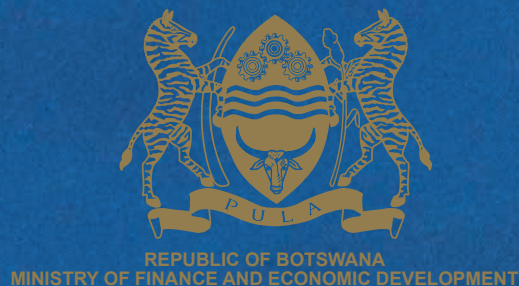


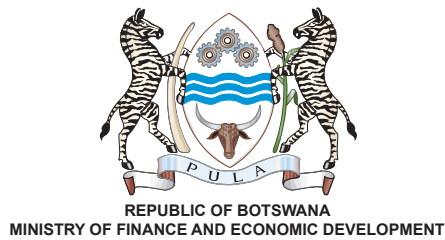
FINANCIAL STABILITY REPORT



MAY 2020

FINANCIAL STABILITY COUNCIL

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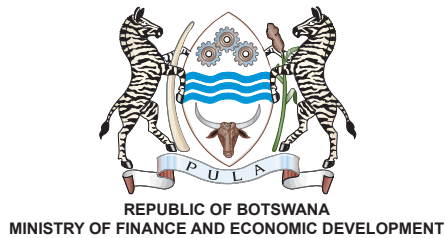
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ABBREVIATIONS

| | |
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| AML/CFT | Anti-Money Laundering and Combating the Financing of Terrorism |
| BACH | Botswana Automated Clearing House |
| BISS | Botswana Interbank Settlement System |
| BoBCs | Bank of Botswana Certificates |
| BSEL | Botswana Stock Exchange Limited |
| CSD | Central Securities Depository |
| DPF | Deposit Protection Fund |
| D-SIFIs | Domestic Systemically Important Financial Institutions |
| DTI | Debt-to-Income |
| EFTs | Electronic Funds Transfers |
| EMDEs | Emerging Market and Developing Economies |
| FATF | Financial Action Task Force |
| FIA | Financial Intelligence Agency |
| FMI | Financial Market Infrastructure |
| FSB | Financial Stability Board |
| FSC | Financial Stability Council |
| GDP | Gross Domestic Product |
| GFMA | Global Financial Markets Association |
| GFSR | Global Financial Stability Report |
| ICRG | International Cooperation Review Group |
| IMF | International Monetary Fund |
| IOSCO | International Organisation of Securities Commission |
| LIBOR | London Interbank Offered Rate |
| MFED | Ministry of Finance and Economic Development |
| MOU | Memorandum of Understanding |
| NBFIs | Non-Bank Financial Institutions |
| NBFIRA | Non-Bank Financial Institutions Regulatory Authority |
| OECD | Organisation for Economic Cooperation and Development |
| REER | Real Effective Exchange Rate |
| SACU | Southern African Customs Union |
| WEO | World Economic Outlook |

ACKNOWLEDGEMENT

The May 2020 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.



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PREFACE

Purpose of the Report

The Financial Stability Report (FSR) provides an assessment of the vulnerabilities to the stability and resilience of the Botswana financial system by the Financial Stability Council (FSC).¹ The Report provides analytical and performance updates for the financial sector and its impact on economic activity and welfare; encourages informed engagement on financial stability issues; and helps provide information that major participants in the Botswana financial industry and elsewhere may use as input into their own financial risk assessment processes.

Macroprudential Policy Framework

The primary objective of the macroprudential policy framework is to limit systemic risk and its transmission to the broader economy. This is predicated on the observation that the financial system is interconnected and vulnerable to contagion risk, with the result that financial crises can spill over more rapidly to the real economy. At the same time, sectoral or broader economic weaknesses could adversely affect the financial system and trigger instability or crisis. In turn, this can cause widespread disruption to the provision of financial services, with serious negative consequences for macroeconomic stability and the real economy.

In order to limit systemic and spill over or contagion risks, financial sector regulators pursue a number of key intermediate objectives, among others: minimising and mitigating excessive credit growth and leverage; mitigating and preventing significant maturity mismatches and market illiquidity; controlling structural vulnerabilities in the financial system that arise through interlinkages; limiting direct and indirect exposure concentrations from domestic systemically important financial institutions (D-SIFIs); reducing the systemic impact of misaligned incentives with a view to reducing moral hazard; monitoring systemic risks from activities outside the banking system, and implementing appropriate policy responses to contain such risks; and strengthening the resilience of the financial system and related infrastructure to aggregate shocks.

The macroprudential policy framework identifies the external sector of the domestic economy, through trade shocks, capital outflows and adverse exchange rate movements, as having the greatest potential for elevated financial stability risks. The FSR provides an analysis of these domestic vulnerabilities, how they interact internally, as well as the potential impact and response to spill overs from regional and global financial stability developments and trends. Financial soundness and macroeconomic indicators are used to assess risks to and within the financial system. Relevant and appropriate policy instruments and tools have been identified for possible use as intervention measures during periods of financial instability. These instruments and policy tools would be adjusted accordingly to mitigate the envisaged threats.

Decision-making Process

The FSC is not a decision-making body; it is a coordinating and cooperation mechanism. It is the responsibility of the respective regulatory authorities to ensure that relevant macroprudential instruments are timeously activated to combat vulnerabilities, with a view to maintaining long-term financial stability.

Announcement of Macroprudential Policy Decisions

The outcome of the FSC deliberations are communicated through a Press Release, shortly after a Council meeting. The Press Release informs the public of the discussions and conclusions regarding the stability of the domestic financial system. It further highlights the key risks in the financial system and recommendations to address such vulnerabilities. Any issue regarding policy action is communicated through a circular to all affected financial institutions by the relevant agency i.e., MFED, the Bank, NBFIRA or FIA. The circular provides a brief description that links the identified risk with the intermediate objective, and explains how measures taken are expected to mitigate the risk.

¹ The FSC is an interagency committee made up by senior officials from the Bank of Botswana (Bank), Ministry of Finance and Economic Development (MFED), Financial Intelligence Agency (FIA) and Non-Bank Financial Institutions Regulatory Authority (NBFIRA) for collaboration, coordination and sharing of information on financial stability issues and macroprudential policy reforms. The FSC is chaired by the Governor, while the Bank acts as the secretariat.

1. EXECUTIVE SUMMARY

1.1 **Financial conditions have tightened significantly in recent weeks, following the outbreak and subsequent spread of COVID-19 (coronavirus) and the attendant rise in uncertainty, globally.**

This abrupt rise in uncertainty has fuelled downside risks to global growth and a rise in financial stability risks. In major economies, equity market volatility increased sharply, with stock markets in major global markets, notably the US, Euro area and Japan, recording significant declines. For corporates, the tightening financial conditions mean higher funding costs in the capital markets, leading to firms likely postponing their investment decisions. This, coupled with reduced household consumption, dampens economic activity and poses additional risks to financial stability.

1.2 **Most of the prognosis on the impact of COVID-19 on economic growth suggest a short-term large impact and a sharp deterioration in output, but subsequent containment and recovery of economic activity in 2021.**

Generally, downward revisions to projections have been made for 2020 growth, especially in the first half of the year. The April 2020 World Economic Outlook (WEO) estimates that global economic growth will contract by 3 percent from the January 2020 growth forecast of 3.3 percent, while the Organisation for Economic Cooperation and Development (OECD) forecasts that growth will be lower by 0.5 percentage points. The impact of COVID-19 is expected to be significantly negative in the short term (first half of 2020), with subsequent recovery in economic activity in the medium term as the spread of the virus is contained and possible remedies, including vaccines, are developed.

1.3 **Meanwhile, Botswana's financial system continues to be resilient, buoyed by accommodative monetary conditions and characterised by strong capital buffers and high levels of liquidity, as well as continued profitability.**

The vulnerabilities relating to potential for excessive and rapid credit growth, liquidity and funding risk, corporate leverage, inflated asset valuations and interlinkages between banks and non-bank financial institutions (NBFIs) have, thus far, been generally contained. However, the protracted pandemic could elevate risk of financial instability. Stress tests also suggest some degree of resilience that would, however, be weakened by the full effects of the coronavirus, especially if the second wave could occur.

1.4 **Domestic economic activity increased by a lower rate of 3 percent in 2019 than the previously forecasted 3.6 percent. Growth is further expected to be significantly lower than the earlier forecast 4.4 percent for 2020.**

The growth outlook has been revised downwards, taking into account the country's openness and integration with the regional and global economies. It is expected that weaker global demand will affect exports, particularly of diamonds, tourism, hospitality (hotels and restaurants), manufacturing, transport and communications. Notably, recovery and continuing robust performance of the mining and tourism sectors were key inputs in the earlier projection for the higher rate of growth for 2020. In addition, global supply chain disruptions will constrain domestic production and consumption, further dampening the growth forecast, which was to benefit from improved performance of the non-mining sectors. It is, therefore, certain that the drivers of economic growth will not hold, with the domestic economy now projected to contract by 5.4 percent in 2020 before rebounding by 6.8 percent in 2021 (WEO, April 2020). A more pessimistic projection by the MFED suggests a contraction of 13.1 percent in GDP in 2020, rebounding by 3.9 percent in 2021. These projections suggest loss of output equivalent to the last two years' growth, resetting the economy to the 2017 levels.

1.5 **Domestic credit growth remains moderate and in line with GDP growth rates, posing minimal risk to financial stability.**

Annual growth in commercial bank credit fell from 7.7 percent in December 2018 to 7.6 percent in the twelve months to December 2019, before rising to 10.2 percent in February 2020. The acceleration in credit growth in February 2020 was mainly due to faster annual increase (15.2 percent) in lending to households. Business credit expanded by 2.3 percent over the twelve months to February 2020, as compared to 1.7 percent contraction in December 2019 and 10 percent expansion in December 2018. Commercial bank credit continued to be dominated by household borrowing, which accounted for the largest proportion at 63.7 percent in February 2020, unchanged from December 2019 (December 2018: 60.2 percent). The level of household indebtedness in Botswana is, however, considered low by international standards, at 20.3 percent of GDP (in December 2019), compared to, for example, 105.1 percent, 88.5 percent and 83.8 percent in Norway, Sweden and United Kingdom, respectively. Moreover, household borrowing appears to be in line with trends in personal incomes (reflected in the low debt to income ratio), representing a relatively

stronger debt servicing capacity. A concern would arise when levels of borrowing are out of line with personal income growth, which could amplify the risk or exposure of households and related businesses to economic shocks; thus, adversely affecting their ability to repay debt. Household credit is, however, overly concentrated within the inherently expensive unsecured lending at 70.4 percent, which makes the sector vulnerable to tightening of financial conditions. These risks are, however, moderated to the extent that they are widely distributed to a large number of households employed in different sectors of the economy, a large proportion of which are employed in the public sector. The ratio of non-performing loans (NPLs) to total bank credit was also modest at 4.9 percent in December 2019, from 5.5 percent in December 2018. Overall, there is no indication of excessive and rapid credit growth that could threaten the stability of the financial system.

- 1.6 **There was a slight decrease in market liquidity**, with average daily liquidity falling by P823 million between January and February 2020, from P11.8 billion to P11 billion. This was largely attributable to deterioration of the foreign exchange position on account of a fall in diamond sales in February 2020, from USD551 million (P6.2 billion) to USD355 million (P4.0 billion). This is a major amplification channel of external shocks associated with the COVID-19 pandemic. As such, if the pandemic persists for long and containment measures remain in place, it is most likely that diamond sales will plummet further, leading to erosion of market liquidity in the short to medium term. However, banks continued to be compliant with the minimum liquid asset requirement of 10 percent and were also able to support lending, with a financial intermediation ratio of 82.7 percent in December 2019. The commercial banks' funding structure, however, continues to be concentrated in a few depositors, mainly businesses, reflecting an imbalance in the market and the potential increase in funding costs due to the volatile nature of business deposits.²
- 1.7 **In terms of macro-financial interlinkages and contagion risk, banks maintained significant linkages with the rest of the financial system and the real sector.** As a result, risks emanating from other sectors could easily spread to the banking sector, and vice-versa, thus weakening financial stability. The strong interconnectedness between the banking system and NBFIs sector elevates the risk of contagion in the domestic financial system, although effective regulation across the system,

as well as proper governance and accountability structures moderate the risk.

- 1.8 **The Bank conducted stress tests on the liquidity profiles and profitability of banks to establish their resilience to shocks propagated by coronavirus.** The COVID-19 scenario was presented as the most extreme stress scenario in the local market and resulted in strained liquidity profiles and subdued profitability of domestic banks. The interest rate shock, in particular, takes cue from ongoing herding behaviour to counteract economic slowdown with easy financial conditions. However, for the domestic market, interest income lost through the reduction in the Bank Rate implies that alternative policy measures, such as easing the primary reserve requirement, increasing the eligible collateral pool for access to central bank Credit Facility and tenure of the repo transactions would limit the liquidity constraints that might arise due to the coronavirus. In addition, several macroprudential tools could be applied to contain the liquidity crunch associated with the virus, and to boost credit extension. Overall, these measures should contain the potential vulnerabilities to the stability and resilience of the domestic financial system arising from coronavirus.
- 1.9 **Overall, vulnerabilities and risks to financial stability are elevated in the short term.** The heat map (Appendix: Chart A1), which is the FSC's vulnerability indicator, shows moderate sovereign vulnerabilities; slightly elevated levels of risks to the corporate and household sectors; stable housing prices and stock market indices; low funding costs and sufficient market liquidity; and elevated risk of contagion in the domestic market. These conditions could worsen as developments relating to the coronavirus unfold.
- 1.10 Strategic anti-money laundering and combating the financing of terrorism (AML/CFT) deficiencies and adverse media reports on unsubstantiated missing government funds, however, continue to put pressure on the integrity of the domestic financial system. Concerted efforts are ongoing to implement the required action plans to address identified deficiencies in the country's AML/CFT framework. It is expected that the Financial Action Task Force – International Co-operation Review Group (FATF – ICRG) will update Botswana profile, reflecting significant progress in the implementation of the agreed remedial action plan.

² Business deposits tend to attract higher interest rates.

2. FINANCIAL STABILITY DEVELOPMENTS

(a) Global Financial Stability Developments

The global economy is projected to contract sharply

- 2.1 Global economic activity has been greatly impacted by the containment measures aimed at fighting the COVID-19 pandemic. According to the April 2020 WEO, the output loss associated with the outbreak and accompanying containment measures likely dwarfs the losses that triggered the global financial crisis. As a result, global growth is projected to contract sharply by 3 percent in 2020.
- 2.2 For 2021, global GDP growth is projected to grow by 5.8 percent as economic activity normalises, buoyed by policy support, although with great uncertainty to the growth forecast. First, it is assumed that the pandemic will fade in the second half of 2020, and that containment measures would gradually be withdrawn. In addition, many factors influencing economic growth interact in unpredictable ways, including the progression of the pandemic, the intensity and effectiveness of containment measures, the degree to which supply chains are disrupted, the impact of tightening global financial conditions and volatile commodity prices, among others. Meanwhile, the Global Financial Stability Report (GFSR) of April 2020 notes that the COVID-19 pandemic is a human and health crisis that poses unprecedented economic and financial stability challenges. The measures taken to combat it have triggered an economic downturn, and the financial system has been dramatically affected. Market liquidity has also declined.
- 2.3 The GFSR notes that central banks have been the first line of defence and have employed a four-pronged response to the crisis. First, central banks have significantly eased monetary policy by cutting policy rates, in some advanced countries to historical lows. Second, central banks have provided additional liquidity through open market operations (OMOs), and, third, they have agreed to enhance US dollar liquidity through swap programmes. Finally, central banks have launched a range of new products, including the purchase of risky assets like corporate bonds. Moreover, central banks stand ready to ensure that households continue to have access to credit and have indicated their readiness to expand their balance sheets by about USD6 trillion.
- 2.4 It is noted that sentiments remain weak, although they have calmed recently. Financial conditions are much tighter than at the beginning of the year, with consequential risks for global growth. Emerging market countries have experienced the sharpest portfolio flow reversals on record, with over USD100 billion that has flown out, a larger amount at a much faster pace than during the 2008 crisis, which has led to a further tightening of financial conditions.
- 2.5 The GFSR also indicates that financial institutions' resilience may be tested, as asset managers may face further outflows and be forced to sell assets into falling markets. Among households and firms, default rates are high, and credit markets are at risk. Since early March 2020, yields spreads have skyrocketed and rating agencies have revised upwards the likelihood of downgrades.
- 2.6 For banks, while they have taken coordinated action to inject liquidity, their resilience could be tested in the economic downturn. Investors are concerned about profitability and investment opportunities in the banking sector, and there are fears that banks could act as amplifiers to the crisis.
- 2.7 Overall, central banks are expected to be crucial in dealing with this pandemic, which has not just caused liquidity crisis, but is also about solvency. There is, therefore, a role for fiscal policy, hence monetary policy and fiscal policy should be well coordinated to cushion the impact of COVID-19.
- 2.8 In terms of cooperation, countries have come together to establish relief measures. The G7 countries are working on a debt relief programme for poor countries. The IMF will also provide debt relief for 25 of the poorest countries in the world, and has a lending capacity of USD1 trillion, which could be increased as necessary. Out of the IMF's membership of 190 countries, more than 90 have requested for this funding.
- 2.9 The risk of money laundering and cyber security is reported to have heightened, with cyber-attacks on the rise. Hence, regulators are encouraged to take precautions to ensure safety and counter the risk of money laundering.

2.10 For Botswana, the full extent of the impact of COVID-19 is yet to be determined as developments are still unfolding, suffice to say, just like in other countries, the impact will be considerably larger than what was experienced during the 2008/09 global financial crisis. However, the response so far is consistent with what has been taking place internationally. Emphasis has been on health measures complemented by targeted fiscal policies, particularly because there is still some fiscal space. In the financial sector, policy responses were aimed at banks and other financial institutions, by offering capital relief on the backdrop of high levels of capital, relaxation of some liquidity measures, as well as loan restructuring and repayment holidays.

(b) Regional Financial Stability Developments

Sub-Saharan Africa's growth contracts under COVID-19

2.11 The April 2020 WEO projects Sub-Saharan Africa's output to contract by 1.6 percent in 2020, much lower than the revised growth of 3.1 percent in 2019. Growth is expected to recover significantly in 2021, reaching 4.1 percent, despite the continued uncertain outlook for global growth. Nonetheless, there are challenges resulting from the continued disruptions in oil-exporting countries and weaker than expected growth in some of the largest Sub-Saharan African economies, which, in turn, have contributed to weaker growth forecasts in the region. The two largest economies in the region, Nigeria and South Africa, are expected to contract by 3.4 percent and 5.8 percent, respectively, in 2020, before recovering to 2.4 percent and 4 percent, respectively, in 2021. Fiscal space in the region remains constrained by elevated debt levels and low external buffers.

2.12 Botswana, unlike other countries in the region, continues to have strong external buffers, albeit weakening, and low debt levels. Nevertheless, the foreign exchange reserves are declining, partly due to drawdown by government, in light of the reduction in government revenue and the prolonged weakening of the market for diamonds. This is likely to affect economic performance going forward, posing downward risks to financial stability. Botswana should, therefore, continue to pursue a policy mix that supports growth and promotes economic and revenue diversification.

South Africa's GDP continues to contract, and its sovereign credit rating is downgraded

2.13 The South African economy contracted by 1.4 percent in the fourth quarter of 2019, following a contraction of 0.8 percent growth in the third quarter. According to the South African Reserve Bank's (SARB) April 2020 monetary policy statement, reduction in growth is expected in the short term due to the expected supply and demand constraints imposed by COVID-19 containment measures. SARB has also noted that the uncertainties of the pandemic present a challenge in forecasting domestic activity. Overall, SARB expects GDP to contract by 6.1 percent in 2020 and to grow by 2.2 percent in 2021. In March 2020, Moody's Investor Service (Moody's) downgraded South Africa's sovereign credit rating to "junk" status. According to Moody's, the downgrade was due to continued deterioration in the country's fiscal strength and structurally weak growth. The rating agency does not expect the country's current policy settings to address the underlying problems effectively. Developments in South Africa's growth have implications for Botswana's economic growth, given the two countries' strong economic ties.

(c) Domestic Economic Developments

Uncertain macroeconomic environment in Botswana could heighten financial stability risks

2.14 Output growth was 3 percent in 2019, supported by robust performance of the non-mining sectors. Growth was, however, lower than the 4.5 percent experienced in 2018. Going forward, output is expected to contract in 2020 on the back of developments related to the outbreak of COVID-19. Given the country's openness and integration with regional and global economies, it is expected that weaker global demand will affect exports, particularly of diamonds, tourism, hospitality, travel and manufacturing. In addition, global supply chain disruptions as well as measures imposed domestically to help curb the spread of COVID-19 will constrain domestic production and consumption, further dampening the economic activity going forward.

2.15 The Government budget was in a deficit of P4.1 billion in the third quarter of the 2019/20 fiscal year, representing 2.1 percent of GDP. However, Government expenditure is expected to increase faster than revenue and grants, thus resulting in a larger budget deficit of 3.5 percent of GDP in the fiscal year 2019/20. It is expected that the budget deficit will be funded through domestic

and external debt as well as drawdown of Government savings. These increased financing needs are generally in line with internationally acceptable levels and, as such, are not expected to substantially change the sovereign debt sustainability levels.

2.16 Table A1 in the Appendix shows macroeconomic and financial vulnerability indicators. The proportion of Government debt and guarantees to GDP was 17.9 percent in 2018/19 and is projected to drop marginally to 17.6 percent in 2019/20. Effectively, government debt level remains within the statutory limit of 40 percent of GDP. This notwithstanding, the country's long-term borrowing costs are likely to rise due to a sovereign credit rating downgrade by S&P Global Ratings (S&P). Botswana's 2020 sovereign credit rating for long-term foreign and domestic currency bonds was downgraded from "A-" to "BBB+", while the short-term foreign and domestic currency bonds rating was retained as "A-2". The ratings were undermined by the prolonged weakening of the external market for diamonds, pressures on expenditure due to the increase in public sector wages and the resultant expected gradual decline of the country's strong fiscal and external buffers in the near to medium term. A stable economic outlook was, however, maintained for the country on the backdrop of relatively low external debt compared to external assets.

2.17 Meanwhile, Moody's affirmed the "A2" sovereign credit rating for Botswana but revised the outlook downwards from stable to negative. Moody's revision reflected on the increased risks to Botswana's fiscal strength due to the severe shock to its growth and government revenue, resulting from the impact of the COVID-19 pandemic on the economy and the diamond sector, in particular. Overall, the ratings were supported by Government's relatively strong, albeit deteriorating, fiscal metrics, in particular low debt level, high debt affordability and fiscal and external liquidity buffers that help mitigate the impact of the coronavirus shock. As such, the domestic macroeconomic environment remains stable and conducive for financial stability, notwithstanding the likely rise in sovereign vulnerabilities inflicted by global economic prospects.

3. DOMESTIC MACROPRUDENTIAL ANALYSIS

(a) Sovereign Vulnerabilities

External sector risks likely to increase in the near to medium term

- 3.1 The projected contraction in global output growth, and the deceleration in output growth of the mining sector (due to reduced diamond production and sales) could increase Botswana's susceptibility to risks emanating from the external sector. The country's overdependence on external trade and related revenue i.e., Southern African Customs Union (SACU) and mineral exports revenue, could further amplify vulnerability from external macroeconomic developments.³ Mineral exports revenue directly supports government expenditure and household consumption indirectly; hence, it is filtered through to the rest of the economy. Given the narrow export base, external shocks, especially in the diamond markets, could, severely undermine the external balance outcome in the near to medium term.
- 3.2 The balance of payments was in a deficit of P12 billion in December 2019, a significantly adverse position than the deficit of P4.2 billion reported in December 2018. The deficit in the current year was mainly attributable to government financial obligations and payments for imports in the context of slower growth in exports⁴ and reduced revenue inflow from SACU.

(b) Credit Growth and Leverage

Commercial Banks

Bank credit growth modest

- 3.3 Annual growth in commercial bank credit decelerated from 7.7 percent in December 2018 to 7.6 percent in December 2019, before rising to 10.2 percent in February 2020. Commercial bank loans and advances increased from P58.3 billion in December 2018 to P62.8 billion in December 2019. In addition, credit extended by commercial banks further increased to P63.7 billion in February 2020 owing largely to a faster annual increase (15.2 percent) in lending to households. The increased borrowing by

households was mainly due to an increase in public sector salaries that improved debt servicing ratios, in turn, increasing credit uptake within the sector. Furthermore, the accommodative monetary policy stance maintained by Bank of Botswana during 2019 has been supportive of the borrowing capacity of households. The Bank Rate was reduced from 5 percent to 4.75 percent in August 2019 and to 4.25 percent in April 2020. Similarly, the reduction of the primary reserve requirement to 2.5 percent from 5 percent, effective May 13, 2020, should allow commercial banks to perform the necessary financial intermediation, unconstrained by any liquidity concerns, to support economic activity.

- 3.4 Table 3.1 shows the distribution of commercial bank credit to businesses, households and Government. In February 2020, credit to households was P40.6 billion, an increase from P39.9 billion in December 2019 and P35.1 billion in December 2018. The increase in total credit in February 2020 was driven by a significant increase of 20.8 percent in personal loans. Business loans, on the other hand, expanded by 2.3 percent over the one-year period to February 2020. There was an increase in the uptake of loans by parastatals and mining, which was offset by the significant reduction in credit to the "Manufacturing", "Financial Services" and "Trade" industries. Business credit as a proportion of total credit, declined from 39.8 percent in December 2018 to 36.3 percent in December 2019 (February 2020: 36.3 percent), while the share of household credit increased from 60.2 percent in 2018 to 63.7 percent in December 2019 and February 2020.

- 3.5 Total credit as a proportion of GDP (output) has been growing steadily between 2009 and 2019, recording an average growth of 29.8 percent over the 11-year period (Table A2). This indicates increasing credit allocation to the economy. Overall, the modest increase in credit growth does not reflect indications of overheating of the economy, but rather suggests some scope for increased disciplined and prudent credit extension to support economic activity.

Commercial banks are adequately capitalised

- 3.6 Commercial banks' capital adequacy ratio improved to 18.4 percent in December 2019 from 17.9 percent in December 2018, indicating the sector's resilience to unexpected losses (Table 3.8). The industry's strong capital base is further augmented by the modest level of

³ Diamonds accounted for 79 percent of exports in 2018.

⁴ Exports decreased by 32.5 percent, larger than a reduction of 2.7 percent in imports in 2019.

NPLs to total loans, which declined from 5.5 percent in December 2018 to 4.9 percent, at the end of December 2019. The current economic conditions presented by coronavirus, however, pile pressure on the capital position of domestic banks through a potential increase in NPLs and, in turn, amplifying specific provisions. To counter these effects, commercial banks have granted customers with a good repayment history a 3 months repayment holiday, with a possibility for extension to 6 months, while the Bank is exercising regulatory forbearance in relation to the assessment on NPLs and determination of expected credit losses for regulatory and compliance purposes.

Box 3.1: Tools for Assessing Excessive Credit Growth

Background

One of the objectives of macroprudential policy is to mitigate systemic financial stability risks, which are sometimes precipitated by excessive credit growth. Credit growth that is out of line with trends in economic growth often leads to the build-up of systemic risks to financial stability, which may trigger systemic banking crises. It is, therefore, important to monitor the rate of credit growth. In this regard, the Bank is continually developing and adopting means and tools of assessing whether the rate of credit growth is excessive. Early tools included the desired objective range for credit, which the Bank specified annually. Following the development of better forecasting techniques and the adoption of the inflation forecasting framework, the Bank discontinued this tool. Currently, the Bank calculates some measures based on the Credit-to-GDP ratio, including the Credit-to-GDP gap.

The Desired Range for Credit Growth

This desired range (objective range) was deemed to be compatible with the inflation objective. The calculation of the range considered the inflation objective (target), the projected GDP growth rate, and a measure to account for financial deepening. In 2004, the range was calculated as:

| | | |
|-----------------------------|-----------|---------------------|
| | Assuming: | |
| Inflation Target | | 3.0 – 4.5 |
| + GDP Growth Rate | | 5.0 – 5.5 |
| + Financial deepening | | 2.0 – 2.0 |
| = Credit Growth Rate Target | | 10.0 – 12.0 percent |

Expert judgement was also exercised, and the range was ultimately set at 12 – 15 percent as inflation was higher during that period.

Given the current 3 – 6 percent inflation objective, and assuming a GDP growth rate of 4 – 5 percent, and with the same factor for financial deepening, the desired long-term range would be 9 – 13 percent. Credit growth was 7.6 percent in December 2019, and thus would be below the range. At 10.2 percent in February 2020, credit growth would be within the desired range.

The Credit-to-GDP Gap

The Bank for International Settlements (BIS) defines the Credit-to-GDP gap ("credit gap") as the difference between the Credit-to-GDP ratio and its long-term trend. Borio and Lowe (2002, 2004) documented the property of the Credit-to-GDP gap as a very useful early warning indicator for banking crises. This finding has been subsequently confirmed for a number of countries over a long time span that includes the most recent global financial crisis.

Commercial bank rate of credit growth is moderate and commensurate with the rate of increase in GDP, as measured by the Credit-to-GDP gap, which was below the 10 percent threshold at the end of December 2019 (see Chart below). The low Credit-to-GDP gap indicates scope for sustained economic expansion from positive shocks to financial conditions. Furthermore, the gap has been positive since the global financial crisis, mainly reflecting the 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.

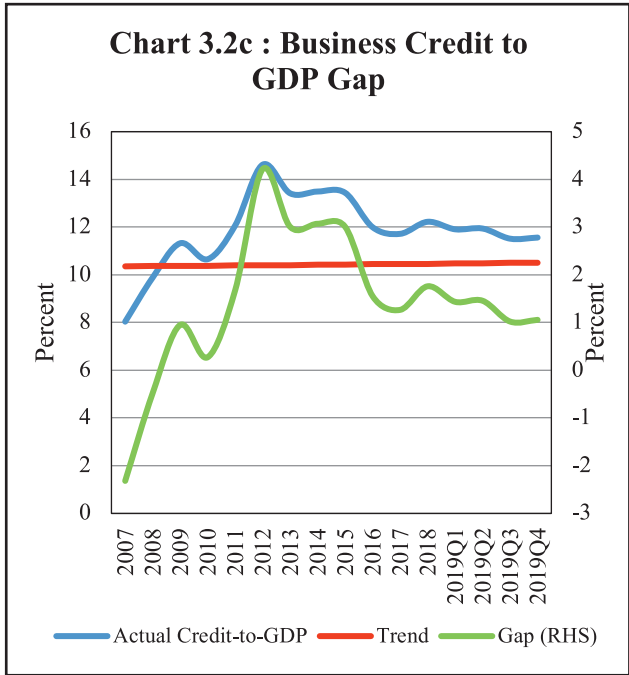
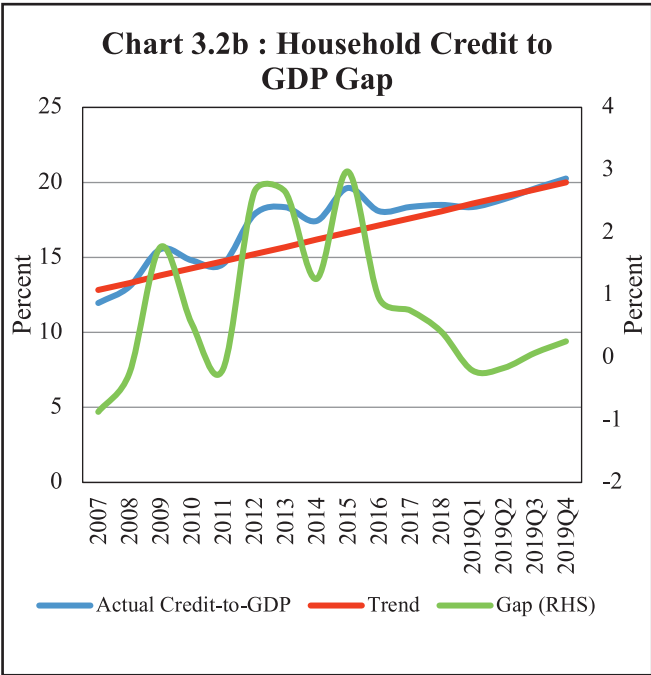
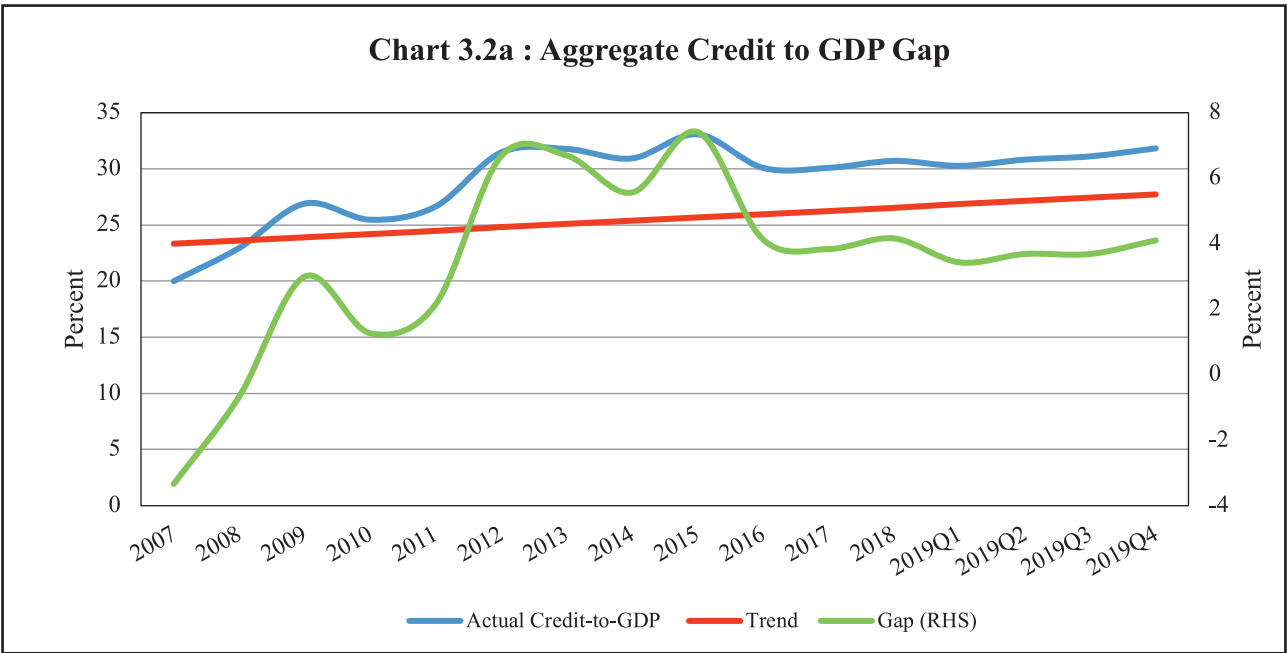


Chart 3.2b shows a slightly positive credit to GDP gap for households in December 2019, indicating that there remains scope for healthy credit expansion in the sector.

Table 3.1: Sectoral Distribution of Commercial Bank Loans¹

| Sector | QUARTERLY | | | | | | | | | | MONTHLY | |
|-------------------------------------|--------------------|------------------|--------------------|------------------|--------------------|------------------|--------------------|------------------|--------------------|------------------|--------------------|------------------|
| | 2018Q4 | | 2019Q1 | | 2019Q2 | | 2019Q3 | | 2019Q4 | | February 2020 | |
| | Amount (P'million) | Percent of Total | Amount (P'million) | Percent of Total | Amount (P'million) | Percent of Total | Amount (P'million) | Percent of Total | Amount (P'million) | Percent of Total | Amount (P'million) | Percent of Total |
| Business | 23 206 | 39.8 | 22 961 | 39.3 | 23 316 | 38.7 | 22 616 | 37.0 | 22 806 | 36.3 | 23 123 | 36.3 |
| Parastatals | 1 159 | 5.0 | 1 222 | 5.3 | 1 800 | 7.7 | 1 405 | 6.2 | 1 851 | 8.1 | 1 763 | 7.6 |
| Agriculture | 1 210 | 5.2 | 1 108 | 4.8 | 1 406 | 6.0 | 1 529 | 6.8 | 1 498 | 6.6 | 1 486 | 6.4 |
| Mining | 316 | 1.4 | 264 | 1.2 | 501 | 2.2 | 551 | 2.4 | 618 | 2.7 | 580 | 2.5 |
| Manufacturing | 3 563 | 15.4 | 3 399 | 14.8 | 3 021 | 13.0 | 2 533 | 11.2 | 1 963 | 8.6 | 2 428 | 10.5 |
| Construction | 1 240 | 5.3 | 1 210 | 5.3 | 1 298 | 5.6 | 1 191 | 5.3 | 1 087 | 4.8 | 1 086 | 4.7 |
| Trade | 5 126 | 22.1 | 4 887 | 21.3 | 4 494 | 19.3 | 4 556 | 20.1 | 4 542 | 19.9 | 4 462 | 19.3 |
| Transport ² | 628 | 2.7 | 572 | 2.5 | 629 | 2.7 | 616 | 2.7 | 654 | 2.9 | 613 | 2.7 |
| Finance ³ | 4 918 | 21.2 | 4 730 | 20.6 | 4 322 | 18.5 | 4 424 | 19.6 | 4 605 | 20.2 | 4 752 | 20.5 |
| Real Estate | 3 881 | 16.7 | 4 455 | 19.4 | 4 476 | 19.2 | 4 413 | 19.5 | 4 495 | 19.7 | 4 428 | 19.1 |
| Electricity and Water | 77 | 0.3 | 92 | 0.4 | 92 | 0.4 | 95 | 0.4 | 90 | 0.4 | 92 | 0.4 |
| Other ⁴ | 1 088 | 4.7 | 1 020 | 4.4 | 1 277 | 5.5 | 1 305 | 5.8 | 1 404 | 6.2 | 1 435 | 6.2 |
| Households | 35 126 | 60.2 | 35 400 | 60.7 | 36 861 | 61.3 | 38 485 | 63.0 | 39 949 | 63.7 | 40 591 | 63.7 |
| Unsecured Lending | 23 686 | 67.4 | 23 770 | 67.1 | 25 170 | 68.3 | 26 737 | 69.5 | 28 002 | 70.1 | 28 561 | 70.4 |
| Motor Vehicle | 1 800 | 5.1 | 1 794 | 5.1 | 1 862 | 5.1 | 1 912 | 5.0 | 2 017 | 5.1 | 2 052 | 5.1 |
| Mortgage | 9 640 | 27.4 | 9 836 | 27.8 | 9 828 | 26.7 | 9 836 | 25.6 | 9 930 | 24.9 | 9 978 | 24.6 |
| Government | - | - | 2.4 | 0.0 | 0.6 | 0.0 | 0.2 | 0.0 | 0.1 | 0.0 | 0.4 | 0.0 |
| Total Commercial Bank Credit | 58 332 | | 58 363 | | 60 177 | | 61 102 | | 62 755 | | 63 715 | |

Source: Commercial Banks

Notes:

1. Sectoral contributions are calculated as percentage of total commercial banks loan, and subsector contributions are calculated as percentage of sector loans.
2. Transport and Communications.
3. Finance and Business Services.
4. Includes non-resident businesses.

The Household Sector

Households vulnerable to sudden and sharp tightening of financial conditions

3.7 Annual rate of growth in household credit was 13.7 percent in the twelve months to December 2019, higher than 6.2 percent in December 2018 (Chart 3.1). Compared to the aforementioned periods, the month of February registered a higher annual growth rate of 15.2 percent. Commercial bank household credit continued to account for a larger proportion of credit at P40.6 billion in February 2020 constituting 63.7

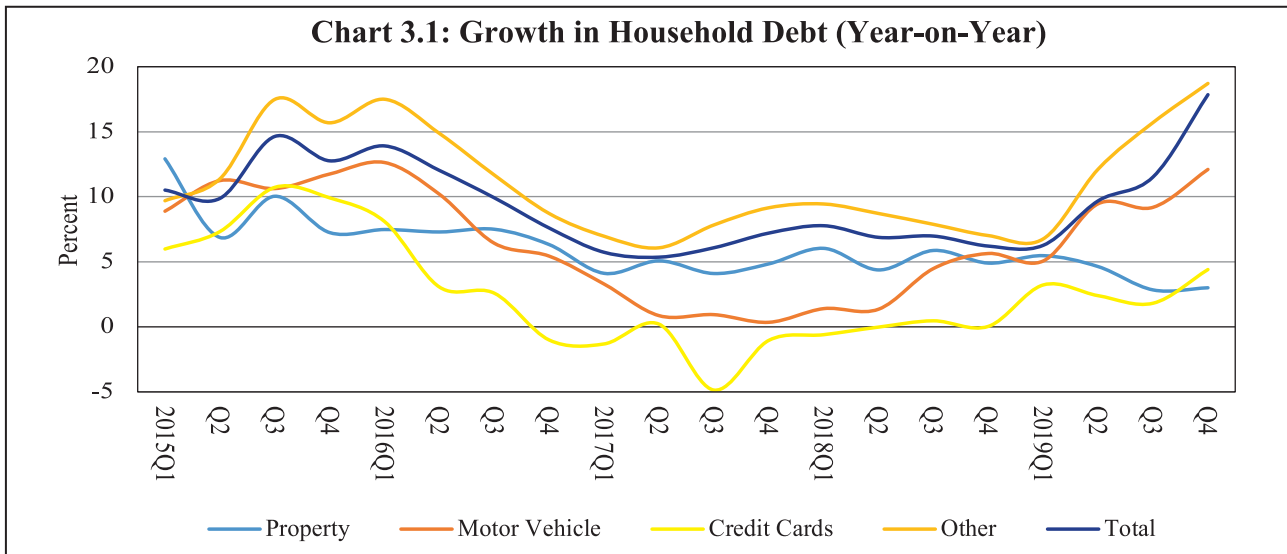
percent of total bank credit. Household credit was mostly concentrated in unsecured lending (70.4 percent), which is considerably high when compared to 18.6 percent and 35.4 percent for South Africa and Mauritius, respectively. The significant share of unsecured loans and advances has the potential to cause financial distress for households, given the inherently expensive nature of such credit. Therefore, excluding wealth effects as indicated in paragraph 3.9, households remain vulnerable to sudden and sharp tightening of financial conditions.

Household borrowing in line with trends in personal incomes

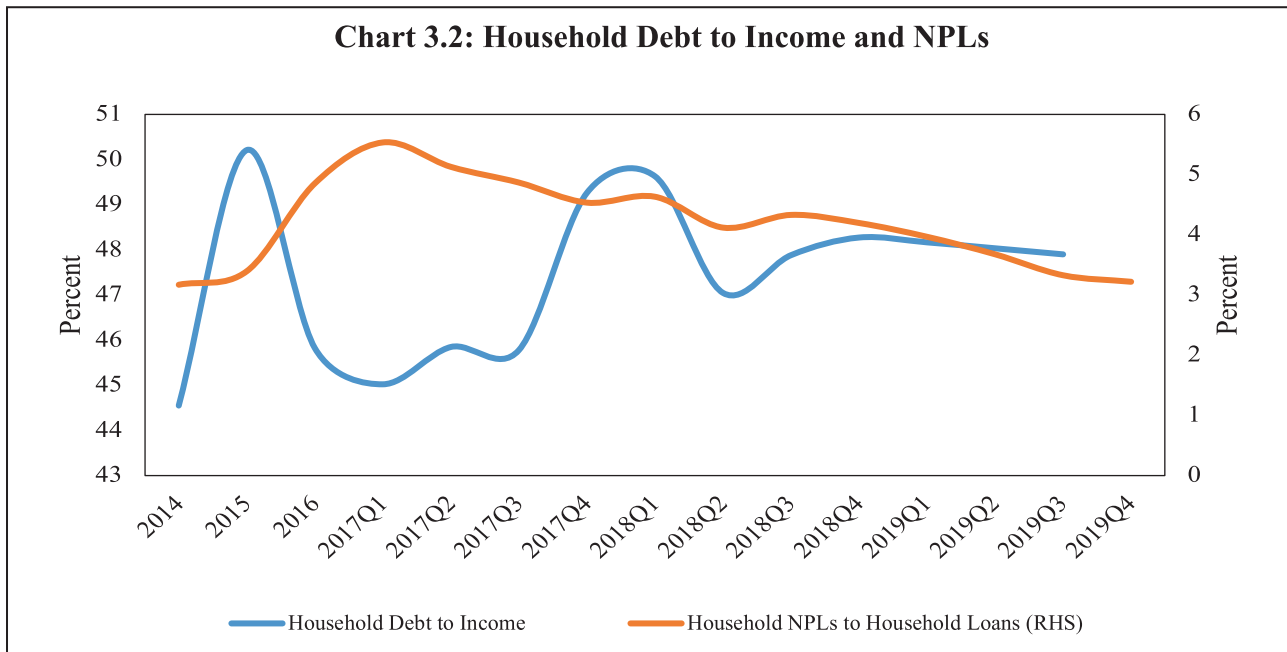
3.8 Household debt as a proportion of household income remained stable at 48 percent in September 2019, the same as in September 2018 (Chart 3.2). The ratio remains relatively low when compared to 78.7 percent and 72.7 percent for Namibia and South Africa, respectively.⁵ In this respect, domestic household borrowing appears to be in line with trends in personal incomes, representing a relatively stronger debt servicing capacity. Consequently, the ratio of

household NPLs to total household credit was modest, at 3.2 percent in December 2019 (Chart 3.2).

3.9 Moreover, Table 3.2 indicates that households are net savers when considering contractual savings (pension funds). Other household assets such as cattle, commercial farmland and shareholding in listed companies could substantially increase the saving position of households but have not been included due to data limitations.



Source: Commercial Banks



Source: Statistics Botswana and Bank of Botswana

⁵ Namibia Financial Stability Report – April 2020 and SARB Financial Stability Review – Second Edition 2019.

Table 3.2: Household Net wealth

| Asset Class | 2017 (P'million) | 2018 (P'million) | 2019 (P'million) | Annual Growth (Percent) |
|--|---------------------|---------------------|---------------------|----------------------------|
| Retail Deposits | 12 746.2 | 13 843.9 | 15 384.2 | 11.1 |
| Pensions | 82 003.9 | 78 971.9 | 93 133.2 | 17.9 |
| Insurance Contracts (endowment policies) | 12 218.3 | 12 874.7 | <i>13 423.6</i> | <i>4.3</i> |
| Mortgage Property | 9 189.6 | 9 639.9 | 9 929.5 | 3.0 |
| Motor Vehicles | 1 703.6 | 1 799.7 | 2 017.5 | 12.1 |
| Total Assets (a) | 117 861.6 | 117 130.1 | 133 888.0 | 14.3 |
| Total Household Debt (b) | 41 443.8 | 40 571.2 | 45 490.5 | 11.5 |
| Total Household Net Wealth (a) – (b) | 76 207.9 | 76 558.9 | 88 397.5 | 15.5 |

Source: Bank of Botswana

Note: Figures in italics are estimates

Box 3.2: Household Indebtedness to Banks, Microlenders and Hire Purchase Stores

Introduction

The Bank conducted household indebtedness survey for 2018 in its continued effort to identify structural relationships between households' characteristics and their indebtedness. Furthermore, the survey intended to determine the extent of vulnerability of the financial system to the household sector and guide the determination and implementation of financial sector policies, in general, for the safety and soundness of the financial system.

The survey analysed different features of household debt, including Debt-to-Income ratios, debt service capacity, types and structure of household borrowings, cost of credit and the alternative sources of funding.

Summary Findings

(a) Demography

The survey reveals that men tend to borrow more than females; the middle-aged population (between 31 years old and 51 years old) tends to take on more debt than other age groups. Furthermore, households earning incomes between P3 001 and P20 000 are highly indebted compared to those who earn income outside this range. By type of employment, 60.4 percent were Government employees, private sector (25.2 percent), unemployed (2.7 percent) and 0.7 percent were self-employed. The credit providers could not classify the remaining 11 percent (Table 1). These results have not changed much compared to the 2017 survey results.

(b) Types of Credit by all Banks, Microlenders and Hire Purchase Stores

As shown in Chart 1, most of households' credit from banks is in the form of unsecured personal loans, at 60 percent in December 2018. The second largest credit is for residential property at 34 percent, followed by motor vehicle loans at 5 percent. The evidence obtained from the survey is that hire-purchases are mostly used for appliances (30 percent) and furniture (29.9 percent), electronics (19.4 percent) and other (20.7 percent), while loans from micro-lenders are mostly for personal use.

(c) Credit Application Processes

(i) Documents Required During Application for Credit

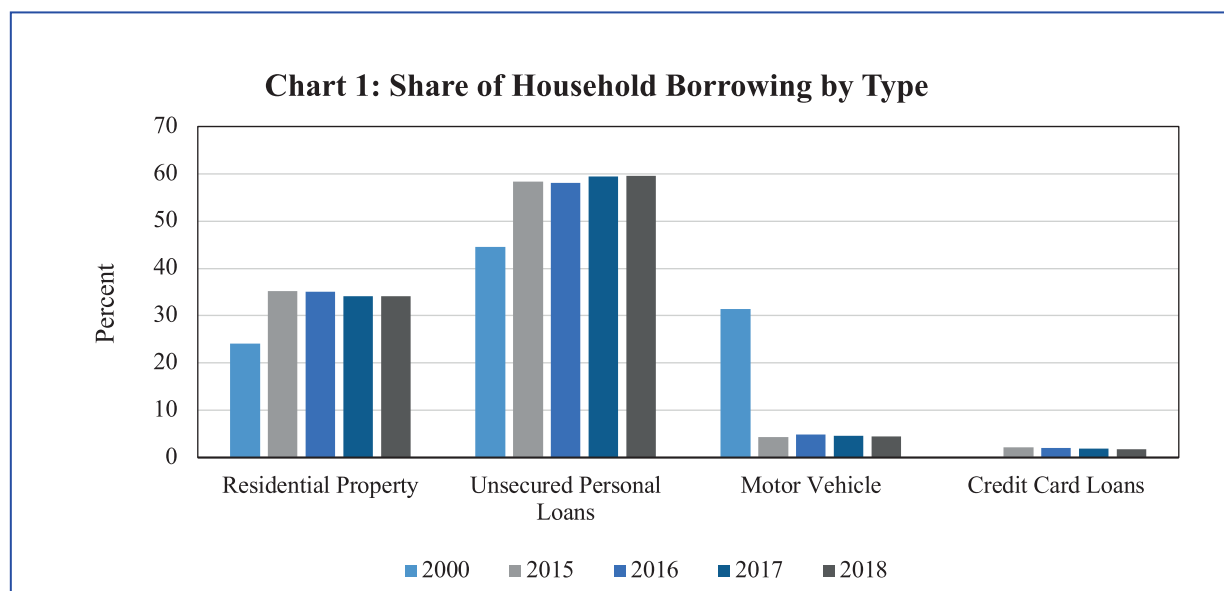
The results indicate that, on average, 90 percent of institutions surveyed require borrowers to produce an identification document and proof of earnings (payslip, bank statements and confirmation of employment). In addition, banks subject potential borrowers to credit bureau checks in order to determine the financial behaviour of customers in servicing their debt obligations. The requirements are generally the same for hire purchase and micro-lenders.

Inability of some households to satisfy certain stipulated requirements leads to some credit applications being rejected. Specifically, the survey reveals that rejections were mainly due to mismanagement of personal bank accounts, failure to meet minimum employment period and application thresholds such as debt-to-income ratio (reflecting over-indebtedness), failure to agree on the rate of interest by the bank and the customer and rejection of property presented to the bank as collateral due to poor structural integrity.

Table 1: Percentage Distribution of Household Debtors by Gender, Age, Employment and Income

| Gender | Percent (%) |
|---------------------|-------------|
| Males | 57.2 |
| Females | 42.8 |
| | |
| Age | Percent (%) |
| Less than 30 | 11.6 |
| 31-50 | 59.9 |
| Above 51 | 19.1 |
| Unclassified | 9.4 |
| | |
| Employment | Percent (%) |
| Government Employed | 60.4 |
| Privately Employed | 25.2 |
| Self Employed | 0.7 |
| Unemployed | 2.7 |
| Unclassified | 11 |
| | |
| Income | Percent (%) |
| Less than P3000 | 27.6 |
| P3001-P20 000 | 59.1 |
| Above P20 000 | 13.3 |

Source: Banks, Microlenders and Hire Purchase Stores



Source: Banks

(ii) Assessment of Credit

For 2018, the Debt-to-Income (DTI) ranged between 35 percent and 70 percent for banks, 35 percent and 65 percent for microlenders; and 25 percent to 35 percent for hire purchase stores. The evidence from the survey is that DTI varies from one lender to the other, but Angel and Heitzmann (2015), suggest that the DTI should be 40 percent or below. Thus, households that find themselves with higher DTIs would have a relatively higher financial burden than those at the lower end of the spectrum.

During the year under review, the minimum Loan-to-Value (LTV) ranged between 10 percent and 45 percent, whilst the maximum LTV ranged between 45 percent and 100 percent. There are banks that reported a maximum LTV ratio of 100 percent for mortgage loans, exposing them to financial losses in cases where the proceeds from foreclosure on the property do not fully pay off the outstanding loan balance.

(d) Characteristics of the Loan Book

(i) Quality of the Loan Book

In general, majority of banks and micro-lenders indicated that the default rate during 2018 was not a concern to them, with some recording an improvement on the aforementioned. Non-performing loans as a percentage of total household loans were between 0.53 percent and 8.85 percent for banks, while the ratio ranged between 0.01 percent and 9.5 percent for microlenders. For the commercial banking sector, 55 percent of non-performing loans were in unsecured lending, whilst 45 percent were asset - backed.

(ii) Servicing of Debt by Households

Across the banking sector, the percentage of households who serviced their debt directly from their payroll ranged from 46 percent to 83 percent; whilst that for direct debit from personal bank accounts ranged from 16 percent to 66 percent. As for hire-purchase, the majority of households service their debt through in-store payments (an average of 85 percent). Some micro-lenders deduct monthly loan repayment directly from the employer.

(iii) Cost of Credit to Households

The interest rate charged by banks on most household loans is linked to the prime lending rate (and, therefore, the Bank Rate). By type of loan, credit card loans are the most expensive, followed by unsecured personal loans across all banks that have these facilities. Mortgage and motor vehicle loans are generally cheaper in comparison.

Households also have to incur extra bank charges like administration fees or arrangement fees or processing fees, documentation fees, insurance fees, collection fees, facility fees, valuation fees, early repayment penalties and credit reference or clearance fees. These fees are either proportionate to the loan amount (ad valorem) or fixed. The survey further indicated that banks' average percentage rate (APR) ranged between 3 percent and 12 percent for mortgages; 7 percent and 18 percent for motor vehicle loans; 10 percent and 30 percent for personal loans; and 6 percent and 43 percent for credit cards.

Some microlenders charge interest rates as high as 60 percent per annum. Late payment fees are extra charges applied by hire purchase stores, whilst other charges include application and insurance fees. About 40 percent of micro-lenders who responded to the survey indicated that they charge application, insurance and late payment fees; and about 20 percent charge legal fees. Hire-purchase stores charge interest rates of between 30 and 36 percent per annum.

(e) *Strategies by Credit Providers on Household Lending*

(i) Lending Strategies

Almost all banks have some form of what are called “scheme loans” with household customers and about 86 percent of these loans are repaid through deductions from the employer payroll arrangements (deduction codes). Some microlenders, on the other hand, focused on short-term products to meet immediate needs of households, as well as grow their market share in the microlending sector. Other strategies by microlenders include enhancement of affordability criteria; advertising; giving out small loans; convincing referrals from existing customers; and the use of credit bureaus.

(ii) Credit Risk Mitigation Measures

In order to mitigate risks associated with lending to the household sector, credit providers conduct extensive credit worthiness checks to ensure that credit is granted to credit worthy borrowers with known financial history and habits. Banks also introduced payment insurance policies (PIP), such as retrenchment covers, and credit life policies to protect their positions against loss eventualities. Furthermore, personal guarantees, mortgage protection policies and deduction codes are some of the credit risk mitigants adopted by banks.

Conclusion

Generally, the survey results are suggestive of minimal risks posed by the level of household indebtedness in 2018. Banks dominate in providing credit to households with the majority of loans being channelled towards unsecured lending. Notwithstanding that, a large number of borrowers are employed; with most credit providers deducting the monthly repayments from the payroll, thus reducing the probability of default among borrowers. Further, credit extension accords with the life cycle consumption pattern and therefore contributes to cross-generational welfare enhancement and is supportive of economic growth and development.

The Non-Financial Corporate Sector

Corporate sector borrows less from the domestic market

3.10 The non-financial corporate sector is important, as it contributes to the health and soundness of the financial system. Non-financial corporates are linked to the financial sector through credit from the banking system and, in turn, the deposits, equity and bonds they hold in the banks' balance sheets. In addition, non-financial corporates influence households' debt repayment capability through labour market conditions and prospects (employment and wage growth).

3.11 Credit to the non-financial corporate sector (excluding external debt) constituted 30.8 percent of total commercial bank credit in February 2020, compared to 30.5 percent in December 2019 (34.1 percent in December 2018). Total credit to the sector was P19.6 billion in February 2020, an increase from P19.1 billion in December 2019 (P19.9 billion in December 2018). Annual credit growth expanded by 0.4 percent in February

2020. Corporates typically borrow less from the local market, as most of them tend to open credit lines with parent companies in South Africa (Business Expectations Survey, March 2017). Some also cite difficulty in accessing finance due to limited collateral.

Financial health of the corporate sector remains good

3.12 Selected financial soundness indicators of the 14 domestic non-financial corporates listed on the Botswana Stock Exchange Limited (BSEL) show that the financial health of the corporate sector was good in 2019, albeit with reduced profitability due to subdued trading conditions (Table 3.3). The sector's leverage ratio (i.e., debt/equity ratio) fell slightly to 46.3 percent in December 2019 from 46.9 percent recorded in December 2018, while interest coverage ratio increased from 6.8 percent in December 2018 to 8.8 percent in June 2019. The improvement in interest coverage ratio reflects a relatively strong debt servicing capacity. This notwithstanding, risks associated with governance, accountability

and compliance failures remain elevated in parastatal corporations that fail to produce annual financial statements. Compliance failures in the private sector are also prevalent and have resulted in the suspension of Choppies Enterprises Limited, a fast-moving consumer goods company, from both the Johannesburg Stock Exchange (JSE) and BSEL.

Corporate sector NPLs likely to increase

- 3.13 Although the ratio of non-performing corporate loans to the sector’s total bank loans is higher than the banking sector average, at 9 percent in December 2019, with companies forced to shut down or reduce production due to lockdown and other measures aimed at containment of COVID-19 pandemic, corporate NPL are likely to rise. Banks have, however, committed to reschedule loans and offer payment holidays for affected companies.
- 3.14 Nevertheless, the sector’s strong profitability ratios and low level of bankruptcies in the period under review suggest that a larger proportion of corporates should be able to continue servicing their loans. The profitability ratio, as measured by the return on equity (ROE), remains relatively high. ROE averaged 12.6 between 2016 and 2019 (Table 3.3).

Industries primarily affected by COVID-19 are likely to drag down economic performance

- 3.15 The virus containment measures that ensued at the beginning of April 2020 have severely disrupted economic activity, and in particular, some sectors such as Manufacturing, Travel, Leisure, Trade, Hotels and Restaurants and Transport and Communications were brought to a standstill. The manufacturing; trade, hotels & restaurants; and transport and communication

sectors contributed a combined average of 29.5 percent to GDP over the period 2014 and 2019 (Table A3) and, therefore, have the potential to significantly affect future economic performance if the virus does not abate in the near future. Moreover, the combined exposure of commercial banks to these sectors stood at 32.8 percent in February 2020, down from 33.8 percent in December 2019 (Table 3.1). Therefore, these sectors pose significant consequences to asset quality and bank profitability if economic activity does not quickly return to normalcy. Notably, some corporates within these sectors had already been struggling. For example, Air Botswana, which announced restructuring plans in November 2019 and suspended flights from 27 March 2020. COVID-19 containment measures will further exacerbate the airline’s financial challenges. In essence, the supply chain disruption and slowdown caused by the virus is expected to affect freight and passenger transport business at a significant cost to the national airline.

Firms less optimistic about economic activity in the fourth quarter of 2019

- 3.16 The December 2019 Business Expectations Survey shows that firms were less optimistic about economic activity in the fourth quarter of 2019 compared to the third quarter, expecting a decrease in exports of goods and services, sales and investment in buildings, vehicles and equipment in the fourth quarter. This is likely to have worsened given the ongoing crises caused by the COVID-19 pandemic and measures aimed at fighting it. Therefore, potential vulnerabilities from the corporate sector are assessed to pose moderate to high risk to financial stability in the medium term.

Table 3.3: Non-Financial Corporates’ Financial Soundness Indicators (Percent)

| Ratios | 2016 | 2017 | 2018 | 2019 |
|---|------|------|------|------|
| Non-Financial Corporates Credit-to-GDP ⁶ | 11.2 | 10.7 | 11.2 | 10.7 |
| Cost-to-Income Ratio | 54.1 | 60.0 | 60.3 | 65.1 |
| Total Debt to Equity Ratio | 53.8 | 42.1 | 46.9 | 46.3 |
| Return on Equity | 8.8 | 13.8 | 15.7 | 12.0 |
| Price/Earnings Ratio (times) | 13.4 | 13.3 | 11.2 | ... |
| Dividend Yield | 4.4 | 5.1 | 5.5 | ... |

Source: Botswana Stock Exchange Limited, Statistics Botswana, Financial Statements of Corporates

Note: (...) denotes data is not yet available

⁶ Calculated using total credit to the non- financial corporation from commercial banks.

Table 3.3a: 2019 Domestic Listed Non-Financial Corporates Financial Soundness Indicators (Percent) by Sector

| Financial Ratios | All | Retail | Real Estate | Hotel & Tourism |
|--------------------------|------|--------|-------------|-----------------|
| Return on Equity | 12.0 | 14.5 | 8.6 | 16.7 |
| Leverage | 46.3 | 6.3 | 50.6 | 112.3 |
| Cost-to-Income | 65.1 | 57.6 | 48.2 | 85.7 |
| Interest Coverage Ratio | 6.8 | 0.1 | 13.9 | 2.7 |
| Interest Expense to Debt | 5.9 | 4.2 | 6.1 | 8.3 |

Source: Botswana Stock Exchange Limited, Statistics Botswana, Financial Statements of Corporates

The Real Estate Sector

Some real estate companies moderately leveraged

3.17 Trends and developments in the real estate sector are important to financial stability as they reflect the public’s perception of the state of the economy. In addition, the banking sector may have large exposures to this sector that could be affected by movement in house prices. Most importantly, real estate assets represent household and private sector wealth, which often serves as collateral for bank loans. Hence, these assets represent future income prospects. On these grounds, developments in the real estate industry have a bearing on the financial system and, therefore, require continuous monitoring and assessment. Table 3.3a particularly shows relatively moderate leverage by real estate listed companies.

Commercial real estate credit remains low but there is concern about concentration risk

3.18 Credit to the commercial real estate sector⁷ grew, on average, by 22 percent over the five-year period from 2014 to 2019 (i.e., from P4 billion to P4.9 billion). However, the proportion of commercial real estate loans to total loans has remained relatively low over the years, averaging 7 percent between 2014 and 2019 (Chart 3.3). As such, commercial real estate lending poses minimal risk to financial stability. Moreover, the level of NPLs in the sector remains moderate, constituting 3.6 percent of total commercial real estate loans in December 2019. There are, however, some concerns about concentration risk in the real estate sector, with most loans (about 90 percent) originating in Gaborone and the surrounding areas.⁸

Housing finance low by international standards

3.19 In the residential real estate sector, mortgage loans as a proportion of total household credit was 31.2 percent in December 2019, compared to 34.9 percent in December 2018, signifying a growth trend that is not commensurate with the needed development and growth path to fill the apparent need for housing, as well as the financing gap. Thus, the size of housing finance, as estimated by total value of mortgages relative to GDP, is low by international standards.⁹ 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). Mortgage lending is, however, expected to rise following the amendments of Deeds Registry and Tribal Land Acts in 2017 that would facilitate acquisition of title deeds country-wide.

3.20 Credit risk in the mortgage sub-sector remains low. The Loan-to-Value (LTV) ratio at commercial banks ranges between 45 percent and 85 percent, which is considered prudent. Low to medium LTV ratios limit the exposure of banks to mortgage credit default.

Residential market weakened in Q3 2019

3.21 According to the Riberry Report for the third quarter of 2019¹⁰, the residential rental market weakened in the third quarter of 2019 compared to the previous quarter, on account of weaker demand for both the upper- and middle-end properties. However, the rental market enjoys good demand and supply for properties in the lower-end. Overall, the average price for residential properties sold in the third quarter

⁷ Data from commercial and statutory banks.

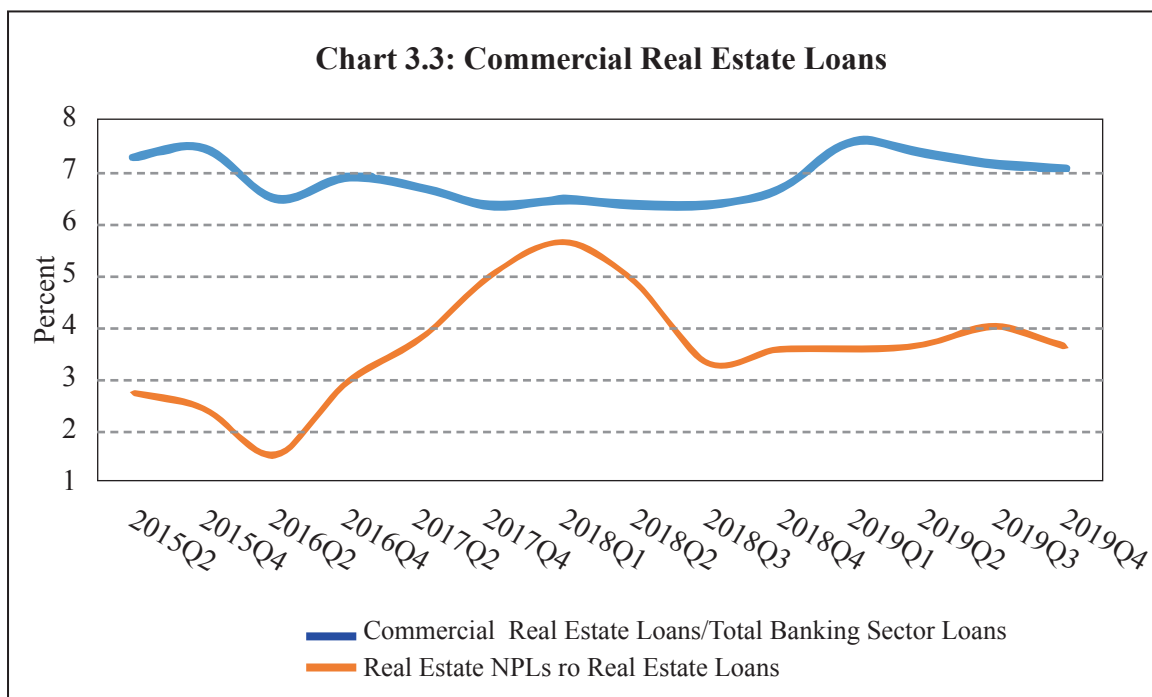
⁸ Bank of Botswana Residential Property Survey Report, 2017.

⁹ The challenges in accessing mortgages viz., land tenure, relatively low average incomes, affordability, building costs and strict funding requirements have, however, shifted house financing to unsecured personal loans.

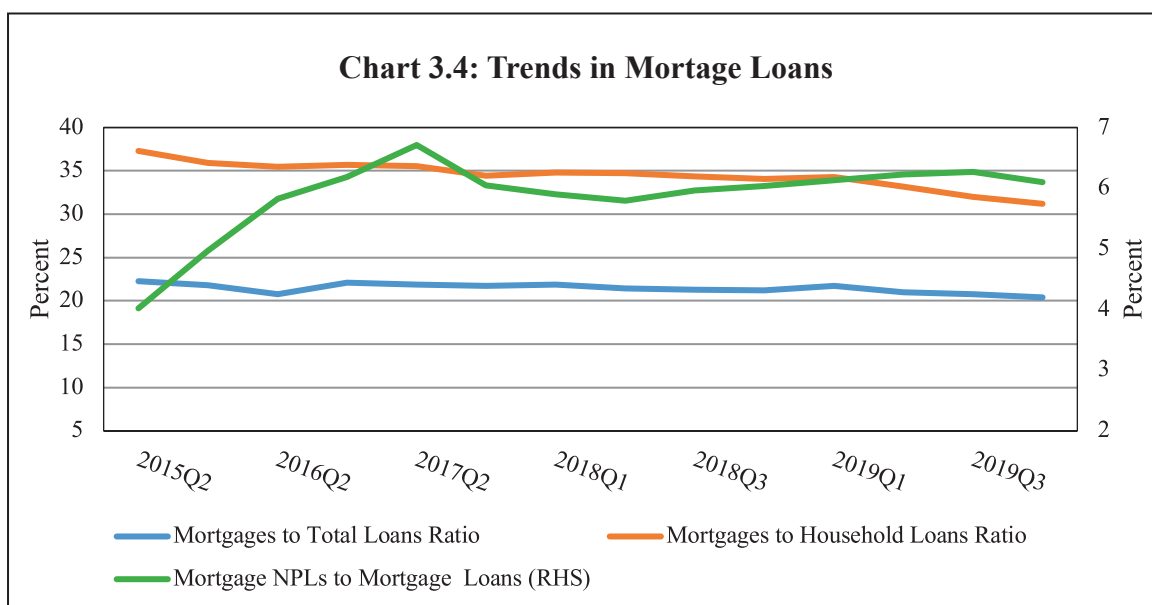
¹⁰ This is a quarterly report produced by independent valuers, Riberry Botswana (Pty) Ltd.

of 2019 decreased by 4.8 percent to P708 180 compared to the previous quarter, reflecting the lower value of properties traded in the quarter under review (477 properties were sold in the third quarter of 2019 compared to 474 in the previous quarter). Looking ahead, the demand for lower-end prime located residential housing is expected to improve given affordability of

properties in this category relative to others (middle and upper-end). Overall, vulnerabilities from the real estate sector posed minimal risk to financial stability during the period under review, but prospective developments require continuous monitoring and assessment.



Source: Bank of Botswana, Commercial Banks¹¹



Source: Bank of Botswana

¹¹ Real Estate NPLs to Real Estate Loans Ratio is calculated using commercial banks data only.

Non-Bank Financial Institutions (NBFIs)

Credit by NBFIs dominated by a single microlender

3.22 The NBFIs comprise a large group of diverse institutions that include retirement funds, insurance companies, capital markets and non-bank lenders (including microlenders, pawnshops and finance and leasing companies). Credit extension in this sector is carried out by insurance companies, microlenders, pawnshops, as well as finance and leasing companies. Nevertheless, credit information is currently available only for microlenders

3.23 The Top 20 (by asset size) microlenders' loan book grew from P3.5 billion in 2017 to P3.9 billion in 2018, dominated by Letshego Financial Services (Pty) Ltd (Botswana) which accounts for approximately 65 percent of the industry. As at June 2019, Letshego had a loan book value of P2.8 billion.¹² The microlending industry is too small, relative to the financial system assets of P220 billion in 2018, to pose any significant financial stability risk. However, there are concerns that the sector exposes households to high levels of indebtedness and has consistently recorded annual asset growth of 10 percent; hence warrants regular monitoring. Moreover, the larger microlenders are also linked to the real economy 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, is minimal and presents limited risks to financial stability. Botswana Insurance Holdings Limited (BIHL), in particular, advanced P50 million to clients in December 2018, representing 0.1 percent of the combined commercial banking and microlending loan book value of P62 billion.¹³

Leverage in the NBFIs moderate

3.24 While leverage is good for the financial sector, excessive levels could reduce NBFIs' ability to absorb adverse shocks or financial losses. Trends in leverage ratios (liabilities to assets) show that pension funds in Botswana are lowly leveraged, at an average of 13.2 for the three-year period

to 2017.¹⁴ The low leverage ratios are explained by the dominance of defined contribution (DC) pension schemes in the country, whereby members' contributions are used to fund assets. The life insurance industry was highly leveraged at 86 percent in 2018 (2017: 85.7 percent), while the general insurance sector was moderately leveraged at 50 percent during the same period. Microlenders were also moderately leveraged at 50 percent in 2018 as compared to 54 percent in 2017. Notwithstanding the foregoing, overall, the risk to financial stability is considered low for the pension and insurance sectors.

(c) Liquidity and Funding Risk

Banking Sector

The banking sector continues to have sufficient liquidity

3.25 Average liquidity fell by P823 million between January and February 2020, from P11.8 billion to P11 billion. This was largely attributable to deterioration of the foreign exchange position on account of a fall in diamond sales in February 2020, which declined by USD196 million or P2.2 billion to USD355 million. This is a major amplification channel of external shocks associated with the COVID-19 pandemic. As such, if the pandemic is not contained swiftly, it is most likely that diamond sales will plummet further, leading to erosion of market liquidity in the short to medium term.

3.26 However, banks continued to have adequate liquidity levels to fund asset growth and deposit withdrawals while adhering to the minimum Liquid Assets Ratio requirement of 10 percent, and held, or had access to, highly marketable instruments to meet collateral needs (Chart 3.5). More specifically, a total of P8.6 billion Bank of Botswana Certificates (BoBCs) were held by banks in December 2019, constituting 83 percent of average liquidity. The ratio of BoBCs to total assets was 8.8 percent in December 2019, down from 10.8 percent in December 2018. This does not suggest that banks' liquidity positions have deteriorated in 2019 but reflects the higher rate of growth in total assets (7.1 percent) than the 4.9 percent increase in BoBCs and, thus, a general

¹² Letshego Holdings Limited Group financial results for the period ended June 30, 2019.

¹³ BIHL is one of the major shareholders of Letshego at 27.9 percent followed by Botswana Insurance Fund Management Limited at 11.7 percent.

¹⁴ 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.

improvement in average liquidity. The industry, however, remains vulnerable to funding risk arising from a concentrated deposit base, and the feed-effects of the COVID-19 pandemic. The ratio of large deposits to total deposits averaged 40 percent over the last three years and presents potential vulnerability of the sector to further external shocks, that is, should there be sudden withdrawal of funding.

- 3.27 In spite of the concentrated deposit base, and the predominantly short-term nature of deposits, the industry continues to experience good levels of credit intermediation. The financial intermediation ratio was 82.9 percent in December 2019 (December 2018: 84.2 percent), thus above the 50 – 80 percent preferred range. This pace of intermediation could exaggerate maturity mismatches in banks' balance sheets, further amplifying liquidity risk in the sector.

The Bank relaxes some liquidity requirements and offers capital relief to banks

- 3.28 In view of the threats imposed by COVID-19 pandemic on economic activity in general, including the financial system, the Bank has implemented temporary policy measures to expand sources of liquidity and funding in the banking system. The capital adequacy ratio was reduced from 15 percent to 12.5 percent and it is expected that the capital relief will be ploughed back into the economy through loans and advances. In addition, the discount window (Credit Facility) for licensed banks will be offered at the prevailing Bank Rate without the punitive 6 percent add-on; overnight repo facilities will be provided against eligible securities maturing in 92 days; and collateral pool for borrowing from the Bank will be extended to include all bonds listed and traded in the Botswana Stock Exchange. These measures are intended to ensure that the banks continue to operate smoothly and support economic activity during the COVID-19 crisis.

Money Market

Money market interest rates remain stable

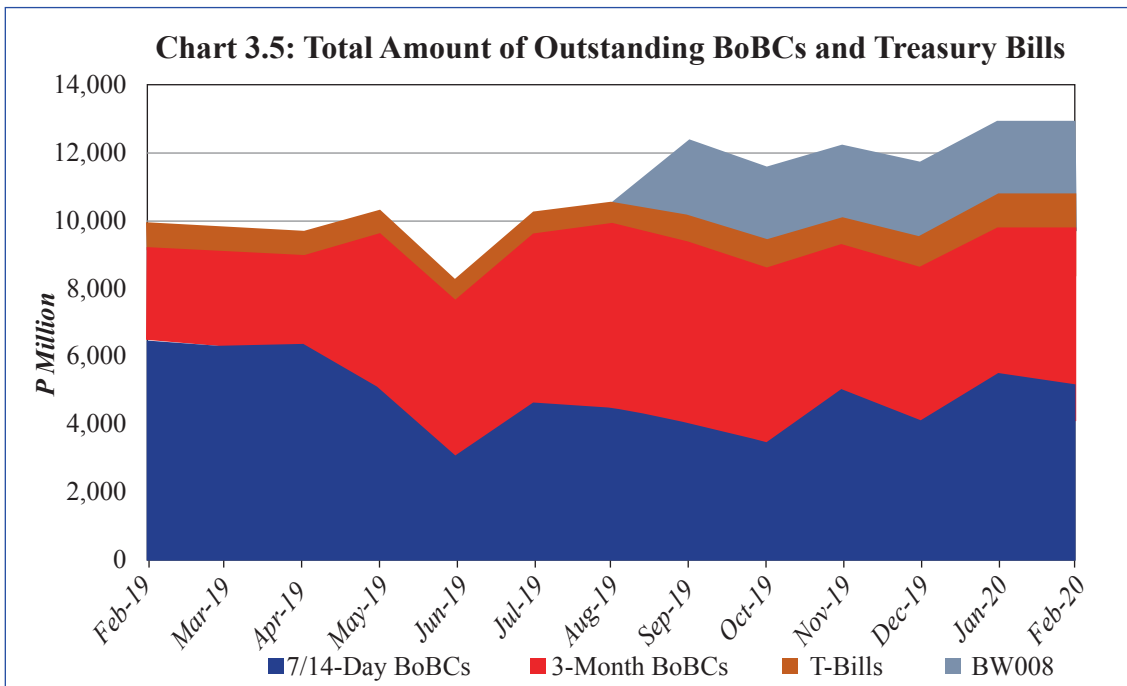
- 3.29 Money market interest rates have remained stable between August 2018 and August 2019, but declined in September 2019, in line with the reduction in the Bank rate. The stop out yields for the 7-day BoBC increased from 1.43 percent in December 2019 to 1.44 percent in January 2020; and further increased to 1.45 percent in February 2020. The yield on the 91-day BoBC

was 1.49 percent in December 2019. The yield rose by two basis points in January 2020 (1.51 percent), and by one basis point in February 2020, to 1.52 percent (Chart 3.6). Furthermore, the 7-day BoBC yield was within the lower and the upper bound of the Open Market Auction Committee (OMAC) mandate of 1.43 percent +/- 10 basis points, reflecting stability in money market interest rates.

Large banks dominate the interbank lending market

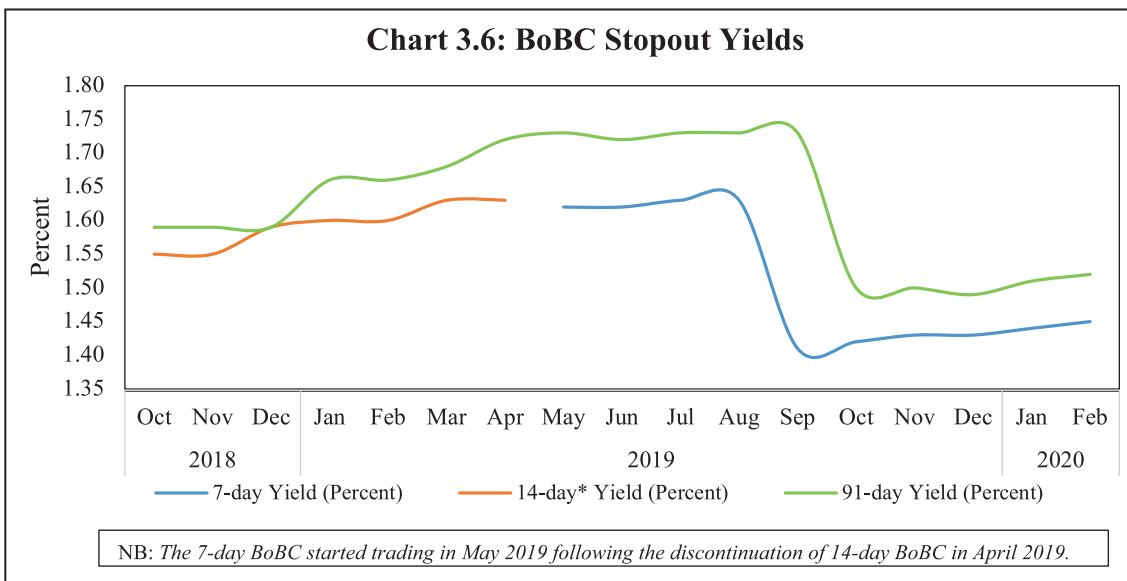
- 3.30 An efficient interbank market provides a platform for banks to lend to each other in case of liquidity shortage or excess. As at end of December 2019, large banks, by asset size¹⁵, constituted 97 percent of the P6.9 billion interbank borrowing and 87 percent of interbank lending. Total interbank lending fell significantly to P3.1 billion in February 2020, where large banks accounted for 91 percent of total borrowing and just 32 percent of total lending. The interbank market poses minimum risk to the financial system given that overall activity was only 3 percent of total assets as at end of February 2020. It is clear that large banks are using small banks as alternative sources of funds in the face of weakened liquidity positions.
- 3.31 In addition, banks seem to actively monitor risks of insolvency, leading to limited participation of small banks in the interbank market. This may reflect the large banks' reluctance to lend to small banks due to the perceived, relatively high counterparty risk. This market rationing, however, limits small banks' sources of funds in cases of liquidity shortages, in turn pushing them to expensive and volatile wholesale funding. It also introduces an exclusive market for lending, notwithstanding the master repo agreement signed by all banks.

¹⁵ Banks with a share of total banking assets greater than 9 percent.



Source: Bank of Botswana

Note: Only short-term bonds are included.



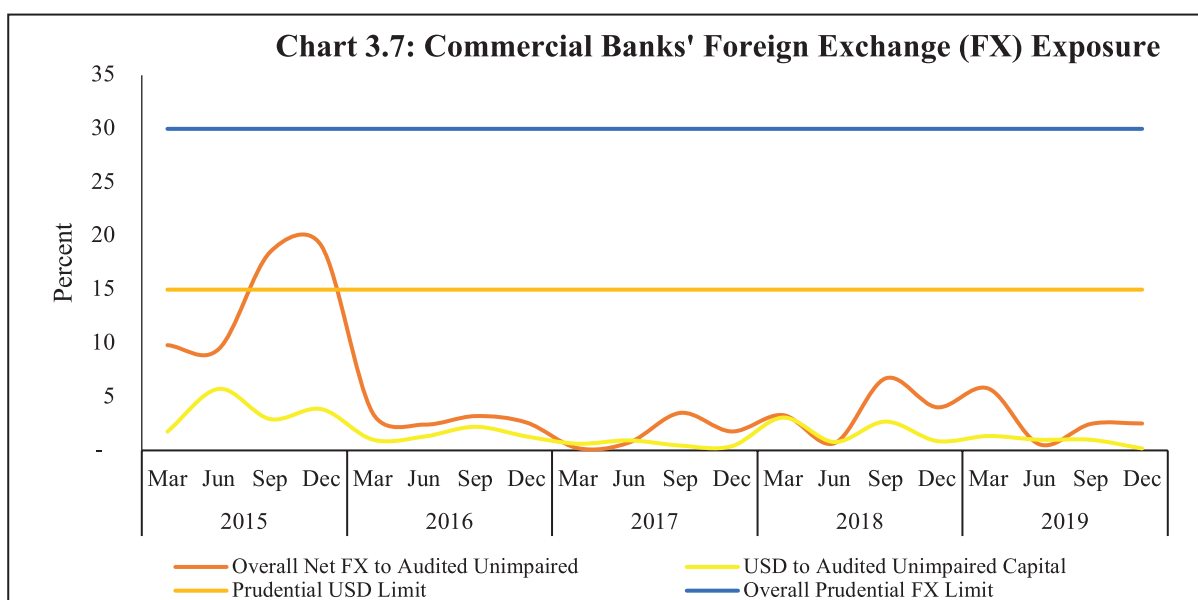
Source: Bank of Botswana

Foreign Exchange Market

Banks maintain minimal exposure to foreign exchange risk

3.32 Domestic banks remain marginally exposed to foreign exchange risk, with an industry net open foreign exchange position of negative P328 million in December 2019 compared to negative P486 million in December 2018. The current position translates to 2.5 percent of the industry's unimpaired capital, compared to 4 percent in the previous year. The foreign exchange exposure remained within the 30 percent prudential limit (Chart 3.7). Notably, concerns of vulnerabilities

from US dollar funding remain limited in the domestic banking system due to the low exposure to the currency. The Pula equivalent net exposure to the US dollar decreased to P24 million in December 2019, from P106 million in December 2018. The exposure to the US dollar thus remained within the 15 percent prudential limit at 0.2 percent of unimpaired capital (December 2018: 0.9 percent). In this regard, the industry was resilient to vulnerabilities from foreign exchange, particularly US dollar funding.



Source: Bank of Botswana, Commercial Banks

Capital Markets

Stock market capitalisation on the rise

3.33 Total equity market value of domestic listed companies increased marginally in the opening two months of 2020 to record a market capitalisation of P39.3 billion compared to P38.7 billion reported in December 2019. The rebound was mainly driven by significantly positive share prices of Letshego Holdings Limited and Minergy Limited. As a result, the domestic company index improved by 1.4 percent between February 2020 and December 2019. However, Choppies Limited shares remain suspended from trading, hence, continue to limit the pool of tradeable stocks on the main board. Many of the institutional investors, including most retirement funds (pension funds) are likely to experience significant deterioration of value as a result of governance changes of the Choppies Group.

Stock market volatility declining, but remains high

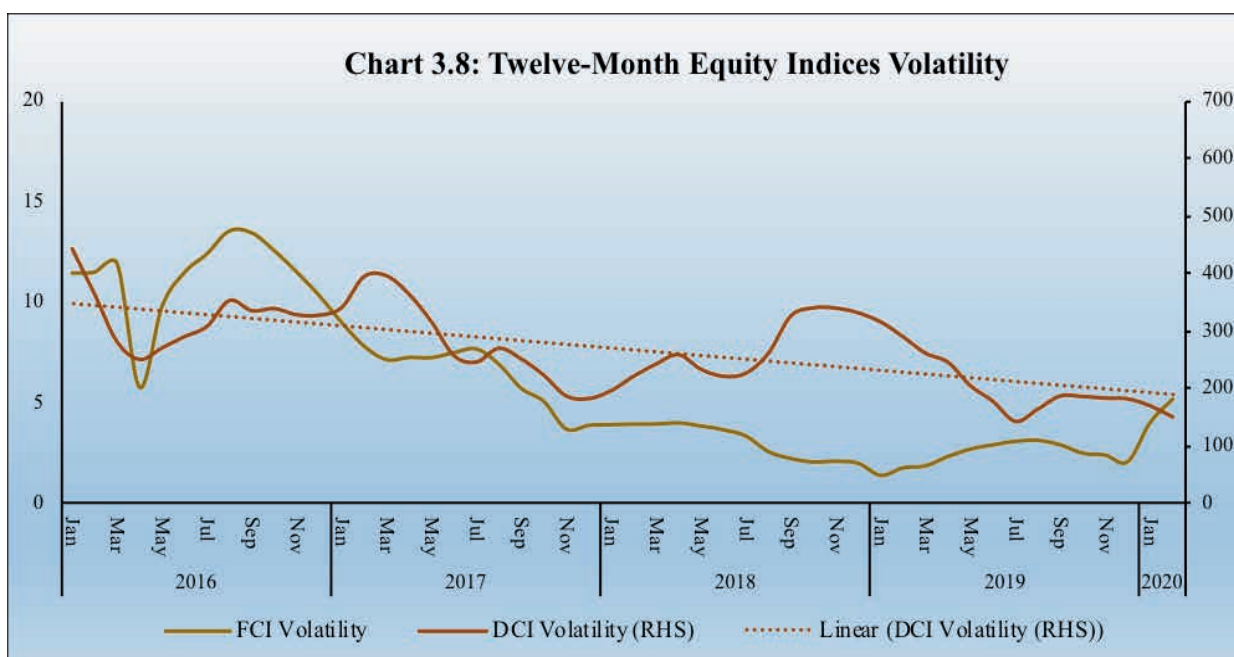
3.34 Despite the relatively better equity performance in the first two months of 2020, significant variation in the domestic company index (DCI) continued to be experienced. The DCI recorded a volatility measure of 153 compared to 184 in December 2019, partially reflecting the rebound in equity values and the inherently risky nature of the equity markets (Chart 3.8). The volatility in the DCI has, however, been declining in the long run and was at its lowest mark since the 145 recorded in July 2019. Going forward, it is expected that stock market volatility will rise as a result of investor panic brought about by the economic fallout from the coronavirus. This notwithstanding, the currently low interest rate environment caused by global reactions to coronavirus consequences are expected to push investors to high-yielding assets such as equity, in turn sustaining equity index values.

Table 3.4: Selected Botswana Stock Exchange Indicators

| Period | Shares Traded | | Domestic Stock Market Capitalisation (P'Million) | Liquidity Ratio (Percent)† | Equity Indices | | | |
|----------|------------------|-------------------|--|----------------------------|------------------------------|----------------------|-----------------------------|----------------------|
| | Volume (Million) | Value (P'Million) | | | Domestic Company Index (DCI) | DCI Growth (Percent) | Foreign Company Index (FCI) | FCI Growth (Percent) |
| 2015 | 834 | 3 034 | 49 993 | 6.2 | 10 602 | 11.5 | 1 572 | -0.4 |
| 2016 | 784 | 2 573 | 46 304 | 5.3 | 9 401 | -11.3 | 1 586 | 0.8 |
| 2017 | 775 | 2 477 | 44 408 | 5.5 | 8 860 | -5.8 | 1 575 | -0.7 |
| 2018 | 583 | 1 862 | 42 406 | 4.4 | 7 854 | -11.4 | 1 570 | -0.3 |
| 2019 | 628 | 1 811 | 38 709 | 4.5 | 7 495 | -4.6 | 1 562 | -0.5 |
| 2020 Feb | 31 | 67.4 | 39 290 | 4.2 | 7 599 | 1.4 | 1 551 | -0.7 |

Source: Botswana Stock Exchange

† Liquidity ratio is calculated as turnover divided by average market capitalisation.



Source: Bank of Botswana

Bond market capitalisation stable despite decrease in listed bonds

3.35 The number of listed bonds declined to 45 in February 2020 from 46 in the December 2019, following the maturity of the P21.8 million Get Bucks Limited bond (GBL002). The number of corporate bonds was, therefore, reduced to 38 while Government bonds remained at 7 (Table 3.5). Bond market capitalisation, however, increased marginally to P17.33 billion (December 2019: P17.29 billion) as the valuation effects of the USD-denominated Investec Limited bond (INB001) offset the nominal value of the delisted bond. This notwithstanding, Government bonds continued to dominate the bond market value at 68.4 percent compared to the 31.6 percent for corporate bonds. The trend continues to demonstrate the Government’s efforts to deepen and develop the domestic bond market. Notably, current sovereign borrowing present minimal fiscal risks given that Government Debt to GDP ratio remains well within the statutory threshold.

Corporate bond yields higher but stable

3.36 Average corporate bond yields were stable at 8.1 percent between February 2020 and December 2019, perhaps reflecting a limited, or no change, in the risk profile of the issuers. This could be indicative that investors have not yet priced in the default likelihood induced by coronavirus, or do not expect coronavirus to significantly alter the default risk of bond issuers. Another view is that, limited bond trading in the domestic bourse could be hindering effective pricing of risk, thus delaying the reaction of investors to crucial

market developments such as the economic fallout from the COVID-19 pandemic. As such, investor sentiments on corporate risk could be well reflected in the volatility of the corporate bond index (CorpI), which has been on an upward trend, rising to 4.1 in February 2020 from 3.9 in December 2019 (Chart 3.9). Generally, volatility in the bond indices has shown an upward trajectory since November 2019, which can partly be attributed to recent changes in the constituents of the indices. For example, the reallocation of Government bonds (BW007, BW012 and BW014) as well as the removal of corporate bonds that no longer met the index criteria (BHC020, SCBB003 and FNBB005), along with the addition of FNBB010, affected nominal values that, in turn, impacted on the indices. However, to the extent that corporate volatilities reflected the rising risk of issuers rather than computational issues, there remains a potential for tightening of corporate funding in the bond market, although the associated consequences are currently judged to be minimal due to accommodative financial conditions. In that sense, funding opportunities in money markets would augment any decline in capital market funding.

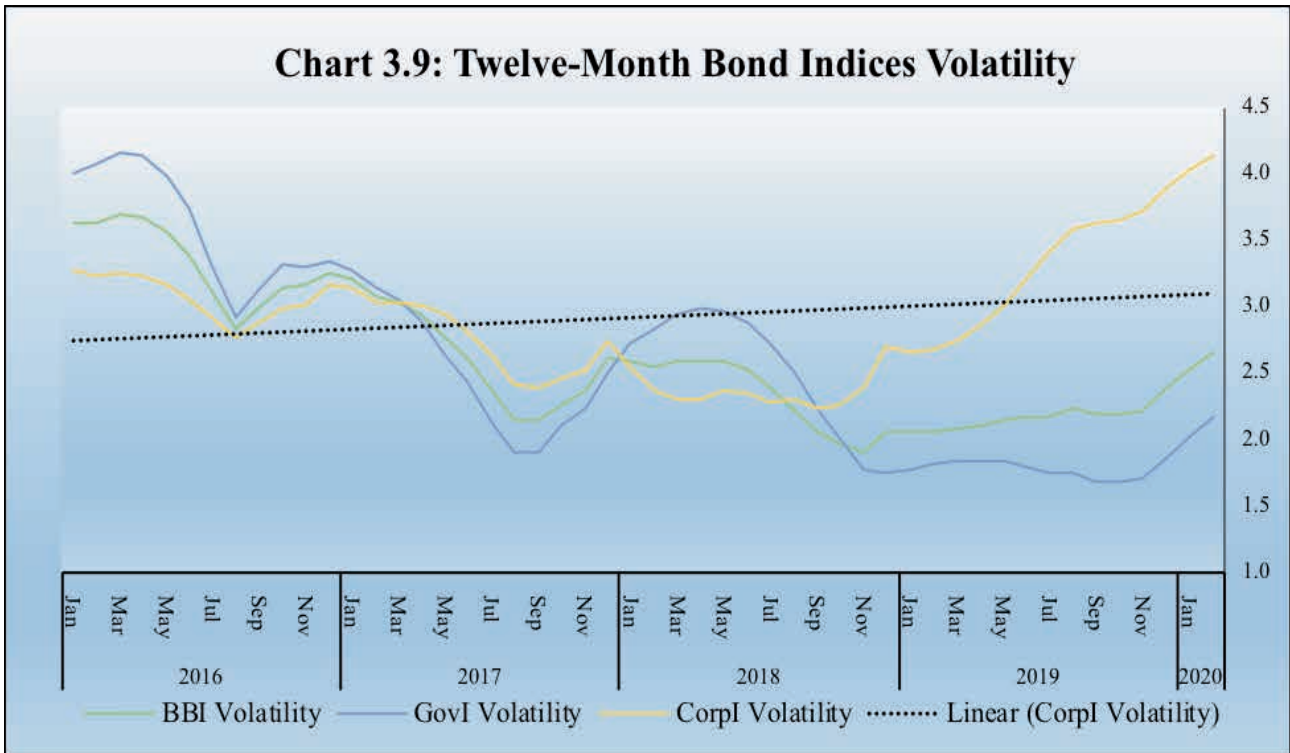
Net asset values of exchange traded funds are stable

3.37 Developments in international financial markets have a significant bearing on domestic asset valuations. Asset classes that reference on international commodities or indices in other countries, therefore, have the potential to

transmit instability to local asset classes. More specifically, exchange traded funds (ETFs) present a conduit for transmission of shocks into local asset prices.

3.38 The net asset value (NAV) of ETFs listed on the BSE increased marginally to P20.8 billion in February 2020 from P20.3 billion in December 2019, as the gains in NewGold more than offset the losses in NewPlat and NewFunds. NewGold

valuations were mainly buoyed by the ongoing strong performance of gold, its underlying asset, while the poor performance of Platinum and South African inflation-linked bonds dragged down the NAVs of NewPlat and NewFunds, respectively. In terms of market capitalisation, ETF valuations were just 0.2 percent of equity market capitalisation, same as in December 2019, hence posed little threat to the stability of the capital markets.



Source: Botswana Stock Exchange

Table 3.5: Selected Bond Market Indicators

| Period | Government | | | Corporate† | | | Total Value of Bonds (P*Million) | Government Bonds Value/Total (Percent) | Corporate Bonds Value/Total (Percent) | Bond Indices | | |
|----------|-----------------|---------------------------|--------------------------|-----------------|---------------------------|--------------------------|----------------------------------|--|---------------------------------------|---------------------|-----------------------|----------------------|
| | Number of Bonds | Nominal Value (P*Million) | Average Yield* (Percent) | Number of Bonds | Nominal Value (P*Million) | Average Yield* (Percent) | | | | Botswana Bond Index | Government Bond Index | Corporate Bond Index |
| 2016 | 6 | 8 258 | 4.5 | 35 | 3 888 | 7.2 | 12 146 | 68.0 | 32.0 | 170.1 | 169.6 | 170.6 |
| 2017 | 5 | 9 083 | 4.5 | 38 | 5 129 | 7.1 | 14 212 | 63.9 | 36.1 | 179.4 | 178.1 | 180.7 |
| 2018 | 7 | 9 588 | 4.6 | 42 | 5 446 | 8.8 | 15 034 | 63.8 | 36.2 | 185.1 | 184.4 | 186.7 |
| 2019 | 7 | 11 859 | 4.7 | 39 | 5 429 | 8.1 | 17 288 | 68.6 | 31.4 | 193.5 | 191.1 | 200.1 |
| 2020 Feb | 7 | 11 859 | 4.7 | 38 | 5 472 | 8.1 | 17 331 | 68.4 | 31.6 | 195.0 | 192.5 | 202.1 |

Source: Botswana Stock Exchange

† Includes bonds listed by corporate, quasi-government, parastatal and supranational institutions.

* The average of daily implied yields calculated by the BSE.

Table 3.6: Selected Exchange Traded Fund Indicators

| ETF Underlying Asset | EWT40† | | | NewGold | | | NewPlat | | | NewFunds^ | | |
|----------------------|------------------------|----------------------|-----------------------------|------------------------|----------------------|-----------------------------|------------------------|----------------------|-----------------------------|------------------------|----------------------|-----------------------------|
| | Units Traded (Million) | Turnover (P*Million) | Net Asset Value (P*Million) | Units Traded (Million) | Turnover (P*Million) | Net Asset Value (P*Million) | Units Traded (Million) | Turnover (P*Million) | Net Asset Value (P*Million) | Units Traded (Million) | Turnover (P*Million) | Net Asset Value (P*Million) |
| Period | | | | | | | | | | | | |
| 2016 | 0.02 | 0.6 | 229 | 1.0 | 137.6 | 13 152 | 0.9 | 95.7 | 7 471 | -- | -- | 143 |
| 2017 | 3.1 | 121.6 | 132 | 0.1 | 10.0 | 12 525 | 0.1 | 13.1 | 7 174 | -- | -- | 59 |
| 2018 | 0.01* | 0.4* | 124* | 0.3 | 33.7 | 7 906 | 2.8 | 246.4 | 5 742 | 0.0 | 0.0 | 45 |
| 2019 | | | | 0.0 | 166.2 | 10 007 | 0.3 | 29.9 | 10 279 | 0.0 | 0.0 | 46 |
| 2020 Feb | | | | 0.2 | 25.4 | 10 556 | 0.4 | 39.0 | 10 172 | 0.0 | 0.0 | 45 |

Source: Botswana Stock Exchange

† CoreShares Equally Weighted Top 40 (EWT40) was delisted in August 2018.

* EWT40 was delisted in August 2018, hence the information used is for the period January to August 2018.

^ NewFunds was listed in 2015 but only started trading in 2018.

Non-Bank Financial Institutions (NBFIs)

Gross insurance premiums and pensions contributions increased

3.39 NBFIs, particularly pension funds and insurance firms, are funded by contractual savings in the form of pension contributions and gross insurance premiums. The gross premiums for life insurance increased by 10 percent from P3.7 billion in 2017 to P4.1 billion in 2018. All life insurance companies maintained adequate capital levels as at December 31, 2018. The insurance penetration ratios remained low and relatively unchanged in the same period, but in line with industry trends across Sub-Saharan Africa. In contrast, pension penetration ratios averaged 45.6 percent over the years 2015 to 2019 before rising to 47.2 percent in December 2019 (Table 3.7). Given the higher levels of disposable income, there are opportunities to further development and growth in these sectors.

3.40 Annual pension contributions increased from P4 billion in 2017 to P4.3 billion in 2018. The pension funds industry was financially sound and stable as at December 31, 2018. 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. In this regard, the industry continued to match current assets to current liabilities. The pensions liquidity ratio (current assets to current liabilities) was 97 percent in 2018, implying that the industry could meet short-term maturing pension obligations. While the ratio declined from the 151 percent recorded in 2017, it was stable as compared to the 97 percent recorded in 2016. In addition, the pensions industry held cash and cash equivalent of P10.1 billion in December 2019 and 9.9 billion in January 2020 (December 2018: P7.8 billion), translating into an improved liquidity ratio (Cash and cash equivalent-to-Assets) of 9.4 percent (September 2018: 9 percent). Moreover, in January 2020, 89.2 percent of the cash and cash equivalent balances were held in domestic currency, further enhancing the liquidity profile of the pension industry.

COVID-19 will affect NBFIs negatively with severe repercussions for households

3.41 Botswana Public Officers Pension Fund (BPOPF) has made an assessment that investment markets

for pension funds are currently highly volatile, citing COVID-19 as the major source of instability in global financial markets.¹⁶ NBFIs will have to contend with this instability which, at least in the short-term, could negatively impact their financial performance.

3.42 To mitigate the negative economic effects of COVID-19 on households and, at the same time, ensure that the insurance companies and pension schemes are operated in a sustainable manner, a number of policy initiatives were adopted including restructuring and rescheduling of loan installments, deferral of life premium and retirement contributions for at least 3 months; discount on insurance products; reduction of interest rates on non-bank lending; and provision of quick turnaround time for processing insurance and medical aid claims.

(d) Macro Financial Linkages and Contagion Risk

Banks have significant linkages with the rest of the financial system and the real sector

3.43 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. These linkages are assessed with a view to determining the possible impact of a financial crisis or shock on macroeconomic developments and vice versa. Figure 3.1 shows the interlinkages.

3.44 Total banking sector assets as a proportion of total financial sector assets were 45 percent in 2018 (2017: 42.7 percent), whereas NBFIs assets as a ratio of total financial sector assets were 55 percent (2017: 57.3 percent). The estimates for 2019 indicate that the share of bank assets in the financial system rose slightly to 46.2 percent.¹⁷ A larger proportion of commercial banking assets are facilities to households (loans to households made up 63 percent of total bank credit, while the sector's share of bank deposits was 20.8 percent), followed by non-financial corporations, and lastly NBFIs. Banks are also exposed to state owned enterprises (SOEs) or parastatal corporations that hold 6.2 percent of bank deposits, while loans to the sector account for 2.3 percent of total bank lending.

¹⁶ BPOPF press release dated March 30, 2020.

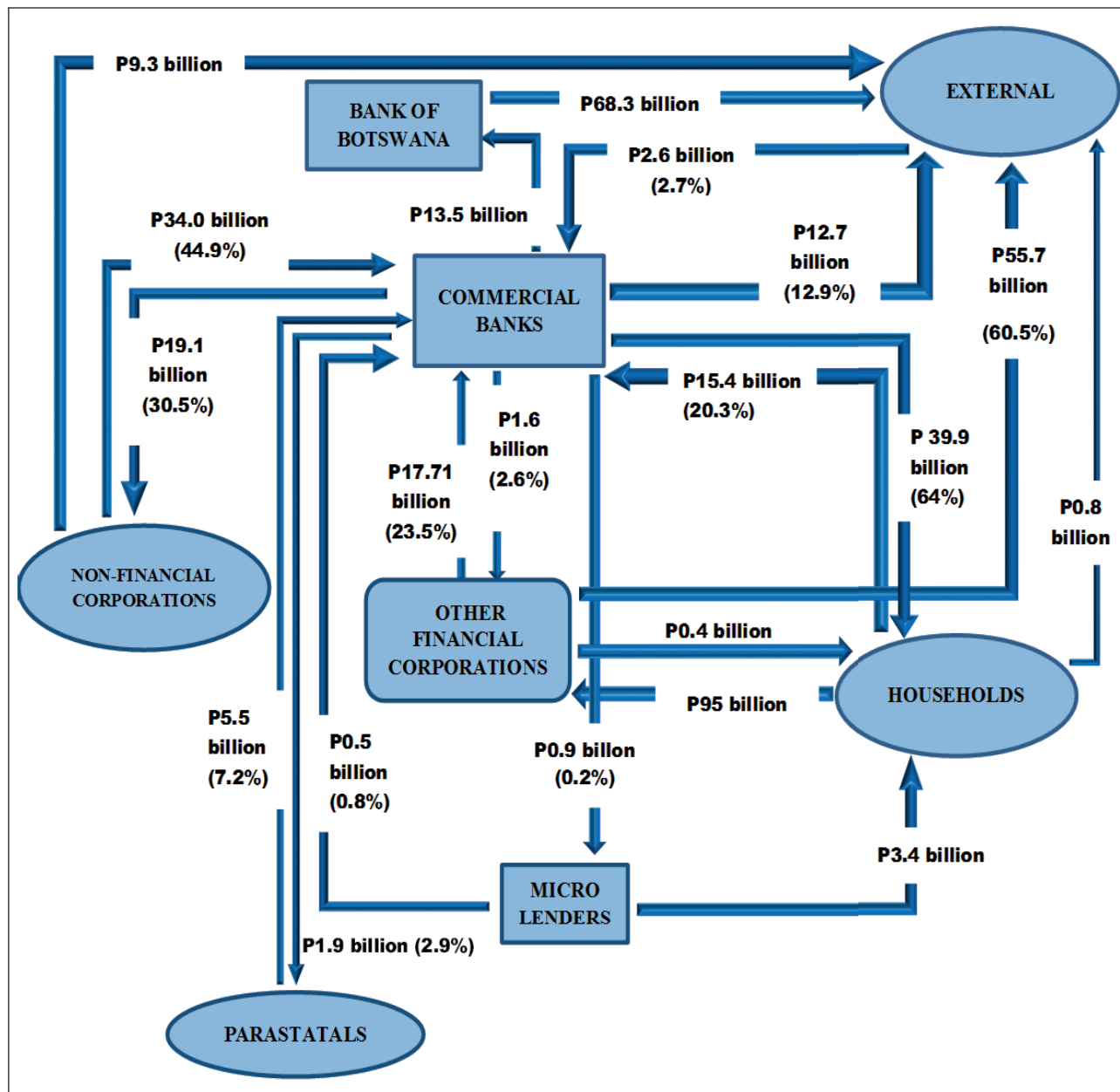
¹⁷ The financial results for most NBFIs are not yet published hence a few, but large, NBFIs were used to estimate the relative size of the financial system in 2019.

Banking sector assets increased as a percentage of GDP

3.45 Banking sector assets as a percentage of GDP increased from 50.7 percent in 2017, to 52 percent in 2018, and further to 54.2 percent in September 2019. The combined assets of banks and NBFIs (financial sector assets) to GDP

averaged 117 percent between 2015 and 2018, indicating the significance and importance of the financial system to the economy.¹⁸ The risk of contagion within the financial system, and across to the rest of the economy is, therefore, rising in view of the interconnectedness and sheer size of the financial system.

Figure 3.1: Macro-Financial Linkages (December 2019)



Source: Bank of Botswana and NBFIRA

Notes: The percentages indicate shares of loans/deposits for the sector.

Balances from the Bank to the external sector represents net foreign assets.

Balances from other financial corporations to the external sector are pension fund assets invested offshore.

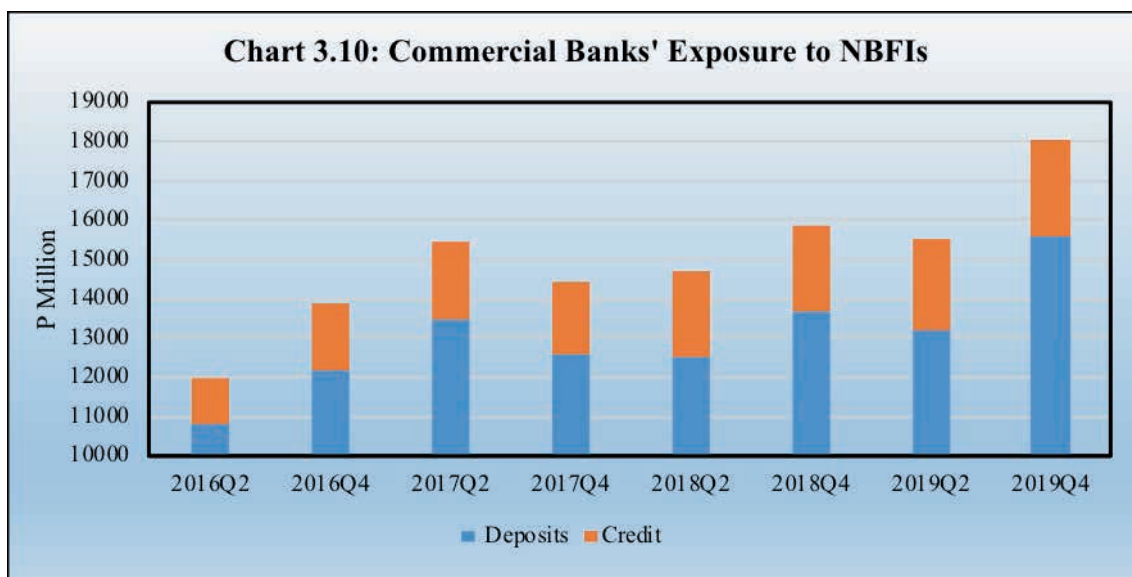
Balances from commercial banks to the external sector are commercial banks' balances due from foreign banks.

Balances from the Bank to commercial banks are insignificant.

Household-External data is cumulative outflows from January to July 2019.

Bank of Botswana to External and Households to Other Financial Corporations data is as at end of October 2019.

¹⁸ See Beck et al (1999), A New Database on Financial Development and Structure



Source: Commercial Banks

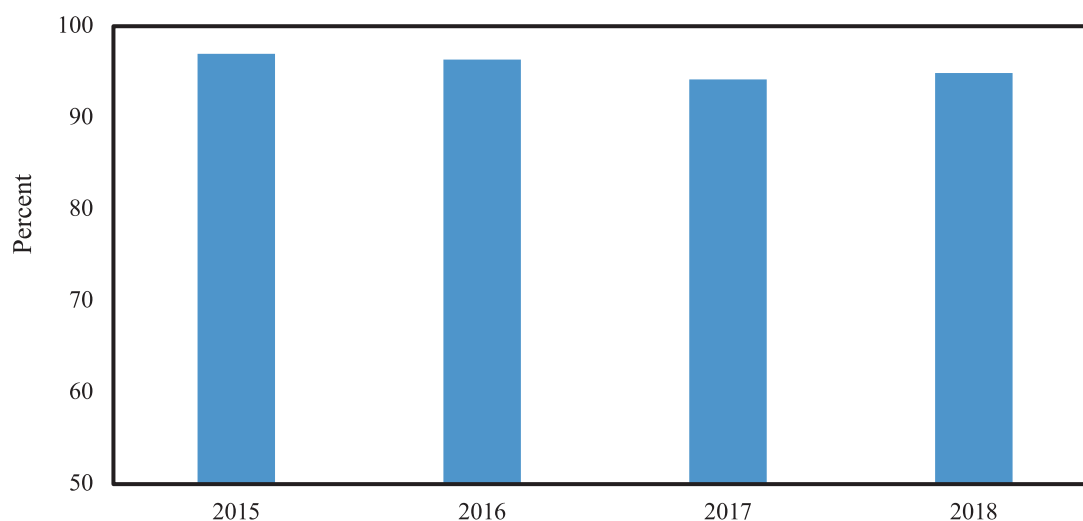
(i) Risk Concentrations

Insurance and pensions sectors highly concentrated

3.46 Insurance companies could affect financial stability and contribute to systemic risk through 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 markets.¹⁹ 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 have the capacity to fill the void. 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 domestic systemically important financial institution, and requires enhanced supervision. 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).

¹⁹ French et al., (2015): Insurance and Financial Stability, Bank of England Quarterly Bulletin.

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



Source: NBFIRA

Allocation of pension funds' assets remained unchanged and within prudential limits.

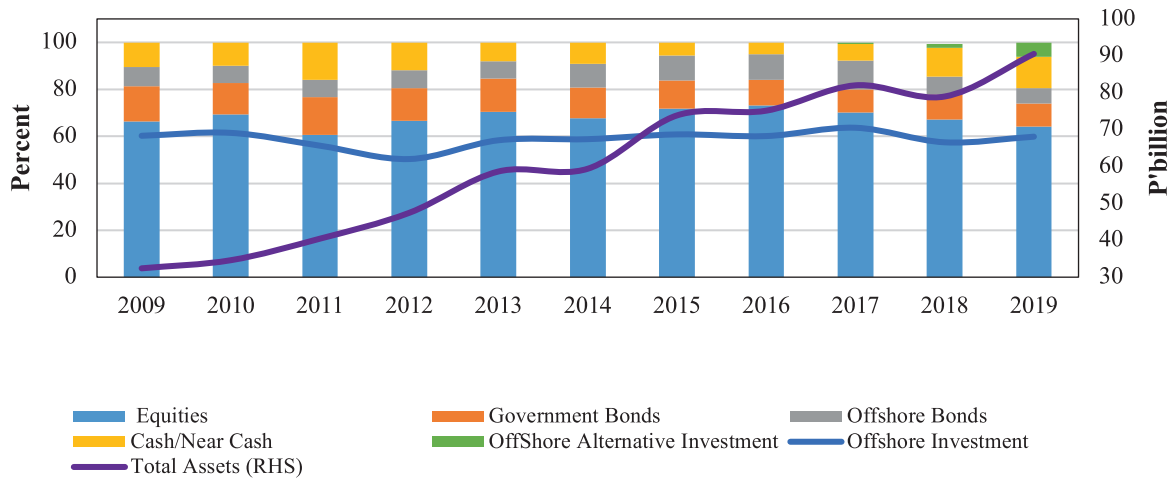
3.47 Pension funds play a vital role in the financial system and could potentially impact its stability. First, stability in the performance of funds preserves the wealth of retirees, confidence and positive expectations about future prospects, thus sustains economic activity. Second, pension funds have 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 behaviour and sentiments. Withdrawal of significant amounts of pension funds deposits from commercial banks may cause liquidity challenges especially for smaller banks due to their dependence on this source of funding.

3.48 Over the last 12 years, pension fund assets have grown by 132 percent from P34 billion in 2007 to P79 billion in December 2018; increasing further to P93 billion in December 2019 (P94 billion in January 2020). Equities accounted for the biggest share of 64.2 percent in the portfolio investment allocation of pension funds in 2019 (Chart 3.12). Furthermore, 59.8 percent of the funds were invested offshore in December 2019, compared to 57.4 percent in December 2018. Generally, the investment allocation of pension funds remained broadly unchanged with an average of 60 percent invested offshore since 2009. This is in line with the pension prudential regulations that require that at least 30 percent of assets should be invested locally. The law

also requires that annuities must be purchased exclusively from insurance providers operating in Botswana. As a general observation, there is a concern that the annuity market is not deep enough to benefit consumers due to limited competition and shortage of annuity related products.

3.49 Noteworthy is that more than 70 percent of pension funds are held by BPOPF. Measured in relation to the size of the domestic economy, the total assets of pension funds amounted to 41.6 percent of GDP as at December 2018 and 47.2 percent in December 2019.

Chart 3.12: Investment Allocation of Pension Funds



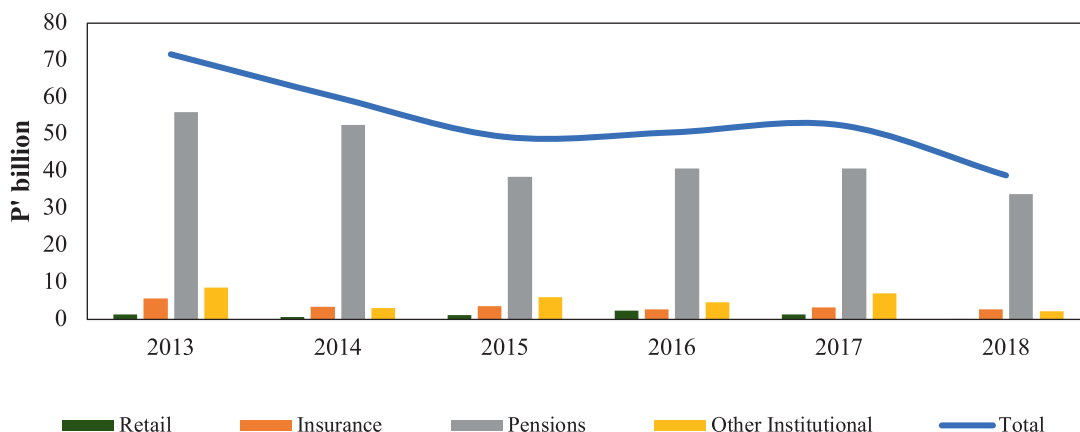
Source: NBFIRA

Pension funds constitute the largest share of assets under management

- 3.50 Asset managers play a vital role in the intermediation of funds in the financial system. These entities provide investors with an opportunity to invest in a diversified portfolio of securities. By pooling funds from a large group of investors, asset managers reduce investment risk through diversification.
- 3.51 The asset management sub-sector is highly interconnected with other parts of the financial system through ownership links, common asset exposures and the provision of wholesale funding to banks. Therefore, the sub-sector poses some systemic risk.
- 3.52 At the end of 2018, there were 21 asset managers and management companies (Mancos) with a total balance sheet of P6 billion. Total Assets Under Management (AUM) of local asset

managers, excluding Mancos, were P38.9 billion in December 2018, a significant fall from P53.2 billion in December 2017 (Chart 3.13). The decline was attributable to the recent decision by pension funds to directly place assets with off-shore fund managers in a bid to cut fund management costs. In December 2018, 77 percent of these assets were invested domestically, while 23 percent were invested offshore. It is important to note that institutional pension investors constituted the largest share of AUM, at 75 percent, followed by other institutional investors and insurance investors at 14 percent and 8 percent, respectively. This demonstrates the interlinkages between NBFIs, and the associated contagion risk. Even though the AUM have been declining, asset management companies remain profitable and adequately capitalised. Therefore, the risk to financial stability from this sub-sector is benign.

Chart 3.13: Assets Under Management by Local Asset Managers



Source: NBFIRA

Penetration ratio of medical insurers remains low

3.53 The medical insurance industry remains relatively small when compared to other types of risk insurance, with a penetration ratio of 0.56 percent in 2018 compared to 41.6 percent and 2.7 percent for pension funds and insurance sectors, respectively (Table 3.7). This suggests that financial vulnerabilities from medical aid schemes would have an insignificant macro impact.

and severe shock scenarios, each involving a number of variables (see Box 3.3 for stress test assumptions). The results must be used with caution.

3.56 Currently, the banking sector continues to be adequately capitalised, liquid (with high quality assets) and profitable (Table 3.8).

Table 3.7: Penetration Ratios of Selected Non-Bank Financial Institutions

| | 2015 | 2016 | 2017 | 2018 | 2019 |
|--|-------|-------|-------|-------|-------|
| Insurance Penetration Ratio (Percent) ¹ | 3.20 | 2.60 | 2.90 | 2.70 | - |
| Pension Penetration Ratio (Percent) ² | 50.60 | 44.00 | 46.10 | 41.50 | 47.20 |
| Medical Aid Penetration Ratio (Percent) ³ | 0.54 | 0.51 | 0.52 | 0.56 | - |

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

3.54 Of concern in the non-bank financial institutions sector was the emergence of governance, accountability and compliance issues in the ongoing case between Bona Life and BPOPF. Specifically, Bona Life Insurance (Pty) Ltd was placed under statutory management on January 20, 2020, after failing to meet regulatory requirements. While Bona Life is small relative to the financial system, accounting for 0.38 percent of total financial system assets, BPOPF's exposure to Bona Life as a majority shareholder puts the members' investment returns at risk. The successful recapitalisation or acquisition of Bona Life is of priority.

Notwithstanding this, development of Corporate Governance Guidelines commenced in 2019 and are being subjected to the Regulatory Impact Assessment (RIA) methodology to cater for different levels of sophistication of NBFIs. As such, the guidelines should effectively mitigate governance and misconduct risk within NBFIs.

(e) Stress Testing Results of the Banking Sector

Banking sector safe and sound

3.55 The Bank conducts quarterly stress tests on the banking sector to assess the resilience of banks to plausible credit, liquidity and interest rate shocks, among others. This exercise uses hypothetical scenarios for, moderate

Banking sector resilient under moderate shocks

3.57 The December 2019 stress tests assessed the resilience of banks when subjected to a moderate shock as well as a severe shock, (note that the December 2019 data serves as the baseline scenario). Commercial banks were generally resilient to stress, save for credit shocks that resulted in prudential capital breaches. Under the moderate scenario, where an additional 10 percent of performing loans are assumed to become impaired, bank capital levels decline to 11.1 percent, thus breaching the prudential capital adequacy requirement of 15 percent. The industry capital position worsens to 6.6 percent in the severe scenario, where 15 percent of performing loans are assumed to become non-performing assets (impaired). Resultantly, asset quality declines under assumed stress conditions, with the ratio of NPLs to total loans rising from a baseline of 4.9 percent to 14.3 percent and 19.1 percent under moderate and severe scenarios, respectively.

3.58 Regarding credit concentration shocks, banks breach the capital adequacy requirement, recording 8.3 percent under the assumption that the largest borrower defaults for each bank (moderate scenario). The capital adequacy ratio drops to 4.2 percent under the severe scenario, which assumes that the largest two borrowers

would default. The assumed borrower defaults would increase the NPL ratio to 15.4 percent and 20.2 percent in the moderate and severe scenarios, respectively. Overall, credit risk tests show that the credit concentration shocks have more prominence in the capital and asset quality position of banks than the non-performing loan shock. This notwithstanding, the credit concentration stress test does not take into account credit risk mitigants measures such as underlying collateral.

3.59 In the liquidity risk test, banks show resilience to a liability run in the moderate scenario, particularly the large banks, which survive for 25 days (September 2019: 26 days). Small banks, however, experience some liquidity squeeze and would only survive for 15 days. (September

2019: 18 days) as shown under Table 3.9. Under the severe stress conditions, large banks survive for 17 days (September 2019: 18 days), while small banks survive for a much shorter 10 days (September 2019: 12 days). Shorter survival horizons for small banks reflect the large proportion of illiquid assets, being loans and advances, relative to a highly liquid deposit base that is dominated by wholesale deposits. Strong credit growth in the fourth quarter of 2019²⁰ also explains the overall deterioration of liquidity stress test results between September 2019 and December 2019. Nevertheless, these scenarios do not consider the availability of liquidity support provided by the Bank of Botswana through the Credit Facility. Accordingly, the stress results should not be interpreted to mean that the banks would default under these scenarios.

Table 3.8 Banking Sector Financial Soundness Indicators (Baseline Scenario)

| Capital Adequacy (Percent) | Dec 2017 | Dec 2018 | Mar 2019 | Jun 2019 | Sep 2019 | Dec 2019 |
|--|----------|----------|----------|----------|----------|----------|
| Core Capital to Unimpaired Capital | 68.3 | 68.0 | 70.6 | 69.0 | 68.9 | 67.9 |
| Tier 1 Capital to Risk-Weighted Assets ¹ | 13.3 | 13.2 | 14.1 | 13.0 | 12.8 | 13.3 |
| Capital Adequacy Ratio ² | 19.3 | 17.9 | 18.8 | 17.7 | 18.6 | 18.4 |
| Asset Quality (Percent) | | | | | | |
| NPLs to Total Loans | 5.3 | 5.5 | 5.2 | 4.7 | 5.2 | 4.9 |
| NPLs Net of Specific Provisions to Unimpaired Capital | 12.3 | 15.0 | 11.9 | 10.6 | 12.1 | 9.4 |
| Specific Provisions to NPLs | 53.7 | 42.7 | 49.4 | 52.8 | 52.7 | 59.0 |
| Liquidity (Percent) | | | | | | |
| Liquid Assets to Deposits (Liquidity Ratio) ³ | 16.6 | 17.8 | 19.1 | 17.7 | 18.7 | 18.3 |
| Total Loans to Total Deposits (Intermediation Ratio) | 85.2 | 84.2 | 81.5 | 84.1 | 81.1 | 82.9 |
| Profitability/Efficiency (Percent) | | | | | | |
| Return on Average Assets (ROAA) | 1.9 | 2.8 | 2.6 | 2.8 | 1.7 | 2.3 |
| Return on Equity (ROE) | 16.3 | 23.3 | 21.4 | 22.9 | 14.3 | 19.4 |
| Cost to Income | 59.9 | 58.5 | 59.1 | 56.3 | 58.3 | 58.1 |

Notes:

1. Prudential lower limit is 7.5 percent.
2. Prudential lower limit is 15 percent.
3. Minimum statutory requirement is 10 percent.

²⁰ Total credit grew by 7.6 percent in the twelve months to December 2019, compared to 6.1 in the twelve months to September 2019.

Table 3.9: December 2019 Commercial Banks’ Stress Test Results

| SCENARIOS | RISK CATEGORY | | |
|--|---|---|--|
| | Credit | Liquidity | Interest |
| <p>BASELINE SCENARIO:</p> <p>(BANKING CONDITIONS AS AT DECEMBER 2019)</p> | <p>Capital Adequacy Ratio (CAR) of 19.7 percent.</p> <p>4.8 percent NPLs/Total loans.</p> | <p>Perfect Asset Liability match, leading to at least 30 days survival.</p> | <p>Banks start off with a CAR of 19.7 percent.</p> |
| MODERATE SCENARIO | | | |
| <p>DESCRIPTION OF SHOCK</p> | <p><i>NPL Shock:</i></p> <p>10 percent of Performing loans become Non-Performing or Largest Exposure Defaults</p> <p><i>Credit Concentration Shock:</i></p> <p>Largest Exposure defaults or becomes non-performing.</p> | <p>Bank run simulation based on Assets’ Haircuts and Liabilities’ Run-off Rates.</p> | <p>150 basis point cut in Policy Rate.</p> |
| <p>RESULTS</p> | <p><i>NPL Shock:</i></p> <p>Banking system breaches the prudential limit with CAR of 11.1 percent.</p> <p>NPLs/Total Loans ratio increases to 14.3 percent, a sign of increasing vulnerability.</p> <p><i>Credit Concentration Shock:</i></p> <p>Banking system breaches the prudential limit with CAR of 8.3 percent.</p> <p>NPLs/Total Loans ratio increases to 15.4 percent, a sign of increasing vulnerability.</p> | <p>On average banks survive for 23 days</p> <p>Large banks survive for 25 days.</p> <p>Small banks survive for 15 days.</p> | <p>19.3 percent CAR (change in CAR not significant at -0.5 percentage points).</p> <p>Loss of P181.5 million in interest income.</p> |

| SCENARIOS | RISK CATEGORY | | |
|-----------------------------|---|---|---|
| | Credit | Liquidity | Interest |
| SEVERE SCENARIO | | | |
| DESCRIPTION OF SHOCK | <p><i>NPL Shock:</i></p> <p>15 percent of previously performing loans become non-performing.</p> <p>Credit Concentration Shock</p> <p>Two Largest Exposure defaults or become non-performing.</p> | <p>Bank run simulation based on higher Assets' Haircuts and Liabilities' Run-off Rates than in moderate scenario.</p> | <p>350 basis points cut in policy rate.</p> |
| RESULTS | <p><i>NPL Shock:</i></p> <p>Banking system breaches the prudential limit with CAR of 6.6 percent.</p> <p>NPL/Total Loans ratio increases to 19.1 percent, a sign of increasing vulnerability.</p> <p><i>Credit Concentration Shock:</i></p> <p>Banking system breaches the prudential limit with CAR of 4.2 percent.</p> <p>NPLs/Total Loans ratio increases to 20.2 percent, a sign of increasing vulnerability.</p> | <p>On average banks survive for 16 days</p> <p>Large banks survive for 17 days.</p> <p>Small banks survive for 10 days.</p> | <p>18.9 percent CAR (change is -0.8 percentage points).</p> <p>Loss of P423.6 million in interest income.</p> |

Source: Bank of Botswana

Box 3.3: Stress Test 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 10 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 make additional provisioning; the increased provisioning requirements will reduce profitability 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 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 haircuts 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 haircut refers to a discount on asset value considering that a bank cannot access the full value of the asset within a short period to meet urgent and large value transactions or call withdrawals. A run-off rate is the speed at which a liability will be drawn down. Different haircuts and run-off rates are assumed for different categories of assets and liabilities, respectively. In the severe shock, the magnitudes of haircuts 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 Risk²¹

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 Bank Rate and assesses how this interest rate shock affects banks' net income and balance sheets.

²¹ This is interest rate risk in the banking book.

4. FINANCIAL MARKET INFRASTRUCTURE AND REGULATORY DEVELOPMENTS

(a) Payments and Settlements Systems

Value and volume of cheque transactions show a declining trend

- 4.1 The value and volume of cheque transactions show a declining trend (Table 4.1). The clearing systems were largely resilient in handling large volumes of transactions without any major disruption during the period under review.
- 4.2 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. Table 4.1 shows BISS transactions by value and volume for the years 2016 to 2019. The volume of transactions increased from 175 080 in 2018 to 182 954 in 2019. In value terms, the transactions increased from P1 414 billion in 2018 to P1 899 billion in 2019.
- 4.3 Developments and trends in the payments and settlement platforms point to an economy that is increasingly using electronic means of payment such as electronic funds transfers (EFTs) as compared to cheques (Table 4.1).

- 4.5 While payment and settlement platforms are becoming more reliable and efficient in terms of timeliness and finality, they are generating different types of risks. Hence, it is imperative that systems users and operators guard against system failure due to faults in operations and cybersecurity risk.

(b) Regulatory Developments

The Financial Stability Council convenes a special meeting

- 4.6 The FSC convened a special virtual meeting on March 31, 2020 to deal with the impact of coronavirus, COVID-19, on macroeconomic and financial stability. The FSC noted that the ongoing pandemic was disrupting global output and financial market performance, with severe consequences on the domestic economy. Domestic growth projections for 2020 were, therefore, reported to be under threat due to decelerated output in key sectors of the economy, viz., Mining, Hospitality and Transport. Nonetheless, the economy was still exhibiting some resilience to the effects of COVID-19, but its duration and intensity would challenge liquidity and profitability of the banking system. It was noted that the liquidity profile of domestic banks, especially small ones, will be greatly affected by the extreme conditions under the COVID-19 environment. Similarly, the FSC noted that bank profitability would

Table 4.1: Selected Payment and Settlement Systems Indicators

| Period | BISS Transactions | | Cheques | | EFTs | |
|--------|-------------------|-------------------|---------------|-------------------|---------------|-------------------|
| | Volume ('000) | Value (P'billion) | Volume ('000) | Value (P'billion) | Volume ('000) | Value (P'billion) |
| 2016 | 183 | 1 690 | 1 204 | 26 | 7 507 | 166 |
| 2017 | 178 | 1 273 | 1 038 | 22 | 8 135 | 165 |
| 2018 | 175 | 1 414 | 929 | 20 | 8 513 | 180 |
| 2019 | 183 | 1 899 | 810 | 19 | 9 161 | 209 |

Source: Bank of Botswana

- 4.4 In addition, in 2019, the BSEL and Central Securities Depository (CSD) Botswana commenced the implementation of a new Central Securities Depository system with new functionalities that enable it to connect in real time to the BISS, thus ensuring quicker settlement and reducing counterparty risk. It, therefore, improves settlement efficiency and compliance with the International Organisation of Securities Commissions (IOSCO) Principles for Financial Markets Infrastructures.

be significantly affected by large Bank Rate adjustments that attempts to ease the financial and economic burden of the pandemic.

- 4.7 To counteract the potential instabilities due to COVID-19, the FSC endorsed temporary measures presented by the Bank. These include, among others, capital relief to banks, regulatory forbearance in relation to assessment of non-performing loans as well as the determination of expected credit losses, expand the pool of collateral eligible for securing facilities

with the Bank, and increasing the tenure on eligible collateral for overnight repo facilities. Appropriate measures for NBFIs would be implemented when necessary, but most importantly, the FSC emphasised the importance of collective responsibility while responding to the effects of the virus to ensure that unilateral actions by regulatory authorities do not present detrimental effects to the entire financial system. As such, regular information-sharing, continuous monitoring and coordinated policy response underpin a successful countercyclical response strategy to COVID-19 pandemic as suggested by the Financial Stability Board (Box 4.1)

Bank of Botswana reduces Bank Rate and Primary Reserve Requirement

- 4.8 The Monetary Policy Committee (MPC) of the Bank decided to reduce the Bank Rate from 4.75 percent to 4.25 percent and the primary reserve requirement (PRR) from 5 percent to 2.5 percent at its meeting held on April 30, 2020. The decision to ease financial conditions is expected to support domestic economic activity in terms of reducing borrowing costs in the economy and provide a sound springboard for future recovery; sustain, in the short-term, the cash flow position and balance sheets of businesses and households; and facilitate unconstrained banking system support for economic activity, among others. In particular, the reduction of the PRR is expected to inject liquidity of approximately P1.6 billion into the banking system, which should allow commercial banks to perform the necessary financial intermediation to support economic activity.²²

Industry consultations on the establishment of a Deposit Protection Fund ongoing

- 4.9 Following the approval of the policy framework for Botswana's Deposit Protection Fund (DPF) by the FSC, the Bank consulted the industry about the terms of the DPF and how the fund could be operationalised. The consultations started in November 2019 and expected to be completed in 2020 with a comprehensive strategy for the establishment of a DPF in Botswana.

Government adopts a 2.87 percent downward rate of crawl for 2020

- 4.10 In the latest review of the Pula exchange rate framework, the Government adopted a downward rate of crawl of 2.87 percent per annum, being implemented effective May 1, 2020. The decision took into account the difference between the Bank's medium-term inflation objective and the

forecast inflation for trading partner countries. It is also expected to contribute to further easing of real monetary conditions in the economy. Meanwhile, the Pula basket weights were maintained at 45 percent South African rand and 55 percent Special Drawing Rights (SDR) of the International Monetary Fund (IMF). The current exchange rate framework, which provides for a continuous adjustment of the exchange rate, prevents surprise discretionary policy interventions, and thus shocks to the economy, in turn, fostering financial stability.

Financial Stability Board consults on LIBOR

- 4.11 During the period under review, Financial Stability Board (FSB) issued a questionnaire on "Supervisory Issues Associated with Benchmark Transition", which surveys global efforts undertaken to strengthen the robustness and reliability of existing benchmarks as well as promoting the development and adoption of alternative risk-free rates. In particular, the survey establishes the extent of exposure to the London Interbank Offered Rate (LIBOR) and the supervisory measures being taken to address transition to alternative reference rates, owing to the intended discontinuation of the LIBOR by the end of 2021 (Box 4.2).

Botswana remains on the FATF grey list

- 4.12 The FATF-ICRG Africa/Middle East Joint Group assessed Botswana's progress towards addressing its strategic AML/CFT deficiencies in January 2020. The FATF – ICRG found that further progress was needed to rectify the deficiencies, including completing the risk assessment on legal persons, legal arrangements and non-profit organisations (NPOs); applying a risk-based approach to monitoring NPOs; and fully implementing risk-based AML/CFT supervisory manuals for bureaux de change, money and value transfer services and designated non-financial businesses and professions, among others. Meanwhile, the next reviews were scheduled to take place prior to the June 2020 FATF Plenary. Regrettably, FATF has informed Botswana that due to the COVID-19 Pandemic, the reviews have been suspended until further notice. In addition, the Joint Group face-to-face meetings for this review cycle have been cancelled and active timelines have been extended by four months in the current International Cooperation Review Group (ICRG) Action Plan, excluding those with expired timelines. The country will, therefore, remain under monitoring until December 2020. A

²² The revised PRR is effective May 13, 2020.

prolonged stay on the watch list could destabilise the financial system especially that the financial system is experiencing some disruptions in

undertaking international transfers.

Box 4.1: The Financial Stability Board's Response to COVID-19

The Financial Stability Board (FSB), representing a broad and diverse membership of national authorities, international standard setters and international bodies, is actively cooperating to maintain financial stability during market stress related to COVID-19. The FSB's efforts are targeted at providing a rapid and coordinated response to support the real economy, maintain financial stability and minimise the risk of market fragmentation. This response is underpinned by the following five principles:

- monitor and share information on a timely basis to assess and address financial stability risks from COVID-19;
- recognise and use the flexibility built into existing financial standards to support our response;
- seek opportunities to temporarily reduce operational burdens on firms and authorities;
- act consistently with international standards, and not roll back reforms or compromise the underlying objectives of existing international standards; and
- coordinate on the future timely unwinding of the temporary measures taken.

Based on these principles, the FSB has re-prioritised its work programme for 2020 to focus on responding to the pandemic in this way:

a) Regular Information sharing on evolving financial stability threats and on the policy measures that financial authorities are taking

FSB members are taking a number of measures to ensure that the financial system is able to respond to the pandemic, such as:

1. Lending and credit support – including actions to ensure that financial institutions are able to continue lending, such as loan guarantee schemes, restructuring of loan terms, or the release of countercyclical capital buffers and encouragement to use capital and liquidity buffers.
2. Funding and liquidity support – including actions by authorities to support funding markets in domestic currency, for instance through bank and market funding facilities or asset purchases, as well as facilities that provide access to foreign currency.
3. Market functioning – steps by markets authorities to support the operations of markets, including enhanced market surveillance or volatility control mechanisms.
4. Operational and business continuity of financial institutions – including engagement with financial institutions to ensure that they have robust measures in place so they can continue to maintain their activities.
5. Authority business continuity measures – actions taken by authorities to ensure the continuity of their supervisory and regulatory activities.

b) Assessing financial risks and vulnerabilities

The COVID-19 pandemic represents the biggest test of the post-crisis financial system to date. The pandemic constitutes an unprecedented global macro-economic shock, pushing the global economy into a recession of uncertain magnitude and duration. The global financial system faces the dual challenge to sustain the flow of credit amidst declining growth and to manage heightened risks. FSB members assess financial risks and vulnerabilities related to COVID-19 on an ongoing basis. Given the increased risks that the pandemic poses, the FSB is holding regular calls of its senior committees to discuss these risks and to share experiences of members on the steps they are taking to address them. The FSB provided its assessment of financial stability risks related to COVID-19 in a report to the virtual meeting of G20

Finance Ministers and Central Bank Governors held on April 15, 2020. The FSB is examining the potential financial stability risks that may lie ahead as the impact of COVID-19 on the global economy unfolds.

c) Coordinating policy responses

FSB members, including the standard-setting bodies (SSBs), are cooperating closely to coordinate action, including financial policy responses in their jurisdictions, to maintain global financial stability, keep markets open and functioning, and preserve the financial system's capacity to finance growth. The FSB is actively coordinating with SSBs on issues that cut across sectors. Guided by the five principles laid out above that underpin national and international regulatory and supervisory responses, the FSB and SSBs are:

- sharing information on, and considering whether there are areas for collaboration to promote the effectiveness of, the steps authorities and the private sector are taking to temporarily mitigate lending terms for borrowers.
- coordinating steps to support the business continuity of financial services firms, both through facilitating remote working and enabling those essential staff who need to work onsite to do so.
- coordinating their responses to enable firms and authorities to focus their resources on COVID-19 response by delaying existing deadlines for implementation of international reforms and of other international regulatory initiatives, where this can be done in a way that remains consistent with the underlying objectives of the reforms.

The FSB's reprioritisation of its work programme is in the following areas:

- Non-bank financial intermediation (NBFI). Prioritisation will support timely discussion of policy issues arising from vulnerabilities in NBFI that are surfacing in the COVID-19 crisis, and decisions on how to organise such work in the FSB going forward.
- Financial innovation. Prioritisation will ensure that key deliverables to the Saudi G20 Presidency will be provided, and that the FSB completes initiatives on topics that are likely to remain of policy relevance in the near term.
- Cross-border payments. The three-stage work to develop a roadmap on cross-border payments, in coordination with the Committee on Payments and Market Infrastructures (CPMI), will continue as scheduled, given the importance of efficient cross-border payments systems.
- Resolution. Technical work on central counterparty resolution and the implementation of the Total Loss-Absorbing Capacity standard remains a priority, given the importance as part of effective crisis management.
- OTC derivatives. Finalising the oversight arrangements for Unique Product Identifier (UPI) and Unique Transactions Identifier will continue as the UPI service provider awaits clarity on the oversight arrangements.
- Benchmark transition. The transition from LIBOR remains a priority as firms cannot rely on LIBOR being produced after end 2021. Benchmark transition will help to strengthen the global financial system.
- Other work on supervisory and regulatory policies. FSB will prioritise work to focus on policy responses to the COVID-19 crisis, including forward-looking issues concerning crisis management.
- Implementation monitoring. Implementation monitoring will track measures taken by SSBs in response to the COVID crisis. Other work will be reduced to the completion of near-final projects and the production of a streamlined annual report to the G20.

Source: Various FSB Press Releases

Box 4.2: Financial Benchmark Reforms – LIBOR Transition

Benchmark rates, or financial benchmarks, are published pricing assessments used as a basis for determining the pricing of, or amount payable pursuant to, financial instrument or contract. Global Financial Markets Association (GFMA, 2012). They are essentially market infrastructures that aid effective functioning and development of financial markets; hence their accuracy, integrity and robustness are critical to market efficiency (European Parliament and Council of the European Union, 2016). More precisely, BIS (2013) indicates that robust and reliable interest rate frameworks promote financial stability by maintaining market confidence, reducing transfer pricing errors and allowing central banks to effectively respond to market distress.

Enhancing governance and strengthening robustness and reliability of existing financial benchmarks has therefore gained prominence, particularly after cases of attempted manipulation of key short-term benchmark rates and declining liquidity in unsecured interbank funding markets (FSB, 2013).¹ The reforms also provided impetus for the development and adoption of feasible and viable alternative reference rates and potential transition paths from widely used benchmarks such as the LIBOR. LIBOR, in particular, is expected to be discontinued after the end of 2021² and, as such, ongoing dependence on the benchmark presents risks to financial stability. The Financial Stability Oversight Council (2018) notes that sudden cessation of LIBOR could disrupt the functioning of markets, hence an orderly transition to alternatives is critical. On these concerns, the FSB instigated a survey, “Supervisory Issues Associated with Benchmark Transition”, in December 2019 to establish the extent of exposure to LIBOR and the supervisory measures being taken to address transition to alternative risk-free rates (RFRs). The survey thus sought to improve collective understanding of progress on LIBOR transition and to increase awareness of timely transition.

The Bank of Botswana and the Non-Bank Financial Institutions Regulatory Authority (NBFIRA) participated in the survey, generally indicating that the discontinuation of LIBOR would have a significantly negative impact on the domestic financial system. Specifically, non-bank financial institutions (NBFIs) would be impacted through investment guidelines and prospectuses that benchmark the LIBOR for money markets, derivatives and forward contracts. The nominal exposure to LIBOR in the domestic financial system is, however, yet to be quantified, which hampers development of a detailed and robust transition plan to RFRs. Moreover, transitioning to RFRs in the domestic economy is hindered by illiquidity of new RFRs; inadequacy of fallback provisions; challenges agreeing contract amendments; lack of awareness and limited understanding on the use of RFRs, among other things. Nevertheless, domestic banks are reportedly on track to transitioning, with some having conducted an impact analysis of LIBOR transition on conduct risk matters.

Overall, progress made by domestic financial institutions to transition to RFRs could be supported by a clear regulatory approach to address the risk arising from benchmark reforms. Specifically, supervisory targets and timelines, as well as awareness about the need to transition to alternative rates would provide basis for a robust transition plan. As such, the supervisory gaps in relation to transition to RFRs heighten risks to financial stability arising from abrupt and disorderly exit from LIBOR contracts post 2021. A poorly managed transition, therefore, has the potential to cause significant disruptions and uncertainties, with dire consequences for lending and investment in the domestic financial system.

Notes:

1. Several reports were issued to reform the benchmark-setting process, among others, IOSCO, 2013, Principles for financial benchmarks; BIS, 2013, Towards better reference rate practices – a central bank perspective; ESMA-EBA, 2013, Principles for benchmark-setting process in the EU and The 2012 Wheatly review of LIBOR.
2. Last Orders: Calling Time on LIBOR, Remarks by Dave Ramsden, Deputy Governor for Markets and Banking, Bank of England, June 5, 2019.

5. CONCLUSION AND OUTLOOK

Overall, vulnerabilities to financial stability are generally contained, but could be elevated in the short to medium-term due to the effects of coronavirus

- 5.1 The vulnerabilities relating to potential for excessive and rapid credit growth, liquidity and funding risk, corporate leverage, inflated asset valuations and interlinkages between banks and non-bank financial institutions (NBFIs), were generally contained. However, the ongoing Covid-19 pandemic elevates some risk to financial stability. The rate of credit growth, in particular, was moderate and in line with trends in personal incomes and thus did not present any indication of excessive and rapid credit increase that could threaten financial stability. However, commercial bank credit continued to be dominated by household credit. Market liquidity declined over the review period, owing largely to the deterioration in the foreign exchange position due to declining diamond sales. Unabated, this situation could further erode market liquidity in the short-to-medium term, hence the Bank has come up with numerous temporary liquidity measures to support the market.
- 5.2 Corporate leverage is rising but corporates are demonstrating an increased capacity to repay their commitment as reflected in improving interest coverage ratios. COVID-19 containment measures are, however, likely to destabilise companies within sectors primarily affected by the virus. In terms of asset valuations, developments in stock market and bond market capitalisation do not suggest any build-up of asset bubbles. The assessment of interlinkages between banks and NBFIs suggest elevated levels of vulnerabilities to financial stability and the economy at large. The growing interconnectedness within the financial system and across the economy, therefore, elevates the risk of contagion in the domestic financial system, although effective regulation across the system, as well as proper governance and accountability structures, moderate the risk
- 5.3 Despite the current level of resilience exhibited by the domestic financial system, longevity and intensity of coronavirus would weaken this position. The economic fallout from the virus further threatens the domestic macroeconomic stability through the external shocks propagated through the diamond market. Adverse global

economic outlook thus has far reaching consequences on the demand for diamonds, which could undermine the country's trade balance in the near to medium-term. There is also some likelihood of elevated risk to financial stability due to ongoing strategic AML/CFT deficiencies.

APPENDIX

Table A1: Macroeconomic and Financial Stability Indicators

| Financial Sector (Percent) | Dec 2017 | Dec 2018 | Jun 2019 | Sep 2019 | Dec 2019 |
|---|-------------|-------------|-------------|-------------|-------------|
| Relative Size of Financial Sector (percent of GDP) | 115.6 | 115.8 | 99.81 | 97.31 | 101.21 |
| Botswana Public Officers Pension Fund (percent of GDP) | 32.5 | 31.8 | ... | ... | ... |
| Pension Funds Offshore Investments (percent of GDP) | 29.0 | 23.9 | 27.2 | 27.5 | 28.3 |
| Corporate Sector (Percent) | | | | | |
| Corporate Sector Debt to GDP | 11.7 | 12.2 | 11.5 | 11.5 | 11.6 |
| Debt to Equity | 42.1 | 46.9 | ... | ... | 46.3 |
| Household (Percent) | | | | | |
| Household Debt to GDP | 18.4 | 18.5 | 18.9 | 18.9 | 21.7 |
| Household Debt to Income | 49.3 | 48.3 | 48.0 | 48.0 | 48.0 |
| NPL (household) | 4.5 | 4.2 | 3.7 | 3.3 | 3.2 |
| Real Estate (Percent) | | | | | |
| Mortgage loans to Total loans | 21.7 | 21.2 | 21.0 | 20.8 | 20.4 |
| NPL (mortgages)/Total mortgage loans | 6.0 | 6.0 | 6.2 | 6.2 | 6.1 |
| Total mortgage loans/GDP | 7.3 | 7.2 | 7.1 | 7.1 | 7.1 |
| General Economic Indicators | | | | | |
| Economic growth | 2.9 | 4.5 | 3.9 | 3.1 | 3.0 |
| Inflation | 3.2 | 3.5 | 2.8 | 3.0 | 2.2 |
| Foreign Exchange Reserves (percent of GDP) | 40.2 | 36.7 | 35.9 | 35.9 | 33.1 |
| Current Account Balance (P'Million) | 10 987 | 4 014 | 846 | (6 499) | (6 581) |
| Months of Import Cover | 17.1 | 14.7 | 14.7 | 14.8 | 12.6 |
| Exports (percent of GDP) | 39.1 | 45.7 | 40.8 | 27.0 | 38.2 |
| Imports (percent of GDP) | 40.0 | 44.4 | 38.2 | 35.0 | 35.0 |
| Government | | | | | |
| Government Debt to GDP | 13.6 | 17.9 | 13.4 | 13.6 | 13.9 |
| Government Debt to Revenue | 43.4 | 64.4 | 49.4 | 47.5 | 50.1 |
| Government Guaranteed Debt/GDP | 4.7 | 4.4 | ... | ... | ... |
| Government Net Financial Position to GDP | (0.6) | (6.2) | -4.3 | 10.2 | 8.7 |
| Government Interest Payments to Revenue | 1.8 | 1.7 | 2.6 | 2.3 | 2.3 |
| Government Interest Payments to GDP | 0.5 | 0.5 | 0.1 | 0.2 | 0.2 |
| Government Lending to State Owned Enterprises (P'Million) | 2 444.2 | 2 530.6 | ... | ... | ... |
| General Government to GDP | 14.4 | 14.5 | 14.7 | 14.7 | 14.7 |
| Government Deposits to GDP | 16.9 | 18.9 | 16.7 | 16.3 | 16.3 |
| Government Expenditure to GDP | 32.4 | 32.8 | 30.3 | 36.2 | 32.2 |
| Government Employment to Total Employment | 47.9 | 48.5 | 45.0* | 45.0* | 45.0* |

Source: Bank of Botswana, Statistics Botswana, MFED, NBFIRA, Botswana Stock Exchange Limited and Commercial Banks

Note: Numbers in Italics are as at December 2018; numbers in bold have been revised

... denotes data not available

Numbers in parenthesis denote a negative figure

¹Figures include Commercial Banks, Statutory Banks and Pension fund Assets only

* are estimated figures


Table A2: Selected Banking Sector Indicators

| Number of Licensed Institutions, Branches and ATMs | | | | | | | | | | | |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
| Commercial Banks | 11 | 11 | 11 | 13 | 13 | 11 | 10 | 10 | 10 | 10 | 9 |
| Branches | 91 | 94 | 96 | 105 | 115 | 114 | 114 | 115 | 127 | 128 | 136 |
| Agencies | 18 | 26 | 18 | 14 | 19 | 18 | 15 | 18 | 20 | 23 | 26 |
| Statutory Banks | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Building Society | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| ATMs | 352 | 381 | 357 | 379 | 390 | 432 | 427 | 455 | 473 | 523 | 542 |
| Assets of the Banking System (in millions of Pula) | | | | | | | | | | | |
| Commercial Banks | 44 148 | 49 590 | 51 600 | 57 954 | 59 962 | 67 994 | 76 605 | 80 640 | 83 475 | 91 341 | 98 677 |
| Statutory Banks | 1 590 | 1 689 | 1 839 | 2 329 | 2 893 | 3 267 | 3 229 | 3 871 | 3 660 | 3 465 | 4 184 |
| Building Society | 1 874 | 2 073 | 2 413 | 2 770 | 3 045 | 3 422 | 4 264 | 3 765 | 4 261 | 4 017 | 4 641 |
| Selected Ratios | | | | | | | | | | | |
| Market Share (Top 4 Banks) | 89.8 | 87.0 | 85.2 | 81.4 | 81.0 | 81.0 | 79.2 | 79.4 | 79.8 | 78.6 | 78.7 |
| Private Sector Credit/GDP | 11.0 | 9.2 | 25.0 | 26.0 | 29.6 | 29.1 | 31.6 | 29.4 | 28.5 | 29.0 | 30.1 |
| Total Credit/GDP | 27.2 | 25.4 | 26.0 | 30.5 | 31.4 | 31.7 | 32.4 | 30.1 | 30.1 | 30.7 | 32.0 |
| Total Deposits/GDP | 52.0 | 47.9 | 40.3 | 41.9 | 38.6 | 36.1 | 40.2 | 36.6 | 35.3 | 36.5 | 38.6 |

Table A3: GDP of Primary COVID-19 Affected Economic Sectors

| Year | Manufacturing (P'million) | Trade, Hotels and Restaurants (P'million) | of which Hotels and Restaurants (P'million) | Transport and Communications (P'million) | of which | | GDP (P'million) |
|----------------|------------------------------|--|--|--|---------------------------------|----------------------------------|-----------------------|
| | | | | | Air Transport (P'million) | Road Transport (P'million) | |
| 2014 | 7 740.3 | 26 182.3 | 7 956.9 | 7 788.2 | 2 015.9 | 1 494.4 | 145 868.6 |
| 2015 | 8 441.7 | 23 711.4 | 8 856.7 | 8 559.3 | 2 155.1 | 1 665.3 | 146 066.2 |
| 2016 | 8 859.5 | 30 997.2 | 9 970.3 | 9 642.7 | 2 452.0 | 1 775.4 | 170 564.0 |
| 2017 | 9 214.5 | 35 059.1 | 10 916.9 | 10 622.7 | 2 762.7 | 1 996.1 | 180 102.6 |
| 2018 | 9 794.7 | 36 652.6 | 11 965.7 | 11 508.7 | 2 947.1 | 2 144.5 | 190 365.3 |
| 2019 | 10 352.6 | 38 765.9 | 12 886.4 | 12 129.7 | 2 866.5 | 2 331.2 | 197 268.8 |
| Percent of GDP | | | | | | | Sectors to GDP |
| 2014 | 5.3 | 17.9 | 5.5 | 5.3 | 1.4 | 1.1 | 28.6 |
| 2015 | 5.8 | 16.2 | 6.1 | 5.9 | 1.5 | 1.2 | 27.9 |
| 2016 | 5.2 | 18.2 | 5.8 | 5.7 | 1.4 | 1.2 | 29.0 |
| 2017 | 5.1 | 19.5 | 6.1 | 5.9 | 1.5 | 1.2 | 30.5 |
| 2018 | 5.1 | 19.3 | 6.3 | 6.0 | 1.5 | 1.2 | 30.4 |
| 2019 | 5.2 | 19.7 | 6.5 | 6.1 | 1.5 | 1.3 | 31.0 |

Chart A1: Financial Systems Vulnerabilities' Heat Map

| | GLOBAL ECONOMY | 2018 | 2019 | 2020 | 2021 | 2022 |
|---------------|--|------------|--------|--------|-----------|--------|
| RISK CATEGORY | UNDERLYING INDICATOR | RISK LEVEL | | | | |
| | Output (year) | | | | | |
| Global | Inflation (Year) | | | | | |
| | Financing Conditions* | | | | | |
| RISK CATEGORY | DOMESTIC ECONOMY | 2018 Q4 | 2019Q1 | 2019Q2 | 2019Q3 | 2019Q4 |
| RISK CATEGORY | UNDERLYING INDICATOR | RISK LEVEL | | | | |
| | Economic growth | | | | | |
| | Foreign exchange reserves (percent of GDP) | | | | | |
| MACRO | Month of imports | | | | | |
| | Current account balance | | | | | |
| | Public debt to GDP | | | | | |
| | Business confidence index | | | | | |
| | Pensions assets/GDP | | | | | |
| | Credit to GDP gap | | | | | |
| | Total credit to GDP | | | | | |
| | Household debt to GDP | | | | | |
| | Household debt to income | | | | | |
| | NPL (household) | | | | | |
| | NPL (banking sector) | | | | | |
| CREDIT | 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 | | | | | |
| | NBFIs credit to total credit | | | | | |
| SOLVENCY | Leverage ratio | | | | | |
| | Insurance capital adequacy | | | | | |
| | Corporate cost to income ratio | | | | | |
| FUNDING | Intermediation ratio (loans to deposits) | | | | | |
| | Stock market: Domestic capitalisation growth | | | | | |
| | Stock market: Domestic-capitalisation/GDP | | | | | |
| | Insurance concentration -top 5 | | | | | |
| CONTAGION | Pension fund concentration | | | | | |
| | Micro Lender concentration | | | | | |
| | NBFIs deposits to total deposits | | | | | |
| KEY | Very Low | Low | Medium | High | Very High | |
| |  | | | | | |

