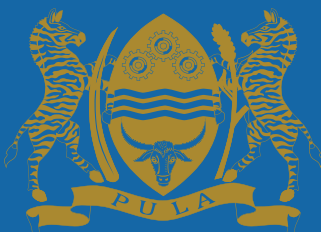


FINANCIAL STABILITY REPORT



REPUBLIC OF BOTSWANA
MINISTRY OF FINANCE AND ECONOMIC DEVELOPMENT



SEPTEMBER 2019
FINANCIAL STABILITY COUNCIL

FINANCIAL STABILITY REPORT



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FINANCIAL STABILITY COUNCIL



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ABBREVIATIONS

AML/CFT	-	Anti-Money-Laundering and Combating the Financing of Terrorism
BACH	-	Botswana Automated Clearing House
BBS	-	Botswana Building Society
BES	-	Business Expectations Survey
BISS	-	Botswana Interbank Settlement System
BOBCs	-	Bank of Botswana Certificates
BPOPF	-	Botswana Public Officers Pension Fund
BSB	-	Botswana Savings Bank
BSE	-	Botswana Stock Exchange
BSEL	-	Botswana Stock Exchange Limited
CAR	-	Capital Adequacy Ratio
CSD	-	Central Securities Depository
DB	-	Defined Benefit
DC	-	Defined Contribution
DCI	-	Domestic Companies Index
DPF	-	Deposit Protection Fund
DSR	-	Debt Service Ratio
DTI	-	Debt to Income
DVP	-	Delivery versus Payment
EFTs	-	Electronic Funds Transfers
EMDEs	-	Emerging Market and Developing Economies
ESAAMLG	-	Eastern and Southern Africa Anti-Money Laundering Group
FATF	-	Financial Action Task Force
FIA	-	Financial Intelligence Agency
FMI	-	Financial Market Infrastructure
FSC	-	Financial Stability Council
FSR	-	Financial Stability Report
GDP	-	Gross Domestic Product
IOSCO	-	International Organisation of Securities Commissions
ICRG	-	International Cooperation Review Group
LTV	-	Loan-to-Value
MFED	-	Ministry of Finance and Economic Development
MOU	-	Memorandum of Understanding
NBFIRA	-	Non-Bank Financial Institutions Regulatory Authority
NBFIs	-	Non-Bank Financial Institutions
NPLs	-	Non-Performing Loans
NPOs	-	Non-Profit Organisations
REER	-	Real Effective Exchange Rate
ROAA	-	Return on Average Assets
ROE	-	Return on Equity
RPC	-	Regulatory Policy Committee
RTGS	-	Real Time Gross Settlement
SACCOS	-	Savings and Credit Cooperative Society
SACU	-	Southern African Customs Union
SPEDU	-	Selebi-Phikwe Economic Diversification Unit
TF	-	Terrorist Financing
UNSCRs	-	United Nations Security Council Regulations
WEO	-	World Economic Outlook

ACKNOWLEDGEMENT

The September 2019 maiden issue of the Financial Stability Report (FSR) was prepared by the Research and Financial Stability Department of the Bank of Botswana. The Report was approved for publication by the Financial Stability Council (FSC). The FSC was officially launched in February 2019, and comprises senior officials from the Ministry of Finance and Economic Development (MFED), Bank of Botswana, Non-Bank Financial Institutions Regulatory Authority (NBFIRA), and Financial Intelligence Agency (FIA). These Authorities have signed a Memorandum of Understanding (MoU) for the purpose of information sharing, cooperation and communication in the implementation of macroprudential policy for Botswana.



PREFACE

The Financial Stability Report (FSR) presents an assessment of the vulnerabilities and risks to the stability and resilience of the Botswana financial system. The Bank publishes the FSR to fulfil its statutory objectives of promoting and maintaining monetary stability, an efficient payments mechanism and the liquidity, solvency and proper functioning of a soundly based monetary, credit and financial system in Botswana. The Report is also published for information and provides analytical and performance updates for the financial sector and its impact on economic activity and welfare.

Going forward, the FSR will be the anchor publication, which provides accountability in areas of assessment of financial stability risks and mitigation measures in the form of appropriate policy response. Appropriate macroprudential institutional arrangements have been set up to effect policy responses. These include the Financial Stability Council (FSC) and statutory provisions in the respective financial legislation and regulations used to supervise and monitor financial institutions by the respective regulators. The FSC comprises senior officials of the Ministry of Finance and Economic Development (MFED), the Bank, Non-Bank Financial Institutions Regulatory Authority (NBFIRA) and the Financial Intelligence Agency (FIA). The main objective of the FSC is to facilitate exchange of information, collaboration and a coordinated approach to financial sector monitoring frameworks and crisis resolution. The FSC was officially launched in February 2019. The Bank of Botswana Act, the Banking Act, and NBFIRA Act give these institutions oversight authority on financial stability matters while the FIA Act addresses key and relevant compliance aspects with respect to anti-money laundering and combating the financing of terrorism.

There are several variations of what financial stability means. The FSC defines financial stability as the smooth functioning of the key elements that make up the financial system, that have the capacity to withstand shocks, stress situations and periods of profound structural change, and facilitate economic growth and development on a safe, sound and sustainable basis. A well-functioning and stable financial system is critical to sustainable economic performance and macroeconomic stability. When the environment in which the financial system operates is characterised by sound regulatory policies, which strengthen corporate control

and mitigate wastage (positively influencing the efficient allocation of financial resources), macroeconomic, industrial and social policies, structural transformation and innovation, and a stable external environment, living standards are improved. (Figure 1 illustrates these interlinkages).

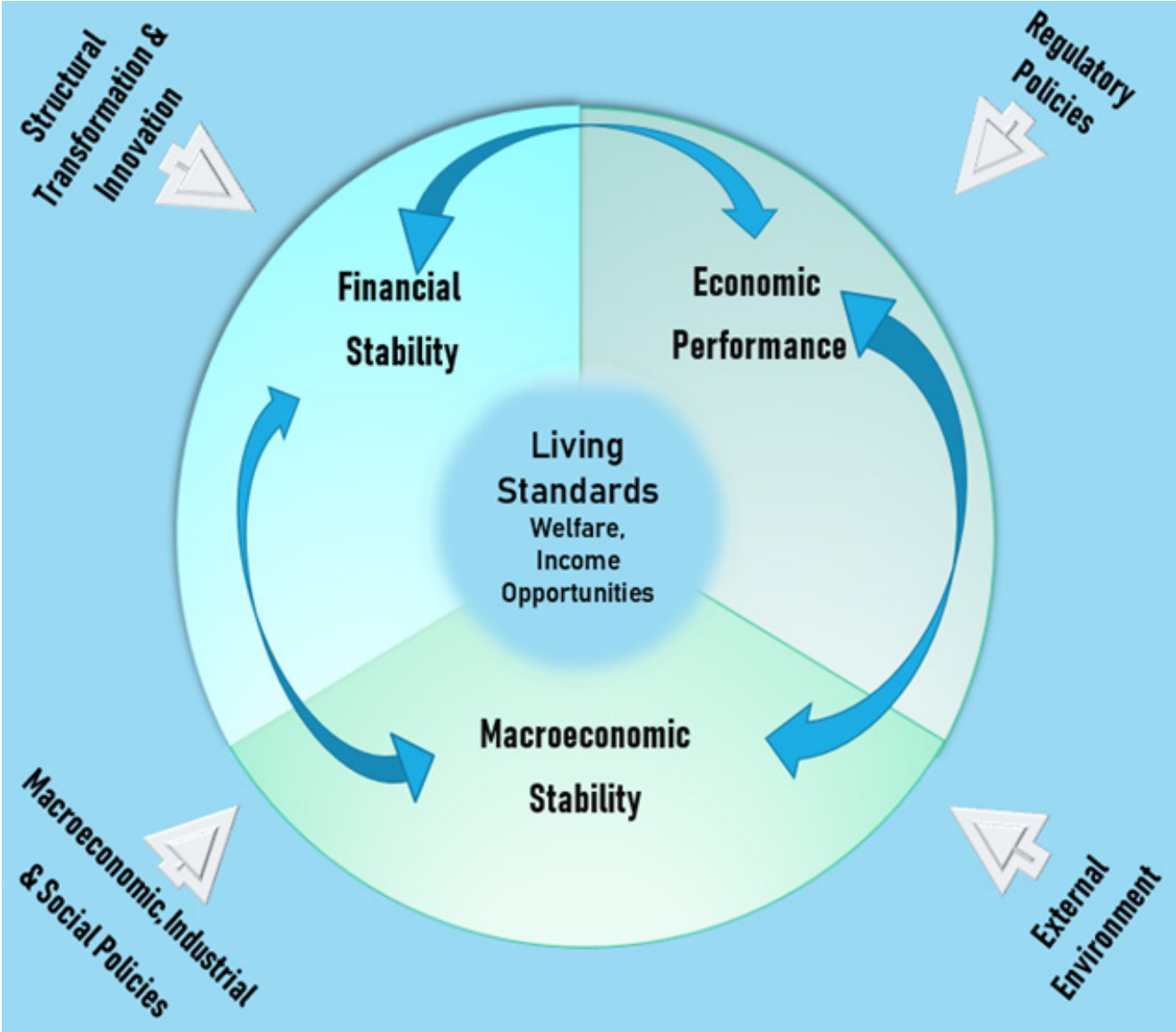
The envisaged macroprudential policy framework¹ for Botswana identifies the external sector as having the greatest potential for elevated financial stability risks to the domestic economy in the form of trade shocks, capital outflows and adverse exchange rate movements. Other vulnerabilities and threats to the soundness and stability of the financial system in Botswana could arise from excessive credit growth and leverage, funding and liquidity mismatches given the imbalances in the money and capital markets, and contagion risk from the macro-financial linkages between banks, non-bank financial institutions and the real economy. These vulnerabilities call for appropriate levels and depth of monitoring, analysis and response.

The FSR provides an analysis of these domestic vulnerabilities, how they interact internally, as well as the potential impact and response to spillovers from regional and global financial stability developments and trends. Various financial vulnerability indicators, such as balance sheet based ratios, macroeconomic, credit, capital, foreign exchange and liquidity based indicators are used to carry out the analysis for the various sectors of the economy, namely, Government, banks, non-bank financial corporations (e.g., insurance, pensions and micro-lenders), non-financial corporates, households and the external sector. Where vulnerabilities are found to be either stable, building up or elevated, the relevant policy instruments/tools will be adjusted accordingly to mitigate the envisaged threats. In the period under review, the monitored financial vulnerability indicators show a strong and resilient domestic financial system; hence no recommendation is made to implement counter measures.

The Report is structured as follows: Chapter 1 covers the overview, while Chapter 2 discusses global and regional financial stability developments and trends. Chapter 3 deals with domestic macroprudential analysis. Chapter 4 reviews financial market infrastructures and regulatory developments, and Chapter 5 concludes.

¹ The Macroprudential Policy Framework was approved at the August 6, 2019 Financial Stability Council meeting.

Figure 1: Macroeconomic and Regulatory Operating Environment



1. EXECUTIVE SUMMARY

1.1 **The domestic financial system was resilient during 2018 and in the first half of 2019, despite some tightening of global financial conditions** driven by strengthening of the US dollar, mounting trade tensions as well as specific challenges to emerging market economies, financial markets pressure emanating from increased borrowing costs, rising inflation and currency depreciation.

1.2 **Domestic economic activity is expected to increase by 4.2 percent and 4.8 percent in 2019 and 2020, respectively.** The significant influences on domestic economic performance include conducive financial conditions as indicated by accommodative monetary policy and anticipated increase in government spending. However, given the narrow export base, the economy remains vulnerable to external shocks, especially in the diamond market, which could undermine the external balance outcome in the near to medium term. Real GDP grew by 4.5 percent in 2018 compared to a lower expansion of 2.9 percent in 2017. Latest data indicates that real GDP grew by 4.4 percent in the twelve months to March 2019, compared to a lower expansion of 3.8 percent in the year to March 2018.

1.3 **Domestic credit growth was moderate and commensurate with the rate of increase in GDP, posing minimal financial stability risk as reflected in the Credit to GDP Gap.** Annual growth in commercial bank credit rose from 5.6 percent in December 2017 to 7.7 percent in December 2018, but fell to 6.5 percent in the twelve months to June 2019. Household credit continued to account for the largest proportion of total commercial banks' credit, at 60.2 percent as at December 31, 2018 and 61.3 percent in June 2019. However, the levels of household indebtedness in Botswana are considered low by international standards, at 18.4 percent of GDP (December 2017), compared to, for example, 52.3 percent and 71.9 percent in Mauritius and South Africa, respectively during the same period. It is also observed that household credit is

concentrated in unsecured lending (67.4 percent and 68.3 percent in December 2018 and June 2019, respectively). A concern would arise in the event of high levels of borrowing that are out of line with trends in economic and personal income growth, which would amplify the risk or exposure of households and related businesses to economic shocks; thus adversely affecting their ability to repay debt. Nevertheless, overall the level of non-performing loans (NPLs) to total credit remained modest at about 5 percent between December 2017 and December 2018 and improved slightly to 4.7 percent in June 2019 compared to 4.8 percent in June 2018. Overall, current levels of bank credit continued to be supportive of growth in economic activity.

1.4 **Liquidity and funding conditions were supportive of financial intermediation in 2018. Total market liquidity increased from P11.2 billion in December 2017 to P13.2 billion in December 2018.** There was a negligible increase to P13.3 billion in June 2019. The financial intermediation ratio averaged 85% between December 2017 and December 2018, an indication that, although banks were relying more on volatile deposits, they maintained sufficient buffers to meet any short term liquidity requirements. However, the commercial banks' funding structure continues to be dominated by business deposits (70.6 percent and 69.1 percent of total deposits in December 2018 and June 2019, respectively), reflecting an imbalance in the market and the potential increase in funding costs due to the volatile nature of business deposits².

1.5 **In terms of macro-financial interlinkages and contagion risk, banks continue to have significant linkages with the rest of the financial system and the real sector.** As a result, risks emanating from one sector could adversely affect banks and easily spread to the rest of the financial system (contagion risk). However, the risk of contagion was benign in 2018. Moreover, the relatively modest risk posed by governance and

² Business deposits tend to attract higher interest rates.

accountability weaknesses in some non-bank financial institutions, which had the potential to disrupt the financial system, did not materialise.

1.6 **Banks are resilient to credit shocks and have adequate liquid assets to meet short-term demand.** The Bank's June 2019 stress tests, which assessed the resilience of the banking sector to credit, liquidity and interest rate shocks, show that the large banks are more resilient to these shocks than the small banks. Overall, commercial banks are well regulated, and have adequate capital levels and sufficient liquidity.

1.7 **Overall, vulnerabilities and risks to financial stability are considered low.** The heat map (Appendix Chart A1), which is the Bank's vulnerability indicator, shows that sovereign vulnerabilities are low to moderate; borrowing by corporates and households is at acceptable levels; housing prices and stock market indices are not under pressure; there is increased market liquidity and funding costs are low; and the risk of contagion is benign in the domestic market. These conditions are expected to remain unchanged in the short to medium term. While Botswana remains on the Financial Action Task Force (FATF) list of jurisdictions with strategic anti-money laundering/combating the financing of terrorism (AML/CFT) deficiencies, the authorities continue to implement the required action plans to address identified deficiencies. The FATF has reiterated that they would continue to monitor the country on the implementation of the International Cooperation Review Group (ICRG) action plan until January 2020.

2. FINANCIAL STABILITY DEVELOPMENTS AND TRENDS

(a) Global Financial Stability Developments

Global economic growth important for overall global financial stability

- 2.1 The World Economic Outlook (WEO)³ and the European Central Bank's Financial Stability Report⁴ are moderately optimistic about growth in the global economy, which is important for overall global financial stability. The WEO projects the global economy to grow by 3.2 percent in 2019 and 3.5 percent in 2020, although it cautions about downside risks to growth. The risks cited by the report include, additional trade and technology tensions that dent sentiment and slow investment as well as lengthened escalation in risk aversion that exposes the financial vulnerabilities that continue to accumulate after years of low interest rates. The Global Economic Prospects Report⁵ also notes that the downside risks continue to dominate. In particular, the report observes that subdued investment will continue to weigh on emerging market and developing economies (EMDEs), whilst increased trade tensions could lead to sharp increase in trade barriers. Furthermore, it is observed that financial conditions have eased as predictions regarding tightening of monetary policy in the near term by major central banks have faded. This has also led to recovery of capital flows to EMDEs.

(b) Regional Financial Stability Developments and Trends

Sluggish economic performance for South Africa could spill over to Botswana

- 2.2 Regionally, in South Africa, GDP growth is expected to average 1 percent in 2019, revised downwards from an earlier projection of 1.3 percent. For 2020 and 2021, economic growth is forecast at 1.8 percent and 2 percent, respectively. Weak business confidence, possible electricity supply constraints and high state-owned enterprises debt levels are anticipated to continue limiting investment prospects. Overall, South Africa is exposed to structural and reputational challenges that could adversely affect its economic

performance through trade and investment channels. As Botswana's biggest trading partner, sluggish performance in the South African economy could have a negative impact on the economy of Botswana, and potentially impact on domestic financial stability.

(c) Domestic Economic Developments

Stable macroeconomic environment in Botswana conducive for financial stability

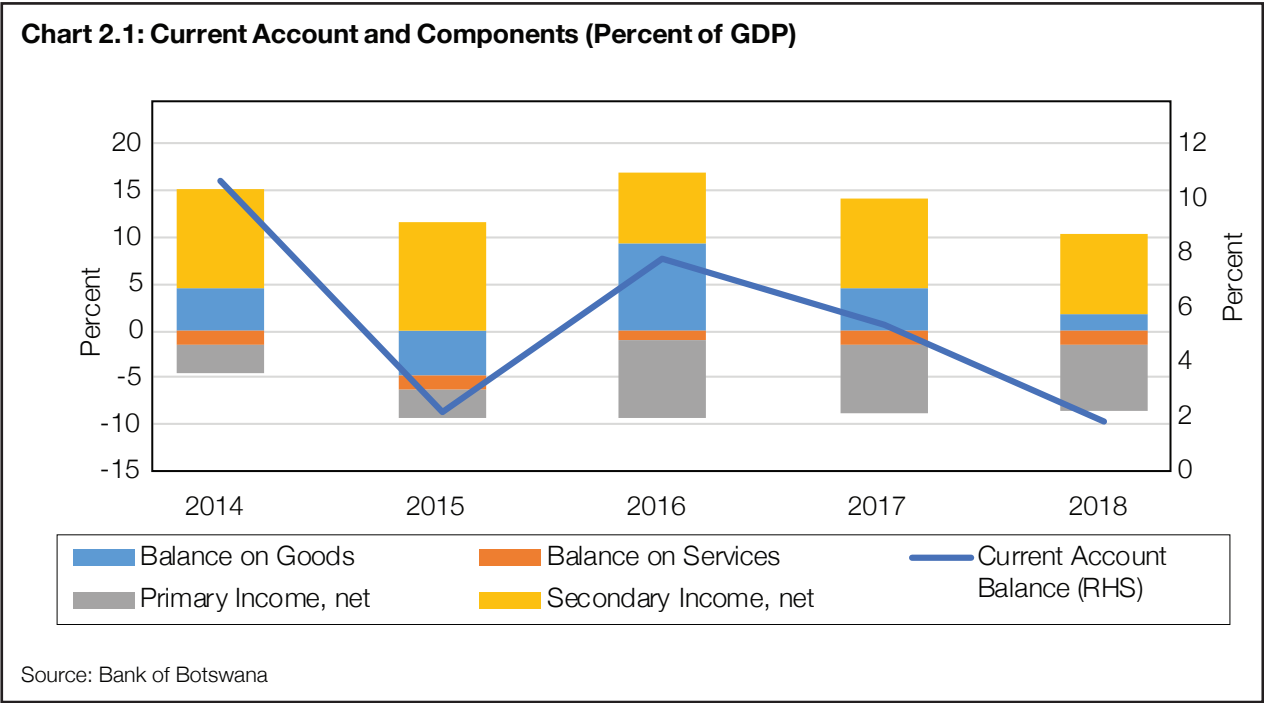
- 2.3 Domestic output growth for 2019 is projected at 4.2 percent, which is lower than the 4.5 percent for 2018. Among the factors contributing to the positive growth projection are the conducive financing conditions, as reflected by the accommodative monetary policy stance, a sound financial environment as well as the projected 3.6 percent increase in government spending for the fiscal year 2019/2020. However, Government expenditure is budgeted to increase faster than revenue and grants, thus resulting in a budget deficit equivalent to 3.5 percent of GDP in the fiscal year 2019/2020. It is expected that the budget deficit will be funded through both domestic and external government debt as well as drawdown of Government savings. The increased financing needs of government are not expected to substantially change the sovereign debt sustainability levels as they are generally within internationally acceptable levels.
- 2.4 Table A1 in the Appendix shows macroeconomic and financial stability indicators. Government debt and guarantees averaged about 28 percent of GDP. Overall, government exposure remains within the legal limit of 40 percent of GDP and poses minimal risk to financial stability. While global economic growth is forecast to be modest, it is anticipated that the specific markets for key exports for Botswana will remain buoyant (Monetary Policy Statement, 2019). In addition, the stable and competitive real effective exchange rate (REER); adequate foreign exchange reserves;

³ WEO report (July 2019).

⁴ The November 2018 European Central Bank Financial Stability Review.

⁵ The World Bank Global Economic Prospects Report (June 2019).

the higher level of confidence among businesses with respect to prospects in 2019⁶ and the continuing current account surplus (Chart 2.1) will also be supportive of macroeconomic growth. Overall, the stable macroeconomic environment in Botswana is conducive for durable operational stability of the financial system.



⁶ September 2018 Business Expectations Survey.

3. DOMESTIC MACROPRUDENTIAL ANALYSIS

(a) Sovereign Vulnerabilities

The external sector risks are balanced

- 3.1 As a small and open economy, Botswana remains susceptible to risks emanating from the global economy, especially given its dependence on external trade and related revenue (Southern African Customs Union (SACU) and mineral exports revenue). Mineral exports revenue directly supports government expenditure and household consumption indirectly; hence, it permeates the rest of the economy. Botswana is dependent on the diamond mining industry and that makes it vulnerable to external macroeconomic developments. To underscore the risk of exposure from the external environment, during the global financial crisis of 2007-2009, mining output in Botswana contracted by more than 42.2 percent in 2009, resulting in a considerable decline in real output. The likely negative spillover to the financial system through non-performing loans was mitigated by expansionary fiscal policy.
- 3.2 Given the narrow export base, external shocks, especially in the diamond markets, could undermine the external balance outcome in the near to medium term. Diamonds accounted for 90 percent of exports in 2018.

(b) Credit Growth and Leverage

Banks and Other Deposit Taking Financial Institutions

Bank credit growth moderate and commensurate with increase in GDP

- 3.3 Annual growth in commercial bank credit accelerated from 5.6 percent in 2017 to 7.7 percent in 2018 and decelerated to 6.5 percent in June 2019. Outstanding commercial bank loans and advances increased from P54.2 billion at the end of 2017 to P58.3 billion in December 2018 and P60.2 billion in June 2019. The annual credit expansion in 2018 was mostly associated with a faster increase in lending to businesses, from

3.2 percent in 2017 to 10 percent in 2018, with a notable increase in financing of trade, hospitality, tourism, construction and financial services. Foreign currency denominated debt is low at 7.8 percent of total credit.

Table 3.1 shows the distribution of commercial bank credit to businesses and households as a percent of GDP. The level of credit relative to GDP (11.9 percent and 18.4 percent for business and household credit, respectively) indicates considerable scope for disciplined and prudent credit extension to enhance support for economic activity. Enhanced integration between the financial and real sectors enables regulatory and policy potency, which is ultimately facilitative and supportive of financial stability.

- 3.4 In the recent past, commercial bank credit growth was moderate and commensurate with the rate of increase in GDP, as measured by the credit-to-GDP gap, which was below both its trend and the 10 percent threshold at the end of March 2019 (Chart 3.1). The gap has been positive since the global financial crisis, mainly reflecting the trend decline in the rate of GDP growth, which in the main, was due to the overall subdued performance of the mining sector. A credit-to-GDP gap that moves significantly above its trend or exceeds some critical threshold (typically 10 percent) portends emerging financial imbalances and risk of financial distress.

Commercial banks adequately capitalised

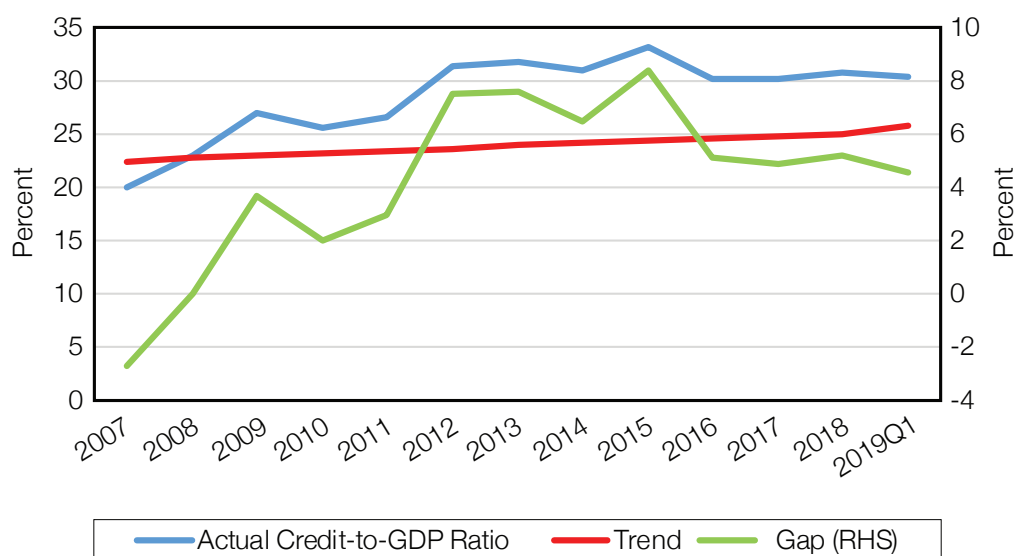
- 3.5 The aggregate commercial banks' leverage ratio for 2018 was 14.1 percent compared to 14.4 percent in June 2019, indicating that banks have strong capital bases and can continue to extend credit without increasing their vulnerability to losses⁷. This conclusion is strengthened by the level of non-performing loans to total credit, which remains modest at about 5 percent.

⁷ Banking industry leverage is defined as tier 1 capital/total exposures. The ratio should be 3 percent or more as per prudential limits.

3.6 Annual growth of credit extension by other deposit taking financial institutions (i.e., Botswana Building Society (BBS), Botswana Savings Bank (BSB) and

Savings and credit cooperative societies (SACCOS) declined by 3.2 percent in December 2018; and was 3.7 percent as a ratio of GDP in December 2018.

Chart 3.1: Credit to GDP Gap



Source: Bank of Botswana

Table 3.1: Distribution of Credit to Business and Household Sector (Percent of GDP)

Credit By Sector	2016	2017	2018	2019Q1
Total Commercial Bank Credit ¹	30.1	30.1	30.7	30.3
Business	11.9	11.7	12.1	11.9
Parastatals	0.8	0.5	0.6	0.6
Agriculture	0.7	0.7	0.6	0.6
Mining	0.2	0.2	0.2	0.1
Manufacturing	1.9	1.9	1.9	1.8
Construction	0.5	0.6	0.7	0.6
Trade	2.5	2.3	2.7	2.5
Transport and Communications	0.4	0.4	0.3	0.3
Finance and Business Services	2.3	2.4	2.6	2.5
Real Estate	2.2	2.0	2.0	2.3
Households	18.1	18.4	18.5	18.4
Retail Credit ²	12.9	13.1	13.4	13.3
Mortgage	5.1	5.1	5.1	5.1

Source: Commercial banks, Statistics Botswana and Bank of Botswana calculations.

Notes:

1. Although not shown in the table, electricity and water, other and non-resident sub-sectors are included in the business credit to GDP ratio.
2. Includes motor vehicle, personal and credit card loans.

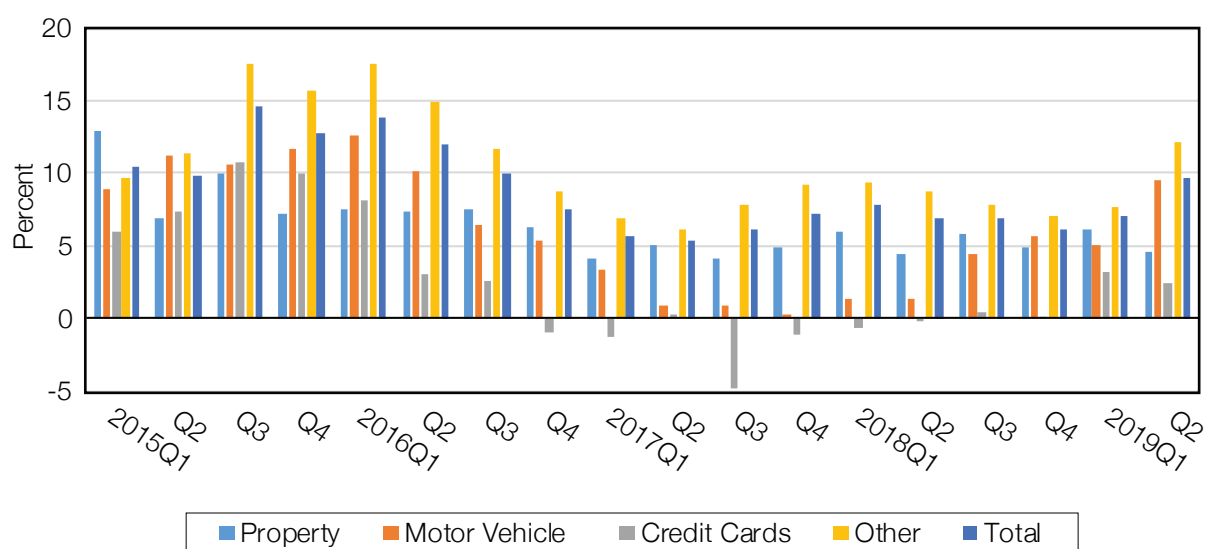
The Household Sector

Household debt remains low compared to peer countries

- 3.7 Annual growth in household credit was 6.2 percent in 2018, lower than 7.2 percent in 2017 (Chart 3.2). Commercial bank household credit continues to account for a larger proportion of credit at P36.9 billion in June 2019, thus constituting 61.3 percent of total bank credit, most of which is concentrated in unsecured lending (68.3 percent as at June 30, 2019). Households in Botswana borrow mainly in the domestic currency, thereby minimising any foreign exchange risk that may arise from banks' foreign currency exposure to this sector.

- 3.8 Nevertheless, total household debt relative to the economy, and by international standards, is low when measured using household debt to GDP and household debt to income ratios. This suggests scope for growth of the household credit market, particularly in the context of development and welfare enhancement needs. However, structural problems relating to economic diversification, land tenure, income growth, employment creation and strategic preference for (and resource allocation to) unsecured credit by banks pose a challenge to further expansion of household credit. Also debt service ratios and marginal propensity to borrow constrain further growth in demand for household credit.

Chart 3.2: Growth in Household Debt (Y-o-Y)



Source: Commercial Banks

3.9 More recently, the ratio of household debt to GDP has been fluctuating between 17.8 percent and 18.4 percent from June 2017 to March 2019, possibly on account of faster growth in household debt than GDP⁸ (Chart 3.3 and Table A2). Meanwhile, household debt as a proportion of household income ranged between 25 percent and 50 percent in the period 2009 to 2018. In comparison with peer countries, Botswana has a relatively low household debt to income ratio. For example, Mauritius and South Africa had ratios of 52.3 percent and 71.9 percent, respectively, in December 2017, while Namibia had a significantly higher ratio of around 84 percent in 2017.

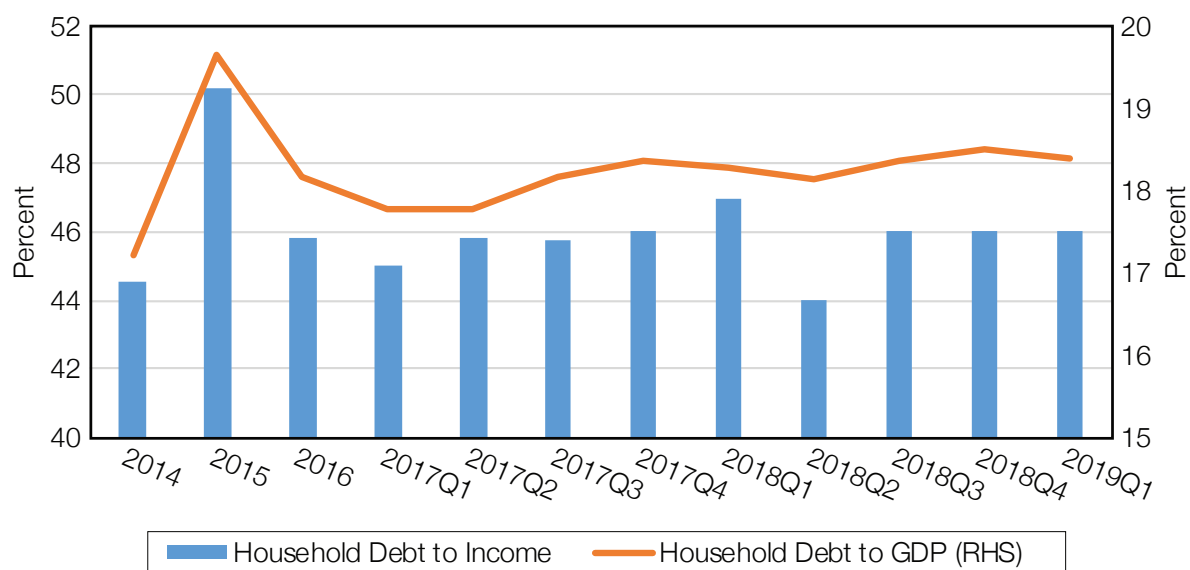
3.10 High levels of borrowing that are out of line with trends of economic and personal income growth amplify the risk or exposure of households to economic shocks and may adversely affect their ability to repay debts. Overall, nominal national wages increased by 5.8 percent in the twelve months to December 2018, higher than the

average inflation of 3.2 percent in 2018. The ratio of NPLs (households) to total household credit is modest, averaging about 4 percent between 2015 and 2018.

3.11 Overall analysis of the available official data show a controlled and sustainable household debt situation (see also Box 3.1). However, this excludes estimates of the extent of household indebtedness outside the regulated financial system. The proposed Credit Information Act is expected to address this data gap to a large degree. Moreover, households are net savers with the rest of the economy (Table 3.2) when taking into account contractual savings (pension funds). This is excluding household wealth or other household assets, such as cattle, commercial farm land and retail shareholding in listed companies; reliable data sources for these asset classes is limited. Table 3.3 shows household lending rates and other credit eligibility requirements.

⁸ As at end of 2018, the ratio, inclusive of lending by statutory banks and micro-lenders, was estimated at 22.9 percent.

Chart 3.3: Trends in Household Debt



Source: Statistics Botswana and Bank of Botswana

Box 3.1: Household Indebtedness to Commercial Banks and Other Deposit-Taking Institutions

Introduction

The Bank conducted a survey on the household sub-sector indebtedness for the period 2015 to 2017. The survey examined the demographic profile of borrowers; purpose of household credit; cost of credit; lending and risk mitigation strategies. In addition, the survey also looked at the different measures applied by banks to assess capacity of households to service loans, such as loan to value (LTV) ratio, debt to income ratio (DTI) and debt service ratio (DSR). The findings of the survey envisaged to highlight the extent of vulnerability of the financial system to risks emanating from the household sector. The findings also aimed to inform the Bank's decisions on the appropriate macro-prudential policy tools for mitigating financial stability risks.

Summary of Findings

(a) Demographic Profile of Borrowers

The demographic profile of the household borrowers at banks indicate that males are in the majority, at 56 percent of total borrowers as at December 31, 2017. In terms of level of income, most borrowers (71 percent) earned between P3 001 - P20 000 per month, while 8 percent of the borrowers had monthly income above P20 000. With regard to employment status, most of the households who accessed loans from banks were employed (94 percent). The aggregate borrowers translate to 68 percent of the total number of formal sector paid employees in the country.

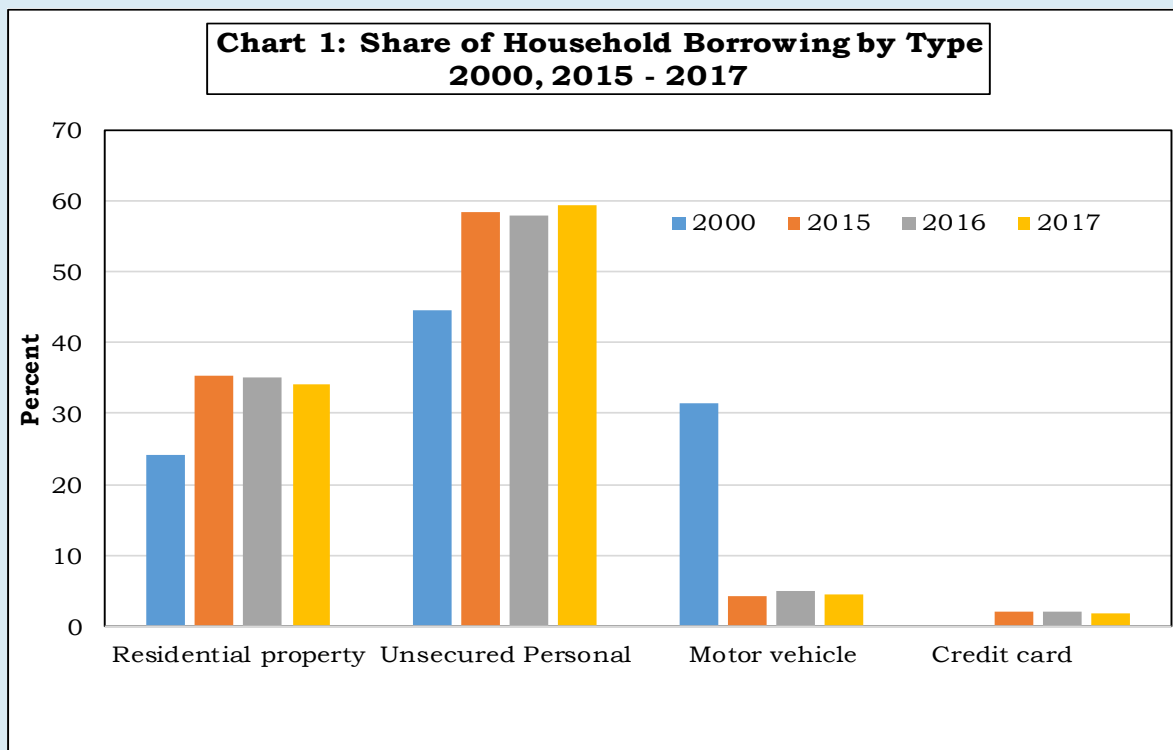
(b) Purpose of Household Credit

Household credit is categorised into housing or mortgage loan, unsecured personal loan, motor vehicle asset loan and credit card loan. The bulk of the households' debt is in the form of unsecured personal loans (59 percent in December 2017), followed by borrowing for residential property at 34 percent. This trend has been consistent throughout the period under review. A long-term view indicates that unsecured personal loans (45 percent) dominated the structure of household loans in 2000 (Chart 1).

(c) Loan Application Assessment Measures

During the three-year period under review, most banks maintained the same loan to value (LTV) ratios, ranging from 50 percent to 100 percent. The banks reported a debt to income (DTI) ratio for the households ranging from 40 percent to 70 percent. A rough estimate by the Bank indicates that household debt as a proportion to income⁹ rose sharply from 25 percent in 2009 to 50 percent in 2015, before easing to 46 percent in 2016 and 2017 while there may be other supply-demand dynamics, the increase was mainly attributed to the capping of BoBCs and a rise in demand for credit, following the accommodative monetary policy environment during the period under review.

⁹ This measure was developed using a rough estimate of household income. Data on household income that includes other sources of income (dividends and rentals) is not readily available.



Source: Statistics Botswana and Bank of Botswana

(d) Cost of Household Credit

Although the cost of credit has generally been declining in line with the accommodative monetary policy, credit card loans remain the most expensive at an average of 29.1 percent followed by unsecured personal loans at about 20.1 percent. Mortgage and motor vehicle loans are generally priced competitively, averaging at 10.75 percent and 10.85 percent, respectively. Even though expensive, the share of credit card balances in total household loans is the lowest at 2 percent, and thus does not pose much default risk to the banking sector. Besides the interest rate charge on loans, banks levied additional costs on borrowers, including administration, legal and valuation fees, as well as payment

for credit risk mitigation such as insurance for loans. Some banks have an early repayment penalty and credit reference/clearance fees.

(e) Banks' Strategies regarding Household Lending and Risk Mitigation

On lending strategies, indications are that banks with large proportions of unsecured loans aim to accelerate growth in the more secured loan segment, particularly mortgage loans. The survey indicated that any changes in the set strategies would aim to improve consultants' and relationship managers' knowledge of products and services to increase efficiency. In order to mitigate risks associated with lending to households, some banks introduced

a retrenchment insurance product to provide relief to customers during distress. The product is available to all types of loans at 1.5 percent of the outstanding balance and the cover extends up to tenor of the loan. For mortgage loans, the same premium applies, except that the coverage is for the twelve months period, which is renewable on an annual basis.

Conclusion

The findings of this survey are suggestive of a balanced exposure of the banks to household debt. Although the bulk of banks' lending is taken up by the households, most of which is unsecured lending, the possible risk is moderated by the fact that the majority of borrowers are employed (94 percent). The banks' risk mitigation strategies to reduce excessive lending to households, particularly from unsecured loans to secured loans, such as property, bodes well with the need for banks to extend loans for economically productive investments.

Table 3.2: Household Net wealth

Asset	Outstanding (P million) 2017	Outstanding (P million) 2018	Annual growth (%)
Retail Deposits	12 746.2	13 843.9	8.6
Pensions	82 003.9	78 971.9	(3.7)
Life and Health Insurance	18 705.0	19 640.3	5.0
Mortgage Property	9 189.6	9 639.9	4.9
Motor Vehicles	1 703.6	17 99.7	5.6
Total Assets (a)	124 348.3	123 865.7	(0.4)
Total Household Debt (b)	38653.7	40 570.9	5.0
Total Household Net Wealth (a)–(b)	85 698.2	83 298.4	(2.8)

Source: Bank of Botswana

Note: Figures in italics are estimates

Table 3.3: Household Lending Rates and Other Requirements

Loan Category	2018 Average Annual Interest Rate (%)	Other Terms and Conditions of Financial Transactions
Personal Loan	13.9	Life insurance cover: Debt to Income (DTI) Limit
Motor Vehicle	9.7	Insurance cover: DTI Limit
Credit Card	26.7	Life insurance cover: DTI Limit
Housing Loan	8.3	LTV ratio ranges from 45 percent to 100 percent: DTI Limit and insurance cover

Source: Bank of Botswana

The Non-Financial Corporate Sector

Corporate sector leverage moderate

- 3.12 The non-financial corporate sector is an important sector as it contributes to the health and soundness of the financial system. Non-financial corporates are linked to the financial sector in terms of credit extended to the sector by banks and they, in turn, are a source of funding for financial institutions through deposit placements, equity and bond holdings. In addition, non-financial corporates influence households' debt repayment capability through labour market conditions and prospects (employment and wage growth).
- 3.13 Credit to the non-financial corporate sector (excluding external debt) constituted about 35 percent of total loans during the period 2016-2018, and grew by 12.3 percent over the same period, from P17.7 billion in December 2016 to P19.9 billion in December 2018. By June 2019, total credit to the non-financial corporate sector stood at P19.7 billion. Credit growth was driven by a notable increase in lending to trade, hospitality, tourism, construction and financial services, and was mostly short-term.
- 3.14 As a percentage of GDP, non-financial corporate credit increased slightly from 10.4 percent in December 2016 to 10.5 percent in December 2018 before decreasing to 10.1 percent in March 2019. This ratio remains low and below the average of 65 percent in comparable countries¹⁰, indicating that there is room for measured and disciplined expansion of credit to this sector, which would enhance the value addition of finance to economic activity. The ratio of large exposures (i.e., large loans and advances) as a percentage of total business credit decreased from 72.6 percent in 2016 to 56 percent in June 2019; signifying that most of the credit is to large corporates in the trade sector.

Financial health of the corporate sector remains good

- 3.15 Selected financial soundness indicators (Chart 3.4 and Table 3.4), based on 14 domestic non-financial corporates listed on the Botswana Stock Exchange Limited (BSEL) show that most of these companies were profitable even though they recorded reduced earnings as a result of subdued trading conditions and low consumption spending during the period under review. They also maintained attractive dividend payouts. Credit extended to the sector as a percentage of GDP is low by international standards, averaging about 11 percent. The sector's leverage ratio (i.e., debt/equity ratio) is also low, ranging between 42.1 percent and 53.8 percent in the period between 2016 and 2018. Low corporate leverage reduces the vulnerability of corporate entities to economic or financial shocks.

Corporate Sector NPLs Moderate while Corporate Bankruptcies/Closures Increased

- 3.16 Although the NPLs in the non-financial corporate sector have been marginally higher than the banking sector average (the ratio was 5.7 percent in December 2016; it increased to 8.1 percent in December 2018; and 8.2 percent in March 2019), the sector remains profitable and able to service its loans. The profitability ratio, as measured by the return on equity, remains relatively high, at an average of 14.3 percent between 2015 and 2017 with good dividend payouts¹¹. However, there were several major corporate bankruptcies during the period under review, including the BCL Group, which was the largest. Others were the closure of Discovery Metal Limited (Boseto copper mine), Kimberly Diamond (Ghaghoo diamond mine), Leboam Holdings (Mowana copper mine) and Pula Steel (Pty) Ltd. Other corporate credit defaults were reported in the diamond manufacturing sector.

¹⁰ This ratio was 63 percent for South Africa in 2018Q3, 65 percent in Namibia in 2018, and 66 percent in Mauritius in 2018.

¹¹ Botswana Stock Exchange 2018 Market Analysis Report.

- 3.17 The closure of BCL and Tati Nickel mines in the fourth quarter of 2016 has had a significant adverse impact on employment, with a direct loss estimated at 4500 jobs. Consequently, the resultant loss of income and purchasing power led to closure of small businesses throughout the Selebi-Phikwe Economic Diversification Unit (SPEDU) region¹² as well as an increase in non-performing loans in the banking and micro-lending businesses at the time.

Business confidence positive

- 3.18 Business conditions are expected to improve in 2019, albeit at a slower pace. The Bank's Business Expectations Survey (BES) for March 2019 indicates that the level of optimism by firms regarding

economic activity has declined, compared to the previous survey. Overall, businesses expect lower sales, reduced capacity utilisation and lower profits, compared to the September 2018 survey. Investment in buildings also declined in the current survey, in line with the dampening effect of the tight access to credit in the domestic market, as perceived by the respondents. Overall, potential vulnerabilities from the corporate sector are assessed to pose minimal risk to financial stability.

Table 3.4: Non-Financial Corporates' Financial Soundness Indicators (Percent)

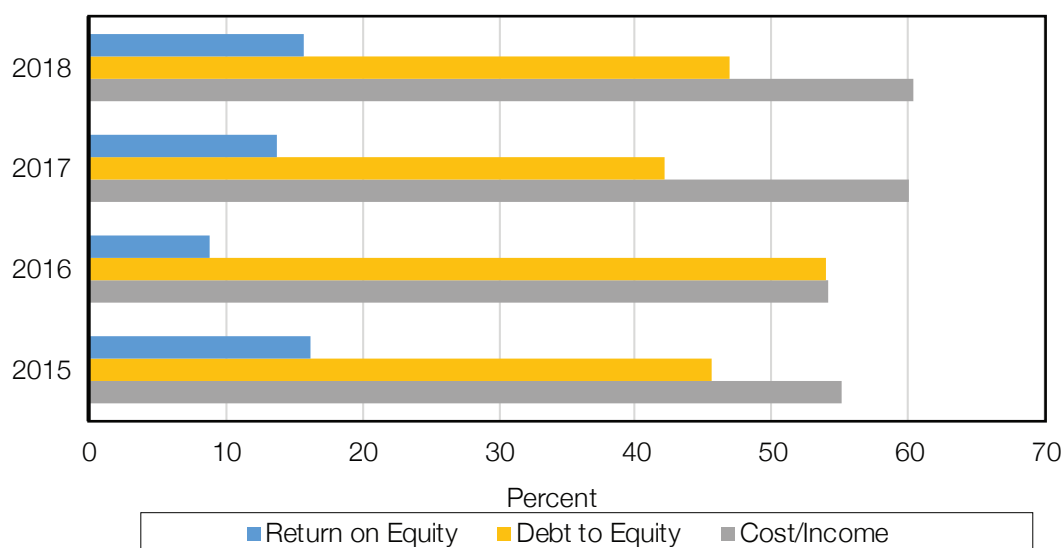
Indicators	Dec 2016	Dec 2017	Dec 2018
Non-Financial Corporates Credit-to-GDP ¹³	11.1	10.7	11.3
Cost-to-Income Ratio	54.1	60.0	60.3
Total Debt to Equity Ratio	53.8	42.1	46.9
Return on Equity	8.8	13.8	15.7
Price/Earnings Ratio (times)	13.4	13.3	11.2
Dividend Yield	4.4	5.1	5.5

Source: Botswana Stock Exchange, Statistics Botswana, company financial statements

¹² According to the Government of Botswana, SPEDU region comprises of Selebi-Phikwe Town, Bobirwa, Tswapong North and Mmadinare-Sefhophe area.

¹³ Calculated using total credit to the non-financial corporation from commercial banks.

Chart 3.4: Non-Financial Corporates FSIs



Source: Botswana Stock Exchange

The Real Estate Sector¹⁴

Mortgage credit to GDP remains very low

- 3.19 Trends and developments in the real estate sector are important to financial stability as they reflect the public's perception on the state of the economy. In addition, creditors may have large exposures from this sector, hence may be affected by movements in house prices. The real estate assets also represent wealth of the household and the private sector, which is often leveraged to the financial sector and future income prospects. Furthermore, property and immovable assets are often used as collateral for bank loans to businesses and households. Therefore, developments in the real estate industry have a bearing on the financial system, hence the need for continuous monitoring and assessment¹⁵.

- 3.20 Credit¹⁶ to the commercial real estate sector has increased by around 20 percent over a five-year period (i.e. from P3.6 billion in quarter 4 of 2013 to P4.3 billion in quarter 4 of 2018; and increased further to P4.9 billion in quarter 2 of 2019). However, as a proportion of total loans, the ratio has been declining over the years; for example, from 8 percent in December 2013 to 6.7 percent in December 2018 (Chart 3.5). This implies that total credit was growing at a higher rate than credit to the commercial real estate sector. However, the ratio increased to 7.4 percent in the first half of 2019. Commercial real estate credit to GDP has decreased slightly from 2.8 percent in December 2013 to 2.5 percent in March 2019. Therefore, while there is considerable opportunity for a more significant and beneficial linkage between the commercial real estate sector and financial sector, the current low level of credit suggests minimal risk to financial stability.

¹⁴ Calculations include data from commercial and statutory banks.

¹⁵ The 2007-09 financial crisis emanated from negative developments in the real estate sector in the United States.

¹⁶ Credit by commercial banks and statutory Banks.

3.21 In the residential real estate sector, mortgage loans as a ratio of total household credit (Chart 3.6) constituted 34.1 percent in December 2018, compared to 34.3 percent in March 2019, but with a slow growth trend that is not commensurate with the needed development and growth path to fill the apparent need for access to housing, as well as the financing gap. Thus, the size of housing finance, as estimated by mortgages, is low by international standards¹⁷. These stagnant ratios might be reflective of the restrained growth in incomes relative to the increase in residential house prices over the years (itself reflective of limited housing stock in various categories).

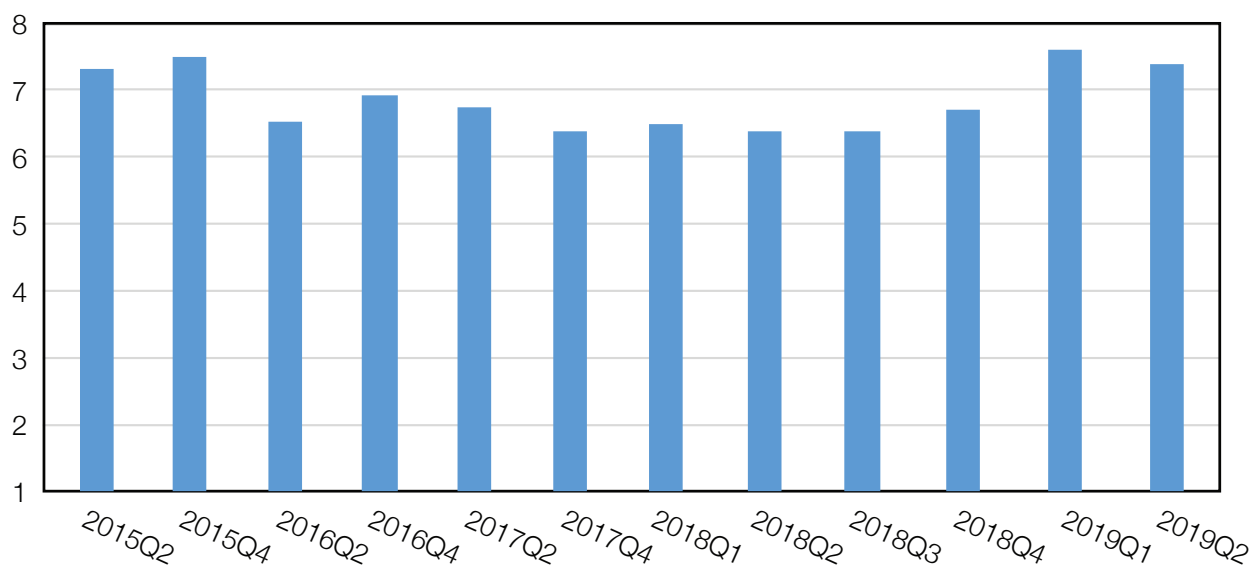
3.22 Credit risk in the real estate sector remains low. The NPLs as a proportion of total mortgages was 6 percent in December 2018, a decline from 6.2 percent in December 2016. The NPLs in the commercial real sector were at 2.9 percent in December 2016, and increased to 3.6 percent in December 2018, which remained constant in June 2019. However, there are concerns about concentration risk in the real estate sector, as most loans are concentrated in the capital city Gaborone and surrounding areas. The Loan-To-Value (LTV) ratio at commercial banks ranged between 45 percent and 85 percent, which is considered prudent. Low to medium LTV ratios limit the exposure of banks to mortgage credit default.

3.23 Overall, the real estate market continues to perform satisfactorily. According to the latest Riberry Property Market report¹⁸, the residential market for the lower-end and medium-cost properties continued to have good demand and supply compared to the higher-end residential housing, where the demand was weaker. Growth in credit to the real estate sector remains modest compared to the general increase in credit. The supply of credit to this sector is, therefore, expected to increase to meet the demand subject to relevant structural and policy reforms, realignment of strategic focus by banks and enhanced public knowledge of the relative costs and benefits of mortgages. In particular, property financing is expected to increase following the amendments of Deeds Registry and Tribal Land Acts in 2017 that would facilitate acquisition of title deeds country-wide. Overall, vulnerabilities from the real estate sector posed minimal risk to financial stability during the period under review, but prospective developments require commensurate risk assessment and management frameworks.

¹⁷ However, given the challenges in accessing finance including land tenure, relatively low average incomes and strict requirements, there is a significant funding of housing construction and purchases that is financed through unsecured personal loans.

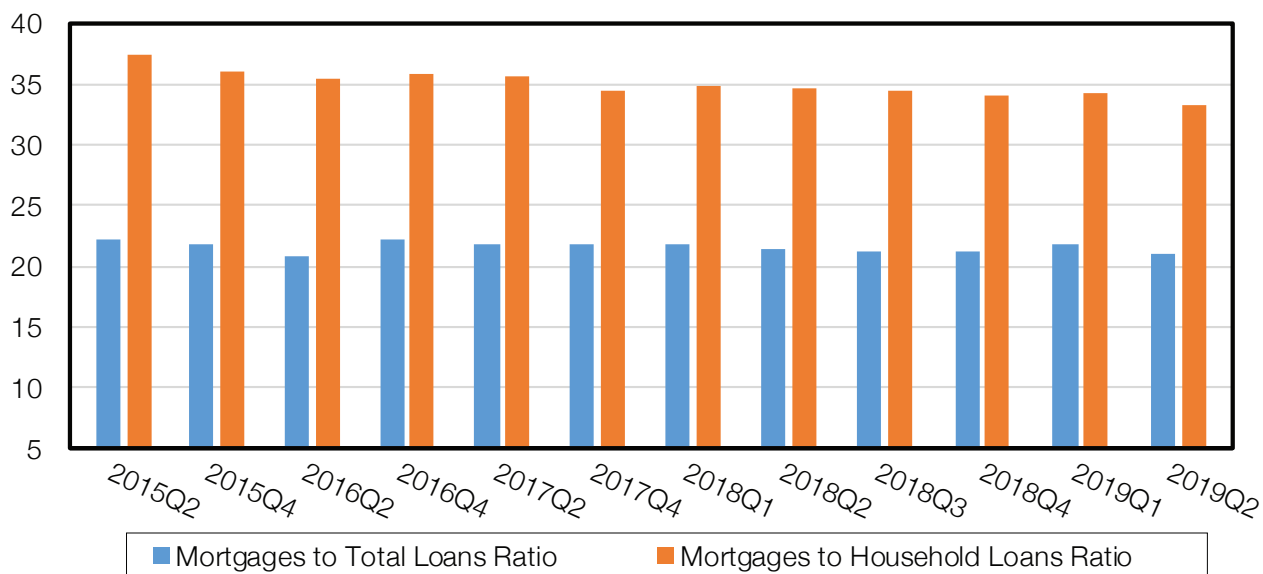
¹⁸ The 2018 quarter 4 report.

Chart 3.5: Commercial Real Estate Loans /Total Banking Sector Loans



Source: Bank of Botswana

Chart 3.6: Trends in Mortgages



Source: Bank of Botswana

Table 3.5: Selected Real Estate Sector Indices

Year	Average Mortgage Interest Rate (%)	Average House Prices (Pula)
2013	9.6	P698 000
2015	8.2	P742 000
2016	8.8	P707 000
2017	8.6	P785 000
2018	8.4	P711 000

Source: Commercial banks and Riberry Reports

Non-Bank Financial Institutions (NBFIs)

Credit by micro-lenders increased

- 3.24 The NBFIs comprise a large group of diverse institutions that include retirement funds, insurance, capital markets and lending activities. Credit extension in this sector is carried out by insurance companies, micro-lenders and pawnshops, as well as finance and leasing companies.
- 3.25 The micro-lending business loan book amounted to P3.6 billion in December 2018, with an annual average growth of 11.5 percent in the past three years. The micro-lending business in Botswana is heavily dominated by Letshego Financial Services (Pty) Ltd (Botswana), with a loan book of P2.4 billion¹⁹ as of June 2018. Therefore, the micro-lending industry is too small (relatively) to pose any significant financial stability risk. However, there are concerns that the sector exposes households to high levels of indebtedness; hence it warrants regular monitoring. Moreover, the bigger micro-lenders are also linked to the real and financial sectors through equity and other exposures by pension funds and commercial banks. Lending by the other NBFIs, which is otherwise referred to as shadow banking, will also be monitored going forward.

Leverage in NBFIs Sector moderate

- 3.26 While leverage is good for the financial sector, it should not be excessive, particularly for NBFIs, because it could reduce their ability to cushion themselves against adverse shocks or financial losses. Trends in leverage ratios²⁰ show that pension funds²¹ in Botswana are lowly leveraged, at an average of 13.1 percent in 2015 and 2016. Such low leverage ratios are expected, because the Defined Contribution (DC) Pension Scheme is dominant in the country and uses contributions from members to build its assets. The life insurance industry was highly leveraged at an average of 85.7 percent in 2016 and 2017, while general/short term insurance sector was moderately leveraged at 59.4 percent during the same period. Micro-lenders were also moderately leveraged at about 54 percent in 2016 and 2017. Notwithstanding the foregoing, overall, the risk to financial stability is considered low for the pension and insurance sectors.

¹⁹ Letshego Holdings Limited Group financial results for the period ended June 30, 2018.

²⁰ The leverage ratio is defined as total debt to total assets. The ratio shows the proportion of total asset financed by creditors, liabilities, or debt.

²¹ Botswana Public Officers Pension Funds (BPOPF) financial data has been used as proxy for the industry because data on liabilities is not published by NBFIRA. More than 70 percent of pension assets are held by BPOPF.

(c) Liquidity and Funding Risk

Banking Sector

Banking sector has sufficient liquidity

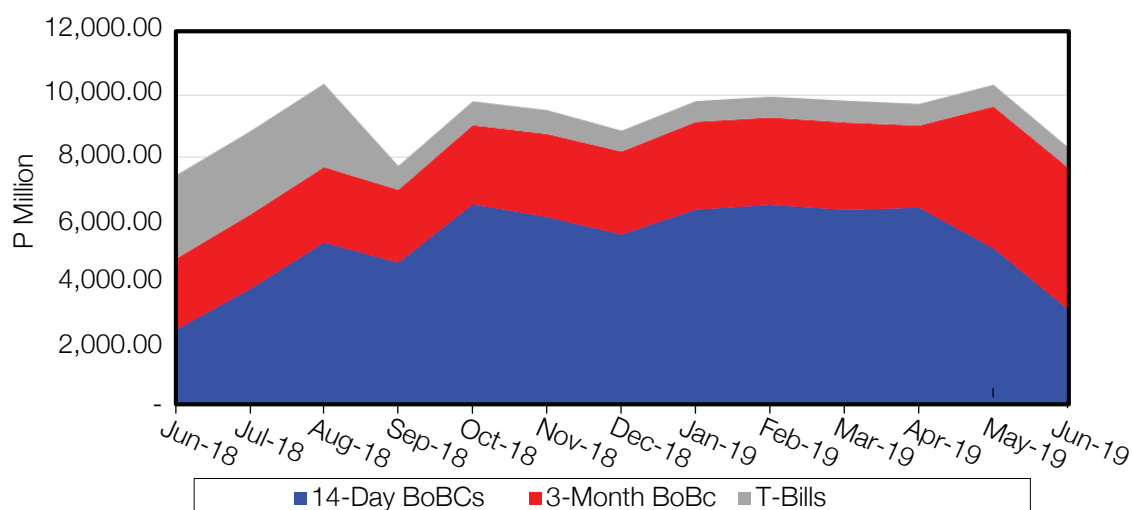
- 3.27 Liquidity and funding conditions were supportive of financial intermediation by the banking sector in 2018 although there was a marginal decline in the first half of 2019. Total market liquidity increased, rising from P11.2 billion in December 2017 to P13.2 billion in December 2018, and was virtually unchanged at P13.3 billion in June 2019. The liquidity ratio of the banks increased from 16.6 percent in December 2017 to 17.8 percent in December 2018, but declined slightly to 17.7 percent in June 2019. Nevertheless, the ratio was significantly higher than the prudential requirement of 10 percent, signifying a liquid banking system. However, the ratio of large deposits to total deposits has averaged 40 percent over the last three years to 2018, an indication of potential funding concentration risk.
- 3.28 Business deposits amounted to 70.6 percent of total deposits, signifying high funding concentration risk, and potentially higher funding costs due to the volatile nature of business deposits and skewed dependence on their funding by some banks. In addition, the financial intermediation ratio has been above the upper bound of the 50-80 preferred range since 2017. The ratio decreased marginally from 84.2 percent in December 2018 to 84.1 percent in June 2019. An elevated intermediation ratio in an environment of reliance on short-term deposits signals that stable funding is low relative to the loans granted; that is, more short term volatile deposits are used to fund long term assets, a situation that could make banks vulnerable to a liquidity stress.

Money Market

Money market interest rates normalised

- 3.29 Between June 2018 and June 2019, money market rates fluctuated within the upper and lower floors signified by the reverse repo rate and repo rate, respectively, indicating that they were stable overall.
- 3.30 Associated with stable money market interest rates, banks held or had access to sufficient instruments to meet the regulatory liquidity requirements and collateral needs (Chart 3.7). In addition, interbank money market trading decreased considerably from P5.5 billion in January 2019 to P1.9 billion in March 2019, indicating overall improvement in market liquidity.

Chart 3.7: Monthly Total Amount of Outstanding BoBCs and Treasury Bills (June 2018 to June 2019)



Source: Bank of Botswana

Note: Only short term bonds are included here.

Capital Market

Botswana ranked favourably in the ABSA Africa Financial Markets Index in 2018

- 3.31 The ABSA Financial Markets Index score, produced by the Official Monetary and Financial Institutions Forum (OMFIF), in collaboration with ABSA Bank, which encompasses pillars such as market depth, access to foreign exchange and market transparency, tax and regulatory environment, improved from position 3 in 2017 to position 2 in 2018. The indicators point to a stable performance with efforts made to improve the local investor base.

Trading activity declined

- 3.32 The average equity daily turnover in the Botswana Stock Exchange (BSE) for the years 2016 and 2017 was relatively the same at P10.2 million and P10 million, respectively (Chart 3.8). However, it

fell to P7.5 million in 2018 and P4.9 million in June 2019. There was evidence of a decline in trading activity as total turnover fell from P2 477 million in 2017 to P1 862 million in 2018, and further to P1 644.5 million in June 2019, while the total value of shares traded decreased from P775 million in December 2017 to P583 million and P428.5 million in December 2018 and June 2019, respectively. The BSE attributes the drop in turnover to various occurrences in the year under review and the prior years, including the reorganisation of investment mandates in 2018 by some of the largest pension funds in the country (subsequent to the dissolution of investment management contracts at two of the largest local asset managers); the introduction of the minimum brokerage commission of 60 basis points (0.6 percentage points) in April 2016; and a decrease in the price of shares.

Bond indices improved

- 3.33 Both corporate and government bonds have been performing well in the market and should improve domestic financing conditions in the future. The Corporate Bond Index improved by 3.3 percent from 180.7 in December 2017 to 186.7 in December 2018 and 192.9 in June 2019, while the Government Bond Index also increased by 3.6 percent from 178.1 to 184.4 in the same period, and further to 187.0 in June 2019 (Table 3.7). There was an increase from 41 bonds in 2016, to 43 bonds in 2017 and 49 bonds in 2018 listed on the Botswana Stock Exchange. Ten new bonds came on board in 2018 compared to eight in 2017. This cushioned the impact of the four bond delistings in 2018.

Government dominated the bond market

- 3.34 Government bonds, on average, accounted for close to 65 percent of bond market capitalisation over the three years to 2018. The share of Government in the bond market rises to around 80 percent, when quasi-government and parastatal bonds are included (Chart 3.9). Over the one-year period to December 2018, Government accounted for 69 percent bond market capitalisation compared to 64 percent in the previous year.
- 3.35 As a percentage of GDP, the bond market remains very small and stagnant. Over the three years to 2018, bond market capitalisation averaged 7 percent of GDP.

Stock market indices decline

- 3.36 As at December 31, 2018, the BSE domestic market capitalisation amounted to P42.4 billion, compared to P44.4 billion in December 2017 (Table 3.7). The domestic market capitalisation declined to P40.8 billion in June 2019. Meanwhile, the proportion of domestic market capitalisation to GDP has been declining over the years, from 48.7 percent as at the end of 2007 to 22.3 percent as at the end of December 2018, and 21.9 percent in March 2019.
- 3.37 In 2018, the Domestic Companies Index (DCI) decreased by 11.4 percent compared to a decline of 5.8 percent in 2017. The general decline in the index is attributable to reduced earnings of a majority of listed companies²², which resulted in the annual decrease in prices per share. The failure of Choppies (Pty) Ltd to submit its audited financial report on time also had an impact on the DCI in 2018. It contributed 4.7 percentage points to the 11.4 decline in the DCI. Table 3.7 shows growth rates of traded shares and market capitalisation.

²² According to Botswana Stock Exchange, in 2018, eight companies registered positive price changes, fourteen registered negative price movements and four closed the year with 2017 share prices.

Table 3.6: BoBC Stop Out Yields for 2018/19

Period	14 day	91 Day
	Yield (Percent)	Yield (Percent)
June 2018	1.50	1.55
July 2018	1.52	1.55
August 2018	1.52	1.55
September 2018	1.55	1.55
October 2018	1.55	1.59
November 2018	1.55	1.59
December 2018	1.59	1.59
January 2019	1.60	1.66
February 2019	1.60	1.66
March 2019	1.63	1.68
April 2019	1.63	1.72
May 2019*	1.62	1.73
June 2019*	1.62	1.72
BoBC Stop Out Yield range	1.50- 1.63	1.54 – 1.73

Source: Bank of Botswana

**Following the discontinuation of the issuance of the 14-day BoBC in May 2019, the stop-out yield for the two months is for the 7-day BoBC.*

3.38 Table 3.7 indicates that there is room to grow the bond market and indeed the whole stock market in Botswana as an alternative financing avenue away from the traditional bank loans and advances, and to some extent, government grants and support for businesses. The recent privatisation of parastatals, such as Botswana Telecommunications Corporation (BTC) has added some impetus to the growth of the stock market. While in other countries the dominance of government bonds would be seen as government crowding out the private sector, this is not the case in Botswana. This is a deliberate effort by government to aid in

the development of both equity and bond markets, in an effort to spur the economy by having a well-developed and robust stock market, which is able to finance business expansions and start-ups.

Table 3.7: Selected Botswana Stock Exchange Indicators

Period	Shares Traded		Domestic Stock Market Capitalisation (P million)	Domestic Companies Index	Foreign Companies Index	Government Bond Index	Bond Market Capitalisation (% of GDP)
	Volume (million)	Value (P billion)					
2016	784	2.6	46 304	9 400.7	1 585.8	169.6	7.2
2017	775	2.5	44 408	8 860.1	1 574.9	178.1	7.9
2018	583	1.9	42 406	7 853.5	1 570.3	184.4	7.3
2019 (March)	156	0.3	42 212	7 885.6	1 566.3	185.9	7.4
2019 (June)	101	0.5	40 804	7 622.5	1 564.6	187.0	...

Source: Botswana Stock Exchange

Note: ...denotes data not yet available

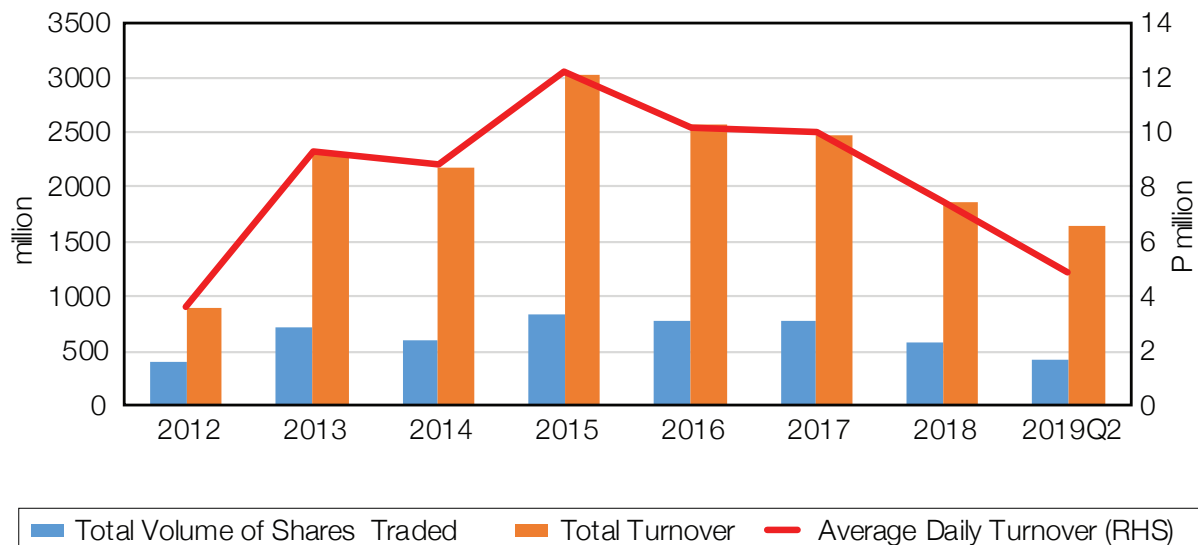
*Non-Bank Financial Institutions**Gross insurance premiums and pensions contributions increased*

- 3.39 Non-Bank Financial Institutions, particularly pensions and insurance, are funded by contractual savings in the form of pension contributions and gross insurance premiums. The gross premiums for life insurance increased by 16 percent from P3.2 billion in 2016 to P3.7 billion in 2017. All life insurance companies maintained adequate capital levels as at December 31, 2017. In the same period, annual pension contributions increased from P3.7 billion in 2016 to P4 billion in 2017. The pension funds industry was financially sound and stable as at December 31, 2017. In Botswana, the majority of pension funds' assets are under the defined contribution pension schemes (DC) as opposed to defined benefit pension schemes (DB), indicating that the public sector and major private sector businesses do not have contingent liabilities to cater for future retirees but rather pay pension obligations on a continuing basis.

(d) Macro-Financial Linkages and Contagion Risk*Banks have significant linkages with the rest of the financial system and the real sector*

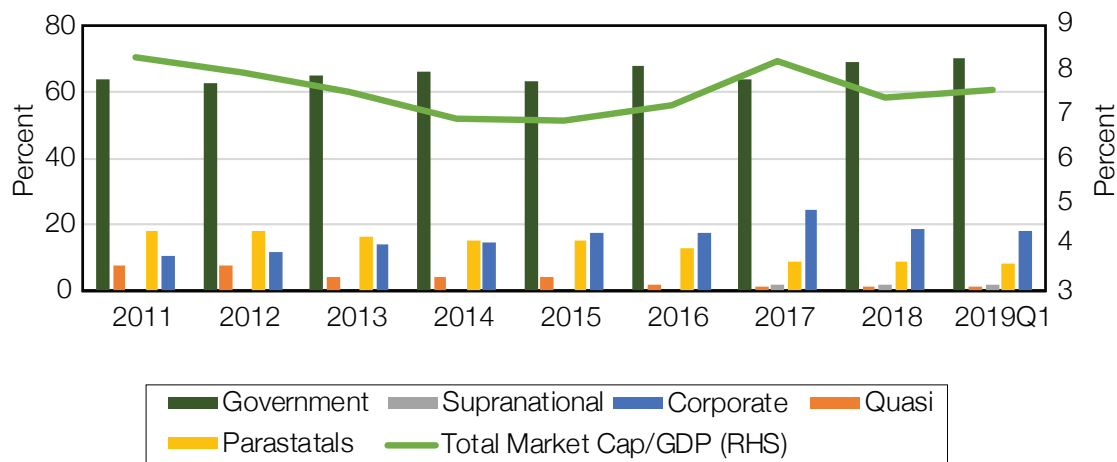
- 3.40 Financial stability vulnerabilities could also arise from risk concentrations and interlinkages between different sectors of the economy through different transmission channels, such as the macro-financial channel, the bond demand channel, and the bank lending channel. It is important for these linkages to be assessed with a view to determining the possible impact of a financial crisis on macroeconomic developments and vice versa. Figure 3.1 shows the interconnectedness of the financial system with the domestic and external economy (i.e., macro-financial linkages).
- 3.41 Total banking sector assets as a proportion of total financial sector assets was 45 percent (2017: 42.7 percent) in 2018 whereas NBFIs assets as a ratio of total financial sector assets was 55 percent (2017: 57.3 percent). A larger proportion of commercial banking assets are with households, followed by non-financial corporations, and lastly with NBFIs. Banking sector assets as a percentage of GDP increased from 50.7 percent in 2017, to 52.0 percent in 2018 and 52.1 percent in March 2019.

Chart 3.8: Stock Market Liquidity Indicators



Source: Botswana Stock Exchange
Note: Total turnover is in Pula million

Chart 3.9: Sectoral Bond Market Capitalisation/ Total Market Capitalisation



Source: Botswana Stock Exchange

3.42 The ratio of total financial sector assets (banks and NBFIs) to GDP averaged 117 percent between 2015 and 2018 (Chart A2). Thus, any instability in the financial system has great potential to adversely affect the economy in a significant way. There is, therefore, a need to continually monitor the interlinkages for vulnerabilities, which could pose risks to financial stability and the economy.

i. Exposure of Commercial Banks to Non-Bank Financial Institutions and Government

Banking sector funding dominated by NBFIs

3.43 The banking industry has significant exposure to NBFIs. As at June 30, 2019, 18.5 percent of the banks total deposits were from the NBFIs sector compared to 19.3 percent the same period in 2018. On the other hand, commercial banks' lending to NBFIs is less pronounced at 3.8 percent of total credit (Chart 3.10). Commercial banks' exposure to government is low, with credit to government averaging 2 percent between 2016 and the first quarter of 2019. Meanwhile, government deposits at commercial banks averaged 10 percent during the same period. Most of these deposits belong to parastatal organisations.

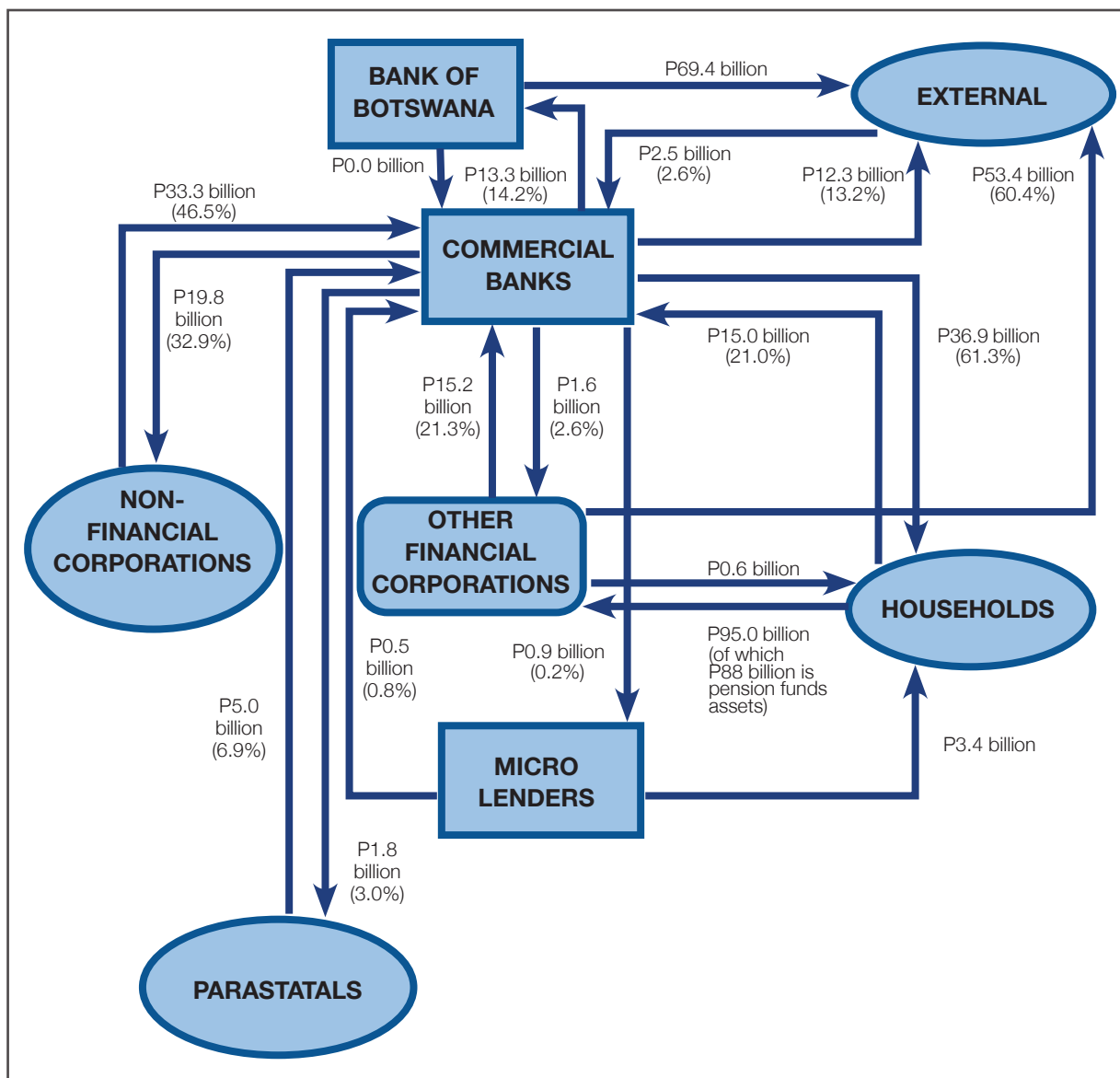
ii. Risk Concentrations

Insurance and pensions sectors highly concentrated

3.44 Insurance companies could affect financial stability and contribute to systemic risk through the three potential transmission channels, namely failure to provide critical services; inability to mitigate risk and compensate for loss with respect to systemically important counterparties; and with regard to risk to systemically important financial markets²³. In a highly concentrated market, failure by a dominant insurance company may leave a significant gap in the provision of critical risk mitigation services to the economy as remaining companies may not be able to fill the void because of their small size. The failure to have an alternative service provider could amplify the effect of an insurance company's distress on the real economy. The dominance of one insurance company in Botswana exposes the country to the risk that in the event it ceases to operate it may not be possible to have adequate provision of insurance services to the economy; hence, it can be considered as a domestically systemic financial institution, which requires additional supervisory attention. The top three life insurance companies have a market share of over 90 percent of the assets of the life insurance sector and consequently dominate in gross premiums written (Chart 3.11).

²³ French et al: *Insurance and Financial Stability*, Bank of England Quarterly Bulletin, 2015 Q3.

Figure 3.1: Macro-Financial Linkages (June 2019)



Source: Bank of Botswana and NBFIRA

Note: The percentages indicate shares of loans/deposits for the sector.
 Balances from BoB to the external sector represents net foreign assets of the central bank.
 Balances from other financial corporations to the external sector are pension funds' assets invested offshore.
 Balances from commercial banks to the external sector are commercial banks' balances due from foreign banks.
 Balances from Bank of Botswana to commercial banks are insignificant.

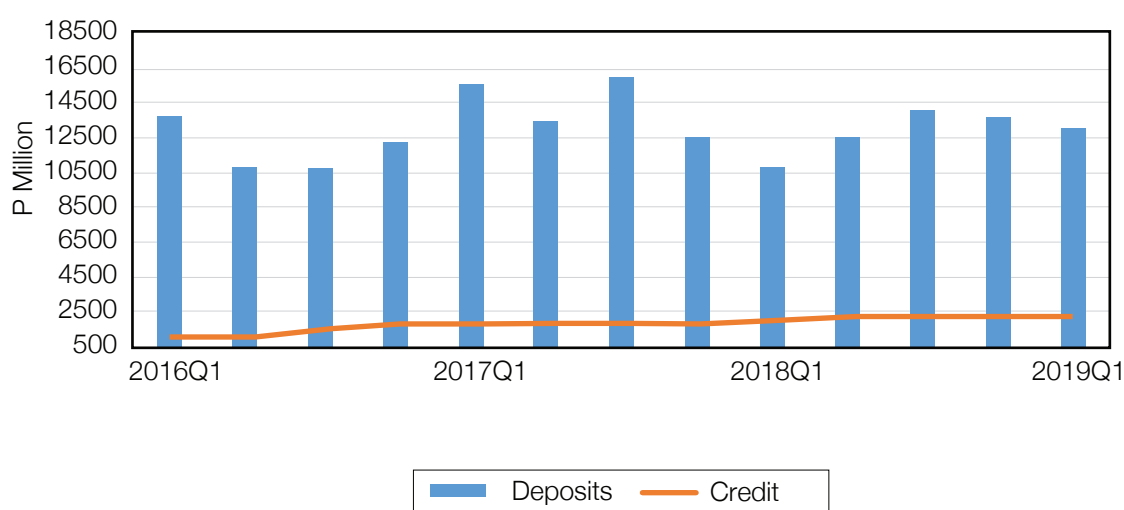
3.45 Pension funds play a vital role in the financial system and could potentially impact the stability of financial markets in an economy. First, stability in the performance of funds, preserves the wealth of retirees, confidence and positive expectations about future prospects, thus sustains economic activity. Second, pension funds have an impact on the liquidity of banks because of the large deposits they hold, and lastly, related thereto, they could impact the financial system through their investment behavior and sentiments. Withdrawal of significant amount of pension funds deposits from commercial banks may cause liquidity challenges, especially for smaller banks due to their dependency on this source of funding.

3.46 The Retirement Funds Act (Cap 27:01) allows pension funds to invest a maximum of 70 percent of the total holdings offshore; meaning at least 30 percent of assets should be invested in Botswana. The law also requires that

annuities must be purchased exclusively from insurance providers operating in Botswana²⁴. Nevertheless, there is a concern that the annuity market is not deep enough to be beneficial to consumers because of lack of competition and shortage of annuity related products.

3.47 Over the last 10 years, pension funds' assets have grown by 132 percent from P34 billion in 2007 to P79 billion in December 2018; increasing further to P88 billion in June 2019. Measured in relation to the size of the domestic economy, the assets of pension funds amounted to 41.6 percent of GDP as at December 2018 and 45 percent in the first quarter of 2019 (Chart 3.12). More than 70 percent of these funds are held by the Botswana Public Officers Pension Fund (BPOPF).

Chart 3.10: Commercial Banks Exposure to NBFIs



Source: Commercial banks

²⁴ Annuities are fixed sums of money paid to retirees at specified agreed intervals, to provide them with a stream of income until their death.

3.48 Table 3.8 shows penetration ratios for the insurance, pension funds and medical aid sectors and these reflect both the trends and relative importance of the respective industries in the economy. The insurance penetration ratio, has been constant at around 3 percent over the years while that of pensions grew from 43.2 percent in 2012 to a peak of 50.6 percent in 2015, but declined to 41.6 percent in 2018. The growth of the pension industry and relatively bigger asset base was aided by the move from defined benefit scheme to define contribution scheme and the increasing preference by employers and employees for pension contribution schemes rather than gratuity (at the end of contract).

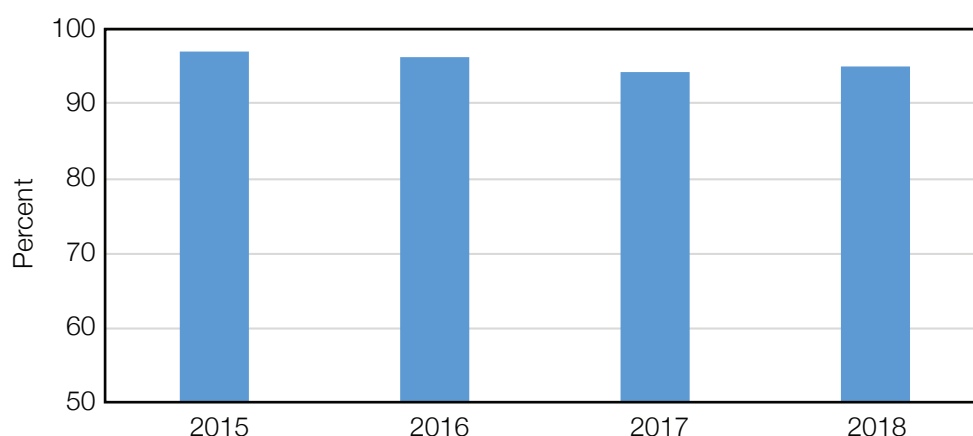
3.49 The medical insurance remains relatively small when compared to other types of risk insurance. This suggests that in terms of monitoring financial vulnerabilities, the performance of medical aid schemes has a much smaller macro impact.

(e) Banking Sector Stress Testing Results

Banking sector safe and sound

3.50 Banks are an important and major player in the financial system stability. Hence, their safety and soundness is crucial to maintaining financial stability. Overall, the banking sector continues to be generally adequately capitalised, liquid and profitable. The sector maintained quality assets and sufficient liquid buffers in 2018 and the first quarter of 2019 as shown in Table 3.9. This condition of banks in June 2019 serves as the basis for the June 2019 stress tests.

Chart 3.11: Share of Assets of top 3 Life Insurers to Total Life Insurance Assets



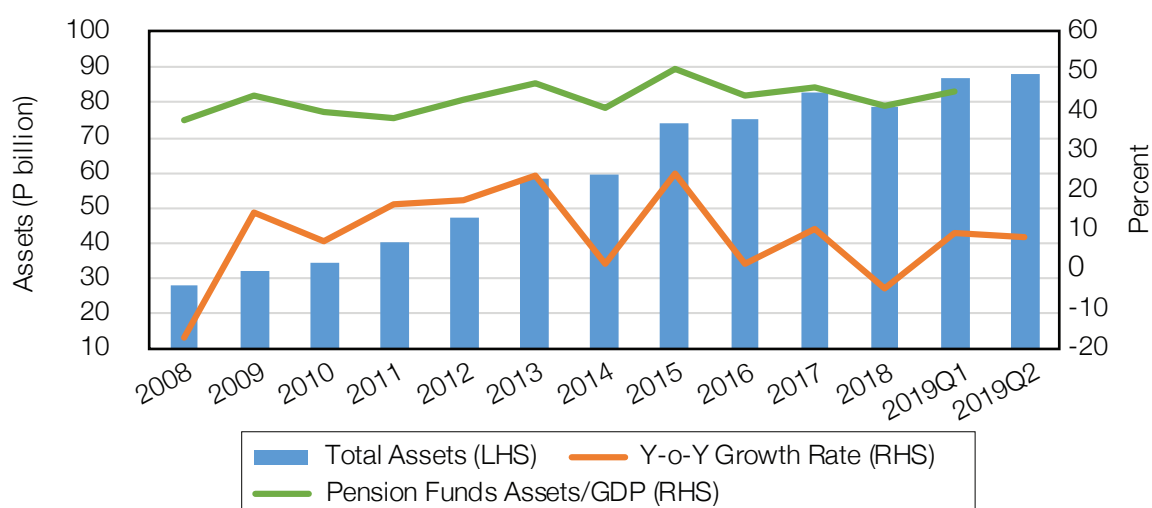
Source: Non-Bank Financial Institutions Regulatory Authority

3.51 The Bank conducts stress tests on the banking sector to assess the resilience of banks to plausible credit and liquidity risk shocks, among others (Box 3.2). The credit risk test focuses on the impact of non-performing loans shock on the level and adequacy of a bank's capital. Meanwhile, the liquidity risk test covers both sides of the balance sheet to determine the level of available unencumbered liquid assets that could be used to meet near term payment obligations when faced with loss of funding and counterparty cash drains. The aim of the liquidity stress test is to assess the ability of a bank to survive unexpected liquidity drain without recourse to any outside liquidity support, such as the central bank or inter-bank market.

Banking sector resilient

3.52 Commercial banks are generally resilient to shocks, but breach regulatory requirements under stress. The June 2019 stress tests (Table 3.10) assess the resilience of banks when subjected to a moderate shock as well as a severe shock. For the credit risk, banks breach the capital adequacy prudential limit of 15 percent, at 9.4 percent after a moderate shock of an additional 10 percent of performing loans becoming NPLs. This worsens to 5.1 percent in the severe scenario, where it is assumed that 15 percent of previously performing loans become NPLs. In terms of the ratio of NPLs to total loans, the ratio under stress increased to 14.2 percent (in the moderate scenario) and 19 percent (severe shock) from a baseline of 4.7 percent.

Chart 3.12: Trends in Pension Funds' Assets



Source: Commercial banks

3.53 In the liquidity risk test, banks show resilience to a deposit run in the moderate scenario, particularly the large banks, which survive for 25 days, while small banks survive for only 16 days. Under the severe stress conditions, large banks survive for 17 days and small banks survive for a much shorter 11 days. Shorter survival horizons for small banks are indicative of growth in loans (which are illiquid) and overall accumulation of wholesale deposits.

These scenarios do not take into account the availability of lender of last resort and other credit facilities provided by the Bank of Botswana (central bank). Accordingly, these stress results should not be interpreted to mean that the banks would default under these scenarios.

Table 3.8: Penetration Ratios of Selected Non-Bank Financial Institutions

Penetration Ratios	2012	2013	2014	2015	2016	2017	2018
Insurance Penetration Ratio ¹ (Percent)	3.3	3.0	2.7	3.2	2.6	2.9	2.7
Pension Penetration Ratio ² (Percent)	43.2	46.9	40.7	50.6	44.0	46.1	41.6
Medical Aid Penetration ³ (Percent)	-	-	0.58	0.54	0.51	0.52	0.56

Source: NBFIRA

Notes: 1. Calculated as Gross Written Premiums as a share of GDP.

2. Calculated as pension funds' assets as a share of GDP.

3. Calculated as medical aid funds' assets as a share of GDP.

Table 3.9: Banking Sector Financial Soundness Indicators

Capital Adequacy (Percent)	Dec 2017	Mar 2018	Dec 2018	Mar 2019	Jun 2019
Core Capital to Unimpaired Capital ¹	68.3	67.6	68.0	70.6	69.0
Tier 1 Capital to Risk-Weighted Assets ²	13.3	12.3	13.2	14.1	13.0
Unimpaired Capital to Risk-Weighted Assets (Capital Adequacy Ratio) ³	19.3	18.1	17.9	18.8	17.7
Asset Quality (Percent)					
NPLs to Gross Loans	5.3	5.3	5.4	5.2	4.7
NPLs Net of Specific Provisions to Unimpaired Capital	12.3	14.9	15.0	11.9	10.6
Specific Provisions to NPLs	53.7	45.1	42.7	49.4	52.8
Liquidity (Percent)					
Liquid Assets to Deposits (Liquidity Ratio) ⁴	16.6	15.7	17.8	19.1	17.7
Advances to Deposits (Intermediation Ratio)	85.2	87.5	84.2	81.5	84.1
Profitability/Efficiency (Percent)					
Return on Average Assets (ROAA)	1.9	2.8	2.8	2.6	2.8
Return on Equity (ROE)	16.3	23.2	23.3	21.4	22.9
Cost to Income	59.9	55.8	58.5	59.1	56.3

Source: Bank of Botswana

Notes: 1. Prudential lower limit is 50 percent.
2. Prudential lower limit is 7.5 percent -Basel II (prior to January 2016, it was 4 percent - Basel I).
3. Prudential lower limit is 15 percent.
4. Prudential lower limit is 10 percent.

Table 3.10: June 2019 Commercial Banks' Stress Test Results

Scenario/Results	Risk Category		
	Credit	Liquidity	Interest
BASELINE SCENARIO	Capital Adequacy Ratio (CAR) of 17.7 percent 5.4 percent NPLs/Total loans	Perfect Asset Liability match, leading to 30 days survival	Banks start off with a CAR of 17.7 percent
MODERATE SCENARIO DESCRIPTION OF SHOCK	10 percent of Performing loans become Non-Performing	Bank run simulation based on Assets' Hair-cuts and Liabilities' Run-off Rates	150 basis point cut in Policy Rate
RESULTS	Banking system breaches the prudential limit with CAR of 9.4 percent. NPLs/Total Loans ratio increases to 14.2 percent, a sign of increasing vulnerability	Large banks survive 25 days Small banks survive 16 days	Loss of P125.9 million in interest income 17.5 percent CAR (change in CAR not significant at -0.2 percentage points).
SEVERE SCENARIO DESCRIPTION OF SHOCK	15 percent of previously performing loans become non-performing	Bank run simulation based on higher Assets' Hair-cuts and Liabilities' Run-off Rates greater than in the moderate scenario	350 basis points cut in policy rate
RESULTS	Banking system breaches the prudential limit with CAR of 5.1 percent. NPL/Total Loans ratio increases to 19 percent, a sign of increasing vulnerability	Large banks survive 17 days Small banks survive 11 days	Loss of P293.8 million in interest income. 17.2 percent CAR (change is -0.4 percentage points).

Source: Bank of Botswana

Box 3.2: Stress Tests Assumptions

Credit Risk

Credit risk is the potential that a borrower or counterparty to a credit transaction will fail to meet obligations in accordance with the agreed terms. The level of Non-Performing Loans (NPLs) is an indicator of credit risk for a bank. In the Stress Testing Model, the credit shock scenario models a general decline in the asset quality of individual banks subject to calibrated shocks. Generally, the increase in NPLs can be a certain percentage of either existing NPLs or existing performing loans. In the moderate scenario, the stress tests assume ten percent of existing performing loans become non-performing, while the shock applied in the severe scenario is 15 percent.

An increase in NPLs means that the bank has to undertake additional provisioning; the increased provisioning requirements will reduce the value of Risk Weighted Assets as well as capital. This assumed transmission mechanism would lead to a decline in the Capital Adequacy Ratio (CAR).

Liquidity Risk

Liquidity risk refers to lack of cash and other liquid assets to meet maturing obligations and/or funding an increase in assets. The purpose of the liquidity stress is to test the ability of banks to meet near-term payment obligations when faced with the loss of funding and counterparty cash drains. The test uses hair-cuts for asset holdings and run-off rates for liabilities to estimate the number of days a bank is likely to survive a bank run without assistance of the central bank or any other sources of financing.

In the case of liquidity stress testing, a hair-cut refers to a percentage of asset value that a bank cannot access within a short period to meet

urgent and high value customer demands. A run-off rate is the value of a liability that a bank has to meet within a short period. Different hair-cuts and run-off rates are assumed for different categories of assets and liabilities, respectively. In the severe shock, the magnitudes of hair-cuts and run-off rates are higher than in the moderate scenario for some asset and liabilities classes. The survival horizon is given as number of days out of 30 days.

Interest Rate Risk²⁵

This test considers the direct interest risk, incurred by a financial institution when the interest rate sensitivities of assets and liabilities of banks are mismatched. The calculation of the risk consists of two parts reflecting flow and stock impacts of interest rate changes. The test works with the repricing gap information. It calculates the changes in interest income and interest expenses resulting from the gap between the flow of interest on the holdings of assets and liabilities in each category. The gap in each time band or repricing category shows how net interest income will be affected by a given change in interest rates. The model extends to assessing how this change in interest rate will affect capital.

The model assumes 150 basis points (in the moderate scenario) and 350 basis points (in the severe scenario) cuts in the Policy Rate and assesses how this interest rate shock affects banks' net income and balance sheets.

²⁵ This is interest rate risk in the banking book.

4. FINANCIAL MARKET INFRASTRUCTURE²⁶ AND REGULATORY DEVELOPMENTS

(a) Payments and Settlement Systems

The domestic economy is increasingly becoming automated

- 4.1 Developments and trends in the payments and settlement platforms point to an economy that is increasingly becoming automated/computerised with growing usage of electronic funds transfers and mobile phone payments. Cheque clearances are now automated. The Botswana Interbank Settlement System (BISS) (owned and operated by the Bank of Botswana) and the Botswana Automated Clearing House (BACH) (owned and run by the Bankers Association of Botswana) are the two systemically important payments systems in Botswana. Chart 4.1 shows BISS transactions by value and volume for the years 2014 to 2018²⁷. The number of BISS transactions fell from 177 725 in 2017 to 175 080 in 2018. By value, the transactions fell from P2 198 billion in 2014 to P1 414 billion in 2018 period having peaked at P3 675 billion in 2015.
- 4.2 The volume and value of cheque transactions show a similarly declining trend (Chart 4.2). The volume and value of cheques declined from 1.657 million and P32.723 billion in 2014 to 0.9 million and P20.437 billion, in 2018 respectively. This equates to a 44 percent decline in the volume of cheques used and 38 percent decline in value in this period. The clearing systems were largely resilient in handling large volumes of transactions without any major disruption during the period under review.

Demutualisation of BSE

During 2018, the Botswana Stock Exchange (BSE) demutualised into a limited company

- 4.3 The BSE is the seventh among twenty-eight stock exchanges in Africa to have undergone demutualisation, which is expected to bring forth efficiencies that will enable it to discharge its

mandate and drive value for shareholders and stakeholders. Henceforth BSE changed its name to Botswana Stock Exchange Limited (BSEL). In addition to improving efficiency at the BSE, NBFIRA approved the rules regulating market makers on the BSEL, effective January 1, 2019. The purpose of the market makers on the BSE is to provide liquidity in listed securities by submitting both bids and offers for a designated security during the designated market making session.

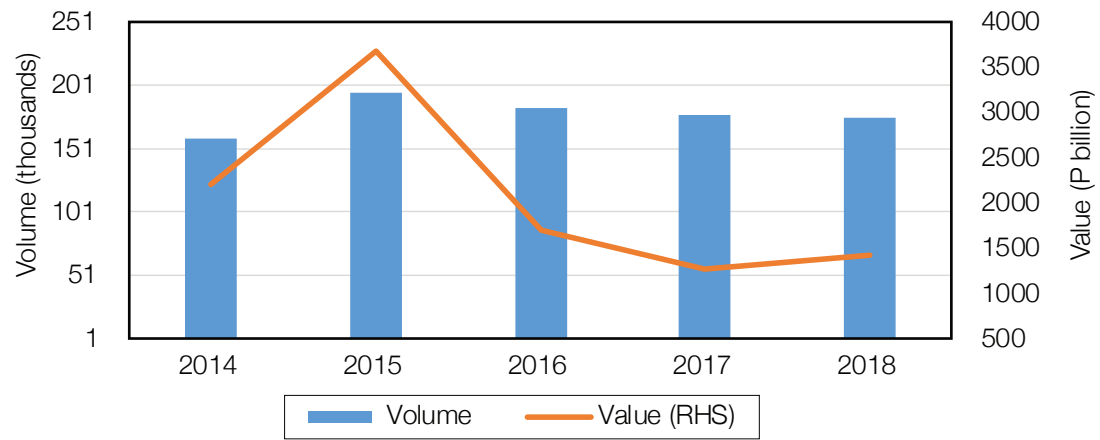
New CSD System is being implemented

- 4.4 The Central Securities Depository (CSD) is a key market infrastructure used for the clearing and settlement of securities transactions carried out on the BSEL. It was introduced to eliminate risks such as the loss, mutilation and theft of physical certificates and facilitates achievement of Delivery versus Payment (DVP), with payment and delivery taking place simultaneously. It further makes clearing and settlement of securities more efficient by reducing errors and delays associated with manual paper-based processing. In 2019, the BSEL and CSD Botswana commenced the implementation of a new CSD system with new functionalities that enable it to connect in real time to the BISS, thus ensuring settlement in central bank money and reducing counterparty risk. It therefore improves settlement efficiency and compliance with the International Organisation of Securities Commissions (IOSCO) Principles for Financial Markets Infrastructures.

²⁶ Financial Market Infrastructures (FMIs) refers to critically important institutions responsible for providing clearing, settlement and recording of monetary and other transactions. Key FMIs in Botswana include the Botswana Interbank Settlements System, the Botswana Automated Clearing House and the Central Securities Depository.

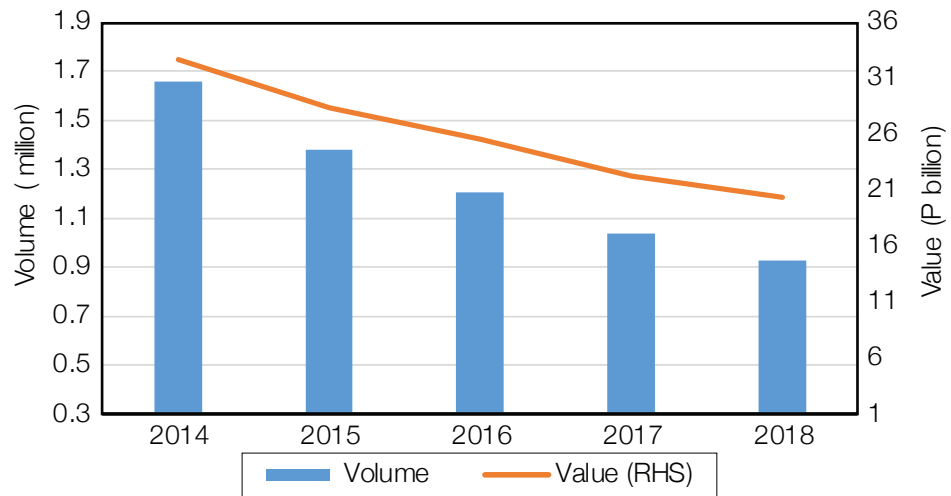
²⁷ Effective June 2016, the BISS values are adjusted to exclude BACH net settlement instructions and cancelled payments.

Chart 4.1: BISS Transactions



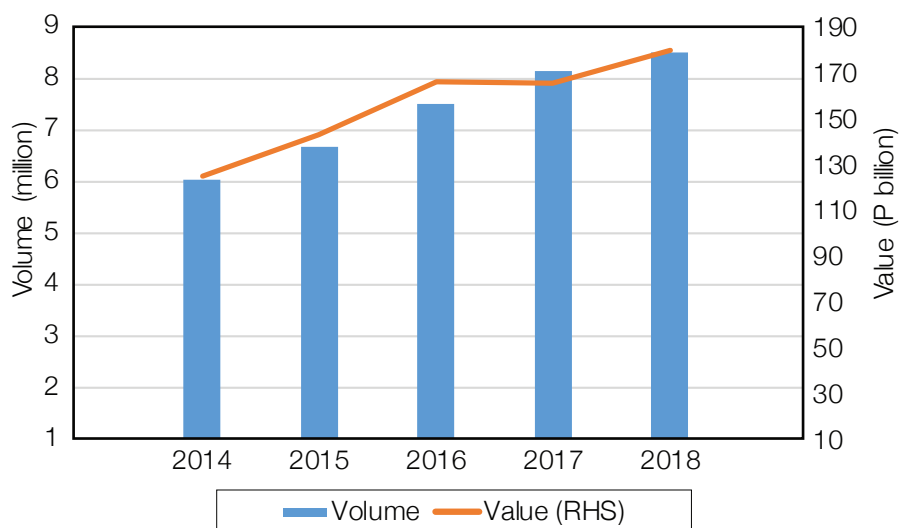
Source: Commercial banks

Chart 4.2: Cheques



Source: Commercial banks

Chart 4.3: EFTs



Source: Commercial banks

4.5 Therefore, payment and settlement platforms are becoming dependent in terms of timeliness and finality (Chart 4.3). However, they are generating different types of risks. Hence, it is imperative that the country guards against system failure due to faults in operations and cybersecurity risk.

(b) Regulatory Developments

Financial Stability Council

The Financial Stability Council officially launched in February 2019

4.6 The Financial Stability Council (FSC), a body established to ensure coordinated macro-prudential monitoring, analysis and response with respect to financial stability matters, comprises the Ministry of Finance and Economic Development (MFED), the Bank, Non-Bank Financial Institutions Regulatory Authority (NBFIRA), and Financial Intelligence Agency (FIA).

4.7 Following the establishment of the FSC (Box 4.1), members signed a Memorandum of Understanding (MoU), which provides a framework for the formulation and implementation of policies that contribute to strengthening the resilience of the domestic financial system; to assist in early identification of systemic threats and financial sector vulnerabilities; to exchange information on matters relating to financial stability and financial market regulation; and to coordinate the management of financial crisis and adopt preventive strategies, in accordance with their respective statutory mandates. The FSC therefore complements regulation and supervision of individual and distinct sectoral and “issues” oversight by the individual policymaking and regulatory bodies.

The Financial Stability Council (FSC) met on August 6, 2019

The FSC met to deliberate on several market, regulatory and public interest developments and issues relating to the stability, performance and prospects for the financial sector. Overall, the macroeconomic environment and the financial sector are assessed to be broadly stable with limited risks to financial stability.

4.8 The assessment of vulnerabilities, risks and conclusions were made with respect to the following:

- (a) Global economic prospects are projected to moderate due to trade and geopolitical tensions, as well as policy uncertainty, with modest adverse impact on the domestic economy. Weak regional performance and adverse weather conditions also add to dampened domestic growth momentum. The global response to weaker growth and subdued inflation imply maintenance of low interest rates and further loosening of monetary policy, led by major central banks, with potential for capital flows to the deeper, more liquid and stable emerging markets. The external sector vulnerabilities (i.e. trade shocks, capital outflows and adverse exchange rate movements), which could present the greatest potential for elevated financial stability risks, were balanced with respect to Botswana.
- (b) Other vulnerabilities, such as potential for excessive credit growth and leverage, maturity mismatches, liquidity management challenges and macrofinancial linkages between banks and non-bank financial institutions, were generally contained and posed minimal risk to financial stability. Nevertheless, excessive maturity mismatches and occasional structural excess liquidity continue to constrain orderly management of market liquidity.
- (c) The rate of increase in credit growth remains aligned to prospects for output and income growth, but continues to be heavily skewed towards the household sector. The financial health of the corporate sector remains good, albeit with isolated high profile closures and threats to business sustainability. Credit to the corporate sector relative to the size of the economy remains low by international standards. The real estate market continues to perform satisfactorily despite a similarly low sectoral credit to GDP ratio. Lack of organised housing market and publicly available property price index constrain price discovery and activity in the mortgage market.
- (d) The deposit structure and concentration of funds remains skewed towards the business sector, institutional investors and large depositors. There are no immediate concerns, but there can be occasional liquidity management challenges, particularly for individual banks, with potential to constrain policy transmission. A less diversified and predominantly short-term base for deposits as well as volatile funds also detract from long-term business, project and infrastructure funding.
- (e) Governance and accountability issues for some non-bank financial institutions that arose in the last two years are being addressed through regulatory and supervisory responses, as well as on-going investigations and prosecutions, as necessary. Therefore, risks of loss of funds and financial instability emanating from the subsector remain low. Even then, the respective regulators will continue to enforce and enhance measures that are aimed at improving professional and ethical conduct by both individuals and firms in the financial services industry by:
 - (i) promoting governance frameworks that will guide appropriate behaviour;
 - (ii) strengthening individual fiduciary responsibility and accountability, including strict application of the 'fit and proper' requirements, and introducing responsibility mapping to ensure that individuals are held accountable for their actions;

(iii) addressing the 'rolling bad apples' phenomenon, which relates to individuals accused of financial misconduct in one institution ending up at another financial institution without disclosure of previous misconduct. Therefore, financial institutions are being encouraged to introduce and maintain, for industry reference, a list of staff members terminated/released from duty on the basis of being found to have committed acts of impropriety, dishonesty and other forms of serious misconduct. The regulators also routinely reassess the fitness and propriety of employees in functions deemed capable of causing significant harm to the financial institution or its customers; and encouraging private sector responses to misconduct in the financial system.

(f) While Botswana remains on the Financial Action Task Force (FATF) list of jurisdictions with strategic anti-money laundering/combating the financing of terrorism (AML/CFT) deficiencies, the authorities continue to implement the required action plans to address identified deficiencies. Therefore, the associated vulnerabilities in this regard are expected to recede going forward.

(g) The payments infrastructure remains stable with orderly accommodation of new payment platforms and methods, in particular following the promulgation of the Electronic Payments Regulations.

4.9 The FSC also initiated discussion on a deposit protection fund and concluded consultation on the macro-prudential policy framework. The framework outlines the possible and situational policy responses to developments that could include prescriptions with respect to loan-to-value, debt-to-income, and debt service ratios, among others, as measures or tools to foster safe and sound lending practices.

Box 4.1: Remarks at the Official Launch of the Financial Stability Council and Signing of the Memorandum of Understanding by Governor Moses D. Pelaelo on February 26, 2019

The official launch of the Financial Stability Council is the culmination of several significant steps and consultations. Among these are: first, the initial assessment by the Bank of the need and prospective role of a Financial Stability Council, articulated in the 2018 Monetary Policy Statement; second, consultations by officials within the auspices of the Bank of Botswana/Ministry of Finance and Economic Development Working Group, and also involving the Non-Bank Financial Institutions Regulatory Authority and the Financial Intelligence Agency; third, approval for establishment of the Council by the Honourable Minister of Finance and Economic Development obtained in April 2018; and fourth an inaugural meeting to consider an outline of the Macroprudential Policy Framework and review of the draft Memorandum of Understanding in September 2018.

The Financial Stability Council comprises the leadership of the Ministry of Finance and Economic Development (MFED), the Bank of Botswana (the Bank), Non-Bank Financial Institutions Regulatory Authority (NBFIRA), and the Financial Intelligence Agency (FIA), institutions that are involved in developing legislation and regulations, policymaking and supervision with respect to the whole or facets of the financial sector. It is acknowledged that the respective institutions have unique mandates, objectives, oversight frameworks and operational spheres, albeit mostly related. In this regard, the Financial Stability Council is not established to usurp or dilute the role of the respective institutions, which is neither feasible nor desirable. Rather it is to share information and where, desirable,

facilitate collective and coordinated approach to financial sector monitoring frameworks and crisis resolution.

As indicated in the 2018 Monetary Policy Statement, coordinated oversight is necessary because, while the relevant institutions are distinctly and individually supervised at a micro level, the financial system encompasses interconnected relationships and activities and is subject to common and transferable risks. Therefore, the Council is designed to facilitate collaboration and coordination in the four areas of: sharing of data and information for purposes of monitoring and risk assessment; overseeing and guiding the macro-prudential policy framework and implementation; regular briefings, consultations and policy review with respect to relevant developments; and a structured and coordinated response to any financial system imbalances and resolution as may be necessary.

Therefore, the signing of the Memorandum of Understanding today by the respective institutions represents an undertaking to collectively safeguard the continuing soundness and integrity of the financial system. Moreover, going forward, it also facilitates the development of mechanisms and channels for sharing of data and consultation. The thought process for establishment of a Financial Stability Council also involves consideration of a robust legislative backing for the work of the Council and this will accordingly be facilitated in the revised Bank of Botswana Act.

The more urgent work programme for the Council in the short to medium term is, firstly, the publication of the Financial Stability Report, as an anchor publication, providing accountability in the areas of assessment of financial stability risks and mitigation measures. Second is agreement on a Macroprudential Policy Framework that is relevant for Botswana, in terms of systemic risk mitigation,

as well as recognising the gaps in financial inclusion and development.

Third, there is a specific need to address the challenges arising from implementation of the Anti-Money Laundering and Combatting the Financing of Terrorism protocols and requirements. Fourth, and related thereto, is the requirement to decisively address the incipient misconduct and governance challenges in the financial sector, deriving from greed and/or misunderstanding or incompetence with respect to fiduciary responsibilities, as well as opportunistic crime and fraud. Fifth, consultation during 2019 will also involve consideration of a deposit protection fund for the country, to guarantee access to deposits up to a specified threshold, in the event of bank failure. Lastly, cooperation and collaboration among the Council members would be critical in the timely update and renewal of legislation and policies to retain and improve effectiveness of supervision, monitoring and guidance for the financial sector.

Proposal for the Establishment of a Deposit Insurance Scheme (DPF)

RPC approves DPF concept paper

- 4.10 A concept paper on the establishment of a deposit protection fund (DPF) was approved by the Bank's Regulatory Policy Committee (RPC) on March 25, 2019. Stakeholder consultations (with banks and the Financial Stability Council) commenced in the second half of 2019.

Developments at FATF and European Union regarding Botswana²⁸

Botswana grey listed by the FATF

- 4.11 Botswana is on the Financial Action Task Force (FATF) list of jurisdictions that have been identified as having strategic Anti-Money Laundering and Combating Financing of Terrorism (AML/CFT) deficiencies. The grey listing is due to identified technical deficiencies and ineffectiveness. Adverse listing by the FATF and European Union has the potential to adversely affect the conduct of financial services in Botswana and vis-à-vis the rest of the world. For example, with respect to correspondent banking and custodian relationships thus undermining Botswana's ability to conduct international trade and transactions. Following the release of the list, United States (US) authorities issued a reminder to financial institutions under their jurisdiction to consider the risks associated with dealing with countries flagged as having strategic AML/CFT deficiencies such as Botswana²⁹. Global financial institutions were thus reminded of their obligations to comply with the due diligence obligations as stipulated in the US laws.
- 4.12 Some incidents of failure to make foreign placements and derisking, including delays when undertaking international transactions as a result of increased due diligence with respect to entities in Botswana³⁰, have thus been reported. This is an indication of how debilitating the effects of grey listing could be on trade, conduct of financial transactions and investment by the private sector, households and government.

- 4.13 Botswana has made a high-level political commitment to work with the FATF and the Eastern and Southern Africa Anti-Money Laundering Group (ESAAMLG) to strengthen the effectiveness of its AML/CFT regime and address any related technical deficiencies. Botswana undertook to implement its action plan to accomplish these objectives, including by:

- (i) assessing the risks associated with legal persons, legal arrangements, and non-profit organisations (NPOs), and developing and implementing a risk-based comprehensive national AML/CFT strategy;
- (ii) developing and implementing risk-based AML/CFT supervisory manuals;
- (iii) improving its analysis and dissemination of financial intelligence by the Financial Intelligence Agency (FIA), and enhancing the use of financial intelligence among the relevant law enforcement agencies;
- (iv) developing and implementing a CFT strategy, and ensuring terrorist financing (TF) investigation capacity of the law enforcement agencies;
- (v) ensuring implementation without delay of targeted financial sanctions measures related to terrorist financing and proliferation of weapons of mass destruction; and,
- (vi) applying a risk-based approach to monitoring non-profit organisations.

²⁸ On February 13, 2019, the European Union released a list of jurisdictions, (including Botswana) with strategic deficiencies in their anti-money laundering and countering terrorists financing regimes.

²⁹ US Treasury Department, Financial Crimes Enforcement Network Advisory, October 31, 2018.

³⁰ Sunday Standard Newspaper, February 3-9, 2019.

Botswana at an advanced stage of developing a national cyber strategy

- 4.14 Just like in many other countries, Botswana's financial system relies heavily on cyber and digital infrastructure as well as network of computer systems to provide financial services to clients. The financial system is increasingly dependent on digital channels and related infrastructure to perform critical functions, such as maintenance of clients' databases, and facilitates both the domestic and cross border transactions through various channels and platforms. However, use of such infrastructure exposes jurisdictions to cyber risks and threats. Currently, the country does not have a national cyber security strategy. However, several laws related to cyber and computer related crimes have been enacted. Recent developments include the launch of the European Union Cyber Resilience Initiative for Botswana³¹. Its objective is to support the development of the national cyber strategy. Botswana has identified aviation, finance, government information technology, communications and critical national information infrastructures to be the first to be assessed in the pilot phase.
- 4.15 Due to high dependency of the overall economic system and, in particular, the financial system on cyber infrastructure, cyber security risks have increased globally to a level where they are considered a financial stability risk. The impact of cyber-attack could result in disruption of business operating systems, work stoppages and cause negative impact on balance sheets of financial institutions. The international cyber threat landscape shows that cyber threats are on the increase and the main perpetrators are states and individual criminals.

³¹ <https://eeas.europa.eu>

5. CONCLUSION AND OUTLOOK

Overall, vulnerabilities that could elevate risks to financial stability remain balanced in the short-to-medium term, but are expected to increase due to Botswana's grey listing

5.1 Early warning macro-prudential indicators and the banking sector stress test results do not show any heightened risks to financial stability. The large size of other non-bank financial institutions (i.e., other financial corporations) in the domestic economy and the financial system warrants close monitoring of any risks that can potentially stem from this sub-sector. The June 2019 stress test results show that banks are resilient to credit shocks and have adequate liquid assets to meet short-term demand, though with elevated vulnerabilities for small banks.

5.2 Despite the anticipated positive domestic and international macroeconomic indicators, there is elevated risk to financial stability due to the country's being listed as having strategic AML/CFT deficiencies. If the country fails to implement the action plans expeditiously and within the proposed time frames, it may find itself outside the international trading and financial system, a situation that might precipitate financial instability going forward. Already, the financial system is experiencing some disruptions in undertaking international transfers. Moreover, there has been reported cases of termination of correspondent banking relationships as a result of Botswana being placed in the FATF watch list or grey listed.

5.3 The banking and non-banking sectors remain stable and sound. Nevertheless, concern regarding misconduct risk in the non-bank financial sector is being addressed.

5.4 On a positive note, the successful court cases by the Non-Bank Financial Institution Regulatory Authority (NBFIRA) against wayward fund managers should restore public confidence in the system and assure the public that their interests are to some extent protected.

5.5 It should be noted, for public information, that the FSC and/or its constituent members, particularly Bank of Botswana and NBFIRA do not underwrite the solvency of any one particular institution.

APPENDIX

Table A1: Macro - Economic and Financial Stability Indicators

	Dec 2016	Dec 2017	Dec 2018	Mar 2019	Jun 2019
Financial Stability Indicators	Percent				
Corporate Sector (Percent)					
Corporate sector debt to GDP	10.4	10.1	10.5	10.4	...
Debt to Equity	37.6	38.1	...	...	...
Relative size of financial sector (percent of GDP)	114.4	115.6	115.8	...	...
Household (Percent)					
Household debt to GDP	18.1	18.4	18.5	18.4	...
Household debt to income	45.8	46.0	46.0	46.0	...
NPL (household)	4.9	4.5	4.2	3.9	...
Botswana Public Officers Pension Fund (percent of GDP)	44.0	46.1	41.6	...	...
Pension funds offshore investments (percent of GDP)	26.5	29.0	23.9	27.0	...
Real Estate (Percent)					
Mortgage loans to Total loans	22.1	21.7	21.2	21.7	21.0
NPL (mortgages)/Total mortgage loans	6.2	6.0	6.0	6.1	6.2
Total mortgage loans/GDP	7.5	7.3	7.2	7.2	...
Macro-Economic Indicators					
Economic growth	4.3	2.9	4.5	5.5	...
Inflation	2.8	3.3	3.2	3.3	2.8
Foreign exchange reserves (percent of GDP)	45.0	44.5	39.6	...	...
Current account balance (P Million)	13 222	9 613	3 522	...	...
Month of imports	17.4	16.0	18.5	14.9	...
Exports (percent of GDP)	47.1	34.2	34.3	40.4	...
Imports (percent of GDP)	37.7	29.5	32.6	38.3	...
Government					
Government debt to GDP	22.3	20.8	23	...	...
Government debt to revenue	47.0	43.4	44.5	...	...

	Dec 2016	Dec 2017	Dec 2018	Mar 2019	Jun 2019
	Percent				
Government net financial position to GDP	4.7	(0.6)	1.1	...	...
Government interest payments to revenue	1.9	1.7	1.2	...	...
Government interest payments to GDP	0.6	0.6	0.4	...	...
Government guaranteed debt/GDP	5.8	5.5	5.2	...	...
Government lending to state owned enterprises (P million)	1 933.5	2 429.2	2 429.2	...	...
General government to GDP	14.0	14.3	14.5	...	...
Government deposits to GDP	20.8	20.3	15.8	...	...
Government expenditure to GDP	33.0	32.4	33.1	...	...
Government employment to total employment	47.6	48.0	48.5	...	...

Source: Bank of Botswana, Statistics Botswana, NBFIRA and Commercial Banks

Table A2: Selected Countries' Debt to GDP Ratios

	Household debt to GDP		Corporate debt to GDP	
	2017	Q3 2018	2017	Q3 2018
Botswana ³²	18.4	18.4	11.7	12.3
Chile	43.7	44.7	94.8	96.3
Mauritius	34.9	20.9	50.2	53.0
South Africa	33.1	33.0	38.0	39.3
United States	77.8	76.4	73.2	73.9
Euro	58.0	57.6	106.4	106.4

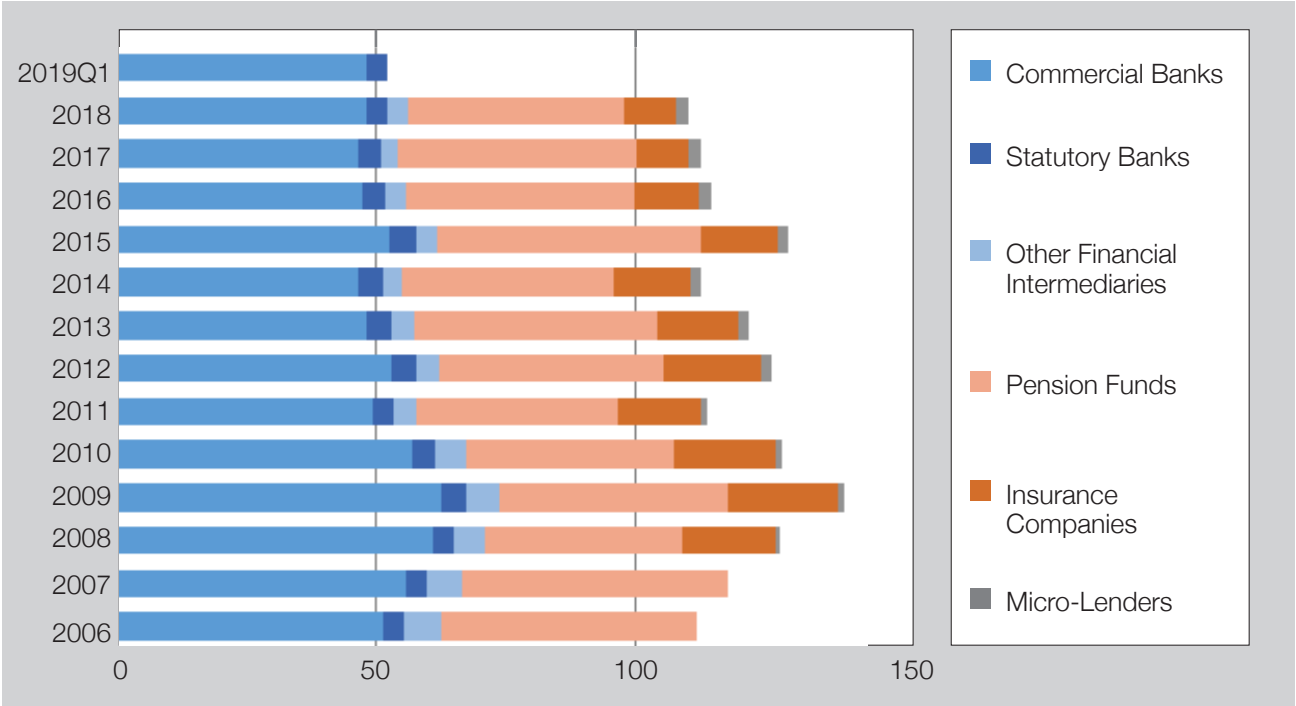
Source: Bank of Botswana, Bank for International Settlements, International Monetary Fund

³² 2018 Data for Botswana are for December 2018

Chart A1: Financial Systems Vulnerabilities' Heat Map

Risk Category	Global Economy	2016	2017	2018	2019	2020	2021
	Underlying Indicator	Risk Level					
Global	Output (year)						
	Inflation (Year)						
	Financing Conditions						
Risk Category	Domestic Economy	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1
	Underlying Indicator	Risk Level					
Macro	Economic growth						
	Foreign exchange reserves (percent of GDP)						
	Month of Imports						
	Current account balance						
	Public Debt to GDP						
	Business confidence index						
	Pensions Assets/GDP						
Credit	Credit to GDP gap						
	Total Credit to GDP						
	Household Debt to GDP						
	Household Debt to Income						
	NPL (household)						
	NPL (banking sector)						
	Large exposures to bank capital						
	Large exposures to total deposits						
	Mortgage Loans/Total Loans						
	Total Mortgage Loans/GDP						
	NPL (mortgages)/Total Mortgage Loans						
	Commercial Real Estate Loans/Total Loans						
	Corporate Sector Debt to GDP						
Solvency	NBFIs Credit to Total Credit						
	Leverage Ratio						
Funding	Insurance Capital Adequacy						
	Corporate cost to income ratio						
	Intermediation ratio (loans to deposits)						
	Stock market: Domestic capitalisation growth						
Contagion	Stock market: Domestic-capitalisation/GDP						
	Insurance concentration -top 5						
	Pension fund concentration						
	Micro Lender concentration						
Key	NBFIs deposits to total deposits						

Chart A2: Assets of Financial Institutions as a Percentage of GDP



Source: Bank of Botswana, NBFIRA

