is aimed at creating the conditions for sustained growth through a significant improvement in the fiscal sustainability as well as price and non-price competitiveness.

Since the start of the programme, both the fiscal and monetary authorities have met the agreed benchmarks and targets. In this regard, on 23 September 2015, the Executive Board of the IMF concluded the ninth review of the programme and confirmed the country's successful performance. This enabled the disbursement of SDR 28.32 million (approximately US$39.7 million). Total disbursements under the EFF to end-September 2015 amounted to SDR445.45 million (approximately US$665.1 million).[8]

At end-September 2015, Jamaica completed the tenth quarter of its macroeconomic programme. All structural benchmarks were met. With regards to the fiscal and monetary performance, it is anticipated that Jamaica would have met all the QPCs for the quarter (See **Table 2**).

Table 1: Structural Benchmarks

	Benchmark	Deadline	Status
1	Finalize the transition of retail repos to the trust-based framework.	Aug-15	Met
2	Establish a new Cash Management Unit in the AGD, and transfer the cash management function (currently handled by FPMU) to this new unit.	Sep-15	Met
3	Make the Banking Services Act effective.	Sep-15	Met

Source: Bank of Jamaica

6 The Executive Board of the IMF approved the four-year EFF arrangement for Jamaica on 01 May 2013.

7 The EFF was established to provide assistance to countries: (i) experiencing serious payments imbalances because of structural impediments; or (ii) characterized by slow growth and an inherently weak balance of payments position. This facility has a longer engagement and repayment period compared to the previous Stand-by Arrangement (SBA) with the IMF. https://www.imf.org/external/np/exr/facts/eff.htm

This review coincided with the regular Article IV Consultation conducted every two years.

8 Total disbursement agreed under the EFF is SDR 615.38 million (225 percent of quota).

Table 2: Quantitative Performance Targets (In billions of Jamaica dollars)

		Dec-13	Sep-14		Dec-14		Mar-15		Jun-15		Sep-15		Dec-15
	Fiscal targets	Stock	Criteria	Actual	Criteria	Actual	Actual	Actual	Criteria	Actual	Criteria	Actual	Criteria
1.	Primary balance of the central government (floor)	….	38.4	43.6	66.0	66.8	121.0	117.2	17.0	20.7	40.0	50.8	60.8
2.	Tax Revenues (floor)	….	166.0	169.0	260.0	258.6	384.0	370.9	88.0	95.8	185.0	195.1	280.0
3.	Overall balance of the public sector (floor)	….	-30.2	-23.1	-37.0	-17.0	-11.6	1.7	-33.0	-7.9	-34.0	9.2	-40.2
4.	Central government direct debt (ceiling)	1672.0	23.2	99.9	92.4	67.9	90.6	77.8	4.5	-37.9	40.0	-11.0	47.0
5.	Central government guaranteed debt (ceiling)	….	2.7	1.1	0.1	0.1	-1.8	-1.8	2.0	n.a.	2.0	0.0	0.0
6.	Central government accumulation of domestic expenditure arrears (ceiling)	21.6	0.0	n.a	0.0	-0.1	0.0	0.0	0.0	n.a.	0.0	-1.3	0.0
7.	Central government accumulation of tax refund arrears (ceiling)	24.6	0.0	-0.9	0.0	-2.9	0.0	-1.4	0.0	-2.4	0.0	n.a	0.0
8.	Consolidated government accumulation of external arrears (ceiling)	….	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9.	Social spending (floor)	….	8.9	n.a	14.8	18.2	21.7	n.a	4.5	n.a.	9.2	14.1	15.6
	Monetary targets												
10.	Cumulative change in NIR (floor)	….	187.3	1159.3	217.2	970.4	391.0	1290.0	380.2	125.7	-463.3	444.2	-338.0
11.	NIR stock floor	1045.1	1232.3	2204.4	1262.2	2015.5	1436.0	2335.0	1425.2	2123.4	1534.4	2441.9	1659.7
12.	Cumulative change in NDA (ceiling)	-7.6	-17.1	-130.7	-12.7	-98.0	-40.4	-139.8	-36.1	-22.2	56.1	-51.9	61.8

Source: Bank of Jamaica

Note: The NIR/NDA criteria reflect adjusted targets to account for any surplus or shortfall in programme loan disbursements from multilateral institutions (the IBRD, IDB, and CDB) relative to the baseline projection.

4.0 Implications for Monetary Policy

The Bank projects that headline inflation will gradually increase during the last half of FY2015/16 to end within the target range of 5.5 per cent to 7.5 per cent. This forecast reflects increases in the prices of domestic agriculture due to the impact of the dry conditions which persisted during the September quarter as well as higher crude oil prices. Over the next four quarters inflation is expected to be in the of 4.5 per cent – 6.5 per cent. Stronger growth in output is projected for FY2015/16, primarily reflecting the positive impact from net external demand and domestic competitiveness. Concurrently, GDP growth is expected to accelerate over the next four quarters. In the context of the aforementioned, the Bank's policy stance will remain generally accommodative over the next four quarters.

Main Policy Considerations

Prices and Output

Headline inflation is projected to gradually increase from 1.8 per cent at end-September 2015 to end FY2015/16 within the target range of 5.5 per cent to 7.5 per cent. This increase primarily reflects projected higher prices for domestic agriculture due to the impact of the recent dry conditions and moderate increases in crude oil prices. However, the forecasts for agricultural prices incorporates some moderation in the latter part of the December 2015 quarter with price reversals expected in the March 2016 quarter as the Island recovers from the dry conditions. Over the next four quarters, inflation is forecasted to remain relatively stable within a range of 4.5 per cent – 6.5 per cent. This forecast reflects the anticipated impact of improvements in domestic demand conditions and higher international commodity prices which should result from improved global demand conditions relative to projected supplies.

Output is forecasted to expand within the range of 1.0 per cent to 2.0 per cent for FY2015/16, reflecting an improvement relative to FY2014/15. This improvement is predicated primarily on projections for continued recovery in the economies of Jamaica's major trading partners. The recovery in these economies coupled with the gains in price competitiveness under the Programme should manifest in improved net external demand for the country. In addition to these external factors, the Bank anticipates improvements in business and consumer confidence, despite the declines recorded in the September 2015 quarter.

The Bank's assessment continues to suggest that the recovery in output poses little upside risk to the inflation outlook. This is in the context where the additional growth should be facilitated by improved productive processes and introduction of additional capacity.[9]

Expectations

For September 2015, private sector expectations for inflation 12 months ahead remain fairly well anchored in single digit territory.[10] In addition, private sector expectations remain below the Bank's projection. In the context of overwhelming evidence of reduced exchange rate pass-through to inflation since the beginning of the economic programme, it is anticipated that movements in the exchange rate will gradually decline in importance as a nominal anchor.[11] The adjustments in inflation expectations coupled with lower nominal interest rates on Jamaica Dollar-denominated assets should continue to create an environment of low,

9 See **Inflation Section** and **Figures 1** and **6** for a more detailed discussion on capacity conditions and inflation.

10 See BOX 1.1 BOJ's Inflation Expectations Survey (IES).

11 The exchange rate pass-through refers to the proportion of changes to the exchange rate that result in changes in domestic prices. Studies by the BOJ have shown this to be close to 100.0 per cent in one year, prior to 1995. However, this level declined to approximately 49.0 per cent by 2001. See McFarlane, L., (2002), "Consumer Price Inflation and Exchange Rate Pass-Through in Jamaica". BOJ's recent assessment suggests that the pass-through has fallen below 30.0 per cent.

stable and positive real interest rates over the near- to medium-term. This environment augurs well for strong private capital inflows (see Box 4: **Monetary Policy Transmission Mechanism**).

Financial Markets

Real rates in the private money market increased marginally in the September 2015 quarter primarily reflecting the fall in domestic inflation and relatively stable interest rates following the Bank's policy action during the quarter. Given the relative stability of inflation expectations, nominal interest rates are expected to remain relatively low over the near- to medium-term. This interest rate environment should continue to bolster prospects for new investments and overall output expansion.[12]

Monetary Targets

The Bank comfortably met the NIR and NDA targets for the nine reviews since the beginning of the Programme.[13] It is the Bank's assessment that the targets for the September 2015 quarter were again comfortably met. Further, the projections suggest that growth in the monetary base will remain consistent with the targets for the NIR and NDA over the next four quarters. The continued attainment of the NIR targets is supported by the projected reduction in the current account deficit and improvements in net private capital inflows.

12 Near-term refers to the next four quarters while medium-term refers to the next one to five years.

13 The NDA is calculated as the difference between the stock of base money and the NIR.

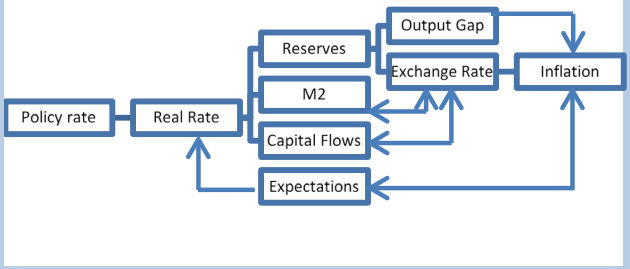
Box 5: Monetary Policy Transmission Mechanism

The monetary policy transmission mechanism is the process through which adjustments in the central bank's policy rate induces changes in the price and allocation of goods and services. For most central banks the ultimate goal of the transmission process is a desired level of inflation.

Studies on the transmission mechanism in Jamaica have shown that the credit and the exchange rate channels are the main conduits through which policy affects inflation (see **Figure 1**). The credit channel impacts inflation through aggregate demand and the output gap. With respect to the exchange rate, the impact has been through imported inflation and changes in expectations given the country's openness.

Consistent with the findings for other countries, the transmission process in Jamaica is long lived. Allen and Robinson (2005) suggested that changes in the policy rate have the largest impact approximately three to four quarters after a rate adjustment and that it could take three to four years before the full impact dissipates. Given the inherent lag in the transmission process, monetary policy must be forward-looking to influence short-term interest rates to deliver a desirable long-term inflation outcome.

Figure 1: Monetary Transmission Process



Source: Allen, C and W. Robinson, 2005, *"Monetary Policy Rules and the Transmission Mechanism in Jamaica"*, Money Affairs, Volume XVIII

Monetary Policy Outlook

The Bank reduced its policy rate by 25 bps in September 2015 quarter, the second adjustment for the fiscal year. This adjustment was consistent with the forecasted path for inflation over the near-term as well as the downward trend in inflation expectations (see **Box 4: Monetary Policy Transmission Mechanism**). The outlook over the next four quarters is consistent with the maintenance of the accommodative monetary stance. This policy posture is also contingent on the continued strong fiscal performance.

Additional Tables

1: INFLATION RATES

		CPI (End of Point)	Headline Inflation	Core Inflation*
FY03/04	4-Jun	77.21	13.38	10.97
	4-Sep	80.58	12.59	10.58
	4-Dec	85.77	15.82	13.11
	5-Mar	85.49	12.58	11.7
FY04/05	5-Jun	88.95	15.2	12.9
	5-Sep	93.6	16.15	12.3
	5-Dec	94.79	10.52	9.68
	6-Mar	95.4	11.59	10.95
FY05/06	6-Jun	97.68	9.81	10.42
	6-Sep	99.76	6.59	9.71
	6-Dec	100	5.49	8.13
	7-Mar	102.5	7.44	9.49
FY06/07	7-Jun	105.1	7.6	9.65
	7-Sep	108.9	9.16	10.39
	7-Dec	116.82	16.82	15.62
	8-Mar	122.94	19.94	17.32
FY07/08	8-Jun	130.29	23.97	20.27
	8-Sep	136.45	25.3	20.99
	8-Dec	136.5	16.84	16.61
	9-Mar	138.22	12.43	12.98
FY08/09	9-Jun	141.95	8.95	10.29
	9-Sep	146.3	7.22	9.77
	9-Dec	150.44	10.21	10.28
	10-Mar	156.64	13.33	11.6
FY09/10	10-Jun	160.7	13.21	10.99
	10-Sep	162.77	11.26	9.4
	10-Dec	168.1	11.74	8.65
	11-Mar	168.92	7.84	6.57
FY10/11	11-Jun	172.28	7.2	6.67
	11-Sep	175.91	8.07	6.99
	11-Dec	178.21	6.01	6.86
	12-Mar	181.17	7.26	6.97
FY11/12	12-Jun	183.83	6.71	6.91
	12-Sep	187.61	6.65	5.59
	12-Dec	192.47	8	5.44
	13-Mar	197.72	9.13	6.3
FY12/13	13-Jun	199.93	8.76	6.26
	13-Sep	207.24	10.46	6.95
	13-Dec	210.7	9.47	7.38
	14-Mar	214.21	8.34	6.54
FY13/14	14-Jun	215.86	7.97	6.1
	14-Sep	225.86	8.99	6.72
	14-Dec	224.09	6.36	5.97
	15-Mar	222.69	3.96	5.51
FY14/15	15-Jun	225.30	4.37	4.81
	16-Sep	229.97	1.82	4.00

2: ALL JAMAICA INFLATION – Point–to–Point (September 2015)

Divisions, Classes and Groups	Weight (%)	Inflation (%)	Weighted Inflation	Contribution
FOOD & NON-ALCOHOLIC BEVERAGES	37.45	1.14	0.43	129.24
Food	35.1	1.19	0.42	126.45
Bread and Cereals	6.1	0.07	0.00	1.29
Meat	7.66	0.15	0.01	3.54
Fish and Seafood	5.33	0.11	0.01	1.82
Milk, Cheese and Eggs	3.11	0.11	0.00	1.04
Oils and Fats	1.64	0.11	0.00	0.57
Fruit	1.14	0.88	0.01	3.04
Vegetables and Starchy Foods	6.85	4.20	0.29	86.87
Sugar, Jam, Honey, Chocolate and Confectionery	1.72	0.15	0.00	0.76
Food Products n.e.c.	1.55	0.51	0.01	2.39
Non-Alcoholic Beverages	2.35	0.23	0.01	1.66
Coffee, Tea and Cocoa	0.66	0.34	0.00	0.67
Mineral Waters, Soft Drinks, Fruit and Vegetable Juices	1.69	0.19	0.00	0.96
ALCOHOLIC BEVERAGES AND TOBACCO	1.38	0.14	0.00	0.60
CLOTHING AND FOOTWEAR	3.33	0.64	0.02	6.39
Clothing	2.12	0.37	0.01	2.39
Footwear	1.22	1.04	0.01	3.85
HOUSING, WATER, ELECTRICITY, GAS AND OTHER FUELS	12.76	-1.15	-0.15	-44.36
Rentals for Housing	3.52	0.00	0.00	0.00
Maintenance and Repair of Dwelling	0.8	0.20	0.00	0.49
Water Supply and Miscellaneous Services Related to the Dwelling	1.32	-1.59	-0.02	-6.33
Electricity, Gas and Other Fuels	7.12	-1.84	-0.13	-39.62
FURNISHINGS, HOUSEHOLD EQUIPMENT AND ROUTINE HOUSEHOLD MAINTENANCE	4.93	0.13	0.01	1.87
Furniture and Furnishings	0.69	0.10	0.00	0.20
Household Textiles	0.32	0.17	0.00	0.16
Household Appliances	0.56	0.38	0.00	0.64
Glassware, Tableware and Household Utensils	0.05	0.20	0.00	0.03
Tools and Equipment for House and Garden	0.15	0.22	0.00	0.10
Goods and Services for Routine Household Maintenance	3.16	0.08	0.00	0.74
HEALTH	3.29	0.15	0.01	1.51
Medical Products, Appliances and Equipment	1.22	0.16	0	0.59
Health Services	2.07	0.15	0	0.92
TRANSPORT	12.82	-1.04	-0.13	-40.31
COMMUNICATION	3.99	0	0	0
RECREATION AND CULTURE	3.36	0.53	0.02	5.35
EDUCATION	2.14	5.27	0.11	34.08
RESTAURANTS & ACCOMMODATION SERVICES	6.19	0.02	0	0.36
MISCELLANEOUS GOODS AND SERVICES	8.37	0.21	0.02	5.27
ALL DIVISIONS	100	0.43	0.33	100

3: BANK OF JAMAICA OPERATING TARGETS

	Actual Sep-13	Actual Dec-13	Actual Mar-14	Actual Jun-14	Actual Sept-14	Actual Dec-14	Actual Mar-15	Actual Jun-15	Actual Sept-14
Net International Reserves (US$)	910.1	1,047.8	1,303.6	1,376.1	2,200.6	2,002.0	2,293.7	2,116.5	2,441.9
NET INT'L RESERVES (J$)	85,681.0	111,468.2	138,679.5	146,393.0	234,096.3	212,969.6	244,001.7	225,154.3	279,986.1
Assets	161,309.8	193,351.8	217,929.9	214,518.3	288,848.3	263,172.4	286,134.5	269,914.9	331,967.0
Liabilities	-75,628.9	-81,883.6	-79,250.3	-68,125.3	-54,752.0	-50,202.8	-42,132.9	-44,760.6	-51,433.1
NET DOMESTIC ASSETS	6,402.3	-7,834.8	-44,251.5	-50,448.6	-137,846.8	-104,087.0	-142,920.4	-120,678.7	-171,987.5
-Net Claims on Public Sector	162,943.8	157,750.3	158,974.9	192,366.7	110,474.8	142,209.3	95,157.1	140,317.0	101,215.6
-Net Credit to Banks	-21,124.3	-21,500.4	-21,390.8	-22,702.7	-22,606.0	-23,210.1	-23,886.3	-24,229.3	-24,897.5
-Open Market Operations	-53,306.5	-49,948.2	-30,533.2	-40,570.1	-35,206.8	-25,480.8	-38,871.7	-51,609.4	-48,743.7
-Other	-82,110.6	-94,136.5	-151,302.5	-179,542.5	-190,508.7	-197,605.5	-194,311.1	-202,681.7	-199,561.8
MONETARY BASE	92,083.3	103,633.4	94,428.0	95,944.4	96,249.6	108,882.5	101,081.3	104,475.6	107,998.6
- Currency Issue	58,183.1	69,801.7	61,110.2	62,025.3	61,573.4	74,937.1	66,356.3	67,916.9	70,635.1
- Cash Reserve	32,689.2	33,593.3	32,275.6	32,914.5	34,271.2	33,385.0	34,566.9	35,852.7	36,680.4
- Current Account	1,211.0	238.4	1,042.2	1,004.6	405.0	260.5	158.0	706.1	683.2
GROWTH IN MONETARY BASE [F-Y-T-D]	0.9	13.5	3.4	1.6	1.9	15.3	7.0	3.4	6.8

4: MONETARY AGGREGATES

		BASE	M1J	M1*	M2J	M2*	M3J	M3*
FY10/11	Jun-10	77757.80	93074.23	93074.23	218702.11	332339.11	306741.21	420378.21
	Sep-10	74230.90	95444.97	95444.97	221386.83	328598.33	311288.97	418500.47
	Dec-10	85093.00	103252.10	103252.10	230232.17	337664.44	321728.87	429161.14
	Mar-11	78919.19	97448.70	97448.70	225681.98	332828.17	319837.08	426983.27
FY11/12	Jun-11	80560.55	102219.91	102219.91	232910.73	341652.12	329909.45	438650.84
	Sep-11	80479.50	97967.02	97967.02	227561.92	332330.13	325013.24	429781.45
	Dec-11	91710.12	112757.18	112757.18	245020.02	351418.54	355367.82	461766.34
	Mar-12	83696.70	103826.70	103826.70	236177.27	349882.92	348301.96	462007.61
FY12/13	Jun-12	84337.37	104266.47	104266.47	236397.42	351510.21	338191.88	453304.66
	Sep-12	85193.86	105164.94	105164.94	237685.09	351396.29	340031.63	453742.83
	Dec-12	97648.46	117908.77	117908.77	253848.71	383195.99	357503.67	486850.96
	Mar-13	91294.45	113240.38	113240.38	252128.71	396423.90	355217.29	499512.48
FY13/14	Jun-13	90221.88	110381.42	110381.42	250702.54	397899.09	354684.76	501881.32
	Sep-13	92083.29	113684.42	113684.42	259771.42	409003.99	369324.33	518556.90
	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
	Sept-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	104475.6	142761.90	142761.90	292242.71	471576.37	422968.84	602302.50
	Sept-15	107998.6	137336.80	137336.80	288215.89	475790.09	421278.58	608852.79

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)
FY10/11	Jun-10	4.75 – 8.50	4.75 – 10.00	3.90	20.72	6.29	22.11	5.20
	Sep-10	2.25 – 7.90	2.25 - 8.15	3.12	19.24	5.40	21.52	5.25
	Dec-10	2.25 – 7.90	2.25 – 7.70	2.47	18.95	4.89	20.43	4.14
	Mar-11	2.25 – 6.00	2.25- 6.75	2.34	18.52	4.52	20.33	3.70
FY11/12	Jun-11	2.25 – 6.00	2.25 – 6.50	2.24	17.98	4.20	20.10	3.43
	Sep-11	2.25 – 5.72	2.25 – 6.25	2.27	18.54	4.12	18.34	3.29
	Dec-11	2.25 – 5.72	2.25 – 6.00	2.13	18.30	4.16	18.03	3.34
	Mar-12	2.25 – 6.40	2.00 – 6.75	2.10	18.12	3.70	17.70	3.73
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	1.25 – 7.00	1.44	14.99	3.98	17.18	3.94
	Mar-15	1.00 – 6.88	1.25 – 7.20	1.44	14.9	3.80	17.10	3.94

6: GOJ TREASURY BILL YIELDS
(End of Period)

		1-month	3-month	6-month	9-month	12-month
FY11/12	Jun-11	6.67	6.56	6.61	...	...
	Sep-11	6.47	6.37	6.56	...	...
	Dec-11	6.49	6.21	6.46	...	...
	Mar-12	6.24	6.27	6.47	...	...
FY12/13	Jun-12	6.18	6.26	6.47	...	...
	Sep-12	6.16	6.36	6.57	...	...
	Dec-12	6.31	7.67	7.18	...	...
	Mar-13	5.37	5.82	6.22	...	...
FY13/14	Jun-13	6.02	6.76	7.12	...	...
	Sep-13	6.32	7.42	7.95	...	...
	Dec-13	6.25	7.53	8.25	...	...
	Mar-14	6.76	8.35	9.11	...	...
FY14/15	Jun-14	6.80	7.66	8.37	...	...
	Sep-14	6.89	7.47	8.00	...	...
	Dec-14	6.38	6.96	7.14	...	...
	Mar-15	6.30	6.73	7.00	...	...
FY15/16	Jun-15	6.23	6.48	6.63	...	...
	Sept-15	6.23	6.20	6.35	...	...

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
FY10/11	Jun-10	9.00	...	...	...	...	...	...
	Sep-10	8.00	...	...	...	...	...	...
	Dec-10	7.50	...	...	...	...	...	...
	Mar-11	6.75	...	...	...	...	...	...
FY11/12	Jun-11	6.75	...	...	...	...	...	...
	Sep-11	6.25	...	...	...	...	...	...
	Dec-11	6.25	...	...	...	...	...	...
	Mar-12	6.25	...	...	...	...	...	...
FY12/13	Jun-12	6.25	...	...	...	...	...	...
	Sep-12	6.25	...	...	...	...	...	...
	Dec-12	6.25	...	...	...	...	...	...
	Mar-13	5.75	...	...	...	...	...	...
FY13/14	Jun-13	5.75	...	...	...	...	...	...
	Sep-13	5.75	...	...	...	...	...	...
	Dec-13	5.75	...	...	...	...	...	...
	Mar-14	5.75	...	...	...	...	...	...
FY14/15	Jun-14	5.75	...	...	...	...	...	...
	Sep-14	5.75	...	...	...	...	...	...
	Dec-14	5.75						
	Mar-15	5.75	...	...	...	...	...	...
FY15/16	Jun-15	5.50	...	...	...	...	...	...
	Sep-15	5.25	...	...	...	...	...	...

8: Placements and Maturities* in BOJ OMO Instruments

	April – June 2015			July – September 2015		
	Maturities (J$BN)	Placements (J$BN)	Average Yield (%)	Maturities (J$BN)	Placements (J$BN)	Average Yield (%)
19-day	0.0	0.0	0.0	0.0	0.0	0.0
30-day	48.3	47.3	5.63	45.0	46.3	5.63
182-day VR CD	0.0	0.0	0.0	0.0	0.0	0.0
275-day VR CD	0.0	0.0	0.0	0.0	0.0	0.0
365-day VR CD	6.0	3.0	6.82	6.4	1.2	6.82
548-day VR CD	0.0	0.0		0.4	0.0	
729-day VR CD	0.0	3.8	7.25	0.0	1.0	7.25
182-day FR USD	0.0	0.0		0.0	0.0	
Indexed Bond	0.0	0.0		0.0	0.0	
365-day FR USD	0.0	0.0		0.0	0.0	
Indexed Bond	0.0	0.0		0.0	0.2	
Repos	0.0	19.2		8.9	0.0	
FX (Trading Room & PSE)	66.8	34.7		63.7	51.53	
Other	0.0	0.0		0.0	0.0	
Net Injection (ALL Operations)	88.0	107.9		103.0	119.4	

	Maturities (US$MN)	Placements (US$MN)	Average Yield (%)	Maturities (US$MN)	Placements (US$MN)	Average Yield (%)
1-year FR USD CD				0.0	19.12	-
2-year FR USD CD	0.0	0.0	-	0.0	0.0	-
3-year FR USD CD	21.6	0.0	3.08	74.0	0.0	3.08
4-year FR USD CD	0.0	0.0	-	2.5	0.0	-
4.5-year FR USD CD	0.00	0.00	0.00	0.00	97.3	-
5-year FR USD CD	10.6	0.0	4.14	10.6	0.0	3.95
7-year FR USD CD	22.6	0.0	4.67	8.7	0.0	4.57
3-year FR CD#	0.00	0.00	-	0.00	0.00	-
TOTAL	54.8	0.0		85.8	116.5	

*Excludes overnight transactions

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

(Flows – US$MN)

	Bauxite	Alumina	Sugar	Bananas	Other Traditional	Non-Traditional	Other	Total Goods Exports
FY10/11	133.2	446.7	47.9	0.0	76.6	448.2	227.5	1380.1
Jun-10	31.6	83.6	13.3	0.0	22.4	109.5	49.1	309.4
Sep-10	37.0	87.1	7.7	0.0	22.4	110.7	54.7	319.7
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								
Jun-14	34.4	108.6	26.5	0.0	21.0	98.9	67.9	355.7
Sep-14	33.4	151.6	11.9	0.0	16.4	101.0	70.8	385.1
Dec-14	33.4	130.4	0.0	0.0	12.3	108.8	58.7	343.8
Mar-15	35.3	132.3	17.1	0.1	6.8	101.4	45.1	338.1
FY15/16								
Jun-15	33.8	139.5	18.3	0.1	4.8	76.5	44.5	317.4

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

	13-Sep	13-Dec	14-Mar	14-Jun	14-Sep	14-Dec	15-Mar	15-Jun
1. Current Account	-327.1	-494.1	-127.1	-270.8	-337.3	-343.0	40.7	-85.5
A. Goods Balance	-921.9	-1108.8	-873.1	-912.0	-949.6	-968.2	-772.4	-832.0
Exports (f.o.b)	362.8	363.5	396.0	370.3	385.1	343.8	336.5	317.4
Imports (f.o.b)	1284.7	1472.2	1269.1	1282.3	1334.7	1312.0	1108.9	1149.4
B. Services Balance	94.9	98.6	230.8	158.9	114.0	136.6	309.2	224.1
Transportation	-167.6	-185.5	-200.8	-163.0	-169.1	-163.3	-140.4	-146.5
Travel	418.7	437.7	595.5	504.9	458.8	500.6	640.5	524.7
Other Services	-156.2	-153.6	-163.9	-183.1	-175.7	-200.7	-190.8	-154.1
Goods & Services Balance	-827.0	-1010.2	-642.3	-753.1	-835.6	-831.6	-463.2	-608.0
C. Income	-43.4	-98.1	-40.7	-79.0	-85.7	-101.5	-40.2	-79.2
Compensation of employees	15.3	15.9	7.3	5.3	19.9	35.3	12.2	4.9
Investment Income	-58.8	-114.0	-47.9	-84.3	-105.5	-136.8	-52.4	-84.1
D. Current Transfers	543.3	614.2	555.9	561.3	584.0	590.1	544.1	601.7
General Government	57.9	98.1	63.3	45.5	59.4	52.8	42.8	54.2
Other Sectors	485.4	516.1	492.6	515.8	524.5	537.3	501.3	547.5
2. Capital & Financial Account	339.8	330.5	403.9	375.1	-32.8	326.5	311.1	137.9
A. Capital Account	-7.2	-5.6	-7.9	-6.9	-6.1	-6.7	0.8	-5.5
Capital Transfers	-7.2	-5.6	-7.9	-6.9	-6.1	-6.7	0.8	-5.5
General Government	0.5	1.7	0.6	1.4	1.5	0.6	9.3	2.8
Other Sectors	-7.6	-7.2	-8.5	-8.3	-7.6	-7.2	-8.5	-8.3
Acq/disp of non-produced non- fin assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B. Financial Account	347.0	336.0	411.8	382.0	-26.7	333.2	310.3	143.4
Direct Investment	147.0	138.2	112.5	154.7	120.9	127.4	146.0	107.8
Portfolio Investment	50.1	32.2	51.6	12.1	15.3	15.7	51.6	12.1
Other official investment	67.8	208.4	147.9	170.9	787.5	-222.7	23.7	-255.9
Other private Investment	-11.0	94.9	355.6	116.8	-125.9	213.4	381.6	102.1
Reserves	93.1	-137.7	-255.8	-72.5	-824.4	199.5	-292.6	177.2
Errors & Omissions	-12.7	163.6	-276.7	-104.4	370.1	16.5	-351.8	-52.4

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

		US$	Can$	GB £
FY10/11	Jun-10	89.5100	88.0600	135.0700
	Sep-10	86.0200	82.2600	128.5800
	Dec-10	86.2500	83.8400	135.8700
	Mar-11	85.8600	85.3400	133.7400
FY11/12	Jun-11	85.9100	88.6100	137.7700
	Sep-11	86.3000	83.3100	134.6900
	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

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

		(US$MN) Gross Foreign Assets	(US$MN) Gross Foreign Liabilities	(US$MN) International Reserves (Net)	Weeks of Imports	
					Goods	Goods & Services
FY10/11	Jun-10	2,526.70	730.90	1,795.80	25.40	18.60
	Sep-10	2,789.70	816.00	1,973.70	29.60	21.50
	Dec-10	2,979.20	807.80	2,171.40	31.90	23.20
	Mar-11	3,434.70	881.50	2,553.20	37.20	26.70
FY11/12	Jun-11	3,156.70	889.60	2,267.10	28.50	21.40
	Sep-11	2,949.20	868.60	2,080.60	27.80	20.70
	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	2441.88	32.34	22.39

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

December 2012 – December 2014 (Seasonally Unadjusted)

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

	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14	Jun-14	Sep-14	Dec-14
Total Value Added at Basic Prices	-1.2	-1.2	-0.2	0.4	1.8	1.6	1.9	-1.4	-0.4
Agriculture, Forestry & Fishing	-8.4	-11.7	-6.5	5.4	13.2	17.3	17.1	-22.9	-12.8
Mining & Quarrying	-10.3	-9.6	5.2	5.0	11.5	8.5	-0.3	-2.0	-2.1
Manufacturing	-1.8	-0.9	0.4	-0.6	-1.1	-1.1	4.2	-5.9	-1.7
Food, Beverages & Tobacco	-0.8	0.2	-0.3	-0.7	2.6	-1.0	3.4	1.1	-0.7
Other Manufacturing	-2.7	-2.4	1.5	-0.6	-4.5	-1.3	5.4	-14.5	-2.8
Construction & Installation	-3.3	0.4	2.2	2.2	2.8	1.1	1.2	1.7	1.3
Electricity & Water	-3.8	-3.0	-2.0	-3.6	1.0	0.5	-1.6	-1.1	-2.4
Wholesale & Retail Trade; Repairs; Installation Of Machinery	-1.9	0.1	-0.5	-0.1	0.1	0.1	0.1	0.4	0.3
Hotels and Restaurants	-1.3	-2.0	0.7	0.9	5.9	0.2	2.3	4.1	5.6
Transport, Storage & Communication	2.0	0.9	-0.7	0.4	1.1	0.7	1.0	1.1	1.6
Finance & Insurance Services	0.7	0.3	0.5	0.2	0.4	0.1	0.2	0.2	0.4
Real Estate & Business Services	0.3	0.3	0.3	0.3	0.4	0.6	0.6	0.4	0.5
Government Services	0.1	-0.1	-0.3	-0.3	-0.2	-0.2	-0.2	-0.2	-0.2
Other Services	0.3	-0.3	1.0	-0.8	0.8	0.6	1.1	1.6	1.5
Less Financial Intermediation Services Indirectly Measured (FISIM)	-3.4	-2.2	-0.1	0.2	0.5	-0.2	-0.8	-0.6	0.5

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

		1-month	3-month	6-month	12-month
FY10/11	Jun-10	0.3484	0.5339	0.7525	1.1731
	Sep-10	0.2563	0.2900	0.4625	0.7778
	Dec-10	0.2606	0.3028	0.4559	0.7809
	Mar-11	0.2435	0.3030	0.4595	0.7825
FY11/12	Jun-11	0.1856	0.2458	0.3978	0.7335
	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

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

		EURO-ZONE	UNITED STATES			UNITED KINGDOM
		Repo rate	Fed Funds Rate	Discount Rate	Prime Rate	Repo rate
FY10/11	Jun-10	1.00	0 – 0.25	0.75	3.25	0.50
	Sep-10	1.00	0 – 0.25	0.75	3.25	0.50
	Dec-10	1.00	0 – 0.25	0.75	3.25	0.50
	Mar-11	1.00	0 - 0.25	0.75	3.25	0.50
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

16: INTERNATIONAL EXCHANGE RATES

		Sterling vs. US$	Canadian $ vs. US$	Yen vs. US$	Euro vs. US$
FY10/11	Jun-10	0.6691	1.0606	88.5310	0.8137
	Sep-10	0.6358	1.0298	83.5200	0.7353
	Dec-10	0.6411	0.9946	81.1260	0.7468
	Mar-11	0.6232	0.9718	82.7770	0.7051
FY11/12	Jun-11	0.6230	0.9634	80.5600	0.6896
	Sep-11	0.6417	1.0503	77.0600	0.7468
	Dec-11	0.6435	1.0213	76.9100	0.7714
	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

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)
FY10/11	Jun-10	78.69	78.03	182.14	392.00
	Sep-10	76.41	76.20	245.66	468.49
	Dec-10	86.80	85.17	284.25	513.85
	Mar-11	104.90	94.10	325.63	620.03
FY11/12	Jun-11	117.10	102.56	320.60	636.54
	Sep-11	112.48	89.76	293.06	597.37
	Dec-11	109.29	94.06	265.07	536.18
	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	47.24	51.52	189.86	336.22

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.

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 month.

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 derived 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 to 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 title to property, or claim on income e.g. bonds and stocks.

Signal Rate: Interest rate on Bank of Jamaica's thirty-day reverse repurchase agreements. This rate provides a benchmark for the pricing of all open market instruments negotiated between the BOJ and Primary Dealers.

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

	37	The Exchange Rate Regime and Monetary Policy
Apr – Jun 2004	38	Preserving Financial Stability
	39	Financial Sector Assessment Programme
	40	Jamaica's Current Relationship with the IMF
Jul – Sep 2004	41	Recent Developments in Crude Oil Prices
	42	Implications of Higher Crude Oil Prices for the Balance of Payments and Inflation
Oct – Dec 2004	43	Recent Trends in Foreign Direct Investment
	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