BANK OF JAMAICA

2016

ANNUAL REPORT

ANNUAL REPORT
2016

Report and Statement of Accounts for the
Year Ended 31 December 2016

ⓒ 2017 Bank of Jamaica
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Kingston
Jamaica

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Mission Statement

The mission of the Bank of Jamaica
is to formulate and implement
monetary and regulatory policies
to safeguard the value of the domestic
currency and to ensure the soundness
and development of the financial system
by being a strong and efficient
organisation with highly motivated
and professional employees
working for the benefit of
the people of Jamaica.

The Governor

Bank of Jamaica
Nethersole Place
Kingston, Jamaica, W.I.

6 March 2017

Hon Audley Shaw, CD, MP
Minister of Finance and the Public Service
Ministry of Finance and the Public Service
30 National Heroes Circle
Kingston 4

Dear Minister Shaw,

In accordance with section 44(1) of the Bank of Jamaica Act, I have the honour of transmitting herewith the Bank's report for the year 2016 and a copy of the statement of the Bank's accounts as at 31 December 2016 duly certified by the auditors.

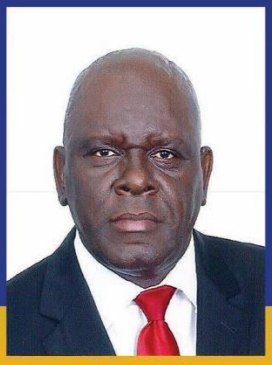
Yours sincerely,

Brian Wynter, CD

Board of Directors

as at 31 December 2016

Mr. Brian Wynter, CD
Governor & Chairman



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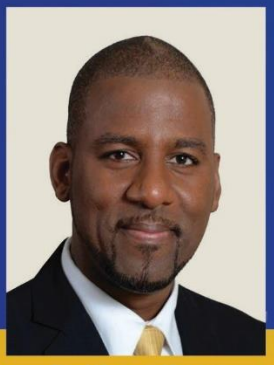

Dr. Wayne Henry

Mr. Everton McFarlane
Financial Secretary

Mr. John Robinson, JP
Deputy Chairman

Senior Management

as at 31 December 2016

(Left to Right) Dr. Wayne Robinson, Deputy Governor, Research & Economic Programming and Financial Stability; Mr. Livingstone Morrison, Deputy Governor, Administration & Technical Services, Finance & Technology, Payment Systems and Risk Management; Mr. Brian Wynter, CD, Governor & Chairman; Ms. Maurene Simms, Deputy Governor, Financial Institutions Supervision; and Mr. John Robinson, JP, Senior Deputy Governor.

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Division Chief
Administration & Technical
Services Division

Mrs. Natalie Haynes,
Division Chief
Banking & Market
Operations Division

Mr. Robert Stennett,
Division Chief
Research & Economic
Programming Division

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Financial Controller
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Chief Audit Executive
Internal Audit
Division

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BANK OF JAMAICA
PRINCIPAL OFFICERS
As at 31 December 2016

GOVERNOR

Mr. Brian Wynter, CD

SENIOR DEPUTY GOVERNOR

Mr. John Robinson, JP

DEPUTY GOVERNORS

Mr. Livingstone Morrison	–	Administration & Technical Services, Finance &Technology and Payment Systems & Risk Management Division
Ms. Maurene Simms	–	Financial Institutions Supervisory Division
Dr. Wayne Robinson	–	Research & Economic Programming Division & Financial Stability Department

DIVISION CHIEFS

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Dr. Jide Lewis	–	Financial Institutions Supervisory Division
Mrs. Natalie Haynes	–	Banking & Market Operations Division
Mr. Robert Stennett	–	Research & Economic Programming Division

FINANCIAL CONTROLLER – DIVISION CHIEF

Ms. Angela Foote	–	Finance and Technology Division

CHIEF AUDIT EXECUTIVE – DIVISION CHIEF

Mr. Ian Williams	–	Internal Audit Division

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ABBREVIATIONS

ABM	Automated Banking Machines
ABT	Alcohol, Beverages & Tobacco
ACH	Automated Clearing House
AML	Anti-money Laundering
ARP	Average Realized Price
ASBA	Association of Banking Supervisors of the Americas
Avg	Average
BCG	Basel Consultative Group
BCP	Business Continuity Plan
BCP	Basel Core Principle
Bn	Billion
BOE	Bank of England
BOJ	Bank of Jamaica
BoJ	Bank of Japan
BOJ-SWEP	Bank of Jamaica Summer Work Experience Programme
BOP	Balance of Payments
BMRO	Bi -Monthly Repurchase Operation
bps	Basis points
BSA	Banking Services Act
CAD	Canadian Dollar/Current Account Deficit
CAP	Clarendon Alumina Partners
CAR	Capital Adequacy Ratio
CARTAC	Caribbean Regional Technical Assistance Centre
CD	Certificate of Deposit
CDB	Caribbean Development Bank
CEO	Chief Executive Officer
CEMLA	Centre for Latin American Monetary Studies
CF	Clothing & Footwear
CFATF	Caribbean Financial Action Task Force
CGBS	Caribbean Group 0f Banking Supervisors
CIS	Credit Information Services
CPC	Chief Parliamentary of Counsel
CFT	Counter-Financing of Terrorism
CPI	Consumer Price Index
CPI-AF	Consumer Price Index excluding Agriculture and Fuel
CPI-FF	Consumer Price Index excluding Food and Fuel
CRA	Credit Reporting Act
CRR	Cash Reserve Requirement
CSD	Central Securities Depository
CTMS	Central Treasury Management System
D & CC	Debit & Credit Card
DNFBPs	Designated Non-Financial Businesses & Professions
DTIs	Deposit-taking Institutions

DVBP	Dollar Value of a Basis Point
EBIS	Enterprise Business Intelligence System
ECB	European Central Bank
EFF	Extended Fund Facility
ELMF	Enhanced Liquidity Management Framework
ERPS	Electronic Retail Payment Services
EU	European Union
EWS	Early Warning System
FATF	Financial Action Task Force
Fed	Federal Reserve (US)
FFIT	Full-Fledged Inflation Targeting
FHC	Financial Holding Company
FHERM	Furniture, Household Equipment & Routine Household Maintenance
FIA	Financial Institutions Act
FID	Financial Investigations Division
FIDA	Financial Investigations Division Act
FIU	Financial Intelligence Unit
FNB	Food and Non-alcoholic Beverages
f.o.b.	Free on board
FRC	Financial Regulatory Council
FSB	Financial Stability Board
FSC	Financial Services Commission
FPP	Fiscal Policy Paper
FSAP	Financial Sector Assessment Programme
FX	Foreign Exchange
FY	Fiscal Year
GBP	Great Britain Pound
GCT	General Consumption Tax
GDP	Gross Domestic Product
GFA	Gross Foreign Assets
GKMA	Greater Kingston Metropolitan Area
GOJ	Government of Jamaica
HLTH	Health
HWEG	Housing, Water, Electricity, Gas and Other Fuels
IDB	Inter-American Development Bank
IFPAS	Inflation Forecast & Policy Assessment System
IMF	International Monetary Fund
IPCP	Index of Primary Commodity Prices
IT	Information Technology
JCCUL	Jamaica Co-operative Credit Union League
JDX	Jamaica Debt Exchange
JMD	Jamaica Dollar
JMMB	Jamaica Money Market Brokers
JSE	Jamaica Stock Exchange
JUTC	Jamaica Urban Transit Corporation

KYC	Know-your-customer
LOI	Letter of Intent
LTO	Large Tax Payer Office
MaFI	Macro-Financial Index
MEFP	Memorandum of Economic & Financial Policies
MIIC	Miscellaneous Goods & Services
MOU	Memorandum of Understanding
MN	Million
MPI	Micro-prudential Index
NAMLAC	National Anti-Money Laundering Committee
NCBJ	National Commercial Bank Jamaica Limited
NDA	Net Domestic Assets
NDX	National Debt Exchange
NII	Net Interest Income
NIR	Net International Reserves
NPL	Non-Performing Loans
NPS	National Payment System
NRA	National Risk Assessment
NWC	National Water Commission
OMO	Open Market Operations
OMT	Outright Monetary Transaction
OPB	Other Public Bodies
OSFI	Office of the Superintendent of Financial Institutions
OUC	Other Urban Centres
PAYE	Pay As You Earn (income tax)
PB	Public Bodies
PBOC	People's Bank of China
PD	Primary Dealers
PDVSA	Petróleos de Venezuela, S.A
POCA	Proceeds of Crime Act
POS	Point of Sale
pps	Percentage points
PSE	Public Sector Entity
PSIP	Public Sector Investment Programme
QPC	Quantitative Performance Criteria
R&A	Restaurants and Accommodation
RA	Rural Areas
R&C	Recreation & Culture
ROAA	Return on Average Assets
RSP	Remittance Service Provider
RTGS	Real Time Gross Settlement
SCT	Special Consumption Tax

SDR	Special Drawing Rights
SIPPA	Security Interest in Personal Property Act
SLF	Standing Liquidity Facility
SPB	Selected Public Bodies
SMRO	Six-Month Repurchase Operation
SSBO	Standard of Sound Business Practices
TAJ	Tax Administration Jamaica
TPA	Terrorism Prevention Act
TRAN	Transport
TRIM	Trimmed Mean
USA	United States of America
USAID	United States Agency for International Development
USD	US dollar
UTECH	University of Technology
UWI	University of the West Indies
VRCDs	Variable Rate Certificates of Deposit
WASR	Weighted Average Selling Rate
WATBY	Weighted Average Treasury Bill Yield
WGPSLAC	Working Group on Payment Systems for Latin America and the Caribbean
WTI	West Texas Intermediate (crude oil)
Y-O-Y	Year-over-Year

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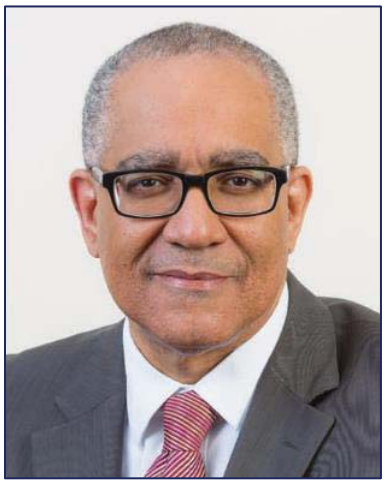
FOREWORD BY THE GOVERNOR



Bank of Jamaica continued its accommodative monetary policy stance in 2016. The Bank during the year reduced its signal interest rate, the rate payable on its 30-day Certificate of Deposit (CD), by 25 basis points (bps) to 5.00 per cent. This reduction reflected the generally favourable outlook for inflation over the near to medium-term, amidst improved macroeconomic fundamentals. In preparation for the transition to inflation targeting, steps were also taken to strengthen the monetary policy transmission process. These included clearly defining the floor of the interest rate policy corridor by raising the interest rate on the Bank's overnight CDs in addition to reducing the frequency with which the Bank's 30-day CDs were offered. To curb increasing dollarization, the Bank also adjusted upwards the reserve requirements for foreign currency liabilities to equal those for domestic currency.

The year 2016 brought positive developments in Jamaica's inflation experience. The calendar year inflation outturn of 1.7 per cent not only was lower than in 2015 but was the lowest rate for a calendar year since 1964. The deceleration in inflation for the year reflected the impact of weak, albeit improving, domestic demand conditions, declining inflation expectations and favourable weather conditions. Also of note was the acceleration in GDP growth in the Jamaican economy to 1.4 per cent in 2016 following growth of 0.9 per cent in 2015. The expansion in economic activity for 2016 largely reflected the impact of increased investments in infrastructure, business process outsourcing, tourism and agro-processing, given improvements in external competitiveness facilitated in part by structural reforms, public-private partnerships and changes in relative prices.

Jamaica's current account deficit (CAD) of the balance of payments recorded a fifth consecutive year of improvement in 2016 and the lowest outturn in 15 years. Provisional data indicate that the CAD improved to 2.6 per cent of GDP in 2016 relative to 2.8 per cent in the previous year, reflecting an improvement in the trade balance as well as higher net current transfers. Despite the improving CAD and a narrowing inflation differential, there was a faster pace of depreciation in the Jamaica Dollar relative to its US Dollar counterpart in 2016 compared to 2015. This was due mainly to periodic bouts of instability, particularly during the June quarter, arising from an uptick in investor demand for high yielding foreign currency denominated instruments. Against this background, the Bank increased its intervention sales to the market during the year relative to 2015. Despite the higher net sales, the net international reserves (NIR) increased by US$282.4 million to US$2 719.4 million at the end of 2016.

In 2016, there were no principal statutes or amendments governing entities supervised or regulated by Bank of Jamaica. However, activities related to the implementation of the Banking Services Act (BSA) dominated the supervisory agenda over the period. These activities involved the review and development of statutory instruments associated with agent banking and the code of conduct. The Bank, as part of an inter-agency effort, participated in the development of a national crisis management plan and resolution framework for systemically important financial institutions (SIFIs). A concept paper was prepared and shared with the International Monetary Fund (IMF). During 2016, the Bank also issued two consultation papers that covered foundational areas for the commencement of the financial holding company oversight regime under the BSA.

With regard to the health of the banking sector, deposit-taking institutions remained largely resilient to potential macro-economic shocks due to strong capital positions. More specifically, stress test results revealed that the average post-shock capital adequacy ratios (CARs) for the banking system generally remained above the 10.0 per cent benchmark in response to extreme but plausible hypothetical shocks. In addition, crisis signals from BOJ's macro-financial and micro-prudential indices remained well below crisis threshold levels. Asset quality for the financial system improved significantly during 2016 as the stock of non-performing loans (NPLs) contracted by 16.8 per cent, resulting in the NPLs to total loans ratio declining to 2.9 per cent from 4.1 per cent at the end of 2015.

The Bank continued to play a lead role in advancing the country's National Financial Inclusion Strategy (NFIS) by chairing the Financial Inclusion Steering Committee. It continued the implementation of its strategic plan under the theme "One Bank, One Mission, One Vision", capitalizing on the Bank's institutional excellence while recognizing the need for greater internal cooperation and preserving the positive aspects of its culture. Particular focus was given to executing initiatives in support of six strategic imperatives. The Bank also placed special focus on resourcing its human capital requirements in the context of continued challenges in attracting and retaining competent staff. Several strategies were implemented to address the loss of critical skills. Emphasis was placed on the implementation of a succession management programme. The Bank also introduced the Graduates Opportunity for Learning and Development (GOLD) Programme, which had, among its objectives, the support of the professional development of graduates and the provision of a ready pool of candidates from which the Bank can recruit.

The Bank continued its support of the Government of Jamaica economic reform programme. To this end, all the monetary targets under the IMF-supported programme were successfully attained. The Bank also participated in the successful negotiation of a new precautionary three-year Stand-By Arrangement (SBA) with the IMF after the early cancellation of the existing Extended Fund Facility. The successor programme is aimed at preserving macroeconomic stability while pursuing policies that will provide the long-term foundation for sustained growth and job creation.

The outlook for the Jamaican economy remains positive. Economic growth is projected in 2017 at a faster rate than 2016 in the context of on-going structural reforms, improved confidence and increased demand. In the context of improving demand, headline inflation is expected to normalize in 2017 relative to the inflation rate of 1.7 per cent recorded in 2016. Relatively stable inflation expectations and low imported commodity prices will suppress upward price adjustments. Against this background, the Bank will continue to focus on the maintenance of low single-digit inflation and the monetary targets outlined under the country's SBA with the IMF.

In closing, I want to express my gratitude to the staff of Bank of Jamaica who worked assiduously in providing service to the Bank and, by extension, Jamaica. I am also grateful to the members of the Board for their continued support and dedication in meeting the objectives of the Bank.

Brian Wynter, CD
Governor

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1. Bank of Jamaica: Role & Function

Bank of Jamaica (BOJ), established by the Bank of Jamaica Act (1960), is responsible for the implementation of sound and consistent monetary policies, while ensuring financial system stability through robust supervisory and regulatory policies. The achievement of these objectives is critical to the attainment of sustainable growth in the Jamaican economy. The two-fold nature of the Bank's operations is captured in its mission statement:

The mission of the Bank of Jamaica is to formulate and implement monetary and regulatory policies to safeguard the value of the domestic currency and to ensure the soundness and development of the financial system by being a strong and efficient organization with highly motivated and professional employees working for the benefit of the people of Jamaica.

Bank of Jamaica conducts monetary policy with the aim of achieving inflation in line with that of our major trading partners. While the Bank does not yet operate a full-fledged inflation targeting regime, at the beginning of each year, the Minister of Finance announces an inflation target range for the current fiscal year, based on the BOJ's recommendation. In formulating monetary policy to achieve this target, the Bank takes into consideration all prevailing and prospective developments in the macroeconomy, fiscal operations, external sector as well as relevant market information. A decision to change the stance of monetary policy can be reflected in a number of adjustments. These include changes in the rates paid on the Bank's certificates of deposit and adjustments to the liquid asset and cash reserve ratios.

In fulfilling its mandate to maintain financial system stability, the BOJ has supervisory and regulatory oversight of commercial banks and other licensed deposit-taking institutions. The BOJ routinely monitors institutions' compliance with all the relevant legislation and regulations to ensure the highest level of prudence and integrity in the management of such organizations. The Bank's overall responsibility for financial stability is supported by micro- and macro-prudential assessments, which are underpinned by the results from early warning systems and risk models.

The Bank carries out the administration of the Banking Services Act through its Supervisory Committee (SC) and undertakes its expanded role of supervisory and financial system stability oversight in collaboration with the Financial Services Commission (FSC) and the Jamaica Deposit Insurance Corporation (JDIC) in the context of the statutory committees called the Financial System Stability Committee (FSSC) and the Financial Regulatory Committee.

The Bank's responsibilities also include:

- oversight of the operation of the payments system and the foreign exchange market;
- the issue and redemption of currency;
- the provision of banking services to the Government and commercial banks as well as fiscal agency services to the Government; and
- management of the external reserves of Jamaica.

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2. The Economy & Monetary Policy Review

2.1. Economic Overview

Bank of Jamaica (BOJ) continued its accommodative monetary policy stance in 2016. For the year, the Bank reduced its signal interest rate, the rate payable on its 30-day Certificate of Deposit (CD), by 25 basis points (bps) to 5.00 per cent. Simultaneously, the Bank effected a similar adjustment to the interest rates on its overnight lending facilities but maintained the rate on its overnight CD. The lowering of the signal rate reflected the generally favourable outlook for inflation over the near- to medium-term amidst improved macroeconomic fundamentals. The Bank also took steps to strengthen the monetary policy transmission process as it prepares for a possible transition to a full-fledged inflation targeting regime. These actions included adjustments to its overnight rate to more clearly define the Bank's interest rate corridor (IRC). Subsequently, there was a reduction in the frequency with which it offered its 30-day CD issues to twice per week. These adjustments were consistent with the Bank's plan to use the overnight CD rate as its policy rate.

During the year, the Bank raised the cash reserve and liquid asset reserve requirements for deposit-taking institution's foreign currency liabilities in incremental steps to equal those for domestic currency liabilities while discontinuing the remuneration of foreign currency reserve holdings. This adjustment was intended to curb the growing trend in dollarization. The Bank continued to manage Jamaica Dollar liquidity through issues of regular sterilization instruments and repurchase operations.

Headline inflation, as measured by the annual point-to-point change in the All Jamaica Consumer Price Index (CPI), was 1.7 per cent for 2016 relative to 3.7 per cent for 2015. This outturn was the lowest level of inflation for a calendar year since 1964. The deceleration in inflation for the year reflected the impact of weak, albeit improving, domestic demand conditions, declining inflation expectations and favourable weather conditions. Inflationary impulses in 2016 largely emanated from higher utility rates due to higher energy cost and a rise in the cost of miscellaneous goods and services, largely due to upward movements in the cost of personal care products and services. However, the deceleration in inflation relative to 2015 was mainly due to a marginal increase in average food prices which chiefly resulted from declining prices for raw foods. The Bank's survey of business expectations indicated that inflation expectations continued to moderate in 2016. The fall in expectations was against the background of improved business confidence, low and declining inflation trends, decisive actions by the Bank to stabilise the value of the domestic currency and the continuation of an IMF approved programme for an additional three years.

Growth in the Jamaican economy accelerated to an estimated 1.4 per cent in 2016, following an increase of 0.9 per cent in 2015. The expansion in 2016 was largely influenced by improvements in both net external demand and domestic demand. The improvement in external demand was underpinned by increased consumer confidence and an acceleration in growth in the US economy while domestic demand was influenced by a confluence of factors, including increased employment, increased investor confidence and a stable macroeconomic environment. Further, growth reflected the impact of increased investments in infrastructure, business process outsourcing, tourism and agro-processing given improvements in external competitiveness facilitated in part by structural reforms and public-private partnerships. The acceleration in economic growth in 2016 was reflective of increases of 0.5 per cent and 1.6 per cent in the tradable and non-tradable industries, respectively, relative to expansions of 1.0 per cent and 0.9 per cent in the previous year. With the exception of Mining & Quarrying and Producers of Government Services, all industries recorded growth. There was a marginal improvement in labour market conditions in 2016 as the unemployment rate declined by 0.3 percentage

point to 13.2 per cent, relative to the previous year. The decline in the unemployment rate reflected growth of 2.8 per cent in employment which outweighed the expansion of 2.5 per cent in the labour force. Labour productivity measured as output per hour worked and output per worker declined by 2.5 per cent and 1.5 per cent, respectively.

The Bank's more accommodative monetary policy stance facilitated an expansion in credit to the private sector. For 2016, the stock of commercial bank credit to the private sector grew by 14.8 per cent and was largely denominated in local currency. This growth represents a significant acceleration relative to the increase of 9.6 per cent for 2015 and was above the average growth of 11.4 per cent for the previous five years. Growth in foreign currency loans to the private sector, however, moderated for the review period and was reflected in both personal and business loans. The moderation in the growth of foreign currency loans occurred across most sectors in the context of the faster pace of depreciation in the Jamaica Dollar vis-à-vis the US dollar, relative to 2015.

The exchange rate depreciated by 6.7 per cent in 2016 compared to 5.0 per cent in 2015. This acceleration was due mainly to periodic bouts of heightened demand, particularly during the June quarter arising from an uptick in investor demand for high yielding foreign currency denominated instruments supported by the residual flows from the domestic GOJ maturities in the previous quarter. Against this background, the Bank increased its intervention sales to the market during 2016 evidenced by net sales of US$848.0 million relative to net sales of US$609.8 million during 2015. The Jamaica Dollar also depreciated against the Canadian Dollar by 11.4 per cent while it appreciated against the Great Britain Pound by 12.5 per cent following respective appreciation of 15.1 per cent and 0.3 per cent in 2015.

Consistent with the generally favourable macroeconomic conditions and the accommodative monetary policy stance of the Bank, there was a general decrease in interest rates on Treasury bills. For 2016, the weighted average yields on GOJ Treasury bills generally declined during the year compared to the corresponding period in 2015. Specifically, the weighted average yields on GOJ 30-day and 90-day T-Bills decreased by 33 and 32 basis points (bps) to 5.64 and 5.68 per cent, respectively. However, the 180-day T-Bill instrument increased by 52 bps to 6.56 per cent for 2016 relative to end-2015 in a context where liquidity conditions were tight at year end. This condition also influenced increases in money market rates for 2016 relative to 2015.

Jamaica's balance of payments recorded a fifth consecutive year of improvement in 2016 and the lowest current account deficit (CAD) in 15 years. Provisional data indicate that Jamaica's current account deficit (CAD) improved to 2.6 per cent of GDP relative to 2.8 per cent of GDP in 2015. The continued improvement in the CAD was largely underpinned by an improvement in the Goods & Services balance as well as a higher surplus on Current Transfers. These were partly offset by deterioration on the Income sub-account. The improvement in the Goods & Services balance primarily reflected higher travel inflows as well as a continued contraction in imports. Current Transfers were buoyed by higher remittance inflows. The surplus on the Financial Account due to increased net private investment inflows were sufficient to finance the deficits on the Capital and Current Accounts. Consequently, the net international reserves (NIR) of the Bank increased by US$282.4 million to US$2 719.4 million at end-2016. Gross reserves amounted to US$3 291.5 million and represented 24.7 weeks of projected goods and services imports at end-2016 relative to 23.5 weeks at end-2015.

The Government of Jamaica, throughout 2016, was resolute in its effort at maintaining fiscal prudence and achieving continued success under its economic reform programme. To that end, in November 2016, the Government recorded its thirteenth consecutive positive review under the IMF-EFF programme. It also successfully negotiated a new precautionary 3-year Stand-By Arrangement (SBA) with the IMF and requested the cancellation of the Extended Fund Facility. The successor programme is aimed at preserving macroeconomic stability while pursuing other policies that will provide the long-term foundation for sustained growth and job creation. The programme is an insurance against potential balance of payments pressures from adverse external shocks.

Preliminary information to date indicated that the Government has achieved its targets under the new SBA as at end-2016. Central Government operations for April-December 2016 resulted in a fiscal deficit of 1.3 per cent of GDP, which was below the budgeted deficit of 2.9 per cent. This resulted from Expenditure being below budget while Revenue & Grants was above budget.

The general improvement in the domestic economy was also reflected in increased buoyancy in the local equities market. For 2016, all indices of the Jamaica Stock Exchange (JSE) increased, albeit at a slower pace in comparison to 2015. Specifically, the JSE Main Index increased by 27.6 per cent for the year following an increase of 97.4 per cent for the previous year. The performance of the JSE indices for 2016 occurred against the background of improvements in investor appetite. This was influenced by positive developments in the macroeconomy which included growth in real economic activity, low inflation, improved liquidity conditions as well as Jamaica's continued favourable performance under the EFF supported programme. Higher profits by large corporations as well as announcements of stocks splits, rights issues and bonus issues also contributed to the favourable performance of equity prices.

Jamaica's economy is projected to grow in 2017 at a faster rate than the expansion recorded in 2016 largely reflecting the impact of on-going structural reforms, improved confidence and increased external and domestic demand. The global economy is projected to expand by 3.2 per cent in 2017 relative to 2.9 per cent in 2016. Growth is expected to accelerate in the economies of the USA and Canada due mainly to expansionary fiscal policies. Growth in the domestic economy will ensue from increases in consumption and investment spending. In the context of improving domestic demand, headline inflation is expected to increase in 2017 relative to the 1.7 per cent recorded in 2016. Notwithstanding, relatively stable inflation expectations and low imported commodity prices should suppress upward price adjustments. Against this background, the Bank will continue to focus on the maintenance of single digit inflation and the monetary targets outlined under the country's SBA with the IMF.

2.2. International Economic Developments

2.2.1. Overview

Global growth continued to decelerate in 2016, reflecting the weakest pace of expansion since the 2009 financial crisis. The deceleration in 2016 mainly reflected the impact of instability in world financial markets resulting from concerns of a slowdown in China's economic growth in the first half of the year and falling commodity prices. In particular, crude oil prices plummeted to their lowest levels since 2003. Of note, there was slower economic activity for most advanced economies (AEs), while growth for emerging market and developing economies (EMDEs) remained unchanged from the previous year. In particular, weaker expansion was evidenced in the United States (US), United Kingdom (UK), Japan and the Euro Area. The UK was the fastest growing economy of the Group of Seven (G7) leading industrial countries during 2016, notwithstanding the June 23 vote in favour of leaving the European Union (Brexit).[1, 2]

In an attempt to spur economic growth, central banks in both AEs and EMDEs implemented additional expansionary monetary policies.

Inflation was generally mixed for the 2016 period as reflected in higher inflation for the AEs, while EMDEs recorded lower inflation. Lower inflation across EMDEs primarily reflected the impact of generally weak domestic demand, while higher inflation in AEs reflected increased commodity prices towards the end of the year.

For 2016, the US Dollar continued to appreciate against most major currencies, with the exception of the Japanese Yen.

[1] G7 is an informal bloc of industrialized democracies--the United States, Canada, France, Germany, Italy, Japan and the United Kingdom.

[2] For further details, see the Box titled 'Implication of "Brexit" on the Jamaican Economy' in the BOJ's Quarterly Monetary Policy Report (QMPR) for the April to June 2016 quarter.

2.2.2. Output

Global economic growth is estimated to have moderated to 3.1 per cent for 2016 from 3.2 per cent for 2015. This tempered growth was driven by the economic slowdown in the AEs, where GDP expanded by 1.6 per cent compared to the 2.1 per cent for 2015. The EMDEs grew at 4.1 per cent in 2016, similar to the growth achieved in 2015 (see **Tables 1** and **2**). The first half of 2016 was challenging for the global economy due to instability in world financial markets resulting from concerns of a slowdown in China's economic growth and falling commodity prices. However, general improvement was observed in the second half of the year.

Among the AEs, growth in the US economy decelerated to 1.6 per cent in 2016, from 2.6 per cent in 2015. This outturn mainly reflected weak business investment, the spillover effects from financial market instability in China and falling commodity prices earlier in the year. Despite the heightened uncertainty related to the US elections in the second half of 2016, GDP growth accelerated in the September 2016 quarter to 3.5 per cent. Further, there was a strengthening of the manufacturing and services sectors, an increase in consumer confidence to the highest level since August 2001 and an increase in home buying activity. Additionally, the unemployment rate fell to a nine-year low of 4.6 per cent in November 2016 before ending the December quarter at 4.7 per cent.

In the UK, growth slowed to 2.0 per cent in 2016 from 2.2 per cent in 2015. This was partly influenced by the impact of the June 23 referendum as uncertainty about the Brexit vote weighed on firms' investment and hiring decisions as well as consumers' purchases of durable goods and housing. However, subsequent to the vote, the UK economy showed improvements in the services and manufacturing sectors as well as gains in business confidence and expansion in consumer credit. The appreciation of the USD against the Great Britain Pound (GBP) also had positive effects on the economy. For the Euro Area, growth decelerated to 1.7 per cent in 2016 from 2.0 per cent in 2015.

In contrast to the above mentioned economies, growth in Canada accelerated to 1.3 per cent for 2016 from 0.9 per cent in 2015. This was mainly reflected in the second half of the year as growth was temporarily boosted by the resumption of production in the oil sands following the May wildfires in Alberta and a partial rebound in non-energy exports. Consumption, especially of services, remained robust, benefiting from the rollout of the Canada Child Benefit Programme.[3]

Table 1

ADVANCED ECONOMIES
Selected Indicators

Country	Real GDP Growth (%)		Unemployment Rate*** (%)		Inflation Rate** (%)		Central Bank Target Interest Rates*** (%)	
	2015	2016*	2015	2016	2015	2016	2015	2016
Advanced Economies	2.1	1.6	7.3	6.9	0.3	0.8	n/a	n/a
of which								
USA	2.6	1.6	5.3	4.8	0.1	1.2	0.25 - 0.5	0.5 - 0.75
UK	2.2	2.0	5.4	4.9	0.1	0.7	0.5	0.3
Euro Area	2.0	1.7	10.9	10.0	0.0	0.3	0.1	0.0
Canada	0.9	1.3	6.9	7.0	1.1	1.6	0.5	0.5
Japan	1.2	0.9	3.4	3.2	0.7	-0.2	0.1	-0.1

Source: IMF World Economic Outlook Update: October 2016;
** IMF World Economic Outlook Update: January 2017*
Various statistical offices
*** Point-to-Point *** End-of-period*

With regards to EMDEs, growth rates in general continued to be faster than those of AEs, but remained below the average of the past decade. The Chinese economy expanded by 6.7 per cent in 2016, lower than the 6.9 per cent growth recorded in 2015. This was the weakest pace of expansion since 1990, but within the government's target range of 6.5 to 7.0 per cent. Economic activity in Russia improved, in part reflecting higher oil prices. Notably, Brazil's economic recession significantly weighed down the economic growth for the Latin America and Caribbean region which is estimated to have contracted by 0.7 per cent for 2016, when compared to growth of 0.1 per cent for the previous year.

2.2.3. Monetary Policy

In the context of the overall weak economic performance for the first half of 2016, central banks in a number of AEs and EMDEs took a more

[3] The Canada Child Benefit (CCB), implemented in July 2016, is a tax-free monthly payment made to eligible families to help them with the cost of raising children under 18 years of age.

accommodative monetary policy stance. Of note, on 04 August 2016, the Bank of England (BOE) reduced its key interest rate by 25 basis points (bps) to 0.25 per cent, which was the first interest rate reduction since March 2009. Additional measures included a new Term Funding Scheme to reinforce the pass through of the fall in the bank rate, the purchase of UK corporate bonds valued up to 10.0 billion GBP and the expansion of its bond buying programme to 435.0 billion GBP. The change in the policy rate reflected the BOE's outlook for weaker growth in the UK following the Brexit vote.[4]

The European Central Bank (ECB) and the Bank of Japan also eased monetary policy in the first half of 2016. Both central banks reduced key interest rates into low/negative territory in an effort to stimulate spending and economic growth.

The Bank of Canada kept its overnight rate at 0.50 per cent, the bank rate at 0.75 per cent and the deposit rate at 0.25 per cent. Similarly, policy makers at China's central bank held their benchmark interest rate at 4.35 per cent throughout 2016 as the economy recovered modestly following the implementation of stimulus measures.

On 14 December 2016, the Federal Open Market Committee (FOMC) voted unanimously to increase the US Federal Funds target range by 25 bps to 0.50 per cent to 0.75 per cent, which represented the second interest rate increase since the 2008 global financial crisis. Members of the Committee agreed that there were significant improvements in the economy that warranted this increase.[5]

With regards to EMDEs, the central banks of Russia and Brazil eased monetary policy twice in 2016. On 10 June 2016, Russia's central bank cut its key interest rate to 10.50 per cent from the initial rate of 11.00 per cent. A further reduction was made on 16 September 2016 to 10.00 per cent. The bank cited that it made the decision given the slowdown in inflation, in line with its forecast decrease in inflation expectations and unstable economic activity. It further signalled that it would continue its strategy of gradual rate cuts into 2017. Brazil's central bank voted unanimously on 19 October 2016 to ease monetary policy for the first time since August 2012 aimed at bolstering recovery in the economy. The Central Bank lowered its benchmark Selic rate by 25 bps to 14.00 per cent. A further reduction was made on 30 November 2016 to 13.75 per cent, amid domestic political turmoil and uncertainties emanating from the impact of the 2016 US presidential election.

2.2.4. Inflation

For 2016, AEs recorded higher inflation while EMDEs reflected lower inflation. Inflation for AEs accelerated to 0.8 per cent in 2016 from 0.3 per cent in the previous year. However, inflation for EMDEs decelerated to 4.5 per cent from 4.7 per cent in 2015. Although both sets of economies generally benefitted from lower commodity prices during the review year, in the latter part of the year increases in crude oil prices helped to boost domestic inflation for major economies towards the end of the year. In addition, higher inflation reflected base effects. Inflation in Venezuela continued to accelerate rapidly as a result of deteriorating economic conditions in the economy (see **Tables 1 & 2**).[6]

As it relates to Jamaica and its trading partners, the overall inflation for Jamaica's top 17 trading partners, excluding Venezuela, increased at end-2016 to 2.2 per cent from 1.2 per cent.[7] Notably, for 2016, Jamaica's inflation was 0.5 percentage points below that of its trading partners, compared to 2.4 percentage points above the same measure for end-2015.

[4] Growth in the UK has not yet shown an adverse impact from the Brexit vote with strong performance in the services industries offsetting declines in other industrial groups. Additional stimulus measures may become necessary over the near- to medium-term as the process to trigger Article 50 begins, signalling Britain's official exit from the EU.

[5] The Federal Reserve's dot plot, which is used to show policymakers' stance on the interest rate path, indicated that over the next year there would be three possible increases in interest rates.

[6] Venezuela relies heavily on oil production and suffered tremendously from low crude oil prices in recent years.

[7] The calculation for Jamaica's trading partner's inflation is a trade-weighted average of the inflation of the top 17 trading partners. The top 17 trading partners are: United States, Trinidad and Tobago, Canada, United Kingdom, China, Japan, Brazil, Mexico, Spain, Germany, France, Netherlands, Australia, Italy, Belgium, Korea and India.

Table 2

SELECTED DEVELOPING COUNTRIES REAL GDP GROWTH & INFLATION				
Country	GDP Growth (%)		Inflation Rate** (%)	
	2015	2016	2015	2016
Emerging Market and Developing Economies	**4.1**	**4.1***	**4.7**	**4.5**
Latin America and the Caribbean	**0.1**	**-0.7***	**5.5**	**5.8**
Argentina	2.5	-1.8	n/a	39.4
Brazil	-3.8	-3.5*	9.0	9.0
Chile	2.3	1.7	4.3	4.0
Colombia	3.1	2.2	5.0	7.6
Dominican Republic	7.0	5.9	0.8	2.3
Ecuador	0.3	-2.3	4.0	2.4
Mexico	2.6	2.2*	2.7	2.8
Peru	3.3	3.7	3.5	3.6
Uruguay	1.0	0.1	8.7	10.2
Venezuela	-6.2	-10.0	121.7	475.8
Antigua & Barbuda	2.2	2.0	1.0	1.4
Barbados	0.9	1.7	-1.1	0.3
Dominica	-1.8	1.5	-0.8	-0.2
Guyana	3.2	4.0	-0.3	0.2
Jamaica	0.9	1.5	3.7	4.4
St. Kitts & Nevis	5.0	3.5	-2.8	-1.3
St. Vincent & Grenadines	0.6	1.8	-1.7	-0.4
Trinidad & Tobago	-2.1	-2.7	4.7	4.8
Developing Asia	**6.4**	**6.5**	**2.7**	**3.1**
China	6.9	6.7*	1.4	2.1
India	7.6	7.6	4.9	5.5
Indonesia	4.8	4.9	6.4	3.7
Malaysia	5.0	4.3	2.1	2.1
Philippines	5.9	6.4	1.4	2.0
Thailand	2.8	3.2	-0.9	0.3
Middle East and North Africa, Afghanistan and Pakistan	**2.3**	**3.4**	**6.0**	**5.4**

Source: The World Economic Outlook Update, October 2016
* The World Economic Outlook Update, January 2017
Various Statistical Offices
**point-to-point

2.2.5. Selected Exchange Rates

Select international currencies, with the exception of the Japanese Yen, continued to depreciate against the USD during 2016. In particular, the Mexican Peso, the GBP, the Brazilian Real and the Canadian Dollar (CAD), depreciated by 15.1 per cent, 11.3 per cent, 5.0 per cent and 3.6 per cent, respectively (see **Table 3**). The weakening of the GBP was largely attributed to the uncertainty surrounding the repercussions of the Brexit vote, which resulted in the currency at one point reaching its lowest level since 1985.[8] The CAD and the Brazilian Real continued to be impacted by low commodity prices, notably crude oil, soybean, wheat and corn. However, the Brazilian Real regained strength in the latter half of 2016 following the impeachment of former President of Brazil Dilma Rousseff. This was interpreted by investors as a signal that the government was committed to restoring economic stability. The Mexican Peso was negatively impacted by the outcome of the US Presidential election of 2016, as the proposed policies by President Donald Trump was expected to have adverse effects on the Mexican economy. Of note, the Japanese Yen appreciated by 10.3 per cent against the USD as investors moved into alternative assets during periods of economic uncertainty.

Table 3

Selected Economies: Exchange Rates (End of Period)				
	US Dollars per Unit of National Currency		Annual Per cent Change	
	2015	2016	2015	2016
Canadian Dollar	0.78	0.76	-13.5	-3.6
Japanese Yen[/1]	120.99	108.50	14.6	-10.3
Great Britain Pound	1.53	1.36	-7.2	-11.3
Euro	1.11	1.11	-16.4	-0.3
Real	0.30	0.29	-28.6	-5
Yuan	0.16	0.15	-1.9	-5.4
Mexican Peso	0.06	0.05	-16	-15.1
Rupee	0.02	0.01	-4.9	-4.6

Source: Bloomberg

[/1] Expressed as local currency per unit of US dollars (in accordance with international convention)

2.2.6. Commodity Markets

The IMF's Index of Primary Commodity Prices (IPCP) fell by 10.1 per cent in 2016, following a reduction of 35.3 per cent in 2015 (see **Table 4**). The continued decline in IPCP was attributed to reductions of 2.1 per cent and 16.5 per cent in the Non-fuel Commodities and Energy indices, respectively. The decline in the Non-fuel Commodities index moderated in 2016 in the context of a more tempered fall in the Industrial Inputs price sub-index, which was partly offset by an increase of 1.1 per cent in the Edibles index. The decline in Industrial Inputs reflected reduced prices for Agricultural Raw Materials and Metals, while the

[8] The currency fell to a low of US$1.2123 /GBP on 11 October 2016, reaching almost 19.0 per cent below where it traded on 23 June, the day the UK went to the polls.

expansion in Edibles was supported by higher Food prices with offsetting impulses from Beverage prices. [9]

Upward price movements in Food largely reflected increases in the prices of bananas, oranges, rice, fish, soybean, sugar and vegetable oils.[10] Despite buoyant supplies of soybean on the market due to favourable weather conditions, soybean prices increased by 4.4 per cent in 2016. Higher prices emanated from supply disruptions in Brazil and Argentina as well as strong demand for US exports, particularly from China. The decline in the Beverages sub-index reflected falls of 7.8 per cent and 15.6 per cent in the prices of cocoa beans and tea, respectively. Cocoa prices fell to the lowest level in three years as a result of favourable weather conditions in West Africa, which resulted in increased crop yields, and a decline in demand for cocoa based products in the US and the UK.

With respect to the Metals sub-index, lower prices resulted from contractions in the prices of copper, aluminium, nickel and uranium. Of note, the pace of decline of aluminium prices slowed to 3.6 per cent in 2016 relative to 10.9 per cent in 2015, largely reflecting the impact of higher input costs for Chinese producers.[11] There was some upward pressures on aluminum prices towards the end of the year in the context of investors' speculation that the US Administration's infrastructure programme would lead to a boost in demand. However, the aluminium market remained oversupplied in 2016 thus influencing the overall decline in prices.

The continued decline in the Energy index occurred in the context of a global glut in the crude oil market as well as weak global demand resulting from a slowdown in most AEs and EMDEs.[12] The three benchmark crude oil prices, the Dubai, Brent and West Texas Intermediate (WTI) declined by 19.5 per cent, 15.9 per cent and 11.3 per cent, respectively.

Table 4

SUMMARY OF WORLD COMMODITY PRICES
Annual Average per cent change

	2015	2016
All Primary Commodities	**-35.3**	**-10.1**
1. Non-fuel Commodities	-17.5	-2.1
1.1 Edibles	-15.7	1.1
(a) Food	-17.1	1.9
(b) Beverages	-3.1	-5.0
1.2 Industrial Inputs	-19.5	-6.0
(a) Agricultural Raw Materials	-13.5	-6.9
(b) Metals	-23.1	-5.4
o/w Aluminium	-10.9	-3.6
2. Energy	-44.8	-16.5
Petroleum[1/]	-47.2	-15.8
(a) WTI	-47.7	-11.3
(b) Brent	-47.0	-15.9
(c) Dubai	-47.0	-19.5

Source: IMF

[1/] Simple Average of West Texas Intermediate (WTI), Brent and Dubai Fateh Crude oil prices

2.3 Prices

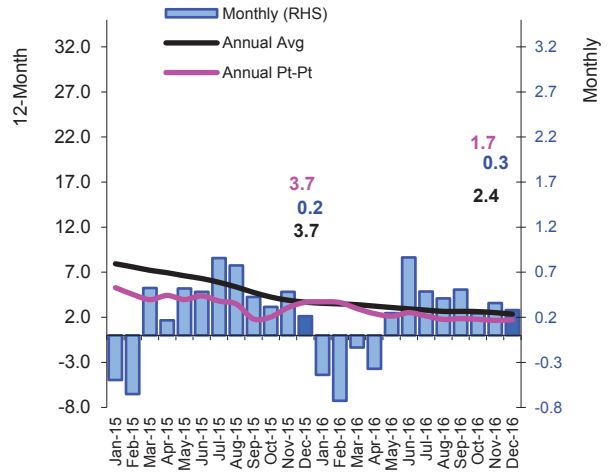
2.3.1. Overview

Headline inflation, as measured by the annual point-to-point change in the All Jamaica Consumer Price Index (CPI), was 1.7 per cent for 2016 relative to 3.7 per cent for 2015 (see Chart 1 and Appendix A). This outturn was the lowest level of inflation for a calendar year since 1964. The deceleration in inflation for the year reflected the impact of weak, albeit improving domestic demand conditions, declining inflation expectations and favourable weather conditions. In this context, food prices increased marginally for the year chiefly due to raw food prices. Inflationary impulses largely emanated from higher utility rates due to increased energy costs and a rise in the cost of miscellaneous goods & services largely due to personal care products & services. In addition, some noticeable price increases were observed in the cost of education and household items.

[9] Agricultural raw materials include timber, cotton, wool, rubber and hides.
[10] Vegetable oils include soybean and palm oils.
[11] New weight limitations on trucks impacted aluminium transportation in China which led to higher transport costs. In addition, higher coal prices as a result of China's restriction on coal mining and supply disruptions in Australia increased production cost for alumina refiners.
[12] Oil prices declined significantly in 2016 reflecting expectations of sustained increases in production by OPEC members amid continued global oil production in excess of oil consumption.

All three measures of core inflation monitored by the Bank were lower in 2016 relative to 2015. In this regard, the rate of change in the CPI excluding Food and Fuel (CPI–FF), CPI excluding Agriculture and Fuel (CPI–AF) and the Trimmed Mean (TRIM) were 2.3 per cent, 2.3 per cent and 0.7 per cent, respectively, compared to 3.7 per cent, 3.5 per cent and 3.0 per cent in 2015.

Chart 1: Headline Inflation



Source: STATIN

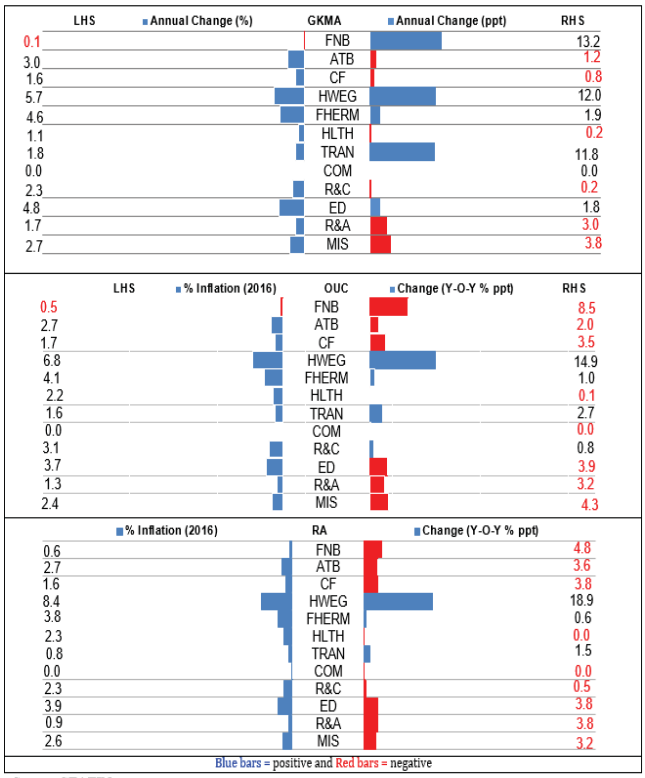
The lower levels of core inflation largely reflected the impact of low demand conditions, partly offset by the faster pace of exchange rate depreciation.

For 2016, all regions recorded a deceleration in inflation. The Greater Kingston Metropolitan Area (GKMA), Other Urban Centres (OUC) and Rural Areas (RA) recorded inflation of 1.6 per cent, 1.6 per cent and 1.9 per cent, respectively, compared to 5.0 per cent, 3.6 per cent and 2.6 per cent for 2015 (see **Chart 2** and **Appendix A**).

2.3.2. Component and Contributing Factors to Inflation

With the exception of Housing, Water, Electricity Gas & Other Fuels (HWEG), Transport (TRAN) and Furnishings, Household Equipment and Routine Household Maintenance (FHERM), the CPI divisions recorded lower levels of inflation in 2016 relative to 2015.

Chart 2: Annual Inflation & Y–O–Y Change by Region



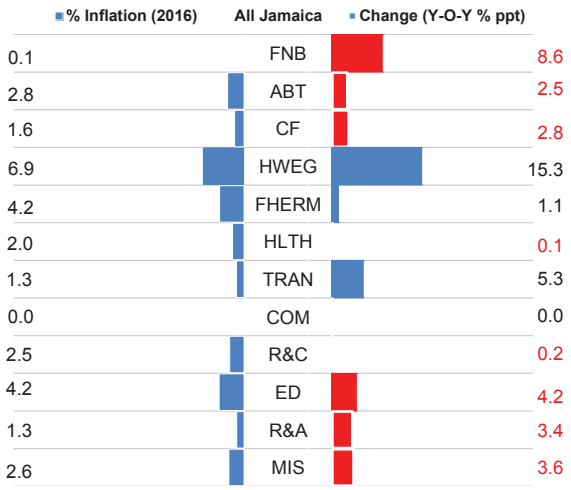
Source: STATIN

The increase in HWEG inflation mainly emanated from upward movements in the cost of energy which was reflected in higher prices for electricity and water. Higher TRAN prices were primarily as a result of a rise in petrol prices while FHERM mainly reflected an increase of 10.7 per cent in the National Minimum Wage, particularly on the cost of household services. Among these, FNB and MIS rose by 0.1 per cent and 2.6 per cent in 2016, relative to 8.7 per cent and 6.2 per cent in 2015 (see **Chart 3** and Appendix **A**).

2.3.3. Domestic Agriculture Supply

The significant fall off in inflation in the FNB occurred in the context of a decline in raw food prices (see **Appendix A)**. The fall in food prices emanated from increased domestic agricultural supplies in 2016 reflecting favourable weather conditions when compared to 2015. The improved production was primarily observed during the second half of the year (see **Section 2.7: Production**). Consequently for 2016, the prices of vegetables & starchy foods declined by 6.7 per cent relative to an increase of 27.0 percent in 2015 (see **Chart 4**).

Chart 3: Annual Inflation 2016



Blue bars = positive and Red bars = negative

MIS= Miscellaneous Goods & Services, R&A=Restaurants & Accommodation, ED=Education, R&C=Recreation & Culture, COM=Communication, TRAN= Transport, HLTH=Health, FHERM=Furniture, Household Equipment & Routine Household Maintenance, HWEG=Housing, Water, Electricity, Gas & Other Fuels, C&F=Clothing & Footwear, ABT=Alcohol, Beverages & Tobacco, FNB=Food & Non-Alcoholic Beverages

Source: STATIN

Chart 4: Average Supplies of Agriculture Produce (2015 – 2016)

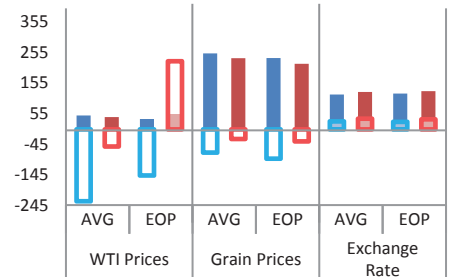
2.3.4. Imported Inflation

Imported inflation increased during the year in response to higher crude oil prices and an increased pace of depreciation in the domestic currency (see **Chart 5**). International grain prices however fell reflecting buoyant global supplies coupled with weak international demand which had a dampening effect on processed food prices within FNB (see **Section 2.2: International Economic Developments**).

2.3.5. Administered and Other Price Adjustments

There were several notable price developments during the review year. The Incorporated Master Builders Association of Jamaica and Government of Jamaica (GOJ) granted wage increases in the March 2016 quarter of 6.0 per cent and 10.7 per cent to artisans and minimum wage workers, respectively. Tax measures during the year included an increase in special consumption tax (SCT) on heavy fuel oil of approximately $0.20 per litre and an increase in the SCT on cigarettes to $14.0 per stick from $12.0 per stick. In addition, departure tax was increased to US$35.00 from US$20.00. In the September 2016 quarter, there was an average 2.8 per cent upward adjustment to the tariff rate applied on the Jamaica Public Service bill following the annual review.

Chart 5: Trends in WTI Crude Oil Price and Grains Index



	AVG	EOP	AVG	EOP	AVG	EOP
	WTI Prices		Grain Prices		Exchange Rate	
2015	48.8	37.0	252.5	237.0	117.5	120.4
2016	43.3	53.7	236.4	218.2	125.8	128.4
2015 (Y-O-Y%)	-47.5	-30.5	-15.3	-19.4	5.3	5.0
2016 (Y-O-Y%)	-11.3	45.0	-6.4	-7.9	7.1	6.7

Source: Bloomberg & BOJ

2.3.6. Demand and Supply Conditions

The trends in the Bank's short-term indicators of domestic demand were mixed for 2016. For the review year, it is estimated that real total imports and non-business loans expanded by 26.5 per cent and 14.1 per cent, respectively, compared to a decline of 18.5 per cent and an increase of 6.2 per cent in the previous year (See **Chart 6**).

In contrast, real PAYE receipts as well as debit & credit card transactions fell by 27.8 per cent and 1.1 per cent, respectively, relative to increases of 12.0 per cent and 21.7 per cent in 2015.

During 2016, the output gap continued to narrow as actual output grew at a faster rate (see Chart 7). Despite the reduction in excess capacity among industrial suppliers, continued fiscal consolidation assisted in restraining upward price adjustments during the year.

2.3.7 Inflation Expectations

The Bank's survey of business inflation expectations indicated a 12-month ahead annual inflation of 3.3 per cent as at December 2016. The survey's annual inflation expectation of 4.4 per cent at end-2015 exceeded the outturn of 1.7 per cent for 2016 (see Chart 8). The fall in expectations at end-2016 reflected

Chart 6: Domestic Demand Indicators

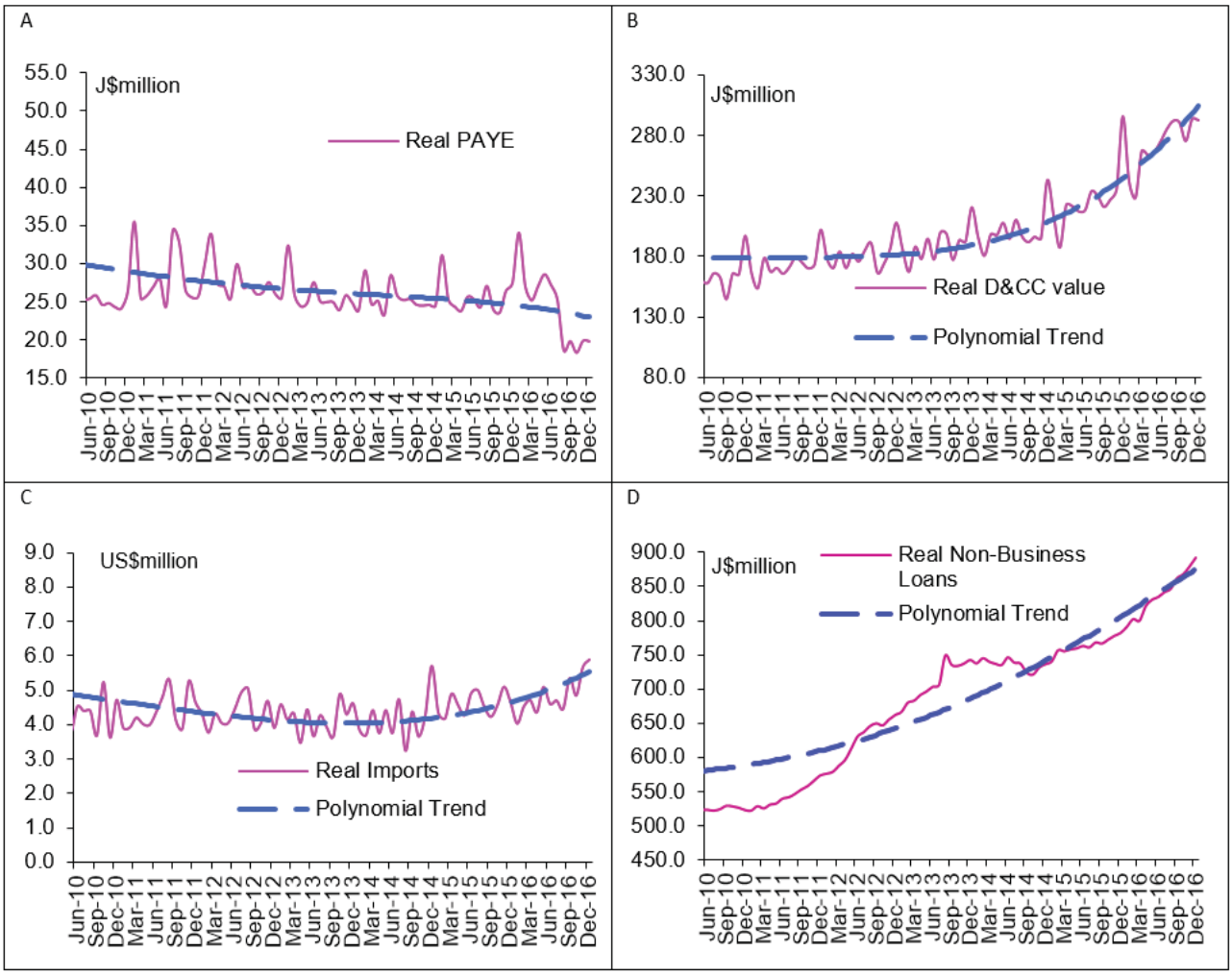
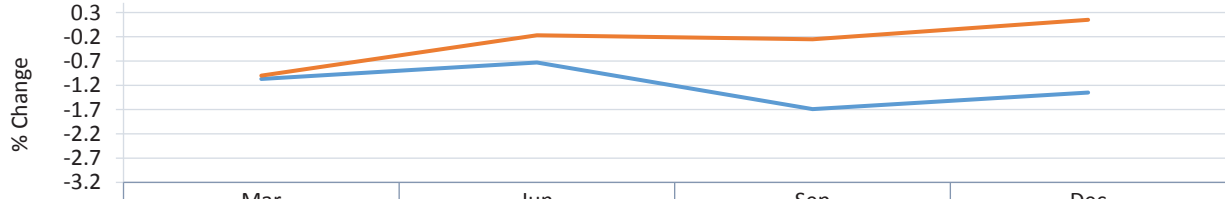


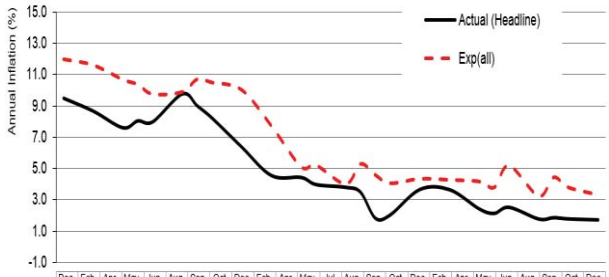
Chart 7: Trends in Domestic Output Gap for 2015 and 2016



	Mar	Jun	Sep	Dec
2015	-1.1	-0.7	-1.7	-1.3
2016	-1.0	-0.2	-0.2	0.2

improved business confidence perhaps influenced by the approval of a three year SBA programme by the IMF Board as well as a trend decline in inflation.

Chart 8: Headline Inflation vs. Expectations



	Dec-13	Feb-14	Apr-14	May-14	Jun-14	Aug-14	Sep-14	Oct-14	Dec-14	Feb-15	Apr-15	May-15	Jul-15	Aug-15	Sep-15	Oct-15	Dec-15	Feb-16	Apr-16	May-16	Jun-16	Aug-16	Sep-16	Oct-16	Dec-16
Actual (Headline)	9.5	8.7	7.6	8.0	8.0	9.8	9.0	8.2	6.4	4.5	4.4	4.0	3.8	3.5	1.8	2.0	3.7	3.6	2.4	2.1	2.5	1.8	1.9	1.8	1.7
Exp(all)	12.0	11.6	10.7	10.4	9.8	9.9	10.7	10.5	10.0	7.7	5.1	5.2	4.0	5.3	4.6	4.1	4.4	4.3	4.2	3.8	5.2	3.3	4.5	3.8	3.3

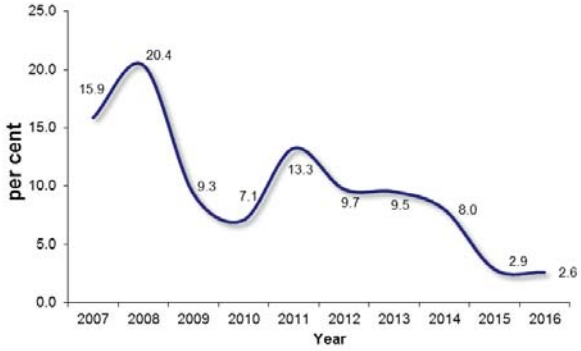
Source: BOJ

2.4 Balance of Payments

2.4.1. Overview

Provisional data indicate that Jamaica's current account deficit (CAD) improved by US$28.9 million to US$370.9 million (2.6 per cent of GDP) in 2016 relative to 2.8 per cent of GDP in 2015 (see **Chart 9** and **Table 5**). This outturn marked the fifth consecutive year of improvement and the lowest CAD in 15 years.

Chart 9: Jamaica: Current Account Deficit to GDP Ratio



The continued improvement in the CAD was underpinned by an improvement in the Goods & Services balance as well as a higher surplus on Current Transfers, offset by a deterioration on the Income sub-account. The improvement in the Goods & Services balance primarily reflected higher Travel inflows. With regard to Current Transfers, the increase in the surplus stemmed largely from sustained growth in remittance inflows, while the deterioration on the Income sub-account was related to a large income deficit on Investment Income due to higher government bond payments.

Net Private Investment inflows were more than sufficient to finance the deficits on the Capital and Current Accounts. Consequently, the net international reserves (NIR) of the Bank increased by US$282.4 million to US$2 719.4 million at end-2016. Gross reserves amounted to US$3 291.5 million and represented 24.7 weeks of projected goods and services imports.

2.4.2. Trade in Goods and Services

The deficit on the Goods & Services balance is estimated to have recorded an improvement of US$69.8 million for 2016. This performance primarily reflected the impact of a higher Services balance, the impact of which was partly offset by a worsening in the Goods balance.

2.4.2.1. Merchandise Trade

For 2016, the merchandise trade deficit (goods balance) is assessed to have deteriorated by US$36.4 million, relative to 2015 (see **Table 5**). Earnings from exports registered a fall of US$126.1 million or 9.8 per cent while imports (f.o.b.) declined by US$89.7 million or 2.0 per cent.

The estimated contraction in imports primarily reflected a reduction of US$155.4 million (or 13.4 per cent) in mineral fuel imports amid lower international fuel prices which offset the impact of an increase in fuel volumes. Machinery & Transportation and Manufactured Goods also contracted by US$46.3 million and US$16.1 million, respectively.

Table 5

SUMMARY OF BALANCE OF PAYMENTS (US$MN)				
	2015 [1/]	2016 [2/]	Change	% Change
1. CURRENT ACCOUNT	**-399.8**	**-370.9**	**28.9**	**-7.2**
% of GDP	**-2.8**	**-2.6**	**0.2**	
A. GOODS BALANCE	**-3 164.0**	**-3 200.5**	**-36.4**	**1.2**
Exports (f.o.b.)	1 286.4	1 160.3	-126.1	-9.8
Imports (f.o.b.)	4 450.4	4 360.7	-89.7	-2.0
B. SERVICES BALANCE	**897.9**	**1 004.1**	**106.3**	**11.8**
Transportation	-573.3	-605.4	-32.1	5.6
Travel	2 166.1	2 285.0	118.9	5.5
Other Services	-694.9	-675.5	19.4	-2.8
GOODS & SERVICES BALANCE	**-2 266.2**	**-2 196.3**	**69.8**	**-3.1**
C. INCOME	**-440**	**-527.2**	**-87.2**	**19.8**
Compensation of employees	80.9	79.2	-1.6	-2.0
Investment income	-520.8	-606.4	-85.6	16.4
D. CURRENT TRANSFERS	**2 306.4**	**2 352.7**	**46.3**	**2.0**
Official	165.5	169	3.5	2.1
Private	2 140.8	2 183.6	42.8	2.0
2. CAPITAL & FINANCIAL A/C	**399.8**	**370.9**	**-28.9**	**-7.2**
A. CAPITAL ACCOUNT	**1 430.0**	**-27.3**	**-1 457.3**	**-101.9**
Official	13.1	3.9	-9.2	-70.2
Private	1 416.9	-31.2	-1 448.1	-102.2
B. FINANCIAL ACCOUNT	**-1 030.3**	**398.2**	**1 428.4**	**-138.6**
Official Investment	-1 202.2	-112	1 090.1	-90.7
Private Investment[3/]	607.8	792.6	184.8	30.4
Reserves[4/]	-435.9	-282.4		

1/ Revised
2/ Provisional
3/ Includes Errors & Omissions
4/ Minus denotes increase

The decline in Machinery & Transportation largely reflected the completion of major infrastructural and development projects including the North-South Highway, while the contraction in Manufactured Goods was largely due to lower imports of bars of steel and cement following the completion of other foreign direct investment (FDI) projects.

Exports are estimated to have declined by US$128 million for 2016. This contraction largely reflected the impact of a decline of US$108.2 million in receipts from Major Traditional Exports which occurred amid lower prices for alumina and bauxite. Sugar exports also declined for the year, reflecting the impact of lower production (see **Section 2.7: Production**).

2.4.2.2. Services

Net earnings from Services are estimated to have increased by US$103.5 million (11.5 per cent) to US$1 004.1 million in 2016.

This higher surplus was underpinned by an increase of US$118.9 million (5.5 per cent) in net travel receipts as well as a lower deficit of US$19.5 million (2.8 per cent) on Other Services.[13] In contrast, the deficit on Transportation widened by US$32.0 million (5.6 per cent).

The higher earnings from Travel occurred in the context of growth of 2.7 per cent in foreign national stop-over arrivals, along with increases in their estimated average daily expenditure. Of note, total earnings from Travel amounted to US$2 529.0 million in 2016 while stop-over visitor arrivals amounted to 2.12 million persons. With regard to Other Services, the estimated increase in net inflows stemmed primarily from higher receipts for Other Business Services and Communication, as well as lower outflows for Construction and Insurance Services. There were, however, some offsetting impacts from higher outflows for Other Business Services.

There was an estimated growth in net transportation outflows of US$32.1 million reflecting the impact of higher freight charges associated with the increased imports of capital goods and raw materials.

2.4.3. Income

For 2016, the deficit on the Income sub-account is estimated to have widened by US$87.2 million to US$527.2 million (see **Table 5**). This higher deficit principally reflected growth of US$85.6 million in net investment income outflows reflecting an estimated expansion of US$41.9 million in profit repatriation by direct investment companies as well as an increase of US$26.6 million in Central Government interest payments.

2.4.4. Current Transfers

The surplus on the Current Transfers sub-account is estimated to have increased by US$46.3 million in

[13] Other Services include communication, computer & information, other business and government services.

2016, reflecting growth of US$51.0 million in Private Transfers as well as an increase of US$3.2 million in Official Transfers. The estimated growth in Private Transfers occurred in the context of continued economic expansion and improved labour market conditions in the US (the major source market for remittance inflows) (see Section 2.2: International Economic Developments). Gross remittance inflows for 2016 are estimated at US$2 424.8 million or 17.5 per cent of GDP.

2.4.5. Capital and Financial Account

Within the Capital and Financial Account, the Capital Account registered a deficit of US$27.3 million relative to the surplus of US$1 430.0 million recorded in 2015. The surplus in 2015 reflected the Government's debt buy-back operation. The Financial Account recorded a surplus of US$398.2 million in 2016 relative to the deficit of US$1 030.3 million in 2015.

With regard to the Financial Account, Net Official Investments improved by US$1 090.1 million in 2016 relative to a deficit of US$112.0 million in 2015. The improvement primarily reflected the impact of significantly lower General Government debt payments for the year notwithstanding lower loan inflows (see Table 6). Private Investments recorded a surplus of US$792.6 reflecting an increase of US$184.8 million for the year. The growth in Private Investment was due primarily to higher portfolio flows partly offset by lower FDI. The surplus on the *Financial Account* was more than sufficient to finance the deficit on the Current and Capital Accounts. As a result, the NIR of the Bank increased by US$282.4 million to US$2 719.4 million at end-2016.

Table 6

OFFICIAL INVESTMENT FLOWS (US$MN)			
	2015[1/]	2016[2/]	Change
GROSS OFFICIAL INFLOWS	**2 806.9**	**468.4**	**-2 338.5**
Project Loans	332.2	202.6	-129.6
Other Loans	2 474.8	265.9	- 2 208.9
GROSS OFFICIAL OUTFLOWS	**4 009.1**	**580.5**	**-3 428.6**
Government Direct	658.2	341	-317.2
Bank of Jamaica	243.9	149.8	-94.1
Other Official	3 107.0	89.7	-3 017.3
NET OFFICIAL INVESTMENTS	**-1 202.2**	**-112**	**1 090.1**

[1/] *Revised*
[2/] *Provisional*

2.5. Foreign Exchange Market

There was a faster pace of depreciation in the value of the Jamaica Dollar relative to its US dollar counterpart. The Jamaica dollar depreciated by 6.7 per cent vis-à-vis its US counterpart during the year, compared to 5.0 per cent in 2015. This was mainly due to periodic bouts of heightened demand, particularly during the June quarter. Over that period, the depreciation occurred in the context of a net outflow from the foreign exchange market, which was underpinned by an uptick in private capital outflows. This partly reflected investor demand for income earning assets to replace large GOJ maturities during the previous quarter, as well as bouts of demand pressures associated with large value transactions. The Bank increased its intervention sales to the market during 2016 by net selling US$848.0 million relative to net sales of US$609.8 million during 2015.

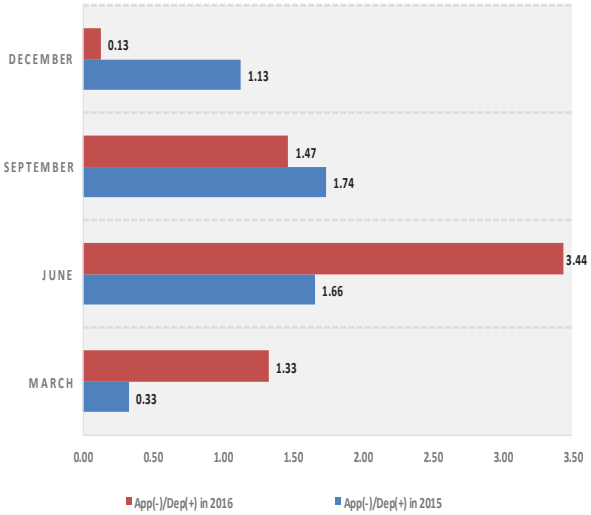
Regarding the other major currencies, the Jamaica Dollar depreciated against the Canadian dollar by 11.44 per cent but appreciated against the Great Britain Pound by 12.5 per cent. This compares to respective appreciation of 15.1 per cent and 0.3 per cent in 2015.

Heightened demand conditions became evident early in the year. In this context, domestic currency fell by 1.3 per cent vis-à-vis the USD in the March quarter compared to a depreciation of 0.3 per cent for the corresponding period in 2015 (see Chart 10). This was in the context of the buoyant JMD supply conditions emanating from the redemption of GOJ FR 7.25% BMI Note in February 2016 and uncertainty associated with the pending General Elections. Against this background, the Bank intensified its sterilization operation using special longer-tenor CDs. In addition the bank net sold US$289.4 million relative to net sales of US$2.8 million during the corresponding quarter of 2015.

The strongest quarterly depreciation of 3.4 per cent in the domestic currency occurred during the June quarter. This accelerated pace of depreciation partly reflected the impact of large value foreign currency denominated investments on offer during that time. The Bank responded by increasing the number of

rounds of intervention to 11 from seven rounds in the March quarter (see Chart 11). Against this background, the overall increase of 5.2 per cent and 5.1 per cent in the total foreign currency sales and purchases for 2016 was largely explained by the increased trading volumes during the June quarter (see Table 7). The trading room activity during the June quarter reflected net sales of US$237.4 million relative to net sales of US$84.9 million for the corresponding period in 2015.

Chart 10: Quarterly Appreciation (–) /Depreciation (+) in the Jamaica Dollar relative to the USD dollar

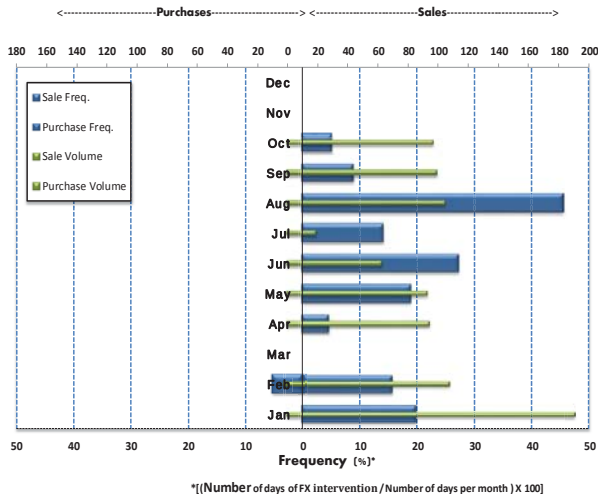


During the two ensuing quarters, the exchange rate generally exhibited a more orderly pace of adjustment, evidenced by quarterly movements of 1.47 per cent and 0.13 per cent for the September and December quarter largely reflected the combined impact of (a) the finalization of the successor 36-month Stand-by Agreement (SBA) with the IMF in November 2016 ahead of the scheduled ending of the 46-month Extended Fund Facility (EFF) in March 2017, (b) the Bank on 25 October 2016 announcing plans to prepay selected foreign currency denominated CDs totalling approximately US$256.8 million in January 2017 and (c) the request from the Minister of Finance and the Public Service for the establishment of a Foreign Exchange Market working group to 'formulate proposals to address the continued depreciation of the Jamaican Dollar'.[14]

Against this background, the intervention during the December quarter was reduced to one round from 15 rounds during the September quarter, while the net sales from the trading room activity declined to US$97.0 million from US$224.2 million in the September quarter (see Chart 11).

Effective 04 July 2016, the Bank deployed the new web-based eGATE® Client 1.0 application to replace the eGATE® Client 4.08. The new system which is configured to collect, compute and publish information on the transactions in the foreign exchange market incorporated upgrades to include the following; (a) the exclusion of all purchases under the surrender arrangements from the weighted average selling rates (b) the publication of a JMD/EUR exchange rate which emanates from trading in the domestic market and (c) expanded data collection to include data on the settlement instruments used for transactions in the domestic foreign exchange system.[15,16]

Chart 11: Bank of Jamaica Foreign Exchange Market Intervention (Spot Market) 2016



Authorised dealers remained the dominant foreign exchange market intermediaries during the review year, with 61.4 per cent of total foreign exchange sales

[14] 'Statement on Foreign Exchange Market Working Group' by Governor Wynter on 04 November 2016.
[15] This is consistent with recommendations from the IMF TA Mission on Developing Monetary and Foreign Exchange Market Operations (April 2014).
[16] This is consistent with the thrust to strengthen Jamaica's oversight if the foreign exchange system, particularly in relation to identifying and detecting anti-money laundering trends for cash trading in the economy.

compared with 57.4 per cent in 2015. Accordingly, the market share for cambios declined to 38.6 per cent from 42.6 per cent in 2015.

Table 7

Total Purchases and Sales of Foreign Exchange (US$ Million) 2015 - 2016						
	Purchases		%	Sales		%
Quarter	2015	2016		2015	2016	
March	2 460.4	2 636.4	7.2	2 654.6	2 663.6	0.3
June	2 353.2	2 691.7	14.4	2 379.1	2 747.1	15.5
September	2 538.1	2 644.7	4.2	2 540.8	2 715.2	6.9
December	2 650.6	2 540.7	- 4.1	2 675.7	2 656.2	- 0.7
Total	**10 002.3**	**10 513.5**	**5.1**	**10 250.2**	**10 782.1**	**5.2**

All Currencies converted to USD Includes BOJ Intervention

2.6. Money and Credit

2.6.1. Money Supply

Growth in broad Jamaica Dollar money supply (M2J) moderated to 12.3 per cent for 2016 from 14.8 per cent for end-2015 but was higher than the average growth of 6.7 per cent over the last five years (see Table 8).[17] This tempered pace of expansion in M2J for 2016 reflected a deceleration in the rate of growth in local currency deposits as currency in circulation expanded at a relatively faster rate. The growth in local currency deposits slowed to 10.6 per cent from 14.6 per cent for 2015, reflecting a contraction of 4.4 per cent in time deposits and a slower rate of expansion in demand deposits. The contraction in time deposits partly reflected a preference for relatively higher interest rates on short-term instruments in the private money market (see Section 2.10: Monetary Policy and Interest Rates). Of note, there was an expansion of 12.8 per cent in savings deposits, relative to 10.7 per cent for 2015, which may be attributed to the impact of the increase in the income tax threshold. Simultaneously, annual growth in currency in circulation accelerated to 17.8 per cent for 2016 from 15.3 per cent. In real terms, currency in circulation also accelerated to 16.0 per cent from 11.6 per cent a year earlier. At end-2016, the money supply, relative to GDP, was 20.5 per cent, compared with 19.1 per cent at end-2015.

Table 8

COMPONENTS OF CHANGE IN MONEY SUPPLY				
	Flows (J$MN)		% Change	
	2015	2016	2015	2016
Total Money Supply (M2*)	**71 247.9**	**68 898.4**	**16**	**13.3**
Money Supply (M2J)	**40 881.5**	**38 963.3**	**14.8**	**12.3**
Money Supply (M1J)	**27 601.4**	**24 619.1**	**20.8**	**15.4**
Currency with the public	9 743.1	13 084.5	15.3	17.8
Demand Deposits	17 858.3	11 534.6	25.9	13.3
Quasi Money	**13 280.1**	**14 344.2**	**9.2**	**9.1**
Savings Deposits	11 955.0	15 812.2	10.7	12.8
Time Deposits	1 325.1	-1 468.0	4.1	-4.4
Foreign Currency Deposits	**30 366.4**	**29 935.1**	**17.9**	**15**

Sources of Change in Money Supply	Flows (J$MN)		% Change	
	2015	2016	2015	2016
TOTAL	**71 247.9**	**68 898.4**	**16**	**13.3**
Net Foreign Assets	**57 894.4**	**38 720.9**	**20.6**	**11.4**
Bank of Jamaica	64 006.0	55 116.7	27.9	18.8
Commercial Banks	-6 111.6	-16 395.7	-11.9	-36.1
Credit to Private Sector	**32 697.8**	**55 375.6**	**9.6**	**14.8**
Local Currency	26 513.3	46 505.5	10.3	16.3
Foreign Currency	6 184.6	8 870.1	7.5	10
Net Claims on Public Sector	**-22 161.1**	**14 594.7**	**-10.2**	**7.5**
Net Claims on Financial Institutions	**-9 876.3**	**25 979.8**	**23.6**	**-50.1**
BOJ Open Market Operations/1	**-13 935.8**	**-13 386.1**	**54.8**	**34**
Other Items (Net)	**26 628.7**	**-52 386.5**	**-8.2**	**17.6**

/1 A negative flow represents an increase in the stock.

During the review year, the monetary base expanded by 15.1 per cent compared to 12.2 per cent for 2015. Given the outturns for the monetary base and broad money supply, the money multiplier moderated to 2.54 for 2016 from 2.60 recorded for 2015. This moderation resulted from an increase in the currency to deposit ratio, as the reserve to deposit ratio was largely unchanged in the review year. The higher ratio of currency to deposits possibly reflected an uptick in spending in the economy.

For 2016, growth in the measure of money supply that includes foreign currency deposits, M2*, decelerated to 13.3 per cent from 16.0 per cent for 2015. Notwithstanding this moderation, the expansion in the review year compares to average growth of 9.0 per cent over the last five years. The Jamaica Dollar value of foreign currency deposits grew at a slower pace of 15.0 per cent for 2016 relative to 17.9 per cent in the previous year.

[17] M2J is the measure of broad money which comprises currency in circulation and local currency deposits which consist of demand, savings and time deposits denominated in Jamaica Dollars.

This outturn reflected the impact of a slower expansion of 7.8 per cent in the US dollar stock of deposits when compared to growth of 12.4 per cent for 2015. However, the more tempered increase in the stock was partially offset by a stronger rate of depreciation in the exchange rate. The WASR depreciated by 6.7 per cent for 2016 relative to depreciation of 5.0 per cent for 2015. The moderation in the growth in US dollar stock of foreign currency deposits reflected a contraction in demand deposits, particularly those held by individuals.

In the context of the stronger growth in foreign currency deposits relative to total deposits during the review year, the deposit dollarization ratio for commercial banks increased to 46.0 percent at end–2016 from 45.0 per cent at end–2015 (see Chart 12).

Chart 12: Foreign Currency Deposits to Total Deposits 2006 to 2016

The main source of the expansion in M2* for 2016 was an increase of $55.4 billion (14.8 per cent) in credit to the private sector and to a lesser extent, an increase in the banking system's net foreign assets (NFA) of $38.7 billion (11.4 per cent). The increase in NFA reflected an increase in BOJ's Net International Reserves as the NFA of Commercial Banks declined. The impact of these impulses was partly offset by an income of $13.4 billion in the stock of BOJ's OMO instruments during the year (see Section 2.10: Monetary Policy and Interest Rates).

2.6.2 Private Sector Credit

The stock of commercial bank credit to the private sector grew by 14.8 per cent for 2016, a significant acceleration relative to the increase of 9.6 per cent for 2015 and was above the average growth of 11.4 per cent for the previous five years (see Table 9). The continued expansion in private sector credit was underpinned by positive macroeconomic conditions as well as an acceleration in economic activity which were supported by the BOJ's accommodative monetary policy stance. The robust growth in 2016 was largely denominated in local currency in a context where there was a faster pace of depreciation in the Jamaica Dollar during the review year relative to 2015.

Table 9

Total Credit to the Private Sector for Year Ended 31 December (Flow J$MN)		
	2015	**2016**
Private Sector Credit	**32 697.8**	**55 375.6**
% Change	9.6	14.8
of which		
Loans and Advances	34 489.5	52 249.3
Less Loans to Overseas Residents	989.4	-490.7
Add Corporate Securities	-802.3	2 635.56

2.6.3 Loans and Advances

Total loans and advances to the private sector expanded by 13.6 per cent ($52.2 billion) relative to growth of 9.9 per cent ($34.5 billion) for 2015. This robust expansion for 2016 reflected an increase in the supply of credit to both businesses and individuals. Business loans expanded by 12.6 per cent relative to 9.9 per cent for 2015 (see Table 10) and was reflected across most sectors, particularly, ***Electricity, Gas & Water*** (50.4 per cent), ***Tourism*** (30.8 per cent) and ***Entertainment*** (39.3 per cent).[18]

[18] The expansion in credit to the ***Electricity, Gas & Water*** sector mainly emanated from the construction of the Bogue power plant and other renewable energy projects. For the ***Tourism*** sector, credit expansion stemmed from the investment in new hotels such as Secrets Montego Bay, Grand Lido Negril and the Royalton Hotel.

Table 10

COMMERCIAL BANKS'
Distribution of Total Loans & Advances to the Private Sector (J$MN)
For Year Ended 31 December

	Stock		Flows		%	
	2015	2016	2015	2016	2015	2016
Loans and Advances	**383 554.5**	**435 803.8**	**34 489.5**	**52 249.3**	**9.9**	**13.6**
Business Lending	**187 788.7**	**211 454.7**	**16 847.7**	**23 666.1**	**9.9**	**12.6**
Agriculture & Fishing	9 044.3	8 950.7	183.2	-93.7	2.1	-1
Mining & Quarrying	786.9	765.2	57.9	-21.7	7.9	-2.8
Manufacturing	15 823.1	17 615.5	3 144.1	1 792.4	24.8	11.3
Construction & Land Dev.	26 157.0	25 446.5	1 785.9	-0 710.5	7.3	-2.7
Transport, Storage & Comm.	11 010.5	10 767.4	-1 526.3	-0 243.1	-12.2	-2.2
Tourism	33 795.0	44 203.9	4 076.7	10 408.9	13.7	30.8
Distribution	50 815.7	53 327.4	1 714.6	2 511.7	3.5	4.9
Electricity, Gas & Water	11 347.2	17 065.4	2 701.3	5 718.2	31.2	50.4
Entertainment	1 609.1	2 242.0	-521.6	632.8	-24.5	39.3
Professional & Other Services	27 399.8	31 070.8	5 231.8	3 671.1	23.6	13.4
Personal & Other Lending	**195 765.8**	**224 349.1**	**17 641.9**	**28 583.2**	**9.9**	**14.6**
Personal	181 535.3	210 609.2	16 652.5	29 073.9	10.1	16
Overseas Residents	14 230.5	13 739.8	989.4	-490.7	7.5	-3.4

Table 11

COMMERCIAL BANKS'
Distribution of Foreign Currency Loans & Advances to the Private Sector (US$MN)
For Year Ended 31 December

	Stocks		Flows		%	
	2015	2016	2015	2016	2015	2016
Private Sector	**836 174.0**	**858 365.0**	**37 515.0**	**25 322.0**	**4.7**	**2.7**
Business Lending	670 936.0	698 324.0	22 727.0	27 388.0	**3.5**	**4.1**
Agriculture & Fishing	15360	8604	-1133	-6756	-6.9	-44
Mining & Quarrying	0 446.0	0 512.0	0 334.0	0 066.0	298.2	14.8
Manufacturing	35 031.0	24 223.0	6 231.0	-10 808.0	21.6	-30.9
Construction & Land Dev.	103 676.0	72 892.0	-16 762.0	-30 784.0	-13.9	-29.7
Transport, Storage & Comm.	53 515.0	42 320.0	-11 775.0	-11 195.0	-18	-20.9
Tourism	266 424.0	87 485.0	23 906.0	-178 939.0	9.9	-67.2
Distribution	83 318.0	64 224.0	-18 624.0	-19 094.0	-18.3	-22.9
Electricity, Gas & Water	52 982.0	329 961.0	16 705.0	276 979.0	46	522.8
Entertainment	5 268.0	3 909.0	0 949.0	-1 359.0	22	-25.8
Professional & Other Services	54 916.0	64 194.0	22 896.0	9 278.0	71.5	16.9
Personal & Other Lending	165 238.0	160 041.0	14 788.0	-5 197.0	**9.8**	**-3.1**
Personal	65 429.0	61 437.0	-5 405.0	-3 992.0	-7.6	-6.1
Overseas Residents	**99 809.0**	**98 604.0**	**20 193.0**	**-1 205.0**	25.4	-1.2

Personal & Other Lending, grew by 14.6 per cent for 2016 relative to 9.9 per cent for 2015. This improvement reflected an increase in credit to domestic residents as loans to overseas residents declined.

The growth in foreign currency loans to the private sector moderated for the review period and was reflected in both personal and business loans. More specifically, loans to the private sector expanded by 3.0 per cent relative to 4.7 per cent for 2015 (see Table 11). This deceleration was underpinned by declines in loans to most sectors. The contraction in foreign currency loans occurred in the context of a faster pace of depreciation in the Jamaica Dollar vis-à-vis the US dollar, which shifted the incentive to borrowing in the domestic currency.

2.6.4. Interest Rates

There was reduction in the weighted average interest rate on commercial banks' local currency denominated loans to the private sector for 2016. Consequently, there was a narrowing in the overall spread between local currency loans and deposit rates by 28 bps to 1.34 per cent (see Table 13). There was also a decrease in the weighted average interest rate on foreign currency denominated loans. However, there was a widening in the spread between interest rates on foreign currency loans and deposits as the weighted average interest rate on foreign currency deposits fell by 22 bps (see Table 14).

2.6.4.1 Interest Rates – Domestic

The weighted average interest rate on local currency denominated loans declined by 72 basis points (bps) to 16.2 per cent at end-2016 (see Table 12). This reduction was underpinned by several factors, including the improvement in macroeconomic conditions supported by the Bank's accommodative monetary policy stance as well as the impact of increased competition between financial institutions. The movement in the rate during 2016 reflected declines of 77 bps and 70 bps in the weighted average lending rates to the private sector and public sector, respectively. There were rate declines in all the private sector loan categories. In particular, there was a major reduction of 139 bps in the weighted average interest rate on instalment credit, which followed a decline of 90 bps for 2015. Similarly, the weighted average lending rates on personal loans fell by 76 bps for 2016 relative to an increase of 79 bps for 2015.

Table 12

COMMERCIAL BANKS LOCAL CURRENCY WEIGHTED AVERAGE INTEREST RATES (End of Period) (per cent)	2011	2012	2013	2014	2015	2016
Overall	**18.03**	**18.44**	**17.49**	**17.18**	**16.92**	**16.2**
Public Sector	**9.98**	**9.94**	**10.09**	**9.83**	**9.71**	**9.01**
Local Govt. & Other Public Entities						
Central Government	10.61	10.69	10.99	10.16	11.35	9.84
	9.77	9.72	9.96	9.76	8.85	8.45
Private Sector						
Instalment	**18.31**	**18.64**	**17.62**	**17.32**	**17.08**	**16.31**
Mortgage	19.2	17.96	16.81	16.11	15.21	13.82
Personal	12.36	9.9	9.88	9.73	9.61	9.41
Commercial	21.66	25.21	24.77	25.56	26.23	25.46
	14.63	12.87	12.76	12.93	12.9	12.32

For the review year, the interest rate spread on local currency denominated loans, relative to deposits, fell by 45 bps to 14.85 percentage points, following an increase of 76 bps in the preceding year (see Table 13). The narrowing of the spread occurred in the context of a decline of 76 bps in the overall weighted average loan rate as well as a fall of 28 bps in the weighted average deposit rate.

Table 13

COMMERCIAL BANKS LOCAL CURRENCY INTEREST RATE SPREADS (End of Period)(percentage points)	2011	2012	2013	2014	2015	2016
Weighted Average Local Currency Deposit Rate(%)	**2.44**	**2.1**	**2.04**	**2.64**	**1.62**	**1.34**
Overall Spread	**15.59**	**16.34**	**15.45**	**14.54**	**15.3**	**14.85**
Spread by Sector						
Public Sector	**7.54**	**7.84**	**8.05**	**7.19**	**8.09**	**7.67**
Local Govt. & Other Public Entities	8.17	8.59	8.95	7.52	9.72	8.5
Central Government	7.33	7.62	7.92	7.12	7.23	7.11
Private Sector	**15.87**	**16.54**	**15.58**	**14.68**	**15.45**	**14.97**
Instalment	16.76	15.86	14.77	13.47	13.58	12.47
Mortgage	9.92	7.8	7.84	7.09	7.99	8.07
Personal	19.22	23.11	22.73	22.92	24.6	24.12
Commercial	12.19	10.77	10.72	10.29	11.28	10.98

2.6.4.2. Interest Rates – Foreign

The weighted average interest rate on foreign currency denominated loans decreased by 9 bps to 7.26 per cent at end–2016 (see Table 14). This reduction was reflected in the weighted average interest rate on private sector loans, which declined by 20 bps to 7.34 per cent and was evident across all loan categories with the exception of mortgage loans. In contrast, there was an increase in the price of public sector loans by 21 bps to 6.69 per cent.

The overall interest rate spread on foreign currency denominated loans relative to deposits increased to 6.68 pps at end–2016 compared to 6.55 pps at end–2015 (see Table 15). The widening in the spread on private and public sector loans was reflected across all loan categories except for instalment credit. Of note, the widening of the spread reflected a sharper fall in the deposit rate, when compared to the fall in the weighted average loan rate for the year.

Table 14

COMMERCIAL BANKS FOREIGN CURRENCY WEIGHTED AVERAGE INTEREST RATES (DOMESTIC LOANS) (End of Period) (Per Cent)	2011	2012	2013	2014	2015	2016
Overall	**7.93**	**7.55**	**7.39**	**7.27**	**7.35**	**7.26**
Public Sector	**7.34**	**6.84**	**6.5**	**6.29**	**6.48**	**6.69**
Local Govt. & Other Public Entities	7.57	6.82	6.41	6.29	6.48	6.69
Central Government	6.88	6.88	7.02	0.00	0.00	0.00
Private Sector	**8.46**	**7.73**	**7.62**	**7.53**	**7.54**	**7.34**
Instalment	9.96	7.84	8.59	8.53	8.56	7.84
Mortgage	8.66	9.44	6.93	6.73	6.7	6.86
Personal	13.76	15.4	15.63	16.89	17.19	17.14
Commercial	8.04	7.15	7.02	6.85	6.96	6.90

Table 15

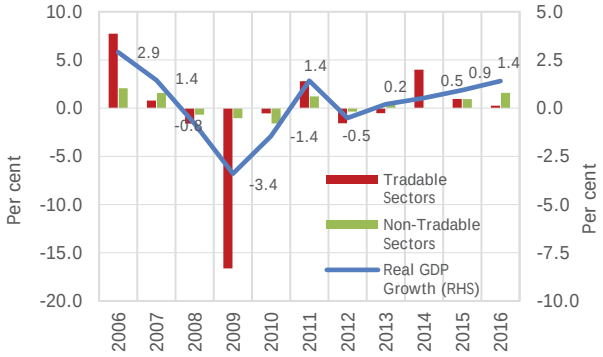
COMMERCIAL BANKS FOREIGN CURRENCY INTEREST RATE SPREADS (End of Period) (percentage points)	2011	2012	2013	2014	2015	2016
Weighted Average Foreign Currency Deposit Rate (%)	**2.71**	**1.28**	**1.06**	**0.95**	**0.8**	**0.58**
Overall Spread	**5.22**	**6.27**	**6.33**	**6.32**	**6.55**	**6.68**
Spread by Sector						
Public Sector	**4.63**	**5.56**	**5.44**	**5.34**	**5.68**	**6.11**
Local Govt. & Other Public Entities	4.86	5.54	5.35	5.34	5.68	6.11
Central Government	4.17	5.6	5.95	-0.95	-0.8	-0.58
Private Sector	**5.75**	**6.45**	**6.55**	**6.58**	**6.74**	**6.76**
Instalment	7.25	6.56	7.53	7.58	7.76	7.26
Mortgage	n/a	8.16	5.87	5.77	5.9	6.28
Personal	11.05	14.12	14.56	15.94	16.39	16.56
Commercial	5.33	5.87	5.95	5.9	6.16	6.32

2.7. Production

2.7.1. Overview

Growth in the domestic economy is estimated to have accelerated to 1.4 per cent for 2016, following growth of 0.9 per cent for 2015 (see **Chart 13**). The expansion for 2016 was largely influenced by improvements in both external and domestic demand. The improvement in external demand was generally observed in the second half of the year underpinned by an acceleration in growth in the US economy (see **Section 2.2: International Economic Developments**). These conditions facilitated an expansion in tourist arrivals to Jamaica. Domestic demand was influenced by increased employment and a stable macroeconomic environment. Notably, business and consumer confidence remained high during the year. Further, growth reflected the impact of increased investments, particularly with regard to infrastructure as well as business process outsourcing, tourism and agro-processing. Economic activity was also supported by more favourable weather conditions relative to 2015.

Chart 13: Real GDP Growth Rates: 2006 – 2016



Source: STATIN and Bank of Jamaica.

Economic growth for the tradable and non-tradable industries in 2016 accelerated 0.5 per cent and 1.6 per cent respectively, relative to increases of 1.0 per cent and 0.9 per cent for 2015. With the exception of Mining & Quarrying and Producers of Government Services, all industries recorded growth (see **Table 16**).

Table 16

INDUSTRIAL CONTRIBUTION TO GDP GROWTH (%)

	2015		2016	
Industries	**Growth**	**Contribution**	**Growth**	**Contribution**
1. GOODS	**1.6**	**42.6**	**3.4**	**59.0**
Agriculture, Forestry & Fishing	-0.1	-0.4	12.8	59.8
Mining & Quarrying	1.0	2.3	-2.7	-4.4
Manufacture	3.6	31.9	0.3	1.6
Construction	1.1	8.7	0.4	2.1
2. SERVICES	**0.7**	**57.4**	**0.8**	**41.0**
Electricity & Water Supply	1.4	4.6	4.0	9.0
Wholesale & Retail Trade, Repairs & Installation	0.6	10.9	0.5	6.7
Hotels & Restaurants	1.9	11.8	2.2	9.0
Transport, Storage & Communication	1.0	11.7	0.7	5.1
Financing & Insurance Services	0.5	5.7	1.4	11.0
Real Estates, Renting & Business Activities	0.5	6.1	0.5	3.7
Producers of Government Services	-0.1	-1.5	-0.1	-0.5
Other Services	1.3	9.4	0.6	2.9
3. FINANCIAL INTERMEDIATION SERVICES INDIRECTLY MEASURED	0.3	1.4	2.1	6.0
TOTAL VALUE ADDED	0.9	100.0	1.4	100.0

Source: STATIN and Bank of Jamaica.

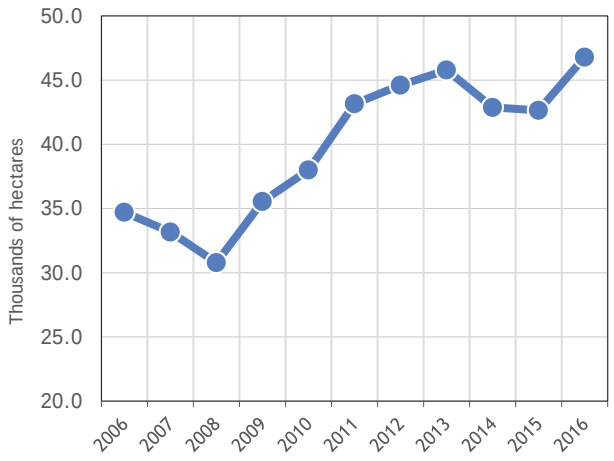
2.7.2. Performance by Industry

Buoyed by favourable weather conditions, continued improvement in crop production techniques and various support initiatives undertaken by the Government and private interests, Agriculture, Forestry & Fishing grew by 12.8 per cent for 2016 in contrast to a decline of 0.1 per cent in 2015. [19] This outturn reflected growth in all quarters, particularly the September 2016 quarter, which recorded a robust increase of 29.1 per cent. While significant growth was recorded in domestic crop production in the year and agriculture export crop has contracted.

For the calendar year, domestic agriculture grew by 17.0 per cent, in contrast to a decline of 0.6 per cent in 2015. The improvement in domestic agriculture was observed in most categories of domestic crop production. Notable increases were observed for fruits, condiments, potatoes and yams (see **Table 17**). The improved weather conditions led to an expansion in hectares under cultivation relative to the previous year (see **Chart 14**). In this context, productivity, measured as output per hectare increased to 14.6 relative to 13.3 in 2015.

[19] Some of these initiatives include, but are not limited to Jamaica's EU-funded Sugar Transformation Programme, Rural Economic Development Initiative (REDI) drip irrigation project as well as the Agro-park Development Programmes.

Chart 14: Hectares Reaped 2006 – 2016



Source: MOA

Table 17

SELECTED DOMESTIC CROP PRODUCTION			
	2015	2016	
Crop Group	Production ('000 tonnes)		% Change
Yams	136.7	156.1	14.2
Vegetables	201.9	201.6	-0.2
Other tubers	41.2	44.9	9.1
Fruits	43.5	45.5	4.7
Condiments	42.8	44.4	3.9
Plantains	38.4	43.4	13.1
Potatoes	58.7	65.0	10.7
Legumes	4.7	4.6	-1.6
Cereals	2.4	2.4	-0.5
Total	**571.4**	**668.8**	**17.0**

Source: Ministry of Agriculture

Table 18

SELECTED AGRICULTURAL EXPORTS			
	2015	2016	% Change
Crop	Exports ('000 tonnes)		
Sugar	133.9	86.1	-35.7
Citrus	3.1	2.4	-22.4
Cocoa	0.3	0.3	-6.8
Coffee	0.8	1	19.2
Pimento	0.3	0.4	56.1
	Production ('000 tonnes)		
Sugar cane	1586	1088.3	-31.4
Banana	55.4	56.8	2.4

Source: Ministry of Agriculture and Sugar Corporation of Jamaica

Agricultural export crops declined by 4.1 per cent, predominantly reflecting lower production of sugar, citrus and cocoa, as pimento and coffee exports improved (see Table 18). The decline in cocoa production partly reflected the impact of the frosty pod disease. Sugar production was affected by the temporary closure of two factories.

Hotels & Restaurants grew by 2.2 per cent relative to 1.9 per cent for 2015. The growth in Hotels was inferred from increases of 2.8 per cent and 5.9 per cent, respectively, in stop-over visitor arrivals and expenditure, relative to the previous year.

The increase in visitor arrivals was primarily attributed to the introduction of new flights and new routes as well as the Fly and Cruise programme. In addition, increases in the hotel room stock was facilitated by the opening and refurbishing of new and existing hotels. Visitor expenditure for the review period was buoyed by increases in the average daily expenditure of tourists, largely supported by improved labour market conditions in major source countries.

Growth in Electricity & Water Supply accelerated to 3.8 per cent in 2016 relative to an increase of 1.4 per cent in 2015. This expansion largely reflected strong growth in electricity consumption, in the context of increases in the customer base, as well as a decline in energy cost associated with an increase in energy diversification initiatives. Owing to more favourable weather conditions during the year, water production increased by 7.1 per cent in contrast to a decline of 0.7 per cent in 2015.

Transport, Storage & Communication grew by 0.7 per cent in 2016, following an expansion of 1.0 per cent in the previous year. The industry's performance reflected expansions in both Transport and Communication. Growth in Communication was consistent with increased broadband penetration, telephone and television service subscriptions. The increase in Transport was associated with a continued rise in domestic cargo movement at the country's port, augmented by increases in both cruise and air passenger arrivals.

Construction & Installation increased by 0.4 per cent relative to growth of 1.0 per cent in 2016. This expansion was evidenced in all quarters, except the September 2016 quarter when the industry contracted. Growth in the industry was bolstered by hotel infrastructural developments, energy-related projects as well as continued construction activities by both the Government and private investors. These included the Jamaica Water Supply Improvement Project, Government's Major Infrastructural Development Programme (MDIP) as well as energy sector projects. Expansion in the Information Technology Enabled Services (ITES) such as Business Process Outsourcing (BPO) also spurred construction growth. This performance was further indicated by an expansion in NHT's housing starts by 160.7 per cent, relative to 2015.[20] Notwithstanding, these developments, the lower expenditure in commercial construction was indicative of the completion of the North-South Leg of Highway 2000 and the Blue Mountain Renewable energy project which tempered the pace of expansion in the industry relative to 2015.

The pace of growth in Manufacturing decelerated to 0.3 per cent in 2016 from 3.6 per cent in 2015. This deceleration was chiefly reflective of a decline of 0.2 per cent in Other Manufacturing as Food, Beverages & Tobacco increased by 0.6 per cent. The decline in Other Manufacturing occurred in the last half of the year and was primarily associated with lower output of refined petroleum due to unplanned shut down in the refinery's operations. This impact of this was partly offset by an expansion in the non-metallic mineral industry (see **Table 19**).

Growth in **Food, Beverages & Tobacco** was tempered by weak performance in the first half of the year, mainly attributed to the significant contraction in sugar production, and a decline in the production of alcoholic beverages. The impact of these contractions was however offset by expansions in food (excluding sugar) and non-alcoholic beverages. The former reflected continued increases in the production of meat, meat products and dairy products while the latter mainly reflected growth in carbonated beverages. Growth in non-alcoholic beverages was partly due to a return of production to Jamaica of a bottling operation and greater import substitution in response to improved competitiveness. Additionally, there was ongoing domestic investment by major manufacturing companies to enhance efficiency in the production of food and beverages.

Table 19

SELECTED MANUFACTURING ITEMS

	2015	2016	% Change
Item	**Production (tonnes)**		
Poultry Meat	113	125	11.2
Sugar	134	83	-38.3
Molasses	69	52	-24.2
Edible Oil	21	22	4.9
Non-Metallic Minerals	809	877	8.4
Animal Feeds	415	461	11.2
	Production ('000 kilolitres)		
Non-Alcoholic Beverages	205	229	11.6
Petroleum Products	68	67	-2.2
Alcoholic Beverages	1310	1153	-12

Source: PIOJ and Bank of Jamaica

Mining & Quarrying contracted by 2.7 per cent for 2016, in contrast to an expansion of 1.0 per cent in the previous year. The adverse performance reflected a contraction of 11.7 per cent in total bauxite production while alumina production remained flat. This outturn is relative to increases of 0.9 per cent and 0.7 per cent in total bauxite production and alumina production, respectively, during 2015. The decline in total bauxite production stemmed from a reduction of 25.1 per cent in crude bauxite which reflected a lower capacity utilisation rate of 61.6 per cent relative to 79.8 per cent in 2015 at the one plant which operated throughout the year. This was mainly attributable to the impact of operational challenges throughout the year.

Growth in **Financing & Insurance Services** accelerated to 1.4 per cent relative to an increase of 0.5 per cent in 2015. This expansion reflected consistent increases in all sub-industries during the year. The growth in monetary institutions was largely attributed

[20] The spike in NHT housing starts is predominantly related to the start-up of the Friendship housing development in St. James, where 1 500 units are expected to be constructed.

to expansions in non-interest income and the stock of loans and advances.

2.7.3. Labour Market Developments

There was a marginal improvement in labour market conditions for 2016 as the average unemployment rate for the year declined by 0.2 percentage point to 13.3 per cent, from 13.5 in 2015. The decline in the unemployment rate reflected growth of 2.9 per cent in employment which outweighed the expansion of 2.5 per cent in the labour force. This outturn was also associated with a decline of 0.3 percentage point in the job seeking rate relative to the previous year. There were increases in employment in all the industries with the exception of Agriculture, Forestry & Fishing, Mining, Quarrying & Refining, Electricity Gas & Water Supply, and Transport, Storage & Communication (see Table 20).

Table 20

SELECTED LABOUR FORCE INDICATORS			
	2015	2016	% Change
Total Labour Force ('000)	1316.7	1349.7	2.5
Employed Labour Force ('000)	1138.7	1171.9	2.9
Unemployment Rate (%)	13.5	13.3	-0.2
Job Seeking Rate (%)	9.1	8.8	-0.3
	Employment by Industry ('000)		
Agriculture, Forestry & Fishing	202.1	198.3	-1.9
Mining, Quarrying & Refining	5.8	5.6	-4.2
Manufacture	73	77.3	6
Electricity, Gas & Water	8.7	7.5	-14.1
Construction & Installation	82.6	91.2	10.5
Wholesale & Retail, Hotels & Restaurants Services	227.3	234.4	3.1
Hotels & Restaurants Services	88.2	94.7	7.3
Transport, Storage & Communications	74.7	73.2	-2
Financial Intermediation	26.4	26	-1.5
Real Estate, Renting and Business Activities	74.2	74.6	0.5

Source: STATIN

Labour productivity measured as output per hour worked and output per worker declined by 2.5 per cent and 1.5 per cent, respectively. For 2015, output per worker remained unchanged while output per hour declined marginally by 0.2 per cent.

Chart 15: Labour Productivity 2006 – 2016

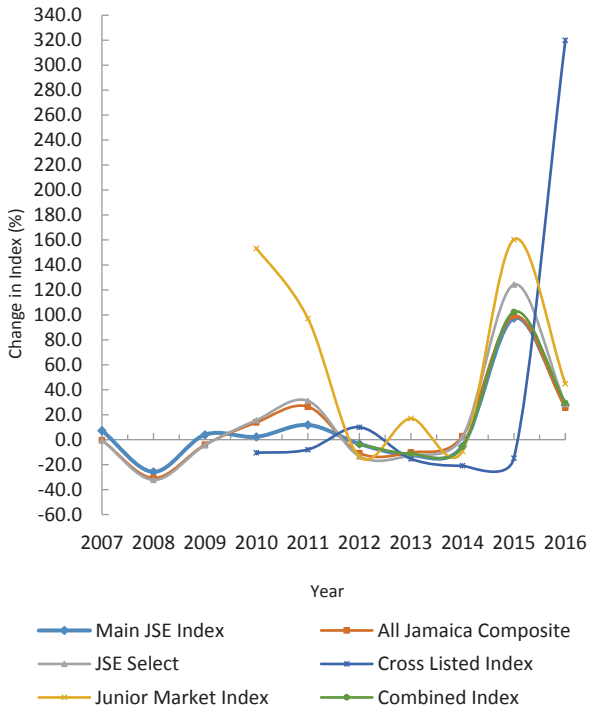
Source: STATIN and Bank of Jamaica.

2.8. The Stock Market

2.8.1. Performance of JSE Indices

All indices of the Jamaica Stock Exchange (JSE) increased for 2016, albeit at a slower pace in comparison to 2015. Specifically, the JSE Main Index increased by 27.6 per cent following an increase of 97.4 per cent recorded for the previous year (see Chart 16).

Chart 16: Annual Growth of the JSE Indices: 2007–2016



Similarly, the Junior Market, Combined, JSE Select and the All Jamaica Composite indices grew by 44.8 per cent, 29.5 per cent, 28.6 per cent and 25.6 per cent, relative to growth of 160.3 per cent, 102.3 per cent, 124.3 per cent and 99.0 per cent, respectively, for 2015. Notably, the Cross Listed Index increased dramatically by 320.0 per cent in comparison to a decline of 14.8 per cent for 2015.[21,22]

The performance of the JSE indices for 2016 occurred against the background of improvements in investor appetite. This was influenced by positive developments in the macroeconomy which included growth in real economic activity, low inflation, improved liquidity conditions as well as Jamaica's successful completion of the EFF supported programme.[23] Additionally, signing a 3-year precautionary Stand-By Arrangement by the Government of Jamaica with the IMF also bolstered investor confidence in the latter part of 2016. At the firm level, higher company profits by large corporates as well as announcements of stocks splits, rights issues and bonus issues contributed to the favourable performance of equity prices.[24] The addition of seven new listings (six junior market listings and one main market listing) also bolstered the performance of the equities market (see **Table 21**). Furthermore, investments in equities continued to provide greater returns relative to foreign currency and domestic money market investments for the review period. More specifically, equities offered a 12-month average return of 27.8 per cent while GOJ global bonds offered an average return of 12.8 per cent. In addition, the average interest rate in the 30-day private money market was 6.3 per cent at end-2016 (see **Chart 17**).[25]

There was consistent growth in the JSE indices during 2016. Of note, the fourth quarter reflected the highest quarterly increase for most of the indices (see **Chart 18**). Consistent with improved investor sentiment, all market activity indicators of the JSE Main Index increased during 2016 with the exception of the volume of stocks traded.

Table 21

STOCK MARKET DEVELOPMENTS IN 2016	
JSE New Listings	
Main Market	**Junior Market**
Portland JSX Limited	IronRock Insurance Company Limited
	CAC 2000 Limited
	tTech Limited
	Jetcon Corporation Limited
	ISP Finance Services Limited
	Key Insurance Company Limited

Chart 17: Returns from Equities, Fixed Income Investments & US Dollar Positions: Comparative Indicators

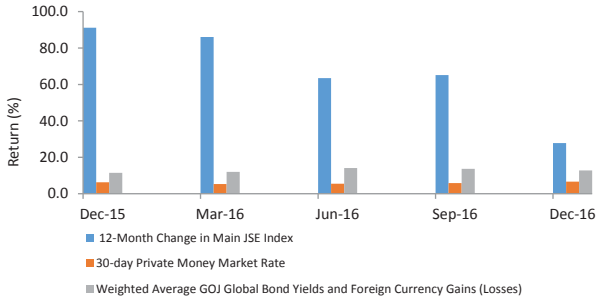
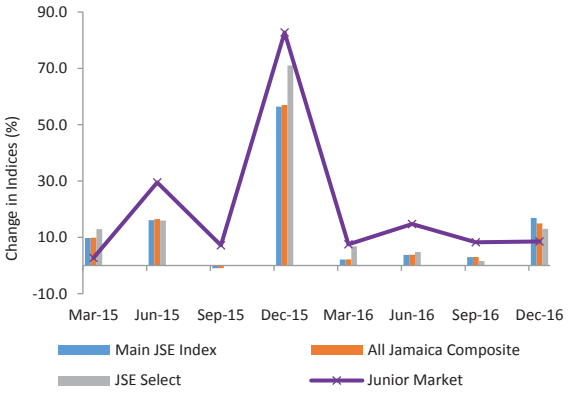


Chart 18: Quarterly Growth of the JSE Indices: 2015 – 2016



[21] See JSE website for composition of each index.

[22] The outturn for the Cross Listed Index was directly attributable to the activities of Trinidad Cement Limited, the only company currently listed for this index. In particular, on 05 December 2016, an offer and take-over bid was made to all shareholders by CEMEX (a global entity that specializes in manufacturing and distribution of construction related products) which influenced the level of market activity and ultimately the index outturn for end-2016.

[23] Notably, there were three consecutive quarters of GDP growth with further expansion estimated to occur for the December 2016 quarter.

[24] At end-September 2016, the top five market capitalization companies listed on the main and junior market recorded improved company profit for the nine months period.

[25] The return on foreign currency investments is computed as capital appreciation/depreciation resulting from exchange rate movements.

Specifically, the number of transactions and the value of stocks traded grew by 41.0 per cent and 25.0 per cent, relative to growth of 35.5 per cent and 59.7 per cent, respectively, for the previous year. In contrast, the volume of stocks traded declined by 3.8 per cent following a decline of 11.2 per cent for the prior year (see Table 22).

2.8.2. Sectoral Performance

The overall advance to decline ratio for the review period was 24:5 in comparison to 27:5 as at end-2015. Price appreciation was broad-based and reflected the performance of stocks within all sectors, with the exception of Tourism. Notably, stocks within the Manufacturing, Conglomerates and Finance sectors accounted for nine of the top ten advancing stocks (see Table 23).

Table 22

TRADING ACTIVITIES OF THE MAIN JSE 2015-2016			
	Values J$mn	**Volumes (mn)**	**No. of Transactions**
Mar-15	3 699.7	274.4	4 109.0
Jun-15	3 111.5	297.6	5 142.0
Sep-15	8 061.7	815.2	4 552.0
Dec-15	5 555.8	494.1	7 954.0
Total	**20 428.7**	**1 881.3**	**21 757.0**
Mar-16	5 805.8	403.1	8 752.0
Jun-16	5 392.1	557.8	7 256.0
Sep-16	7 511.4	507.3	7 665.0
Dec-16	6 823.1	341.8	7 011.0
Total	**25 532.5**	**1 810.0**	**30 684.0**
Annual Change %	**2015**	**2016**	
Values	59.7	25	
Volumes	-11.2	-3.8	
No. of Transactions	35.5	41	

Table 23

TOP TEN ADVANCING STOCKS for 2016		
	Price($) (e.o.p)	**Price Change (%)**
MANUFACTURING		
Trinidad Cement Limited	63.0	320.0
Caribbean Cement Company	34.0	78.4
Kingston Wharves	20.0	76.1
Berger Paints (Jamaica)	5.6	75.0
CONGLOMERATES		
GraceKennedy Limited	123.0	51.4
Pan Jamaican Investment Trust	140.0	48.9
Sagicor Group Jamaica	29.0	45.4
FINANCE		
Barita Investments Limited	6.0	57.9
Jamaica Stock Exchange	27.5	47.8
OTHER		
Palace Amusement	195.0	124.7
DECLINING STOCKS for 2016		
CONGLOMERATES		
Jamaica Producers Group	9.3	-70.2
COMMUNICATION		
Radio Jamaica	1.3	-64.5
LIME/ Cable & Wireless	0.8	-42.0
TOURISM		
Ciboney Group	0.2	-14.3
MANUFACTURING		
Salada Foods Jamaica	8.5	-0.2

2.9 Public Finance

2.9.1. Introduction

The Government of Jamaica (GOJ), throughout 2016, was resolute in its effort to ensure fiscal prudence and achieve continued success under its economic reform programme. The success of the Government in 2016 was facilitated by a revenue package of 0.8 per cent of GDP for FY2016/17, which financed the sizeable increase in the income tax threshold to One Million Dollars, implemented in July 2016. Against this background, in November 2016, the Government achieved its thirteenth consecutive successful review under the International Monetary Fund (IMF) Extended Fund Facility (EFF) programme. In addition, the GOJ successfully negotiated a new precautionary 3-year Stand-By Arrangement (SBA) with the IMF and requested the cancellation of the EFF Facility. The successor programme is aimed at preserving macroeconomic stability while pursuing other policies that will provide the long-term foundation for sustained growth and job creation. The SBA is intended to be an insurance against potential balance of payments pressures from adverse external shocks. In that regard, if required, the Government has access to US$1.7 billion from the IMF.

The main elements of the new SBA include the acceleration of growth and job creation, commitment to a primary balance target of 7.0 per cent of GDP to support debt reduction while completing reforms aimed at improving revenue administration and shifting the tax system away from direct towards indirect taxes. The Government has also recommitted to a lowering of the public sector wage bill, enhancing the efficiency of service delivery by the public sector, the creation of fiscal space for growth-enhancing capital spending and expanded support for the most vulnerable in the society. To support the growth agenda, Jamaica has committed to advancing the creation of a modern monetary framework anchored on maintaining low and stable inflation and creating a more robust, inclusive and competitive financial system. In addition, a key priority of the Government is to decisively tackle crime. In that regard, efforts are underway to define and finance a programme to strengthen public order and security. This new SBA programme is predicated on growth accelerating in the range 2.0 – 3.0 per cent over the medium-term and inflation anchored at an average of 5.5 per cent.

Information as at end-2016 indicates that the Government is firmly on track to achieve its targets under the new SBA. In particular, the primary balance target for the Central Government and the overall balance of the public sector were attained for the December 2016 quarter.

2.9.2. Central Government Performance

Central Government operations for April-December 2016 resulted in a fiscal deficit of $24.5 billion (1.3 per cent of GDP), which was $26.7 billion below the budgeted deficit (see **Tables 24** and **25**). The outturn was marginally lower than the deficit of $24.9 billion recorded for the corresponding period of 2015. Notably, the primary surplus of $76.8 billion (4.4 per cent of GDP) for the fiscal period exceeded the IMF Stand-By Arrangement target by $22.8 billion. Further, the overall deficit of $1.2 billion was $13.3 billion lower than the overall deficit recorded for the similar quarters of 2015, reflecting continued fiscal consolidation in the Government's accounts.

For April-December 2016, Revenue & Grants was $17.6 billion above the budgeted amount and exceeded the intake for the corresponding period in 2015 by $33.3 billion. The over-performance of revenue was reflected primarily in Tax Revenue, Non-tax Revenue and Grants as Bauxite Levy and Capital Revenue underperformed. For Tax Revenue, higher than budgeted receipts were recorded in Income & Profits and Production & Consumption, partly offset by lower receipts in International Trade.

Income & Profits was buoyed by the performance of PAYE, company taxes and tax on interest. Company taxes and PAYE benefitted from increased administrative efforts by the Tax Administration Jamaica (TAJ) in the context of the implementation of the employer's tax credit, which encouraged companies to pay on time. The performance of 'tax on interest' was attributable to lower than expected payment of refunds, improvement in administrative efficiency and due diligence.

Table 24

CENTRAL GOVERNMENT SUMMARY ACCOUNTS (J$MN)	FY 2015/16 Q1- Q3	FY 2016/17 Q1- Q3	Budget Q1- Q3	Variance	%
Revenue & Grants	**318 710.0**	**352 040.0**	**334 464.5**	**17 575.4**	**5.3**
Revenue	**314 727.1**	**347 169.0**	**331 907.1**	**15 262.0**	**4.6**
Tax Revenue	291 652.3	322 067.9	311 821.5	10 246.4	3.3
Non-Tax Revenue	20 962.6	22 854.2	17 575.1	5 279.1	30.0
Bauxite Levy	1 623.6	1 830.9	1 980.9	- 150.0	- 7.6
Capital Revenue	488.6	416.0	529.6	- 113.6	- 21.4
Grants	**3 983.0**	**4 870.9**	**2 557.5**	**2 313.4**	**90.5**
Expenditure	**343 601.4**	**375 529.3**	**384 688.7**	**-9 159.3**	**- 2.4**
Recurrent Expenditure	317 584.2	345 652.4	349 405.6	-3 753.2	- 1.1
Programmes	100 076.9	113 107.3	108 774.9	4 332.5	4.0
Compensation of Empoyees	126 627.4	132 267.6	136 406.6	-4 139.0	- 3.0
Interest	90 879.9	100 277.5	104 224.1	-3 946.6	- 3.8
Domestic	51 554.4	44 481.0	46 674.5	-2 193.5	- 4.7
Foreign	39 325.5	55 796.5	57 549.6	-1 753.1	- 3.0
Capital Expenditure	26 017.2	29 876.9	35 283.1	-5 406.2	- 15.3
Fiscal Balance	**-24 891.4**	**-23 489.4**	**-50 224.1**	**26 734.8**	**- 53.2**
Primary Balance	**65 988.5**	**76 788.2**	**54 000.0**	**22 788.2**	**42.2**
Loan Receipts	**276 910.3**	**69 109.7**	**63 330.4**	**5 779.3**	**9.1**
Domestic	10 469.1	38 006.0	31 206.0	6 800.0	21.8
External	266 441.2	31 103.7	32 124.4	-1 020.7	- 3.2
Divestment	0.0	14 604.7	14 539.2	65.6	0.5
Amortization	**266 465.5**	**61 390.0**	**56 291.0**	**5 099.0**	**9.1**
External	253 298.6	35 530.7	34 779.6	751.1	2.2
Domestic	13 166.9	25 859.3	21 511.5	4 347.9	20.2
Overall Balance	**-14 446.6**	**-1 165.0**	**-28 645.6**	**27 480.7**	**- 95.9**

Note: Fiscal balance equals Revenue & Grants minus Expenditure.
Primary balance equals Revenue & Grants minus non-interest expenditure.
Overall balance equals Fiscal Balance plus net amortization.

Table 25

FISCAL PERFORMANCE RATIOS	Apr-Dec 2015	Apr-Dec 2016		
	Actual	Actual	Bugdet	IMF SBA Programme
Borrowing Requirement (BR)	-1.5	-1.3	-2.9	
Curent Balance (CB)	-0.2	0.1	-1.0	
Primary Balance (PB)	3.9	4.4	3.1	3.1
Interest Payment/GDP	5.4	5.7	5.9	
Fiscal Stability Ratio (FSR)	-1.1	-1.1	-1.2	
Non-Interest Expenditure (NIE)	14.9	15.7	16.0	

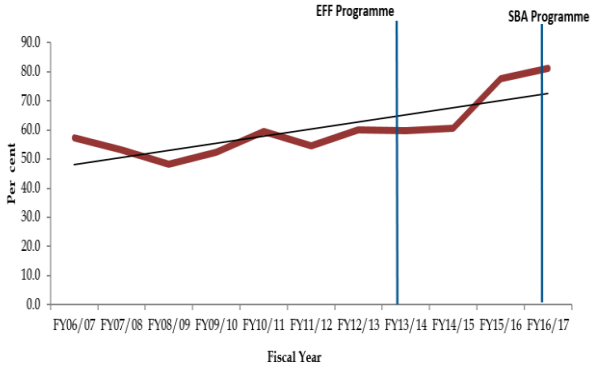
International Benchmark
BR greater than **3% of GDP** often indicate serious fiscal balances
FSR closer to zero indicates more stable government finances
Negative CB Ratio of less than 1% indicates dissaving or a need for fiscal adjustment as the public sector is borrowing for consumption
PB ratio above zero indicates major fiscal adjustment to cover interest on past obligations
* *Recurrent expenditure includes programmes, wages & salaries and interest payments*

Source: Ministry of Finance and the Public Service

The favourable outturn in Production & Consumption was reflected in SCT (Local), Stamp Duty and Education Tax. With respect to SCT (Local), the outturn resulted from increased production from the Petroleum Corporation of Jamaica. Stamp Duty exceeded budgetary expectation due to an extraordinary payment stemming from the sale of high end properties as well as greater than estimated issuance of shares. Education Tax also benefited from improvement in the efficiency of collection by the TAJ. Of note, with the exception of Custom Duty, all categories within International Trade performed below budgetary expectations, particularly Travel Tax and SCT (Imports). For Travel Tax, timing issues relating to the impact of the new tax rate on ticket purchases contributed to the lower than budgeted outturn. Lower than expected refined fuel imports drove the outturn for SCT (Imports).

The favourable performance of Tax Revenue for the review period, was reflected in a C–Efficiency (GCT & SCT) ratio of 81.8 per cent.[26] The ratio was 0.1 percentage point higher than the implicit budgeted ratio of 81.0 per cent as well as 3.5 percentage points above the ratio for the corresponding period of 2015 (see Chart 19).

Chart 19: C–Efficiency Ratio



For the fiscal year–to–December 2016, Expenditure was $9.2 billion below budget and $31.9 billion higher than spending in the corresponding period of 2015. With the exception of programmes, all areas of

[26] 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 ratio for small countries is 83.0 per cent. Factors linked to a high C–efficiency ratio are a relatively high share of trade to GDP (presumably because it is relatively easier to collect the VAT at the point of import than domestically); high literacy rates and the age of the VAT.

expenditure were lower than budgeted. The lower spending on Wages & Salaries reflected the unsettled wage negotiations between some groups within the public sector and the Government for the contract period FY2015/16 – FY2016/17. For capital expenditure, the deviation from budget reflected the slow implementation as well as administrative delays in the execution of projects. Lower domestic interest rates and the non–materialization of some contingency payments contributed to the deviation in interest payments.

2.9.3. Financing

The Government's gross financing requirement for the fiscal year–to–December 2016 amounted to $84.9 billion reflecting a fiscal deficit of $24.5 billion and amortization of $61.4 billion. Given loan receipts of $67.1 billion and debt repayment from the PetroCaribe Development Fund of $14.6 billion, the Government drew down $1.2 billion from bank balances to finance its operations. Loan inflows during the period included $26.8 billion raised on the domestic capital market, Treasury Bill issuances totalling $11.2 billion as well as external project and policy based loans of US$79.3 million and US$150.0 million, respectively.

2.9.4. Public Bodies Performance

For April – December 2016, the Public Bodies recorded an overall surplus of $34.2 billion relative to a targeted loss of $7.4 billion (see **Table 26**). This compares to the overall surplus of $29.2 billion for April – December 2015. The outturn was primarily attributable to lower than anticipated capital and current expenses, partly offset by lower than expected current revenue. Notably, transfers from the GOJ to the public bodies were $6.1 billion lower than budgeted.

Table 26

TOTAL PUBLIC BODIES (J$MN)	FY 2015/16 Q1- Q3	FY 2016/17 Q1- Q3	Budget Q1- Q3	Variance
1. Current Revenue	281 341.8	286 486.6	288 714.3	-2 227.6
2. Current Expenses	-227 627.2	-216 563.6	-245 401.5	28 837.9
3. Current Balance	**53 714.6**	**69 923.1**	**43 312.8**	**26 610.3**
4. Adjustments	8 240.4	5 248.2	5 905.5	- 657.3
of which Depreciation	10 973.2	9 158.1	12 936.6	-3 778.5
5. Operating Balance	**61 955.0**	**75 171.3**	**49 218.3**	**25 953.0**
6. Capital Account	-12 290.5	-16 794.3	-37 436.7	20 642.5
7. Transfers from Government	10 246.3	12 836.1	18 969.8	-6 133.7
8. Transfers to Government	-30 721.8	-36 972.4	-38 199.6	1 227.2
9. Overall Balance (5+6+7+8)	**29 189.0**	**34 240.6**	**-7 448.3**	**41 688.9**

Source: Ministry of Finance and the Public Service

2.9.4.1. Selected Public Bodies (SPBs)[27]

The SPBs recorded an overall surplus of $14.7 billion relative to the targeted loss of $9.3 billion (see **Table 27**). The better than expected outturn reflected containment in current and capital spending where the latter resulted from delays in the execution of several capital projects. The main entities that experienced delays in capital projects were the National Housing Trust (NHT), Petrojam and the National Water Commission (NWC). In addition, an improvement in account receivables contributed to the over–performance of the SPBs, mainly driven by Petrojam. Notably, current revenue was below budget due primarily to reduced sales by Petrojam owing to lower than expected production and prices. The fallout in current revenue was partly offset by higher than targeted collection by the NHT.

Table 27

SELECTED PUBLIC BODIES(J$MN)	FY 2015/16 Q1- Q3	FY 2016/17 Q1- Q3	Budget Q1- Q3	Variance
1. Current Revenue	223 420.5	230 704.4	237 560.0	-6 855.6
2. Current Expenses	-191 305.0	-185 342.2	-208 557.5	23 215.4
3. Current Balance	**32 115.4**	**45 362.2**	**29 002.4**	**16 359.8**
4. Adjustments	10 911.2	10 185.9	5 420.0	4 765.8
of which Depreciation	10 095.4	8 173.6	11 760.4	-3 586.8
5. Operating Balance	**43 026.7**	**55 548.1**	**34 422.5**	**21 125.6**
6. Capital Account	-7 443.4	-14 672.9	-32 421.5	17 748.6
7. Transfers from Government	7 930.7	7 528.7	13 569.6	-6 040.8
8. Transfers to Government	-27 278.0	-32 486.3	-28 740.6	-3 745.7
9. Overall Balance (5+6+7+8)	**16 236.0**	**15 917.6**	**-13 170.0**	**29 087.6**

Source: Ministry of Finance and the Public Service

[27] Includes: Petrojam, National Water Commission (NWC), National Housing Trust (NHT), National Road Operating and Constructing Company Limited (NROCC,) National Insurance Fund (NIF), and Port Authority of Jamaica (PAJ).

2.9.4.2. Other Public Bodies (OPBs) [28]

For the fiscal-year-to-December 2016, the OPBs recorded an overall surplus of $18.3 billion, $12.6 billion higher than projected (see **Table 28**). The entities' performance reflected greater than expected current revenue as well as lower than targeted capital expenditure. The former was chiefly attributable to greater collections from passenger aviation fees by the Jamaica Civil Aviation Authority and higher income receipts by the PetroCaribe Development Fund. The containment in capital spending was observed mostly within the National Health Fund. Other entities that recorded lower than expected capital spending included the Jamaica Civil Aviation Authority and the Universal Service Fund.

Table 28

OTHER PUBLIC BODIES (J$MN)	FY2015/16 Q1-Q3	FY2016/17 Q1-Q3	Budget Q1-Q3	Variance
1. Current Revenue	57 921.3	55 782.3	51 154.3	4 628.0
2. Current Expenses	-36 322.2	-31 221.4	-36 844.0	5 622.5
3. Current Balance	**21 599.1**	**24 560.9**	**14 310.3**	**10 250.5**
4. Adjustments	-2 670.8	-4 937.7	485.5	-5 423.2
of which Depreciation	877.8	984.4	1 176.2	- 191.7
5. Operating Balance	**18 928.3**	**19 623.2**	**14 795.8**	**4 827.4**
6. Capital Account	-4 847.1	-2 121.4	-5 015.3	2 893.9
7. Transfers from Government	2 315.6	5 307.3	5 400.2	- 92.9
8. Transfers to Government	-3 443.8	-4 486.1	-9 459.0	4 972.9
9. Overall Balance (5+6+7+8)	**12 953.0**	**18 323.0**	**5 721.7**	**12 601.3**

Source: Ministry of Finance and the Public Service

2.9.5. Debt Stock[29]

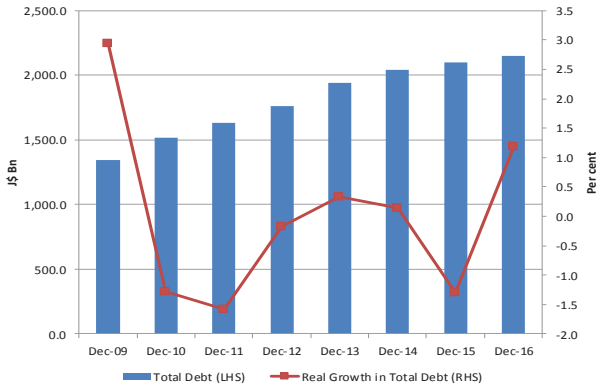
At end-2016, Jamaica's stock of debt was $2 150.1 billion (122.3 per cent of GDP), relative to $2 102.2 billion (124.3 per cent of GDP) at end-2015 (see **Table 29**). The increase in debt was reflected in an expansion in the external debt as the domestic debt declined.[30] Notably, the debt stock reflected a real increase of 1.2 per cent at end-2016, relative to end-March 2016. This increase compares to the real decline of 1.3 per cent for the similar period of 2015 (see **Chart 20**).

Table 29

JAMAICA'S TOTAL PUBLIC SECTOR DEBT (J$MN)	December 2014	% GDP	FY-Dec 2015 Growth %	December 2015	% GDP	FY-Dec 2016 Growth %
Domestic Debt	860 262.6	50.9	- 18.5	834 320.0	47.5	2.3
External Debt	1 241 957.9	73.4	25.9	1 315 742.6	74.9	5.0
Total Debt	2 102 220.5	124.3	3.0	2 150 062.6	122.3	3.9

Source: Ministry of Finance and the Public Service

Chart 20: Jamaica's Total Public Sector Debt



Source: Ministry of Finance and the Public Service

2.9.6. External Debt

At end-2016, the Jamaica Dollar equivalent of the external debt increased by 5.0 per cent to $1 315.7 billion relative to the stock at end-March 2016 (see **Table 30**). The increase was mainly attributed to a depreciation of 5.2 per cent of the domestic currency vis-à-vis the US dollar. However, the stock of external debt in US dollars declined by 0.2 per cent to US$10 244.0 million during the period. The decline in the US dollar value of the external debt reflected the amortization of multilateral and commercial loans, partly offset by the receipt of US$229.3 million in policy based and project loans from the Inter-American Development Bank, Caribbean Development Bank and World Bank as well as US$116.4 million in balance of payments support from the IMF under the EFF.

Central Government accounted for 84.3 per cent of Jamaica's external debt at end-2016, relative to 85.2 per cent at end-March 2016. The ratio of external debt service to exports fell by 7.7 percentage points to 24.5 per cent at end-2016 relative to end-2015, mainly due to lower external amortization. Similarly, the ratio of external debt service to revenue (less grants) declined

[28] Among which are Petro Caribe, Road maintenance Fund (RMF), Student Loan Bureau (SLB), Civil Aviation Authority (CAA)

[29] Includes Central Government, Bank of Jamaica and External Guaranteed Debt as defined by GOJ.

[30] External debt is defined as all debt issued outside of Jamaica.

by 9.0 percentage points to 28.2 per cent at end–2016 when compared to a year earlier. These ratios continue to reflect improvements towards a sustainable external debt position.

Table 30

EXTERNAL DEBT December 2014 - December 2016 ($ MN)						
	Dec-14	Mar-15	Dec-15	Mar-16	Dec-16	FY-Dec 2016 Growth %
External Debt ($J)	992 800.0	986 782.2	1 241 957.9	1 252 811.3	1 315 742.6	5.0
External Debt ($US)	8 658.6	8 577.5	10 314.0	10 265.4	10 244.0	- 0.2

Source: Ministry of Finance and the Public Service

2.9.7. Domestic Debt

Domestic debt at end–2016 was $834.3 billion reflecting an increase of 2.3 per cent relative to the end of the previous fiscal year. The increase was largely attributable to the issuance of three benchmark investment (BMI) notes, totalling $26.8 billion, partially offset by the repayment of $6.5 billion from the maturity of USD BMI notes in September 2016. Given the above, the fixed rate portion of the domestic debt stock rose by 0.9 percentage point to 59.6 per cent while the foreign currency share fell by 0.5 percentage point to 8.1 per cent at end–2016 when compared to end–March 2016 (see **Table 31**).

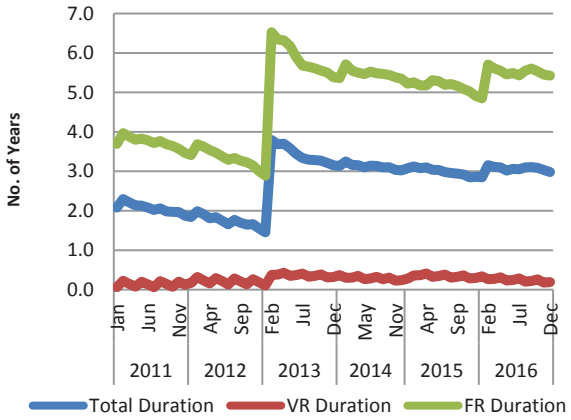
There was a lengthening of the maturity profile of domestic debt at end–2016 with 42.6 per cent of domestic debt scheduled to mature within 5 years relative to 44.3 per cent at the end of the previous fiscal year, reflecting the issuance of longer dated BMI notes. Notwithstanding, there was a marginal deterioration in the duration of the GOJ's domestic debt instruments, which declined to 3.0 years at December 2016 relative to 3.1 years at end–March 2016 (see **Chart 21**).

Table 31

STRUCTURE OF DOMESTIC DEBT (Per cent)							
	Dec-12	Dec-13	Mar-14	Dec-14	Dec-15	Mar-16	Dec-16
Fixed Rate Debt	56.0	67.9	67.0	67.7	60.7	58.6	59.6
Debt maturing in less than 5 years	53.2	31.9	30.0	41.6	48.2	44.3	42.6
Foreign Currency Debt	18.7	23.2	21.5	23.2	23.2	8.6	8.1

Source: Ministry of Finance and the Public Service

Chart 21: Duration of the Domestic Debt Portfolio



2.10. Monetary Policy & Interest Rates

2.10.1. Overview

During 2016, Bank of Jamaica (BOJ) reduced its signal interest rate, the rate payable on its 30–day Certificate of Deposit (CD), by 25 basis points (bps) with similar adjustment to the interest rates on its overnight lending facilities. The lowering of the signal rate reflected the generally favourable outlook for inflation over the near– to medium–term amidst improved macroeconomic fundamentals. During the year, the Bank also advanced its plan to transition to using its overnight CD rate as its policy rate and to more clearly define the Bank's interest rate corridor with the objective of enhancing the effectiveness of the monetary transmission mechanism. The Bank also raised the cash reserve and liquid asset reserve requirements for foreign currency liabilities to levels consistent with domestic currency liabilities while discontinuing the remuneration of foreign currency reserve holdings. This adjustment was intended to curb the growing trend in dollarization which led to an accelerated pace of depreciation for 2016. The Bank continued to manage Jamaica Dollar liquidity via open market operations (OMO) through issues of regular debt instruments and repurchase operations.

2.10.2. Developments and Challenges

On 31 May 2016, the BOJ reduced its policy rate by 25 basis points to 5.00 per cent. The adjustment was in the context of the favourable inflation outlook for the near– to medium–term amidst improved macroeconomic fundamentals. Additionally, the risks to inflation in the near term were perceived to be

generally skewed to the downside while there was a downward trend in inflation expectations. The BOJ also lowered rates on both tiers of its overnight Standing Liquidity Facility by 25 basis points to 7.25 per cent and 9.30 per cent, respectively (see Chart 22 & Chart 23).

During 2016, the Bank started the process of transitioning from the 30-day CD rate to the rate on its overnight CD as the policy rate. This adjustment is in line with international best practices to improve the effectiveness of monetary policy transmission. As such, on 01 September the Bank increased the interest rate on its overnight CD by 275 bps to 3.00 per cent, a rate more consistent with overnight private money market rates (PMMR). The aim of this increase was to clearly define the floor of the BOJ interest rate corridor at the shortest end of the yield curve. In the final quarter of 2016, BOJ took a further step in this transition process by reducing the frequency of 30-day CD offerings to twice per week. BOJ now reflects an interest rate corridor of 425 basis points, representing the spread between the Bank's overnight lending facility and overnight CD.

A major challenge for the Central Bank during the year was the emergence of bouts of instability in the foreign exchange market associated with increased demand for foreign currency to meet portfolio needs. In response, the Bank took a multi-pronged approach to restoring stability to the market. This was evidenced in the Bank's reduced offering of liquidity at the short end of the market, particularly in the December 2016 quarter, increased intervention sales and an increase in the cash and liquid asset reserve requirements for foreign currency liabilities by 3.0 percentage points to 12.0 per cent and 26.0 per cent, respectively, mirroring those for domestic currency liabilities. This adjustment to the reserve requirements, coupled with the discontinuation of remuneration on foreign currency reserve holdings, was aimed at removing the bias towards foreign currency deposit holdings and stemming the growing trend in dollarization.

Chart 22: Interest rate on BOJ 30-day Certificate of Deposit

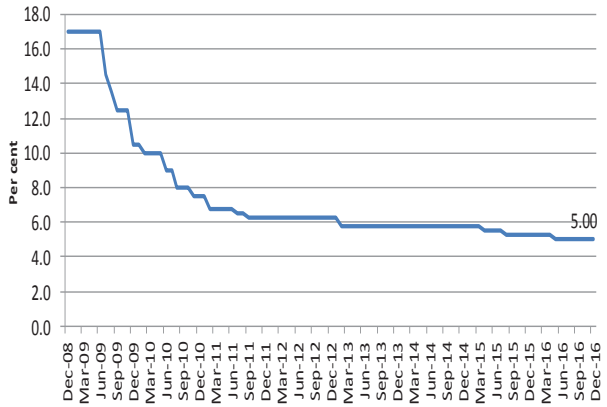
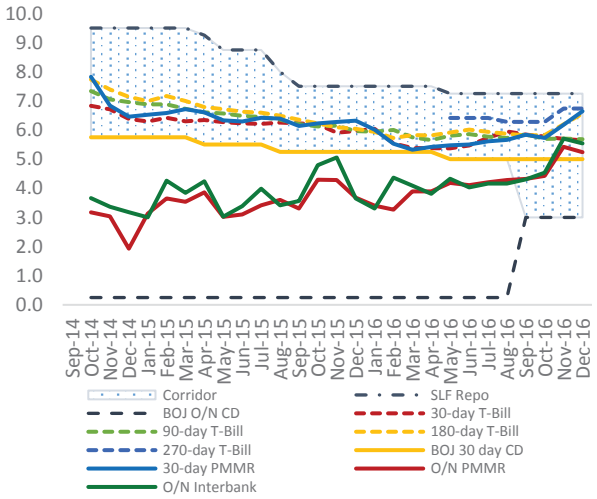


Chart 23: Treasury Bill Yields, Private Money Market Rates & rates on BOJ's Certificates of Deposit and Overnight lending Facility



2.10.3. Base Money Management

In the context of these developments, the monetary base expanded by 15.1 per cent for 2016, relative to an expansion of 10.9 per cent for 2015 (see Table 32). This acceleration was reflected in an uptick in the growth of currency issue to 16.6 per cent from 12.5 per cent for 2015 and a sharp increase in the growth in the current account balances of commercial banks to 22.5 per cent from 8.0 per cent. An increase in the NIR of $67.5 billion (US$282.4 million) was the main source of expansion in the monetary base and was largely influenced by net purchases under the public sector facility (PSE Facility).

Table 32

SUMMARY ACCOUNTS OF THE BANK OF JAMAICA FLOWS - J$ MILLION	2015	2016			2016
	Total	Jan - Mar	Apr - Jun	Jul - Sep	Oct - Dec	Total
Net International Reserves (US$)	**436.2**	**-21.5**	**-150.4**	**197.9**	**256.4**	**282.4**
NET INT'L RESERVES (J$)	**50 011.9**	**-2 462.1**	**-17 245.4**	**54 486.4**	**32 703.5**	**67 482.3**
Assets	50 574.0	-2 238.2	-8 531.8	66 544.5	30 018.6	85 793.0
Liabilities	-562.1	-223.9	-8 713.6	-12 058.1	2 684.9	-18 310.7
NET DOMESTIC ASSETS	**-36 682.7**	**262.3**	**17 915.5**	**-50 055.5**	**-17 118.3**	**-48 995.9**
Net Claims on Public Sector	**-26 832.1**	**17 087.1**	**8 112.2**	**-37 858.9**	**3 879.5**	**-8 780.1**
- Central Government Deposits	-33 801.1	28 979.4	4 980.4	-11 371.9	-4 590.0	17 997.8
- Government Securities	1 157.0	-7 723.2	310.6	2 336.2	6 319.8	1 243.4
- Other Public Sector	-6 775.7	-1 084.9	22 675.4	-23 608.8	2 523.1	504.8
- Other	12 587.6	-3 084.1	-19 854.2	-5 214.3	-373.4	-28 526.1
Net Credit to Banks	**-2 953.1**	**-2 298.4**	**-489.6**	**-5 183.4**	**-7 425.8**	**-15 397.2**
Open Market Operations	**-13 978.2**	**-18 384.3**	**10 999.7**	**2 361.9**	**-8 363.5**	**-13 386.1**
Other	**7 080.6**	**3 857.8**	**-706.8**	**-9 142.0**	**-5 208.5**	**-11 199.5**
MONETARY BASE	**13 329.2**	**-2 199.8**	**670.1**	**4 430.9**	**15 585.2**	**18 486.4**
- Currency Issue	9 357.6	-4 305.9	-252.5	3 212.1	15 323.5	13 977.3
- Cash Reserve	3 912.9	2 021.9	746.4	1 278.5	436.7	4 483.5
- Current Account	58.7	84.1	176.1	-59.6	-175.1	25.6
Memo:						
NIR Stock (US$MN) e.o.p.	2 437.3	2 415.5	2 265.1	2 463.0	2 719.4	2 719.4
Growth in Monetary Base (%)	11.8	-1.8	0.6	3.7	12.5	15.1
Inflation (%)	3.7	-1.3	0.7	1.4	0.9	1.7

Table 33

QUANTITATIVE PERFORMANCE CRITERIA Monetary Targets as at Dec' 16	Target	Outturn
Non-Borrowed Reserves - US$Mn	1 418.6	1 667.7
Monetary Policy Consultation Clause-CPI (Inflation) (%)		
Upper band	9.0	
Point estimate		1.7
Lower band	1.0	

2.10.4. Market Determined Interest Rates

The weighted average yields on GOJ Treasury Bills (T-Bills) generally declined during the year compared to the corresponding period in 2015 (see **Table 34** and **Chart 22**). Specifically, the weighted average yields on GOJ 30-day and 90-day T-Bills decreased by 33 and 32 bps to 5.64 and 5.68 per cent, respectively.

These reductions were predominantly reflected in the March and December quarters. In the March quarter, there were reductions of 58 bps and 21 bps in the 30 and 90-day T-Bills, respectively given increased liquidity influenced by the GOJ debt payment of $62.0 billion for the first tranche of maturing National Debt Exchange bonds. The reduction in the December quarter mainly reflected increased demand for these short-term instruments in a context where BOJ reduced the frequency with which it offered its 30-day CD. However, the 180-day T-Bill instrument increased by 52 bps to 6.56 per cent for 2016 relative to end-2015 in a context where liquidity conditions were fairly tight. This tight liquidity also influenced increases in money market rates for 2016 relative to 2015. Specifically, the monthly average interest rates on the overnight private money market instruments (PMMR), the 30-day PMMR instrument as well as the interbank rate increased by 161 bps, 22 bps and 209 bps to 5.28 per cent, 6.54 per cent and 5.76 per cent, respectively for 2016 relative to 2015.

Table 34

WEIGHTED AVERAGE TREASURY YIELDS (PER CENT)	30 -day WATBY		90-day WATBY		180-day WATBY	
	2015	2016	2015	2016	2015	2016
March	6.30	5.38	6.73	5.75	7.00	5.83
June	6.23	5.47	6.48	5.86	6.63	6.01
September	6.23	5.84	6.20	5.86	6.35	5.81
December	5.97	5.64	5.96	5.68	6.04	6.56

Table 35

AVERAGE PRIVATE MONEY MARKET INTEREST RATES	O/N		30-day		I/B	
	2015	2016	2015	2016	2015	2016
March	3.65	4.10	6.68	4.38	3.99	3.85
June	3.14	4.15	6.31	5.54	3.50	4.20
September	3.49	4.33	6.14	5.78	3.70	4.10
December	3.67	5.28	6.32	6.54	3.67	5.76

2.11. Economic Outlook

2.11.1. Overview

Jamaica's economy is projected to grow in 2017 at a faster rate than the expansion recorded in 2016 largely reflecting the impact of on-going structural reforms, improved confidence and increased external and domestic demand. Growth in aggregate spending over the near term is chiefly driven by an increase in private consumption and investment spending. This forecast assumes expansions primarily in Agriculture, Forestry & Fishing, Manufacturing, Electricity & Water Supply, Mining & Quarrying and Hotels & Restaurants. In the

context of improved domestic demand, headline inflation is expected to increase in 2017 relative to the inflation rate recorded for 2016.

2.11.2. International Economy

The global economy is projected to expand by 3.2 per cent for 2017 relative to 2.9 per cent for 2016. Growth is expected to accelerate in USA and Canada. Growth in the USA is expected to emanate from increased consumption owing to the implementation of expansionary fiscal policies. Similarly, growth in Canada mainly reflects the anticipated impact of fiscal policy on spending as well as higher oil prices which is expected to positively impact the energy sector. The UK is, however, expected to record lower growth in 2017 due to an anticipated slowdown in investment and consumption associated with uncertainty about trade relations with the Euro Area.

Average crude oil prices for 2017, as measured by the West Texas Intermediate (WTI), are forecast to increase within the range of 15.0 per cent to 25.0 per cent compared to a decline of 11.3 per cent for 2016. This outlook is informed by an expected reduction in the level of excess global supplies associated with the adherence of the Organization of Petroleum Exporting Countries (OPEC) and non-OPEC producers to agreed production targets.[31] However, the pace of increase in prices is expected to be tempered, particularly in the second half of the year, by improved US shale production and the persistent oversupplied crude oil market.

The prices of food-related raw materials are projected to remain largely unchanged when compared with 2016. This compares with the average decline of 11.6 per cent recorded for the last two years. The outlook for 2017 is consistent with the modest improvement in global demand. Average wheat prices are expected to decline within the range of 8.5 per cent to 11.5 per cent. Benchmark Thai rice prices are, however, expected to increase within the range of 4.0 per cent to 7.0 per cent while corn prices are forecast to trend within the range of -2.5 per cent to 0.5 per cent.

2.11.3. Domestic Economy

2.11.3.1. Inflation

Domestic inflation, is projected to remain within the single digit range albeit increasing relative to the 1.7 per cent in 2016. This outlook is premised primarily on the expected improvement in domestic demand as well as the anticipated increase in international commodity prices, particularly crude oil. Notwithstanding, relatively stable inflation expectations should continue to suppress upward price adjustments.

The main upside risks to this forecast include higher than anticipated international commodity prices, adverse weather conditions and administered price adjustments.

2.11.3.2. Growth

The rate of growth in the Jamaican economy is expected to accelerate in 2017 relative to 2016. The economy is expected to expand within the range of 1.5 per cent to 2.5 per cent for 2017, outpacing the expansion of 1.4 per cent recorded in 2016. Growth in aggregate spending over the near term is underpinned by an anticipated improvement in private consumption and investment spending. The main sectors contributing to output growth are expected to be Agriculture, Forestry & Fishing, Manufacturing, Electricity & Water Supply, Mining & Quarrying and Hotels & Restaurants.

Growth in Agriculture, Forestry & Fishing is expected to be buoyed by continued improvement in crop production as well as various support systems developed through public-private partnerships to mitigate against production disruptions within the industry. Manufacturing is expected to accelerate largely reflecting recovery in petrol refining and ongoing domestic investment by major manufacturing companies to enhance efficiency in the production of food and beverages. The anticipated growth in Mining & Quarrying is consistent with a normalization in the industry given the operational challenges experienced in 2016 as well as higher external demand. Growth in

[31] In November 2016, OPEC announced a framework for supply reductions among most of its members, for the first time since 2008. This resulted in a reduction in crude production by 1.2 million barrels per day to 32.5 million barrels per day, effective January 2017. The reduction should last for at least six months. Several non-OPEC producers, led by Russia, also announced their intention to reduce production by 558,000 barrels per day, in support of OPEC.

Electricity & Water Supply is mainly predicated on a continued increase in electricity consumption given anticipated improvements in domestic demand. For Hotels & Restaurants, the expansion is premised on continued increases in stopover arrivals and visitor expenditure associated with an acceleration in growth in major source markets, particularly the US. The industry is also expected to benefit from greater room stock and ventures into new markets.

The main downside risks to this forecast include weak external demand associated with uncertainty in the international markets, lower than anticipated business and consumer confidence, the postponement of major infrastructural projects and adverse weather conditions. The main upside risks include possible second round effects from the rise in investment spending, stronger global demand conditions, improvement in labour market conditions as well as increased production capacity within industrial operations.

2.11.3.3. Monetary Policy

Current projections suggest that inflation should increase moderately as output growth accelerates relative to 2016. In this regard, the Bank will continue to maintain its generally accommodative policy stance while remaining poised to address any undesirable risks to inflation that may emerge. Of note, the Bank will also continue to implement monetary policy aimed at achieving the monetary targets outlined under the country's precautionary Stand by Arrangement (SBA) with the IMF.

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3. Financial System Surveillance and Policy

3.1. Supervision of Deposit-taking Financial Institutions

3.1.1. Introduction

Bank of Jamaica's responsibility for supervision of deposit-taking institutions (DTIs) derives from Section 34A of The Bank of Jamaica Act.[1] The supervised population comprises entities operating under the Banking Services Act (BSA) and includes commercial banks, merchant banks, building societies and financial holding companies (FHCs) under which entities including DTIs are held. Credit unions have been designated by the Minister of Finance as 'specified financial institutions' under The Bank of Jamaica Act, as a preliminary step towards placing these institutions under the supervisory oversight of the Bank of Jamaica.[2] This specification currently enables the Bank to obtain information on their operations. Regulations to establish a formal supervisory framework for these entities were drafted and presented to the Ministry of Finance during 2016.

Bank of Jamaica's supervisory responsibilities under the BSA are operationally discharged through the Financial Institutions Supervisory Division (FISD) of the Bank. The principal aims of supervision are to promote the safety and soundness of banks and banking groups as well as the stability of the financial system. The supervisory methodology combines risk-focused on-site examinations of each licensee with on-going off-site monitoring facilitated primarily by prudential reporting requirements. Feedback from on- and off-site assessments are provided by the Bank to licensees' management and Boards through a composite of formal meetings, official correspondence and written reports on examination findings. Where there are matters requiring remedial actions or evidence of unsafe practices, corrective measures and or sanctions are applied as relevant, pursuant to the governing legislation. Underpinning the entire supervisory process is a constant review of the legal and policy framework, as well as the supervisory practice to ensure that these remain relevant as financial markets evolve domestically and internationally.

The Bank began working toward the country's 2016 initiative of developing a national strategy on financial inclusion. This initiative was based on the recognition that sustainable growth needed to be inclusive.[3]

3.1.2. Current Priorities in Banking Supervision

3.1.2.1. Application of the Banking Services Act, 2014

No principal statute or amendments to the principal Acts governing persons supervised or regulated by the Bank of Jamaica were passed in 2016. However, activities related to the implementation of the BSA continued to be among prioritised supervisory imperatives over the period. These involved the review and development of statutory instruments including:

- The Banking Services (Deposit Taking Institutions) (Agent Banking) Regulations 2016; and
- The Banking Services (Deposit Taking Institutions) (Customer Related Matters) Code of Conduct 2016.

Development of further key supporting Regulations and Supervisory Rules to facilitate the operationalisation of the BSA were in process as at the end-2016.

The BSA is the primary legislative tool supporting recent enhancements to Jamaica's regulatory and supervisory framework. The enhancements introduced under the BSA are informed in large part by

[1] Regulatory responsibility for non-deposit taking financial institutions rests with the Financial Services Commission which has supervisory oversight of the securities, insurance and private pensions industries (See section 3.1.3.1).

[2] By Notice dated 30 June 1999, The Minister of Finance & Planning designated co-operative societies carrying on the business of credit unions as "specified financial institutions" under the Bank of Jamaica Act.

[3] This strategy is aimed at increasing the uptake and use of financial products and services by underserved individuals, farms and micro, small and medium-sized firms.

assessments of Jamaica's observance of international best practice standards such as the Basel Core Principles (BCPs) for Effective Banking Supervision.[4] Major enhancements brought about by the BSA include the following:

i. Supervisory Autonomy

Consistent with IMF and BCP recommendations on supervisory independence, the BSA transferred certain critical supervisory powers from the Minister of Finance to the Supervisor and the Supervisory Committee (SC). During 2016, the SC met a total of 18 times (see **Section 9: Governance**).

Concomitant with increased supervisory autonomy, are provisions which:

a. Strengthen the governance and accountability structure of the Supervisory Authority;
b. Prescribe the establishment of an independent Supervisory Appeals Board (SAB) to hear appeals arising from supervisory determinations in relation to fit and proper assessments, external auditors' appointments and alleged breaches of the Enforceable Code of Conduct (see Enforceable Code of Conduct);[5] and
c. Codify timelines for supervisory determinations in relation to new businesses or products, new delivery channels for existing businesses or products, strategic alliances, joint ventures and co-branding initiatives.

ii. Consolidated Supervision Framework

An enhanced framework for consolidated supervision, informed by international best practice standards, was introduced by the BSA. Under this regime each financial group to which a DTI belongs is required to structure itself in a way that facilitates effective consolidated supervision and establish an FHC which is to be licensed by the Bank. Each FHC has the responsibility for ensuring that, among other things, the financial group is adequately capitalized on a consolidated basis and is subject to effective group wide governance and risk management. As a result of the multi-jurisdictional reach, and diversity in financial service offerings associated with some of Jamaica's financial groups, there will be greater need for cooperation and collaboration between the Bank, and other domestic and overseas regulators (see **Section 3.1.3**).

During the year, work was undertaken in preparation for the implementation of the attendant licensing and supervisory measures relevant to consolidated supervision. The Bank of Jamaica issued in November 2016 the following consultation papers:

a. Consolidated Capital Adequacy Requirements; and
b. Proposal for Drafting Instructions for FHC Licence Application Rules.

These papers cover two foundational areas that must be in place for the commencement of the FHC oversight regime under the BSA. Accordingly:

a. The paper on consolidated capital adequacy requirements, among other things, proposes the general requirements for group-wide capital adequacy that will be imposed on FHCs who head financial groups as defined in the BSA. The paper also discusses the methodology to be used for computing consolidated capital requirements of the FHC, and the methodology that will be applied where these financial groups include insurance entities. This document will inform the development of the proposal for drafting instructions for the Banking Services (Financial Holding Company) (Capital Adequacy) Regulations under the BSA.

[4] The Basel Core Principles are international best practice standards for Banking Supervision which are established by the Basel Committee on Banking Supervision.

[5] The SAB is a tribunal provided for by Section 27 of the BSA, empowered to hear appeals on decisions made by the Supervisor and Supervisory Committee. The Supervisory Appeals Board shall consist of three to five members appointed by the Governor-General on the advice of the Minister of Finance. These persons must appear to the Minister of Finance to be knowledgeable and experienced in matters relating to law, banking, finance or the regulation of financial services and otherwise qualified for appointment to the Appeals Board and of which at least one member shall be a retired judge.

b. The proposal for drafting instructions for Licence Application Rules under the BSA for FHCs among other things, sets out the information which must be provided in an application. The information required covers the areas of: ownership and group structure, financial resources and strength, strategic plans and projections, governance structure and arrangements, risk management and internal controls, corporate governance and IT systems and details of the recovery & resolution strategy and plans, as well as recovery options of entities within the financial group headed by the applicant.

At end-2016, the Bank continued to benefit from feedback provided by the industry, and other relevant stakeholders on these consultation papers. The consultation period for both papers ended at close of business on January 31, 2017.

iii. Reduction in Capital Requirements for Development Banks

At end-2016, Bank of Jamaica, in keeping with the provisions of the Banking Services (Deposit-Taking Institutions) (Capital Adequacy) Regulations, 2015, Bank of Jamaica recommended that loans (or portions thereof) with guaranteed coverage by credit guarantee schemes (subject to conditions) should be risk-weighted 20 per cent, with uncovered portions remaining 100 per cent risk-weighted.[6] The application of the twenty per cent risk-weighting is limited to loans extended in Jamaican currency (as outlined in paragraph 2(5) of Schedule 3 of the aforementioned Regulations).

iv. Agent Banking

The BSA sets out a framework which will allow DTIs to extend certain banking services to their customers, through agents. Agents may be eligible for appointment by DTIs if they meet certain requirements under the BSA.

The Supervisory Authority (through the Supervisor or the Supervisory Committee) is empowered to, inter alia:

a. Approve a DTI to appoint a person to offer prescribed banking services;
b. Authorize a person to be an agent and offer prescribed banking services;
c. Prescribe operational thresholds, limits or other restrictions in relation to the services offered through an agent;
d. Examine the books, documents, records, statements and other relevant information of an agent; and
e. Revoke approvals given to conduct agent banking.

In December 2016, the Banking Services (Deposit Taking Institutions) (Agent Banking) Regulations were promulgated under the BSA, which contain provisions to facilitate the offering of certain banking services through agent operations. These provisions allow the widening of banking access channels beyond existing DTI branch networks and electronic access channels, to include the use of third-party-owned locations that, will offer banking services alongside their own products and services. The provision of banking services through this delivery channel is expected to widen access to financial services and promote financial inclusion.

v. Enforceable Code of Conduct

The BSA provides for the Supervisor issuing a Code of Conduct on customer related matters. The Act further indicates the matters which the Code may address which include obligations for DTIs to:

- provide reasonable notice of fees, charges, terms and conditions and changes thereto;
- allow customers access to their information at reasonable cost;
- express interest rates as effective annual rates calculated in a standard manner across the banking services industry;
- keep language in contracts simple and clear and identify key terms for customers' attention; and

[6] A Credit Guaranteed Scheme provides third-party credit risk mitigation to lenders through the absorption of a portion of the lender's losses on the loans made to SMEs in case of default, typically in return for a fee.

- provide effective mechanisms to address customer complaints, communicate those mechanisms and procedures to customers and maintain relevant reporting and record keeping in that regard.

In keeping with the provisions of the BSA for the development and issue of a code of conduct on consumer related matters, Bank of Jamaica issued the Banking Services (Deposit Taking Institutions) (Customer Related Matters) Code of Conduct, in August of 2016.

The Code addresses a small part of the existing gap in financial consumer protection arrangements. However, there remains a need for other mechanisms to be implemented to provide for a comprehensive market conduct framework for consumers of deposit-taking financial services. Financial consumer protection is among a number of matters proposed to be covered under a National Financial Inclusion Strategy which is being spearheaded by BOJ and is expected to involve both public and private sector stakeholders.

In this vein, it is worth noting that a private member's bill was tabled in Parliament in October, the Banking Services Amendment Act 2016, seeking to amend the BSA to have BOJ regulate licencees' use of fees and charges, provision of information and mandatory service packages to customers, all in an effort to increase consumer protection. The Bill has not yet been debated.

With a view to promoting transparency and access by consumers to comparative information on fees and charges offered by DTIs, Bank of Jamaica has published annually on its website since December 2010, information on fees and charges for certain widely used services/products of commercial banks, building societies and merchant banks.[7] The BSA now specifically provides for the publication of information on licensees' fees and charges as well as statistics on customer complaints.

3.1.2.2. Crisis Management

During the year, the Bank as part of an inter-agency working group, participated in efforts geared towards the development of a national crisis management plan and resolution framework for Systemically Important Financial Institutions (SIFIs).[8] A concept paper was drafted by the working group and shared with to the International Monetary Fund in November 2016. Feedback will inform the finalization of the consultation paper scheduled for end-February 2017 that will further inform legislative provisions.

Additionally, the Bank has commenced participation in an inter-central bank working group centred on the development of a regional crisis management plan and resolution framework for SIFIs. Efforts from this working group are expected to inform legislative provisions to support the framework.

3.1.2.3. International Best Practice Standards-Supervisory Approach

i. *Anti-Money Laundering, Combatting the Financing of Terrorism (AML/CFT) and Proliferation of weapons of Mass Destruction Rules*

Drafting instructions for AML/CFT Supervisory Rules under the BSA and the Bank of Jamaica Act have been substantially revamped and updated to account for amendments to the current AML/CFT legislation, the United Nations Security Council Resolutions Implementation Act (UNSCRIA), and the revised Financial Action Task Force (FATF) Recommendations.[9] International standards on AML/CFT and

[7] http://www.boj.org.jm/financial_sys/rates_charges.php

[8] In addition to the Bank of Jamaica, SIFIs include the Financial Services Commission, Ministry of Finance, and the Jamaica Deposit Insurance Corporation.

[9] The Financial Action Task Force (FATF) is an inter-governmental body established in 1989 by the Ministers of its Member jurisdictions. The objectives of the FATF are to set standards and promote effective implementation of legal, regulatory and operational measures for combating money laundering, terrorist financing and other related threats to the integrity of the international financial system. The FATF monitors the progress of its members in implementing necessary measures, reviews money laundering and terrorist financing techniques and counter-measures, and promotes the adoption and implementation of appropriate measures globally. FATF membership (directly and via associate membership through FATF Styled Regional Bodies) stands at 198 countries.

proliferation include a number of enhanced requirements with which countries are asked to comply. These enhanced requirements include, inter alia, requiring the application of a risk-based approach to AML/CFT policies and procedures; outlining regulatory expectations related to high-risk and low-risk scenarios; expanding Know your Customer (KYC) and Customer Due Diligence (CDD) considerations; providing additional guidance on agent banking and responsibilities for group-wide AML/CFT approaches; the phenomenon of virtual currencies and obligations which will attract sanctions based on the AML/CFT Rules that will be issued under the BSA and Bank of Jamaica Act.

Once the consultation process is completed, the revised guidance notes will be finalised and issued. Accordingly, the notes seek to encourage competent authorities to ensure measures to prevent or mitigate money laundering or terrorist financing are commensurate with the risks identified and enable such authorities to make decisions on how to allocate their resources in the most effective way.

ii. Risk-Based Supervision

In line with the drive to improve the efficiency and effectiveness of the supervisory process, the Supervisory Authority carried out work during 2016 (including the development of supervisory guidance) with a view to streamlining Jamaica's risk focused supervisory practices to a risk-based approach informed by emerging supervisory practices internationally, including the Basel Core Principles. This new approach will also be integrated with the consolidated supervision framework.

3.1.2.4. The Financial System Stability Committee

The Financial System Stability Committee (FSSC) held its first meeting during 2016. The FSSC is a statutory committee established under section 34H of the Bank of Jamaica Act, as amended, with responsibilities of, inter alia, reviewing developments in the financial system and the economic environment; providing oversight of financial stability assessments prepared by Bank of Jamaica; and advising on financial stability policy and engagement with stakeholders (see **Section 9: Governance**).

3.1.2.5. Caribbean Financial Action Task Force (CFATF) – Mutual Evaluation

During 2016 Bank of Jamaica continued its review of its June 2015 fourth round evaluation of the country's compliance with AML/CFT measures in relation to the FATF 40 Recommendations.[10] At end-2016, the Bank continued to work with the assessors to have the report finalised for publication January 2017.

The Bank of Jamaica is the Competent Authority for licensees under the BSA pursuant to The Proceeds of Crimes Act and The Terrorism Prevention Act, and is responsible for monitoring compliance with legal requirements. The Competent Authority is also tasked with issuing guidelines regarding effective measures to prevent money laundering and terrorism financing within licensees.

The risk-based approach is still in the emergent stages as Bank of Jamaica worked toward revision of its AML/CFT guidance notes to incorporate a risk-based approach in line with FATF Recommendations and local legislation.

3.1.3. Supervisory Cooperation and Interaction

3.1.3.1. Financial Regulatory Committee and Financial Regulatory Council

With eight meetings held during the course of the year, the Financial Regulatory Committee facilitated information sharing, coordination and cooperation among regulatory authorities (see **Section 9: Governance**). The Committee replaced the Financial Regulatory Council (the Council) established in 2000 with the mandate to develop policies and strategies to facilitate greater co-ordination and information sharing between the various supervisory and related agencies operating in the Jamaican financial sector.

[10] The FATF Recommendations are the internationally endorsed global standards against money laundering and terrorism financing.

3.1.3.2. The Caribbean Group of Banking Supervisors (CGBS)

Throughout 2016, the Bank of Jamaica continued its chairmanship for the Secretariat of the Caribbean Group of Banking Supervisors (CGBS).[11] Early in 2016, the Bank of Jamaica hosted the XXXIV Annual Strategic Planning Meeting that informed which topics would be presented at the XXXIV Annual Conference, also hosted by the Bank of Jamaica. As was the case in 2015, three training programmes were organized and held for the region with international facilitators from the Federal Reserve System (USA); the Financial Stability Institute (FSI); and the Association of Banking Supervisors of the Americas (ASBA).[12,13] Five supervisory regional colleges were also convened.

3.1.3.3. Association of Banking Supervisors of the Americas (ASBA)

Bank of Jamaica is a member of the hemispheric group, ASBA, and was appointed as the Caribbean representative on the ASBA Board to serve for a two year term. During 2016, the Bank remained an active contributor to the work of the organisation.

3.1.4. The Supervised Environment

3.1.4.1. Overview

As at 31 December 2016, the total number of licensed DTIs stood at eleven (11), marking three consecutive years in which the number of supervised entities remained unchanged (see **Tables 36** and **37**). Although licensees continued to channel service offerings through technologically-driven mediums such as internet banking, mobile money banking and ATMs, the physical branch network increased by one to 162 locations.

Notably, during September 2016, JMMB Merchant Bank Limited (JMMBMB) received supervisory approval from the BOJ to upgrade its existing license to a commercial banking license. The merchant bank joined the Jamaica National Building Society (JNBS) in this transition, as the society obtained Ministerial Approval in September 2015 for conversion to a commercial bank and the re-organization of the group. However, as at the end-2016, both entities were working on fulfilling the conditions of approval. Additionally in July 2016, supervisory approval was granted of the acquisition of an 80 per cent equity stake in MF&G Trust and Finance Limited by United Commonwealth Holding Jamaica Limited. The approval was subject to the formal commitment of the purchasers to provide the Bank of Jamaica with certain information and the entity is currently working on providing same.

Table 36

MARKET COMPOSITION
(Number of Licensed Deposit-taking Entities)

Supervised Entities	2012	2013	2014	2015	2016
Commercial Banks	7	7	6	6	6
Merchant Banks	2	2	2	2	2
Building Societies	4	3	3	3	3
Total	**13**	**12**	**11**	**11**	**11**

The proposal by the Minister of Finance for assumption by the Bank of Jamaica of full supervisory responsibility for credit unions, which numbered 32 as at 31 December 2016, will result in significant expansion of the supervised deposit-taking population.

Table 37

LICENSED DEPOSIT-TAKING INSTITUTIONS
as at 31 December 2016

Sub-sector	Institution Name	Related Deposit-taking Institution
Commercial Banks	Bank of Nova Scotia Jamaica Limited (BNSJ)	*Scotia Jamaica Building Society*
	Citibank N. A. (CBNA)	
	FirstCaribbean International Bank (Jamaica) Limited (FCIBJ)	
	First Global Bank Limited (FGB)	
	National Commercial Bank Jamaica Limited (NCBJ)	
	Sagicor Bank (Jamaica) Limited (SBJL)	
Merchant Banks	JMMB Merchant Bank Limited (JMMB)	
	MF&G Trust and Finance Limited (MF&G)	
Building Societies	Jamaica National Building Society (JNBS)	
	Scotia Jamaica Building Society (SJBS)	*Bank of Nova Scotia Jamaica Limited*
	Victoria Mutual Building Society (VMBS)	

[11] The CGBS was established in 1983 under the aegis of the Central Bank Governors of member countries of the Caribbean Community (CARICOM), with the specific mandate to co-ordinate the enhancement of bank supervisory practices in the English speaking Caribbean, consistent with internationally accepted standards. Participation in CGBS was later extended to banking supervisors from non-CARICOM Caribbean territories and now comprises membership from seventeen regional jurisdictions, eleven of which are currently core members of CARICOM.

[12] The FSI was jointly established by the Bank for International Settlements and the Basel Committee on Banking Supervision to assist Supervisors around the world in improving and strengthening their financial systems.

[13] ASBA is a regional grouping of Banking Supervisory Authorities whose membership spans 36 jurisdictions encompassing North, Central and South America and the Caribbean, non-regional member, Spain.

At the end of 2016, assets for the DTI system recorded significant growth of 15.1 per cent ($180.3 billion to $1 375.9 billion), outperforming the growth of 9.6 per cent ($104.7 billion) during 2015.[14] The expansion primarily reflected in increased loans of 18.3 per cent ($99.5 billion), investment securities of 14.2 per cent ($49.5 billion) and cash and bank balances of 16.4 per cent ($32.2 billion). The major source of financing for the increase in assets, approximately 59.0 per cent, were deposits which increased by 13.8 per cent ($106.4 billion), followed by increased borrowings of 32.8 per cent ($54.5 billion) and shareholders' equity of 11.6 per cent ($20.6 billion).

Market share for the commercial banking sub-sector increased to 77.0 per cent relative to 76.8 per cent in 2015 as assets grew by 15.3 per cent or $140.9 billion relative to 10.7 per cent or $88.8 billion in 2015 (see Table 38). Market leaders, NCBJ and BNSJ, dominated growth during the year and commanded a larger 73.4 per cent of the sector at end-2016, compared with 72.7 per cent the previous year.

Table 38

MARKET SHARE (%) OF LICENSED DEPOSIT-TAKING INSTITUTIONS As at 31 December						
	Dec-2014		Dec-2015		Dec-2016	
Sub-sector	J$BN	%	J$BN	%	J$BN	%
Commercial Banks	829.6	76.0	918.4	76.8	1,059.3	77.0
Buildings Societies	230.3	21.1	246.8	20.6	278.7	20.3
Merchant Banks	31.0	2.8	30.4	2.5	37.9	2.8
System Total	**1,090.9**	100.0	**1,195.6**	100.0	**1,375.9**	100.0

Although the market share of building societies at end-2016 reduced marginally to 20.3 per cent from 20.6 per cent at end-2015, total assets for the sub-sector expanded by 12.9 per cent or $31.9 billion, higher than the previous year's growth of 7.2 per cent or $16.5 billion. The combined market share of the two dominant players in the sub-sector remained relatively flat at 89.9 per cent compared to 90.1 per cent in 2015.

During the year, following notable growth in loans, the asset base of merchant banks increased by 24.6 per cent or $7.5 billion, in contrast to a reduction of 2.0 per cent or $0.6 billion in the previous year. Consequently, merchant banks represented 2.8 per cent share of the market compared to 2.5 per cent in 2015.

3.1.4.2. Balance Sheet Profile

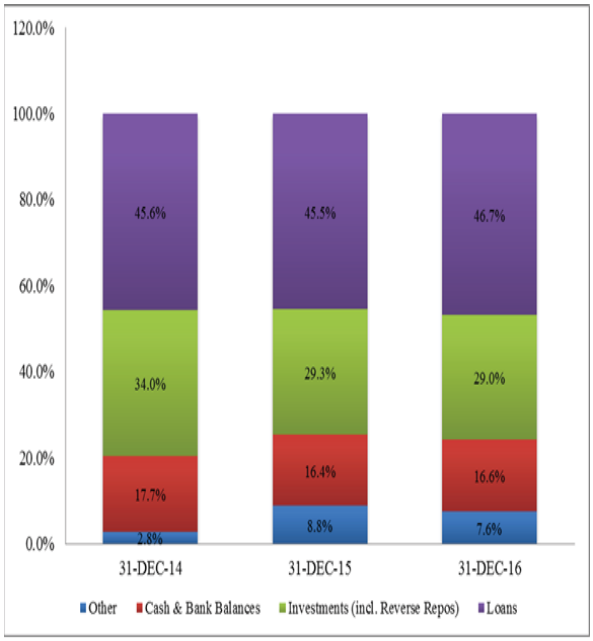
Growth in system assets was reflected largely in gross loans, which expanded by 18.3 per cent or $99.5 billion to $643.2 billion, twice the growth rate in 2015 of 9.3 per cent or $46.4 billion. Although domestic currency credits continued as the favoured option with an increase of $57.9 billion ($39.6 billion in 2015), foreign currency loans advanced by a significant $41.6 billion or US$281.1 million to record the largest annual growth in over ten years.[15] The increase in foreign currency loans was due primarily to the disbursement of a large short-term loan to the non-deposit taking financial sector. Consequently, at end-2016, gross loans maintained its position as the largest asset category at 46.7 per cent of total assets, higher than the 45.5 per cent reported at end-2015 (see Chart 24).

Holdings in investment securities (including repurchase transactions) were augmented by 14.2 per cent or $49.5 billion to $399.4 billion, in contrast to the contraction of 5.6 per cent or $20.8 billion recorded at end-2015. Total incremental investments were reflected in increased foreign currency securities of $31.2 billion or US$136.5 million (primarily instruments issued by the Government of Jamaica and new repurchase transactions) and domestic currency investments of $18.4 billion (mainly BOJ certificates of deposit). Notwithstanding the rebound in investments growth, the wider expansion in loans restricted the category's share of total assets to 29.0 per cent, compared to 29.3 per cent the previous year.

[14] Assets include acceptances, guarantees and letters of credits and are shown net of provisions for losses under International Financial Accounting Standards

[15] References to US dollar values represent the USD equivalent of all foreign currencies. Bank of Jamaica Weighted Average Selling rates utilized: December 2016: US$1.00 = J$128.4404 and December 2015: US$1:00 = J$120.4150

Chart 24: Profile of System Assets 31 December 2014 – 2016



Growth in cash and bank balances accelerated by 16.4 per cent or $32.2 billion to $228.8 billion, higher than the growth of 2.1 per cent or $4.1 billion recorded for 2015. Accretion during 2016 was largely attributable to increased foreign currency cash and placements of $33.3 billion or US$187.7 million, specifically in higher cash reserve balances resulting from adjustments to the statutory requirements, and placements with overseas deposit taking institutions (see Section 6.3). Accordingly, combined holdings in cash and bank balances represented a slightly larger 16.6 per cent of total assets at end–2016 relative to 16.4 per cent at end–2015.

Deposits continued as the primary source of funding for the DTI system with expansion of 13.8 per cent or $106.4 billion to $877.9 billion, surpassing the previous year's growth of 11.8 per cent or $81.7 billion. The increased deposit base was predominantly reflective of foreign currency deposit inflows of 16.3 per cent or $56.5 billion (US$365.6 million), ahead of the prior year's increase of 12.0 per cent or $37.1 billion (US$226.7 million), and included revaluation gains of $26.1 billion on the stock of foreign currency deposits. Domestic currency deposit flows also augmented by $49.8 billion, relative to the $44.6 billion growth reported for 2015.

Borrowed funds (including repurchase transactions) increased by 32.8 per cent or $54.5 billion (chiefly commercial banks with $46.9 billion) to $220.7 billion. Asset growth was supported by increased foreign currency borrowings of $50.1 billion or US$337.4 million, obtained primarily from overseas sources, as well as under repurchase agreements. Net repayments of 4.6 per cent or $8.0 billion were made during 2016.

Shareholders' equity also provided additional support for asset growth with total expansion of 11.6 per cent or $20.6 billion, higher than the increase of 10.1 per cent or $16.2 billion in 2015. As with the previous year, capital was bolstered by profits of $16.3 billion at commercial banks, and was influenced by a capital reconstruction exercise at one entity which resulted in the elimination of accumulated losses.

As at end–2016, the foreign currency denominated assets portfolio stood at US$4.7 billion, reflective of annual growth of 15.1 per cent or US$618.9 million (5.6 per cent or US$218.5 million during 2015). The increase in foreign currency assets was concentrated in loans and advances of US$281.1 million, cash and placements of US$187.7 billion and investments of US$136.5 billion. Similar movements were reported in foreign currency denominated liabilities which expanded by 17.2 per cent or US$674.3 million (10.6 per cent or US$373.5 million in 2015) to US$4.6 billion, and were due largely to deposit inflows of US$365.6 million and increased borrowings of US$335.5 million. The higher procurement of liabilities relative to assets resulted in a narrowing of the system's foreign currency long position to US$33.6 million (US$101.8 million in 2015).

3.1.4.3. Liquidity

Against the background of increased foreign exchange risk exposures due to significant expansions in the foreign currency liabilities of DTIs over the past two years, the BOJ, during the last quarter of 2016, incrementally increased the statutory minimum for foreign currency cash reserve and liquid asset ratios by 3.0 percentage points to 12.0 per cent and 26.0 per cent, respectively, notably on par with the corresponding statutory minimum requirements for the domestic currency ratios. However, despite the subsequent higher average balances of US dollar

liquid assets, the system's liquid assets ratio contracted from 46.2 per cent in 2015 to 42.6 per cent in 2016 on account of growth in reservable deposits and overseas debt obligations.

The system held higher levels of average domestic currency liquid assets in respect of average domestic currency prescribed liabilities resulting in an increased liquid assets ratio of 27.4 per cent (26.5 per cent at end-2015). The increase was reflective of larger holdings in domestic currency BOJ securities. Notably, the pay out of the Government of Jamaica BMI Note in February 2016, had little or no effect on liquidity as the excess funds were largely redeployed to new issues.

Throughout 2016, licensees generally satisfied the required domestic currency and foreign currency cash reserve requirements, with a few instances of breaches arising from delays by some entities in topping-up their cash reserve accounts within the stipulated timeframe. This resulted in the imposition of the applicable interest penalties in accordance with the relevant statutes.

3.1.4.4. Asset Quality

Asset quality for the system improved significantly during the year, as the stock of non-performing loans (NPLs) contracted by 16.8 per cent or $3.7 billion to $18.4 billion, similar to the reduction of 11.6 per cent or $2.9 billion in 2015. The overall improvement in loans was primarily influenced by the commercial banking sub-sector following the pay-out of a major facility in the construction sector. As a result, the NPLs to total loans ratio declined to 2.9 per cent from 4.1 per cent at end-2015, well within the tolerable limit of 10.0 per cent (see **Chart 25**).

Commensurate with the reduction in NPLs, total loan loss provisions declined by 8.5 per cent or $2.0 billion, similar to the contraction of 7.5 per cent or $1.9 billion in 2015.[16] Notwithstanding, coverage of NPLs by provisions increased to 117.0 per cent from 106.4 per cent at end-2015. Regulatory capital and provisions provided an aggregate cushion of 905.4 per cent against total loss in NPLs, up from 689.1 per cent for 2015.

Chart 25: Stock of NPLs (3 Months & Over) with Ratio of NPLs to Gross Loans

3.1.4.5. Capital

Total regulatory capital increased by 11.1 per cent or $13.4 billion to $133.9 billion, compared with growth of 8.4 per cent or $9.4 billion in 2015, due primarily to transfers from realised profits to statutory reserve funds and reductions in market losses, primarily in the commercial banking sub-sector. Despite the accelerated pace of growth in regulatory capital, capital ratios contracted slightly, with the primary ratio (regulatory capital: total assets) declining to 10.6 per cent at end-2016 from 10.8 per cent, and the risk-weighted capital adequacy ratio (regulatory capital to risk-weighted assets and foreign exchange exposure) falling to 14.7 per cent end-2016 from 14.9 per cent at end-2015. The decrease in capital adequacy indicators was due largely to the greater than proportionate growth in assets (15.1 per cent), mainly foreign currency loans and Government of Jamaica debt instruments. Notwithstanding, all licensees remained adequately capitalized with ratios well within the required statutory minima of 6.0 per cent and 10.0 per cent, respectively.

[16] Provisions for Loan Losses represent a combination of assessments under International Financial Reporting Standards and incremental amounts required in accordance with the Central Bank's prudential guidelines

3.1.4.6 Profitability

Pre-tax profits for the year ended December 2016 expanded by 61.5 per cent or $14.5 billion to $38.1 billion, far above the prior year's accretion of 11.7 per cent or $2.5 billion. As a result, the Pre-Tax Profit Margin reflected significant improvement from 19.8 per cent at end-2015 to 27.5 per cent at end-2016, whilst the Return on Average Assets (ROAA) indicator moved to 3.0 per cent at end-2016 from 2.1 per cent at end-2015.

Although interest income accounted for the largest share of revenue of 61.7 per cent, non-interest was the most significant contributor to the increase in revenue, reflecting growth of 35.7 per cent or $14.0 billion during the year, particularly dividends and trading profits of $7.8 billion, earnings from fees and commission of $3.1 billion and gains from foreign exchange transactions of $2.7 billion (primarily revaluation gains). Amidst an environment of gradual lowering of interest rates, growth in net interest income remained relatively flat at $4.4 billion relative to end-2015, reflecting higher loan income on the widened stock of credit facilities tempering the impact of increased expenses associated with borrowings. Notwithstanding, the Net Interest Margin for the system contracted from 6.3 per cent at end-2015 to the current position of 6.1 per cent owing to the counter effects of an expansion in earning assets.

Non-interest expenses increased by $4.2 billion compared with the increase for the previous year of $3.8 billion, as licensees faced increased miscellaneous operating charges of $3.2 billion and higher staff costs of $1.0 billion.

3.1.5. Credit Unions

3.1.5.1. Proposed Bank of Jamaica (Credit Unions) Regulations

The Bank of Jamaica continues to prepare for the imminent assumption of supervisory oversight of the credit union sector. Crucial to this process will be the passage of two companion pieces of legislation through Parliament, namely the Bank of Jamaica (Credit Unions) Regulations to be issued under the Bank of Jamaica Act and amendments to the Co-operative Societies Act. In this regard preparations have continued apace to facilitate a smooth transition from the Department of Co-operatives and Friendly Societies which presently has statutory oversight responsibility for the credit union sector as well as the Jamaica Co-operative Credit Union League which undertakes an industry self-regulatory role.

During 2016, the Bank of Jamaica provided comments to the Ministry of Industry Commerce, Agriculture and Fisheries regarding amendments to the Cooperative Societies Act and also issued amended draft instructions for the proposed Regulations by the Minister of Finance and the Public Service to the Office of the Chief Parliamentary Council in September 2016. The Bank of Jamaica also continued its discussions with the Jamaica Deposit Insurance Corporation (JDIC), and in particular provided feedback on proposals aimed at having credit unions become policy holders under its Deposit Insurance Scheme.

It is anticipated that the next draft of the proposed Regulations will be finalized by the office of the Chief Parliamentary Counsel and then reviewed by stakeholders. Once this review is completed, the proposed Regulations will be forwarded by the Minister of Finance to the Legislation Committee of the Cabinet for confirmation of its readiness for tabling. Passage of the Regulations will result in the BOJ proceeding with the process for the licencing of credit unions by the Minister of Finance. Important features of this impending regulatory regime will include prescribed criteria covering capital adequacy, liquid assets, credit limits, non-accrual and provisioning requirements, submission of financial statements and minimum solvency standards. In addition all volunteers, managers and key employees will be required to be assessed as fit and proper persons for the roles to be performed at credit unions, while provisions will be in place for the Supervisor to address cases of unsafe and unsound practises or insolvency. Savings in credit unions will also be covered by the JDIC up to the prescribed limit.

3.1.5.2. Credit Union Sector Performance Highlights

The number of credit unions operating within the sector continued to contract as merger activity during the year resulted in the 34 entities operating at the

beginning of the year falling to 32 at the end of 2016.[17] Notably, further mergers are to be effected, namely; Educom Co-operative Credit Union Limited with St. Catherine Co-operative Credit Union Limited, effective 1 January 2017 and Montego Co-operative Credit Union Limited with Hanover Co-operative Credit Union Limited; to form Gateway Co-operative Credit Union (2017) Limited, effective 3 January 2017. These mergers will ultimately see the sector being represented by 30 entities as at the beginning of 2017. In addition the Church of the First Born Cooperative Credit Union Limited will transition to a thrift society by mid-January 2017, thus further contracting the sector to 29 Credit Unions. Reflective of these changes, credit unions deployed their services to members through a combined network of 87 branches, sub-branches and agencies, as compared to 89 at the end of 2015.

The sector reported total assets of$95.6 billion at the end of December 2016, exhibiting a growth of $6.6 billion or 7.4 per cent above the $89.0 billion reported at end- 2015. Growth was mainly evidenced in the loan portfolio, (primarily consumer lending) of $4.1 billion or 6.9 per cent while there was increased investments of $3.1 billion or 25.4 per cent, (primarily Repos securities)); as cash and placement contracted by $0.9 billion or 8.4 per cent. Funding for asset growth was largely provided by a $5.7 billion or 8.4 per cent growth in the Savings Fund, primarily represented by member's savings which increased by $5.0 billion (10.2 per cent) to total $54.1 billion (see Table 39).

Table 39: Comparative Key Indicators – Credit Union Sector

COMPARATIVE KEY CREDIT UNION INDICATORS 2014 - 2016					
INDICATORS	Dec-14 $BN	Change %	Dec-15 $BN	Change %	Dec-16 $BN
Total Assets ($BN)	82.3	8.1	89.0	7.4	95.6
Total Loans ($BN)	55.7	7.0	59.6	6.9	63.7
Total Investment	11.2	8.9	12.2	25.4	15.3
Cash and Placements	9.4	13.8	10.7	-8.4	9.8
PDL (>3months) ($BN)	1.9	26.3	2.4		2.4
Capital Base	9.7	5.2	10.2	9.8	11.2
Total Savings Fund ($BN)	62.3	8.7	67.7	8.4	73.4
Members Savings	44.6	10.1	49.1	10.2	54.1
Fixed/Term Deposits	17.7	5.6	18.7	3.2	19.3
Borrowings from JCCUL	1.9	-10.5	1.7	-35.3	1.1
EARNINGS PROFILE	$BN	%	$BN	%	$BN
Total Income	11.0	4.5	11.5	5.2	12.1
Interest Income	9.6	4.2	10.0	4.0	10.4
Total Expense	9.6	7.2	10.4	3.8	10.8
Interest Expense	2.1	9.5	2.3	-4.3	2.2
Net Profits	1.4	-28.6	1.0	30.0	1.3
RATIOS					
PDL: Total	3.4%		4.0%		3.8%
Loans: Savings Ratio	89.4%		88.0%		86.8%
Capital Base: Assets Ratio (Primary Ratio)	11.8%		11.5%		11.7%
Profit Margin (Net Profit pre-tax/Total Income)	12.7%		8.7%		10.7%
ROAA	1.7%		1.1%		1.4%
DEMOPGRAPHIC PROFILE	Dec-14	%	Dec-15	%	Dec-16
Number of Credit Unions (Actual)	37	-8.1	34	-5.9	32
Membership (Actual)	1 027 592	-2.6	1 000 753	-5.4	947 045
Total number of Deposit Accounts(Actual)	2 043 146	5.7	2 159 160	2.9	2 222 326

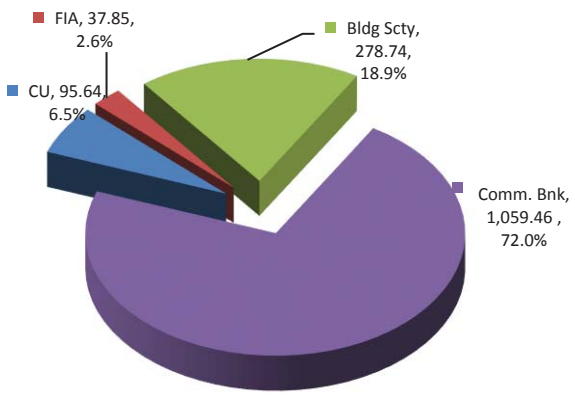
Source: Prudential Data submitted by Credit Unions to the Bank of Jamaica

The year to date surplus for the sector, based on unaudited prudential returns submitted to Bank of Jamaica as at year end 31 December 2016, augmented by $0.3 billion or 30 per cent to total $1.3 billion ($1.0 billion for the year 2015). This increase was reflective of a faster rate of growth in total income ($0.6 billion or 5.2 per cent mainly driven by increased inflows derived from loans and advances) as against the increase in expenses ($0.4 billion or 3.8 per cent). The sector's profitability indicators progresses as evidenced by the net profit margin and return on asset ratios of 10.7% and 1.4% respectively (8.7% and 1.1% for 2015).

Despite the growth experienced, the credit union sector at the end of 2016 accounted for a marginally lower 6.5 per cent (2015: 6.9 per cent) of the $1,471.7 billion in assets held by the combined deposit-taking sector (including credit unions).

[17] The two (2) mergers finalised during 2016 were i. C&WJ Co-operative Credit Union Limited with National Water Commission Co-operative Credit Union Limited effective 30 September 2016: and ii. JPS & Partners Co-operative Credit Union Limited with Collector General Co-operative Credit Union Limited, effective 1 October 2016

Chart 26: DTI Asset Portfolio ($'bn)
as at 31 December 2016



Source: Prudential Data submitted by Financial Institutions to the Bank of Jamaica

3.1.6. Credit Reporting

As the designated Supervising Authority under the Credit Reporting Act, 2010 (CRA), Bank of Jamaica continued its implementation of the operational and supervisory framework for the credit reporting system. Since implementation of the CRA, three credit bureaus have been licensed by the Minister of Finance based on recommendations from the Bank of Jamaica. These are:

1. Credit info Jamaica Limited (licensed March 2012); and
2. CRIF NM Credit Assure Limited (licensed April 2012)
3. Credit Information Services Limited (licensed August 2014).

During 2016, Credit Information Services Limited commenced credit reporting operations, having finalized its operational arrangements and concluded several contracts with credit information providers (CIPs).

3.1.6.1. Market Activity

During the year, there continued to be an increased level of credit reporting activity reported by the credit bureaus which was reflected in increases in the number of credit information providers exchanging credit information with credit bureaus (approximately 90% more), and in the number of credit reports issued (approximately 100% more) (see Table 40).

Table 40: Credit Reporting Statistics

CREDIT REPORTING ACTIVITY as at 31 December	2015	2016
No. of reports issued during the year	129 698	259 703
No. of signed credit information providers*	69	84
No. of signed credit information providers submitting data	19	36

3.1.6.2. Consumer Complaints

Pursuant to Section 16(1) of the CRA, a consumer who disputes the accuracy or completeness of any information disclosed by a credit bureau in relation to that consumer may make a complaint in person or in writing to the credit bureau. The credit bureau shall as soon as is reasonably practicable, and in any event not later than 14 days after the complaint is made, take steps to correct or complete the information as the case may require, in order to ensure the accuracy and completeness thereof [Section 16(2)(a)]. Where a consumer is dissatisfied with any step taken by the credit bureau, the consumer may complain in writing to the Supervising Authority within 30 days after receiving the report of the complaint from the credit bureau [Section 16(3) (a)].

The Bank of Jamaica monitors the credit reporting market to ensure that consumers' complaints are adequately addressed for resolution within the provisions of the CRA. For 2016, the two earlier licensed credit bureaus reported having received a combined total of 1 705 consumer complaints which represented 0.7 per cent of total credit reports issued during the year (see Table 40). There was a case of a consumer complaint that was escalated to the Supervising Authority, which at year end, the Bank was awaiting information from an external agency to complete its investigation.

3.2. Supervision of Cambios and Remittance Service Providers

During 2016, the Bank continued to implement a robust regulatory regime for Cambios and Remittance Service Providers (RSPs). In a context of de-risking by correspondent banks and its implications for the stability of the financial sector, the Bank enhanced the reporting standards to facilitate ongoing assessment of their adherence to the due diligence requirements for cash transactions.

Licensees remained subject to on-site inspections and rigorous in-house monitoring to test the effectiveness of their Anti-Money Laundering (AML)/Combatting the Financing of Terrorism (CFT) compliance regimes and monitor adherence to licensing requirements. In addition, operators remain subject to on-going assessment under the Bank's 'Fit and Proper' criteria as a condition for the issuance and renewal of licences. [18,19] In this regard, 281 operators were assessed in 2016.

3.2.1 Cambios

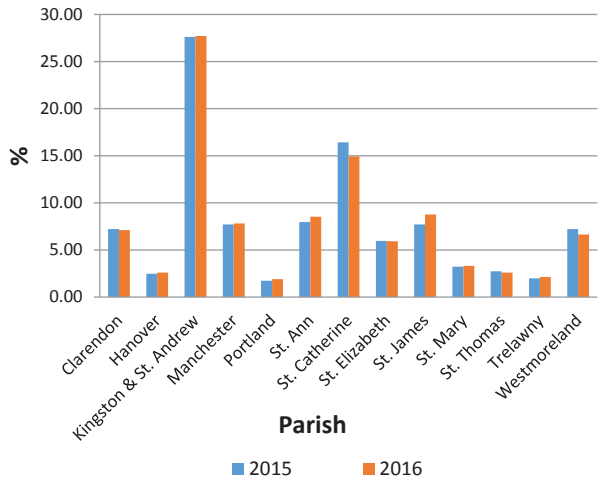
During 2016, one new cambio licence was issued while seven were voluntarily surrendered. This resulted in a total number of cambio outlets at end-December 2016 of 144, compared to 150 at end-December 2015 (see **Table 41**). Four companies ceased offering cambio services resulting in a reduction in the number of cambio entities to 57 compared to 61 at end-December 2015.

Table 41

STATUS OF CAMBIO LICENCES as at 31 December		
	2016	2015
New Locations Licensed	1	3
Locations Closed	7	12
Number of Locations	144	150
Number of Companies	57	61

Kingston and St. Andrew continued to account for the largest concentration of cambio outlets, (see **Chart 27**). Cambios commanded 39.5 per cent of total foreign currency market purchases in 2016, a decrease of 4.3 percentage points relative to 2015.

Chart 27: Geographic Distribution of Cambio Outlets at end-December



3.2.2. Remittance Service Providers

The number of Remittance Service Providers (Primary Agents) increased to nine in 2016 relative to eight in 2015. Jamaica remains a net receiver of remittances with flows mainly from the USA, UK, Canada and the Cayman Islands.[20]

For 2016, 82 new licences were issued to operate at an additional 41 outlets.[21] Concurrently, 61 licences representing 21 outlets were relinquished during the review period. The number of licensed outlets therefore increased to 422 at end-2016 relative to 402 at end-2015 (see **Table 42**)

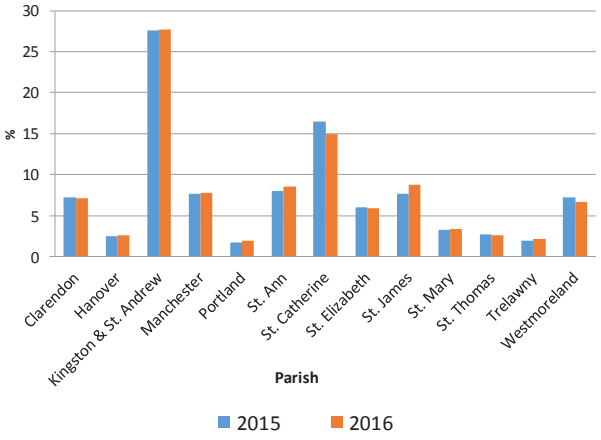
[18] Operators include: Directors, shareholders and managers of Cambios and RSPs)
[19] Shareholders are defined as persons holding 10.0 per cent or more of shares of the relevant company.
[20] Primary Agents are companies licensed in Jamaica to offer remittance services as agents of remittance companies domiciled overseas. They are authorised to offer the service in Jamaica through sub-agents.
[21] Several RSPs may be granted approval to offer their service at a single outlet, each approval is represented by a licence.

Table 42

STATUS OF REMITTANCE LICENCES as at 31 December		
	2016	2015
New Outlets Licensed	41	28
Outlets Closed	21	27
Number of Outlets	422	402
New Licences Issued	82	131
Licences Relinquished/Revoked	61	46
Number of Licences	679	658
Number of Primary Agents	9	8

Kingston & St. Andrew region accounted for 27.73 per cent of outlets relative to 27.61 per cent at the end of 2015 (see Chart 28).

Chart 28: Geographic Distribution of Remittance Outlets at end-December



3.3. Financial Stability Assessment of Deposit-taking Institutions (DTIs)

3.3.1 Overview

DTIs were largely resilient to macro-prudential stress tests conducted during the calendar year to end-September 2016, due to strong capital positions.[22,23] More specifically, stress test results revealed that the average post-shock capital adequacy ratios (CARs) for the banking system generally remained above the 10.0 per cent minimum benchmark, in response to extreme but plausible hypothetical credit, foreign exchange, interest rate, liquidity and aggregate shocks. In addition, signals from the BOJ's macro-financial and micro-prudential indices remained well below crisis threshold levels.

In the context of continued improvements in loan quality, credit risk stress test results showed that the system remained largely resilient to hypothetical shocks to non-performing loans (NPLs). As it relates to foreign exchange risk exposures, DTIs' net open position to capital increased for the calendar year to end-September 2016. However, the sector continued to be robust to hypothetical depreciation and appreciation in the exchange rate.

Regarding liquidity risk, the DTI sector showed marginal improvement in domestic currency liquidity positions as measured by the ratio of liquid assets to average prescribed liabilities at end-2016 relative to end-2015. Nonetheless, stress tests showed that the DTI sector remained resilient to hypothetical deposit withdrawals under 64.0 per cent. Furthermore, DTIs demonstrated resilience to hypothetical interest rate shocks over the review period. Nevertheless, there was a slight increase in the dollar value of a basis point (DVBP) to capital base ratio at end-September 2016 compared to end-2015, indicative of higher loss in net interest income as a result of interest rate shocks to the system's foreign and domestic securities portfolio.

[22] DTIs include commercial banks, FIA licensees and building societies.

[23] The objective of stress testing by the BOJ is to determine the impact of extreme but plausible shocks to various risk factors such as credit quality, foreign exchange rates, domestic interest rates and liquidity on the capital adequacy ratios of the DTIs.

Within the context of the above described stress tests results, the value of the Bank's macro-financial index (MaFI), which comprises 18 key macroeconomic indicators, improved at end-2016 relative to end-2015.[24] This performance predominantly reflected lower risk signals from 12-month measures and price volatility indicators. However, the Bank's micro-prudential index (MiPI) for DTIs, comprising 21 key financial ratio indicators, deteriorated slightly at end-2016 compared to end-2015.[25] This outturn emanated from deterioration in the balance sheet structure category.

3.3.2. Credit Risk Stress Tests

DTIs' loan quality as measured by the ratio of NPLs to total loans improved as at end-2016 (See **Section 3.1: Supervision of Deposit-taking Institutions**).

The DTI sector remained robust to hypothetical increases in NPLs at end-2016. In particular, it would require a 425.0 per cent hypothetical increase in NPLs to breach the 10.0 per cent CAR benchmark. This result was primarily influenced by the performance of commercial banks and represents an improvement relative to end-2015 when an increase of 300.0 per cent in NPLs would result in the CAR of the DTI sector falling just below the prudential minimum (see **Chart 29**). This higher breaking point for the post-shock CAR for the DTI sector at end-2016, largely represents lower NPLs relative to the close of the previous year.

As a result of hypothetical sectoral shocks to performing loans at end- 2016, the CAR for the DTI sector continued to be mostly impacted by shocks to personal loans.[26] Regarding this loan category, a hypothetical shock of 25.1 per cent would result in the CAR of the DTI sector declining from a pre-shock CAR of 14.7 per cent to a post-shock CAR of 9.9 per cent at end-2016, to breach the prudential benchmark of 10.0 per cent. This result represents an improvement relative to that obtained at end-2015, when a reduction of 24.4 per cent in performing personal loans would result in the CAR of the DTI sector falling below the prudential minimum (see **Chart 30**).

Chart 29: Banking Sector: Impact on CAR from an Increase in NPLs

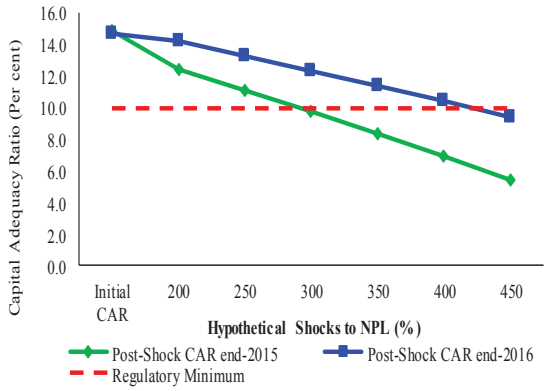
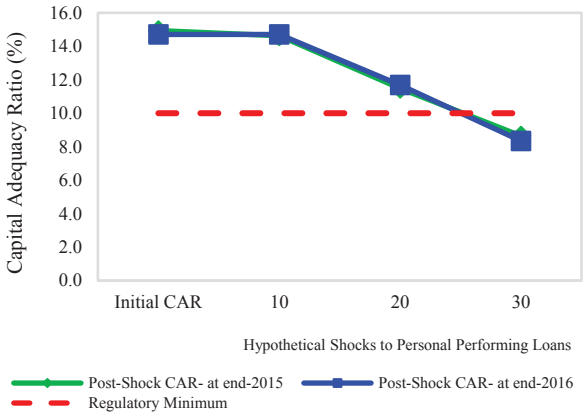


Chart 30: Banking Sector: Impact on CAR from a Reduction in Performing Personal Loans



[24] The macroeconomic indicators are categorized as follows: *12-Month Measures* – 12-month growth in CPI, 12-month growth in GDP, 12-month growth in stock market index,12-month growth in private sector credit; *Fiscal Measures* – central government deficit as a per cent of GDP, credit to public sector as a per cent of GDP, national debt as a per cent of GDP, external debt as a per cent of GDP, volatility in inflation; *Other Economic Prices* – volatility in interest rates, volatility in exchange rates, real lending rate minus real deposit rate, U.S./Jamaica interest rate differential, real T-bill rate, real effective interest rate and *BOJ Variables* – BOJ credit to banking sector as a per cent of GDP, M2 as a per cent of net international reserves, money multiplier.

[25] The financial ratios are categorized as follows: *Balance Sheet Structure* – capital as a per cent of assets, loans as a per cent of capital, deposits as a per cent of loans, deposits as a per cent of total assets, liquid assets as a per cent of total assets, deposits & repos as a per cent of assets, public sector loan as a per cent of assets, financial inst. loans as a per cent of total loans, investments as a per cent of assets; *Asset Quality* – non-performing loans as a per cent of assets, non-performing loans as a per cent of total loans, reserve for loan losses as a per cent of total assets, loan & sec. loss prov. as a per cent of assets; *Profitability* – implicit deposit rates, employee salaries as a per cent of assets, non-interest income as a per cent of assets, interest income as a per cent of assets, net income as a per cent of assets and *Other Indicators* – FX liabilities as a per cent of FX assets, FX deposits as a per cent of FX assets, 12-month growth in deposits.

[26] Mortgage loans are included in the personal loan category for building societies.

3.3.3. Foreign Exchange Risk Stress Test Results

DTIs' susceptibility to foreign exchange risk declined during the review period relative to 2015. Specifically, the ratio of foreign currency net open position (NOP) to capital marginally decreased to 2.3 per cent at end–2016 relative to 3.5 per cent at the close of 2015. Accordingly, stress test results as at end–2016 showed that the CAR of the DTI sector was unchanged at 14.7 per cent in response to hypothetical depreciation and appreciation shocks of 50.0 per cent in the exchange rate (see **Chart 31**).

3.3.4. Interest Rate Risk Stress Tests

The DTI sector remained robust to routine interest rate stress tests performed during 2016 as the sector's buffer capital was sufficient to absorb the impact of hypothetical shocks.

In particular, following the highest applied set of hypothetical increases of 1 400 bps/400 bps and 350 bps/70 bps in interest rates on domestic/foreign rate sensitive assets and liabilities, respectively, the sector–CAR for DTIs was unchanged at 14.7 per cent at end–September 2016.[28, 29] Of note, this result was largely similar to stress testing results obtained for the previous year. Notwithstanding the robust performance of the sector, the DVBP to capital base ratio increased to 11.5 per cent at end–September 2016 relative to 11.3 per cent at end–2015, reflecting a slight decline in the system's ability to absorb interest rate shocks (see **Chart 32**).[30]

3.3.5. Liquidity (Funding) Risk Stress Tests

At end–2016, the DTI sector remained resilient to a hypothetical sudden withdrawal of deposits of 60.0 per cent. It would take a reduction of 64.0 per cent

Chart 31: Banking System Foreign Exchange Risk Stress Test Results[27]

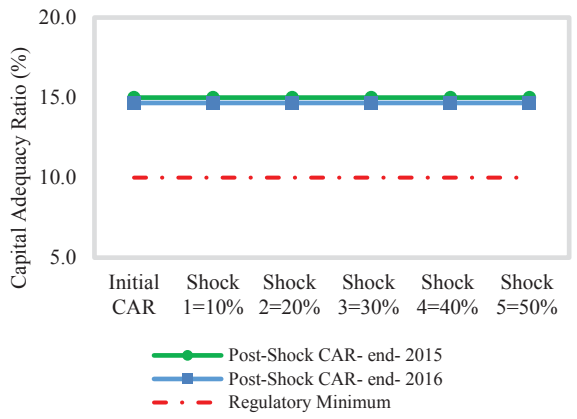
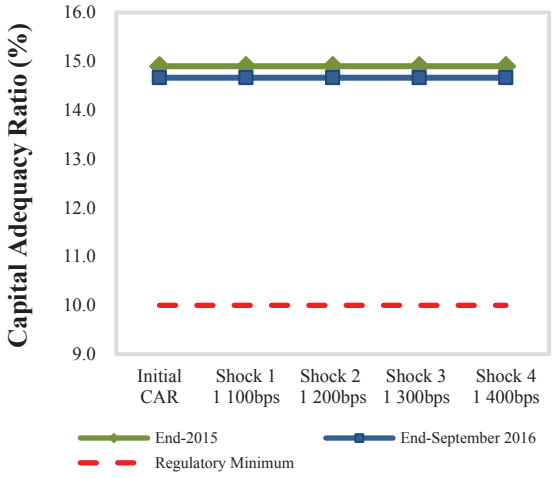


Chart 32: Banking System Interest Rate Risk Stress Test Results[31]



[27] These stress tests involve 10.0 per cent to 50.0 per cent depreciation and appreciation in the Jamaica Dollar vis–à–vis the US dollar. Shocks are applied firstly to the exchange rate between the Jamaica Dollar and the US dollar. The corresponding exchange rates of the Jamaica Dollar vis–à–vis the Euro, the Canadian dollar, and the Pound Sterling were then incorporated based on historical correlations with the selling rate for the US dollar between January and May 2003. The increase in NPLs on foreign currency loans is assumed to be directly related to the proportion of foreign currency loans that are extended to non–foreign currency earners. Additionally, a 100.0 per cent provisioning rate is assumed for loan losses.

[28] Interest rate increases ranging from 1 100 bps to 1 400 bps and 275 bps to 350 bps are applied to domestic and foreign investment holdings, respectively, for fair value and net interest income assessment. Increases of 100 bps to 400 bps and 15 bps to 70 bps are applied to the domestic and foreign non–investment components respectively.

[29] Re–pricing net gap positions are computed for each re–pricing bucket. The change in the market value of net re–pricing assets is evaluated by applying the interest rate shock and duration factor to each re–pricing gap position. The impact on capital adequacy is then evaluated.

[30] DVBP is the loss in net interest income generated from shocks to the system's foreign and domestic securities portfolio and reported as a percentage of the system's capital base.

[31] See footnote 32.

in deposits at end-2016 for the CAR of the overall DTI sector to breach the statutory benchmark of 10.0 per cent.[32] This result was similar to that obtained at end-2015 (see Chart 33). Nonetheless, for 2016, the liquid assets to average prescribed liabilities ratio averaged 26.2 per cent, on a quarterly basis, relative to an average quarterly ratio of 27.3 per cent for the previous year. This decrease reflected a slightly weaker liquidity position of the banking system during the first three quarters of 2016. This decline in liquidity was reflected in two of the three DTI sub-sectors. The liquid assets to average prescribed liabilities ratio for both commercial banks and merchant banks declined by 1.8 percentage points, to 29.2 per cent. Meanwhile, the average liquid assets to average prescribed liabilities ratio for the building societies sector increased by 0.9 percentage point to 15.6 per cent.

3.3.6. Aggregate Stress Test Results

The aggregate stress test assessed the impact on the CAR for the banking sector resulting from simultaneous shocks to interest rate, credit quality and deposit withdrawals.

The aggregate stress test assumptions were:

- increases of 1 100 bps and 100 bps in interest rates on domestic currency investment assets & liabilities and other assets & liabilities, respectively;
- increases of 100 bps and 10 bps in interest rates on foreign currency investment assets & liabilities and other assets & liabilities, respectively;
- 10.0 per cent depreciation in the JMD/USD exchange rate;
- 100.0 per cent of past due performing loans (1 month to under 3 months) becoming non-performing; and
- 10.0 per cent reduction in deposits.

In response to the abovementioned shocks, the CARs of the DTIs declined by an average of 1.0 percentage point per quarter for the year ended September 2016 relative to an average quarterly decline of 1.8 percentage points for 2015 (see Chart 34). Of note, the post-shock CAR of the DTI sector remained above the prudential minimum benchmark during 2016 (see Table 43).

Chart 33: Banking System Funding Risk Stress Test Results

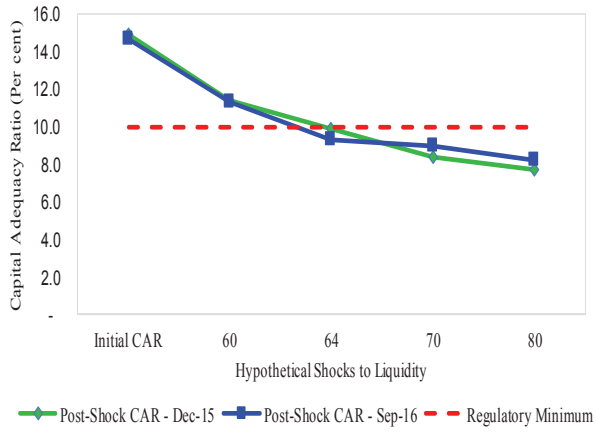
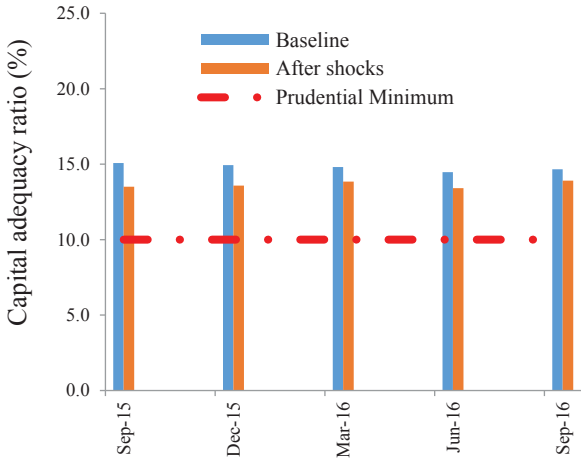


Chart 34: Banking Sector: Impact on CAR following Aggregate Stress Test Scenarios



[32] Hypothetical reductions are applied directly to the deposit base of the bank. Assets are assumed to be liquidated, in order of liquidity, so as to satisfy the demand. Haircuts are applied to non-liquid assets to satisfy further declines in deposits. The resulting impact on capital adequacy is then evaluated.

Table 43

DTIs QUARTERLY AGGREGATE STRESS TEST RESULTS							
	2015				2016		
	Mar	Jun	Sept	Dec	Mar	Jun	Sept
Original CAR *(%)*	15.7	15.6	15.1	14.9	14.8	14.5	14.7
Post-shock CAR *(%)*	13.2	13.8	13.5	13.6	13.8	13.4	13.9
Change in CAR *(pp.)*	-2.5	-1.8	-1.6	-1.4	-1.0	-1.1	-0.8

3.3.7. Early Warning System Results[33]

The MaFI decreased by 2.0 points to 20.0 points at end-2016 relative to end-2015 and remained well below the 1996-1998 financial crisis threshold value of 44.0 points (see **Chart 35**). This improvement in outturn largely reflected improvements in the signals from the volatility in inflation and the 12-month growth in the stock market index indicators. More specifically, the signals from the volatility in inflation and the 12-month growth in the stock market index indicators decreased to 3.0 points and no signal respectively at end-2016 relative to 4.0 points and 5.0 points at end-2015. This outturn was, however, partially offset by a deterioration in the signal from volatility in the exchange rate indicator which increased in severity to 5.0 points at end-2016 from 1.0 point at end-2015.

The MiPIs for DTIs deteriorated to 30.0 points for end-2016 relative to 29.0 points for end-2015 but remained below 1996-1998 financial crisis threshold value of 50.0 points.[34] This outturn reflected a deterioration in the balance sheet structure indicator and financial institution loans to total loans indicator to 5.0 points for end-2016 relative to no signal for end-2015. The deterioration was however, offset by improvements in asset quality and profitability indicators. In particular, non-performing loans to total assets improved to no signal for end-2016 relative to 1.0 point for end-2015 while employee salaries to total assets and net income to total assets both improved to no signal for end-2016, relative to 2.0 points and 1.0 point respectively, for end-2015.

Chart 35: Macro-Financial Index & Sub-Components: 2015 – 2016

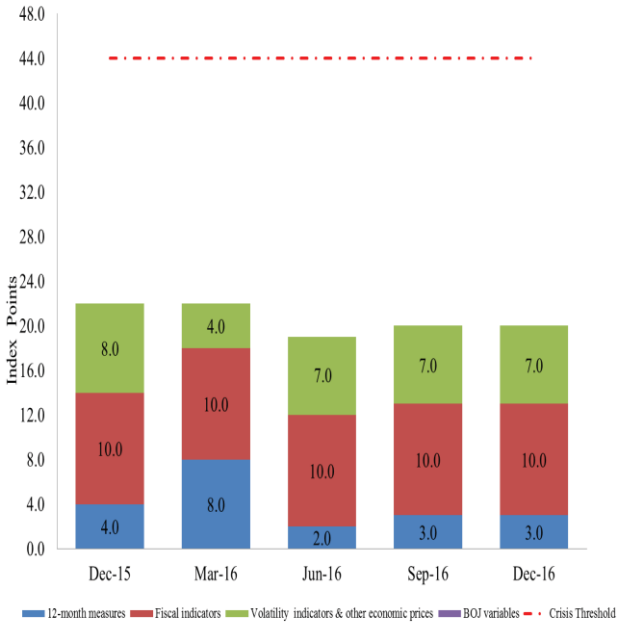


Chart 36: Micro-Prudential Index & Signalled Sub-Components for Deposit-Taking Institutions: 2015 – 2016

[33] The BOJ Early Warning System (EWS) for financial stability monitors macro- and micro- economic indicators of the banking sector via a non-parametric approach to signal banking sector vulnerability. The signal is based on EWS scores for each indicator, which is computed based on the number of standard deviations of each indicator from its 'tranquil period' mean value. The tranquil period for both indices has been changed to a fixed period spanning March 2002 to March 2003. The scores range from 0 to 5 with a score of 5 representing the most severe signal. Banking sector vulnerability at a point in time is determined by the trend in the aggregate EWS score (or index) over the previous eight quarters.

[34] Indicators included in the micro-prudential index are weighted by asset size.

3.4 Financial Legislation

In relation to persons supervised or regulated by the Bank of Jamaica, no principal statute or amendments to the principal Statutes governing such persons were passed in 2016.

3.4.1. Subsidiary Financial Legislation (Regulations, Rules, Codes of Conduct)

3.4.1.1. Regulations

The following Regulations were affirmed in Parliament:

The Banking Services (Deposit Taking Institutions) (Agent Banking) Regulations

In December 2016, the Banking Services (Deposit Taking Institutions) (Agent Banking) Regulations were promulgated under the Banking Services Act, 2014. Section 108 of the Banking Services Act, 2014 ("BSA") contains enabling provisions which facilitate the offering of certain banking services through agent operations. These provisions allow the widening of banking access channels beyond existing deposit taking institutions' ("DTIs") branch networks and electronic access channels, to include the use of third-party-owned locations, that will offer banking services alongside their own products and services. This widening of the channels of delivery of banking services, to include non-bank agents, creates an increased risk to the financial services sector which has to be met with adequate regulation of this area. Accordingly, these Regulations operationalize section 108 of the BSA by:

1. prescribing the application process and eligibility requirements for involvement, in agent banking;

2. outlining the responsibilities and obligations of the appointing DTI and its agent;

3. establishing the operating parameters of the agent banking space; and

4. addressing the matter of breaches, offences, applicable penalties and sanctions.

3.4.1.2. Codes of Conduct

Code of Conduct on Consumer Related Matters

The Banking Services (Deposit Taking Institutions) (Customer Related Matters) Code of Conduct, 2016 was issued by the Bank of Jamaica on 30 August 2016.

Section 132 (4) (b) of the Banking Services Act, 2014 ("BSA") contains enabling provisions for the development and issue of a code of conduct on consumer related matters ("the Code"). The BSA further indicates the matters for which the Code may provide. Accordingly, the matters covered in the Code include:

1. Disclosure obligations on deposit taking institutions ("DTIs") regarding:
    a. fees, charges, terms and conditions and changes thereto that are applicable to a product or service that is offered by the DTI ;
    b. mechanisms for handling customer complaints;

2. Obligations on DTIs to:
    a. allow customers' access to their information at reasonable cost;
    b. express interest rates as effective annual rates calculated in a standard manner across the banking services industry; and
    c. establish mechanisms and procedures to address customer disputes, communicate those mechanisms and maintain relevant reporting and record keeping in that regard.

A breach of a requirement in the Code may constitute grounds for the issue of directions by the Supervisor under the BSA. A licensee that does not comply with a direction given by the Supervisor commits an offence.

3.4.1.3 Pending Amendments to Financial Legislation

The Co-operative Societies (Amendment) Bill

This amendment to the Co-operative Societies Act will among other things bring credit union co-operative

societies under the regulatory ambit of the Minister of Finance and the Public Service and Bank of Jamaica. Accordingly, this Bill includes provisions that will restrict the deposit-taking activities of co-operative societies to those co-operative societies, which operate as credit unions. Other substantive enhancements to the Co-operative Societies Act are contemplated by the Ministry of Industry, Investment, Agriculture and Fisheries ("MICAF") (formerly Ministry of Industry, Investment and Commerce (MIIC)), which is the Ministry with portfolio responsibility for co-operative societies. It is anticipated that this Bill will be presented to Parliament jointly with the draft Bank of Jamaica (Credit Union) Regulations which contain the substantive prudential requirements to which credit unions will be subject once the aforesaid regulatory regime comes into effect.

3.4.1.4. Pending Subsidiary Financial Legislation (Regulations, Rules, Codes of Conduct)

The Bank of Jamaica (Credit Union) Regulations

These regulations will bring the operations of credit unions fully under the Bank of Jamaica's prudential supervisory regime. These regulations will therefore among other things cover licensing, capital, reserves, prohibited business, remedial and intervention processes and define the role of specially authorized credit union (See **Supervision of Deposit-Taking Financial Institutions**).

Anti-Money Laundering /Combatting the Financing of Terrorism (AML/CFT) and Proliferation of Weapons of Mass Destruction Rules

The international standards on AML/CFT and proliferation (i.e. the revised FATF[35] Recommendations 2013) include a number of enhanced requirements with which countries are asked to comply. These enhanced requirements include requiring the application of a risk-based approach to allow competent authorities to ensure that measures to prevent or mitigate money laundering or terrorist financing are commensurate with the risks identified and enable such authorities to make decisions on how to allocate their resources in the most effective way. Accordingly, the framework that is implemented should, among other things:

1. maintain the requisite focus on the risks to the system, customers, services (including the business line and products), and the quality of compliance;

2. have express triggers for periodic reviews, that is, major events, changes in management or operations;

3. ensure that the frequency and intensity of supervision are clearly dependent on risks;

4. ensure consolidated supervisory obligations with respect to AML/CFT remain applicable including the requirement for regulatory co-operation nationally and cross border, including co-operation on a diagonal basis;

5. ensure that supervisors have the range of disciplinary and financial sanctions (including the application of administrative fines and the power to revoke and/or restrict or suspend the licence) and

[35] The Financial Action Task Force (FATF) is an inter-governmental body established in 1989 by the Ministers of its Member jurisdictions. The objectives of the FATF are to set standards and promote effective implementation of legal, regulatory and operational measures for combating money laundering, terrorist financing and other related threats to the integrity of the international financial system. The FATF is therefore a "policy-making body" which works to generate the necessary political will to bring about national legislative and regulatory reforms in these areas.
The FATF has developed a series of Recommendations that are recognised as the international standard for combatting of money laundering and the financing of terrorism and proliferation of weapons of mass destruction. They form the basis for a co-ordinated response to these threats to the integrity of the financial system and help ensure a level playing field. First issued in 1990, the FATF Recommendations were revised in 1996, 2001, and 2003 and most recently in 2012 to ensure that they remain up-to-date and relevant, and they are intended to be of universal application.
The FATF monitors the progress of its members in implementing necessary measures, reviews money laundering and terrorist financing techniques and counter-measures, and promotes the adoption and implementation of appropriate measures globally. In collaboration with other international stakeholders, the FATF works to identify national-level vulnerabilities with the aim of protecting the international financial system from misuse. (Source: www.fatf-gafi.org)

6. ensure co-operation and collaboration with local competent authorities can be undertaken.

A proposal for the development of drafting instructions for AML/CFT Supervisory Rules under the Banking Services Act, 2014 and the Bank of Jamaica Act were in development at end-2016.
These Rules will, among other things:

1. codify the risk-based examinations and oversight processes pertaining to the AML/CFT oversight functions of the Bank of Jamaica that were established in 2014.

2. outline the areas in the BOJ's AML/CFT Guidance Notes with which compliance will be expressly mandated and allow BOJ to directly sanction breaches of those requirements in BOJ's AML/CFT Guidance Notes. The BOJ is currently the Competent Authority with responsibility for monitoring compliance with the requirements of the Proceeds of Crime Act (POCA) and Terrorism Prevention Act (TPA) for persons comprising :

    a. deposit taking institutions under the Banking Services Act;
    b. cambios (Exchange Bureaux);
    c. money transfer and remittance agents and agencies; and
    d. a society registered under the Cooperative Societies Act and which carries on credit union business.

The requirements under the Guidance Notes with which compliance will be expressly mandated pertain to areas regarding:

a. Risk assessments;
b. Know Your Customer;
c. Nominated Officer Regime;
d. Governance Arrangements and Employee Integrity and Awareness;
e. Internal Compliance Programme Requirements; and
f. Record keeping.

Once drafted, the proposal will be issued for consultation and eventually finalised to inform the development of the requisite drafting instructions for Supervisory Rules under the Banking Services Act, 2014 and under the Bank of Jamaica Act.

3.4.2 Consultation Papers

On 30 November 2016, the Bank of Jamaica issued the following consultation papers:

1. Consolidated Capital Adequacy Requirements; and

2. Proposal for Drafting Instructions for FHC Licence Application Rules.

These papers cover two foundational areas that must be in place for the commencement of the financial holding company ("FHC") oversight regime under the Banking Services Act, 2014 ("BSA"). Accordingly:

1. The paper on consolidated capital adequacy requirements, among other things, proposes the general requirements for group-wide capital adequacy that will be imposed on FHCs who head financial groups as defined in the BSA. The paper also discusses the methodology to be used for computing consolidated capital requirements of the FHC, and the methodology that will be applied where these financial groups include insurance entities. The consultation period ended at close of business on 31 January 2017. This document will inform the development of the proposal for drafting instructions for the Banking Services (Financial Holding Company) (Capital Adequacy) Regulations under the BSA.

2. The proposal for drafting instructions for Licence Application Rules under the BSA for FHCs among other things, sets out the information set which must be provided in an application. The information required includes the same particulars that apply to an applicant for licence to operate as a DTI and therefore covers areas such as ownership and group structure, financial resources and strength, strategic plans and projections, governance structure and arrangements, risk management and internal controls, corporate governance

and IT systems. Additionally, the information must provide details of the recovery and resolution strategy and plans, as well as recovery options of entities within the financial group headed by the applicant. The consultation period ended at close of business on 31 January 2017.

3.4.3. Non–Financial Legislation

In relation to the AML/CFT framework and the financial system, no legislation was passed in 2016.

4. Financial Market Operations

4.1. Open–Market Operations

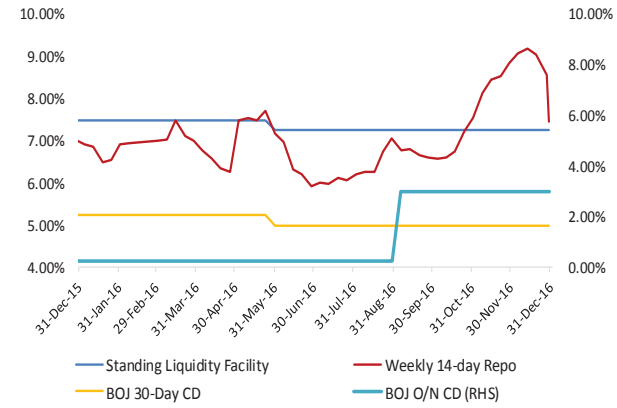
4.1.1. Bank of Jamaica Liquidity Management Operations

During 2016, the Bank continued to conduct liquidity management operations through its sterilization instruments, 30–day Certificate of Deposits (CDs), overnight deposits and special instruments with tenors in excess of 30–days. Additionally, the Bank continued to provide liquidity assurance to the financial system through the overnight Standing Liquidity Facility (SLF) and the offer of 14–day repurchase agreements on a competitive auction basis.[1] In taking further steps to enhance the monetary policy transmission process, the Bank, during the September quarter announced changes to the monetary policy framework aimed at establishing the use of the overnight interest rate to signal its policy stance. Specifically, the activities in the initial phase of the transition process included an increase in the interest rate offered on the overnight instrument, the resumption of the multiple–price competitive auction of 365–day CDs and a reduction in the frequency of the offer of the 30–day CDs.[2,3]

By end–December 2016, the rate on the 30–day CD was 5.00 per cent, following a 25 bps reduction during the June 2016 quarter (see **Chart 37**). The interest rate on this instrument remained the benchmark for rates on the Bank's overnight liquidity instruments.

During the year, there was a net issue of BOJ CDs resulting in the liquidity absorption of $12 755.4 million. This absorption mainly occurred in the March quarter evidenced by the net placements of $15 025.3 million on CDs.[4]

Chart 37: Interest Rates/Average Yields on Standard Sterilization & Liquidity Provision Instruments 2016



The liquidity absorption in the March quarter was followed by net maturities totalling $9 434.2 million in the June and September quarters. However, Jamaica Dollar liquidity tightened during the December 2016 quarter as net placements on BOJ CDs amounted to $7 164.2 million (see **Table 44**).

Table 44

BANK OF JAMAICA LIQUIDITY OPERATIONS					
	Mar-16	**Jun-16**	**Sep-16**	**Dec-16**	**Total**
Sterilization Operations					
Net issues (+) /Net maturities (-)	15 025.3	-6 855.0	-2 579.2	7 164.2	12 755.4
Liquidity Provision Operations					
Net Maturity (+)/ Net Issue (-)	3 456.6	-4 361.2	908.6	1 554.1	1 558.1
TOTAL OPEN-MARKET OPERATIONS					
Net Absorption (+) / Net Injection (-)	**18 481.9**	**-11 216.1**	**-1 670.7**	**8 718.3**	**14 313.4**
Foreign Exchange Transactions					
Net Sale(+) / Net Purchase(-)	-11 810.5	-21 576.1	-21 633.0	-43 875.8	-98 895.4
Domestic Cash Reserve					
Net increase (+)/net Decrease (-)	1 897.0	754.0	510.6	325.3	3 486.8
BOJ Operations					
Net Absorption (+) / Net Injection (-)	8 568.4	-32 038.2	-22 793.2	-34 832.2	-81 095.2

[1] The SLF provides overnight liquidity up to an aggregate value of $14.6 billion to DTIs. Each entity has an established limit for accessing liquidity via this medium.

[2] Effective 01 September 2016; the interest rate offered on the overnight instrument increased by 275 bps to 3.00 per cent.

[3] Effective 03 October 2016, the offer of 30–day CDs was reduced from daily to three days per week on Mondays, Wednesdays and Fridays and then to Mondays and Fridays commencing 01 December 2016. However the offer amount on the 30–day CDs remained unlimited. In subsequent steps the Bank will effect further adjustments to the frequency, volume and price determination for the issuance of 30–day CDs. With the introduction of a competitive price auction for 30–day CDs, this rate will cease being the Bank's policy rate.

[4] The outturn in the March quarter was due to the performance of 365–day US Index Linked Notes that were offered to offset the impulse of maturity payments on a GOJ BMI Note in February 2016.

During 2016, the overall net placement on the sterilization instruments was largely attributed to the performance of the longer-tenor CDs. Notable, there were 15 new issues of 365-day fixed rate CDs in 2016 relative to two issues in 2015. In addition, the Bank issued three fixed rate US dollar Indexed Notes and one variable rate CD in the March quarter. In that regard, the net issue on the longer-tenor CDs amounted to $8 180.2 million to fully offset a net maturity of $5 594.1 million on 30-day CDs during the review period (see Table 45 and Table 46).

Table 45

INVESTMENT PROFILE OF BOJ'S 30-DAY CD [1/]

Year	Quarter	Take-up (J$ Mn)	Take-up Ratio (%)	Maturity (J$ Mn)	Maturity Ratio (%)	Net Issue(+)/ Net Maturity(-) (J$ Mn)	Reinvestment Rate (%)
2015	March	58 938.6	29.4	62 981.2	31.5	-4 042.6	93.6
	June	47 292.2	23.6	48 314.3	24.2	-1 022.1	97.9
	September	46 234.9	23.1	44 976.7	22.5	1 258.3	102.8
	December	47 791.0	23.9	43 519.9	21.8	4 271.1	109.8
	Total	**200 256.7**		**199 792.1**		**464.6**	**100.2**
2016	March	63 486.2	26.2	64 512.7	26.0	-1 026.4	98.4
	June	59 408.1	24.5	61 783.3	24.9	-2 375.2	96.2
	September	58 067.5	23.9	58 193.3	23.5	- 125.8	99.8
	December	61 517.1	25.4	63 583.8	25.6	-2 066.7	96.7
	Total	**242 479.0**		**248 073.1**		**-5 594.1**	**97.7**

[1/] Data includes principal amounts only.

Table 46

STERILIZATION OPERATIONS WITH LONGER-TERM CERTIFICATES OF DEPOSITS [1/]

Quarter:	Mar-15	Jun-15	Sep-15	Dec-15
Number of Instruments Offered	10.0	6.0	4.0	7.0
o/w - Variable Interest Rate	8.0	6.0	4.0	5.0
o/w - Fixed Interest Rate CD Auction	n/a	n/a	n/a	2.0
o/w - US Indexed Note	2.0	n/a	n/a	n/a
Average Tenor	548-days	548-days	548-days	547-days
Nominal Subscription (J$mn)	11 897.9	6 296.7	3 119.5	6 103.0
Maturities (J$mn)	17 204.7	3 885.9	6 579.9	11 711.7
Quarter:	**Mar-16**	**Jun-16**	**Sep-16**	**Dec-16**
Number of Instruments Offered	10.0	4.0	0.0	5.0
o/w - Variable Interest Rate	1.0	0.0	0.0	0.0
o/w - Fixed Interest Rate CD Auction	6.0	4.0	0.0	5.0
o/w - US Indexed Note	3.0	0.0	0.0	0.0
Average Tenor	401-days	365-days	n/a	365-days
Nominal Subscription (J$mn)	21 804.0	2 463.1	0.0	4 670.0
Maturities (J$mn)	10 788.6	2 812.7	2 039.1	5 116.5

[1/] Data includes principal amounts only.

With regards to the liquidity providing operations, there was a net maturity of $3 456.6 million during the March quarter, largely due to DTIs opting to net repay the maturing repurchases from the Occasional Term Repurchase Operations (OTRO) that were conducted in the December 2015 quarter (see Table 44). Notably, the repurchases from that operation were issued for a tenor of four months with an option to roll for an additional four months. The repayment of these repurchases occurred in a context of the buoyant liquidity conditions during the March quarter occasioned by the GOJ BMI maturity of approximately $62.0 billion in February 2016.

In contrast, the liquidity providing operation during the June quarter resulted in a net injection of $4 361.2 million given the DTIs increased access to funds via the 14-day repurchase auctions. This was evidenced by the allocation to bid ratio in the June quarter increasing to 87.6 per cent from 72.7 per cent during the March quarter. There was a net maturity of these repurchases during the second half of the year, given the strategy to temper the impact of JMD supply in the foreign exchange market. Notwithstanding, the allocation of 14-day liquidity was adequate throughout the year, evidenced by an average allocation to bid ratio of 75.7 per cent (see Table 47).

Table 47

SUMMARY STATISTICS ON LIQUIDITY PROVISION OPERATIONS FOR DTIs

Outstanding Balance for Repurchases (J$MN)	end-Mar. 2016	end- Jun. 2016	end-Sept. 2016	end-Dec. 2016
Standing Liquidity Facility (SLF)	0.0	0.0	0.0	0.0
Excess Funds Rate (EFR)	0.0	0.0	0.0	0.0
14-day Repurchases	10 200.0	18 450.0	17 800.0	16 550.0
3-month/4-month Repurchases	3 589.1	0.0	0.0	0.0
Usage of Liquidity Facilities by DTIs	**Mar. 2016**	**Jun. 2016**	**Sept. 2016**	**Dec. 2016**
SLF-frequ (%)[1/]	23.0	32.8	30.8	69.4
Overnight Repo -size ($mn)[2/]	5 169.7	2 346.4	880.8	2 699.1
EFR-frequ (%)	13.1	10.9	4.6	27.4
Overnight Repo/ SLF limit (%)[3/]	71.3%	79.7%	48.2%	74.9%
14-day Alloc/ Bid Ratio (%)[4/]	72.7	87.6	77.9	64.6

[1/] The frequency of use for the SLF is measured as the number of days liquidity is accessed relative to the number of business days within the period.
[2/] Measured as the simple average of the liquidity accessed (per day) by DTIs within a quarter.
[3/] Average liquidity provided relative to the SLF limit within a quarter.
[4/] Measured as the amount allocated relative to bids received from DTIs within a quarter for each operation.

Against this background, there was increased usage of the overnight facility during the December quarter evidencing DTIs efforts to source additional liquidity as

needed given the decline in the allocation to bid ratio on the 14-day facility during the quarter. In that regard, the average size for overnight repurchases increased to $2 699.1 million relative to $880.8 million for the September quarter. In addition, the frequency of institutions' use of the overnight facility increased to 69.4 per cent from 30.8 per cent in the previous quarter.

During the year, the spread on the overnight SLF and EFR repurchases remained unchanged relative to the 30-day CD rate at 225 bps and 430 bps, respectively. At end-December 2016, the rates on SLF, EFR and 14-day repurchases were 7.25 per cent, 9.30 per cent and 8.57 per cent respectively (see **Chart 37**).

For 2016, the overall liquidity management operations resulted in a net absorption of $14 313.4 million from the system. However, the impact of this absorption was offset by the net purchase of foreign exchange equivalent to $98 895.4 million, to result in an overall net injection of $81 095.2 million emanating from the Bank's financial market operations (see **Table 45**).

4.1.2. Issuance of Foreign Currency Certificates of Deposit

During the review year, the Bank continued to issue foreign currency CDs as a part of the strategy to meet the foreign reserve objectives. The total number of instruments offered to the market in 2016 was 30 relative to 33 instruments in 2015. Subscriptions to US dollar (USD) CDs during 2016 amounted to US$110.6 million relative to US$277.9 million in 2015, while the weighted average tenor for new issues remained at five years. For 2016, principal payments on USD CDs amounted to US$25.4 million. Consequently, the outstanding stock of foreign currency CDs at end-December 2016 was US$1 026.5 million relative to US$960.8 million at end-December 2015 (see **Table 48**).[5]

Table 48

BOJ FOREIGN CURRENCY CERTIFICATES OF DEPOSIT

	Mar-16	Jun-16	Sep-16	Dec-16
Number of Instruments Offered	3.0	6.0	6.0	15.0
Average Tenor (Years)	5.0	5.0	5.0	5.0
Nominal Subscription (US$mn)	0.2	3.7	74.3	32.5
Nominal Outstanding (US$mn)	931.5	929.0	999.9	1 026.5
	Mar-15	**Jun-15**	**Sep-15**	**Dec-15**
Nominal Outstanding (US$mn) [1/]	953.8	1 025.8	981.3	960.8

[1/] Outstanding CDs denominated in GBP converted to USD at the applicable WASR as at the reporting date.

4.1.3. Primary Dealer Performance & Administration

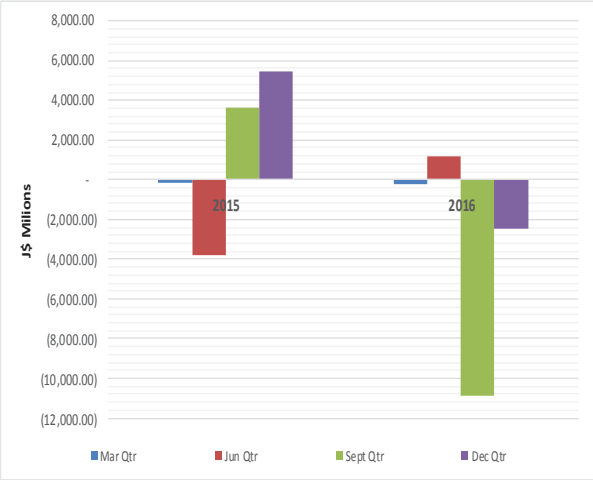
During 2016, the Primary Dealers[6] (PDs) net invested $12 313.0 million in BOJ Instruments in contrast with a net redemption of $5 050.1 million for 2015. The performance during 2016 reflected the net take-up of $13 311.4 million during the second half of the year which offset the net redemption of $998.4 million during the first half of the year (see **Chart 38**). This net take-up largely reflected the increased investments in FR USD CDs during the September quarter, when the Bank resumed its' monthly offer of these instruments following a three-month absence from the market.

Notwithstanding the net take-up of OMO issues during 2016, PDs' share of the instruments issued by BOJ decreased in 2016, to account for an average of 57.0 per cent of total issues relative to 61.3 per cent in 2015 (see **Chart 39**). This decline in the PDs share of total issues reflect the combined impact of the dominance of other investor groups for the issuance of US Index Linked Notes in the March quarter, the increased issuance of the FR 365-day CDs on a competitive price basis and the reduced frequency of the offer of 30-day CDs during the December quarter.

[5] The annual change in the outstanding stock of foreign currency CDs reflect the variability in the GBP/USD exchange rate used for valuation as at each reporting period.

[6] Securities dealers, licensed by the Financial Services Commission (FSC) that are designated by the Bank as BOJ Primary Dealers.

Chart 38: Primary Dealers' Net Take–Up of BOJ Instruments



In that regard, with the exception of the September quarter when the PDs share of new OMO issues was 59.7 per cent, the performance for the remaining three quarters averaged 56.2 per cent. Consequently, by end–2016 their share of the outstanding stock of BOJ instruments declined to 56.2 per cent from 57.8 per cent at end–2015.

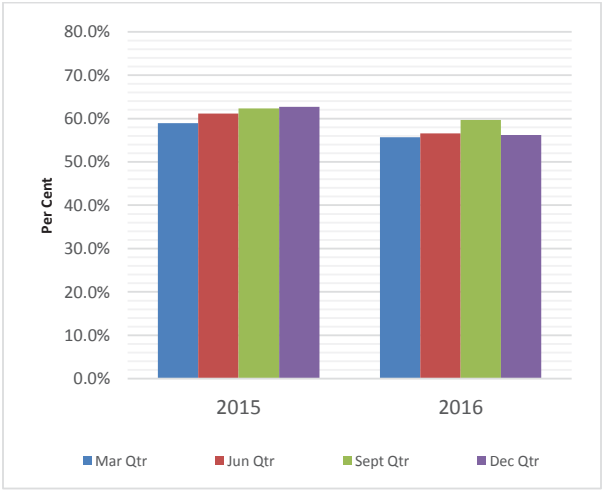
During 2016, the number of PDs remained unchanged at eight. A total of 21 persons were assessed under the Bank's 'Enhanced Fit & Proper' Criteria. These assessments were conducted in accordance with the policy for designating entities as well as in relation to the requirements for the annual renewal of the PD designation.

4.2. International Reserves

4.2.1. Overview

For 2016, the gross foreign asset (GFA) of the Bank of Jamaica (BOJ) increased by US$377.6 million to end the year at US$3 291.5 million (see Table 49). The increase in the foreign assets was mainly observed during the second half of the year and reflects the impact of Government receipts from the PetroCaribe Development Fund, increases in the prudential reserve requirement on the prescribed foreign currency liabilities and receipts from multilateral agencies.[7] Inflows to the GFA were partly offset by BOJ intervention sales and Government debt payments.

Chart 39: Primary Dealers' Share of BOJ Instruments Issued



The net international reserves (NIR) increased by US$282.4 million to US$2 719.4 million at end– 2016, given the increase in the GFA, which was partially offset by the increase of US$95.3 million in foreign liabilities. As at end–2016, the gross foreign liabilities were US$572.1 million compared with US$476.8 million at end–2015 (see Table 50).

Table 49

BANK OF JAMAICA GROSS FOREIGN ASSETS As at 31 December 2016 US$MN	
Opening Gross Foreign Assets (GFA)	**2 913.8**
Inflows	2 950.7
Outflows	2 590.3
Adjustment to GFA [1/]	*17.2*
Closing Gross Foreign Assets	**3 291.5**

1/ Unrealized losses on foreign currencies and other investments.

Table 50

BANK OF JAMAICA NET INTERNATIONAL RESERVES (End of Period) US$MN						
	2015	2016				Annual Change
	Dec.	Mar.	June	Sept.	Dec.	(US$)
NIR	2437.0	2415.5	2265.1	2463.0	2719.4	282.4
Gross Foreign Assets	2913.8	2894.3	2819.9	3056.2	3291.5	377.6
Foreign Liabilities	476.8	478.8	554.8	593.2	572.1	95.3

[7] There were three consecutive increases of 1.0 per cent for each month in the December quarter. These actions brought the foreign currency reserve requirement on par with the local currency requirement at 12.0 per cent.

4.2.2. Foreign Exchange Inflows

Total foreign currency inflows declined by US$2 194.9 million to US$2 950.7 million in 2016 (see Table 51). This significant decline during the year reflected lower foreign currency receipts by the Government relative to inflows that were buoyed by a GOJ Eurobond offer 2015.

For 2016, receipts comprised mainly of disbursements from multilateral agencies as well as receipts from the PetroCaribe Development Fund consequent on the payment of US$1 500.0 million by GOJ in a debt buy-back agreement with Petróleos de Venezuela S.A (PDVSA) in 2015.

Total market purchases amounted to US$2 052.0 million and represented 70.0 per cent of total inflows in 2016. This reflected a decline of US$164.3 million relative to the purchases in 2015 due to the lower receipts from Other Purchases. In that regard, the total Other Purchases during 2016 amounted to US$69.1 million, and represented a reduction of US$236.7 million relative to 2015. However, this decline in Other Purchases was partially offset by inflows from Authorised Dealers and Cambios under the surrender arrangement that increased by US$72.5 million.

Foreign currency receipts on behalf of the Government during 2016 totalled US$457.5 million, a decline of US$1 948.0 million relative to the receipts in 2015. Notably, receipts in 2015 were driven by the GOJ Eurobond issue on the international capital market.

During the review year, BOJ issuance of foreign currency-denominated CDs amounted to US$110.7 million, representing a decrease of US$167.3 million relative to 2015.

4.2.3. Foreign Exchange Outflows

Foreign currency outflows totalled US$2 590.3 million in 2016, reflecting a decline of US$2 071.0 million relative to 2015 (see Table 52).Foreign currency payments by the GOJ declined by US$1 669.7 million in a context where the outflows in 2015 largely reflected the one-off payment of US$1 500.0 million to PDVSA under a debt buy-back agreement (see Table 52).

Table 51

INFLOWS OF FOREIGN EXCHANGE
US$MN

	2015	2016	Change ($)
Bauxite Receipts[1/]	**21.4**	**25.3**	**3.9**
Market Purchases	**2216.2**	**2052.0**	**-164.3**
Surrenders to BOJ	**1910.4**	**1982.9**	**72.5**
Authorised Dealers	1213.0	1363.7	150.6
Cambios	697.4	619.3	-78.1
Other Purchases[2/]	305.8	69.1	-236.7
GOJ Receipts	**2405.4**	**457.5**	**-1948.0**
Bond Flows	**2064.8**	**0.0**	**-2064.8**
Domestic USD Bond	0.0	0.0	0.0
Eurobond	*1997.5*	*0.0*	*-1997.5*
Domestic USD Loans	*67.3*	*0.0*	*-67.3*
GOJ Multilateral Agency Flows	**274.0**	**183.4**	**-90.6**
IDB	*164.0*	*157.6*	*-6.5*
CDB	*0.0*	*10.0*	*10.0*
IBRD	*85.8*	*0.0*	*-85.8*
IMF [3/]	*0.0*	*0.0*	*0.0*
Grants	*24.2*	*15.9*	*-8.3*
Divestment	0.0	0.0	0.0
Other GOJ	66.6	274.0	207.4
IMF	**158.4**	**120.0**	**-38.5**
Loan Disbursement/Misc. Funds	*158.4*	*120.0*	*-38.5*
Investment Income	**8.6**	**10.9**	**2.2**
BOJ Certificates of Deposit	**278.0**	**110.7**	**-167.3**
Other Receipts[4/]	**57.5**	**174.5**	**117.0**
Total Cash Inflows	**5145.6**	**2950.7**	**-2194.9**

[1/] *Includes Royalty, Levy and Taxes. Local Costs have been excluded.*
[2/] *Includes all trading room purchases, including market intervention and Local Costs.*
[3/] *IMF loan for Budgetary support.*
[4/] *Includes inflows for net prudential reserves.*

GOJ foreign currency debt payments totalled US$1 041.3 million during 2016, a decline of US$107.8 million relative to 2015. This decline reflected amortization amounts that were lower by US$233.9 million partially offset by interest payments that were higher by US$126.1 million.

During 2016, BOJ foreign currency sales to the market totalled US$1 276.0 million, representing a decline of US$28.6 million relative to 2015. While foreign currency sales via intervention increased by US$24.5 million, sales to the public sector bodies via the Centralised Facility for Foreign Exchange for Public Sector Entities (PSE Facility) declined by US$53.1 million (see Table 52).

Table 52

OUTFLOWS OF FOREIGN EXCHANGE US$MN			
	2015	2016	Change (US$)
GOJ Payments	**2830.3**	**1160.6**	**-1669.7**
Debt	**1149.0**	**1041.3**	**-107.8**
Principal	*683.1*	*449.3*	*-233.9*
Interest	*465.9*	*592.0*	*126.1*
Other Payments	181.3	119.4	-61.9
PetroCaribe Debt to PDVSA	1500.0	0.0	-1500.0
Market Sales	**1304.6**	**1276.0**	**-28.6**
Intervention	*845.7*	*870.2*	*24.5*
Public Sector Facility	*458.9*	*405.8*	*-53.1*
IMF	**136.5**	**5.5**	**-130.9**
Principal	*134.8*	*5.5*	*-129.2*
Interest	*1.7*	*0.0*	*-1.7*
BOJ Foreign Currency Certificates of Deposit	352.3	60.3	-292.0
Other Payments[1/]	37.6	87.8	50.2
Total Cash Outflows	**4661.3**	**2590.3**	**-2071.0**

[1/] *Includes Central Bank payments for notes and coins.*

4.2.4. Financial transactions with the International Monetary Fund

IMF disbursements to BOJ during 2016 totalled US$119.5 million, which represented a decline of US$38.5 million relative to 2015 given the early cancellation of the four year Extended Fund Facility (EFF) as requested by the Government.. The successor 36-month Stand-By Arrangement (SBA) programme with the IMF was finalised in November 2016 and in that regard, the final of four equal disbursements of SDR 28.3 million/USD 39.6 million that was scheduled during 2016 was forfeited during the December 2016 quarter (see Table 53).

Table 53

SDR DISBURSEMENTS AND REPURCHASES/REPAYMENTS CALENDAR YEAR 2016 MN				
	DISBURSEMENTS		REPURCHASES	
Date	SDR	USD[1/] Equiv.	SDR	USD[1/] Equiv.
March Qtr	0.0	0.0	4.0	5.5
June Qtr	56.6	79.9	0.0	0.0
September Qtr	28.3	39.6	0.0	0.0
December Qtr	0.0	0.0	0.0	0.0
TOTAL	**85.0**	**119.5**	**4.0**	**5.5**

[1/] *Based on the prevailing SDR =US$ exchange rate.*

4.3. Reserve Management

At 31 December 2016, the Gross Foreign Assets (Reserves) held by the Bank of Jamaica was US$3, 291.5 million compared to US$2 913.8 million at 31 December 2015. Throughout the year, the Reserves were managed in accordance with the Bank's Foreign Investment Policy Statement (IPS) which informed the operating guidelines employed, the strategies employed and the risk management arrangements that were imposed.

Over the review period, there were significant changes to the Governance Policy Framework of the Reserve Management portfolio as follows:

i. Revision of the IPS with the assistance of the World Bank's Reserve Advisory Management Programme (RAMP) team, with particular emphasis on the inclusion of the Risk Management Framework (RMF) and the amended Counterparty Credit Limits consistent with the contemporary industry best practice. .
ii. Formulation and approval of corresponding Investment Guidelines.

The Bank is in the third year of a three (3) year agreement entered into with the World Bank (Reserves Advisory and Management Programme (RAMP) for Central Banks). Under this programme the resources of the World Bank Treasury is made available to the BOJ. The programme is divided into two main services, Advisory Management and Fund

Management. The following were the main highlights under the Advisory Management section of the agreement during 2016:

i. Providing guidance in relation to the drafting of the revised Investment Policy Statement and Investments Guidelines.
ii. Completion of three on–site missions, along with a number of external workshops to strengthen the reserve management capacity building and knowledge transfer for the Reserve Management Department and the Corporate Risk Management Departments.
iii. Implementation of the Asset Allocation Workbench (AAW), installed in the front office for continuous simulations of Asset Return Generator and Portfolio Optimizer.
iv. Partial implementation of an integrated Portfolio Analytics Tool (PAT2) prescribed for Front, Middle and Back Offices (Trading, Settlement and Risk Monitoring). This will be fully implemented in 2017.

4.3.1. Portfolio Distribution

No new type of investment instruments were added to the portfolio in 2016, hence the asset class profile throughout the year was similar to that of 2015. The following details the composition of the portfolio at 31 December 2016 vs 31 December 2015 (see Table 54).

Table 54

DISTRIBUTION OF FOREIGN ASSETS
For the Years Ended 31 December

	2015		2016	
Assets	**US$MN**	**% of Holdings**	**US$MN**	**% of Holdings**
Money Market Investments / Balances	2 254.4	77.4	2 599.1	79.0
Bond Holdings	65.8	2.3	33.1	1.0
External Funds	343.2	11.8	346.8	10.5
Total Funds Invested	**2 663.4**	**91.4**	**2 979.0**	**90.5**
Allocation of Special Drawing Rights	250.4	8.6	312.5	9.5
TOTAL	**2 913.8**	**100.0**	**3 291.5**	**100.0**

Of note is the US$344.7 million increase in Money Market holdings, a direct result of the increase in the Reserves. The increased Reserves was primarily funded by net purchases under the Public Sector Entity (PSE) Facility (US$1,199.78mn). Bond Holdings contracted by US$32.7 million, due to bonds maturing and called throughout the year.

To mitigate the foreign currency risk, the portfolio was managed to maintain a bias towards US dollar denominated investments, to reflect the fact that 90.1 per cent of the portfolio, excluding the allocation of Special Drawing Rights, being held in US dollar denominated securities at the end of the year.

4.3.2. 2016 Investment Strategy

i. **To diversify the placements with alternative counterparties**. Despite the improvement in U.S. economy in 2016 the planned strategy to diversify the placements with alternative counterparties did not materialize. This was due to the late approval of the revised IPS, which would have allowed for placements with these counterparties.
ii. **To reduce the portfolio's duration by purchasing instruments with shorter tenors**. This was aimed at reducing the Bank's exposure to market risk as well as ensuring adequate liquidity was available to meet the projected recurrent debt obligations. As a result, investments with the Bank for International Settlements (BIS) were laddered to ensure that weekly maturities were available to satisfy any potential demand. However the capital market investments were reduced due to bonds maturing and being called, reducing the overall portfolio duration.

During 2016, there were signals from the FED that the benchmark overnight rate would be increased during the year. The Federal Open Market Committee (FOMC) meeting notes signalled that the rate increase would be data, and not date driven and would be predicated on the core inflation rising to a target of approximately 2 per cent and unemployment falling to less than 5 per cent.

Notwithstanding these targets, there were two major geopolitical events that heightened market volatility during the year and weighed heavily on the rate hike decision–making process:

i. The events leading up to and the impact of the Brexit vote in June and,
ii. The events leading up to and the results of the November 8 US elections.

Consequently, the FED did not increase rates until December 2016 by twenty five (25) basis points from 0.25– 0.50 bps to 0.5 – 0.75 bps.

4.3.3. Portfolio Performance

Average income earning assets for the year was US$2, 855 million, which was US$65.0 million or 2.3 per cent above budget and 10.3 per cent higher than in 2015 (see Table 55). Portfolio cash income of US$11.6 million was US$2.6million or 28.44 per cent higher than in 2015 when earnings were US$9.0 million. The average yield on the portfolio was 0.41 per cent per annum in 2016, six basis points higher than the yield in 2015.

The following table highlights the portfolio performance in terms of the foreign investment income for the years ending December 2015 and 2016.

Table 55

FOREIGN INVESTMENT INCOME
For the Years Ended 31 December

Assets	2015 Earnings US$MN	2015 % of Earnings	2016 Earnings US$MN	2016 % of Earnings
Money Market Investments / Balances	2.9	32.3	7.4	63.8
Bond Holdings	3.4	37.8	0.9	7.8
External Funds	2.7	30.0	3.3	28.4
Total	**9.0**	**100**	**11.6**	**100**
Average Income Earning Assets	2 588		2 855	
Rate of Return (%)	0.35		0.41	

5. Payment System Oversight

5.1. Overview

During 2016, payment system oversight continued to be focused on ensuring the safety and efficiency of the national payment system. Of significance were the risk mitigation measures implemented to improve system resilience. In addition, the operational arrangements for monitoring and reporting on payment system activities were executed according to plan with the objective of ensuring strict compliance with applicable regulations and guidelines. Efforts to guide and facilitate the adoption of existing technology for the purpose of improving retail payment service efficiency were also advanced during the year.

The following subsections provide details on payment system developments, as well as, payment system activities during the year.

5.2. Payment System Developments

5.2.1. Risk Mitigation Measures

During the second half of the year, the Principles for Financial Market Infrastructures (PFMIs) were applied to the two designated systemically important payment systems owned and operated by the Bank, that is, the real-time gross settlement system, JamClear®-RTGS, and the central securities depository, JamClear®-CSD. The process involved the assessment of compliance against each applicable principle of the PFMI and the assignment of ratings to identify any concerns or issues to ensure overall observance with international standards.

In addition, the Payment System Oversight team tailored off-site assessment tools for retail payment systems to include the Automated Clearing House (ACH), Multilink and Qnet. The assessment included continued reporting of statistical data, submission of audit reports to the Bank, meeting with system operators and the application of PFMI assessment methodology.

During the review year, the Payment System Oversight change management process was effected for JamClear®-RTGS. The change management included the modification of the system to increase the frequency of the Automated Clearing House (ACH) net settlement windows, supporting greater efficiency in settlement of payments for commercial banks and their customers.

5.2.2. Automated Clearing House (ACH) Value Threshold

The year 2016 marked the culmination of the phased programme to significantly reduce, if not eliminate, settlement risk to the safety and security of the national payment system posed by large value transactions processed through the ACH for settlement on a deferred net settlement basis. In May 2016, the decision was taken by the Bank in consultation with the National Payment Council (NPC), to reduce the ACH Value Threshold to J$1 million, with the requirement that commercial banks target 100 per cent of all payments and transfers that are J$1 million and above for migration to JamClear®-RTGS.

5.2.3. Application for Authorization of Electronic Retail Payment Services (ERPS)

The Bank of Jamaica over the reporting period authorized four electronic retail payment service providers under the Guidelines for Electronic Retail Payment Services. The Guidelines provide the regulatory framework for authorization of payment service providers and continuous oversight through on-going annual assessment to ensure compliance. The four authorized ERPS providers in 2016 included JaMobile Payment Services Limited (Conec services), National Commercial Bank Jamaica Limited (Quisk mobile product), GraceKennedy Payment Services (Mpay mobile product) and Alliance Payment Services Limited (ePay card product). For the most part, the typical mobile wallet solutions for which authorization was granted related to the provision of services such as bill payment, balance enquiries, mobile phone top-up, person-to-person transfers, person-to-business transfers and loyalty programmes. The provision of

electronic retail payment services through authorized entities integrated seamlessly into aspects of work on financial inclusion.

5.2.4. Financial Inclusion Strategy

The Bank during 2016, continued to play a lead role in advancing the country's National Financial Inclusion Strategy (NFIS) through the chairmanship provided by the Governor of the FI Steering Committee. This was facilitated by the Payment System Oversight team through the work undertaken by the Retail Payments and Financial Infrastructure Working Group (RPFIWG). The NFIS of Jamaica is structured around a supporting framework that includes four pillars:

1. Financial access and usage;
2. Financial resilience;
3. Financing for growth; and
4. Responsible finance.

For each pillar, a working group was formed and given the responsibility to undertake activities to enable the implementation of the NFI strategy, which includes high impact activities to be completed by 2020. The RPFIWG, where the Payment System Department has direct impact, has responsibility under Pillar 1 to facilitate financial access and usage as well as the payments infrastructure required to enable the other three pillars. Over the review period, the RPFIWG made significant progress with the achievement of planned key performance indicators.

5.2.5. Yellow Book – Compilation of Payments and Securities Settlement Arrangements

Due to the critical nature of payment and securities settlement systems as core elements of the financial market infrastructures at the national and international levels, reference works on the payment and settlement arrangements are published periodically within respective regions. These publications referred to as Colour Books are published under the auspices of CEMLA, the World Bank and the Committee on Payments and Market Infrastructure (CPMI), formerly Committee on Payment and Settlement Systems (CPSS). The colour of the book is dependent on the region from which the publication was developed. Countries in Latin America and the Caribbean regions are required to publish a Yellow Book. The Yellow Book which records the status of the payments, clearing and securities settlement systems was drafted for Jamaica in 2016. It is aimed at promoting the development of an informative regime among Financial Market Infrastructure (FMI) participants, facilitating analysis of new developments in the industry and the monitoring of FMI oversight functions, as well as providing a reference guide for cross country comparison. To facilitate the publication of the Yellow Book, stakeholders' consultations were required to provide data and information, address queries and provide amendments. The final consultation process took place in August 2016, in the form of a Yellow Book sensitization workshop and review session led by the Bank. The Yellow Book is under review and is scheduled for publication by CEMLA in the first half of 2017.

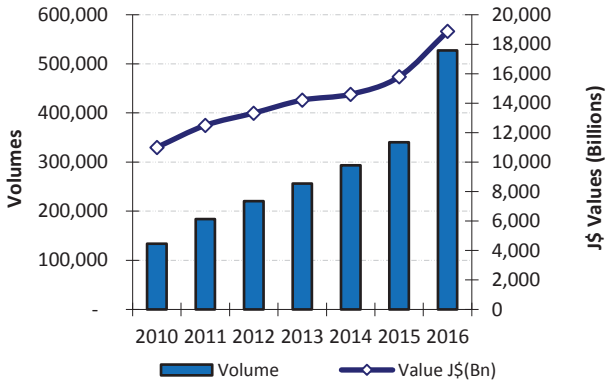
5.3 Payment System Activities

5.3.1. JamClear® Systems

In 2016, JamClear®–RTGS recorded the highest number of transactions in a single year processing 527 428 in volume and $18.88 trillion in value (see **Chart 40**). When compared to 2015, the upward movement represents an increase in volume and value by 55 per cent (186 883) and 20 per cent ($3.08 trillion) respectively. An analysis of the movement over the reporting period indicated an increase in total payment volumes attributed to a 180 614 increase in participant payments on behalf of households and corporate clients. While a disaggregation of payment value was attributed to a J$2.14 trillion and J$543.83 billion increase in payment values between securities settlement transactions initiated from JamClear®–CSD and payments on behalf of households and corporate clients respectively.

In 2016, the total USD transaction values processed in JamClear®–RTGS declined by 16.8 per cent to US$2.49 billion compared to US$2.99 billion in 2015.

Chart 40: JamClear–RTGS Volumes and J$ Values 2010–2016



5.3.2. Retail Payment Systems and Instruments

There was an overall increase in the usage of the retail payment systems over the review period. As at the end of the reporting period, total debit cards in circulation amounted to 2.2 million reflecting a reduction of 21.6 per cent relative to 2015. This was mainly due to a purge of debit cards by the commercial banks in the first half of the year. On the other hand, credit cards in circulation totalled 245 500 representing an increase of 8.1 per cent when compared to 2015.

As at the end of 2016, total ABMs installed reported by commercial banks increased by 25 terminals to 551. While there was an increase of 9.5 per cent in POS terminals to 26 750, when compared to 24 425 in 2015.

5.3.3. Cheque Clearing Activities

5.3.3.1. Domestic Cheques

The total number of cheques processed through the ACH over the reporting period was 6.6 million for an aggregate value of J$0.89 trillion. This represented a marginal decline of 2.7 per cent in volume and 8.8 per cent in value when compared to 2015. The average value of each cheque payment processed in the ACH declined by 6.2 per cent moving from J$143 556 to J$134 635.

Cheques processed by the commercial banks proprietary system totalled 8.1 million by volumes and J$0.93 trillion by values reflecting declines of 3.8 per cent and 5.5 per cent respectively, when compared to 2015. The average value of proprietary cheques processed by commercial banks declined marginally by 1.8 per cent when compared to 2015 moving from J$116 706 to J$114 631.

5.3.3.2. Selected Foreign Currency Cheques

Total foreign currency cheques cleared manually through the BOJ Clearing House reflected a marginal increase in value of 5.0 per cent when compared to 2015 (see Table 56). Cheques cleared were denominated in four major currencies namely USD, GBP, CAD and Euro. In 2016, cheques denominated in USD amounted to US$2 294 million which was 99.2 per cent of the total foreign currency cheques cleared of US$2 313 million.

Table 56

VALUE OF FOREIGN CURRENCY CHEQUES CLEARED (IN MILLIONS)				
	2013	**2014**	**2015**	**2016**
Currency				
USD	1 929.0	2 160.0	2 163.7	2 294.0
CDN	11.3	12.8	23.5	5.1
GBP	28.4	28.0	11.0	12.3
EURO	4.7	2.4	2.4	1.2
Total in USD	**1 973.4**	**2 203.2**	**2 200.6**	**2 312.6**

Foreign currency items cleared derived from Consolidated Clearing Figures. The USD figures remains in that denomination.

The CDN and GBP selling rate was gathered from the Trading Summary as at December 31, 2016.

Euro rate was collated from Indicative rate as at Dec. 31, 2016.
(All values processed are converted to USD Millions.)

5.3.4. Electronic Retail Payments

For the year 2016, the total volume of retail payments processed in Multilink, ACH and the proprietary systems of commercial banks stood at 139.7 million transactions valued at J$3.3 trillion. A comparative review with the previous year indicated an increase in total transaction volume by 11.3 per cent, while total transaction values increased by 4.9 per cent. The increase in retail payment volumes was attributed to

the increasing usage of electronic retail payment instruments and terminals, such as debit cards, direct credits and direct debits. Additionally, the rise in non-cash retail payment value for the review period was due primarily to an increase in debit card usage over the Multilink Network and commercial bank proprietary system. A disaggregation of the data indicated that debit cards continued to be the dominant retail payment instruments in terms of volumes and values.

5.3.4.1.ACH – Direct Credits and Direct Debits

The total number of direct credits processed through the ACH in 2016 was 2.7 million valued at J$209.3 billion, reflecting a 30.4 per cent and 18.3 per cent increase in volume and value respectively. The growth in direct credit transactions was due to the continued usage of the ACH by the Government as part of Government Payments Reform under the implementation of the Central Treasury Management System. Direct Debits processed through the ACH in 2016 represented 506 178 payments valued at J$9.2 billion, reflecting an increase of 14.3 per cent in volume and 1.9 per cent increase in value.

5.3.4.2. Multilink Transactions – ABM and POS

The total number of domestic card transactions processed through the Multilink network using Automated Banking Machine (ABM) and Point of Sale (POS) terminals, was 24.9 million valued at $152.9 billion in 2016, reflecting increases in volume and value of 13.6 per cent and 20.1 per cent respectively, relative to 2015. Transactions processed in ABM terminals through the Multilink network, totalled 12.4 million valued at J$85.1 billion reflecting an increase of 7.6 per cent and 16.5 per cent in volume and value respectively, relative to 2015. Transactions processed on POS terminals increased in volume and value by 20.1 per cent and 24.8 per cent respectively to 12.6 million transactions valued at J$67.8 billion relative to 2015 (see Chart 41 & Chart 42).

Chart 41: Multilink ABM and POS Transactions by Volume

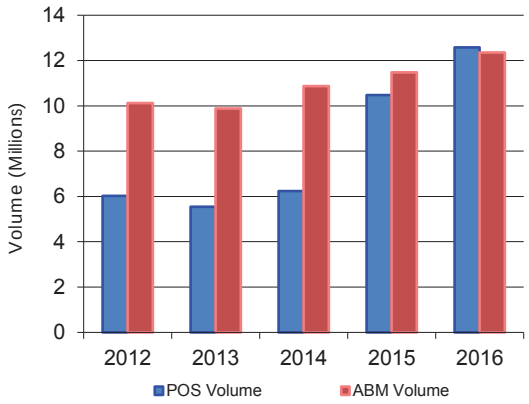
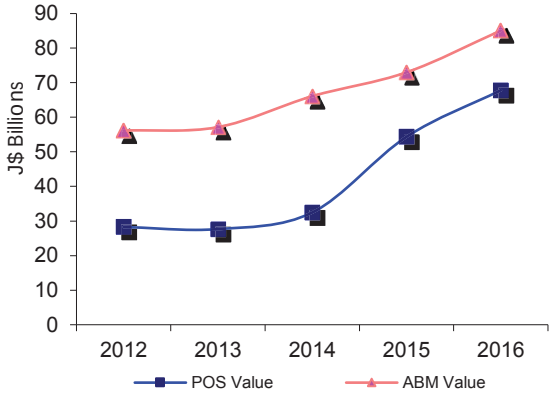


Chart 42: Multilink ABM and POS Transactions by JMD Value



5.3.4.3. Proprietary Systems – Commercial Banks

a. Debit Cards

The proprietary systems of the commercial banks represent systems owned and operated by these institutions for settling payments. The commercial banks settled debit card transactions totalling 81.2 million valued at J$818.6 billion in 2016. Debit cards transactions processed on the proprietary system of the commercial banks reflected increases of 13.7 per cent and 25.1 per cent in volume and value respectively relative to 2015.

b. Credit Cards

In 2016, the total number of credit card transactions processed on the proprietary system of commercial banks was 15.8 million valued at $261.1 billion, representing increases in volume and value of 7.8 per cent and 22.8 per cent respectively relative to 2015.

5.4. Bill Payment Activities

The total bill payment transactions reported for 2016 was 17.8 million valued at $247.9 billion, this reflected a marginal increase of 4.9 per cent and 8.9 per cent in volume and value respectively relative to 2015. The dominant payment method for making bill payments was cash, which accounted for 57.3 per cent of the total bill payments processed, while debit cards accounted for 53.3 per cent of total value.

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6. Banking & Depository Services

6.1. Banking Services

During 2016, the Bank continued to provide a variety of banking services to its customers.[1] In the provision of these services, the Bank operated the JamClear®–RTGS and provided administrative support to the Automated Clearing House (ACH) system, owned and operated by the commercial banks. Both systems are Systemically Important Payment Systems (SIPS) in Jamaica.[2]

At end–2016, there were 22 participants in the JamClear®–RTGS. The participants in JamClear®–RTGS consisted of all commercial banks, primary dealers, two building societies, two merchant banks, the Jamaica Central Securities Depository and its Trustee Services, the Bank of Jamaica and the Accountant General's Department.

The Bank continued to act as a participant in the ACH by negotiating cheques drawn on commercial banks as well as sending and receiving electronic files with cheque data, debits and credits through the ACH. In addition, the Bank continued to provide oversight to ensure the efficient operation of the ACH by ensuring the timely settlement of the daily net settlement balances on the accounts of the commercial banks. The Bank also supervised the manual clearing process in order to facilitate the processing of items that do not qualify for the ACH and the clearing of foreign currency cheques which were drawn on domestic banks.

In September 2016, the JamClear®–RTGS was modified to accommodate two additional ACH settlement windows, increasing the number of ACH settlement windows to four per day.

6.2. Electronic Securities Depository

The Bank of Jamaica continued to function as Operator of JamClear–Central Securities Depository (JamClear®–CSD) and Registrar for BOJ and GOJ domestically issued fixed income securities, excluding Treasury Bills. As Operator, the Bank continued to oversee the daily management and administration of the JamClear®–CSD, ensuring its ongoing functionality and operations in accordance with the rules and operating procedures.

As Registrar, the Bank continued to deliver all related registry services including (i) registration of new debt issues; (ii) dematerialization and immobilization of securities; (iii) on–going maintenance of ownership records; (iv) distribution of maturity proceeds and interest payments; (v) generation of withholding tax certificates; and (vi) provision of audit confirmations.

At end–2016, the number of participants in JamClear®–CSD decreased to 38 with one secondary dealer disabled during the year. The participants at the end of the year comprised all six commercial banks, two merchant banks, eight primary dealers, twenty–one secondary dealers and one trustee. BOJ and the GOJ remained the only issuers of securities. At end–2016, there were 30 448 beneficial owner accounts in the JamClear®–CSD, an increase of 434 compared to end–2015.

The JamClear®–CSD continued to provide a wide variety of depository services including Repurchase Agreements, Entitlement Proceeds and Taxation (see **Table 57**). Repurchase Agreements had the highest utilization over the review period accounting for 48.8 per cent of the total volumes traded. Entitlement

[1] The Bank's customers include the Government, Primary Dealers, and the Jamaica Central Securities Depository (JCSD), regional central banks, staff and the general public.

[2] The JamClear® – RTGS is specifically designed to clear large–value, time–critical payments by financial market participants on accounts held at the BOJ in real time throughout the business day. Payments settled in the JamClear® – RTGS are final and irrevocable. The JamClear®–RTGS and the JamClear® Central Securities Depository (JamClear® – CSD) systems are fully integrated, facilitating settlement on a delivery versus payment basis of all Government of Jamaica and Bank of Jamaica securities traded in the domestic market.

Proceeds and Taxation accounted for 28.5 per cent and 11.0 per cent, respectively (see Table 57).

Table 57

JAMCLEAR–CSD TRANSACTION TYPES
2015 –2016

Transaction Types	Number of Transactions 2015	% of Total	Number of Transactions 2016	% of Total
Bill Payment	446	0.4	433	0.4
Delivery Versus Payment	148	0.1	130	0.1
Entitlement Proceeds	29 977	24.7	28 931	28.5
Free of Payment	12 428	10.3	7 212	7.1
Initial Placement/ Reopening	4 520	3.7	3 659	3.6
Pledges	28 892	23.8	467	0.5
Repurchase Agreement	33 006	27.2	49 553	48.8
Taxation	11 728	9.7	11 157	11.0
	121 145	**100.0**	**101 542**	**100.0**

For 2016, a total of 101 542 transactions were processed in JamClear®–CSD for both BOJ and GOJ instruments with nominal values of J$14.2 trillion and US$16.1 billion (see Chart 43 and Chart 44).

In comparison to 2015, transaction volumes fell by 16.2 per cent. Although the volume of transactions declined, the nominal value of these transactions increased, with the total nominal value of Jamaican and US Dollar transactions growing by 9.6 per cent and 28.5 per cent, respectively.

The JamClear–CSD® processed an average of 405 trades in securities each day, compared to an average of 483 trades in 2015. The value of securities denominated in JMD at end–2016 declined by 2.4 per cent to J$816.7 billion. In contrast, there was an increase of 6.8 per cent in the value of securities denominated in foreign currency to US$1.6 billion relative to end–2015 (see Charts 45 and 46).

6.3. Auto Repo Facility

The Bank provided intraday liquidity to participants through the Auto Repo Facility. The facility was accessed by 12 participants 4 563 times during the review year, reflecting an increase of 51.0 per cent in usage relative to 2015. The average value of intraday liquidity increased over the period, with the highest utilization occurring in November 2016 (see Chart 47).

Chart 43: JamClear–CSD Annual JMD Values

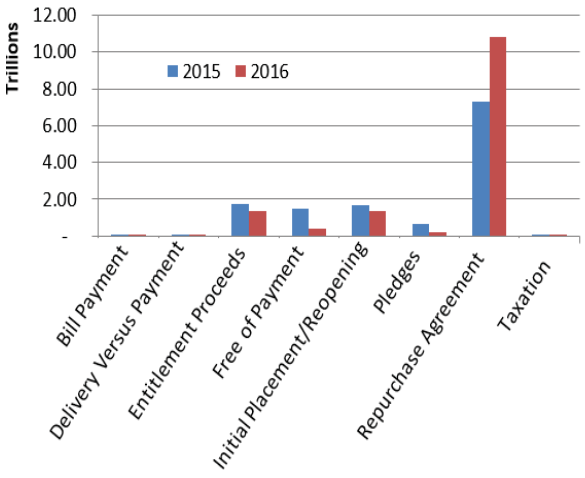


Chart 44: JamClear–CSD Annual USD Values

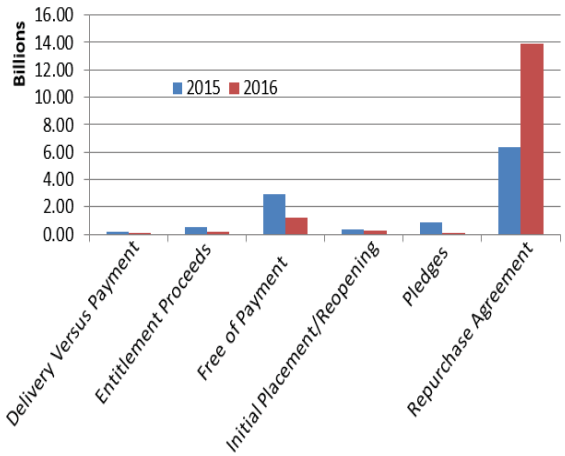


Chart 45: Outstanding JMD Securities – Nominal Values

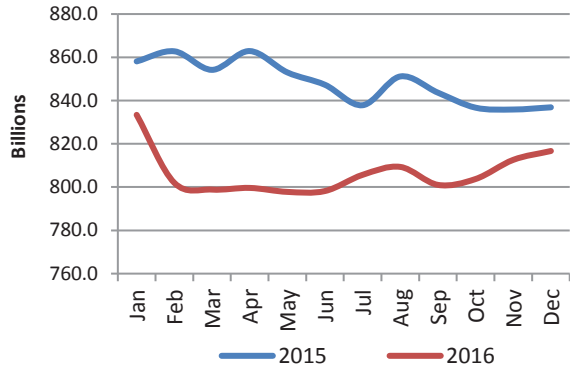


Chart 46: Outstanding USD Securities – Nominal Values

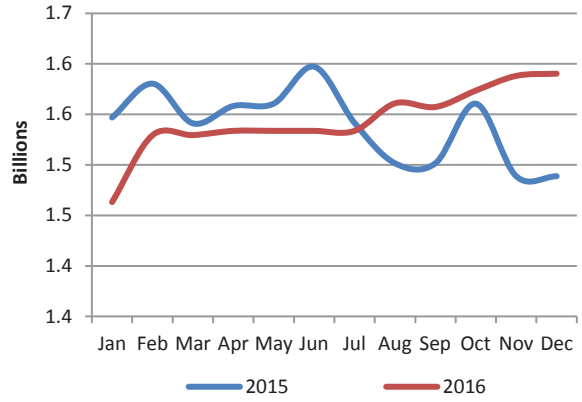
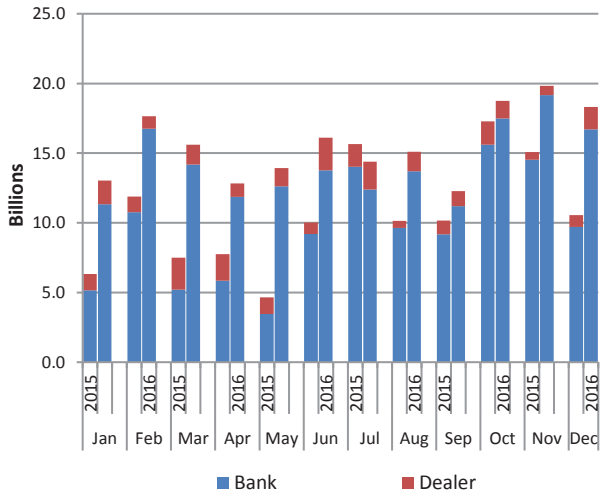


Chart 47: Comparison of Daily Average Liquidity Utilized – 2015 & 2016



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7. Currency Operations

7.1. Currency in Circulation

The value of banknotes in circulation stood at $94.4 billion at end-2016 (see **Chart 48**). This represented an increase of 16.7 per cent relative to end-2015. The $5000, $1000 and $500 notes accounted for 19.1 per cent, 66.4 per cent and 9.5 per cent, respectively, of the total value of notes in active circulation. These compare with 14.2 per cent, 69.8 per cent and 10.6 per cent, respectively, at end-2015.

Chart 48: Value of Banknotes in Circulation

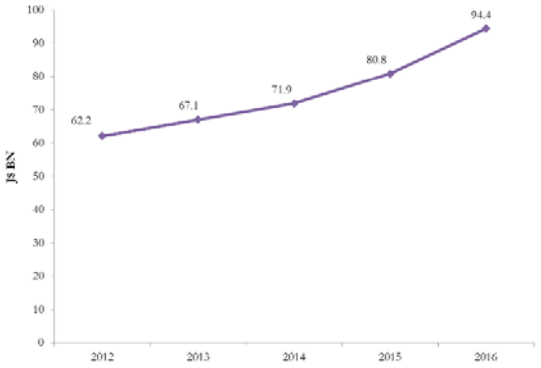
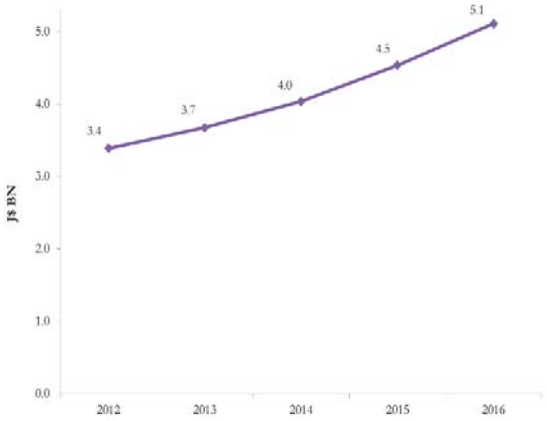


Chart 49: Value of Coins in Circulation



At end-2016, the value of coins in circulation was $5.1 billion, representing an increase of 12.6 per cent relative to end-2015 (see **Chart 49**). The $20 accounted for 42.4 per cent of the total value of coins in active circulation, while the $10, $5 and $1 coins represented 24.5 per cent, 14.6 per cent and 16.5 per cent, respectively. These compare to 42.0 per cent, 23.5 per cent, 15.1 per cent and 17.2 per cent for the $20, $10, $5 and $1 coins, respectively, at end-2015.

7.2. Currency Issue

The total value of banknotes issued for 2016 amounted to $341.8 billion, 9.7 per cent above the previous year's figure (see **Table 58**). The $1000 note continued to account for the largest proportion of the value of notes issued, representing 72.2 per cent, relative to 76.6 per cent in 2015. The $5000 denomination represented 11.4 per cent, an increase of 5.7 percentage points compared to 2015.

Table 58

COMPARISON OF DECIMAL NOTES ISSUED
Year ended 31 December 2016

Denomination	2015 Value J$ BN	2015 Share %	2016 Value J$ BN	2016 Share %	Change %
$5,000	17.8	5.7	38.9	11.4	118.1
$1,000	238.6	76.6	246.7	72.2	3.4
$500	44.6	14.3	46.2	13.5	3.6
$100	9.0	2.9	8.4	2.4	- 7.3
$50	1.6	0.5	1.7	0.5	2.9
Total	**311.6**	**100.0**	**341.8**	**100.0**	**9.7**

Table 59

COMPARISON OF DECIMAL COINS ISSUED
Year ended 31 December 2016

Denomination	2015 Value J$ MN	2015 Share %	2016 Value J$ MN	2016 Share %	Change %
$20	390.1	51.6	394.9	50.3	1.2
$10	189.6	25.1	240.4	30.6	26.8
$5	111.2	14.7	84.1	10.7	- 24.4
$1	63.7	8.4	64.9	8.3	1.9
$0.25	1.0	0.1	0.7	0.1	- 31.3
$0.10	0.4	0.1	0.3	0.0	- 17.9
$0.01	0.0	0.0	0.0	0.0	- 100.0
Total	**756.0**	**100.0**	**785.3**	**100.0**	**3.9**

The total value of coins issued during 2016 amounted to $785.3 million, 3.9 per cent above the total value issued for 2015 (see Table 59). The $20 coin accounted for 50.3 per cent of the total value of coins issued for 2016 relative to 51.6 per cent for 2015.

7.3. Currency Redemption

Banknotes redeemed during 2016 were valued at $328.3 billion, 8.5 per cent above the figure for 2015 (see Table 60). The $1000 and $500 banknotes accounted for 73.2 per cent and 14.0 per cent, respectively, of the value of banknotes redeemed for 2016 relative to 77.4 per cent and 15.1 per cent, respectively, in 2015.

Coins redeemed in 2016 were valued at $212.1 million, representing a decrease of 17.1 per cent relative to the figure for 2015 (see Table 61). The $20, $10 and $5 coins accounted for 62.7 per cent, 25.4 per cent and 9.8 per cent respectively, of the total value of coins redeemed for 2016. These compare to 61.5 per cent, 26.2 per cent and 10.3 per cent, respectively, in 2015.

Table 60

COMPARISON OF DECIMAL NOTES REDEEMED
Year ended 31 December 2016

Denomination	2015 Value J$	2015 Share %	2016 Value J$	2016 Share %	Change %
$5,000	12 210 365 000	4.0	32 256 120 000	9.8	164.2
$1,000	234 379 703 000	77.4	240 461 605 000	73.2	2.6
$500	45 663 179 000	15.1	45 866 937 000	14.0	0.4
$100	8 866 829 900	2.9	8 175 167 700	2.5	- 7.8
$50	1 579 516 650	0.5	1 522 597 700	0.5	- 3.6
$20	17 340	0.0	26 640	0.0	53.6
$10	7 370	0.0	4 400	0.0	- 40.3
$5	1 650	0.0	4 990	0.0	202.4
$2	7 938	0.0	2 624	0.0	- 66.9
$1	525	0.0	260	0.0	- 50.5
Total	302 699 628 373	100.0	328 282 466 314	100.0	8.5

7.4. Banknote Processing

For 2016, 430.7 million notes valued at $319.3 billion were processed by the Bank, compared to 463.7 million notes valued at $310.2 billion for the previous year. Of the total number of notes processed, 81.0 per cent were deemed fit for re-circulation, an increase of 6.8 percentage points relative to 2015. Banknotes considered unfit to re-enter circulation as well as counterfeit notes were destroyed.

Table 61

COMPARISON OF DECIMAL COINS REDEEMED
Year ended 31 December 2016

Denomination	2015 Value J$	2015 Share %	2016 Value J$	2016 Share %	Change %
$20	157 360 000.0	61.5	133 092 140.0	62.7	- 15.4
$10	66 910 000.0	26.2	53 892 590.0	25.4	- 19.5
$5	26 243 225.0	10.3	20 803 140.0	9.8	- 20.7
$1	4 947 430.0	1.9	4 037 467.0	1.9	- 18.4
$0.50	3 557.0	0.0	1 923.0	0.0	- 45.9
$0.25	230 818.0	0.1	209 827.3	0.1	- 9.1
$0.20	1 026.0	0.0	726.0	0.0	- 29.2
$0.10	109 649.0	0.0	101 741.0	0.0	- 7.2
$0.05	499.8	0.0	607.0	0.0	21.5
$0.01	207.5	0.0	87.1	0.0	- 58.0
Total	255 806 412.3	100.0	212 140 248.3	100.0	- 17.1

7.5. Banknote Durability

For 2016, the Average Circulation Lives (ACLs) of the $1000, $500 and $50 notes fell to 16.4 months, 9 months and 16.5 months, respectively, from 20 months, 15.3 months and 19.1 months, respectively, in 2015. However, the ACLs of the $5000 and $100 notes increased to 32.4 months, and 16.6 months, respectively, from 27.4 months and 8.5 months, respectively, for 2015 (see Table 62).

Table 62

Average Circulation Life (ACL)
Year ended 31 December 2016

Denomination	2015 (in months)	2016 (in months)	Change %
$5,000	27.4	32.4	18.3
$1,000	20.0	16.4	- 18.1
$500	15.3	9.0	- 40.9
$100	8.5	16.6	95.3
$50	19.1	16.5	- 13.5

7.6. Counterfeit Detection

The total number of counterfeit notes detected during 2016 was 4 517 representing a value of $4.9 million compared to 3 493 pieces valued at $3.2 million in 2015. This was equivalent to 32 counterfeit notes per one million genuine notes in active circulation in 2016, relative to 27 pieces per million in 2015.

8. Administration

8.1. Overview

During 2016, the Bank placed special focus on resourcing its human capital requirements in the context of continued challenges in attracting and retaining competent staff. Several strategies were implemented to address the loss of critical skills against the background of the institution's loss of competitiveness in the labour market.

In recognition of the role of human capital in delivering the Bank's mandate, a key objective of the institution's strategic plan for 2016 was the modernization of the Human Resources portfolio, to ensure increased operational efficiency and effectiveness in human resource service delivery through the alignment of its processes, technology and organizational structure. In keeping with this objective, a number of reviews were conducted to identify performance gaps and arising from the findings of the reviews, several initiatives were implemented. Significant focus was also placed on the revision of recruitment and selection, training and development strategies to ensure that the required human capital was available to support existing, new and expanding mandates, as well as shared national responsibilities.

Emphasis was also placed on the implementation of the Succession Management Programme to include the revision of the list of positions at risk and the identification of suitable candidates for inclusion in the programme.

Additionally, the process of undertaking organizational reviews of portfolios which directly support the Bank's strategic mandate continued. Focus was also placed on reviewing the role and functions assigned to each position to ensure appropriate job design to promote efficiency and effectiveness in work processes and optimum output.

The Bank introduced during the year, the Graduates Opportunity for Learning and Development (GOLD) Programme which had the following objectives:

a) To support the professional development of graduates in their transition from the lecture theatre to the world of work in keeping with the Bank's effort to discharge its corporate social responsibility;

b) To provide specialized technical training in areas that are unique to central banking;

c) To provide meaningful work experiences in various areas of the Bank's operation as a means of assisting graduates in making their career choices; and

d) To provide a ready pool of candidates from which the Bank can recruit, reducing the length of the recruitment and selection period and reducing the impact of the on-boarding challenges.

The GOLD Programme which commenced in June 2016 with forty four (44) participants comprising undergraduate and postgraduate students was administered over a period of four months. Most of the graduates that participated in the programme were retained by the Bank on fixed-term contracts to undertake various projects.

8.2. Staffing

At the beginning of the year the staff complement was 552, comprising 474 permanent staff and 78 staff on fixed-term contracts. During the year seventy nine (79) persons were recruited and a total of fifty (50) staff exited the institution.

At 31 December 2016, the Bank's staff complement was 581 (467 permanent employees and 114 fixed-term contract staff).

8.3. Employee Relations

The employee relations environment remained relatively stable during the period notwithstanding the continuation of discussions on a number of issues to

include the Bank's competitiveness in the labour market. The negotiations for improved wages, benefits and conditions of service for the 2015 – 2017 contract period were concluded and the provisions of the Heads of Agreement implemented during the year. The Bank continued the implementation of strategies which were developed to address the findings of a Work Environment and Employee Satisfaction Survey which was commissioned in 2015.

8.4. Pension Administration

At the end of 2016, membership of the pension scheme was 1,046 comprising 465 active members, 343 pensioners, 208 deferred pensioners and 30 beneficiaries (spouses and dependent children). Of the 465 active members, 271 or 58 percent were vested. A total of 40 persons attained pensionable status during the year, 15 staff members and 25 deferred pensioners.

8.5. Energy Management

The Energy and Environmental Management programme achieved another successful year with reductions in energy and water consumption. Energy consumption in 2016 was 3,617,104 kWh, a reduction of 80,332 kWh or 2.2 per cent below the 2015 consumption of 3,697,536 kWh. This performance was marginally below the projection of 2.5 per cent. The outturn represents a reduction in energy use of 36.3 per cent below the base year (2009) consumption of 5,676.648 kWh. Water consumption at 26,024 cubic meters was 849 cubic meters or 3.2 per cent below the 2015 consumption of 26,873 cubic meters and 29.7 per cent below the base year consumption of 36,996 cubic meters.

9. Governance

9.1. Overview

Under the Bank of Jamaica Act, the Governor is the Chief Executive Officer of the Bank as well as Chairman of the Board of Directors. The Governor is responsible for overseeing the business of the Bank, and more specifically, the formulation and implementation of monetary policy, the supervision and regulation of deposit-taking entities and other specified financial institutions, the issuance of currency and the provision of fiscal agency services to the Government. The Bank also has statutory responsibility for Jamaica's international reserves and oversight of Jamaica's payment, clearing and settlement systems under the Payment Clearing and Settlement Act (2010).

9.2. Board Membership

9.2.1. Membership

The Bank's Board is comprised of the Governor, the Senior Deputy Governor, the Financial Secretary and six independent directors appointed by the Minister of Finance for a three-year renewable term. The Governor, the Senior Deputy Governor and the Financial Secretary are ex-officio members of the Board. At 31 December 2016 the members of the Board of Directors were Governor Brian Wynter (Chairman), Senior Deputy Governor John Robinson, Financial Secretary (Assigned) Everton McFarlane, Mr Dayle Blair, Dr Christine Clarke, Mrs Andrea Coy, Mr Gary Hendrickson and Dr Wayne Henry.

9.2.2. Responsibility

The Board has general responsibility for the conduct of the affairs of the Bank. All matters of importance outside the functions of daily management are submitted to the Board. Additionally, the Board on the recommendation of the Governor appoints the auditors, attorneys, currency agents and other agents of the Bank, as well as Bank officials. In 2016, nine meetings were held. The legal stipulation is to meet at least ten times annually. The legal requirement was not met based on the change of Government during the year.

9.3. Committee Meetings

The Board has three standing committees: the Audit Committee, the Budget Committee and the Human Resource Development (HRD) Committee. These committees have terms of reference outlining their respective responsibilities.

The Audit Committee, chaired by Dr Christine Clarke, provides independent oversight of the financial reporting process and internal controls of the organization. The Committee is also responsible for overseeing the relationship with the Bank's external auditors. In 2016, the Audit Committee held three meetings, satisfying the minimum stipulation for meetings per year.

The Budget Committee, chaired by Mr Gary Hendrickson, is responsible for monitoring and reviewing the Capital and Recurrent budgets of the Bank. The Committee may also meet at the request of the Board to review the outturn against budget. This committee met twice in 2016, satisfying the minimum requirement.

The HRD Committee, chaired by Mr Dayle Blair, meets as is necessary. The Committee has the responsibility for reviewing, monitoring and making recommendations to the Board on human resource strategy and policies. One meeting was held during the year.

9.4. Statutory Committees

The promulgation of the Banking Services Act (BSA) in 2014 laid the foundation for the improvement in Bank of Jamaica's governance framework and therein has afforded the Bank the opportunity to more effectively and efficiently deliver its expanded mandate. It is against this background and pursuant to the BSA, that statutory committees were established to oversee the decisions of the Bank in its

expanded role of supervisory and financial system stability oversight.

9.4.1. Supervisory Committee

The Supervisory Committee (SC) is responsible for the administration of the Banking Services Act which includes making determinations on the granting, refusal and revocation of licences, among other matters. The SC consists of five members: three ex-officio members and two members appointed by the Governor General on the advice of the Minister after consultation with the Supervisor. The ex-officio members are the Supervisor of Banks, the Deputy Supervisor of Banks and the senior executive of the Bank who has responsibility for financial stability oversight. As at 31 December 2016, the members of the SC were Governor Brian Wynter, Senior Deputy Governor John Robinson, Ms Shirley-Ann Eaton and Professor David Tennant. The position of Deputy Supervisor was vacant.

9.4.2. Financial System Stability Committee

The Financial System Stability Committee (FSSC) is tasked largely with providing oversight to the Bank's risk assessments, coordinating required policy measures and communicating with the public to ultimately safeguard the stability of the financial system. The FSSC is comprised of eight members: six ex-officio members and two members appointed by the Minister on the recommendation of the Governor. The ex-officio members of the Committee are: the Governor, the senior officer of the Bank with assigned responsibility for the Bank's financial system stability mandate, the Financial Secretary, the Deputy Supervisor, the Executive Director of the Financial Services Commission (FSC) and the Chief Executive Officer of the Jamaica Deposit Insurance Corporation (JDIC). As at 31 December 2016, the committee members were Governor Brian Wynter, Senior Deputy Governor John Robinson, Financial Secretary Everton McFarlane, Ms Janice P. Holness, Miss Antoinette McKain, Mr. Karl Wright and Mr. Richard Powell.

9.4.3. Financial Regulatory Committee

The Financial Regulatory Committee (FRC) was established to facilitate information sharing, coordination and cooperation among regulatory authorities. This committee focuses on those policies and procedures appropriate to the strengthening and regulation of the financial system. The FRC is comprised of four ex-officio members: the Governor, Mr. Brian Wynter; the Financial Secretary, Mr. Everton McFarlane; the Executive Director of the FSC, Ms. Janice P. Holness and the Chief Executive Officer of the Jamaica Deposit Insurance Corporation, Miss Antoinette McKain.

9.5. Executive Compensation

The Bank's Executive Management comprises the Governor, the Senior Deputy Governor, and three Deputy Governors. These officers were appointed under fixed term contracts by the Minister of Finance, as provided for under the Bank of Jamaica Act.[1]

The compensation of Executive Management for the year ended 31 December 2016 is described below:

- Salary Range of Executive Management
  $8 096 925 to $18 023 335.00
- Allowances for Deputy Governors
  $1 100 844.00 to $1 194 624.00

Members of the Executive Management team are eligible for benefits available to other members of staff, inclusive of health insurance, life insurance and staff loans. The Deputy Governors are members of the non-contributory pension scheme sponsored by the Bank. The Governor is paid a gratuity in lieu of pension benefits.

The Governor is provided with a residence which is maintained by the Bank. He is also eligible for reimbursement of prescribed overseas medical insurance premium and expenses for his children's education. The Governor and the Deputy Governors are provided with motor vehicles.

[1] The amendment to the Bank of Jamaica Act in September 2015 includes a revised approach for the appointment of the Governor. The appointment of the Governor will be done by the Governor-General in Council for a period fixed in the Act.

Non-executive Directors of the Board are not remunerated for their services but are paid reimbursable expenses within the scale of rates approved by the Ministry of Finance and the Public Service for Directors of public bodies. They are not eligible for staff related benefits.

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10. Community Outreach

10.1. Overview

Bank of Jamaica is committed to targeted community outreach programmes that make a positive impact on the social environment in the areas of education and the arts.

10.2. Support for Education

10.2.1. Schools' Education Programme

In 2016, the Bank hosted over 5000 persons for visits to its Money Museum and lectures on the Bank's role and functions. The Bank also partnered with the Financial Services Commission (FSC) to provide support for the persons who participated in the FSC Junior Achievement programme.

10.2.2. Revision Seminars in Economics

The annual revision seminars in Economics were attended by over 300 CAPE level students from 14 high schools over a two-day period. The sessions were facilitated by staff economists from the Research and Economic Programming Division who made presentations on the role and functions of the Central Bank and demonstrated practical applications of monetary theory.

10.2.3. G. Arthur Brown Scholarship

The 2016 G. Arthur Brown Scholarship was awarded to Miss Chivel Greenland to pursue the Master of Science degree in Economics at the University of the West Indies. The scholarship is for two years and coverage began in September 2016.

10.2.4. St. Michael's Primary School

The Bank continued its sponsorship of St. Michael's Primary School's academic programmes and events through the summer school programme, Boys' and Girls' Day, printing of school material and provision of lunch for staff on Teacher's Day.

10.2.5. Exhibition

Bank of Jamaica participated in the annual Seville Heritage Expo at the Seville Great House in St. Ann through its exhibition on the History of Jamaican Money. The expo provided an opportunity for persons outside of the Kingston Metropolitan area to learn more about this monetary aspect of our history.

10.3. Support for the Visual & Performing Arts

10.3.1. Visual Arts

The Bank acquired work from local and emerging artists throughout 2016. Work of arts were also acquired through the Mustard Seed Communities' ceramic exhibition hosted annually by the Bank. Art pieces from the Bank's collection were loaned to the National Gallery of Jamaica for the landmark exhibition entitled "Kingston: The City and Art".

10.3.2. Lunch Hour Concerts

Over 3 300 patrons attended the Lunch Hour Concerts which are aimed at providing quality entrainment in music, dance, theatre and poetry free of cost on a monthly basis.

10.3.3. An Evening with The University Singers

Hundreds of patrons attended the 20th staging of the annual free concert, *An Evening with The University Singers*, at the University Chapel on 21 December 2016. Mrs. Jacqueline Morgan, former head of the Public Relations Department and conceptualizer of the event and Mr. Noel Dexter, former musical director of the group, were specially recognised. In addition to the live streaming of the performance to patrons in the overflow areas on the chapel grounds, a live broadcast was aired on NewsTALK 93FM.

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11. Bank of Jamaica's Strategic Objectives 2016 - 2018

11.1. Overview

The Bank continued implementation of its strategic plan under the theme "**One Bank, One Mission, One Vision**" capitalizing on the Bank's institutional excellence while recognizing the need for greater cooperation among divisions and preserving the positive aspects of the Bank's culture. During 2016, special emphasis was placed on designing operational objectives to support the strategic goal of improving the Bank's efficiency and effectiveness in operations. Particular focus was given to executing initiatives in support of six strategic imperatives – modernizing the HR function; enhancing the communication framework; enhancing the governance framework; modernizing the budget administration function; operationalizing the Banking Services Act; and strengthening macro-prudential oversight. A structured communication strategy was employed to ensure that all staff members understood the raison d'etre of the theme.

The Bank continued to execute both its strategic and operational activities concurrently, despite the growing demands on the institutional capacity. Approximately 50% of the Bank's strategic targets were met and 76% of its operational targets were met.

A more focused approach to strategic and operational planning and project delivery will be embarked upon for the ensuing year.

11.2. Strategic Objectives

The strategic plan is underpinned by three broad strategic goals which are supported by eleven strategic imperatives, that is, the critical success factors that must be addressed for the strategic goals to be achieved. Strategic imperatives, which are measurable, will define what has to be achieved within a given timeframe so as to achieve the agreed objectives and goals under the strategic plan.

The strategic objectives for 2016 to 2018 are:

1. **Improving Operational Efficiency and Effectiveness**
   - i. Modernisation of the Human Resource Function
   - ii. Enhancement of the Governance Framework
   - iii. Enhancement of the Communication Function
   - iv. Modernisation of the Budget and Administration Function

2. **Strengthening Capacity for New, Changing and Expanded Mandates**
   - i. Operationalisation of the Banking Services Act (BSA)
   - ii. Strengthening Macro-prudential Oversight
   - iii. Strengthening Monetary Policy Framework
   - iv. Strengthening Credit Union Framework

3. **Supporting Shared National Responsibilities**
   - i. Guiding the Development of the National Financial Inclusion Strategy
   - ii. Supporting Economic Growth
   - iii. Leading the process for Special Data Dissemination Standard (SDDS)

11.3. Core Values to support the Strategic Plan Objectives

The attainment of the strategic goals and theme will also hinge upon the adherence of staff to seven core values. These are fairness & equity, teamwork, confidentiality, excellence, transparency, respect and honesty & integrity.

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12. Calendar of Monetary Policy Developments

2016/01/04	BOJ 14- day Repurchase operation was conducted for provision of Jamaica Dollar liquidity amounting to $2,500,000,000.00 to DTI's. The amount offered was allocated through a competitive price auction. Following the auction, the weighted average yield was 6.93 per cent.
2016/01/11	BOJ 14- day Repurchase operation was conducted for provision of Jamaica Dollar liquidity amounting to $2,500,000,000.00 to DTI's. The amount offered was allocated through a competitive price auction. Following the auction, the weighted average yield was 6.87 per cent.
2016/01/18	BOJ 14- day Repurchase operation was conducted for provision of Jamaica Dollar liquidity amounting to $2,500,000,000.00 to DTI's. The amount offered was allocated through a competitive price auction. Following the auction, the weighted average yield was 6.50 per cent.
2016/01/19	BOJ 14- day Repurchase operation was conducted for provision of Jamaica Dollar liquidity amounting to $1,000,000,000.00 to DTI's. The amount offered was allocated through a competitive price auction. Following the auction, the weighted average yield was 5.85 per cent.
2016/02/18	BOJ 5.80% FR JMD-CD 2017B amounting to $1,000,000,000.00 was allocated through a competitive price auction. The first installment of interest will become due and payable on 22 May 2016. Thereafter, the quarterly interest payment becomes due on 22 August 2016, 22 November 2016 and at maturity on 21 February 2017. Following the auction, the weighted average yield was 6.13 per cent.
2016/03/01	BOJ 14- day Repurchase operation was conducted for provision of Jamaica Dollar liquidity amounting to $1,000,000,000.00 to DTI's. The amount offered was allocated through a competitive price auction. Following the auction, the weighted average yield was 6.10 per cent.
2016/03/03	BOJ 14- day Repurchase operation was conducted for provision of Jamaica Dollar liquidity amounting to $1,000,000,000.00 to DTI's. The amount offered was allocated through a competitive price auction. Following the auction, the weighted average yield was 6.29 per cent.
2016/03/18	BOJ 14- day Repurchase operation was conducted for provision of Jamaica Dollar liquidity amounting to $1,000,000,000.00 to DTI's. The amount offered was allocated through a competitive price auction. Following the auction, the weighted average yield was 6.25 per cent.
2016/03/21	BOJ 14- day Repurchase operation was conducted for provision of Jamaica Dollar liquidity amounting to $500,000,000.00 to DTI's. The amount offered was allocated through a competitive price auction. Following the auction, the weighted average yield was 7.12 per cent.
2016/03/24	BOJ 14- day Repurchase operation was conducted for provision of Jamaica Dollar liquidity amounting to $8,000,000,000.00 to DTI's. The amount offered was allocated through a competitive price auction. Following the auction, the weighted average yield was 7.01 per cent.

2016/04/04 BOJ 14- day Repurchase operation was conducted for provision of Jamaica Dollar liquidity amounting to $10,000,000,000.00 to DTI's. The amount offered was allocated through a competitive price auction. Following the auction, the weighted average yield was 6.79 per cent.

2016/04/11 BOJ 14- day Repurchase operation was conducted for provision of Jamaica Dollar liquidity amounting to $18,000,000,000.00 to DTI's. The amount offered was allocated through a competitive price auction. Following the auction, the weighted average yield was 6.57 per cent.

2016/04/25 The Bank of Jamaica offered five instruments:

(i) The offer of BOJ FR USD-CD 2019T is for an unlimited amount. The tenor of this instrument is 3-yearsand offers a fixed coupon of 2.40 percent per annum, which is 1.42 percentage points above the current rate of 0.98 percent on 3-year US Treasury. The coupon is paid semi-annually.

(ii) The offer of BOJ FR USD-CD 2021J is for an unlimited amount. The tenor of this instrument is 5-yearsand offers a fixed coupon of 3.30 percent per annum, which is 1.95 percentage points above the current rate of 1.35 percent on 5-year US Treasury. The coupon is paid semi-annually.

(iii) The offer of BOJ FR USD-CD 2023B is for an unlimited amount. The tenor of this instrument is 7-yearsand offers a fixed coupon of 3.95 percent per annum, which is 2.30 percentage points above the current rate of 1.65 percent on 7-year US Treasury. The coupon is paid semi-annually.

2016/04/25 BOJ 14- day Repurchase operation was conducted for provision of Jamaica Dollar liquidity amounting to $7,500,000,000.00 to DTI's. The amount offered was allocated through a competitive price auction. Following the auction, the weighted average yield was 6.28 per cent.

2016/05/02 BOJ 14- day Repurchase operation was conducted for provision of Jamaica Dollar liquidity amounting to $1,500,000,000.00 to DTI's. The amount offered was allocated through a competitive price auction. Following the auction, the weighted average yield was 7.5 per cent.

2016/05/09 BOJ 14- day Repurchase operation was conducted for provision of Jamaica Dollar liquidity amounting to $7,500,000,000.00 to DTI's. The amount offered was allocated through a competitive price auction. Following the auction, the weighted average yield was 7.56 per cent.

2016/05/20 BOJ 14- day Repurchase operation was conducted for provision of Jamaica Dollar liquidity amounting to $2,500,000,000.00 to DTI's. The amount offered was allocated through a competitive price auction. Following the auction, the weighted average yield was 7.72 per cent.

2016/05/30 BOJ 14- day Repurchase operation was conducted for provision of Jamaica Dollar liquidity amounting to $8,500,000,000.00 to DTI's. The amount offered was allocated through a competitive price auction. Following the auction, the weighted average yield was 7.18 per cent.

2016/06/06 BOJ 14- day Repurchase operation was conducted for provision of Jamaica Dollar liquidity amounting to $9,500,000,000.00 to DTI's. The amount offered was allocated through a competitive price auction. Following the auction, the weighted average yield was 6.98 per cent.

2016/06/13 BOJ 14- day Repurchase operation was conducted for provision of Jamaica Dollar liquidity amounting to $13,000,000,000.00 to DTI's. The amount offered was allocated through a competitive price auction. Following the auction, the weighted average yield was 6.33 per cent.

2016/06/27 BOJ 14- day Repurchase operation was conducted for provision of Jamaica Dollar liquidity amounting to $14,000,000,000.00 to DTI's. The amount offered was allocated through a competitive price auction. Following the auction, the weighted average yield was 5.92 per cent.

2016/07/04 BOJ 14- day Repurchase operation was conducted for provision of Jamaica Dollar liquidity amounting to $8,500,000,000.00 to DTI's. The amount offered was allocated through a competitive price auction. Following the auction, the weighted average yield was 6.00 per cent.

2016/07/18 BOJ 14- day Repurchase operation was conducted for provision of Jamaica Dollar liquidity amounting to $6,000,000,000.00 to DTI's. The amount offered was allocated through a competitive price auction. Following the auction, the weighted average yield was 6.13 per cent.

2016/07/25 BOJ 14- day Repurchase operation was conducted for provision of Jamaica Dollar liquidity amounting to $9,500,000,000.00 to DTI's. The amount offered was allocated through a competitive price auction. Following the auction, the weighted average yield was 6.07 per cent.

2016/07/29 BOJ 14- day Repurchase operation was conducted for provision of Jamaica Dollar liquidity amounting to $5,000,000,000.00 to DTI's. The amount offered was allocated through a competitive price auction. Following the auction, the weighted average yield was 6.22 per cent.

2016/08/08 BOJ 14- day Repurchase operation was conducted for provision of Jamaica Dollar liquidity amounting to $10,000,000,000.00 to DTI's. The amount offered was allocated through a competitive price auction. Following the auction, the weighted average yield was 6.28 per cent.

2016/08/15 BOJ 14- day Repurchase operation was conducted for provision of Jamaica Dollar liquidity amounting to $5,000,000,000.00 to DTI's. The amount offered was allocated through a competitive price auction. Following the auction, the weighted average yield was 6.28 per cent.

2016/08/22 BOJ 14- day Repurchase operation was conducted for provision of Jamaica Dollar liquidity amounting to $6,500,000,000.00 to DTI's. The amount offered was allocated through a competitive price auction. Following the auction, the weighted average yield was 6.75 per cent.

2016/08/29 BOJ 14- day Repurchase operation was conducted for provision of Jamaica Dollar liquidity amounting to $6,500,000,000.00 to DTI's. The amount offered was allocated through a competitive price auction. Following the auction, the weighted average yield was 7.08 per cent.

2016/09/05 BOJ 14- day Repurchase operation was conducted for provision of Jamaica Dollar liquidity amounting to $11,000,000.00 to DTI's. The amount offered was allocated through a competitive price auction. Following the auction, the weighted average yield was 6.79 per cent.

2016/09/12 BOJ 14- day Repurchase operation was conducted for provision of Jamaica Dollar liquidity amounting to $6,500,000,000.00 to DTI's. The amount offered was allocated through a competitive price auction. Following the auction, the weighted average yield was 6.80 per cent.

2016/09/19 BOJ 14- day Repurchase operation was conducted for provision of Jamaica Dollar liquidity amounting to $11,000,000,000.00 to DTI's. The amount offered was allocated through a competitive price auction. Following the auction, the weighted average yield was 6.68 per cent.

2016/10/10 BOJ 14- day Repurchase operation was conducted for provision of Jamaica Dollar liquidity amounting to $12,500,000,000.00 to DTI's. The amount offered was allocated through a competitive price auction. Following the auction, the weighted average yield was 6.60 per cent.

2016/10/14 BOJ 14- day Repurchase operation was conducted for provision of Jamaica Dollar liquidity amounting to $9,000,000,000.00 to DTI's. The amount offered was allocated through a competitive price auction. Following the auction, the weighted average yield was 6.74 per cent.

2016/10/24 BOJ 14- day Repurchase operation was conducted for provision of Jamaica Dollar liquidity amounting to $5,500,000,000.00 to DTI's. The amount offered was allocated through a competitive price auction. Following the auction, the weighted average yield was 6.24 per cent.

2016/10/31 BOJ 14- day Repurchase operation was conducted for provision of Jamaica Dollar liquidity amounting to $5,000,000,000.00 to DTI's. The amount offered was allocated through a competitive price auction. Following the auction, the weighted average yield was 7.54 per cent.

2016/11/07 BOJ 14- day Repurchase operation was conducted for provision of Jamaica Dollar liquidity amounting to $ 5,500,000,000.00 to DTI's. The amount offered was allocated through a competitive price auction. Following the auction, the weighted average yield was 8.15 per cent.

2016/11/14 BOJ 14- day Repurchase operation was conducted for provision of Jamaica Dollar liquidity amounting to $ 5,000,000,000.00 to DTI's. The amount offered was allocated through a competitive price auction. Following the auction, the weighted average yield was 8.46 per cent.

2016/12/05 BOJ 14- day Repurchase operation was conducted for provision of Jamaica Dollar liquidity amounting to $ 5,000,000,000.00 to DTI's. The amount offered was allocated through a competitive price auction. Following the auction, the weighted average yield was 9.09 per cent.

2016/12/23 BOJ 14- day Repurchase operation was conducted for provision of Jamaica Dollar liquidity amounting to $ 10,500,000,000.00 to DTI's. The amount offered was allocated through a competitive price auction. Following the auction, the weighted average yield was 8.57 per cent.

2016/12/30 BOJ 14- day Repurchase operation was conducted for provision of Jamaica Dollar liquidity amounting to $ 10,000,000,000.00 to DTI's. The amount offered was allocated through a competitive price auction. Following the auction, the weighted average yield was 7.46 per cent.

Auditors' Report

BANK OF JAMAICA
FINANCIAL STATEMENTS
December 31, 2016

KPMG
Chartered Accountants
P.O. Box 76
6 Duke Street
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Jamaica, W.I.
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INDEPENDENT AUDITORS' REPORT

TO BANK OF JAMAICA

Pursuant to Section 43(1) of the Bank of Jamaica Act, we have audited the financial statements of Bank of Jamaica ("the Bank"), set out on pages 4 to 51 which comprise the statement of financial position as at December 31, 2016, statements of profit or loss and other comprehensive income, changes in capital and reserves and cash flows for the year then ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

In our opinion, the accompanying financial statements give a true and fair view of the financial position of the Bank as at December 31 2016, and of its financial performance and its cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRS).

Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the *Auditors' Responsibilities for the Audit of the Financial Statements* section of our report. We are independent of the Bank in accordance with the International Ethics Standards Board for Accountants Code of Ethics for Professional Accountants (IESBA Code), and we have fulfilled our other ethical responsibilities in accordance with the IESBA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

KPMG, a Jamaican partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity.

R. Tarun Handa
Cynthia L. Lawrence
Rajan Trehan
Norman O. Rainford
Nigel R. Chambers
W. Gihan C. de Mel
Nyssa A. Johnson
Wilbert A. Spence
Rochelle N. Stephenson

KPMG

INDEPENDENT AUDITORS' REPORT (CONT'D)

TO BANK OF JAMAICA

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation of financial statements that give a true and fair view in accordance with IFRS, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Bank's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Bank or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Bank's financial reporting process.

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Bank's internal control.

INDEPENDENT AUDITORS' REPORT (CONT'D)

TO BANK OF JAMAICA

Auditors' Responsibilities for the Audit of the Financial Statements (Cont'd)

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Bank's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Bank to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Kingston, Jamaica

KPMG

March 2, 2017

BANK OF JAMAICA

Statement of Financial Position
December 31, 2016

	Notes	2016 J$'000	2015 J$'000
ASSETS			
Foreign assets:			
Notes and coins		71,632	104,223
Cash and cash equivalents	4	265,542,331	204,035,103
Interest in funds managed by agents	5	42,930,138	40,637,501
Investment securities	6	73,542,419	75,355,616
International Monetary Fund - Holding of Special Drawing Rights		29,929,849	30,038,907
Bilateral accounts		20,056	-
International Monetary Fund – Quota subscription	7	10,060,734	5,174,650
Total foreign assets		422,097,159	355,346,000
Local assets:			
Notes and coins		92,592	114,069
Resale agreements	8	16,550,000	16,949,931
Investment securities	9	124,723,099	123,867,430
Due from Government and Government Agencies	10	36,782,107	38,969,674
Property, plant and equipment	11	4,482,117	4,584,508
Intangible asset	12	289,425	45,784
Employee benefits asset	13(a)	4,823,200	5,035,500
Other	14	3,763,944	2,983,401
Total local assets		191,506,484	192,550,297
Total assets		613,603,643	547,896,297

The accompanying notes form an integral part of the financial statements.

BANK OF JAMAICA

Statement of Financial Position (continued)
December 31, 2016

	Notes	2016 J$'000	2015 J$'000
LIABILITIES, CAPITAL AND RESERVES			
Liabilities:			
Notes and coins in circulation	15	98,203,483	84,251,184
Deposits and other demand liabilities	16	264,335,816	244,055,332
Open market liabilities	17	192,854,641	161,309,109
International Monetary Fund - Allocation of Special Drawing Rights	18	45,016,212	43,499,182
Foreign liabilities		319	27
Employee benefits obligation	13(b)	1,698,800	1,520,100
Bilateral accounts		-	70,595
Other	19	2,270,562	3,507,666
Total liabilities		604,379,833	538,213,195
Capital and reserves:			
Share capital	20	4,000	4,000
General reserve fund	21	20,000	20,000
Special stabilisation account	22	1,278,391	1,135,011
Other reserves	23	7,921,419	8,524,091
Total capital and reserves		9,223,810	9,683,102
Total liabilities, capital and reserves		613,603,643	547,896,297

The financial statements on pages 4 to 51 were approved for issue by the Board of Directors on March 2, 2017 and signed on its behalf by:

Governor
Brian Wynter

Deputy Governor
Livingstone Morrison

Financial Controller
Angela Foote

The accompanying notes form an integral part of the financial statements.

BANK OF JAMAICA

Statement of Profit or Loss and Other Comprehensive Income
Year ended December 31, 2016

	Notes	2016 J$'000	2015 J$'000
Operating income:			
Interest	24	14,430,641	15,149,568
Foreign exchange gain, net	25	5,585,071	207,969
Other		183,136	150,518
Total operating income		20,198,848	15,508,055
Operating expenses:			
Interest on deposits and open market liabilities	26	9,865,293	10,876,060
Interest on IMF loan		998,075	628,530
Staff costs	27	2,888,842	2,611,129
Currency expenses		1,344,915	1,134,796
Depreciation and amortisation		416,170	394,906
Other property expenses		456,739	471,041
Other operating expenses	28	965,606	934,132
Total operating expenses		16,935,640	17,050,594
Operating profit/(loss)		3,263,208	(1,542,539)
Other income/(expenses):			
Pension, medical and life insurance	13	2,100	165,600
Gain on remeasurement of staff loans		19,050	35,109
Loss on disposal of securities designated as available-for-sale		(22,515)	(16,030)
Gain on disposal of property, plant and equipment		2,578	19,618
Profit/(loss)for the year before transfer to pension equalisation reserve		3,264,421	(1,338,242)
Transfer to pension equalisation reserve	23(c)	(186,400)	(314,100)
Profit/(loss) for the year transferred to general reserve fund	10(b)	3,078,021	(1,652,342)
Other comprehensive income:			
Items that will never be reclassified to profit or loss:			
Gain on revaluation of land and building		68,796	1,302,329
Remeasurement of pension asset and obligation, net	13	(514,400)	(1,108,200)
Item that is or will be reclassified to profit or loss:			
Change in fair value of available-for-sale securities		(438,068)	62,958
Total other comprehensive (loss)/income for the year		(883,672)	257,087
Total comprehensive income/(loss) for the year		2,194,349	(1,395,255)

The accompanying notes form an integral part of the financial statements.

BANK OF JAMAICA

Statement of Changes in Capital and Reserves
Year ended December 31, 2016

	Share capital J$'000 (Note 20)	General reserve fund J$'000 (Note 21)	Special stabilisation account J$'000 (Note 22)	Other reserves J$'000 (Note 23)	Total J$'000
Balances at December 31, 2014	4,000	20,000	1,009,867	7,865,104	8,898,971
Total comprehensive income for the year:					
Loss for the year	-	(1,652,342)	-	-	(1,652,342)
Other comprehensive income:					
Realised change in fair value of available-for-sale securities	-	-	-	229,165	229,165
Unrealised change in fair value of available-for-sale securities	-	-	-	(166,207)	(166,207)
	-	-	-	62,958	62,958
Gain on revaluation of land and building	-	-	-	1,302,329	1,302,329
Remeasurement of pension asset and obligation	-	-	-	(1,108,200)	(1,108,200)
Total other comprehensive income	-	-	-	257,087	257,087
Total comprehensive loss	-	(1,652,342)	-	257,087	(1,395,255)
Other changes in reserves:					
Due from consolidated fund for loss (note 10)	-	1,652,342	-	-	1,652,342
Transfer from coins in circulation	-	-	125,144	-	125,144
Transfer of surplus on defined benefits pension scheme	-	-	-	401,900	401,900
	-	1,652,342	125,144	401,900	2,179,386
Balances at December 31, 2015	4,000	20,000	1,135,011	8,524,091	9,683,102
Total comprehensive income for the year:					
Profit for the year	-	3,078,021	-	-	3,078,021
Other comprehensive income:					
Realised change in fair value of available-for-sale securities	-	-	-	2,951,873	2,951,873
Unrealised change in fair value of available-for-sale securities	-	-	-	(3,389,941)	(3,389,941)
	-	-	-	(438,068)	(438,068)
Gain on revaluation of land and building	-	-	-	68,796	68,796
Remeasurement of pension asset and obligation, net	-	-	-	(514,400)	(514,400)
Total other comprehensive income	-	-	-	(883,672)	(883,672)
Total comprehensive income	-	3,078,021	-	(883,672)	2,194,349
Other changes in reserves:					
Profit due to consolidated fund (note 10)	-	(3,078,021)	-	-	(3,078,021)
Transfer from coins in circulation	-	-	143,380	-	143,380
Transfer of surplus on defined benefit pension scheme	-	-	-	281,000	281,000
	-	(3,078,021)	143,380	281,000	(2,653,641)
Balances at December 31, 2016	4,000	20,000	1,278,391	7,921,419	9,223,810

The accompanying notes form an integral part of the financial statements.

BANK OF JAMAICA

Statement of Cash Flows
Year ended December 31, 2016

	Notes	2016 J$'000	2015 J$'000
Cash flows from operating activities:			
Profit/(loss) for the year		3,264,421	(1,338,142)
Adjustments for:			
Depreciation – property, plant and equipment	11	326,423	370,129
Amortisation – intangible asset	12	89,746	24,777
Gain on disposal of property, plant and equipment		(2,578)	(19,618)
Employee benefits, net		157,600	125,800
Unrealised exchange gain		(25,262,305)	(3,770,555)
Unrealised exchange gain on International Monetary Fund Quota Subscription	7	(180,465)	(19,371)
Unrealised exchange loss on International Monetary Fund - Allocation of SDR's		1,517,030	162,830
Interest income	24	(14,430,641)	(15,149,568)
Interest expense	26	9,865,293	10,876,060
Operating loss before changes in other assets and other liabilities		(24,655,476)	(8,737,658)
Other assets		(724,974)	2,867,489
Other liabilities		(3,274,668)	349,821
Due from Government and Government Agencies		(1,029,850)	(1,099,794)
Interest received		10,886,075	14,962,117
Interest paid		(7,917,910)	(10,310,490)
Net cash used by operating activities		(26,716,803)	(1,968,515)
Cash flows from investing activities:			
International Monetary Fund - Holding of Special Drawing Rights		(4,596,562)	736,174
Interest in funds managed by agents		371,499	(2,244,090)
Foreign currency denominated investments		5,410,553	62,579,355
Local currency denominated investments		2,122,998	(1,185,674)
Resale agreements		399,931	26,646,086
Additions to property, plant and equipment	11	(202,091)	(409,896)
Additions to intangible asset	12	(333,387)	(58,416)
Proceeds from disposal of property, plant and equipment		49,433	55,609
Net cash provided by investing activities		3,222,374	86,119,148
Cash flows from financing activities:			
Notes and coins in circulation		14,095,679	9,433,783
Deposits and other demand liabilities		25,946,216	38,577,524
Open market liabilities		31,545,532	(11,691,210)
Foreign liabilities		(5,303)	(289,927)
Net cash provided by financing activities		71,582,124	36,030,170
Net increase in cash and cash equivalents		48,087,695	120,180,803
Cash and cash equivalents at beginning of year		204,253,395	80,411,160
Effect of exchange rate fluctuation on cash held		13,365,465	3,661,432
Cash and cash equivalents at end of year		265,706,555	204,253,395
Cash and cash equivalents at December 31 comprise:			
Foreign cash and cash equivalents	4	265,542,331	204,035,103
Foreign notes and coins		71,632	104,223
Local notes and coins		92,592	114,069
		265,706,555	204,253,395

The accompanying notes form an integral part of the financial statements.

BANK OF JAMAICA

Notes to the Financial Statements
Year ended December 31, 2016

1. Identification

Bank of Jamaica (hereafter "the Bank") was established under the Bank of Jamaica Act (hereafter "the Act"), which was most recently amended on October 29, 2015, to establish the Bank's statutory responsibility for financial stability. The Bank is domiciled in Jamaica and its principal office is located at Nethersole Place, Kingston, Jamaica.

The principal objects of the Bank, as set out in the Act, are to issue and redeem notes and coins; to keep and administer the external reserves of Jamaica; to influence the volume and conditions of supply of credit so as to promote the fullest expansion in production, trade and employment, consistent with the maintenance of monetary stability in Jamaica and the external value of the currency; to foster the development of money and capital markets in Jamaica; and to act as banker to the Government of Jamaica.

2. Basis of preparation

(a) Statement of compliance

The financial statements are prepared in accordance with the relevant provisions of the Bank of Jamaica Act, and International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board.

Amended standards that became effective during the year

Certain amended standards came into effect during the current financial year. The Bank has adopted those which are relevant to its operations, but their adoption did not result in any changes to amounts recognised or disclosed in these financial statements.

Standards issued that are not yet effective

At the date of authorisation of these financial statements, certain new amended standards have been issued which were not effective at the reporting date and which the Bank has not early-adopted. The Bank has assessed them with respect to its operations and has determined that the following are relevant to its financial statements.

(i) IFRS 9, *Financial Instruments*, which is effective for annual reporting periods beginning on or after January 1, 2018, replaces the existing guidance in IAS 39 *Financial Instruments: Recognition and Measurement*. IFRS 9 includes revised guidance on the classification and measurement of financial assets and liabilities, including a new expected credit loss model for calculating impairment of financial assets and new general hedge accounting requirements. It also carries forward the guidance on recognition and derecognition of financial instruments from IAS 39. Although the permissible measurement bases for financial assets - amortised cost, fair value through other comprehensive income (FVOCI) and fair value though profit or loss (FVTPL) - are similar to IAS 39, the criteria for classification into the appropriate measurement category are significantly different. IFRS 9 replaces the 'incurred loss' model in IAS 39 with an 'expected credit loss' model, which means that a loss event will no longer need to occur before an impairment allowance is recognised.

BANK OF JAMAICA

Notes to the Financial Statements (Continued)
Year ended December 31, 2016

2. Basis of preparation (continued)

(a) Statement of compliance (continued)

Standards issued that are not yet effective (continued)

(ii) IFRS 7, *Financial Instruments*: *Disclosures*, effective for annual reporting periods beginning on or after July 1, 2016, has been amended to clarify when servicing arrangements are in the scope of its disclosure requirements on continuing involvement in transferred assets in cases when they are derecognised in their entirety. A servicer is deemed to have continuing involvement if it has an interest in the future performance of the transferred asset.

(iii) IFRS 15, *Revenue from Contracts with Customers*, is effective for annual reporting periods beginning on or after January 1, 2017. It replaces IAS 11, *Construction Contracts*, IAS 18, *Revenue*, IFRIC 13, *Customer Loyalty Programmes*, IFRIC 15, *Agreements for the Construction of Real Estate*, IFRIC 18, *Transfer of Assets from Customers*, and SIC-31, *Revenue - Barter Transactions Involving Advertising Services*.

The new standard applies to contracts with customers. However, it does not apply to insurance contracts, financial instruments or lease contracts, which fall in the scope of other IFRSs. It also does not apply if two entities in the same line of business exchange non-monetary assets to facilitate sales to other parties. Furthermore, if a contract with a customer is partly in the scope of another IFRS, then the guidance on separation and measurement contained in the other IFRS takes precedence.

(iv) IFRS 16, *Leases*, which is effective for annual reporting periods beginning on or after January 1, 2019, eliminates the current dual accounting model for lessees, which distinguishes between on-balance sheet finance leases and off-balance sheet operating leases. Instead, there is a single, on-balance sheet accounting model that is similar to current finance lease accounting. Leases will be required to bring all major leases on-balance sheet, recognising new assets and liabilities. The on-balance sheet liability will attract interest; the total lease expense will be higher in the early years of a lease even if a lease has fixed regular cash rentals. Optional lessee exemption will apply to short- term leases and for low-value items with value of US$5,000 or less.

Lessor accounting remains similar to current practice as the lessor will continue to classify leases as finance and operating leases.

Early adoption is permitted if IFRS 15, *Revenue from Contracts with Customers* is also adopted.

BANK OF JAMAICA

Notes to the Financial Statements (Continued)
Year ended December 31, 2016

2. Basis of preparation (continued)

(a) Statement of compliance (continued)

Standards issued that are not yet effective (continued)

(v) Amendments to IAS 7, *Statement of Cash Flows*, effective for accounting periods beginning on or after January 1, 2017, requires an entity to provide disclosures that enable users of financial statements to evaluate changes in liabilities arising from financing activities, including both changes arising from cash flows and non-cash flows.

The Bank is assessing the impact that the new and amended standards will have on its financial statements when they are adopted.

(b) Functional and presentation currency

The financial statements are presented in Jamaica Dollars (J$), which is the Bank's functional currency.

(c) Basis of measurement

The financial statements are prepared on the historical cost basis, except that:

(i) available-for-sale investments and certain classes of property, plant and equipment are included at fair value; and

(ii) the defined benefit asset is recognised as plan assets, less the present value of the defined benefit obligation, adjusted for the effect of limiting the net defined benefit asset to the asset ceiling as explained in note 3(f).

(d) Estimation uncertainty and judgements

The preparation of financial statements in conformity with IFRSs requires the use of accounting estimates, based on assumptions. It also frequently requires management to exercise its judgement in the process of applying IFRSs and the Bank's accounting policies. These estimates and judgements affect the reported amounts of, and disclosures relating to assets, liabilities, income, expenses, contingent assets and contingent liabilities.

Estimates and the assumptions underlying them are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised and in any future periods affected. Although these estimates are based on management's best knowledge of current events and actions, actual results may differ from the estimates.

BANK OF JAMAICA

Notes to the Financial Statements (Continued)
Year ended December 31, 2016

2. Basis of preparation (continued)

(d) Estimation uncertainty and judgements (continued)

(i) Judgements

For the purpose of these financial statements, prepared in accordance with IFRS, judgement refers to the informed identification and analysis of reasonable alternatives, considering all relevant facts and circumstances, and the well-reasoned, objective and unbiased choice of the alternative that is most consistent with the agreed principles set out in IFRS.

The determination of whether a security may be classified as 'loans and receivables' or 'held to maturity' (note 6) or whether a security's fair value may be classified as 'Level 1' in the fair value hierarchy (note 32) requires judgement as to whether or not a market is active.

(ii) Key sources of estimation uncertainty

Financial statement amounts that have been significantly affected by estimates, and/or which could be changed significantly in the next financial year as a result of a change in the estimate, are as follows:

(1) Pension and other post-retirement benefits

The amounts recognised in the statements of financial position and profit or loss and comprehensive income for pension and other post-retirement benefits are determined actuarially using several assumptions. The primary assumptions used in determining the amounts recognised include the discount rate used to determine the present value of estimated future cash flows required to settle the pension and other post-retirement obligations, and the expected rate of increase in medical costs for post-retirement medical benefits.

The discount rate is determined based on the estimate of yield on long-term government securities that have maturity dates approximating the terms of the Bank's obligation. In the absence of such instruments in Jamaica, it has been necessary to estimate the rate by extrapolating from the longest-tenure security on the market. The estimate of expected rate of increase in medical costs is determined based on inflationary factors. Any changes in these assumptions will impact the amounts recorded in the financial statements for these obligations.

(2) Fair values of financial instruments

There are no quoted market prices for a significant portion of the Bank's financial instruments. Accordingly, fair values of such financial assets are estimated using prices obtained from a yield curve. That yield curve is, in turn, obtained from a pricing source which estimates the yield curve on the basis of indicative prices submitted by licensed banks and other financial institutions in Jamaica. There is significant uncertainty inherent in this approach which is categorised as a Level 2 fair value; consequently, the estimates arrived at may be different from the actual price of the instrument in an actual arm's length transaction (see notes 8 and 32).

BANK OF JAMAICA

Notes to the Financial Statements (Continued)
Year ended December 31, 2016

2. Basis of preparation (continued)

(d) Estimation uncertainty and judgements (continued)

(ii) Key sources of estimation uncertainty (continued)

(3) Fair value of property, plant and equipment

Market values of the Bank's non-financial assets are not readily determinable. The fair value of property, plant and equipment is therefore determined by property valuers, as set out in note 11, using largely unobservable inputs, making it a level 3 fair value.

(e) Comparative information

Whenever necessary, the comparative figures are reclassified to conform to the current year's presentation.

3. Significant accounting policies

(a) Financial instruments – Classification, recognition and de-recognition, and measurement

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity. In these financial statements:

- Financial assets have been determined to comprise cash and cash-equivalents, interest in funds managed by agents, investment securities, IMF – holding of special drawing rights, bilateral accounts, resale agreements, IMF – quota subscription, due from Government and Government agencies and staff and ex-staff loans.
- Financial liabilities comprise deposits and other demand liabilities, open market liabilities, IMF – allocation of special drawing rights, foreign liabilities and bilateral accounts and payables.

Financial instruments are classified, recognised and measured in accordance with the substance of the terms of the contracts as set out herein.

(i) Classification of financial instruments

The Bank classifies non-derivative financial assets into the following categories:

Loans and receivables: Securities acquired and loans granted with fixed or determinable payments and which are not quoted in an active market, are classified as loans and receivables. The Bank's financial instruments included in this classification are resale agreements, local and foreign currency denominated securities which do not have a quoted market price in an active market and whose fair values cannot be reliably determined, and interest-bearing deposits.

Held-to-maturity: Securities with fixed or determinable payments and fixed maturities that the Bank has the positive intent and ability to hold to maturity are classified as held-to-maturity. The Bank's financial instruments included in this classification are the Government of Jamaica-issued fixed rate accreting notes.

BANK OF JAMAICA

Notes to the Financial Statements (Continued)
Year ended December 31, 2016

3. Significant accounting policies (continued)

(a) Financial instruments – Classification, recognition and de-recognition, and measurement (continued)

(i) Classification of financial instruments (continued)

The Bank classifies non-derivative financial assets into the following categories (continued):

Available-for-sale: Investments are classified as available-for-sale, because they are designated as such or are not classified in any of the other categories. The Bank's financial instruments included in this classification are securities with quoted prices in an active market or for which the fair values are otherwise determinable and interest in funds managed by agents.

Management determines the appropriate classification of investments at the time of purchase, taking account of the purpose for which the investments were purchased.

The Bank classifies non-derivative financial liabilities into the other financial liabilities category.

(ii) Recognition and derecognition - Non-derivative financial assets and financial liabilities

The Bank recognises a financial instrument when it becomes a party to the contractual terms of the instrument. The Bank initially recognises loans and receivables and debt securities on the date when they are originated. All other financial assets and financial liabilities are initially recognised on the trade date.

The Bank derecognises a financial asset when the contractual rights to the cash flows from the asset expire, or it transfers the rights to receive the contractual cash flows in a transaction in which substantially all of the risks and rewards of ownership of the financial asset are transferred, or it neither transfers nor retains all or substantially all the risks and rewards of ownership and does not retain control over the transferred asset. Any interest in such derecognised financial assets that is created or retained by the Bank is recognised as a separate asset or liability.

The Bank derecognises a financial liability when its contractual obligations expire or are discharged or cancelled.

Financial assets and financial liabilities are offset and the net amount presented in the statement of financial position when, and only when, the Bank has the legal right to offset the amounts and intends either to settle them on a net basis, or to realise the assets and settle the liabilities simultaneously.

BANK OF JAMAICA

Notes to the Financial Statements (Continued)
Year ended December 31, 2016

3. Significant accounting policies (continued)

(a) Financial instruments – Classification, recognition and de-recognition, and measurement (continued)

(iii) Measurement - Non-derivative financial assets

Loans and receivables: On initial recognition these are measured at fair value, plus any directly attributable transaction costs. Subsequent to initial recognition, they are measured at amortised cost, using the effective interest method, less impairment losses. Premiums and discounts are included in the carrying amount of the related instrument and amortised based on the effective interest rate of the instrument.

Where securities classified as loans and receivables become quoted in an active market, such securities will not be reclassified as available-for-sale securities. An active market is one where quoted prices are readily and regularly available from an exchange dealer, broker or other agency and those prices represent actual and regularly occurring market transactions on an arm's length basis.

Held-to-maturity instruments: On initial recognition these are measured at fair value, plus any directly attributable transaction costs. Premiums and discounts are included in the carrying amount of the related instrument and amortised based on the effective interest rate of the instrument. Subsequent to initial recognition, they are measured at amortised cost, using the effective interest method, less impairment losses. Any sale or reclassification of a significant amount of held-to-maturity investments that is not close to their maturity would result in the reclassification of all held-to-maturity investments as available-for-sale, and prevent the Bank from classifying investment securities as held-to-maturity for the financial year in which sale or reclassification occurs and the following two financial years.

Available-for-sale instruments: On initial recognition, these are measured at fair value plus any directly attributable transaction costs. Subsequent to initial recognition, they are measured at fair value, with unrealised gains and losses arising from changes in fair value treated as follows:

- Changes in the fair value of monetary securities denominated in a foreign currency and classified as available-for-sale are analysed between translation differences resulting from changes in amortised cost of the security and other changes in the carrying amount of the security. The translation differences are recognised in profit or loss, and other changes in carrying amount are recognised in other comprehensive income. Changes in the fair value of securities classified as available-for-sale are recognised in other comprehensive income.

- When securities classified as available-for-sale are sold or impaired, and therefore derecognised, the accumulated fair value adjustments accumulated in other comprehensive income are reclassified to profit or loss.

BANK OF JAMAICA

Notes to the Financial Statements (Continued)
Year ended December 31, 2016

3. Significant accounting policies (continued)

(a) Financial instruments – Classification, recognition and de-recognition, and measurement (continued)

(iv) Specific items

(1) Cash and cash equivalents

Cash comprises cash on hand and demand deposits. Cash equivalents comprise short-term highly liquid investments that are readily convertible to known amounts of cash, are subject to an insignificant risk of changes in value, and are held for the purpose of meeting short-term commitments (these investments include short-term deposits where the maturities do not exceed three months from the acquisition date). Cash and cash equivalents are measured at cost.

(2) Resale agreements

Resale agreements are accounted for as short-term collateralised lending. They are classified as loans and receivables and carried at amortised cost.

Interest earned on resale agreements is recognised as interest income over the life of each agreement using the effective interest method.

(3) Other assets

Other assets are stated at amortised cost, less impairment losses.

(4) Other liabilities

Other liabilities are stated at amortised cost.

(b) Foreign currencies

The rate of exchange of the Jamaica Dollar for the United States dollar is determined by the weighted average rate of trades reported by authorised foreign exchange dealers and cambios and the rate at which the Bank itself buys United States dollars. The rates of exchange for other currencies are derived from the US dollar rate, thus determined, using rates published by The World Markets Company Plc (WM Reuters).

Monetary assets and liabilities denominated in foreign currencies at the reporting date are translated at the foreign exchange rates prevailing at that date. Transactions in foreign currencies are translated at the foreign exchange rates ruling at the dates of those transactions.

Gains and losses arising on fluctuations in exchange rates are included in profit or loss.

BANK OF JAMAICA

Notes to the Financial Statements (Continued)
Year ended December 31, 2016

3. Significant accounting policies (continued)

(c) Property, plant and equipment

(i) Owned assets

Items of property, plant and equipment are stated at cost less accumulated depreciation and impairment losses, except for freehold land and buildings, which are carried at fair value.

- Cost

Cost includes expenditures that are directly attributable to the acquisition of the asset. The cost of self-constructed assets includes the cost of materials and direct labour and any other costs directly attributable to bringing the asset to the location and condition where it is ready for its intended use.

The cost of replacing part of an item of property, plant and equipment is recognised in the carrying amount of the item if it is probable that the future economic benefits embodied within the part will flow to the Bank and it can be measured reliably.

The costs of the day-to-day servicing of property, plant and equipment are recognised in profit or loss as incurred.

- Fair value

The fair value of freehold land and buildings is the price that would be received to sell them in an orderly transaction between market participants at the valuation date. Such fair value is determined by an external, independent valuer, with appropriate recognised professional qualification and recent experience in the location and category of land and buildings being valued. The Bank's policy is to obtain an independent professional valuation of all its land and buildings every five years. Management's assessment of significant movement in fair value is done for the intervening years and adjustment made to valuation, as necessary.

(ii) Depreciation

Property, plant and equipment are depreciated on the straight-line basis at annual rates estimated to write down the assets to their residual value over their estimated useful lives. Leasehold property is amortised in equal instalments over the shorter of the lease term and the property's estimated useful life.

Land, works of art and museum coins are not depreciated.

The estimated useful lives are as follows:

Buildings	10 – 20 years
Leasehold property	Shorter of lease term and useful life
Furniture, plant and equipment	10 years
Computer equipment	5 years
Motor vehicles	5 years

The depreciation methods, useful lives and residual values are reassessed at each reporting date.

BANK OF JAMAICA

Notes to the Financial Statements (Continued)
Year ended December 31, 2016

3. Significant accounting policies (continued)

(d) Notes and coins in circulation

The nominal value of numismatic coins sold is included in notes and coins in circulation. The net proceeds from such sales are included in profit or loss.

Notes and coins in circulation is stated after a deduction of 25% of the value of coins in circulation in accordance with the Bank of Jamaica (Value of Coins in Circulation) Order 1973, as permitted under Section 22 of the Act. The deductions are credited to the special stabilisation account.

(e) Taxation

Section 46 of the Act, which exempted the Bank from income tax, stamp duties and transfer tax, was repealed on December 23, 2003; however, the Bank is still exempt from income tax under Section 12(b) of the Income Tax Act. The Bank's supplies are substantially exempt from general consumption tax (GCT); it incurs GCT at standard rates on taxable supplies acquired.

(f) Employee benefits

Employee benefits comprise all forms of consideration given by the Bank in exchange for service rendered by employees. These include current or short-term benefits such as salaries, NIS contributions, annual vacation leave, and non-monetary benefits such as medical care and life insurance; post-employment benefits such as pension and medical care; and other long-term employee benefits such as termination benefits.

(i) General benefits

Employee benefits that are earned as a result of past or current service are recognised in the following manner: short-term employee benefits are recognised as a liability, net of payments made, and charged as expense. The estimated cost of accumulated vacation leave is recognised annually. Post-employment benefits are accounted for as described in (ii) and (iii) below.

(ii) Post-employment benefits - Defined benefit pension plan

In respect of defined-benefit arrangements, employee benefits and obligations included in the financial statements are determined annually by a qualified independent actuary, appointed by management. The appointed actuary's report outlines the scope of the valuation and the actuary's opinion. The actuarial valuations are conducted in accordance with IAS 19, and the financial statements reflect the Bank's post-employment benefit asset and obligation as computed by the actuary. In carrying out their audit, the auditors rely on the work of the actuary and the actuary's report.

The cost of the pension benefits the Bank is committed to providing is the total of (1) the net obligation under the plan for services rendered and (2) the cost of administration of the plan – both of which costs are borne by the Bank.

BANK OF JAMAICA

Notes to the Financial Statements (Continued)
Year ended December 31, 2016

3. Significant accounting policies (continued)

(f) Employee benefits (continued)

(ii) Post-employment benefits - defined benefit pension plan (continued)

The Bank's net obligation under its defined-benefit pension plan is calculated by estimating the amount of future benefits that employees have earned in return for their service in the current and prior periods; that value is discounted to determine the present value, and the fair value of any plan assets is deducted. The discount rate is determined by reference to the yield at the reporting date on long-term government securities with maturities approximating the terms of the Bank's obligation. The calculation is performed by a qualified actuary using the projected unit credit method.

Remeasurements of the net defined benefit asset, which comprise actuarial gains and losses and the effect of the asset ceiling (if any, excluding interest), are recognised in other comprehensive income. The Bank determines the net interest income on the net defined benefit asset for the period by applying the discount rate used to measure the defined benefit asset at the beginning of the year to the net defined benefit asset, taking into account any changes in the net defined benefit asset during the year as a result of contributions and benefit payments. Net interest expense and other expenses related to defined benefit plans are recognised in profit or loss.

When the benefits of the plan are changed or when the plan is contracted, the resulting change in benefit that relates to past service or the gain or loss on curtailment is recognised immediately in profit or loss. The Bank recognises gains and losses on the settlement of a defined benefit plan when the settlement occurs.

Where the calculation results in a benefit to the Bank, the recognised asset is limited to the net present value of economic benefits available in the form of any future refunds from the plan or reduction in future contributions to the plan.

(iii) Post-employment defined benefits – medical care and life insurance

The Bank's obligation in respect of unfunded long-term employee medical care and life insurance are the amount of future benefits that employees have earned in return for their service in the current and prior periods; that benefit is then discounted to determine its present value. The discount rate is determined as per the defined benefit pension plan set out at (ii) above. The calculation is performed by a qualified actuary using the projected unit credit method. Remeasurements of the defined obligation as well as net interest expense is recognised in the same manner as described at (ii) above for the defined-benefit pension plan.

BANK OF JAMAICA

Notes to the Financial Statements (Continued)
Year ended December 31, 2016

3. Significant accounting policies (continued)

(g) Statutory transfer of profits and losses

Section 9 of the Act provides for each financial year's net income to be credited, or net loss charged, to the General Reserve Fund, and for the balance on the General Reserve Fund in excess of five times the Bank's authorised share capital to be transferred to the Consolidated Fund. Likewise, any losses not covered by reserves are required by the Act to be funded by Government out of the Consolidated Fund.

(h) Impairment

The carrying amounts of the Bank's assets are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists for any asset, the asset's recoverable amount is estimated. An impairment loss is recognised whenever the carrying amount of an asset or its cash-generating unit exceeds its recoverable amount. Impairment losses are recognised in profit or loss.

When a decline in the fair value of an available-for-sale financial asset has been recognised in other comprehensive income and there is objective evidence that the asset is impaired, the cumulative loss that has been recognised in other comprehensive income is recognised in profit or loss even though the financial asset has not been derecognised. The amount of the cumulative loss that is recognised in profit or loss is the difference between the acquisition cost and current fair value, less any impairment loss on that financial asset previously recognised in profit or loss.

(i) Calculation of recoverable amount

The recoverable amount of the Bank's investment in loans and receivables and other receivables is calculated as the present value of expected future cash flows, discounted at the original effective interest rate inherent in the asset. Receivables with a short-term duration are not discounted.

(ii) Reversals of impairment

An impairment loss in respect of loans and receivables carried at amortised cost is reversed if the subsequent increase in recoverable amount can be related objectively to an event occurring after the impairment loss was recognised. For all other assets, an impairment loss is reversed if there has been a change in the estimate used to determine the recoverable amount.

An impairment loss in respect of an investment in an equity instrument classified as available-for-sale is not reversed through profit or loss. If the fair value of a debt instrument classified as available-for-sale increases and the increase can be objectively related to an event occurring after the impairment loss was recognised in profit or loss, the impairment loss is reversed, with the amount of the reversal recognised in profit or loss.

An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined if no impairment loss had been recognised.

BANK OF JAMAICA

Notes to the Financial Statements (Continued)
Year ended December 31, 2016

3. Significant accounting policies (continued)

(i) Intangible asset:

Intangible asset represents software and is measured at cost less accumulated amortised and impairment losses. The asset is amortised on the straight line basis at an annual rate estimated to write down the asset to its residual value over its estimated useful life of 5 years.

(j) Revenue recognition:

Revenue is income that arises in the course of the ordinary activities of the Bank. Accordingly, revenue comprises interest income and foreign exchange gains from holding foreign currency denominated financial assets.

(i) Interest income

Interest income is recognised in profit or loss using the effective interest method. The effective interest rate is the rate that exactly discounts the estimated future cash receipts through the expected life of the financial asset (or, where appropriate, a shorter period) to the carrying amount of the financial asset. The effective interest rate is established on initial recognition of the financial asset and is not revised subsequently. Interest income includes coupons earned on fixed income investments, accretion of discounts on treasury bills and other discounted instruments, net of amortisation of premiums on instruments bought at a premium.

(ii) Foreign exchange gains

Foreign exchange gains are recognised as set out in note 3(b).

4. Cash and cash equivalents

	2016 J$'000	2015 J$'000
Current accounts and money at call with foreign banks	262,740,010	203,104,900
Current accounts with local banks	2,802,321	930,203
	265,542,331	204,035,103

5. Interest in funds managed by agents

This represents investments managed by Crown Agents Investment Management Limited ("CAIML"), and the International Bank for Reconstruction and Development (IBRD) on behalf of the Bank. The portfolio consists of investments in government bonds, treasury bills, corporate bonds and cash denominated in United States dollars.

BANK OF JAMAICA

Notes to the Financial Statements (Continued)
Year ended December 31, 2016

6. Foreign currency denominated investments

	2016 J$'000	2015 J$'000
Available-for-sale securities:		
USD Bonds issued primarily by specialised financial corporations	4,221,497	7,885,439
Loans and receivables:		
Short-term deposits with foreign banks	69,320,922	67,470,177
	73,542,419	75,355,616

7. International Monetary Fund – Quota Subscription

This represents the portion of Jamaica's fee for membership of the International Monetary Fund (IMF), based on its quota, which was paid by the Bank (the other portion having been subscribed by the Government of Jamaica). The Bank holds, on behalf of the IMF, promissory notes issued by the Government reflecting the Jamaica dollar value of the unpaid subscription quota allocated to Jamaica. The Jamaica dollar value of the promissory notes issued are determined by the SDR:J$ rate at April 30 of each year. The Jamaica dollar amounts in the table below are computed using the SDR: J$ rate at December 31. Jamaica is assigned a quota of SDR 382,900,000, which represents .008% of the total quota allocated by the IMF. Quotas are reviewed every five years, when adjustments may be considered.

	SDR'000	2016 J$'000	2015 J$'000
Amount subscribed by the Government of Jamaica (substituted by securities)	324,425	55,817,935	40,295,765
Amount subscribed by the Bank	58,475	10,060,734	5,174,650
Total quota	382,900	65,878,669	45,470,415

	SDR'000	2016 J$'000	2015 J$'000
Amount subscribed by the Bank (net of reserve tranche of J$Nil):			
At beginning of year	31,125	5,174,650	5,155,279
Movement during the year	27,350	4,705,619	-
Effect of exchange rate fluctuation *	-	180,465	19,371
At end of year	58,475	10,060,734	5,174,650

The quota subscription was reclassified during the year from local assets to foreign assets.

*The exchange rate at the reporting date is set out at note 16(d)(iv).

BANK OF JAMAICA

Notes to the Financial Statements (Continued)
Year ended December 31, 2016

8. Resale agreements

The Bank, as one of its options in pursuing its monetary policy objectives, enters into various resale agreements with financial institutions. Under these agreements, the Bank purchases Government of Jamaica ("GOJ") securities and agrees to resell them to the respective counter-parties on specified dates and at specified prices. These are accounted for as short-term collateralised lending [note 3(a)(iv)(2)]. Section 23(f) of the Act requires the Bank to obtain collateral with a market value that is 1⅓ times the amount of the credit granted to each financial institution. At December 31, 2016, securities held had a fair value of $22,145,086,000 (2015: $22,603,980,000).

9. Local currency denominated investments

	2016 J$'000	2015 J$'000
Available-for-sale securities:		
Jamaica Government Securities:		
Variable rate benchmark investments	34,719,877	34,746,985
Fixed rate benchmark investments	11,947,695	12,320,829
	46,667,572	47,067,814
Held to maturity investments:		
Jamaica Government Securities:		
Fixed rate accreting notes ("FRANs") [See note re National Debt Exchange ("NDX") below]	78,055,527	76,799,616
	124,723,099	123,867,430

As part of the NDX, GOJ mandated the Bank [and all other state-owned/controlled entities that held GOJ - issued notes ("Old Notes")] to exchange those Old Notes for new notes - FRANs - as at February 22, 2013. Old notes with a carrying amount of $94,833,000,000 at that date were exchanged for FRANs with a fair value of $73,748,000,000, resulting in a loss of $21,085,000,000.

In summary, under the terms of the FRANs:

(i) A holder of Old Notes was issued J$80 of initial principal value of FRANs for every J$100 of principal value of Old Notes;

(ii) Interest is payable semi-annually on February 15 and August 15 at a fixed rate of 10% p.a. on the accreted principal value with the first payment made on August 15, 2013;

(iii) Accretion for the additional J$20 of principal value commenced in August 2015 as follows:
- 0.5% of $100 every six months from August 15, 2015 until August 15, 2020;
- Thereafter, 1.0% of $100 every six months until August 15, 2026; and
- Thereafter, 1.5% of $100 every six months until August 15, 2027.

(iv) The FRANs may be redeemed by GOJ on any interest payment date after August 15, 2020. The value at which the FRAN could be redeemed was not specified in the offer document.

BANK OF JAMAICA

Notes to the Financial Statements (Continued)
Year ended December 31, 2016

10. Due from Government and Government Agencies

	2016			
		Movements during the year		
	At beginning of year J$'000	Advances/ losses J$'000	(Settlement)/ profit J$'000	At end of year J$'000
Withholding tax refund due [see notes (c) and (d) below]	7,144,530	1,627,386	(655,347)	8,116,569
Accrued interest on Government securities	3,536,031	3,454,446	(3,536,031)	3,454,446
Net loss receivable from Consolidated Fund [see (b) below]	28,289,113	-	(3,078,021)	25,211,092
	38,969,674	5,081,832	(7,269,399)	36,782,107

	2015			
		Movements during the year		
	At beginning of year J$'000	Advances/ losses J$'000	(Settlement)/ profit J$'000	At end of year J$'000
Withholding tax refund due [see note (c) and (d) below]	6,269,909	1,529,968	(655,347)	7,144,530
Accrued interest on Government securities	3,574,082	3,536,031	(3,574,082)	3,536,031
Net loss receivable from Consolidated Fund [see (b) and (d) below]	26,636,771	1,652,342	-	28,289,113
	36,480,762	6,718,341	(4,229,429)	38,969,674

(a) By virtue of Section 36 of the Act, the Bank is empowered to make advances to the Government of up to thirty percent of the estimated revenue of Jamaica for the financial year of the Government. Such advances are to be repaid within three months of the end of the financial year in which the advances were made. Where advances are not duly repaid, the Bank is prohibited from granting further advances in any subsequent financial year until the outstanding advances are repaid. There was no advance given in 2016 and 2015.

(b) The Government is required by the Act to pay to the Bank, out of the Consolidated Fund, amounts to cover losses incurred by the Bank. Section 9(3) of the Act provides that if, in the opinion of the Minister of Finance, payment to clear the losses cannot be made from the Consolidated Fund, such losses may be cleared by the issue of securities to the Bank chargeable to the Consolidated Fund.

The movement for the year comprises of profit for the year $3,078,021 (2015: loss of $1,652,342).

BANK OF JAMAICA

Notes to the Financial Statements (Continued)
Year ended December 31, 2016

10. Due from Government and Government Agencies (continued)

(c) Income tax is withheld on income earned by the Bank on its holding of securities (in practice, this is GOJ securities) in accordance with Section 31A of the Income Tax Act as an advance on payment of income tax which may be due. However, as the Bank is exempt from income tax, the entire amount of tax withheld is recoverable from Tax Administration Jamaica.

At the reporting date, the age profile of the withholding tax recoverable was as follows:

	2016 J$'000	2015 J$'000
1-6 months	873,115	815,089
6-12 months	664,482	634,307
1-5 years	6,558,198	5,490,709
Over 5 years	20,774	204,425
	8,116,569	7,144,530

(d) The Bank and the Government of Jamaica (GOJ) entered into a memorandum of understanding dated December 21, 2013 for the settlement of accumulated losses and the recovery of withholding taxes refund due to the Bank.

(i) Under the terms of the agreement, GOJ agreed to settle the accumulated losses due to the Bank as at December 31, 2012 by cash payments of specified amounts commencing in financial year 2014/2015 and ending in financial year 2017/2018. The first payment of $74.37 million was received in December 2014. The second and third payments, amounting to $4,781.56 million remains outstanding as at December 31, 2016.

The Bank and the Ministry of Finance further undertook to agree on settlement dates for subsequent amounts that may be due to the Bank under Section 9(3) of the Bank of Jamaica Act, no later than 90 days after submission of the audited financial statements for the relevant year to the Minister with responsibility for Finance. The audited financial statements have been submitted; however, as at December 31, 2016 the required arrangements for settlement of the balances due in relation to the 2013 and 2015 losses have not been agreed.

(ii) In respect of withholding taxes refund due as at December 31, 2012, it was agreed that these would be settled in five equal instalments commencing in the financial year 2014/2015. The Government have been honoring this commitment and have made two installments amounting to $1,310.694 million, of which $655.347 million was made during the financial year ended December 31, 2016.

The agreement also stipulates that all refunds in relation to subsequent withholding taxes will be made on submission of the returns and verification by the Commissioner General, Tax Administration Jamaica. Subsequent to the submission of the required returns a total of $6,150.54 million has accumulated in withholding taxes recoverable for the period January 1, 2013 to December 31, 2016.

BANK OF JAMAICA

Notes to the Financial Statements (Continued)
Year ended December 31, 2016

11. Property, plant and equipment

	Freehold land and buildings J$'000	Leasehold property J$'000	Furniture, plant and equipment J$'000	Motor vehicles J$'000	Total J$'000
Cost or valuation:					
December 31, 2014	3,158,136	80,348	1,790,755	386,789	5,416,028
Additions	82,961	125	204,654	122,156	409,896
Revaluation	573,326	-	-	-	573,326
Disposals/write-offs	-	-	-	(121,485)	(121,485)
December 31, 2015	3,814,423	80,473	1,995,409	387,460	6,277,765
Additions	39,740	214	85,655	76,482	202,091
Revaluation	68,796	-	-	-	68,796
Disposals/write-offs	-	-	-	(115,223)	(115,223)
December 31, 2016	3,922,959	80,687	2,081,064	348,719	6,433,429
Depreciation:					
December 31, 2014	615,674	24,621	1,334,200	163,130	2,137,625
Charge for the year	157,856	8,041	131,148	73,084	370,129
Eliminated on disposals	-	-	-	(85,494)	(85,494)
Revaluation	(729,003)	-	-	-	(729,003)
December 31, 2015	44,527	32,662	1,465,348	150,720	1,693,257
Charge for the year	159,930	8,062	103,803	54,628	326,423
Eliminated on disposals	-	-	-	(68,368)	(68,368)
December 31, 2016	204,457	40,724	1,569,151	136,980	1,951,312
Net book values:					
December 31, 2016	3,718,502	39,963	511,913	211,739	4,482,117
December 31, 2015	3,769,896	47,811	530,061	236,740	4,584,508
December 31, 2014	2,542,462	55,727	456,555	223,659	3,278,403

An independent valuer provides the fair value of the land and buildings when requested by the Bank, which is expected to be every five years (or more frequently if the Bank has compelling reasons to believe the fair value has changed materially in the intervening years) [note 3(c)(i)].

A revaluation was performed in November 2015 and October 2016 by C. D. Alexander Company Realty Limited, Real Estate Broker, Appraiser and Auctioneer.

The surplus arising on revaluation, inclusive of depreciation no longer required, is included in property revaluation reserve [note 23(b)].

BANK OF JAMAICA

Notes to the Financial Statements (Continued)
Year ended December 31, 2016

11. Property, plant and equipment (continued)

The valuations were done using the depreciated replacement cost approach, and management accepted these as reasonable estimates of fair value. The fair value of land and buildings is categorised as Level 3 in the fair value hierarchy. The significant unobservable inputs used in determining the fair value and the effect of each of them on the value determined, are summarised below:

Valuation techniques	Significant unobservable inputs	Inter-relationship between key unobservable inputs and fair value measurement
Depreciated replacement cost. This model takes into account: Building: (i) An estimate of the full replacement cost at the reporting date (ii) An estimate of depreciation based on the age and condition of the building (iii) Deducting the estimated depreciation from the current replacement cost Land (i) An estimate of the site improvements made (ii) An estimate of the market value of the land with the site improvements	Estimates of material, labour, professional fees and other costs of planning, design and construction, expressed as cost per square foot Judgements about the physical condition of the building Judgements about the environment in which the building is located	The estimated fair value would increase (decrease) if: • the cost per square foot were higher (lower) • judgement about the condition of the building had determined the condition to be better or worse.

12. Intangible asset

	Computer software	
	2016	2015
	$'000	$'000
Cost:		
At the beginning of year	544,254	485,838
Addition	333,387	58,416
At end of year	877,641	544,254
Amortisation:		
At the beginning of year	498,470	473,693
Charge for the year	89,746	24,777
At end of year	588,216	498,470
Net book value	289,425	45,784

BANK OF JAMAICA

Notes to the Financial Statements (Continued)
Year ended December 31, 2016

13. Employee benefits

The Bank operates non-contributory defined benefit pension, medical, and life insurance schemes for all its permanent eligible employees and funds supplemental retirement benefits. Benefits under the pension scheme are computed by reference to final salary. The assets of the scheme, which are held separately from those of the Bank, are under the control of a board of trustees, with day-to-day management by employees of the Bank.

(a) Pension asset recognised:

	2016 $'000	2015 $'000
Present value of funded obligations	(10,435,400)	(9,309,900)
Fair value of plan assets	15,258,600	14,345,400
Recognised asset	4,823,200	5,035,500

(i) Movements in the present value of defined benefit obligations

	2016 J$'000	2015 J$'000
Balance at beginning of year	9,309,900	8,233,100
Benefits paid	(506,400)	(465,900)
Service and interest costs	1,015,500	970,500
Remeasurement loss on obligation included in other comprehensive income [note 13(a)(iv)]	616,400	572,200
Balance at end of year	10,435,400	9,309,900

(ii) Movements in plan assets

	2016 J$'000	2015 J$'000
Fair value of plan assets at beginning of year	14,345,400	13,711,400
Contributions paid	94,600	87,800
Interest income on plan assets	1,201,900	1,284,600
Benefits paid	(506,400)	(465,900)
Remeasurement gain/(loss) on assets include in other comprehensive income [note 13(a)(iv)]	123,100	(272,500)
Fair value of plan assets at end of year	15,258,600	14,345,400
Plan assets consist of the following:		
Government of Jamaica securities	13,935,900	11,938,700
Bank of Jamaica certificates of deposit	1,019,200	2,141,600
Real estate	130,800	130,800
Other	172,700	134,300
	15,258,600	14,345,400

BANK OF JAMAICA

Notes to the Financial Statements (Continued)
Year ended December 31, 2016

13. Employee benefits (continued)

(a) Pension asset recognised (continued):

(iii) Credit recognised in profit or loss

	2016 J$'000	2015 J$'000
Current service costs	226,400	192,200
Interest on obligations	789,100	778,300
Interest income on assets	(1,201,900)	(1,284,600)
	(186,400)	(314,100)

(iv) Items recognised in other comprehensive income

	2016 J$'000	2015 J$'000
Remeasurement loss on obligation:		
Change in financial assumptions	-	(914,600)
Experience adjustment	(616,400)	342,400
	(616,400)	(572,200)
Remeasurement gain/(loss) on assets	123,100	(272,500)
	(493,300)	(844,700)

(v) Principal actuarial assumptions at the reporting date (expressed as weighted averages)

	2016 %	2015 %
Discount rate	9.00	8.5
Future pension increases	3.00	2.50
Future salary increases	6.50	6

(vi) A one percentage point change at the reporting date to one of the relevant actuarial assumptions, holding other assumptions constant, would have affected the defined benefit obligations by amounts shown below:

Actuarial assumption	One percentage point increase J$'000	One percentage point decrease J$'000
Discount rate	(1,337,000)	1,683,800
Assumed rate of salary escalation	401,800	(358,300)
Future rate of pension	1,248,700	(1,033,700)

BANK OF JAMAICA

Notes to the Financial Statements (Continued)
Year ended December 31, 2016

13. Employee benefits (continued)

(b) Obligations for post-retirement life insurance and medical benefits:

(i) Liability recognised in statement of financial position

	2016 J$'000	2015 J$'000
Balance at beginning of year	1,520,100	1,130,800
Interest cost	132,500	110,000
Current service cost	51,800	38,500
Benefits paid	(26,700)	(22,700)
Remeasurement loss on obligation, included in other comprehensive income [see (iii)]	21,100	263,500
Balance at end of year	1,698,800	1,520,100

(ii) Expense recognised in profit or loss:

	2016 J$'000	2015 J$'000
Current service costs	51,800	38,500
Interest on obligations	132,500	110,000
	184,300	148,500

(iii) Items in other comprehensive income

	2016 J$'000	2015 J$'000
Change in financial assumptions	(155,100)	(126,800)
Experience adjustment	134,000	(136,700)
Remeasurement loss on obligation	(21,100)	(263,500)

(iv) Principal actuarial assumptions at the reporting date (expressed as weighted averages):

	2016 %	2015 %
Discount rate	9.00	8.50
Medical claims growth	8.00	7.00

Assumptions regarding future mortality are based on the GAM 94 [2015: GAM (94)] mortality table for pensioners (British mortality tables), but with each age rated down by five (2015: five) years.

BANK OF JAMAICA

Notes to the Financial Statements (Continued)
Year ended December 31, 2016

13. Employee benefits (continued)

(c) At the reporting date, changes to one of the relevant actuarial assumptions, holding other assumptions constant, would have affected the defined benefit obligation by amounts shown below:

	One percentage point increase J$'000	One percentage point decrease J$'000
Assumed medical cost trend rate and rate of salary escalation	357,100	(273,700)
Discount rate	(272,300)	359,300

(d) The estimated pension contributions expected to be paid into the plan during the next financial year amounts to J$110,200,000 (2015: J$119,290,000). See note 13(a)(ii) for actual contributions paid during the current and previous years.

14. Other assets

	2016 J$'000	2015 J$'000
Staff loans	1,780,840	1,752,149
Inventory of unissued notes and coins	1,130,443	1,262,811
Ex-staff loans	80,996	118,225
SDR equalisation provision [note 16(d)(iii)]	946,817	-
Accrued interest receivable other than on GOJ securities	103,045	183,259
Salaries and wages paid in advance	74,989	68,115
Stock of souvenir coins	84,057	84,972
Other	176,405	146,719
	4,377,592	3,616,250
Less:		
Remeasurement of staff loans	(602,043)	(621,244)
Impairment allowance - ex-staff loans	(11,605)	(11,605)
	3,763,944	2,983,401

15. Notes and coins in circulation

	2016 J$'000	2015 J$'000
Notes	94,368,310	80,846,150
Coins	3,835,173	3,405,034
	98,203,483	84,251,184

Section 21 of the Act requires the Bank to hold specified assets of an amount in value sufficient to cover the value of the total amount of notes and coins in circulation as defined in that section. The assets held shall include, *inter alia*, (a) gold; (b) "hard currency" cash, bank balances or securities issued by a foreign government or international financial institution of which Jamaica is a member; or (c) Special Drawing Rights. Specified assets held by the Bank, as at December 31, 2016, were 3.91 (2015: 3.86) times the value of notes and coins in circulation at that date.

BANK OF JAMAICA

Notes to the Financial Statements (Continued)
Year ended December 31, 2016

15. Notes and coins in circulation (continued)

Coins in circulation are shown net of a reserve of 25% of the gross amount of coins in circulation (note 22).

16. Deposits and other demand liabilities

(a) Deposits and other demand liabilities comprise the following:

	2016 J$'000	2015 J$'000
Government and Government agencies	88,511,495	107,068,998
Commercial banks and specified financial institutions	99,870,324	80,662,174
International Monetary Fund [see (d) below]	71,413,029	53,275,962
Others	4,540,968	3,048,198
	264,335,816	244,055,332
Jamaica dollar equivalent of foreign currency deposits	197,108,241	186,147,360
Jamaica dollar deposits	67,227,575	57,907,972
	264,335,816	244,055,332

(b) Deposit and other demand liabilities include the reserve deposits prescribed by Section 28 of the Bank of Jamaica Act. Reserve deposits at the reporting date were $86,699,291,000 (2015: $66,270,894,000).

(c) Under Section 28A of the Bank of Jamaica Act, commercial banks and specified financial institutions may be required to make special deposits with the Bank in the form of cash or specified securities. There were no special deposits at the reporting date.

(d) IMF related information

(i) The IMF balance consists of the following loans:

	2016 SDR'000	2015 SDR'000	2016 J$'000	2015 J$'000
2010 Standby agreement	-	3,987	-	646,340
2013 Extended fund facility	408,830	323,870	71,285,095	52,510,660
Total draw-downs	408,830	327,857	71,285,095	53,157,000
Other IMF amounts	734	734	127,934	118,962
Total IMF liability	409,564	328,591	71,413,029	53,275,962

BANK OF JAMAICA

Notes to the Financial Statements (Continued)
Year ended December 31, 2016

16. Deposits and other demand liabilities (continued)

(d) IMF related information (continued)

(ii) In November 2016, the Government of Jamaica discontinued the 2013 extended fund facility that would have expired in March 2017; and replaced it with a three-year precautionary standby agreement. There were no drawdown under this facility as at December 31, 2016.

(iii) The following reconciliation shows the total IMF liability converted at the SDR to J$ exchange rates prevailing at April 30 and December 31

	2016 J$'000	2015 J$'000
At the December 31 SDR rate:		
Amount at which the loan is carried by the Bank	70,466,212	54,629,540
Effect of exchange rate depreciation between April 30 and December 31 (notes 14, 19)	946,817	(1,353,578)
At the April 30 SDR rate:		
Amount at which the loan is carried by the IMF [per (a) above]	71,413,029	53,275,962

(iv) The following table shows the rate of exchange of J$1 for SDR at April 30 and December 31

		2016	2015
April 30	J$1 =	0.0057351	0.0061677
December 31	J$1 =	0.0058122	0.0060149

As at March 2, 2017, the date of approval of these financial statements, the exchange rate was J$1 = SDR 0.0057783.

(v) There was no disbursement to Government for fiscal support during 2016.

17. Open market liabilities

As part of the process of controlling liquidity in the financial system, the Bank acquires funds from or makes funds available to financial institutions. One mechanism for doing this is entering into short-term agreements with the institutions. In the case of funds acquired, receipt of funds is evidenced by the Bank issuing Certificates of Deposit to the depositor.

18. International Monetary Fund - Allocation of Special Drawing Rights

This represents the Bank's obligation for Special Drawing Rights (SDRs) allocated to it. This allocation does not change unless there are cancellations or further allocations.

	SDRs '000	2016 J$'000	2015 J$'000
At beginning of year	261,644	43,499,182	43,336,352
Effect of exchange rate fluctuation	-	1,517,030	162,830
At end of year	261,644	45,016,212	43,499,182

BANK OF JAMAICA

Notes to the Financial Statements (Continued)
Year ended December 31, 2016

19. Other liabilities

	2016 J$'000	2015 J$'000
Interest payable	1,947,383	1,758,272
SDR equalisation provision [note 16(d)(iii)]	-	1,353,578
Staff and staff-related expenses	221,669	294,336
Overdrafts	2,485	2,485
Other	99,025	98,995
	2,270,562	3,507,666

20. Share capital

Section 8 of the Act provides for the capital of the Bank to be J$4,000,000, which has been paid by the Government of Jamaica.

21. General reserve fund

Section 9 of the Act provides that the Bank shall establish and maintain a General Reserve Fund:

(a) to which, at the end of each financial year, the net income for that year shall be transferred or the net losses charged;

(b) from which shall be paid to the Consolidated Fund the amount by which, at the end of the financial year, the balance thereon exceeds five times the Bank's authorised share capital;

(c) into which should be paid from the Consolidated Fund at the end of the financial year, the amount by which the Bank's net loss exceeds the balance in the General Reserve Fund.

22. Special stabilisation account

The special stabilisation account is maintained at 25% of the gross amount of coins in circulation as a reserve against coins that are unlikely to be redeemed (note 15).

23. Other reserves

This represents the following:

	2016 J$'000	2015 J$'000
Securities revaluation reserve [see (a)]	115,917	322,151
Property revaluation reserve [see (b)]	3,692,536	3,623,740
Pension equalisation reserve [see (c)]	4,823,200	5,035,500
Employee benefit obligation reserve	(710,234)	(457,300)
	7,921,419	8,524,091

BANK OF JAMAICA

Notes to the Financial Statements (Continued)
Year ended December 31, 2016

23. Other reserves (continued)

(a) This represents the unrealised gains net of losses on the revaluation of available-for-sale investments securities.

(b) The property revaluation reserve represents the surplus arising on the revaluation of certain freehold properties (see note 11).

(c) The pension equalisation reserve represents the pension surplus arising on the actuarial valuation, under IAS 19, of the Bank's pension scheme. Annual changes in the value of the plan are shown in the statement of comprehensive income, then transferred to this reserve.

24. Interest income

(a) Interest income comprises:

	2016 J$'000	2015 J$'000
Loans and receivables:		
Cash and cash equivalents	677,562	128,127
Investment securities	558,621	507,104
Resale agreements	1,046,309	1,636,298
Other	128,525	96,025
Available-for-sale:		
Investment securities	2,910,699	3,831,908
Funds managed by agents	180,108	121,083
Held to maturity:		
Investment securities	8,928,817	8,829,023
	14,430,641	15,149,568

(b) Analysed as follows:

Government of Jamaica (note 29)	11,762,569	12,301,332
Other sources	1,063,142	704,834
Open market	1,046,309	1,636,298
Investment securities international	558,621	507,104
	14,430,641	15,149,568

25. Foreign exchange gain/(loss), net

	2016 J$'000	2015 J$'000
Net gains on translation and settlement of foreign currency assets and liabilities, other than on IMF deposit liabilities	7,096,798	131,397
Losses on translation and settlement of IMF deposit liabilities	(1,635,618)	(241,308)
Realised exchange gains on purchases and sales of foreign currencies	123,891	317,880
	5,585,071	207,969

BANK OF JAMAICA

Notes to the Financial Statements (Continued)
Year ended December 31, 2016

26. Interest on deposit and open market liabilities

	2016 J$'000	2015 J$'000
Certificates of deposit - Open market liabilities	8,242,107	8,713,708
Deposits:		
- Government and Government agencies (note 29)	886,094	1,438,799
- Commercial banks and specified financial institutions	660,432	682,565
- Other	76,660	40,988
	9,865,293	10,876,060

27. Staff numbers and costs

	2016	2015
Number of employees at the end of the year		
Full-time	467	474
Contract	114	78

The related costs for these employees were as follows:

	2016 J$'000	2015 J$'000
Salaries and wages	2,205,591	1,951,013
Statutory payroll contributions	146,742	132,920
Uniforms	-	28,679
Staff development	49,657	55,453
Subsidy on canteen operations	82,937	77,935
Staff welfare	391,335	348,648
Other staff costs	12,580	16,481
	2,888,842	2,611,129

28. Other operating expenses

Operating expenses include the following charges:

	2016 J$'000	2015 J$'000
Communication	38,111	28,799
Travelling and motor vehicle expenses	80,173	63,090
Commission paid to commercial banks	409,458	440,066
Auditor's remuneration	13,370	12,854
General office expenses	87,052	116,746
Management fees on RAMP portfolio	62,706	46,652
Other administrative expenses	274,736	225,925
	965,606	934,132

BANK OF JAMAICA

Notes to the Financial Statements (Continued)
Year ended December 31, 2016

29. Related parties

(a) Definition of related party

A related party is a person or entity that is related to the Bank:

(i) A person or a close member of that person's family is related to the Bank if that person:

(1) has control or joint control over the Bank;

(2) has significant influence over the Bank; or

(3) is a member of the key management personnel of the Bank

(ii) An entity is related to the Bank if any of the following conditions applies:

(1) The entity and the Bank are members of the same group (which means that each parent, subsidiary and fellow subsidiary is related to the others).

(2) The entity is a post-employment benefit plan for the benefit of employees of either the Bank or an entity related to the Bank.

(3) The entity is controlled, or jointly controlled, by a person identified in (i).

(4) A person identified in (i)(1) has significant influence over the Bank or is a member of the key management personnel of the Bank.

(5) The entity, or any member of a group of which it is a part, provides key management personnel services to the Bank.

A related party transaction is a transfer of resources, services or obligations between the Bank and a related party, regardless of whether or not a price is charged.

(b) Identity of related parties

The Bank has related party relationships with its Board of Directors, the members of the Executive management, the Bank of Jamaica Pension Scheme and the Government of Jamaica and its agencies (see notes 10 and 16).

(c) Related party amounts

(i) The statement of financial position includes balances, arising in the ordinary course of business, with related parties, other than those disclosed at note 10 and 16 as follows:

	2016 J$'000	2015 J$'000
Loans:		
Executive management (included in staff loans, note 14)	53,440	64,538
Open market liabilities: Pension fund	1,019,244	2,141,612

The executive management team consists of twelve (12) 2015: ten (10) persons.

BANK OF JAMAICA

Notes to the Financial Statements (Continued)
Year ended December 31, 2016

29. Related parties (continued)

(c) Related party amounts (continued)

(i) (Continued)

The interest rates applicable on loans to executive management range from 1% - 3%. In addition, a deemed taxable income is computed on the interest saved by virtue of the concessionary interest rate. No non-executive director receives emoluments or is in receipt of a loan from the Bank.

(ii) The statement of profit or loss and other comprehensive income includes income earned from/expenses incurred in transactions with related parties, in the ordinary course of business, as follows:

	2016 J$'000	2015 J$'000
Interest expense:		
Government and Government agencies (note 26)	886,094	1,438,799
Pension scheme	100,066	126,512
Executive management and pension scheme (current accounts)	3,000	3,048
Interest income:		
Government of Jamaica [note 24(b)]	11,762,569	12,301,322
Executive management	1,584	2,017
Pension contribution and other benefits	122,216	117,117 *

Executive management compensation is as follows:

	2016 J$'000	2015 J$'000
Emoluments, included in staff costs (note 27)	193,455	128,236

30. Commitments

(a) Capital commitments as follows:

	2016 J$'000	2015 J$'000
Authorised and contracted	152,728	364,809
Authorised but not contracted	105,847	148,480
	258,575	513,289

* After reclassification to conform with the current year's presentation.

BANK OF JAMAICA

Notes to the Financial Statements (Continued)
Year ended December 31, 2016

30. Commitments (continued)

(b) Operating lease commitments, payable as follows:

	2016 J$'000	2015 J$'000
Within one year	10,412	10,412
Within 1-5 years	37,680	37,680
Over 5 years	45,215	52,751
	93,307	100,843

31. Contingent liabilities

At the reporting date, the Bank was a defendant in various relatively minor suits claiming damages. The Bank is of the view that the claims are generally without merit or will not result in any significant losses to the Bank.

32. Fair value of financial instruments

The Bank's accounting policies on measurement and disclosure require the measurement of fair values for financial assets and financial liabilities.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

When measuring fair value of an asset or liability, where a quoted market price is available, fair value is computed by the Bank using the quoted bid price at the reporting date, without any deduction for transaction costs or other adjustments. Where a quoted market price is not available, fair value is computed using alternative techniques making use of available input data; the Bank uses observable data as far as possible. Fair values are categorised into different levels in a three-level fair value hierarchy, based on the degree to which the inputs used in the valuation techniques are observable.

The different levels in the hierarchy have been defined as follows:

Level 1: Financial assets and financial liabilities that are measured by reference to published quotes in an active market. A financial instrument is regarded as quoted in an active market if quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service or regulatory agency and those prices represent actual and regularly occurring market transactions on an arm's length basis.

Level 2: Financial assets and financial liabilities that are measured using a valuation technique based on assumptions that are supported by prices from observable current market transactions, and for which pricing is obtained via pricing services, but where prices have not been determined in an active market. This includes financial assets with fair values based on broker quotes, investments in funds with fair values obtained via fund managers, and assets that are valued using a model whereby the majority of assumptions are market observable.

BANK OF JAMAICA

Notes to the Financial Statements (Continued)
Year ended December 31, 2016

32. Fair value of financial instruments (continued)

Level 3: Financial assets and financial liabilities that are measured using non-market observable inputs. This means that fair values are determined in whole or in part using a valuation technique (model) based on assumptions that are neither supported by prices from observable current market transactions in the same instrument nor are they based on available market data.

The table below analyses financial instruments carried at fair value and those not carried at fair value but for which fair value has been disclosed.

The fair value of the amount due from Government and Government Agencies has not been estimated, as there is no practical means of estimating its fair value.

The fair value of certain short-term financial instruments was determined to approximate their carrying value and are not disclosed in the table below:

(a) Securities carried at fair value

	2016		
	Level 1 J$'000	Level 2 J$'000	Total J$'000
Available-for-sale financial assets			
USD Bonds issued primarily by specialised financial corporations	4,221,497	-	4,221,497
Government of Jamaica securities	-	46,667,572	46,667,572
Securities included in funds managed by agents			
- Sovereign bonds	-	37,176,406	37,176,406
- Corporate bonds	-	5,753,732	5,753,732
	4,221,497	89,597,710	93,819,207

	2015		
	Level 1 J$'000	Level 2 J$'000	Total J$'000
Available-for-sale financial assets			
USD Bonds issued primarily by specialised financial corporations	7,885,439	-	7,885,439
Government of Jamaica securities	-	47,067,814	47,067,814
Securities included in funds managed by agents			
- Sovereign bonds	-	34,558,766	34,558,766
- Corporate bonds	-	6,078,735	6,078,735
	7,885,439	87,705,315	95,590,754

BANK OF JAMAICA

Notes to the Financial Statements (Continued)
Year ended December 31, 2016

32. Fair value of financial instruments (continued)

(b) Securities not carried at fair value

	Carrying value 2016	Fair value 2016	
		Level 2	Total
	J$'000	J$'000	J$'000
Held-to-maturity financial assets:			
Government of Jamaica securities (FRANs)	78,055,527	88,925,415	88,925,415

	Carrying value 2015	Fair value 2015	
		Level 2	Total
	J$'000	J$'000	J$'000
Held-to-maturity financial assets:			
Government of Jamaica securities (FRANs)	76,799,616	78,284,725	78,284,725

(c) Valuation techniques for investment securities classified as Level 2.

The following table shows the valuation techniques used in measuring the fair value of investment securities the fair values of which are classified as Level 2.

Type of security	Valuation techniques
GOJ J$ securities	• Obtain bid yield from yield curve provided by a recognised pricing source (which uses Jamaica-market-supplied indicative bids) • Adjust yield based on internal policy,* by an amount which depends on the term to maturity or to the next re-pricing date • Using the adjusted yield, determine price using standard approach • Apply modified price to estimate fair value
Interest in funds managed by agent	• Estimated using bid prices published by major overseas broker.

* The adjusted yields fall in the ranges set out below:

	2016	2015
Government of Jamaica local securities:		
Variable rate benchmark investments	5.93 – 6.00	5.50 – 5.72
Fixed rate benchmark investments	9.65 – 11.13	5.51 – 11.08

BANK OF JAMAICA

Notes to the Financial Statements (Continued)
Year ended December 31, 2016

33. Financial risk management

(a) Introduction and overview

The Bank has exposure to the following risks from its use of financial instruments:

- credit risk
- liquidity risk
- market risk

The Board of Directors has overall responsibility for the establishment and oversight of the Bank's risk management framework. It has established four committees for this purpose:

(i) Investment Committee - which is responsible for providing oversight on the conversion of investment strategy into performance, portfolio construction and risk modelling for the Bank's Foreign Reserves;

(ii) Credit Committee - which is responsible for evaluating and approving applications for staff loans.

(iii) Risk Management Committee (RMC) - which is responsible for assisting the Management Committee in its oversight and management of key risks, including strategic, reputational, financial and operational risks, in relation to the Bank's operations. The RMC oversees the establishment of guidelines, policies and processes for monitoring and mitigating risks, while promoting the development and administration of the corporate risk management framework.

The above-listed three committees report to the Committee of Administration, which, in turn, reports to the Management Committee on a weekly basis. The Management Committee reports on a monthly basis to the Board of Directors;

(iv) Audit Committee – which is responsible for monitoring compliance with the Bank's risk management policies and procedures and for reviewing the adequacy of the risk management framework in relation to the risks faced by the Bank. The Audit Committee is assisted in these functions by the Internal Audit Department. This department undertakes both regular and *ad hoc* reviews of risk management controls and procedures, the results of which are reported to the Board of Directors and the Audit Committee.

The nature of the risks and manner in which they are measured and managed are as set out below.

(b) Credit risk

Credit risk is the risk of loss arising from a counter-party to a financial contract failing to discharge its obligations. This risk arises primarily from the Bank's foreign and local currency investment securities, resale agreements, cash and cash equivalents, interest in funds managed by agents balances, due from Government and Government Agencies and other assets.

BANK OF JAMAICA

Notes to the Financial Statements (Continued)
Year ended December 31, 2016

33. Financial risk management (continued)

(b) Credit risk (continued)

(i) Management of credit risk on classes of financial assets exposed to that risk:

- Foreign currency investments and interest in funds managed by agents

  Credit risk on the foreign currency investment portfolio is managed by restricting the holdings of investments substantially to USD Bonds issued primarily by specialised financial corporations, other highly rated sovereign securities, Jamaica Government USD securities and placements in highly rated supranational institutions. The Bank uses the credit ratings ascribed by Moody's Investor Services and Standard & Poors Financial Services LLC and Fitch as its main criteria for assessing the creditworthiness of financial institutions and sovereigns. The Bank's foreign investments are restricted to money market placements with financial institutions with minimum short-term credit ratings of A-2/P-2 /F2 and with minimum long-term ratings of A+/A1/A+ of any two of the three rating institutions. Additionally, capital market issues must have a minimum credit rating of A+/A1/A+ In order to reduce consolidated credit risk exposure, the Bank has investment limits in place. The Bank's foreign investment portfolio consists of short-, medium- and long-term investments, each of which has stipulated percentage limits (upper and lower) of the portfolio at market value.

- Local investment securities

  Credit risk for local securities is managed by investing only in Government of Jamaica securities. Management does not expect this counterparty to fail to meet its obligations.

- Resale agreements

  Credit risk is managed by requiring institutions to deposit with the Bank or its agents, designated securities sufficient to collateralise the amounts advanced under the resale agreements. The minimum collateral value of securities accepted is set at defined percentage of market value.

- Cash and cash equivalents

  Cash and cash equivalents are held in financial institutions which management regards as strong. The strength of these financial institutions is continually reviewed by the Investment Committee. In addition, there are procedures in place to manage potential concentration.

- Due from Government and Government Agencies.

  These amounts are in respect of accrued interest, withholding taxes and losses recoverable from the Government. Management does not expect this counterparty to fail to meet its obligations.

BANK OF JAMAICA

Notes to the Financial Statements (Continued)
Year ended December 31, 2016

33. Financial risk management (continued)

(b) Credit risk (continued)

(i) Management of credit risk on classes of financial assets exposed to that risk (continued):

- Other assets

Other credit exposures consist mainly of staff loans for housing and motor vehicles. There is a documented credit policy in place which guides the Bank's credit process for staff loans. The policy includes established procedures for the authorisation of credit. Staff loans are limited to a percentage of the value of the assets being purchased. Mortgages and liens are obtained for staff housing and motor vehicle loans, respectively, which must also be insured.

(ii) Impaired loans and securities

Impaired loans and securities are loans and securities for which the Bank determines that it is probable that it will be unable to collect all principal and interest due according to the contractual terms of the loan or securities agreements.

(iii) Past due but not impaired loans and securities

These are loans and securities where contractual interest or principal payments are past due but the Bank believes that impairment is not appropriate on the basis of the level of security available or the stage of collection of amounts owed to the Bank.

(iv) Loans with renegotiated terms

Loans with renegotiated terms are loans that have been restructured due to deterioration in the borrower's financial position and where the Bank has made concessions that it would not otherwise consider. Once the loan is restructured, it remains in this category independent of satisfactory performance after restructuring. The Bank had no such loans as at December 31, 2016 and 2015.

(v) Allowances for impairment

The Bank establishes an allowance for impairment losses that represents its estimate of incurred losses in its loan portfolio. The allowance is the aggregate of the estimated losses on individual exposures.

(vi) Write-off policy

The Bank writes off a loan or security balance (and any related allowances for impairment losses) when the Bank determines that the loan or security is uncollectible. This determination is usually made after considering information such as changes in the borrower's financial position, or that proceeds from collateral will not be sufficient to pay back the entire exposure.

BANK OF JAMAICA

Notes to the Financial Statements (Continued)
Year ended December 31, 2016

33. Financial risk management (continued)

(b) Credit risk (continued)

(vii) Exposure to credit risk

Current credit exposure is the amount of loss that the Bank would suffer if all counterparties to which the Bank was exposed were to default at once; this is represented substantially by the carrying amount of financial assets shown on the statement of financial position.

Exposures to credit risk attached to financial assets are monitored through credit rating and lending limits, which are regularly reviewed. In addition, securities issued or guaranteed by the Government of Jamaica are required to collateralise advances to financial institutions.

There has been no change to the nature of the Bank's exposure to credit risk or the manner in which it measures and manages the risk.

The Bank's significant concentrations of credit exposure by geographical region (based on the region of ownership of the entity that issued the security or holds the cash or cash equivalents) are as follows:

	2016 J$'000	2015 J$'000
Caribbean	150,023,456	146,863,919
North America	348,675,394	285,526,484
Europe	70,310,557	68,402,600
Other	273,526	437,783
Total financial assets	569,282,933	501,230,786

(c) Liquidity risk

Liquidity risk is the risk that the Bank will not be able to meet its financial liabilities as they fall due. Prudent liquidity management requires maintaining sufficient cash and marketable securities, and ensuring the availability of funding through an adequate amount of committed standby credit facilities to meet commitments.

The Bank's exposure to liquidity risk to meet foreign liabilities, as an institution, is limited due to the minimal amount owed to overseas creditors/lenders. Management of liquidity risk relates primarily to the availability of liquid foreign resources to sell to the Government of Jamaica and its agencies to repay their suppliers and lenders. The Bank manages this risk through a combination of:

- Budgetary procedures to identify the timing of foreign payments by Government of Jamaica.
- Scheduling the maturity of foreign deposits to coincide with the demands of Government and its Agencies.
- Maintaining a portion of its foreign assets in cash or near cash as precautionary funds to meet unforeseen demands.

The Bank, like all central banks, has no real liquidity risk in relation to its domestic financial obligations. The Bank is not subject to any imposed liquidity limit.

BANK OF JAMAICA

Notes to the Financial Statements (Continued)
Year ended December 31, 2016

33. Financial risk management (continued)

(c) Liquidity risk (continued)

The following table presents the undiscounted contractual maturities of financial liabilities:

	2016					
	Within 1 Month	1 to 3 months	3 to 12 months	1 to 5 years	Contractual cash flow	Carrying amount
	J$'000	J$'000	J$'000	J$'000	J$'000	J$'000
Deposits and other demand liabilities	251,832,347	7,125,260	5,712,833	-	264,670,440	264,335,816
Open market liabilities	41,273,389	23,090,010	45,317,785	99,560,018	209,241,202	192,854,641
Foreign liabilities	319	-	-	-	319	319
Other	2,270,562	-	-	-	2,270,562	2,270,562
Commitments	-	86,124	95,809	76,643	258,576	-
	295,376,617	30,301,394	51,126,427	99,636,661	476,441,099	459,461,338

	2015					
	Within 1 Month	1 to 3 months	3 to 12 months	1 to 5 years	Contractual cash flow	Carrying amount
	J$'000	J$'000	J$'000	J$'000	J$'000	J$'000
Deposits and other demand liabilities	176,909,909	29,112,989	34,801,518	67,450,127	308,274,543	244,055,332
Open market liabilities	19,850,565	18,186,468	14,520,737	131,518,671	184,076,441	161,309,109
Foreign liabilities	27	-	-	-	27	27
Other	3,507,666	-	-	-	3,507,666	3,507,666
Commitments	867	67,008	455,825	90,432	614,132	-
	200,269,034	47,366,465	49,778,080	199,059,230	496,472,809	408,872,134

(d) Market risk

Market risk is the risk that changes in market prices, such as foreign exchange rates and interest rates, will affect the Bank's income or the value of its holdings of financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimising the return on financial assets. Market risk exposures are measured using sensitivity analysis.

There was no change during the year in the Bank's exposure to market risk or the manner in which it measures and manages the risk.

(i) Currency risk

Currency risk is the risk that the market value of, or the cash flows from, financial instruments will vary because of exchange rate fluctuations. The Bank is exposed to foreign currency risk due to fluctuations in exchange rates on transactions and balances that are denominated in currencies other than the Jamaica dollar. At the reporting date, the Bank's net exposure to foreign exchange rate fluctuations, in Jamaica dollar equivalent, was as follows, based on currencies in which reported amounts are denominated:

BANK OF JAMAICA

Notes to the Financial Statements (Continued)
Year ended December 31, 2016

33. Financial risk management (continued)

(d) Market risk (continued)

(i) Currency risk (continued)

	2016				
	USD $'000	EUR $'000	GBP $'000	Other $'000	Total $'000
Foreign currency assets:					
Notes and coins - for local sale	4,830	6,529	3,924	2,459	17,742
- for repatriation	18,893	4,657	4,970	43,112	71,632
Cash and cash equivalents	263,681,093	334,397	629,746	897,095	265,542,331
Interest in funds managed by agents	42,930,138	-	-	-	42,930,138
Interest receivable on BHAs	40,986	-	-	15,055	56,041
Items in the process of collection	-	-	-	-	-
Investment securities	73,542,419	-	-	-	73,542,419
IMF- Holding of special drawing rights	-	-	-	29,929,849	29,929,849
Bilateral accounts	-	-	-	20,056	20,056
IMF - Quota subscription	-	-	-	10,060,734	10,060,734
	380,218,359	345,583	638,640	40,968,360	422,170,942
Foreign currency liabilities:					
Open market liabilities	119,473,042	-	-	-	119,473,042
Deposits - current accounts	106,453,482	48,473	2,504,452	761,689	109,768,096
Deposits - IMF	-	-	-	71,413,029	71,413,029
IMF - Allocation of special drawing rights	-	-	-	45,016,212	45,016,212
Foreign liabilities	319	-	-	-	319
Interest payable	1,427,143	-	112,186	160,627	1,699,956
	227,353,986	48,473	2,616,638	117,351,557	347,370,654
Net foreign currency assets/ (liabilities)	152,864,373	297,110	(1,977,998)	(76,383,179)	74,800,288

BANK OF JAMAICA

Notes to the Financial Statements (Continued)
Year ended December 31, 2016

33. Financial risk management (continued)

(d) Market risk (continued)

(i) Currency risk (continued)

	2015				
	USD $'000	EUR $'000	GBP $'000	Other $'000	Total $'000
Foreign currency assets:					
Notes and coins - for local sale	9,820	10,164	7,083	5,395	32,462
- for repatriation	43,632	3,177	11,506	45,908	104,223
Cash and cash equivalents	201,819,520	539,493	372,092	1,303,998	204,035,103
Interest in funds managed by agents	40,637,501	-	-	-	40,637,501
Interest receivable on BHAs	40,480	-	7,166	7,981	55,627
Items in the process of collection	-	-	-	-	-
Investment securities	75,355,616	-	-	-	75,355,616
IMF- Holding of special drawing rights	-	-	-	30,038,907	30,038,907
IMF - Quota subscription	-	-	-	5,174,650	5,174,650
	317,906,569	552,834	397,847	36,576,839	355,434,089
Foreign currency liabilities:					
Open market liabilities	101,791,295	-	-	-	101,791,295
Deposits - current accounts	114,644,108	36,272	2,084,552	528,895	117,293,827
Deposits - IMF	-	-	-	53,275,962	53,275,962
IMF - Allocation of special drawing rights	-	-	-	43,499,182	43,499,182
Foreign liabilities	27	-	-	-	27
Interest payable	1,263,333	-	128,067	114,118	1,505,518
Bilateral accounts	-	-	-	70,595	70,595
	217,698,763	36,272	2,212,619	97,488,752	317,436,406
Net foreign currency assets/ (liabilities)	100,207,806	516,562	(1,814,772)	(60,911,913)	37,997,683

Exchange rates at December 31:

	2016	2015
USD1 to JMD	127.98	119.98
GBP1 to JMD	158.14	176.83
CDN1 to JMD	95.43	86.40
EUR1 to JMD	134.99	130.33

At March 2, 2017, the date of approval of these financial statements, the exchange rates were US1 to J$127.8253, UK1 to J$159.0658, CDN1 to J$96.5120 and EUR1 to J$135.8272.

The exchange rate for SDR to J$ is shown in note 16(d)(iv).

Sensitivity to exchange rate movements

A 6 percent (2015: 8 percent) devaluation of the Jamaica Dollar against currencies which expose the Bank to risk at December 31 would have increased profit by $9,107,860,000 (2015: decreased loss by $7,972,932,000) while a 1 percent (2015: 1 percent) revaluation would have decreased profit by $1,489,211,000 (2015: increased loss by $952,967,000). The analysis assumes that all other variables, in particular, interest rates, remain constant, and has been performed on the same basis as for 2015.

BANK OF JAMAICA

Notes to the Financial Statements (Continued)
Year ended December 31, 2016

33. Financial risk management (continued)

(d) Market risk (continued)

(ii) Interest rate risk:

Interest rate risk is the risk of loss from fluctuations in the future cash flows or fair values of financial instrument because of a change in market interest rates. It arises when there is a mismatch between interest-earning assets and interest-bearing liabilities which are subject to interest rate adjustments within a specified period. It can be reflected as a loss of future net interest income and/or a loss of current market values. The Bank manages this risk by monitoring interest rates daily and ensuring that, even though there is no formally predetermined gap limits, to the extent practicable, the maturity profile of its financial assets is, at least, matched by that of its financial liabilities.

The following table summarises the carrying amounts of financial assets and liabilities to arrive at the Bank's interest rate gap based on the earlier of contractual re-pricing and maturity dates.

	2016						
	Within 3 months J$'000	Three to 12 months J$'000	Over 12 months J$'000	Payable after notice J$'000	Non-rate sensitive J$'000	Total J$'000	Weighted average interest %
Assets							
Notes and coins	-	-	-	-	164,224	164,224	-
Cash and cash equivalents	-	-	-	-	265,542,331	265,542,331	-
Interest in funds managed by agents	-	-	-	42,930,138	-	42,930,138	1.19
Foreign currency denominated investments	69,320,922	-	4,221,497	-	-	73,542,419	2.18
International Monetary Fund Holding of Special Drawing Rights	-	-	-	-	29,929,849	29,929,849	-
Resale agreements	16,550,000	-	-	-	-	16,550,000	6.81
Local currency denominated investments	-	-	124,723,099	-	-	124,723,099	8.81
International Monetary Fund – Quota Subscription	-	-	-	-	10,060,734	10,060,734	-
Due from Government and Government Agencies	-	-	-	-	36,782,107	36,782,107	-
Bilateral accounts	-	-	-	-	20,056	20,056	-
Other assets	-	-	-	-	3,764,417	3,764,417	-
Total financial assets	85,870,922	-	128,944,596	42,930,138	346,263,718	604,009,374	
Liabilities							
Notes and coins in circulation	-	-	-	-	98,203,483	98,203,483	-
Deposits and other demand liabilities:							
Jamaica dollar equivalent of foreign currency deposits	154,691,519	-	-	42,416,722	-	197,108,241	0.01
Jamaica dollar deposits	21,746,440	-	-	45,481,135	-	67,227,575	1.22
Open market liabilities	61,913,292	41,860,909	89,080,440	-	-	192,854,641	4.54
International Monetary Fund – Allocation of Special Drawing Rights	-	-	-	-	45,016,212	45,016,212	-
Foreign liabilities	-	-	-	-	319	319	-
Bilateral accounts	-	-	-	-	-	-	-
Other liabilities	-	-	-	-	2,271,036	2,271,036	-
Total financial liabilities	238,351,251	41,860,909	89,080,440	87,897,857	145,491,050	602,681,507	-
Total interest rate sensitivity gap	(152,480,329)	(41,860,909)	39,864,156	(44,967,719)	200,772,668	1,327,867	-
Cumulative gap	(152,480,329)	(194,341,238)	(154,477,082)	(199,444,801)	1,327,867	-	-

BANK OF JAMAICA

Notes to the Financial Statements (Continued)
Year ended December 31, 2016

33. Financial risk management (continued)

(d) Market risk (continued)

(ii) Interest rate risk (continued):

	2015						
	Within 3 months	Three to 12 months	Over 12 months	Payable after notice	Non-rate sensitive	Total	Weighted average interest
	J$'000	J$'000	J$'000	J$'000	J$'000	J$'000	%
Assets							
Notes and coins	-	-	-	-	218,292	218,292	-
Cash and cash equivalents	-	-	-	-	204,035,103	204,035,103	-
Interest in funds managed by agents	-	-	-	40,637,501	-	40,637,501	1.06
Foreign currency denominated investments	67,470,177	-	7,885,439	-	-	75,355,616	1.76
International Monetary Fund Holding of Special Drawing Rights	-	-	-	-	30,038,907	30,038,907	-
Resale agreements	16,949,931	-	-	-	-	16,949,931	6.47
Local currency denominated investments	7,954,394	-	115,913,036	-	-	123,867,430	9.00
International Monetary Fund – Quota Subscription	-	-	-	-	5,174,650	5,174,650	-
Due from Government and Government Agencies	-	-	-	-	38,969,674	38,969,674	-
Other assets	-	-	-	-	2,983,401	2,983,401	-
Total financial assets	92,374,502	-	123,798,475	40,637,501	281,420,027	538,230,505	-
Liabilities							
Notes and coins in circulation	-	-	-	-	84,251,184	84,251,184	-
Deposits and other demand liabilities:							
Jamaica dollar equivalent of foreign currency deposits	159,271,435	-	-	26,875,925	-	186,147,360	0.36
Jamaica dollar deposits	16,938,934	-	-	40,969,038	-	57,907,972	0.90
Open market liabilities	36,880,873	10,438,545	113,989,691	-	-	161,309,109	4.92
International Monetary Fund – Allocation of Special Drawing Rights	-	-	-	-	43,499,182	43,499,182	-
Foreign liabilities	-	-	-	-	27	27	-
Bilateral accounts	-	-	-	-	70,595	70,595	-
Other liabilities	-	-	-	-	3,507,666	3,507,666	-
Total financial liabilities	213,091,242	10,438,545	113,989,691	67,844,963	131,328,654	536,693,095	-
Total interest rate sensitivity gap	(120,716,740)	(10,438,545)	9,808,784	(27,207,462)	150,091,373	1,537,410	-
Cumulative gap	(120,716,740)	(131,155,285)	(121,346,501)	(148,553,963)	1,537,410	-	-

BANK OF JAMAICA

Notes to the Financial Statements (Continued)
Year ended December 31, 2016

33. Financial risk management (continued)

(d) Market risk (continued)

(ii) Interest rate risk (continued):

Sensitivity to interest rate movement

An increase of 100 (2015: 100) basis points and a decrease of 100 (2015:150) basis points in interest rates for Jamaica dollar financial instruments and an increase of 100 (2015: 100), and a decrease of 50 (2015: 50) basis points for United States dollar financial instruments would have increased or decreased profit and reserve by the amounts shown below. The analysis assumes that all other variables, in particular, foreign currency rates, remain constant. The analysis has been performed on the same basis as for 2015.

	Increase		Decrease	
	Effect on profit/loss J$'000	Effect on reserves J$'000	Effect on profit/loss J$'000	Effect on reserves J$'000
	2016			
Fixed rate financial instruments	-	2,518,802	-	(702,603)
Variable rate financial instruments	347,144	(31,121)	(347,144)	31,187
	347,144	2,487,681	(347,144)	(671,416)
	2015			
Fixed rate financial instruments	-	(3,553,452)	-	3,526,316
Variable rate financial instruments	347,131	(31,508)	(520,697)	46,636
	347,131	(3,584,960)	(520,697)	3,572,952

(e) Capital management

The Bank's capital consists of share capital, general reserve fund, special stabilisation account, securities revaluation reserve, property revaluation reserve and pension equalisation reserve. The share capital of the Bank may be increased by resolution of the Board of Directors; however, such a resolution would have to be approved by the House of Representatives of Jamaica. The Bank's annual profit is transferred to the general reserve fund. Whenever the credit in the reserve fund exceeds five times the authorised share capital such excess profit is paid to the Consolidated Fund. The Bank has been complying with this requirement. There were no changes in the Bank's approach to capital management during the year.

APPENDIX

Inflation Outturn

Table 1: Inflation Outturn for 2016 Relative to 2015

	Weight in CPI Basket	2016 Per cent Inflation	2016 %Wgt Inflation	2016 %Share Inflation	2015 Per cent Inflation	YOY %pt Chg Inflation
1 FOOD & NON-ALCOHOLIC BEVERAGES	37.45	0.1	0.0	2.6	8.7	-8.6
1.1 **Food**	35.1	0.0	0.0	-0.3	9.0	-9.0
Bread and Cereals	6.1	1.9	0.1	6.7	2.3	-0.4
Meat	7.66	2.7	0.2	11.9	2.5	0.2
Fish and Seafood	5.33	2.1	0.1	6.6	4.5	-2.3
Milk, Cheese and Eggs	3.11	1.3	0.0	2.4	3.2	-1.9
Oils and Fats	1.64	1.8	0.0	1.8	3.9	-2.1
Fruit	1.14	5.7	0.1	3.8	8.0	-2.4
Vegetables and Starchy Foods	6.85	-6.7	-0.5	26.7	27.0	-33.7
Vegetables	4.64	-7.9	-0.4	21.2	33.5	-41.4
Starchy Foods	2.21	-2.9	-0.1	-3.8	10.0	-13.0
Sugar, Jam, Honey, Chocolate and Confectionery	1.72	4.6	0.1	4.6	3.2	1.4
Food Products n.e.c.	1.55	3.2	0.1	2.9	6.3	-3.1
1.2 **Non-Alcoholic Beverages**	2.35	2.6	0.1	3.6	3.6	-1.0
Coffee, Tea and Cocoa	0.66	2.7	0.0	1.1	3.3	-0.5
Mineral Waters, Soft Drinks, Fruit and Vegetable Juices	1.69	2.6	0.0	2.5	3.8	-1.2
2 ALCOHOLIC BEVERAGES & TOBACCO	1.38	2.8	0.0	2.3	5.4	-2.5
3 CLOTHING & FOOTWEAR	3.33	1.6	0.1	3.1	4.4	-2.8
3.1 Clothing	2.12	1.6	0.0	1.9	5.1	-3.5
3.2 Footwear	1.22	1.7	0.0	1.2	3.4	-1.7
4 HOUSING, WATER, ELECTRICITY, GAS & OTHER FUELS	12.76	6.9	0.9	51.3	-8.3	15.3
4.1 Rentals for Housing	3.52	0.5	0.0	0.9	1.1	-0.6
4.3 Maintenance and Repair of Dwelling	0.8	3.8	0.0	1.8	9.9	-6.1
4.4 Water Supply and Miscellaneous Services Related to the Dwelling	1.32	6.6	0.1	5.1	-0.7	7.3
4.5 Electricity, Gas and Other Fuels	7.12	11.2	0.8	46.1	-16.5	27.7
5 FURNISHINGS, HOUSEHOLD EQUIPMENT & ROUTINE HOUSEHOLD MAINTENANCE	4.93	4.2	0.2	12.0	3.1	1.1
5.1 Furniture and Furnishings (inc. Floor Coverings)	0.69	2.2	0.0	0.9	2.9	-0.7
5.2 Household Textiles	0.32	1.4	0.0	0.3	2.9	-1.5
5.3 Household Appliances	0.56	3.8	0.0	1.2	4.5	-0.7
5.4 Glassware, Tableware and Household Utensils	0.05	2.0	0.0	0.1	2.9	-0.9
5.5 Tools and Equipment for House and Garden	0.15	1.6	0.0	0.1	4.1	-2.5
5.6 Goods and Services for Routine Household Maintenance	3.16	5.1	0.2	9.4	2.8	2.3
6 HEALTH	3.29	2.0	0.1	3.8	2.0	-0.1
6.1 Medical Products, Appliances and Equipment	1.22	2.3	0.0	1.7	2.6	-0.2
6.2 Health Services	2.07	1.7	0.0	2.1	1.7	0.0
7 TRANSPORT	12.82	1.3	0.2	9.7	-4.1	5.4
8 COMMUNICATION	3.99	0.0	0.0	0.0	0.0	0.0
9 RECREATION & CULTURE	3.36	2.5	0.1	4.8	2.6	-0.2
10 EDUCATION	2.14	4.3	0.1	5.3	5.5	-1.2
11 RESTAURANTS & ACCOMMODATION SERVICES	6.19	1.3	0.1	4.6	4.7	-3.4
12 MISCELLANEOUS GOODS & SERVICES	8.37	2.6	0.2	12.6	6.2	-3.6
ALL DIVISIONS	100	1.7	1.7	100.0	3.7	-2.0

Table 2: Regional Inflation and Per cent YOY Adjustment

		Weight in CPI Basket	2016 Per cent Inflation	2016 %Wgt Inflation	2016 %Share Inflation	2015 Per cent Inflation	YOY %pt Chg Inflation
1	**FOOD & NON-ALCOHOLIC BEVERAGES**	37.5	0.1	0.0	2.6	8.7	-8.6
1.1	**Food**	35.1	0.0	0.0	-0.3	9.0	-9.0
	Bread and Cereals	6.1	1.9	0.1	6.7	2.3	-0.4
	Meat	7.7	2.7	0.2	11.9	2.5	0.2
	Fish and Seafood	5.3	2.1	0.1	6.6	4.5	-2.3
	Milk, Cheese and Eggs	3.1	1.3	0.0	2.4	3.2	-1.9
	Oils and Fats	1.6	1.8	0.0	1.8	3.9	-2.1
	Fruit	1.1	5.7	0.1	3.8	8.0	-2.4
	Vegetables and Starchy Foods	6.9	-6.7	-0.5	26.7	27.0	-33.7
	Vegetables	4.6	-7.9	-0.4	21.2	33.5	-41.4
	Starchy Foods	2.2	-2.9	-0.1	-3.8	10.0	-13.0
	Sugar, Jam, Honey, Chocolate and Confectionery	1.7	4.6	0.1	4.6	3.2	1.4
	Food Products n.e.c.	1.6	3.2	0.1	2.9	6.3	-3.1
1.2	**Non-Alcoholic Beverages**	2.4	2.6	0.1	3.6	3.6	-1.0
	Coffee, Tea and Cocoa	0.7	2.7	0.0	1.1	3.3	-0.5
	Mineral Waters, Soft Drinks, Fruit and Vegetable Juices	1.7	2.6	0.0	2.5	3.8	-1.2
2	**ALCOHOLIC BEVERAGES & TOBACCO**	1.4	2.8	0.0	2.3	5.4	-2.5
3	**CLOTHING & FOOTWEAR**	3.3	1.6	0.1	3.1	4.4	-2.8
3.1	Clothing	2.1	1.6	0.0	1.9	5.1	-3.5
3.2	Footw ear	1.2	1.7	0.0	1.2	3.4	-1.7
4	**HOUSING, WATER, ELECTRICITY, GAS & OTHER FUELS**	12.8	6.9	0.9	51.3	-8.3	15.3
4.1	Rentals for Housing	3.5	0.5	0.0	0.9	1.1	-0.6
4.3	Maintenance and Repair of Dw elling	0.8	3.8	0.0	1.8	9.9	-6.1
4.4	Water Supply and Miscellaneous Services Related to the Dw elling	1.3	6.6	0.1	5.1	-0.7	7.3
4.5	Electricity, Gas and Other Fuels	7.1	11.2	0.8	46.1	-16.5	27.7
5	**FURNISHINGS, HOUSEHOLD EQUIPMENT & ROUTINE HOUSEHOLD MAINTENANCE**	4.9	4.2	0.2	12.0	3.1	1.1
5.1	Furniture and Furnishings (inc. Floor Coverings)	0.7	2.2	0.0	0.9	2.9	-0.7
5.2	Household Textiles	0.3	1.4	0.0	0.3	2.9	-1.5
5.3	Household Appliances	0.6	3.8	0.0	1.2	4.5	-0.7
5.4	Glassw are, Tablew are and Household Utensils	0.1	2.0	0.0	0.1	2.9	-0.9
5.5	Tools and Equipment for House and Garden	0.2	1.6	0.0	0.1	4.1	-2.5
5.6	Goods and Services for Routine Household Maintenance	3.2	5.1	0.2	9.4	2.8	2.3
6	**HEALTH**	3.3	2.0	0.1	3.8	2.0	-0.1
6.1	Medical Products, Appliances and Equipment	1.2	2.3	0.0	1.7	2.6	-0.2
6.2	Health Services	2.1	1.7	0.0	2.1	1.7	0.0
7	**TRANSPORT**	12.8	1.3	0.2	9.7	-4.1	5.4
8	**COMMUNICATION**	4.0	0.0	0.0	0.0	0.0	0.0
9	**RECREATION & CULTURE**	3.4	2.5	0.1	4.8	2.6	-0.2
10	**EDUCATION**	2.1	4.3	0.1	5.3	5.5	-1.2
11	**RESTAURANTS & ACCOMMODATION SERVICES**	6.2	1.3	0.1	4.6	4.7	-3.4
12	**MISCELLANEOUS GOODS & SERVICES**	8.4	2.6	0.2	12.6	6.2	-3.6
	ALL DIVISIONS	100	1.7	1.7	100.0	3.7	-2.0

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APPENDIX

Annual Prudential Indicators of Commercial Banks

ANNUAL PRUDENTIAL INDICATORS OF COMMERCIAL BANKS,
MERCHANT BANKS AND BUILDING SOCIETIES
PUBLISHED PURSUANT TO SECTION 64 (F) OF THE BANKING SERVICES ACT

31-Dec-16

	COMMERCIAL BANKS			MERCHANT BANK			BUILDING SOCIETIES			System Total (aggregation of all 3 sectors)		
	Dec-16	Dec-15	Dec-14	Dec-16	Dec-15	Dec-14	Dec-16	Dec-15	Dec-14	Dec-16	Dec-15	Dec-14
Number of institutions in operation	**6**	**6**	**6**	**2**	**2**	**2**	**3**	**3**	**3**	**11**	**11**	**11**
J$MN												
[1]**Total Assets** (incl. contingent accounts)	**1,059,461**	918,409	829,634	**37,852**	30,375	31,005	**278,737**	246,803	230,289	**1,376,050**	1,195,587	1,090,928
[2]**Total Assets** (excl. contingent accounts)	**1,038,670**	898,401	815,255	**37,654**	30,306	30,965	**278,734**	246,800	230,286	**1,355,058**	1,175,507	1,076,506
Cash & Bank Balances	**208,674**	176,398	172,114	**4,694**	3,081	2,234	**15,369**	17,165	18,212	**228,737**	196,644	192,560
Investments [incl. Securities Purch.] (net of prov.)	**268,902**	239,226	210,371	**14,114**	13,623	18,785	**116,364**	97,011	94,444	**399,380**	349,860	323,600
Total Loans (gross)	**495,388**	413,770	380,843	**18,113**	12,690	9,254	**129,660**	117,199	107,174	**643,161**	543,659	497,271
Total Loans (net of IFRS prov.) [a]	**487,347**	404,848	370,507	**18,040**	12,639	9,207	**128,428**	116,008	105,552	**633,815**	533,495	485,266
Total Deposits	**667,496**	587,451	523,657	**20,554**	16,076	13,936	**189,867**	168,023	152,225	**877,917**	771,550	689,818
Borrowings (incl. repos)	**174,461**	127,651	128,294	**8,506**	7,189	10,321	**37,625**	31,377	35,639	**220,592**	166,217	174,254
Non-Performing Loans [NPLs] (3 mths & >)	**13,508**	16,835	19,297	**142**	114	94	**4,757**	5,192	5,664	**18,407**	22,141	25,055
Provision for Loan Losses	**17,029**	19,058	20,703	**281**	204	172	**4,161**	4,286	4,589	**21,471**	23,548	25,464
[3] **Capital Base**	**109,435**	93,983	84,645	**5,817**	5,246	4,692	**29,974**	29,788	29,012	**145,226**	129,017	118,349
Contingent Accts [Accept., LC's & Guarantees]	**20,791**	20,008	14,379	**198**	69	40	**3**	3	3	**20,992**	20,080	14,422
Funds Under Management	**424**	387	364	**0**	0	0	**0**	0	0	**424**	387	364
Repos on behalf of or for on-trading to clients	**n/a**	n/a	n/a	**n/a**	n/a	n/a	**n/a**	n/a	n/a	**n/a**	n/a	n/a
%												
Rate of Asset [1] Growth	**15.4%**	10.7%	12.0%	**24.6%**	-2.0%	22.2%	**12.9%**	7.2%	8.9%	**15.1%**	9.6%	11.6%
Rate of Deposit Growth	**13.6%**	12.2%	7.4%	**27.9%**	15.4%	25.3%	**13.0%**	10.4%	7.7%	**13.8%**	11.8%	7.8%
Rate of Loans Growth (gross)	**19.7%**	8.6%	5.2%	**42.7%**	37.1%	30.5%	**10.6%**	9.4%	10.1%	**18.3%**	9.3%	6.6%
Rate of Capital Base Growth	**16.4%**	11.0%	7.1%	**10.9%**	11.8%	18.9%	**0.6%**	2.7%	6.5%	**12.6%**	9.0%	7.4%
Rate of NPLs (3 Mths &>) Growth	**-19.8%**	-12.8%	3.4%	**24.6%**	21.3%	-21.7%	**-8.4%**	-8.3%	-9.0%	**-16.9%**	-11.6%	0.2%
Investments :Total Assets [1]	**25.4%**	26.0%	25.4%	**37.3%**	44.8%	60.6%	**41.7%**	39.3%	41.0%	**29.0%**	29.3%	29.7%
Loans (net of prov.):Total Assets [1]	**46.0%**	44.1%	44.7%	**47.7%**	41.6%	29.7%	**46.1%**	47.0%	45.8%	**46.1%**	44.6%	44.5%
Fixed Assets:Total Assets [1]	**1.9%**	2.0%	2.1%	**0.6%**	0.8%	0.3%	**2.0%**	2.1%	2.0%	**1.9%**	2.0%	2.0%
Loans (gross) : Deposits	**74.2%**	70.4%	72.7%	**88.1%**	78.9%	66.4%	**68.3%**	69.8%	70.4%	**73.3%**	70.5%	72.1%
Liquidity												
Average Domestic Currency Cash Reserve: Average Prescribed Liabilities [4]	**12.0%**	12.0%	12.0%	**12.0%**	12.0%	12.0%	**1.0%**	1.0%	1.0%	**9.5%**	9.5%	9.4%
Average Domestic Currency Liquid Assets: Average Domestic Prescribed Liabilities [4]	**30.0%**	30.6%	35.7%	**29.2%**	26.8%	32.4%	**18.3%**	12.7%	18.1%	**27.4%**	26.5%	31.5%
Asset Quality												
Prov. For Loan Losses:Total Loans (gross)	**3.4%**	4.6%	5.4%	**1.6%**	1.6%	1.9%	**3.2%**	3.7%	4.3%	**3.3%**	4.3%	5.1%
Prov. For Loan Losses: NPLs (3 Mths &>)	**126.1%**	113.2%	107.3%	**197.9%**	178.9%	183.0%	**87.5%**	82.6%	81.0%	**116.6%**	106.4%	101.6%
NPLs (3 Mths &>):Total Loans (gross)	**2.7%**	4.1%	5.1%	**0.8%**	0.9%	1.0%	**3.7%**	4.4%	5.3%	**2.9%**	4.1%	5.0%
NPLs (3 Mths &>): (Total Assets [1]+ IFRS Provision for losses)	**1.3%**	1.8%	2.3%	**0.4%**	0.4%	0.3%	**1.7%**	2.1%	2.4%	**1.3%**	1.8%	2.3%
Capital Adequacy												
Deposits + Borrowings: Capital (:1)	**7.7**	7.6	7.7	**5.0**	4.5	5.2	**7.6**	6.7	6.5	**7.6**	7.3	7.3
Capital Base:Total Assets [1]	**10.3%**	10.2%	10.2%	**15.4%**	17.3%	15.1%	**10.8%**	12.1%	12.6%	**10.6%**	10.8%	10.8%
[5] Capital Adequacy Ratio [CAR]	**14.1%**	13.5%	14.3%	**16.5%**	19.4%	17.4%	**18.4%**	21.3%	22.8%	**14.9%**	14.9%	15.8%
NPLs (3 mths &>):Capital Base+Prov for loan losses	**10.7%**	14.9%	18.3%	**2.3%**	2.1%	1.9%	**13.9%**	15.2%	16.9%	**11.0%**	14.5%	17.4%
Profitability												
[6] Pre - tax Profit Margin (for the Calendar Quarter)	**26.9%**	16.6%	17.9%	**30.7%**	13.7%	12.1%	**10.4%**	13.8%	23.8%	**24.6%**	16.0%	18.8%
Pre - tax Profit Margin (for the Calendar Year)	**29.0%**	20.6%	17.9%	**23.7%**	13.5%	9.5%	**14.8%**	17.0%	22.7%	**26.7%**	19.8%	18.5%
Return on Average Assets (for the Calendar Quarter)	**0.8%**	0.5%	0.5%	**0.9%**	0.3%	0.3%	**0.2%**	0.3%	0.5%	**0.7%**	0.4%	0.5%
Return on Average Assets (for the Calendar Year)	**3.4%**	2.2%	2.1%	**2.6%**	1.3%	0.9%	**1.2%**	1.4%	2.0%	**2.9%**	2.0%	2.0%
[7] Income Assets/Expense Liabilities (at 31 December)	**105.7%**	105.3%	105.2%	**119.6%**	120.0%	120.2%	**108.3%**	109.8%	110.2%	**106.6%**	106.6%	106.7%

ANNUAL PRUDENTIAL INDICATORS OF COMMERCIAL BANKS,
MERCHANT BANKS AND BUILDING SOCIETIES
PUBLISHED PURSUANT TO SECTION 64 (F) OF THE BANKING SERVICES ACT

31-Dec-16

Notes:
n/a not applicable

- Based on unaudited data submitted to BOJ by supervised institutions up to 16 February 2017. Prior years indicators may have revisions arising from amendments.

[a] Effective January 2004, the Bank of Jamaica revised its reporting requirements in line with International Financial Reporting Standards (IFRS) and in this regard the following change was effected:
The composition of "Provision for Loan Losses" has been segregated into two (2) distinct components being:
i) provision for losses computed in accordance with IFRS; and
ii) any incremental provisioning necessary under prudential loss provisioning requirements (treated as an appropriation from net profits).
Consequently, "Total Loans (net of prov.)" represents gross loans net of IFRS loan loss provisions per (i) above

FIA Licensees are now referred to as merchant banks in accordance with Section 2 (1) of the Banking Services Act which came into effect 30 September 2015.
Under transitional arrangements, the computation of regulatory capital base and related indicators continue to be computed in accordance with prior legislation.

[1] Total Assets and Liabilities reflected net of IFRS Provision for Losses and include Contingent Accounts (Customer Liabilities for Acceptances, Guarantees and Letters of Credit). In keeping with IFRS, Total Assets and Liabilities were redefined to include Contingent Accounts.

[2] Total Assets net of IFRS Provision for Losses and Contingent Accounts (Customer Liabilities for Acceptances, Guarantees and Letters of Credit).

[3] Capital Base - Banks & Merchant Banks: (Ordinary Shares+ Qualifying Preference Shares+ Reserve Fund + Retained Earnings Reserve Fund) less impairment by net losses of individual institution.
- Building Societies: (Permanent Capital Fund + Deferred Shares + Capital Shares + Reserve Fund + Retained Earnings Reserve Fund) less impairment by net losses of individual society.

[4] Prescribed Liabilities include:
(i) deposit liabilities, (ii) reservable borrowings and interest accrued and payable on (i) & (ii).

[5] Capital Adequacy Ratio (CAR): Qualifying Capital (Tier 1 + Tier 2 capital items less prescribed deductions) in relation to Risk Weighted Assets and Foreign Exchange Exposure.

[6] Pre-tax Profits include extraordinary income/expenditure and adjustments for prior periods.
Return on Average Assets is computed using pre-tax profits as well as assets before provision for losses (in accordance with IFRS) and including contingent accounts (Acceptances, Guarantees and Letters of Credit).

[7] Income Assets comprise FC Cash Reserves, Placements, Investments, Repo Assets and Loans less Non-Performing Loans (3 months & over).
Expense Liabilities comprise Deposits and Borrowings including Repo Liabilities (from BOJ, Banks, OFI etc).

	COMMERCIAL BANKS			MERCHANT BANKS			BUILDING SOCIETIES**		
	Dec-16	Dec-15	Dec-14	Dec-16	Dec-15	Dec-14	Dec-16	Dec-15	Dec-14
Required Cash Reserve Ratio	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	1% / 12%	1% /12%	1% / 12%
Required Liquid Assets Ratio (incl Cash Reserve)	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%	5% / 26%	5% /26%	5% / 26%

** The Reserve Requirements are differentially applied to societies not meeting the prescribed threshold of residential mortgage lending in relation to savings funds. Societies that meet the prescribed 'qualifying assets' threshold attract the lower Reserve Requirements indicated above. Societies which do not, are required to meet the Reserve Requirements which apply to banks and merchant banks.

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