FINANCIAL STABILITY REPORT

BANK OF BOTSWANA
BANKA YA BOTSWANA

PULA
REPUBLIC OF BOTSWANA
MINISTRY OF FINANCE

NBFIRA
Non-Bank Financial Institutions Regulatory Authority

OCTOBER 2022

FINANCIAL STABILITY COUNCIL

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ABBREVIATIONS

AML/CFT/CPF	Anti-Money Laundering/Combating the Financing of Terrorism/Combating the Financing of Proliferation/Counter Proliferation Financing
ATS	Automated Trading System
AUM	Assets Under Management
BCBS	Basel Committee on Banking Supervision
BES	Business Expectation Survey
BHC	Botswana Housing Corporation
BIHL	Botswana Insurance Holdings Limited
BISS	Botswana Interbank Settlement System
BoBCs	Bank of Botswana Certificates
BoP	Balance of Payments
BPOPF	Botswana Public Officers Pensions Fund
BSEL	Botswana Stock Exchange Limited
CAR	Capital Adequacy Ratio
CBDC	Central Bank Digital Currencies
CPMIs	Committee on Payments and Market Infrastructures
CRE	Commercial Real Estate
CSD	Central Securities Depository
DCI	Domestic Company Index
DCTRI	Domestic Company Total Return Index
D-SIBs	Domestic Systemically Important Banks
D-SIFIs	Domestic Systemically Important Financial Institutions
EFTs	Electronic Funds Transfers
EMDEs	Emerging Market and Developing Economies
EPS	Electronic Payment Service
ERTP	Economic Recovery and Transformation Plan
ETF	Exchange Traded Funds
FATF	Financial Action Task Force
FIA	Financial Intelligence Agency
FMI	Financial Market Infrastructure
FSB	Financial Stability Board
FSC	Financial Stability Council
FSR	Financial Stability Report
GDP	Gross Domestic Product
GFSR	Global Financial Stability Report
IBRD	International Bank for Reconstruction and Development
ICT	Information and Communications Technology
IMF	International Monetary Fund
IOSCO	International Organization of Securities Commissions
ISF	Industry Support Facility
ISSB	International Sustainability Standards Board
KYC	Know Your Customer
LTV	Loan-to-Value
MoF	Ministry of Finance
MoPR	Monetary Policy Rate
MoU	Memorandum of Understanding
MPC	Monetary Policy Committee
NBFIs	Non-Bank Financial Institutions
NBFIRA	Non-Bank Financial Institutions Regulatory Authority
NFCs	Non-Financial Corporates
NPLs	Non-Performing Loans
NAV	Net Asset Value
ROE	Return on Equity

SACU	Southern African Customs Union
SARB	South African Reserve Bank
SCF	Standing Credit Facility
SDR	Special Drawing Rights
SDF	Standing Deposit Facility
SLT	Secure Land Title
SOEs	State Owned Enterprises
SSA	Sub-Saharan Africa
US	United States
VASPs	Virtual Assets Services Providers
VAT	Value Added Tax
WEO	World Economic Outlook
WUC	Water Utilities Corporation

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The October 2022 issue of the Financial Stability Report (FSR) was prepared by the Bank of Botswana (the Bank) in collaboration with the Ministry of Finance (MoF), the Non-Bank Financial Institutions Regulatory Authority (NBFIRA), the Financial Intelligence Agency (FIA) and the Botswana Stock Exchange Limited (BSEL). The Report was approved for publication by the Financial Stability Council (FSC), a multi-agency body launched in 2019 to collaborate and exchange information on financial stability issues affecting Botswana's financial system. The FSC comprises Chief Executive Officers from MoF, the Bank, NBFIRA and 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. Meanwhile, Section 20 (54B) of the Bank of Botswana (Amendment) Act, 2022 provides for the statutory establishment of the FSC. Furthermore, membership of the FSC has been expanded to include the Director of the Deposit Insurance Scheme. BSEL is an observer member.

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PREFACE

Purpose of the Report

The Financial Stability Report (FSR) provides an assessment of the vulnerabilities that could elevate risks to the stability and resilience of the Botswana financial system by the Financial Stability Council (FSC). The Report provides analytical and performance updates for the financial sector and its impact on economic activity and welfare; encourages public discourse and 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. The FSR is published twice a year (May and October) following discussion and approval at the FSC meetings.

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, and understanding, that the financial system is interconnected and vulnerable to contagion risk, with the result that crises emanating from the financial sector can spill-over rapidly to the real economy. At the same time, sectoral or broader economic weaknesses could adversely affect the financial system and trigger instability or cause a systemic financial 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 variety 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 mitigate aggregate shocks.

Given the structure of the Botswana economy, the macroprudential policy framework views the external sector vulnerabilities of the domestic economy, through trade shocks and capital outflows, as having the greatest potential for elevated financial stability risks. In addition, the COVID-19 pandemic and the necessary disease containment measures elevated the risk of a macroeconomic shock, arising out of the depressed global diamond market and disruption of the tourism and related hospitality industries, for most of 2020 though improvements were noted in the first half of 2021. There are also potential risks to the stability of the domestic financial system emanating from the negative effects of the Russia-Ukraine war and other geopolitical tensions; continued exposure to cyber threats due to increasing usage of technology, as well as climate-related financial risks. The FSR provides an analysis of these vulnerabilities – where they persist – their interaction, 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 are available for use as intervention measures during periods of financial instability. The instruments and policy tools would be adjusted accordingly and timeously to mitigate the envisaged threats. Macroprudential interventions in this regard would be communicated through circulars issued, periodically, by the FSC.

Decision-making process

The FSC of Botswana, a multi-agency body, was established to, among others, collaborate and share information on policy and other related issues on strengthening the financial system and making it more robust, in order to mitigate financial stability risks, and take prompt action in response to a perceived build-up of systemic risks; ensure a coordinated response to financial stability issues that may require cross-agency collaboration; request information from any financial institution, exchange information on financial stability issues, and communicate systemic risk warnings.

The FSC is now a statutory body as per Section 20 (54B) of the Bank of Botswana (Amendment) Act, 2022. It is responsible for (a) preserving the stability of the financial system; (b) ensuring cooperation between its members with respect to the assessment of the build up of economic and financial sector systemic risks in Botswana; (c) developing coordinated policy responses to risks including crisis management; and (d) making recommendations, issuing warnings or opinions addressed to regulatory bodies regarding financial institutions.

The FSC comprises Chief Executive Officers of the Ministry of Finance (MoF), the Bank of Botswana (Bank), the Non-Bank Financial Institutions Regulatory Authority (NBFIRA) and the Financial Intelligence Agency (FIA). Through the Bank of Botswana (Amendment) Act, 2022, the composition of the FSC has been expanded to include the Director of the Deposit Insurance Scheme. The Botswana Stock Exchange Limited (BSEL) is an observer member. The FSC is chaired by the Governor, and the Bank acts as the secretariat. The work of the FSC used to be governed by a memorandum of understanding (MoU), signed in February 2019.

Announcement of macroprudential policy decisions

Proceedings of the FSC are communicated through a Press Release, shortly after a Council meeting, to inform the public of the discussions and conclusions regarding the stability of the domestic financial system. The Press Release further highlights the key risks in the financial system and recommendations to address such vulnerabilities. Policy decisions are communicated through a circular to all affected financial institutions. The circular provides a brief description that links the identified risk with the intermediate objective and explains the way measures taken are expected to mitigate the risk.

1. EXECUTIVE SUMMARY

1.1 **The October 2022 International Monetary Fund (IMF) Global Financial Stability Report (GFSR) points to a deterioration in the outlook for global financial stability since the April 2022 GFSR,** largely due to restrained and fragile global economic performance, high and rising inflation, and persisting geopolitical risks. The GFSR notes the tightening global financial conditions, which are a result of accelerated monetary policy tightening to prevent inflationary pressures from becoming entrenched. At a global level, the impact of rising interest rates is already showing through a contraction in profit margins for large firms due to higher costs, and bankruptcies among small firms. Furthermore, there is potential for housing-market-related risks to manifest in most advanced economies and emerging markets as mortgage rates increase and lending standards tighten. Overall, risks to global financial stability have increased, and are skewed to the upside. The IMF recognises the unusually challenging financial stability environment for policy makers and advocates for enhanced and timely monitoring of economic and financial markets to inform proactive and well-thought policy action. The IMF also encourages timely and balanced use of macroprudential tools, as well as reforms for debt resolution to contain current and emerging vulnerabilities.

1.2 **The crypto-assets market structural vulnerabilities remain a concern hence the Financial Stability Board (FSB) has issued a framework on international regulation of crypto-asset activities.** The regulations provide an effective regulatory and supervisory framework based on the principle of "same activity, same risk, same regulation". This is to ensure that crypto-asset activities are subject to comprehensive regulation, commensurate with the risks they pose, while harnessing potential benefits of the technology behind them. Similarly, climate-related financial risks continue to challenge the global financial system, prompting collective action and policy advocacy to green the financial system. The October 2022 GFSR reports that emerging markets and developing economies account for two-thirds of global greenhouse gas emissions and that many are highly vulnerable to climate hazards, hence will need significant green finance to help mitigate the risks. The IMF is expected to play a pivotal role in assisting emerging market and developing economies to strengthen the climate information architecture and help set up climate and other policies to promote private sector climate finance.

1.3 **Botswana's financial system is resilient and continues to perform the expected function of financing key sectors of the economy, given its strong capital and liquidity buffers, profitability, as well as an enabling and effective regulatory environment.** Notably, there is no evidence of excessive and uncontrolled credit growth; the continuing fall in excess market liquidity, due to persistent foreign exchange outflows, is likely to be moderate, going forward, following improvements in diamond sales; asset prices have remained generally stable since the May 2022 FSR; and the risk of contagion between banks and non-bank financial institutions (NBFIs) remain elevated but is moderated by effective prudential regulation and supervision together with strong liquidity and capital positions across the financial system. In addition, the results of the stress test for banks suggest some degree of resilience even though this could be weakened by a delayed recovery. The NBFI sectors remains financially sound and stable as attested by increase in assets and capital levels. There is also some notable recovery in the domestic capital market as reflected in the appreciation of key market indices and improved turnover, while financial market infrastructures remain stable and robust, thus promoting domestic financial stability. That notwithstanding, there are risks emanating from, among others, the negative effects of the Russia-Ukraine war and other geopolitical tensions; continued exposure to cyber threats due to increasing usage of technology as well as climate related financial risk. These risks will be monitored regularly and, where necessary relevant macroprudential policy tools implemented to contain emerging vulnerabilities that could elevate any of these risks.

1.4 **The macroeconomic environment remains conducive for financial stability despite sovereign vulnerabilities (that is, reduced fiscal and external buffers) due to the current depressed global economic environment combined with long-term structural trends.** Over the twelve months to June 2022, the domestic economy grew by 6.7 percent, compared to a growth of 5.1 percent in the year to June 2021[1]. The October 2022 IMF World Economic Outlook (WEO) has revised down the real GDP growth forecast for 2022 and 2023 to 4.1 percent and 4 percent, from the 4.3 percent and 4.2 percent, respectively, projected in the July 2022 WEO Update. On the other hand, the July 2022 IMF Article IV Mission for Botswana

[1] According to Statistics Botswana, real GDP grew year-on-year by 5.6 percent in the second quarter of 2022.

projects real GDP of 4.25 percent in 2022 and 4 percent in the medium term (2023-2027), with non-mineral output expected to outpace mineral output throughout the period. The Mission further projects inflation at 11 percent in 2022, which could require targeted fiscal support to cushion the most vulnerable households from the effects of rising global inflation. In this regard, the Minister of Finance announced short-term inflation relief measures on July 25, 2022, that included the reduction of value added tax (VAT) from 14 percent to 12 percent, VAT zero-rating cooking oil and liquid petroleum gas, as well as an 18.5 percent increase in allowances for tertiary students effective September 1, 2022.

1.5 **Domestic credit growth remains moderate and commensurate with the rate of increase in GDP, thus posing minimal risk to financial stability.** Commercial bank credit grew by 6.4 percent to P72.9 billion in the year to September 2022 and was lower than the 7.4 percent growth in the corresponding period in 2021. The growth in credit was mainly attributable to the 5.4 percent increase in lending to households that was driven by unsecured lending. Commercial bank credit continued to be dominated by household loans, which constituted 64.8 percent of total loans during the period under review. Household debt also dominates credit granted by the NBFI sector, although the level of household exposure in the sector remains relatively low compared to that of commercial banks[2]. The level of household indebtedness in Botswana is, however, considered low by international standards, at 23.4 percent of GDP in 2021, compared to, for example, 34.7 percent for South Africa in 2021[3]. The ratio of non-performing loans (NPLs) to total loans remains modest at 3.8 percent in September 2022, a decline from 4.2 percent in September 2021. The 2021 Household Indebtedness Survey indicates that household debt poses minimal risks to financial stability. Overall, there is no indication of excessive and rapid credit growth that could threaten the stability of the financial system.

1.6 **Average daily market liquidity in the banking system decreased from P5.4 billion in August 2022 to P4.7 billion in September 2022, largely driven by foreign exchange outflows.[4]** Excess market liquidity in the banking sector has generally trended downwards since the outbreak of COVID-19, mainly due to net foreign exchange outflows resulting from dampened trade, payment for external obligations, as well as settlement of some Government bonds. Nonetheless, banks still maintained a healthy liquidity position, with an industry average liquidity ratio of 18.3 percent in September 2022, which is above the statutory requirement of 10 percent. Therefore, banks had scope to increase their financing of the real economy without undue prudential liquidity constraints.

1.7 **Meanwhile, the risk of contagion whereby a weakness in one of the elements of the financial system cascades to others in the domestic financial system remains elevated due to strong and concentrated sectoral interlinkages.** Also, most of the retail and household loans have credit life protection, mortgage repayment policies and retrenchment cover policies provided by insurance companies, effectively shifting some banking risks to the insurance sector. Nevertheless, effective regulation and supervision of the financial system, as well as proper governance and accountability structures moderate the risk.

1.8 **Overall, vulnerabilities remain generally contained in the financial and non-financial sectors following the opening of the economy.** The heat map (Appendix Chart A1), which is the vulnerability indicator, shows a moderate level of risk to the non-financial sector, relatively stable housing prices and stock market (asset) valuations, low funding costs and sufficient market liquidity. Meanwhile, the risk of contagion in the domestic market remains high due to strong macro financial interlinkages. However, vulnerabilities could be worsened by a delayed recovery due to restrained and fragile global economic performance, high and rising inflation, slow structural reforms and persistent geopolitical risks.

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2 As of December 31, 2021, household loans from micro-lenders were equivalent to 11 percent of household credit from commercial banks.

3 South African Reserve Bank Financial Stability Review 2022 First Edition.

4 Average daily market liquidity refers to average daily excess liquidity over the duration of a month, where excess liquidity is the sum of commercial banks' overnight deposits at the central bank (current account), money absorbed through Bank of Botswana Certificates, outstanding reverse repos and the Credit Facility.

2. FINANCIAL STABILITY DEVELOPMENTS AND TRENDS

(a) External Sector Vulnerability Assessment

Botswana susceptible to external sector shocks

2.1 The external sector presents the greatest potential for elevated financial stability risks to the domestic economy due to the country's dependence on external trade and related revenue, that is, Southern African Customs Union (SACU) receipts and mineral export revenue. This vulnerability to external macroeconomic developments, hence external shocks, is exacerbated by the narrow export base, dominated by diamonds, which poses a threat to balance of payment outcomes. For the twelve months to September 2022, the overall balance of payments (BoP) was in a cumulative surplus of P6 547 million, compared to a deficit of P9 245 million in the year to September 2021. This reflects improved (diamonds) export performance over the period.

External buffers recovering

2.2 Foreign exchange reserves amounted to P54.5 billion in September 2022, an increase of 4.6 percent from P52.1 billion in September 2021. In foreign currency terms, the level of foreign exchange reserves decreased by 10.9 percent from USD4.6 billion in September 2021 to USD4.1 billion in September 2022 and by 3 percent to SDR3.2 billion over the same period. The level of foreign exchange reserves in September 2022 is equivalent to 8.8 months of import cover of goods and services.

(b) Global Financial Stability Trends

Deterioration in the outlook for global financial stability

2.3 The October 2022 IMF GFSR indicates that the outlook for global financial stability has deteriorated since the April 2022 GFSR. Notably, strains in global financial markets have been observed, with an elevated risk of quicker and disorderly repricing of assets, which could be amplified by pre-existing vulnerabilities. The GFSR also notes the tightening global financial conditions, which are a result of accelerated monetary policy tightening to prevent inflationary pressures from becoming entrenched. The tightening global conditions are exacerbated by rising uncertainty and have led to capital outflows for emerging markets especially, with the potential to further weaken or distress the financial position of sovereigns, corporates, and households. Investor risk appetite has receded on the backdrop of stretched valuations on risky assets and sectors. At a global level, the impact of rising interest rates is already showing through a contraction in profit margins for large firms due to higher costs and, bankruptcies among small firms. The GFSR also highlights that the housing market in most advanced economies and emerging markets is likely to face stress as mortgage rates increase and lending standards tighten, thus squeezing potential borrowers out of the market. Overall, risks to global financial stability have increased, and are skewed to the downside. The IMF recognises the unusually challenging financial stability environment for policy makers and advocates for enhanced and timely monitoring of economic and financial markets to inform proactive and well-thought policy action. The IMF also encourages timely and balanced use of macroprudential tools, as well as reforms for debt resolution to contain current and emerging vulnerabilities.

Lower economic growth and rising inflation a global concern

2.4 The G20 Finance Ministers and Central Bank Governors meeting of July 2022, recognised the challenges posed by lower growth, rising inflation and tighter global financial conditions as a threat to financial stability which may crystalise pre-existing vulnerabilities and result in new ones. The meeting however, recognised that the global financial system has remained relatively stable, with the economic impact of the COVID-19 pandemic contained by timely and effective responses, which resulted in erosion of financial buffers and an increase in non-financial sector debt including rising sovereign debt. This has resulted in reduced fiscal space and financial buffers for both corporates and households, hence, made it difficult for governments to support a strong, equitable and inclusive recovery.

2.5 Sudden repricing of risk resulting from an intensification of the Russia – Ukraine war and associated escalation of sanctions on Russia could, however, be a source of risk to financial stability, especially if it results in asset price increases. Moreover, the adverse economic and price raising effects of the war further complicate the policy trade-off between safeguarding economic recovery and containing inflation. Targeted and gradual phasing-out of support measures is recommended to avoid the economic scarring or hysteresis phenomenon whereby the negative effects of an event (COVID-19) are felt well beyond its lifespan.

FSB concerned about crypto asset market as a potential source of financial instability

2.6 The FSB brief of October 2022 to the G20 Finance Ministers and Central Bank Governors are concerned about the intrinsic volatility and structural vulnerabilities of crypto assets. The FSB contends that the crypto market is congested with inappropriate business models, significant liquidity and maturity mismatches, extensive use of leverage, and a high degree of interconnectedness susceptible to volatility and hence inherently risky. The inherent risks are, unfortunately, amplified by a lack of transparency and disclosures, flawed governance, inadequate consumer and investor protections, and weaknesses in risk management. As a result, and to deal with vulnerabilities of the crypto markets, the FSB proposed and produced a framework for International Regulation of Crypto-asset Activities (Regulations). Even though currently, the crypto asset ecosystem has low interconnectedness with the traditional financial system, the situation could change rapidly as crypto asset markets recover and grow. Therefore, there is potential that the failure of a major market player with large losses on investors, could easily spill over into the traditional markets such as short-term funding markets and on the real economy. Moreover, the FSB reports that some systemically important banks and other financial institutions are developing appetite towards crypto assets exposures and activities, hence are vulnerable to crypto-markets-related risks and could expose traditional financial markets to the risky crypto market ecosystems. The Regulations are, therefore, an attempt to develop and strengthen effective regulatory frameworks for the crypto ecosphere.

2.7 In Botswana, the crypto asset market is still in its infancy and relatively small, thereby posing limited risks to financial stability. Domestic regulatory authorities, however, recognise the potential for pervasive and significant impact of the crypto asset business on their functions and mandates and, in general, the broader financial sector in Botswana. Hence, a Virtual Assets Act 2022 was enacted to regulate trade in virtual assets.

International sustainability ambitions limit domestic economic policy manoeuvres

2.8 Climate-related risks and their mitigation strategies have taken centre-stage in world forums and are likely to define future regulatory and supervisory cooperative arrangements. The FSB brief of July 2022 reports progress in the Roadmap for Addressing Climate-Related Financial Risk during its first year in all its key areas, which cover disclosures, data, vulnerabilities analysis, and regulatory and supervisory approaches. Furthermore, the FSB plans to publish a report on supervisory and regulatory approaches to climate changes and progress by International Sustainability Standards Board (ISSB) in developing minimum baseline climate disclosure standards by jurisdiction and firms by October 2022. Meanwhile, the International Organization of Securities Commissions (IOSCO) is expected to endorse financial standards which will be adopted across many of its member jurisdictions. These efforts add pressure on emerging market and developing economics (EMDEs) and developed countries alike to move towards sustainable, resilient green technology, financing, and economic development. Some EMDEs are grappling with rising energy prices as well as inflation and are limited in their use of abundant energy supply alternatives amid tension between the use of fossil fuels to meet domestic economic needs and the drive to green the economy.

Substantial green finance is needed to mitigate climate risk

2.9 The October 2022 GFSR contends that establishing the right climate policies, including carbon pricing, is crucial, hence polices need to be fine-tuned to incentivise private sector green investment. EMDEs are estimated to account for two-thirds of global greenhouse gas emissions, and many are highly vulnerable to climate hazards, hence will need significant green finance to help mitigate the risks. This is more urgent given that many developing economies are contending with a menu of challenges including poverty, high unemployment, inequality and misgovernance, among others. To mitigate climate risk, a huge financial outlay is needed. The IMF is expected to play a pivotal role in assisting EMDEs to strengthen the climate information architecture and help set up climate and other policies to promote private sector climate finance.

2.10 Meanwhile, in Botswana, risks associated with climate change such as increased frequency and intensity of droughts, unprecedented heatwaves, floods and hailstorms have increased (Ministry of Environment, Natural Resources Conservation and Tourism, 2020). However, Botswana has not recorded any major climate risk event that has posed a threat to domestic financial stability. Nonetheless, the risk continues to be monitored. The notion of the green economy does not replace sustainable development, but creates new focus on the economy, investment, capital and infrastructure, employment and skills and positive social and environmental outcomes. That notwithstanding, to achieve a green economy, Botswana, like other countries, should target investing in renewable energy such as solar and wind power, and energy efficient homes. In this respect, the Bank is currently (since 2022Q1) collaborating with the United Nations Development Programme on a project to assess Botswana biodiversity loss risk exposure to the financial sector. The project is aimed at conveying the importance of biodiversity and its effects on the safety of financial institutions and the economy, as well as sensitising domestic financial institutions about the impact of their investments and operations on biodiversity.

(c) Regional Financial Stability Trends

The South African financial sector remains resilient

2.11 The South African Reserve Bank (SARB) Financial Stability Review (1st Edition 2022) indicates that the South African financial system continues to be resilient under heightened volatility and challenging global and local conditions. The low and inequitable growth, rising cost of living, and militant society that is prone to social unrest create a challenging operating environment for financial institutions. Persistent underlying vulnerabilities to the financial system include lower liquidity in bond markets, low borrowing and high saving by corporates, highly indebted households, and high level of government debt. The SARB continues to monitor the risk and implement measures aimed at promoting the robustness of the financial system and these include implementing the deposit insurance framework and enhancing supervision and regulation of the financial sector.

Worsening economic outlook for Sub-Saharan Africa

2.12 The October 2022 WEO estimates that economic output in Sub-Saharan Africa (SSA) will grow by 3.6 percent in 2022 and 3.7 percent in 2023, which is a fall of 0.2 percentage points and 0.3 percentage points, respectively when compared to the July 2022 WEO Update forecasts. The outlook for SSA depends on anticipated improvement in the increase in commodity prices that outweighs the COVID-19 related effects and the regional commodities' import bill. For EMDEs, tight monetary and financial conditions could potentially trigger debt distress as a rise in borrowing costs could put pressure on international reserves and lead to a depreciation of EMDE currencies against the United States (US) dollar. These challenges come at a time when EMDEs are grappling with the COVID-19 legacy of high household, corporate and sovereign debt. As a result, EMDEs are faced with limited policy space to respond and cushion vulnerable segments of the population against Russia-Ukraine war-related price pressures. SSA countries are amongst countries where food items represent a larger share of imports, hence significantly impacted by higher food and commodity prices, thus a potential risk to stability. The most affected are countries with appetite tilted towards commodities with the largest price gains (especially wheat and corn), dependency on food imports, and those with a large pass-through from global to local staple food prices (July 2022 WEO Update). The IMF estimates that the two largest economies in the region, Nigeria, and South Africa will grow by 3.2 percent and 2.1 percent, respectively, in 2022.

3. DOMESTIC VULNERABILITY ASSESMENT

(a) Sovereign Vulnerabilities

Positive macroeconomic prospects for the domestic economy

3.1 The domestic macroeconomic environment remains conducive for financial stability despite sovereign vulnerabilities, which have resulted in reduced fiscal and external buffers (Table A1, Appendix). GDP expanded by 6.7 percent in the twelve months to June 2022, compared to the growth of 5.1 percent in the year to June 2021. The increase in output was attributable to the expansion in production in the mining sector, while production in the non-mining sector decelerated. In general, the improved performance is attributable to economic recovery from the low base associated with the negative impact of the COVID-19 pandemic and related disease containment measures.

3.2 The domestic economy is projected to grow by 4.3 percent in 2022 and 4 percent in the medium term (2023-2027) supported by the successful implementation of the Economic Recovery and Transformation Plan (ERTP), and His Excellency the President's Reset Agenda, which should support Botswana's diversification, transformation, and transition to a high-income status. GDP for the second quarter of 2022 is estimated at 5.6 percent, compared to 37.1 percent in the second quarter of 2021. The domestic macroeconomic environment will, however, continue to be shaped by the restrained and fragile global economic performance, high and rising inflation, and persisting geopolitical risks. The prevailing tight global financial conditions, which translate into reduced access to credit and the likelihood of higher credit default risk, could spill over and test the resilience of the domestic financial system.

Budget surplus recorded in the first quarter of 2022/23

3.3 Budget outcomes for the first quarter of 2022/23 (April to June 2022) fiscal year shows a surplus of P838.5 million, with Government receipts constituting 30 percent of the expected total revenue. The revenues were boosted by improved diamond sales, which enhanced mining exports; this should help support the implementation of ERTP projects. The ERTP pursues a policy mix that supports growth and promotes economic, export and revenue diversification.

Government borrowing remains below the statutory limit for both domestic and external debt

3.4 Government debt and guarantees increased to P40.9 billion in June 2022 from P34.6 billion in June 2021 (estimated at 20.9 percent of GDP in June 2022 compared to 20.8 percent of GDP in June 2021). Total domestic borrowing and guarantees amounted to P24.7 billion (10.8 percent of GDP) in June 2022; substantially below the statutory domestic borrowing limit of 20 percent. External debt is estimated at 10.1 percent of GDP in the same period, which is also below the 20 percent threshold for Botswana. Meanwhile, it is expected that the fiscal impact of the COVID-19 pandemic will be felt until the 2022/2023 fiscal year. During the second half of 2021, Government secured a USD250 million (P2.8 billion) loan under the Programmatic Economic Resilience and Green Recovery Development Policy Loan, at the International Bank for Reconstruction and Development (IBRD), for financing of economic recovery.

3.5 The country's long-term borrowing costs are likely to be positively affected by the affirmed country's sovereign credit rating for long and short term foreign and local currency sovereign credit at "BBB+/A-2", and the stable outlook. The ratings were conferred by S&P Global Ratings (S&P) on September 16, 2022. The "stable" outlook is on the backdrop of expectation that the demand for Botswana's diamonds will remain strong against downside risks presented by the weakening global economic activity. Additionally, the investment grade BBB+ and A-2 credit ratings are underpinned by the country's robust institutional frameworks (compared with that of regional peers), which has supported the prudent management of the country's natural wealth; strong monetary policy framework; proactive and independent central bank; strong mineral revenues that will support broadly balanced fiscal outcomes; all of which support durable macroeconomic stability.

(b) Credit Growth and Leverage

Commercial Banks

Moderate growth in overall commercial bank credit

3.6 Commercial bank credit increased by 6.4 percent annually in September 2022, lower than the 7.4 percent growth in the corresponding period in 2021. The growth in commercial bank credit was due to the growth of business and household credit, over the review period (Table 3.1). Household credit increased by 5.4 percent to P47.3 billion in September 2022, from P44.8 billion in September 2021, on the back of a 6.6 percent increase in personal loans. Business loans increased by 8.4 percent over the period under review due to an increase in credit to finance, manufacturing, electricity and water, transport and communications, trade, agriculture, and real estate sectors. The share of business credit to total credit increased to 35.2 percent from 34.6 percent in September 2021; while the share of household credit decreased to 64.8 percent from 65.4 percent over the same period. Total credit grew at an average of 11.2 percent between 2010 and 2021, compared to an average annual growth rate of 8.8 percent for GDP over the same period. Hence, credit growth is in line with its long-term trend and unlikely to overheat the economy (Box 3.1). In this context, there is scope for increased, disciplined, and prudent credit extension to support economic activity.

Banks adequately capitalised

3.7 Commercial banks had strong capital positions, with a leverage ratio of 7.8 percent in September 2022 (September 2021:7.8 percent). The industry's average capital adequacy ratio (CAR) was 18.6 percent over the same period, reflecting a cushion of 6.1 percent over the minimum prudential CAR and demonstrating the sector's ability to withstand shocks as well as resilience to unexpected losses (Table 3.8). The industry's strong capital base was further augmented by the modest level of NPLs to total loans ratio of 3.8 percent in September 2022 (4.2 percent in September 2021).

Table 3.1: Sectoral Distribution of Commercial Bank Loans

SECTOR	2020Q3		2020Q4		2021Q1		2021Q2		2021Q3		2021Q4		2022 Q2		2022 Q3	
	Percent of GDP)	Percent of Total	Percent of GDP	Percent of Total	Percent of GDP	Percent of Total	Percent of GDP	Percent of Total	Percent of GDP	Percent of Total	Percent of GDP	Percent of Total	Amount (P million)	Percent of Total	Amount (P million)	Percent of Total
Business	**13.1**	**35.2**	**13.1**	**34.6**	**12.8**	**34.0**	**12.5**	**34.5**	**12.5**	**34.6**	**11.9**	**33.8**	**25 018**	**35.1**	**25 670**	**35.1**
Parastatals	0.9	6.8	1.0	7.3	0.8	6.1	1.0	8.0	1.0	8.2	0.7	6.0	1 516	6.1	1 535	6.1
Agriculture	0.8	6.2	0.8	5.8	0.8	5.9	0.7	5.5	0.7	5.3	0.7	5.6	1 475	5.9	1 585	6.0
Mining	0.4	2.8	0.3	2.2	0.2	1.7	0.3	2.2	0.3	2.1	0.2	1.3	357	1.4	346	1.4
Manufacturing	1.0	7.4	0.9	7.0	0.9	6.8	0.8	6.5	0.9	7.0	0.8	6.7	1 996	8.0	2 157	8.3
Construction	0.6	4.6	0.5	4.1	0.5	4.0	0.5	4.0	0.5	3.8	0.5	3.9	908	3.6	912	3.6
Trade	2.7	20.6	2.8	21.4	2.9	22.3	2.4	19.6	2.5	20.0	2.5	20.6	5 157	21.3	5 015	21.2
Transport[2]	0.3	2.6	0.3	2.5	0.3	2.4	0.3	2.0	0.3	2.1	0.2	1.9	500	2.3	669	2.5
Finance[3]	2.8	21.6	3.1	23.7	3.2	24.9	3.4	27.1	3.3	26.6	3.2	26.9	6 778	27.0	6 796	26.5
Real Estate	2.7	20.7	2.6	19.8	2.5	19.6	2.4	18.9	2.3	18.6	2.5	20.8	5 323	20.0	5 147	20.1
Electricity and Water	0.1	0.4	0.0	0.4	0.0	0.3	0.0	0.3	0.0	0.3	0.0	0.2	80	0.3	99	0.4
Other[4]	0.8	6.2	0.7	5.7	0.8	5.9	0.7	5.9	0.7	5.9	0.7	6.4	894	3.6	851	3.3
Households	**24.2**	**64.8**	**24.8**	**65.4**	**24.9**	**66.0**	**23.7**	**65.5**	**23.6**	**65.4**	**23.4**	**66.2**	**46 298**	**64.9**	**47 252**	**64.9**
Unsecured Lending	17.1	70.8	17.8	71.5	17.9	71.8	17.1	72.4	17.1	72.5	16.9	72.5	33 754	72.9	34 668	73.4
Motor Vehicle	1.2	4.9	1.2	4.9	1.2	4.8	1.1	4.6	1.1	4.5	1.0	4.4	2 002	4.3	10 599	4.2
Mortgage	5.9	24.3	5.9	23.6	5.8	23.3	5.4	23.0	5.4	22.9	5.4	23.1	10 543	22.8	1 986	22.4
Total Commercial Bank Credit	**37.3**		**38.0**		**37.8**		**36.1**		**36.1**		**35.3**		**71 316**		72 925	

Source: Commercial Banks

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

Households remain vulnerable to sudden and sharp increases in borrowing costs

3.8 Household credit grew by 5.4 percent in the twelve months to September 2022, lower than the 8.5 percent growth recorded in the year to September 2021 (Chart 3.1). Credit to households continues to dominate total commercial bank credit, at P47.3 billion (64.8 percent) in September 2022 and was mostly concentrated in unsecured lending (73.4 percent). The proportion of unsecured loans to total credit remains much higher than the 24.4 percent and 30.8 percent for South Africa and Namibia, respectively[5]. The significant share of unsecured loans and advances has the potential to cause household financial distress, given the inherently short duration and expensive nature of such credit[6]. Therefore, households are vulnerable to sudden and sharp tightening of financial conditions.

3.9 The tightening of the Monetary Policy Rate (MoPR) by 50 basis points in June 2022 and August 2022, respectively, is expected to constrain the demand for credit by customers, as well as cause banks to limit supply of credit to guard against increases in loan default rates. Likewise, the increasing interest rates amid rising inflation could put pressure on debt serviceability and affordability.

Households have increased borrowing capacity and ability to repay

3.10 Household debt as a proportion of household income is estimated at 45 percent in the fourth quarter of 2021, a decrease from the 58.6 percent in the same period in 2020[7] (Chart 3.2). This trend implies increasing borrowing capacity and ability to repay, which remains relatively strong when compared to the 65.1 percent and 77.4 percent for Namibia and South Africa, respectively[8]. The ratio of household NPLs to total household credit was 3.2 percent in June 2022, a slight decrease from 3.3 percent in June 2021 and significantly better than the industry average of 4.0 percent in June 2022 (Chart 3.2).

3.11 Moreover, households are net savers when their non-discretionary contractual pension savings are included (Table 3.2). Although pension assets may not immediately alleviate short-term cashflow constraints or meet immediate financial needs, such assets may improve the long-term financial welfare of households and, in general, underpin wealth creation and financial security for retirees. The net worth or the value of all the non-financial and financial assets owned by households minus the value of their outstanding liabilities is positive, indicating that households in Botswana are in a good financial standing. Nevertheless, household net worth as a percent of GDP fell in the second quarter of 2022 compared to the first quarter of 2022 (Table 3.2).

Household debt posed minimal risk to financial stability in 2021

3.12 The Household Indebtedness Survey of 2021/22, using data collected from commercial banks, statutory banks, micro-lenders and hire purchase stores; as well as data on arrears on rent and water bills from the Botswana Housing Corporation (BHC) and Water Utilities Corporation (WUC), indicates that the level of household indebtedness in 2021 posed minimal risk to financial stability. Total household debt amounted to P58.5 billion, comprising bank loans (88.5 percent), micro-lender loans (11 percent) and hire purchase credit (0.5 percent) as at December 2021. Total household debt was 29.9 percent of GDP in the same period, slightly below 31.7 percent in 2020. Combined with arrears (from BHC, WUC), household debt was P59.2 billion, translating into 30.3 percent of GDP. Evidence from the survey suggests that most borrowers are employed and have a regular source of income, with a large percentage being employed in the public sector. Most importantly, the largest credit providers (banks) deduct monthly loan repayments at source, that is from the payroll, thus reducing the probability of default by borrowers. To that extent, credit extension remains positive for economic activity and welfare enhancement.

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5 SARB Quarterly Bulletin - June 2022 and Namibia FSR-April 2021.

6 It is worth noting that for a given quantum of credit, debt servicing requirements (total monthly repayments) are much higher for short-term (unsecured) credit than for long-term (secured) credit, due to the higher (small) interest rates for short term (long-term) credit, and the differing proportion of the principal that has to be repaid each period.

7 The measure of income used is the compensation of employees (maximum quarterly earnings), obtained from the Quarterly Multi-Topic Survey by Statistics Botswana.

8 Namibia Financial Stability Report - April 2022 figure for December 2021 and SARB Quarterly Bulleting June 2022.

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 banking crises. It is, therefore, important to monitor growth in credit. In this regard, the Bank is continually developing and adopting means and tools of assessing whether or not credit growth is excessive. Currently, the Bank measures excessive credit growth based on the indicative range for credit growth and the Credit-to-GDP Gap.

The Indicative Range for Credit Growth

The Bank calculates an indicative range for an acceptable level of credit growth (i.e., credit growth which is not excessive, and is unlikely to lead to the buildup of systemic risks to financial stability) by considering the inflation objective range, the projected GDP growth rate, a measure of financial deepening and expert judgment. This tool is an adaptation of the desired objective range for credit growth used by the Bank during the period when it was targeting credit growth. In 2004, the objective range was calculated as follows:

Assuming (in percent):	
Inflation objective range	3.0 – 4.5
+ GDP growth rate	4.0 – 5.0
+ Financial deepening	2.0 – 2.0
= Credit Growth Rate Target	9.0 – 11.5

Given the current 3 – 6 percent inflation objective range, and assuming a GDP growth rate of 4 – 5 percent (excluding COVID-19 effects – long term trend) for the period 2021 to 2023, and with the same values for financial deepening, the indicative range within which credit growth would not be considered excessive would be 9 – 11.5 percent. Credit growth was 6.4 percent in September 2022, and lower than the 7.4 percent in September 2021, thus below the indicative range and not posing any threat to the stability of the financial system.

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, whereby Credit-to-GDP ratio is calculated as "Credit divided by GDP". The Credit-to-GDP gap is then calculated by subtracting the Credit-to-GDP ratio from its long-term average or trend. A gap of 10 percent is a critical and reference threshold, and any value above this threshold indicates that economic agents are highly indebted, hence signals emerging financial imbalances and therefore, risk of financial distress.

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.

Domestic bank credit growth is moderate, as measured by the Credit-to-GDP gap of -2.2 percent, which was below the 10 percent threshold in June 2022 (Chart B3.1a). The low Credit-to-GDP gap reflects room for sustained economic expansion. 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.

Chart B3.1a: Aggregate Credit to GDP Gap

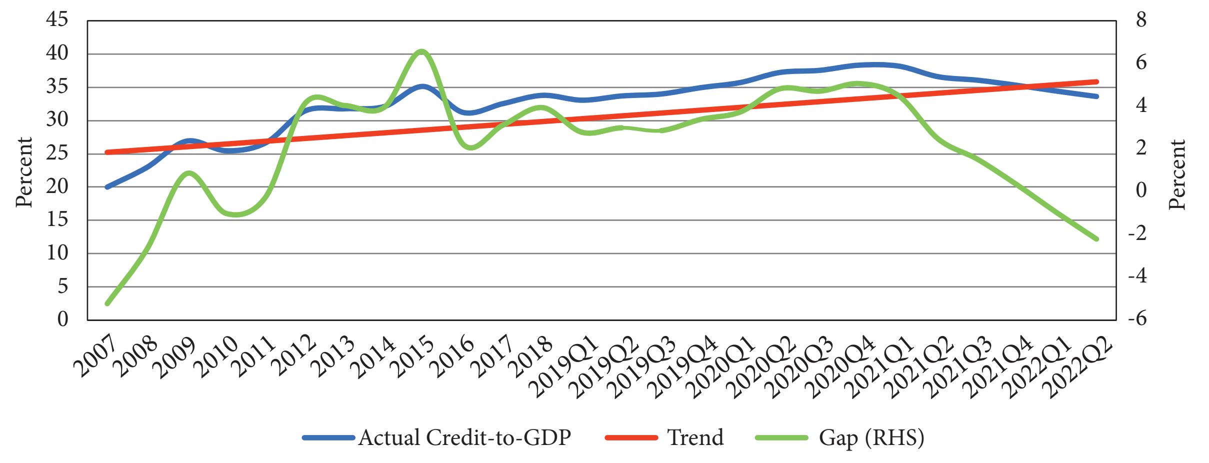


Chart B3.1b: Household Credit to GDP Gap

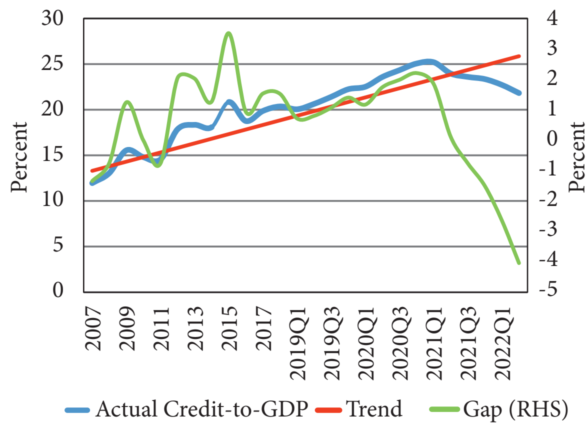
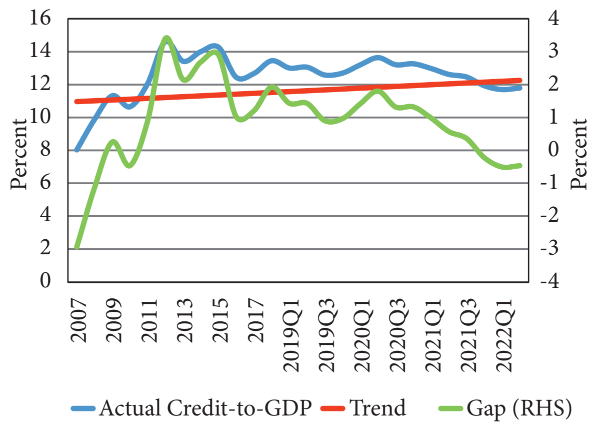
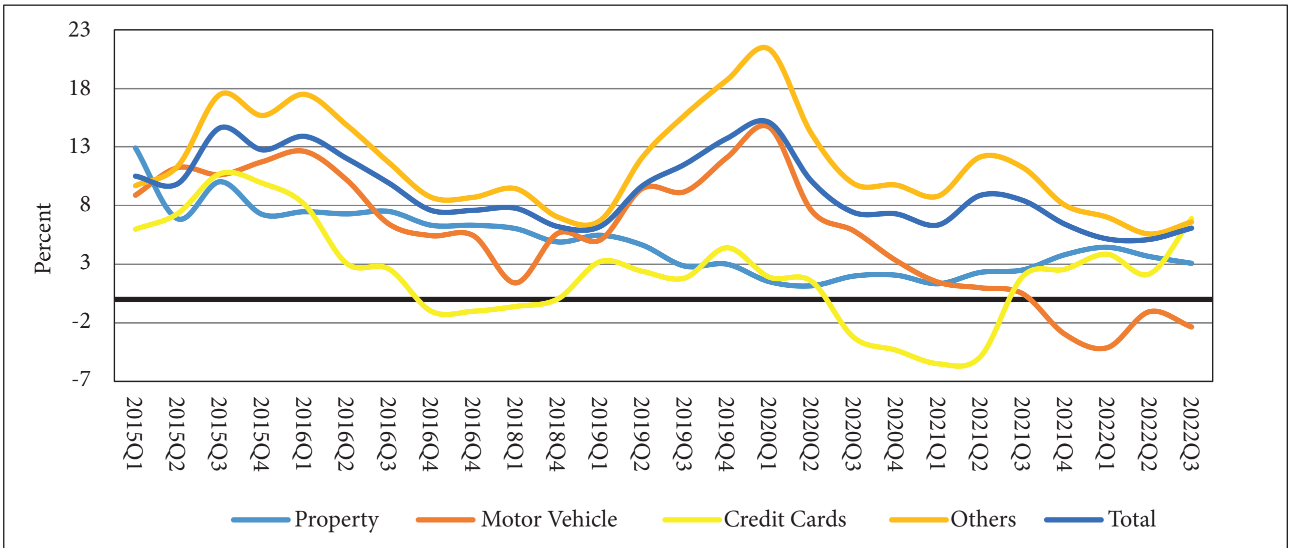


Chart B3.1c: Business Credit to GDP Gap



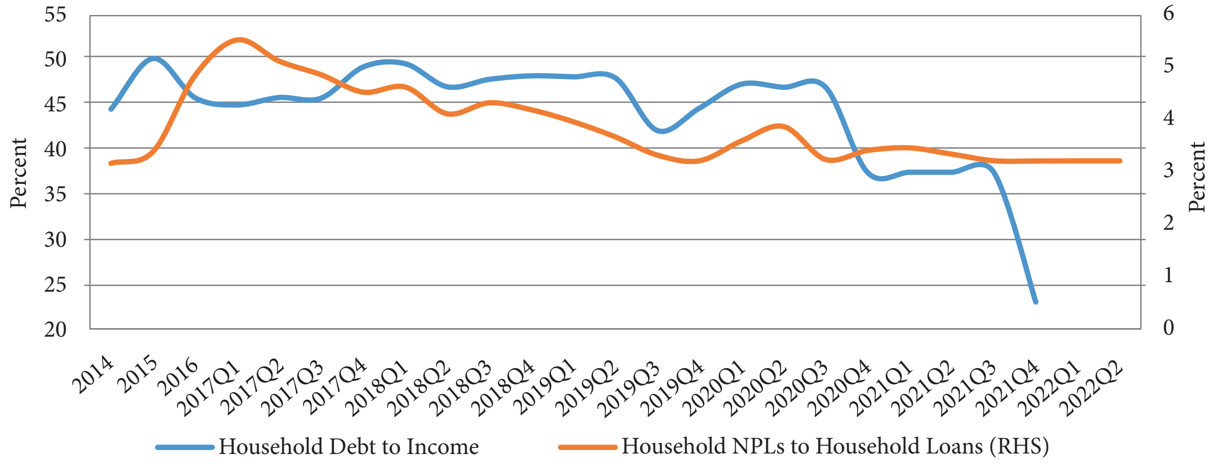
Source: Bank of Botswana

Chart 3.1: Growth in Household Debt (Year-on-Year)



Source: Commercial Banks

Chart 3.2: Household Debt to Income and NPLs



Source: Statistics Botswana and Bank of Botswana

Table 3.2: Household Net Worth

Asset	2021Q2 (P' million)	2021Q3 (P' million)	2021Q4 (P' million)	2022Q1 (P' million)	2022Q2 (P' million)	2022Q3[1] (P' million)
Retail deposits	18 891.1	18 657.2	19 679.0	18 025	19 391	18 491
Pensions	109 873.7	114 269.7	117 549.0	116 314	112 990	113 474
Insurance contracts	*11 035.0*	*11 035.0*	*13 423.6*	*13 424*	*13 424*	*13 424*
Mortgage property	10 170.6	10 282.4	10 520.8	10 598	10 543	10 599
Motor vehicles	2 023.2	2 034.1	2 022.5	2 016	2 002	1 986
Cattle value	*3 500.0*	*3 500.0*	*3 500.0*	*3 500*	*3 500*	*3 500*
Equity investment	*42.8*	*42.8*	*42.8*	*66*	*66*	*66*
Total assets (a)	155 536.4	159 821.2	166 737.7	163 943	161 916	161 540
Total household debt (b)	50 087.0	50 819.1	51 460.7	51 988	52 275	53 176
Total household net worth (a) – (b)	**105 449.4**	**109 002.1**	**115 277.0**	**111 954**	**109 640**	**108 364**
Total household net worth as a share of GDP (Percent)	**57.2**	**57.4**	**59.0**	**58.9**	**51.7**	**…**

Source: Bank of Botswana, Botswana Stock Exchange Limited and Statistics Botswana
Note: Figures in italics are estimates.
1. GDP for the third quarter of 2022 has not yet been released.

Credit to the Non-Financial Corporate Sector

Corporate sector exposures increase

3.13 Total commercial bank credit to the non- financial corporate sector increased by 8.5 percent from P20.9 billion in September 2021 to P22.7 billion in September 2022. The proportion of corporate loans to total commercial banks' credit rose marginally to 31.1 percent in September 2022 compared to 30.5 percent in September 2021. Relative to GDP, bank credit to the corporate sector was 32.9 percent in June 2022 compared to the 35.6 percent in June 2021 and remains significantly lower than the 72.5 percent and 107.8 percent for Namibia and South Africa, respectively[9]. This implies that there is still room for banks to extend credit to support business activity and, in turn, economic growth.

The corporate sector faced tough trading conditions in 2021

3.14 Selected financial soundness indicators of the non-financial corporates listed on the BSE indicate a corporate sector that faced difficult trading conditions during 2021 (Table 3.3). Corporate leverage increased, with a Debt-to-Equity ratio of 85.2 percent in 2021 from 69.8 percent in 2020. Similarly, the cost-to-income ratio rose from 54.3 percent in 2020 to 74.9 percent in 2021. The significant rise

9 https://data.worldbank.org/indicator/FS.AST.PRVT.GD.ZS.

in both the leverage ratio and cost-to-income ratio is a concern for financial stability hence should continue to be monitored. Overall, the soundness of the corporate sector is assessed to pose moderate risk to financial stability in the medium term.

The corporate sector not yet affected by bankruptcies

3.15 The ratio of corporate sector NPLs to total loans fell to 5.5 percent in June 2022 from to 6.1 percent in June 2021 and was higher than the banking sector average of 4 percent. The number of liquidated companies fell from 11 in 2020 to 7 at the end of November 2021, suggesting that the negative impact of COVID 19 has not yet translated into bankruptcies. That notwithstanding, corporates' profitability declined, as measured by the return on equity (ROE), which fell from 11.6 percent in 2020 to 6.9 percent in 2021. Overall, the financial results of corporates in 2021 may be reflective of the difficult trading environment during COVID-19.

Firms pessimistic about economic activity

3.16 The results of the June 2022 Business Expectations Survey (BES) suggest that firms are pessimistic about business conditions than they were in the previous survey. The pessimism is reflected by firms' expectations of weaker domestic economic performance, hence lower inventories, reduced investment in buildings, plant, and machinery, as well as "other" investments, compared to the March 2022 survey. Furthermore, firms anticipate tight access to credit across all markets. They also expect cost pressures to remain high in the third quarter of 2022, mainly reflecting the upward adjustments in energy costs due to the geopolitical risks. Overall, the decline in business confidence is expected to have a negative impact on domestic economic performance. Meanwhile, firms expect inflation to remain above the Bank's 3 - 6 percent objective range in 2022.

Credit to the Real Estate Sector

Commercial real estate lending poses limited risks to financial stability

3.17 Credit to the commercial real estate (CRE) was P5.5 billion in September 2022 (September 2021: P4.7 billion), translating to 6.9 percent of total loans (Chart 3.3). The CRE sector has maintained relatively good quality assets, with a moderate level of NPLs and limited foreclosures. Commercial real estate NPLs grew by 2.9 percent in June 2022, compared to an increase of 2.6 percent in June 2021. Foreclosed commercial real estate properties represented 0.3 percent of total commercial real estate loans in 2021. Hence, domestic CRE lending poses minimal risk to domestic financial stability. There are, however, concerns about concentration (location) risk in the real estate sector, with most loans originating in Gaborone and surrounding areas[10].

Mortgage lending increased

3.18 Residential real estate loans, in particular owner-occupied mortgage loans, increased moderately to P14.4 billion in September 2022 from P14.1 billion in September 2021, constituting 27.1 percent of total household credit and 18.1 percent of total credit in September 2022 (Chart 3.4). This development suggests that the level of housing finance is not commensurate with the needed development and growth path to fill the apparent need for housing, as well as the financing gap[11]. Credit to the residential property market in Botswana is lower than in the region,

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

Ratios	2017	2018	2019	2020	2021
Non-Financial Corporates Credit-to-GDP	10.7	11.2	10.7	12.5	11.0
Cost-to-Income Ratio	60.0	60.3	49.1	54.3	74.9
Total Debt to Equity Ratio (Leverage)	43.1	65.6	66.5	69.8	85.2
Return on Equity	14.1	10.5	13.8	8.9	8.0
Debt Ratio	27.4	39.1	39.5	42.8	47.7
Price/Earnings Ratio (Times)	13.3	11.2	12.4	10.8	-
Dividend Yield	4.4	5.1	4.8	4.1	4.1

Notes: Non-Financial Corporates Credit-to-GDP was calculated using total credit from commercial banks to non-financial corporations.

10 Bank of Botswana Residential Property Survey Report (2022) and Riberry Property Market Report, March 2022.

11 Challenges in accessing mortgages viz., land tenure, relatively low average incomes and strict funding requirements have, however, shifted house financing to unsecured personal loans.

for example, in South Africa and Namibia, residential mortgage loans accounted for 23.6 percent and 40.2 percent of total loans in June 2021 and March 2021, respectively[12]. The low ratio might be reflective of the restrained growth in incomes relative to the increase in residential house prices over the years (possibly reflecting limited housing stock in various categories, or availability of land and prices of building materials).

Mortgage credit risk remains low

3.19 Credit risk in the mortgage sub-sector remains low, with commercial banks maintaining moderate Loan-to-Value (LTV) ratios although LTV ratios have reached 105 percent in some isolated cases.[13] The moderate LTV ratios as well as security in the form of property financed limit exposure of banks to mortgage credit upon default. For example, mortgage loans tainted by arrears and/or impaired had declined to 6.1 percent in June 2022 compared to 6.4 percent in June 2021. Foreclosed residential properties represented 1.5 percent of total residential properties loans in December 2021 compared to 4.9 percent in December 2020.

Residential property prices rise

3.20 According to the Riberry Report for the first quarter of 2022, there was continued weak demand for both rentals and sales for upper market houses as was the case in the previous quarter. There continues to be a notable improvement in demand for rentals and sales for low end houses. Rental demand for medium end houses outstripped supply, while in terms of sales, demand and supply were evenly matched. The average residential property price in Botswana increased by 12 percent in the first quarter of 2022 to P865 000 from P771 000 in the fourth quarter of 2021 (P788 000 in the third quarter of 2021). Meanwhile, even though the market share of the BHC is relatively small (approximately less than 10 percent of property market), for both rental and sales, BHC remains an important property developer, enabling ownership of low, medium and high cost houses. The attractiveness of BHC residential properties is in its lower sale and rental prices compared to the average market property price. For example, in the first quarter of 2022, the average market price was P865 000, whilst for BHC it was P831 808 (the BHC average price was P502 273 for low-cost houses, P874 301 for medium cost houses and P1 118 851 for high-cost houses). The Riberry Report points to a weak office market as the supply of office space continues to exceed demand. In addition, the demand for working space will continue to be negatively affected by working from home arrangements.

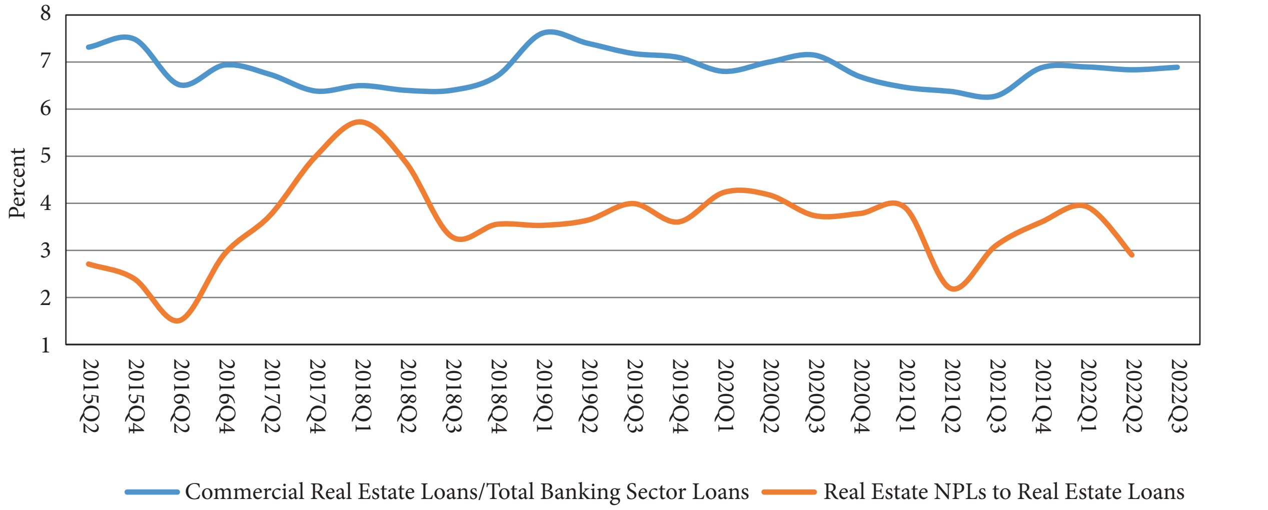
Vulnerabilities from the real estate sector poses minimal risks to financial stability

3.21 Vulnerabilities from the real estate sector, relating to the potential increase in NPLs, posed minimal risk to financial stability in the first quarter of 2022 but prospective developments require continuous close monitoring and assessment.

12 SARB Financial Stability Review (2020) and Namibia FSR (April 2020).

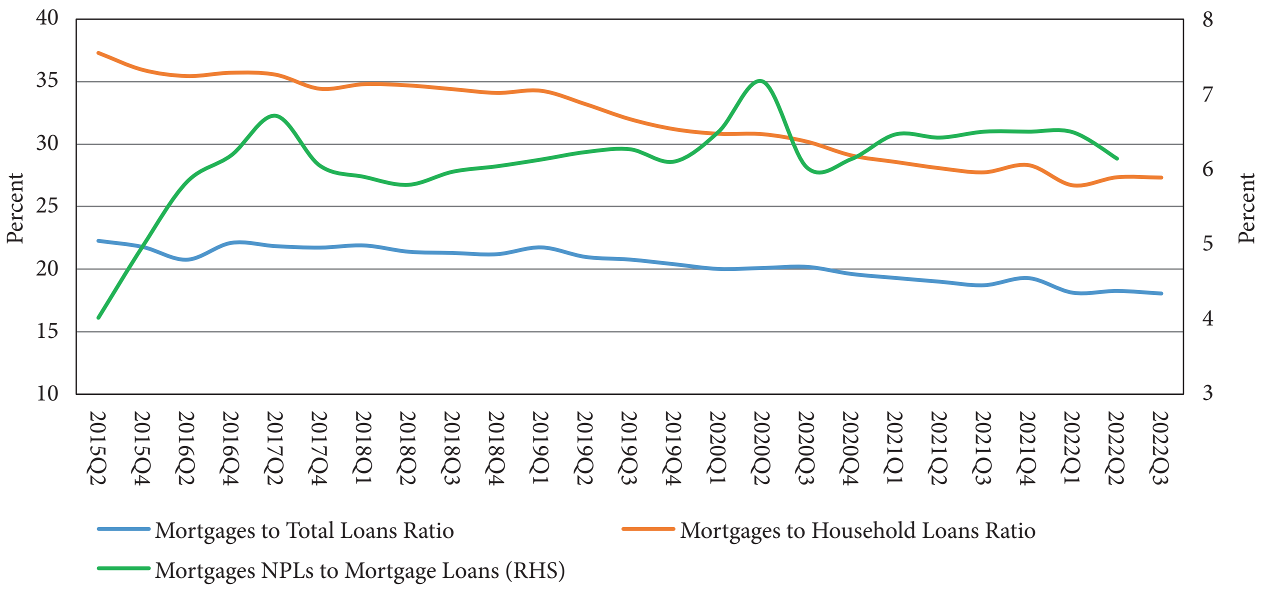
13 One commercial bank reported an LTV of 105 percent in the 2021 Household Indebtedness Survey.

Chart 3.3: Commercial Real Estate Loans



Source: Bank of Botswana and Commercial Banks
Note: Real estate NPLs to Real Estate Loans Ratio is calculated using commercial banks data only

Chart 3.4: Trend in Mortgages



Source: Bank of Botswana

Finacial Developments and Trends in the NBFI Sector

A surge in non-compliance by NBFIs

3.22 The NBFIs conducted their business diligently during 2021-2022. However, several compliance enforcement actions were taken against contravening NBFIs. The total number of enforcement actions increased from 72 in 2021 to 77 in 2022. The increase in enforcement actions was a response to the surge in non-compliances by NBFIs, particularly relating to non-submission of statutory returns, late renewal of licences and controller related non-compliances.

3.23 Warnings issued increased significantly from 6 in 2021 to 24 in 2022, while license cancellations also increased from 21 in 2021 to 29 in 2022. Curatorship, temporary closure and liquidations recorded one case each during the period under review. However, penalties decreased from 43 in 2021 to 21 in 2022. NBFIRA continues to monitor NBFIs to ensure compliance and maintain financial stability

NBFIs highly interconnected with the rest of the financial system

3.24 NBFIs are interconnected with the rest of the financial system through multiple channels, such as deposits held with banks, funding avenues and capital market activities. In August 2022, NBFIs held a net lending position to commercial banks (deposits held with banks less loans from banks) of P19.1 billion, a 28.8 percent increase from P14.8 billion reported in August 2021. Similarly, NBFIs have bonds worth about P1.6 billion in the domestic market and an equity market capitalisation of P8.8 billion at the BSE. In addition, pension funds and asset management companies hold equity positions in other sectors of the economy through their investment strategies. These interlinkages present a conduit for risk emanating from one sector of the economy to be easily transmitted to other sectors, hence present a potential source of systemic risk. Nevertheless, the risk is moderated by effective prudential regulation and supervision of the domestic financial system.

NBFIs recover from COVID-19 related losses

3.25 COVID-19 related deaths resulted in an escalation of claims and benefits in some NBFIs, thus resulting in reduced profitability in 2021 of these NBFIs. However, Botswana Insurance Holdings Limited (BIHL), a leading financial services company, reported a reduction in claims and benefits in the six months to June 2022. The company also recorded a 67 percent increase in operating profits as of June 2022. Additionally, Botswana Life Insurance's operating profit improved by 78 percent year-on-year, from P102 million in June 2021 to P182 million in June 2022. The growth in profit was attributed to lower COVID-19 related claims. NBFIRA continues to monitor NBFIs to ensure compliance and maintain financial stability.

Gross insurance premiums increased in 2021

3.26 The life insurance business dominated the sector in terms of assets, liabilities and Gross Written Premiums, between 2017 and 2021. Life insurance assets declined from P21.4 billion recorded in 2017 to P18.4 billion in 2021. Related liabilities showed similar trend moving from P18.4 billion to P15.4 billion in 2017 and 2021, respectively. Life Insurance Gross Written premiums on the other hand showed a growing trend from P3.7 billion in 2017 to P4.4 billion in 2021, representing about 18 percent increase. General insurance had a growing trend in terms of assets, liabilities and Gross Written Premiums between 2017 and 2021. However, in all the three categories, general insurance accounted for less than P3 billion in any given year. Medical aid claims grew from P1.3 billion to P1.9 billion in 2017 and 2021, respectively.

3.27 In response to the pandemic, some insurers became more innovative in their business offerings, distribution channels and customer service as evidenced by a shift towards investment in online/digital sales platforms. Furthermore, some insurers introduced measures such as flexible payment terms and premium holidays to retain customers. Nevertheless, insurance penetration ratios remain low at 2.9 percent in 2021 (2020: 3.1 percent). This is in line with industry trends across SSA. Overall, the insurance sector was adequately capitalised and remained resilient in uncertain times of COVID-19 in-spite of increased claims and termination of policies.

3.28 The six systemically important micro lenders' performance from 2017 to 2021 show an upward trend with total assets growing from P3.9 billion in 2017 to P7.1 billion in 2021, representing an 82 percent increase. These entities represent 94 percent of total market assets. Total liabilities, though smaller than the assets, grew by more than 100 percent from P1.9 billion to P4.5 billion in 2017 and 2021, respectively. Moreover, between 2017 and 2021, all the entities managed to meet the minimum capital adequacy ratio of 5 percent and the liquidity ratio of 2 percent as per the Prudential Rules for systemically important micro lenders. The micro lenders use deduction codes and their target market is predominantly government employees, thus deduction is made at source. Moreover, there has been an acceleration in digitalisation by the larger micro lenders in recent years. Overall, the micro lending industry poses low risk to the stability of the domestic financial system.

(c) Liquidity and Funding Risk

Banking Sector

Banks remain liquid despite declining excess market liquidity

3.29 Since the onset of the COVID-19 pandemic, average excess market liquidity in the banking sector has been trending downwards mainly due to net foreign exchange outflows because of dampened trade, payments for external obligations, as well as settlement of some Government bonds. Over the last three months, average market liquidity has been fluctuating, from P4.43 billion in July 2022, to P5.37 billion in August 2022 and to P4.68 billion in September 2022. The momentary increase in August 2022 was mainly due to the increase in net government spending while persistent foreign exchange outflows pushed market liquidity down in September 2022.

The banking sector vulnerable to funding risk arising from a concentrated deposit base

3.30 The banking sector remains vulnerable to funding risk arising from a concentrated deposit base, and the negative effects of the COVID-19 pandemic. Commercial banks' funding structure is concentrated in a few depositors, mainly wholesale deposits (i.e., businesses including NBFIs), highlighting the potential increase in funding costs due to the volatile nature of wholesale deposits.

3.31 The banking industry continues to experience high levels of credit intermediation, with a financial intermediation ratio[14] of 79.8 percent in September 2022 (September 2021: 83.3 percent). While this level of intermediation ratio could exacerbate maturity mismatches in banks' balance sheets, further amplifying liquidity risk in the sector, it provides for enduring economic growth.

Money and Capital Markets Funding Opportunities

Money market interest rates increase in line with the contractionary monetary policy stance

3.32 Following monetary policy reforms implemented by the Bank in April 2022, stop-out yields on T-Bills adjusted upwards in line with the subsequent 51 basis points increase in the MoPR (Chart 3.6). At the August 2022 auction, funds were moved from the longer-dated bond to the shorter- and medium-term bonds to take advantage of the investor appetite[15].

3.33 The investor appetite was reflected in the relatively good demand for the shorter- and medium-term bonds, while the demand for the longer-dated bond was subdued. As a result, P260 million was allotted, out of the P200 million that was offered for the 4.7-year bond (BOTSGB0527). However, the 17.8 year longer-dated bond (BOTSGB0640) performed poorly as only P82 million was allotted out of P200 million that was offered. There was a general increase in the stop-out yields from the previous auction, largely reflecting the 50 basis points increase in the MoPR on August 25, 2022. The 3-month T-Bill was allocated at a stop-out yield of 4.552 percent, which is 66 basis points higher than the stop out yield in the previous auction. Similarly, from the previous auction, the stop out yield on: the 4.7-year old bond rose by 15 basis points to 7.100 percent; the 9-year bond (BOTSGB0931) rose by 16 basis points to 8.450 percent; and the 17.8-year bond rose to 8.700 percent.

Large banks continue to dominate interbank lending market

3.34 Interbank activity increased to P10.4 billion in September 2022 from P10.2 billion in August 2022 in response to generally low daily market liquidity. Other banks had a higher share of interbank market borrowing at 75.3 percent, while Domestic Systemically Important Banks (D-SIBs) took up 24.7 percent. D-SIBs contributed 23.7 percent to total interbank lending and the rest was from other banks.

US Dollar Market

US dollar funding risks remain low

3.35 Even though domestic banks' exposure to foreign exchange risk increased in June 2022, the overall net open position increased to P958 million in June 2022 from P423 million in March 2022, thus translating to 7 percent of the industry's unimpaired capital (June 2021: 5 percent), which is well within the 30 percent prudential limit (Chart 3.6). At the same time, the Pula

[14] Measured as a ratio of loans to deposits, the financial intermediation ratio measures the extent to which funds (excess) are availed to those who need them.

[15] There was no auction of government securities for settlement in September 2022.

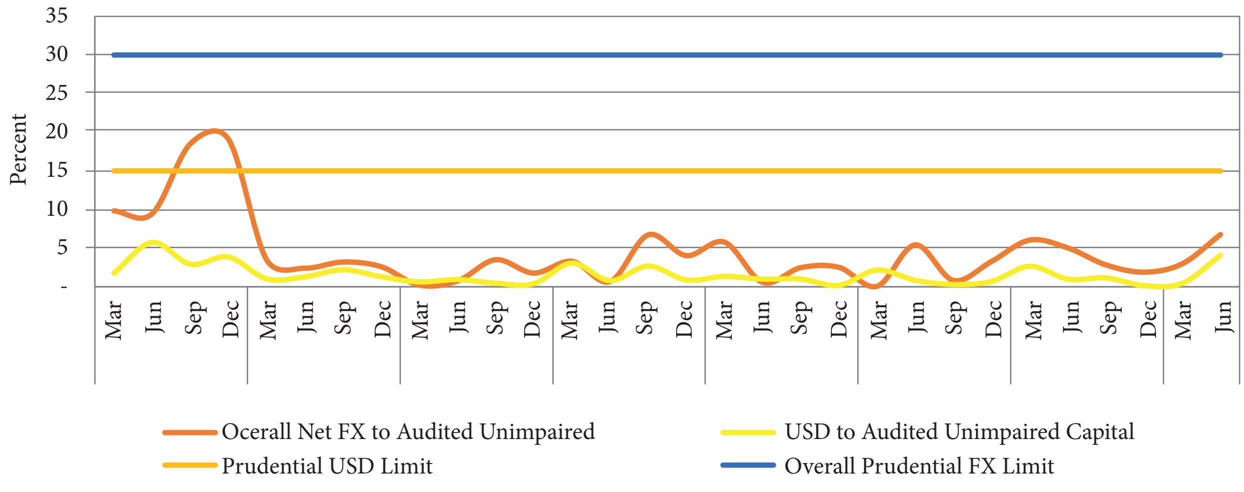
equivalent overall net exposure of the domestic banking system to the US dollar increased to P576 million in June 2022 from P142 million in June 2021. The exposure is equivalent to 4 percent of the industry's unimpaired capital and, therefore, presents limited vulnerabilities from US dollar funding.

The Pula exchange rate generally stable

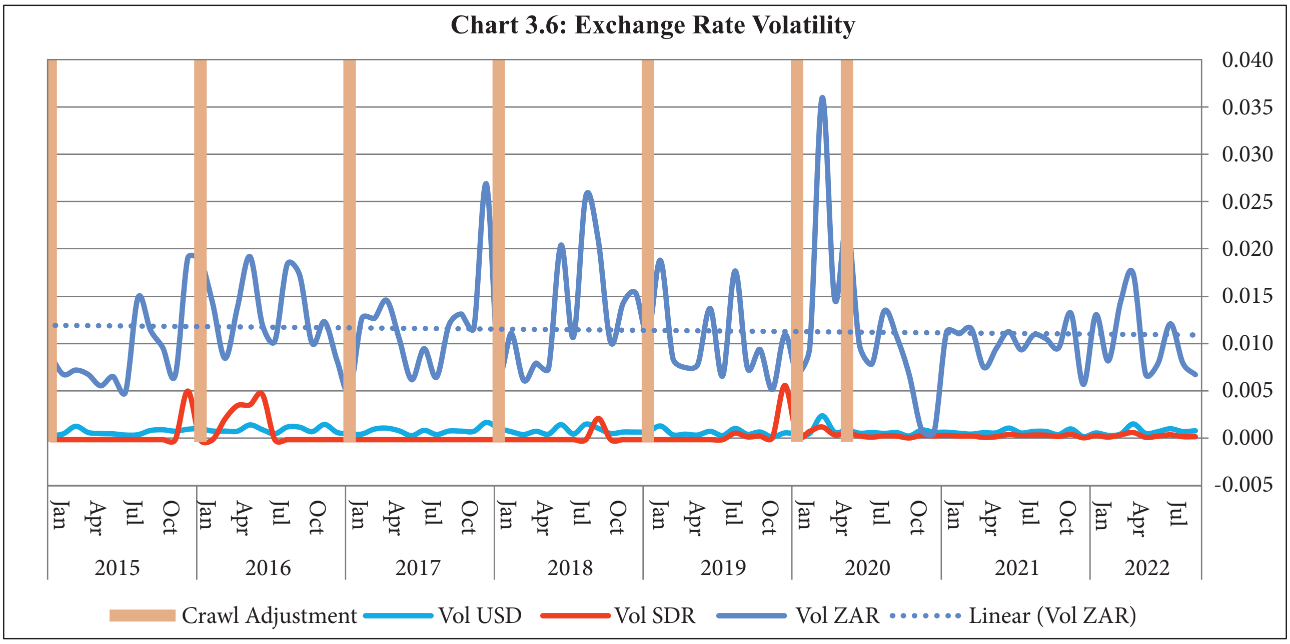
3.36 The exchange rate provides another channel through which adverse developments in international markets could destabilise the domestic financial system. In this sense, a highly volatile exchange rate can increase output volatility and, in turn, become a source of vulnerability. During the twelve-month period to September 2022, the Pula depreciated by 5.9 percent against the IMF Special Drawing Rights (SDR) and appreciated by 1.1 percent against the South African rand. The movement of the Pula against the SDR constituent currencies largely reflects the performance of the South African rand against SDR currencies. Notably, in the same review period, the South African rand depreciated by 5.7 percent against the SDR (13.7 percent against the US dollar).

3.37 The depreciation of the South African rand against major trading currencies was mainly due to a deterioration in projections for global economic growth which adversely affected all risky emerging market currencies, especially the South African rand. The risk appetite was further dented by global factors including a strong US dollar on account of aggressive policy rate hikes by the Federal Reserve. Minutes of the Federal Reserve's latest policy meeting showed more interest rate hikes to curb high inflation, despite the lower-than-expected US annual headline inflation rate in July 2022. Prospects of higher US interest rates tend to lessen the appeal of high-yielding riskier currencies, such as the rand, in favour of the US dollar. Overall, volatility in the Pula exchange rate has been contained since May 2020 (Chart 3.7), hence presenting limited risks to the domestic financial system and economy.

Chart 3.5: Commercial Banks' Foreign Exchange (FX) Exposure



Source: Bank of Botswana and Commercial Banks



Source: Bank of Botswana

Stock Market Activity

Stock market capitalisation and liquidity improves

3.38 The total equity market value of domestic listed companies gained 9.4 percent, year-on-year, to P39.3 billion in September 2022 (September 2021: P35.9 billion). The gains reflect the overall recovery of the domestic market due to the opening of the economy and the resultant increase in economic activity. In general, the market is showing signs of recovery, with month-on-month increases in market capitalisation, leading to a cumulative gain of P5.5 billion since March 2021.

3.39 Liquidity in the local bourse is also improving, with the liquidity ratio rising to 5.9 percent in September 2022 from 1.8 percent in September 2021 (Table 3.4). The improvement in stock market liquidity has been due to higher market activity in 2022 than in the corresponding period in 2021. Notably, total market turnover was P882 million at the end of the third quarter of 2022 compared to a turnover of P462 million in the third quarter of 2021. The BSE notes that the top 3 traded companies were Letshego, FNBB and Sefalana, accounting for 69.1 percent of total trading activity, and Letshego accounted for 52.5 percent of total equity turnover. Prospects for the domestic market are, therefore, becoming increasingly optimistic as economic activity improves.

Domestic stock market is profitable

3.40 The Domestic Company Total Return Index (DCTRI) appreciated by 11.6 percent in September 2022 against 7.9 percent in the corresponding period in 2021. This index provides a means for signalling profitability in the domestic stock market as it shows gains (or losses) in equity positions due to market capitalisation appreciation (or depreciation) and dividend returns. Therefore, the higher appreciation of the DCTRI in 2022 shows that the domestic market is more profitable than it was in 2021.

Stock market volatility rising

3.41 Developments in market capitalisation in the twelve months to December 2021 translated into a stronger performance of the domestic company index (DCI), as it turned around from a gradual decline that started in 2015 (Table 3.4). The losses suffered by the local stock market since 2015 were precipitated by weak economic fundamentals, which partially translated into poor company performance. The DCI recovered to 7010 in 2021, further increasing to 7402 in September 2022, but recorded rising volatility[16] (Chart 3.8), potentially reflecting the inherently risky nature of equity markets. Nonetheless, investor confidence is expected to improve, especially on the back of strong economic prospects for 2022 and beyond.

[16] Measured as the 12-month standard deviation of DCI values.

Digitilisation of the capital market may generate cyber related risks

3.42 On the 23rd of September 2022, the BSE went live with a new Central Securities Depository (CSD) system, an Automated Trading System (ATS) and SWIFT connectivity. The systems mark the beginning of a new era of digitalisation of the domestic stock market, presenting new technology infrastructure that aims to improve the resilience of the market, network security, operational efficiency, and aligns with international best practice.

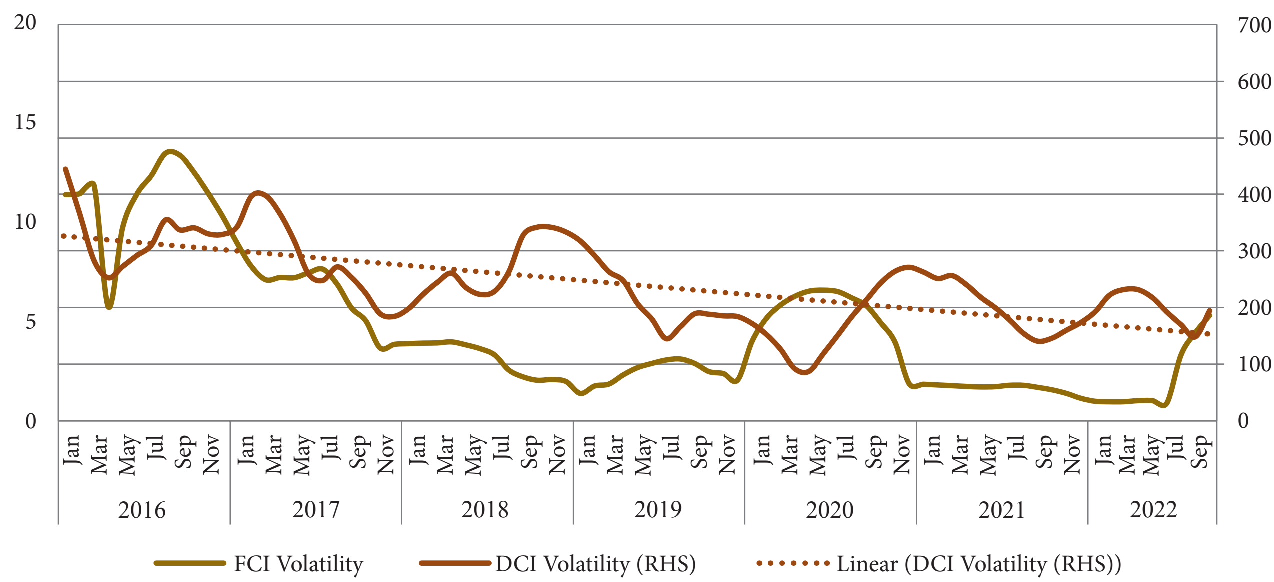
3.43 Notwithstanding the potential benefits of these new technologies, there are emerging risks pertaining to cybercrime because of increased use of technology and virtual private networks; and a digital misinformation risk as more inaccurate information is made available on public digital domains. To avert these vulnerabilities, industry players need to invest in cyber and information security, as well as enhance due diligence and scrutiny when handling business transactions, to ensure the safety and integrity of the capital market, and the overall stability of the financial system.

Table 3.4: Selected Botswana Stock Exchange Indicators

Period	Shares Traded		Domestic Stock Market Capitalisation	Liquidity Ratio	Equity Indices			
	Volume (Million)	Value (P 'Million)	(P 'Million)	(Percent)[1]	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	430	699	35 573	1.8	6 865	-8.2	1 547	-1.0
2021	967	1 817	37 209	5.2	7 010	1.9	1 550	0.2
2022 (Jan-Sep)	406	882	39 312	5.9	7 402	7.3	1 561	0.8

Source: Botswana Stock Exchange Limited
Notes: Liquidity ratio is calculated as turnover divided by average market capitalisation

Chart 3.7: Twelve-Month Equity Indices Volatility



Source: Bank of Botswana

Bond Market Performance

Government bonds drive market capitalisation

3.44 Bond market capitalisation increased by 10 percent to P25.4 billion in September 2022 from P23.1 billion in December 2021 largely because of reopening of existing Government bonds (Table 3.5) and equivalent to 13 percent of GDP. In the same period, a total of P557 million was issued on four already listed Government bonds, offsetting the P116.8 million unlisted FirstCred Limited bond.[17] As a result, the nominal value of Government bonds rose from P17.7 billion to P20 billion, while corporate bond valuations increased by 0.5 percent to P5.5 billion.

3.45 The proportion of Government bonds in the nominal value of the fixed income market stood at 78.6 percent in September 2022 (December 2021: 76.5 percent), compared to 21.4 percent for corporate bonds (December 2021: 23.5 percent), demonstrating Government's ongoing efforts to deepen and develop the domestic capital markets. In the long run, the dominance of government securities has the potential to crowd out capital funding from the private sector. Nonetheless, current sovereign borrowing levels presents minimal fiscal risks given that, relative to GDP, the debt ratio remains within the 40 percent statutory limit. The ratio of total government debt to GDP increased to 27 percent at the end of the 2020/21 financial year, from 17 percent in the previous financial year and, it is estimated to remain at 27 percent through the current financial year. According to the 2022 Budget Strategy Paper, total government debt is expected at P50.7 billion by the end of the financial year 2022/2023. Overall, fiscal vulnerabilities remain and will continue to be closely monitored to assess the overall impact on financial stability.

Bonds yield spread widens

3.46 The spread between average yields on corporate and government bonds is gradually reverting to pre-COVID-19 levels with a spread of 1.4 percentage points recorded at the end of September 2022. This is largely reflective of increasing yields for corporate bonds. The movements in bond yields generally capture the normalisation of the capital markets since the lifting of COVID-19 containment measures in 2021. However, tighter global financing conditions coupled with the effects of the Ukraine-Russia conflict and faltering recovery expectations following COVID-19 present significant uncertainty for the domestic capital market.

Average corporate bond yields increase

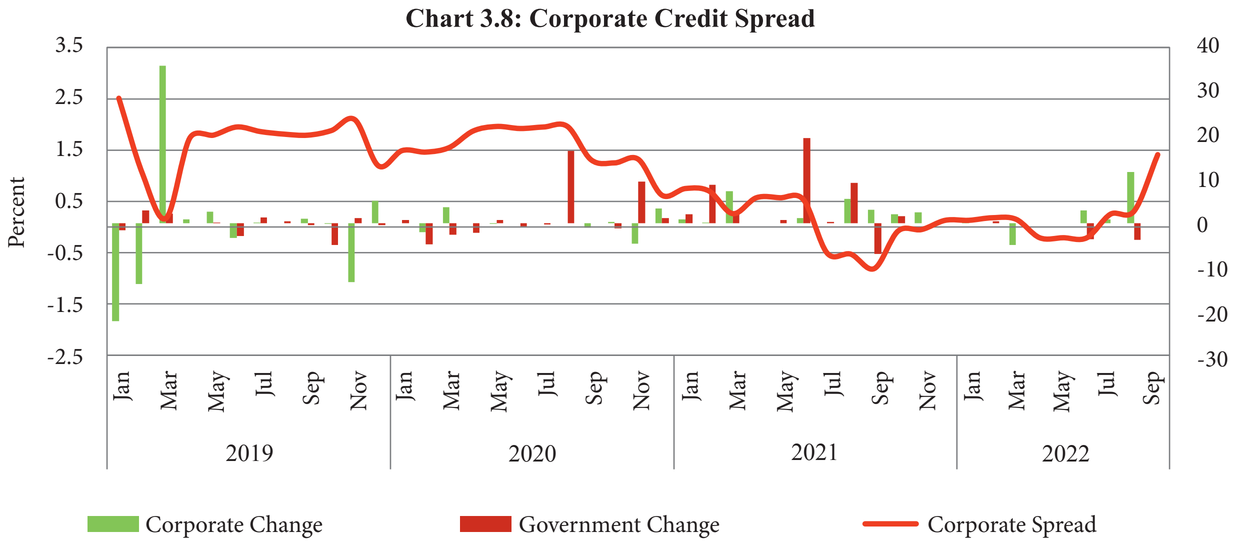
3.47 Data for September 2022 shows that the average corporate bond yield has been on an upward trajectory since June 2022, after being constant (at 6.9 percent) in the 3 months to June 2022. The average corporate bond yield increased to 8 percent in September 2022 from 7.2 percent in August 2022. Meanwhile, the risk in corporate bonds, as reflected in the volatility of the corporate bond index (CorpI), has been increasing since March 2021 (Chart 3.10), and remains in an upward trajectory.

3.48 Corporate bonds, however, remain relatively risky and, as such, there is potential for tightening of corporate funding in the bond market. However, the generally accommodative monetary policy conditions present funding opportunities in money markets that would augment any decline in capital market funding.

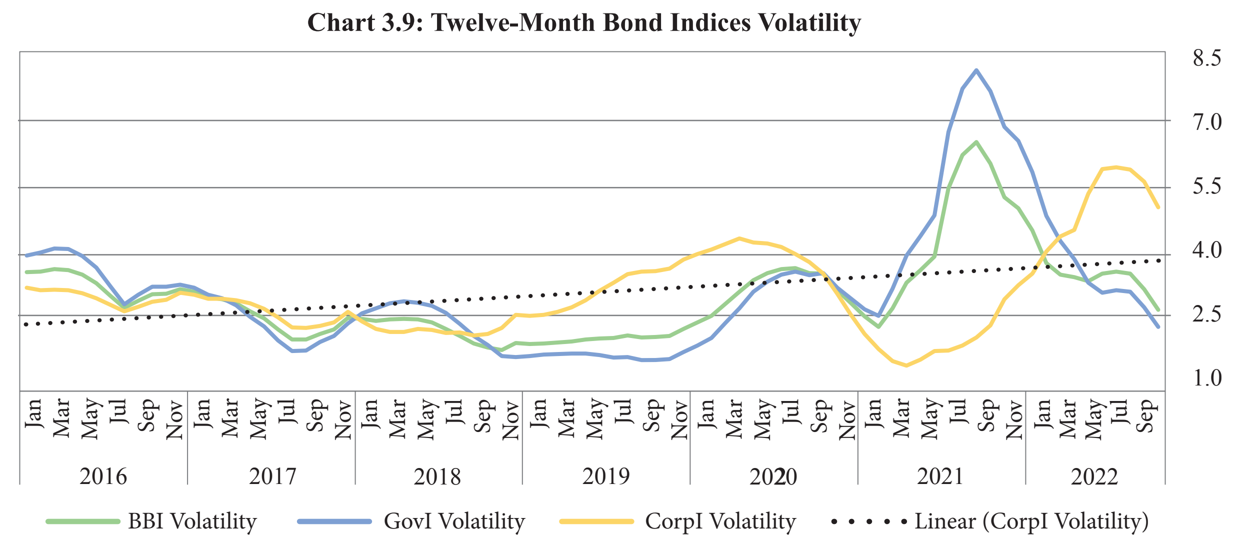
Net asset value of exchange traded funds falling

3.49 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 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. The net asset value (NAV) of ETFs listed on the BSE fell from P18.1billion in December 2021 to P17 billion in September 2022 (Table 3.6) despite the listing of a new ETF, ADBF, by African Development Bank in September 2022. The fall in market value is largely attributable to the steep decline in the nominal value of NewPlat, which lost more than P1 billion, in value, between December 2021 and September 2022 and a fall in the value of NewGold by more than P600 million. The impact of the fall in the nominal value of the two ETFs is partly offset by the new listing with a nominal value of P594 million. In terms of market capitalisation, ETFs valuations represented less than 1 percent of total equity market capitalisation in September 2022 (December 2021: less than 1 percent), hence pose minimal risk to the stability of the capital markets.

[17] Reissuances were made on Government bonds BOTSGB0931 (P227 million), BOTSGB0640 (P225 million), BOTSGB0943 (P20 million) and BOTSGB0527 (P85 million).



Source: Botswana Stock Exchange Limited
Note: Corporate Change and Government Change refer to the changes in the average corporate bond yield and the average government bond yield, respectively.



Source: Botswana Stock Exchange Limited

Table 3.5: Selected Bond Market Indicators

Period	Government			Corporate[1]			Total Number of Bonds	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[2] (Percent)					Botswana Bond Index	Government Bond Index	Corporate Bond Index
2016	6	8 258	4.5	35	3 888	7.2	41	12 146	68.0	32.0	170.1	169.6	170.6
2017	5	9 083	4.5	38	5 129	7.1	43	14 212	63.9	36.1	179.4	178.1	180.7
2018	7	9 588	4.6	42	5 446	8.8	49	15 034	63.8	36.2	185.1	184.4	186.7
2019	7	11 859	4.7	39	5 429	8.1	46	17 288	68.6	31.4	193.5	191.1	200.1
2020	6	14 957	5.3	38	5 352	8.1	44	20 309	73.6	26.4	195.9	192.9	204.8
2021	7	17 685	7.1	37	5 424	7.2	44	23 109	76.5	23.5	188.0	180.9	216.6
2022Q2	7	19 345	6.9	36	5 444	6.9	43	24 790	78.0	22.0	193.1	185.2	225.8
2022Q3	7	19 976	6.6	36	5 453	8.0	43	25 429	78.6	21.4	194.6	186.5	228.9

Source: Botswana Stock Exchange Limited

1. Includes bonds listed by corporate, quasi-government, parastatal, and supranational institutions.
2. The average of daily implied yields calculated by the BSE

Table 3.6: Net Asset Value of Exchange Traded Fund Indicators

ETF	NewGold	NewPlat	NewPall	NewFunds[3]	BAMIB50	BASBI	ADBF	**Total**
Underlying Asset	Gold	Platinum		South African Government Bonds	South African Government Bonds	South African Government Bonds	AfDB Bloomberg African Bond	
2016	13 152	7 471		–	–	–	–	20 623
2017	12 525	7 174		–	–	–	–	19 699
2018	7 906	5 742		–	–	–	–	13 648
2019	10 007	10 279		–	–	–	–	20 286
2020	13 494	6 329		–	–	–	–	19 823
2021	12 043	5 229	273	83.1	107.1	380.6	–	18 116
2022Q2	12 607	4 526	251	89.3	97.2	344.3	–	17 915
2022Q3	11 431	4 202	303	86	90.3	336.8	594	17 043

Source: Botswana Stock Exchange Limited

(d) Macro-Financial Linkages

(i) Contagion Risk

Significant macro-financial linkages persist

3.50 Significant interlinkages persist in the financial system, with the banking sector being largely exposed to households (Figure 3.1). In addition, households are highly exposed to NBFIs, with most household assets, mostly pension assets, held by the sector. In September 2022, non-financial corporations accounted for 41.3 percent of total commercial bank deposits, while their borrowing represented 28.8 percent of commercial bank credit. Meanwhile, deposits from other financial corporations or NBFIs represented a significant portion of bank funding at 22.8 percent of total deposits in September 2022 (Chart 3.10). A sudden withdrawal of these funds would present a potential funding risk to banks. In addition, a significant amount of NBFI assets (62.6 percent) were held abroad, exposing them to external financial and economic shocks (whether positive or negative), albeit providing some portfolio diversification opportunities.

3.51 The interlinkages also extend to state-owned enterprises (SOEs), which accounted for 8.8 percent of bank deposits, while loans to the sector accounted for 2.1 percent of total bank lending in September 2022. Consequently, there are notable vulnerabilities emanating from the interconnectedness between the banking system, household sector, NBFIs and the external sector.

Financial sector assets increase

3.52 The size of the financial system, as reflected by total assets of banks and NBFIs, increased to P274.1 billion in December 2021, registering a 6.7 percent growth from the P256.8 billion reported in December 2020 (Table 3.7) (slight decline to P274.0 billion in March 2022 as Insurance and other NBFIs data for 2022 was not available). The increase is largely driven by an 8.8 percent increase in the NBFI sector, which, in turn, was influenced by a 11.7 percent growth in the retirement funds sub-sector. The NBFI sector accounted for 57.3 percent of the financial systems' assets in March 2022 compared to the 42.7 percent of the banking sector[18].

3.53 The size of the entire financial system represented 135.4 percent of GDP in 2022 compared to 144.3 percent in 2021, demonstrating the significance and importance of the financial system to the economy. The strong interconnectedness and size of the financial system pose a risk of contagion within the financial system, and to the rest of the economy, although effective regulation across the system, as well as proper governance and accountability structures moderate the risk.

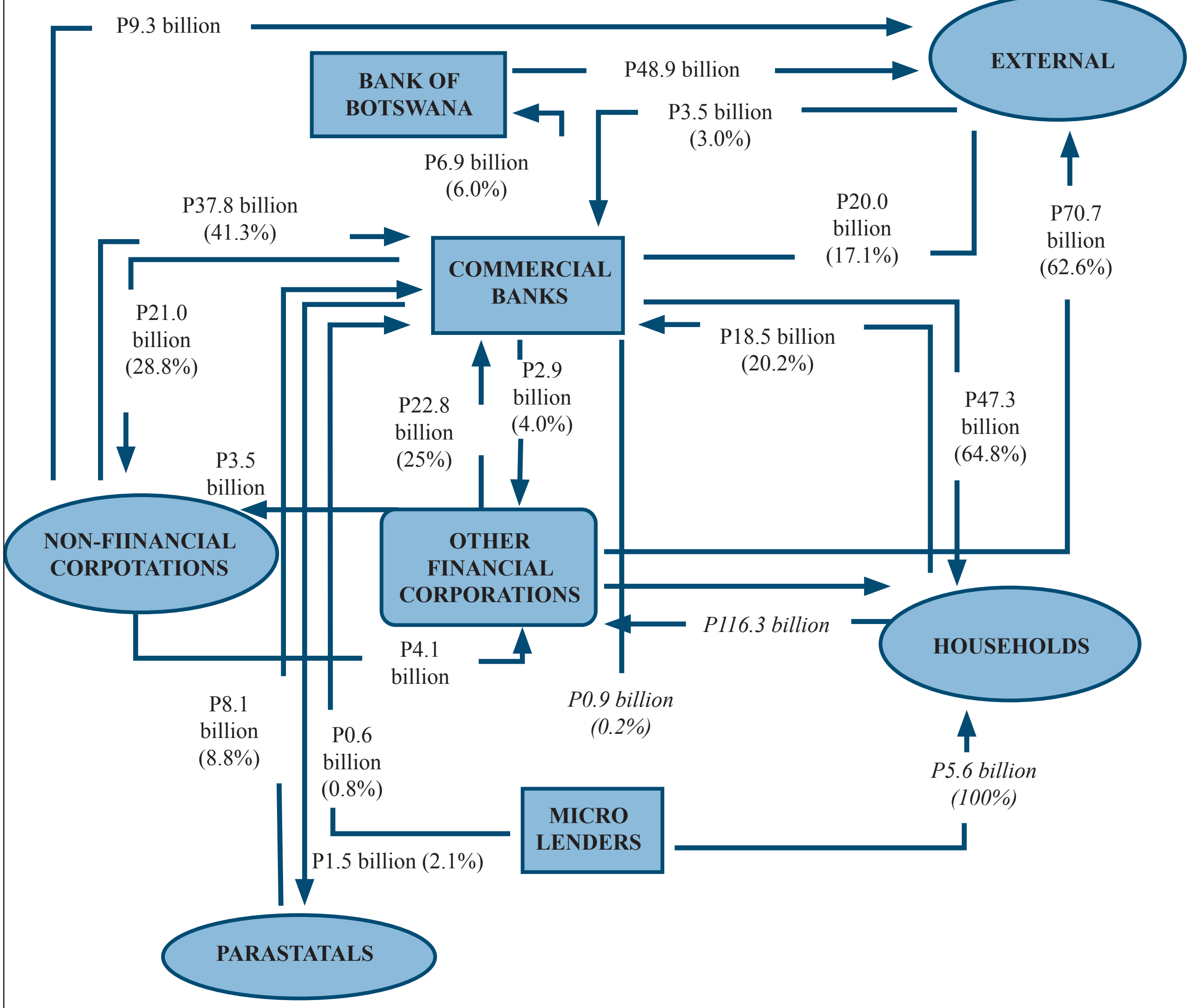
[18] The financial results for most NBFIs are not yet published hence, a few, but large, NBFIs were used to estimate the relative size of the financial system in 2022.

Table 3.7: Structure and Size of the Financial System

Sector/Sub-Sector	2020				2021				2022Q1			
	Assets (P'million)	Percent of Sector Assets	Percent of Financial System Assets	Percent of GDP	Assets (P'million)	Percent of Sector Assets	Percent of Financial System Assets	Percent of GDP	Assets (P'million)	Percent of Sector Assets	Percent of Financial System Assets	Percent of GDP
NBFIs	**145 384**	**100.0**	**56.6**	**85.0**	**158 207**	**100.0**	**57.7**	**83.3**	**156 972**	**100**	**57.3**	**77.6**
Retirement Funds	105 175	72.3	41.0	61.5	117 549	74.3	42.9	61.9	116 313.8	74.1	42.5	57.5
Insurance	20 386	14.0	7.9	11.9	*20 835*	*13.2*	*7.6*	*11.0*	*20 835*	*13.3*	*7.6*	*10.3*
Other Financial Corporations	19 823	13.6	7.7	11.6	*19 823*	*12.5*	*7.2*	*10.4*	*19 823*	*12.6*	*7.2*	*9.8*
Banks	**111 446**	**100.0**	**43.4**	**65.2**	**115 879**	**100.0**	**42.3**	**61.0**	**116 763**	**100.0**	**42.7**	**57.7**
Commercial Banks	103 259	92.4	40.2	60.4	107 452	92.7	39.2	56.6	108 571	92.9	39.7	53.7
Statutory Banks	8 187	7.6	3.2	4.8	8 427	7.3	3.1	4.4	8 192	7.0	3.0	4.1
Total Financial System Assets (P' million)	**256 829**			**150.2**	**274 086**			**144.3**	**273 735**			**135.4**
GDP (P' million)				**171 042**				**189 974**				**202 204**

Source: Bank of Botswana and NBFIRA
Note: Figures in italics are estimates

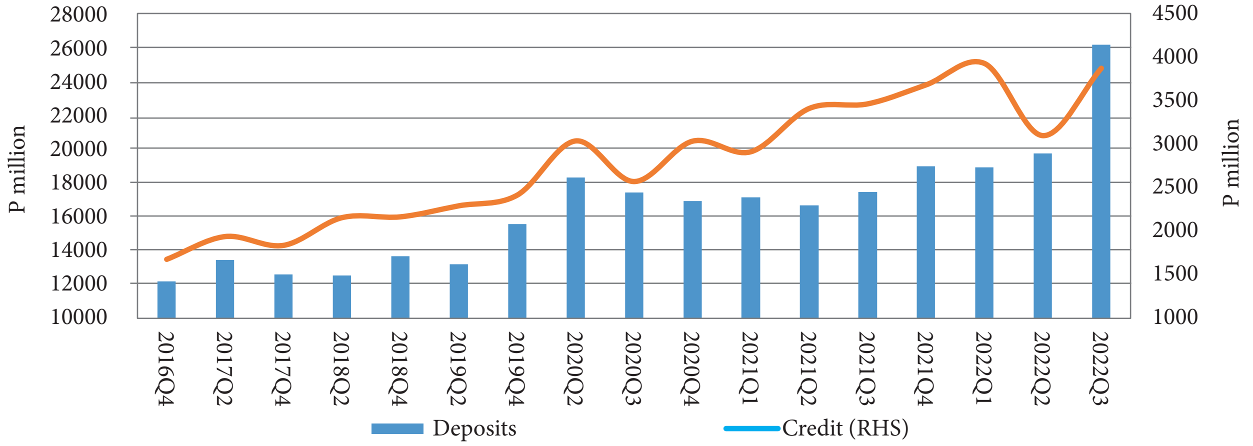
Figure 3.1: Macro-Financial Linkages (September 2022)



Source: Bank of Botswana, NBFIRA and BIHL

Notes:
1. Percentages indicate shares of loans/deposits for the sector.
2. Balances from the Bank to the external sector represents net foreign assets.
3. Balances from other financial corporations to the external sector are pension fund assets invested offshore.
4. Balances from commercial banks to the external sector are commercial banks' balances due from foreign banks.
5. Figures in italics are either estimates or for July 2022.
6. Non-financial corporations' funds to other financial corporations represent corporates assets under management by assets management companies as of December 2020. Other financial corporations' funds in non-financial corporations are corporate bonds for BIHL as of December 2021.

Chart 3.10: Commercial Banks' Exposure to NBFIs



Source: Commercial banks

(ii) Risk Concentrations

The Bank identifies and designates D-SIBs

3.54 The Bank has developed a Framework for D-SIBs, which is based on the Basel Committee on Banking Supervision (BCBS)'s assessment methodology for Global Systemically Important Banks. D-SIBs are banks, which have the potential to significantly affect the stability of the domestic financial system, should they become non-viable. The identification of D-SIBs is part of the broader Macroprudential Policy Framework in which authorities wish to control structural vulnerabilities within the financial system that arise through interlinkages, direct and indirect exposure concentrations and from domestic systemically important financial institutions. The Framework is thus intended to strengthen the resilience of the domestic financial system through dedicated monitoring and supervision of D-SIBs.

3.55 The Bank's identification criteria for D-SIBs is based on a weighted combination of the following five indicators: size, interconnectedness, substitutability, complexity, and domestic sentiment, which are appropriate measures of systemic importance for the domestic banking system. The assessment methodology was published in the May 2021 FSR. A bank is designated a D-SIB if its overall score based on the quantitative methodology is above a set threshold. The minimum quantitative score that a bank should attain to be considered a D-SIB is 180 points, which is the mid-point of the BCBS lowest bucket, with scores ranging from 130 - 229 points.

3.56 Using commercial banks data for December 2021, the Bank has identified two (2) D-SIBs for Botswana, namely, First National Bank of Botswana Limited (FNBB) and ABSA Bank Botswana Limited (ABSA), which scored 207 points and 200 points, respectively. The domestic assets of the two banks constitute the largest share of total banking industry domestic assets. They represent 44.2 percent of the industry total assets and 53 percent of household deposits in Botswana. Regarding geographical presence, and in terms of the number of bank branches, the combined number of bank branches for FNBB and ABSA is half of the total number of bank branches in Botswana.

3.57 FNBB and ABSA are well capitalised, liquid and solvent, hence pose no threat to domestic financial stability. The Bank will continue to undertake assessment of the systemic importance of banks in Botswana annually to ensure that the results reflect the current state of economic and financial developments. Therefore, the next D-SIBs list will be published in the May 2023 FSR.

Insurance and pension sectors highly concentrated

3.58 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 regarding risk to systemically important financial institutions[19]. In a highly concentrated market, such as the domestic 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. Lack of alternative service providers could amplify the effect of an insurance company's distress on the real economy.

3.59 The dominance of BIHL in the local insurance sector exacerbates these risks and warrants enhanced supervision. The top five largest 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. Regarding pension funds, more than 80 percent of total industry pension funds are accounted for by the Botswana Public Officers Pensions Fund (BPOPF). Measured in relation to the size of the domestic economy, total assets of pension funds were 53.2 percent of GDP in June 2022.

Pension fund assets increase

3.60 Pension fund assets increased by 5 percent, from P111.6 billion in July 2021 to P117.1 billion in July 2022, driven largely by an absolute increase in equity and bond investments. The equity portfolio increased from P72.9 billion in July 2021 to P74.1 billion in July 2022 and accounted for the largest share (63.3 percent) of the portfolio investment allocation of pension funds (Chart 3.11). Furthermore, 61.4 percent of the funds were invested offshore in July 2022, compared to 65.8 percent in July 2021.

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

Generally, the investment allocation of pension funds remained generally unchanged with an average of 60 percent invested offshore since 2009. This is in line with the retirement funds prudential regulations that require that at least 30 percent of assets should be invested locally. The regulations also require that annuities must be purchased exclusively from insurance providers operating in Botswana; potentially restricting consumer choices due to limited competition and shortage of annuity-related products.

The asset management sub-sector is highly interconnected with the rest of the financial system

3.61 Asset managers play a vital role in the intermediation of funds in the financial system. They 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.

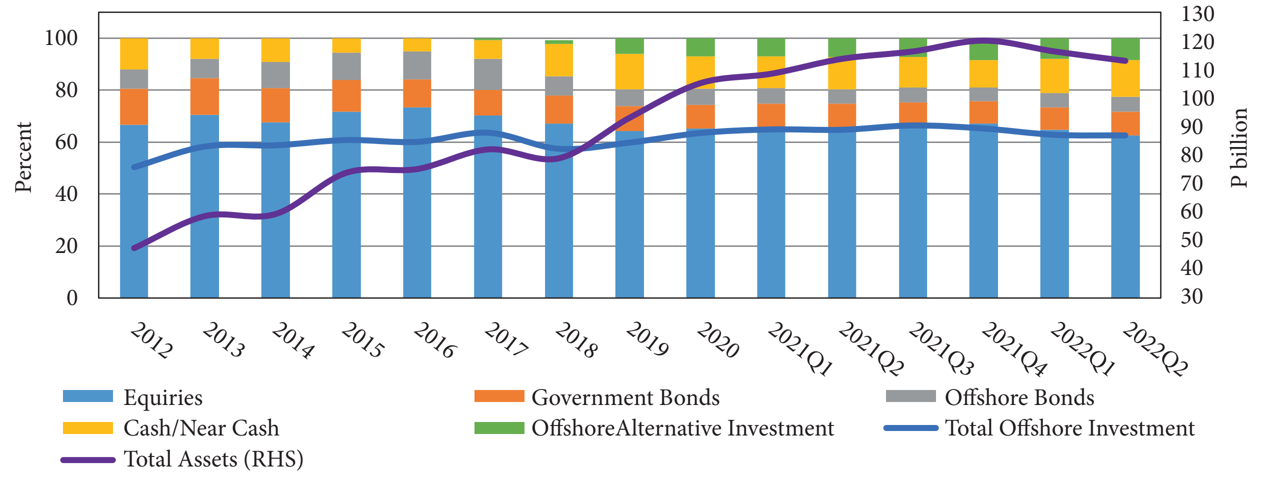
3.62 Total Assets Under Management (AUM) increased from P51.1 billion in 2020 to P60 billion in 2021, and most of these AUM were for pension funds. Other AUM belonged to retail investors, insurance companies and other professional investors. As such, the asset management sub-sector is highly interconnected with other parts of the financial system through ownership linkages, common asset exposures and the provision of wholesale funding to banks. Therefore, the level of systemic risk posed by the sub-sector is mitigated by profitability and adequate capitalisation of asset management companies.

(e) Banking Sector Stress Test Results

3.63 The stress test analysis relied on statutory returns as at June 30, 2022 and banks were subjected to moderate and severe shocks to reflect the impact of plausible adverse economic shocks. The general setting of the June 2022 stress test is a post-COVID-19 recovery phase characterised by uncertain economic conditions characterised by volatile nominal exchange rates, high inflation rates, declining market liquidity, stagnant household incomes and heightened climate risks, and geopolitical risks induced vulnerabilities. Global financial systems are generally being tested by the ongoing surge in energy and food prices, which are putting pressure on businesses and corporates alike, impacting on their capacity to service their loans and support economic recovery.

3.64 Globally, central banks are faced with a policy conundrum involving the need to balance price stability risks and financial stability risks associated with the erosion of purchasing power resulting from the double impact of interest rates hikes and increasing prices, which have a direct impact on households' disposable income and operating costs of businesses. In this context, the stress test exercise considered the impact of the economic uncertainty on the solvency of households and businesses, and the potential impact of moderate and severe recessionary scenarios on the solvency or capitalisation of the banking sector, as well as the simulation of bank runs resulting from banking customers' decline in confidence as assumed risks materialise.

Chart 3.11: Investment Allocation of Pension Funds



Source: NBFIRA

Banks are generally liquid, profitable, and well-capitalised

3.65 Financial soundness indicators as at June 30, 2022, were used as the baseline scenario, and they indicate that the banking sector continues to be adequately capitalised, liquid, and profitable (Table 3.8). The relatively high prudential ratios, however, suggest that banks are hoarding capital and liquidity amid the economic and business uncertainty brought about by COVID-19.

3.66 The stress test covers three simulations, namely liquidity, credit, and interest rate shocks (Table 3.9). The simulation considered that inflation is currently high and risks to the inflation outlook are tilted to the upside. As inflationary pressures continue to increase, the pressure for more upward adjustment in the policy rate is high. It is against this background that the interest rate scenario assumes a 1.5 percentage points (moderate scenario) and 2.25 percentage points (severe scenario) upward adjustment in the policy rate.

D-SIBs subjected to more severe stress conditions

3.67 For a subset of banks that are D-SIBs, a sensitivity scenario is assumed, whereby banks are simultaneously affected by a combination of shocks including a general increase in NPLs and an upward adjustment in the policy rate which leads to an increase in interest income. In addition, for the moderate scenario, the stress test exercise assumes some credit losses for vulnerable sectors and the largest exposure. Under the severe scenario, credit losses are assumed for the total loan portfolio and two largest exposures. To capture liquidity risks associated with the potential insolvency of the D-SIBs in the stress scenario, the thresholds for the capital adequacy ratio is set such that the banks are closed out of funding markets if the post-shock capital adequacy ratio breaches a set hurdle rate.

Banks generally resilient but susceptible to severe credit shocks

3.68 The credit shock is associated with the depletion of incomes of both households and businesses due to the slowdown in economic activity and thus potentially affecting their repayment ability. Stress tests results indicate that commercial banks are generally resilient to stress, save for severe credit shocks that could result in significant prudential capital breaches. Under the system-wide moderate scenario, where an additional 10 percent of performing loans are assumed to become NPLs, bank capital adequacy levels decline to 10.4 percent, thus breaching the prudential capital adequacy requirement of 12.5 percent. The industry capital position worsens to 1.2 percent in the severe scenario, where 20 percent of performing loans are assumed to become NPLs. As a result, the asset quality declines, with the ratio of NPLs to total loans rising from a baseline of 4 percent to 13.5 percent and 23.1 percent under moderate and severe scenarios, respectively.

3.69 Sector specific tests were also conducted to capture the idiosyncratic impact of credit shocks across all sectors of the economy. With the protracted COVID-19, the potential sources of credit risks include possible second round effects of the pandemic on credit losses and structural vulnerabilities associated with overall dependence on the diamond sector, especially for government revenue, as well as the dominance of household unsecured lending in the credit books of the banks. The dominance of household credit in total commercial bank credit is an important potential driver of credit losses. Unsecured credit presents a significant structural credit risk to the banking sector, especially in the event of a sudden erosion of the households' capacity to service their loans.

3.70 Under the moderate scenario, banks' capital adequacy ratio falls to 7.7 percent while the NPLs ratio increases to 16.4 percent. The capital adequacy ratio falls further to 2.9 percent under the severe COVID-19 scenario, and the NPLs ratio increases to 21.5 percent.

3.71 Regarding credit concentration shocks, banks breach the capital adequacy requirement at 9 percent under the assumption that the largest borrower defaults for each bank (moderate scenario). The capital adequacy ratio further falls to 4.3 percent under the severe scenario, which assumes that the largest two counterparties will default. The assumed counterparty defaults would increase the NPLs ratio to 13.1 percent and 18.6 percent in the moderate and severe scenarios, respectively. In general, credit risk tests show that the overall NPLs shock, simulating a proportional increase in NPLs, has more prominence in the capital and asset quality position of banks than the other shocks. Nevertheless, the credit stress tests do not consider credit mitigation measures such as underlying collateral.

Banks are generally resilient to liquidity shocks

3.72 In the liquidity risk test, banks show resilience to a liability run in the moderate stress scenario, and all banks can withstand liability drawdowns for 15 days. Under the severe stress conditions, all banks would be able to withstand drawdowns for 4 days. The results don't reveal any apparent disparity between the asset-liability mismatch for D-SIBs and other banks, as they have similar survival horizons.

3.73 The above scenarios do not consider the availability of liquidity support provided by the Bank through the Credit Facility nor liquidity support available from related companies or holding banks. Accordingly, the stress test results should not be interpreted to mean that banks would default under these conditions.

Bank profitability to rise with a policy rate increase

3.74 Results of the interest rate shock indicate that increases in the policy rate are associated with an overall increase in bank profitability, with resultant increases in the capital adequacy ratio of 0.1 percentage points and 0.6 percentage points for the moderate and severe scenarios, respectively. The increase in profit generally reflects the banking industry's positive interest rate gap, where interest earning assets exceed interest earning liabilities maturing in the next twelve months. Therefore, an increase of 1.5 percentage points in the policy rate would result in industry gains of P103.4 million (4.9 percent increase), while a 2.25 percentage points increase would lead to a gain of P155 million (7.3 percent increase), dominated by large banks (Table 3.12).

D-SIBs are resilient to a combination of shocks

3.75 Under the moderate concentration and overall NPL scenarios, D-SIBs are resilient with capital adequacy ratio above the prudential limit at 14.4 percent for the concentration shock, but they breach the prudential limit with a CAR of 10.4 percent for the overall NPL shock. For the severe concentration and overall NPL shocks the CAR falls to 10.7 percent and 4.4 percent, respectively. Considering a combination of shocks for sensitivity analysis, D-SIBs breach the CAR prudential limit in both the moderate and severe scenarios, with CAR of 10.5 percent in the moderate scenario and are insolvent in the severe scenario with CAR of -5.5 percent. To capitalise D-SIBs, shareholders or parent companies would have to inject capital amounting to P1.6 billion in the moderate scenario and P7.3 billion in the severe scenario. Because credit mitigants are excluded from the stress test scenario, and loss given default is assumed to be 100 percent, D-SIBs are adjudged to be resilient to a combination of shocks, but they are susceptible to extreme shocks.

3.76 To link liquidity risk and solvency of the D-SIBs, it is assumed that D-SIBs are closed out of funding markets if the capital adequacy ratio under stress scenario falls below set hurdle rates. Hurdle rates are set at 8 percent for closure to customer deposits, 10 percent for short-term funding and 4 percent for long-term funding. Under these assumptions, one of the D-SIBs is closed out of funding markets in the moderate scenario with total loss of customer deposits and short-term funding amounting to P5.1 billion. However, the bank would not experience liquidity short-fall due to available liquidity buffers. In the severe scenario, both D-SIBs are closed out of all funding markets, with an average CAR of -5.5 percent and total loss of funding of P11.1 billion. As a result, D-SIBs suffer a liquidity short-fall of P1.3 billion in the severe sensitivity scenario.

Table 3.8: Banking Sector Financial Soundness Indicators

Capital Adequacy (Percent)	Jun 2020	Dec 2020	Mar 2021	June 2021	Sep 2021	Dec 2021	Mar 2022	June 2022	Sep 2022
Core Capital to Unimpaired Capital	65.5	68.0	70.9	70.1	70.0	64.8	67.0	68.4	66.5
Tier 1 Capital to Risk-Weighted Assets[1]	13.3	13.5	14.1	14.1	12.8	12.0	12.5	12.0	11.8
Capital Adequacy Ratio (CAR)[2]	18.5	19.7	19.9	20.1	18.4	18.5	19.4	18.8	18.6
Asset Quality (Percent)									
NPLs to Gross Loans	4.4	4.2	4.4	4.3	4.2	4.3	4.2	4.0	3.8
NPLs Net of Specific Provisions to Unimpaired Capital	8.8	7.4	9.1	7.2	9.5	9.2	8.7	8.8	8.5
Specific Provisions to NPLs	58.9	62.8	54.7	64.5	59.4	45.7	57.6	56.2	55.1
Liquidity (Percent)									
Liquid Assets to Deposits (Liquidity Ratio)[3]	21.2	21.4	20.4	20.9	18.4	16.6	16.6	17.4	18.3
Advances to Deposits (Intermediation Ratio)	85.1	81.4	82.2	82.8	83.3	81.9	82.3	82.3	79.8
Profitability/Efficiency (Percent)									
Return on Average Assets (ROAA)	1.8	1.6	2.3	1.8	2.2	1.7	1.9	2.0	2.1
Return on Equity (ROE)	15.4	15.1	21.0	16.1	20.8	19.2	21.7	26.8	26.1
Cost to Income	69.3	64.9	59.7	59.3	60.9	63.3	60.5	60.3	57.2

Source: Bank of Botswana
Notes: 1. The prudential Limit is 7.5 percent - Basel II/III
2. The prudential Limit is 12.5 percent
3. The minimum statutory requirement is 10 percent

Table 3.9: June 2022 Stress Test Results for Commercial Banks

SCENARIOS	CREDIT RISK		
	CONCENTRATION RISK	SECTORAL SHOCK	OVERALL NPL SHOCK
BASELINE SCENARIO: BANKING CONDITIONS AS AT JUNE 30, 2022	CAR of 18.8 percent. 3.9 percent NPLs/total loans.	CAR of 18.8 percent. 3.9 percent NPLs/total loans.	CAR of 18.8 percent. 3.9 percent NPLs/total loans.
MODERATE SCENARIO			
DESCRIPTION OF SHOCK	Largest exposure defaults or becomes non-performing.	10 percent performing loans become non-performing for all other sectors and 15 percent for vulnerable sectors.	10 percent of performing loans become non- performing.
RESULTS	Banking system breaches the prudential limit with CAR of 9.0 percent. NPLs/total loans ratio increases to 13.1 percent, a sign of increasing vulnerability.	Banking system breaches the prudential limit with CAR of 7.7 percent. NPLs/total loans ratio increases to 16.4 percent, a sign of increasing vulnerability.	Banking system slightly breaches the prudential limit with CAR of 10.4 percent. NPLs/total loans ratio increases to 13.5 percent, a sign of increasing vulnerability.
SEVERE SCENARIO			
DESCRIPTION OF SHOCK	Largest two exposures default or become non-performing.	15 percent of performing loans become non-performing for all other sectors and 20 percent for vulnerable sectors.	20 percent of performing loans become non-performing.
RESULTS	Banking system breaches the prudential limit with CAR of 4.3 percent. NPLs/total loans ratio increases to 18.6 percent, a sign of increasing vulnerability.	Banking system breaches the prudential limit with CAR of 2.9 percent. NPLs/total loans ratio increases to 21.5 percent, a sign of increasing vulnerability.	Banking system breaches the prudential limit with CAR of 1.2 percent. NPLs/total loans ratio increases to 23.1 percent, a sign of increasing vulnerability.

SCENARIOS	LIQUIDITY RISK	INTEREST RATE RISK

BASELINE SCENARIO: BANKING CONDITIONS AS AT JUNE 30, 2022	Perfect asset liability match, leading to 30 days survival.	Banks start off with a CAR of 18.5 percent.
MODERATE SCENARIO		
DESCRIPTION OF SHOCK	Bank run simulation based on Assets Haircuts and Liabilities Run-off Rates.	150 basis points increase in the Policy Rate.
RESULTS	D-SIBs survive for 15 days. Other banks survive for 15 days. On average, banks survive for 15 days.	18.9 percent CAR (+ 0.1 percentage points change in CAR). Gain of P103.4 million in interest income.

SEVERE SCENARIO		
DESCRIPTION OF SHOCK	Bank run simulation based on higher Assets Haircuts and Liabilities Run-off Rates than in the moderate scenario.	225 basis points increase in the Policy Rate.
RESULTS	D-SIBs survive for 4 days. Other banks survive for 4 days. On average, banks survive for 4 days	19.0 percent CAR (+ 0.6 percentage points change in CAR). Gain of P155 million in interest income.

Source: Bank of Botswana

Table 3.10: D-SIBs Stress Testing Results for June 2022

SCENARIOS	CREDIT RISK		SENSITIVITY ANALYSIS
	Concentration Risk	**Overall NPL Shock**	
BASELINE SCENARIO: BANKING CONDITIONS AS AT JUNE 30, 2022	CAR of 20.5 percent. 4.3 percent NPLs/total loans.	CAR of 20.5 percent. 4.3 percent NPLs/total loans.	CAR of 20.5 percent. 4.3 percent NPLs/total loans. P1.6 billion profit buffer.
DESCRIPTION OF SHOCK	Largest exposure defaults or becomes non-performing.	10 percent of performing loans become non-performing.	Increase in interest income; one largest exposure defaults, policy rate hike of 150 basis points; 15 percent of vulnerable sectors' performing loans become non-performing.
RESULTS	D-SIBs are resilient with CAR of 14.4 percent. NPLs/total loans ratio increases to 10 percent, a sign of increasing vulnerability.	D-SIBs are resilient with CAR of 10.4 percent. NPLs/total loans ratio increases to 13.5 percent, a sign of increasing vulnerability.	D-SIBs breach the prudential limit with CAR of 10.6 percent. Capital needs of P1.6 billion to recapitalise D-SIBs (0.8 percent of GDP). No closure of funding markets.
DESCRIPTION OF SHOCK	Largest two exposures default or become non-performing.	20 percent of performing loans become non-performing.	Largest exposures default: policy rate hike of 225 basis points; 15 percent of total performing loans become non-performing.
RESULTS	D-SIBs breach the prudential limit with CAR of 10.7 percent. NPLs/total loans ratio increases to 18.6 percent, a sign of increasing vulnerability.	D-SIBs breach the prudential limit with CAR of 4.4 percent. NPLs/total loans ratio increases to 23.4 percent, a sign of increasing vulnerability.	D-SIBs breach the prudential limit with a negative CAR of -5.5 percent. Capital needs of P7.3 billion to recapitalise D-SIBs (3.8 percent of GDP). Liquidity shortfall of P1.3 billion due to closure of funding markets.

4. FINANCIAL MARKET INFRASTRUCTURE (FMI) AND REGULATORY DEVELOPMENTS

(a) Payments and Settlements Systems

BSE launches digital services technologies for more and better offerings

4.1 The BSE went live with a new CSD system, ATS and SWIFT connectivity in September 2022. These three technology systems represent a modernisation of the BSE's technology infrastructure that aims to improve the resilience of the market, network security, operational efficiencies and align with international best practice to make the BSE competitive in the global securities market. In addition, the CSD system comprises of new functionalities and capabilities that expand its services and products such as the centralised custody for all securities in the market including government securities, Electronic Annual General Meetings (e-AGMs), among others. In due course, the system will provide customers remote access to their CSD accounts and statements.

4.2 The new ATS is an upgrade of the ATS that was implemented in 2012. The salient features of the new ATS include an improved Request for Quotation mechanism, which is popular for trading of bonds, a bond calculator, availability of micro auctions, which can be used for market-making, as well as improved information dissemination capabilities.

FMIs largely resilient

4.3 Clearing systems have been largely resilient in handling large volumes of transactions without any major disruption. Meanwhile, the value and volume of cheque transactions continues to a decline (Table 4.1).

4.4 As at December 31, 2021 the Bank of Botswana had licensed twenty-two Electronic Payment Service (EPS) providers under the EPS regulations of 2019. Total volumes for EPS increased from 9.9 million in January 2022 to 11.1 million in September 2022, while the value increased from P3.7 billion to P4.2 billion over the same period. This shows the increased importance of EPS in the financial system hence increased security and stability risk emanating from EPS.

4.5 Generally, FMIs consisting of payment systems, central securities depository, and securities settlement systems, remain stable and resilient, thus strengthening and preserving domestic financial stability.

Central bank digital currencies could enhance the efficiency of the payment system

4.6 Interest on central bank digital currencies (CBDCs) is on the rise and some countries are running pilot projects to establish their value proposition, while some central banks like the Bahamas and Nigeria have launched their national CBDC. CBDCs in the main, are a digital representation of existing fiat currency and have the potential to introduce efficiencies and convenience in the payments space and financial inclusion. The FSB July 2022 brief indicates that increased globalisation and attention to financial inclusion has resulted in calls for a seamless cross border payments hence, extensive efforts towards cheaper, faster, more inclusive, and transparent cross-border payments. The FSB, in collaboration with the Committee on Payments

Table 4.1: Selected Payments 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
2020	155	2 110	495	12	9 770	211
2021	175	1 777	361	9	10 463	232
2022 Aug	132	749	190	5	7 325	175

Source: Bank of Botswana

and Market Infrastructures (CPMIs), has developed a roadmap to enhance the existing payment ecosystem, exploring among others, the potential role of CBDCs in modernising and improving efficiencies in payment systems. CBDCs offer in digital form, unique advantages of central bank money: settlement finality, liquidity, and integrity. The G20 has made enhancing cross-border payments a priority, with CBDCs emerging as an area of interest. The aim is to address multiple friction points in existing cross-border payments framework, such as fragmented and truncated data formats, complex processing of compliance checks, limited operating hours and legacy technology platforms. Therefore, CBDCs are seen as a potential solution to cross border payments.

4.7 From a financial stability perspective, the design of a CBDC is critical as it determines influence on financial stability and financial inclusion. For example, a wholesale CBDC may not necessarily widen financial inclusion, but it is likely to increase efficiency of wholesale payments. A retail CBDC on the other hand has the potential to assist in achieving financial inclusion goals. However, depending on the design features, a CBDC can increase the reliance of commercial banks on wholesale funding thus, accentuating susceptibility to down turns and lead to disintermediation of the banking system. CBDCs may also, by design, increase the probability and severity of bank runs during periods of system-wide instability. Therefore, Botswana, like other jurisdictions, should ensure that digital money is designed with public interest in mind to ensure open payment platforms and a competitive level playing field that is conducive to innovation and financial stability. Nevertheless, while central banks, including the Bank of Botswana, continue to explore opportunities presented by CBDCs for enhancing efficiency of domestic and cross-border payments, it is also important to remain cautious of the risks, and impact on monetary policy, financial stability, and payment safety.

(b) Regulatory and Other Developments Relevant to Financial Stability

Governance and accountability issues in the NBFI sector a concern

4.8 Governance and accountability issues in the financial sector, especially in the NBFI sector remain a serious concern. The observed lapses, loopholes, lack of oversight, poor fiduciary discharges and weak governance practices have the potential to negatively impact the financial system. Misappropriated or misallocated and unrecoverable collateral and funds could result in financial losses for some institutions and households and ultimately destabilise the financial system. Nonetheless, the NBFI sector continues to be monitored regularly, and where transgressions are identified, appropriate and dissuasive sanctions will be levied. Also, regulatory policies and guidelines will continue to be enhanced to improve the professional and ethical conduct by both individuals and firms in the financial services industry.

The Bank of Botswana (Amendment) Bill, 2022 passed by Parliament

4.9 The Bank of Botswana (Amendment) Bill was passed by Parliament on July 25, 2022. The Act introduces new provisions to enhance the Bank's powers to achieve the price and financial stability mandates. The Act also provides for the establishments of a deposit insurance scheme as well as establishment of a statutory FSC. These developments are expected to further strengthen domestic crisis management and resolution frameworks.

The Credit Information Act, 2021 operational

4.10 The Credit Information Act 2021 came into operation on August 1, 2022. The main objective of the Act is to provide for the regulation of the credit reporting system and the licensing and supervision of credit bureaus by the Bank. The Act provides powers and guidelines on licensing, governance, regulation, and supervision of credit bureaus. It stipulates rights and obligations of providers and users of credit data and information. The Act also gives the Bank power to handle complaints and initiate investigations were necessary.

MoPR maintained at 2.65 percent

4.11 At the meeting held on October 20, 2022, the MPC of the Bank decided to maintain the MoPR at 2.65 percent. The MPC noted that the projected elevated inflation in the short term is primarily due to supply side factors and related second-round effects and entrenched expectations, while demand remains modest. Furthermore, the MPC projects that the economy will operate below full capacity in the short to medium term and, therefore, not creating any demand-driven inflationary pressures; therefore, the decision to maintain the MoPR to support the nascent economic recovery. In addition, the MPC decided that the repo and reverse repo rates will continue to be conducted at the MoPR of 2.65 percent. The Standing Deposit Facility (SDF) Rate was maintained at 1.65 percent (100 basis points below the MoPR) while the Standing Credit Facility (SCF) Rate was maintained at 3.65 percent (100 basis points above the MoPR). The higher cost of borrowing resulting from the previous increases in the MoPR should reduce borrowing for unproductive/consumption purposes and discourage risky speculative borrowing. It is also likely to lead to some increase in business and household NPLs, albeit on a lower scale due to generally good lending practices in the market.

Secure Land Title to make tribal land more marketable and easily mortgageable

4.12 The re-enacted Tribal Land Act of 2018 (Act) came into effect on the April 20, 2022. The Act has, among others, allowed for non-citizens to obtain tribal land (with ministerial consent); all those who hold Customary Land Grants Certificates to be granted a Secure Land Title (SLT); Land Boards are to approve all transactions involving tribal land, including cession, mortgages, five-year leases, and exchanges, and in case of land being repossessed, the Act allows for consideration of market value in determining adequate compensation. These reforms will ensure the exploration of the true economic value of tribal land and make tribal land eligible for mortgage financing. This will not only help in increasing housing for the population, but it is supportive of financial stability as SLT may lead to increased sources of collateral, hence better loan quality.

Licensing of virtual assets operators in the country underway

4.13 The Virtual Assets Act, 2022 and the Virtual Assets Regulations, 2022 were introduced and implemented effective February 1, 2022, and NBFIRA was designated the regulatory authority for Virtual Assets Services Providers (VASPs). NBFIRA is in the process of establishing the regulatory processes, which include licensing of all the virtual assets operators in the country. This would ensure that the regulation of these entities is in line with standards set by Financial Action Task Force (FATF) recommendation 15 which requires that VASPs be regulated for anti-money laundering and countering the financing of terrorism (AML/CFT) purposes, that they be licensed or registered, and subject to effective systems of monitoring or supervision. Beyond the enactment of the Virtual Assets Act (2022), NBFIRA intends to conduct a sectoral risk assessment, a study on prevalence of virtual assets activities in Botswana, formulation of rules for the industry, capital adequacy requirements and inspection manuals.

Parliament passes the Retirement Funds Bill

4.14 In August 2022, Parliament passed the Retirement Funds Bill, 2022, which has aligned Botswana's Retirement Fund Act with modern international standards and best practice in the management of pension funds to protect the benefits of the members. The Act has also strengthened and widened the oversight authority of NBFIRA to improve and insure balanced and cost-effective corporate governance of pension funds. The Retirement Funds Regulations have been revised to introduce new provisions on encashment of residual funds as well as allowing for an increase in the proportion of funds which must be invested locally by pension funds from the current minimum of 30 percent to a minimum of 50 percent. This will enable pension funds to be available for developmental purposes in Botswana, and contribute towards boosting the local economy and to create the much-needed sustainable jobs; all of which augurs well for safeguarding financial stability.

4.15 The downside of this amendment is that funds diverted to the domestic capital markets have the potential to inflate property and equity prices as well as an upsurge in liquidity. In addition, large managed investments are likely to crowd-out individual and small investors in the domestic stock market, leading to even more concentration in the BSE. Nonetheless, the diversion of funds into the domestic market would have to be done in a gradual and phased manner in order to moderate potential risks. Overall, even though this amendment bodes well for supporting economic activity, financial stability risks and vulnerabilities emanating from this amendment must be actively monitored.

Efforts underway to set up safety nets for the NBFI sector

4.16 In line with the objective of the Macroprudential Policy Framework for Botswana that seeks to strengthen the resilience of the domestic financial system. NBFIRA has established an Investor Compensation Fund. In addition NBFIRA is carrying out three studies to: inform the process of establishing a Policyholders' Protection Fund, aimed at protecting insurance policyholders in case of bankruptcy or liquidation of an insurer; assess the strength of the retirement funds industry in Botswana, in relation to its sustainability, as well as evaluate the social impact and coverage of the retirement system in Botswana to inform policy formulation accordingly and; develop a framework for the identification and designation of Domestic Systemically Important NBFIs.

Ongoing implementation of the Post Grey Listing National Action Plan

4.17 Botswana is committed to improve its policies, legal frameworks and action plans following removal from the FATF grey list and the European Union's list of high risk third countries to ensure full compliance with most of the FATF Anti-Money Laundering/Combating the Financing of Terrorism/Counter Proliferation Financing (AML/CFT/CFP) recommendations. Accordingly, preparatory work has commenced towards conductingthe second national risk assessment for Botswana in 2022/23.

5. CONCLUSION AND OUTLOOK

5.1 Notwithstanding the challenges resulting from subdued and fragile global growth; high inflation and resultant tighter global financial conditions, persistent geopolitical risks as well as the scarring and/or lingering effects of the COVID-19 pandemic, the domestic financial system remains resilient and robust, thus continues to be safe and sound as well as unconstrained in providing and growing the range of financial service to support the economy. The enduring stability of the financial system is supported by a conducive macroeconomic environment, characterised by the prevailing accommodative monetary conditions and positive economic growth prospects, despite sovereign vulnerabilities (that is, reduced fiscal and external buffers) due to the current depressed global economic environment combined with long-term structural trends.

5.2 Reforms to further improve the business environment, Government interventions against COVID-19, including vaccine roll-out to the productive population, implementation of the Reset Agenda, the ERTP and the Industry Support Facility (ISF), provide impetus for economic recovery and, in turn, financial stability in the medium-term.

5.3 Emerging vulnerabilities from the global environment include the increasing interconnectedness of the volatile crypto assets market with the rest of the financial system, which challenges regulators to develop effective oversight frameworks for the sector. Climate-related financial risks are also on the rise owing to climate change and its potential to impact the safety and soundness of individual financial institutions and the broader financial systems. As a result, there is increased pressure on institutions and countries to green their financial systems. This may hamper growth of some economic activities considered harmful to the environment/climate. Hence, improving data quality would greatly enhance identification and assessment of climate-related risks and the costs of greening the financial system. Domestically, the risk emanating from crypto assets and climate change is considered small and continues to be monitored (see Table A2 on the risk assessment matrix). These and other risks will continue to be monitored and, where necessary, relevant macroprudential policy tools implemented to contain emerging vulnerabilities that could elevate risks to domestic financial stability.

APPENDIX

Table A1: Macroeconomic and Financial Stability Indicators

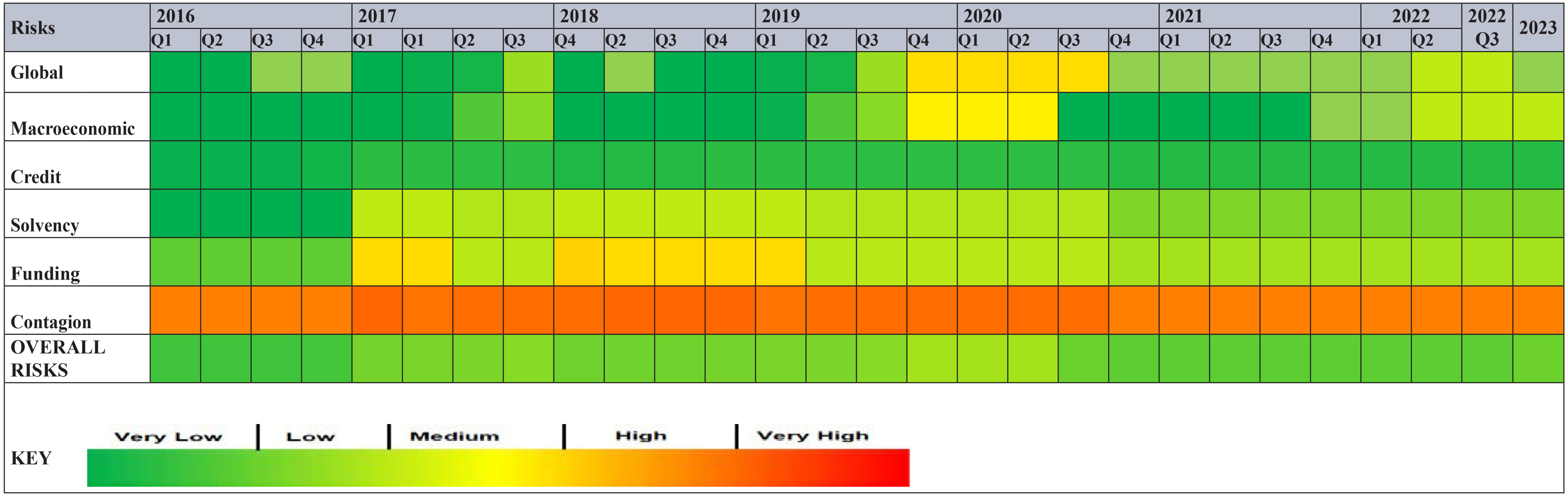
Financial Sector (Percent)	Mar 2020	Jun 2020	Sep 2020	Dec 2020	Mar 2021	Jun 2021	Sep 2021	Dec 2021	Mar 2022
Relative Size of Financial Sector (percent of GDP)[1]	100.17	99.7	99.4	99.12	98.97	98.69	119.1	144.3	115.3
Pension Funds' Assets (percent of GDP)	48.6	54.0	58.6	61.5	63.1	61.7	60.2	61.5	57.2
Pension Funds Offshore Investments (percent of GDP)	28.3	33.9	37.3	39.1	41.0	40.0	40.0	40.2	36.1
Corporate Sector (Percent)									
Corporate Sector Debt to GDP	13.2	13.6	13.1	13.1	12.8	12.6	12.5	11.9	10.9
Debt to Equity	…	45.7	…	69.8	…	80.0	…	85.2	…
Household (Percent)									
Household Debt to GDP	22.5	23.6	24.3	25.1	25.2	24.0	23.6	23.4	22.7
Household Debt to Income	47.3	47.0*	47.0*	58.6	58.6*	58.6*	58.6*	45.0	45.0
NPL (household)	3.6	3.9	3.2	3.4	3.5	3.3	3.2	3.2	3.2
Real Estate (Percent)									
Mortgage Loans to Total Loans	20.0	20.1	20.2	19.6	19.3	19.0	18.7	15.3	15.3
NPL (mortgages)/Total mortgage loans	6.5	7.2	6.0	6.1	6.3	6.4	6.5	6.5	6.5
Total Mortgage Loans/GDP	7.1	7.5	7.7	8.2	8.1	7.6	7.4	7.5	7..3
General Economic Indicators									
Economic growth	2.2	-5.3	-7.3	-8.7	-8.7	5.2	8.6	11.4	7.0
Inflation	2.2	0.9	1.8	2.2	3.2	8.2	8.4	6.7	10.0
Foreign Exchange Reserves (percent of GDP)	30.3	34.1	32.4	29.5	30.5	27.3	27.4	26.7	26.2
Current Account Balance (P' Million)	-3 791	-6 575	-3 848	-18 251	-11 684	-7 341	-1 449	-6 897	…
Months of Import Cover	11.5	11.8	10.9	9.9	10.1	9.6	9.8	9.1	9.1
Exports (percent of GDP)	35.4	28.5	29.6	31.4	37.6	42.1	46.6	40.5	41.1
Imports (percent of GDP)	45.3	43.9	45.2	46.5	49.2	50.8	48.2	52.1	44.8
Government									
Government Debt to GDP	19.2	19.8	20.0	19.5	20.3	26.5	18.1	33.1	…
Government Debt to Revenue	53.9	61.0	63.1	74.4	103.8	19.7	17.5	19.1	…
Government Guaranteed Debt/GDP	4.5	4.6	4.8	4.8	4.4	4.5	4.2	…	…
Government Net Financial Position to GDP	5.6	8.0	9.8	-10.7	-	-	-	-0.9	…
Government Interest Payments to Revenue	4.1	1.0	4.6	2.11	0.9	2.6	0.2	0.2	0.2
Government Interest Payments to GDP	0.9	0.4	1.1	0.04	0.1	0.2	0.0	0.0	0.0
Government Deposits to GDP	1.2	1.0	1.5	1.5	1.1	0.9	1.0	1.1	0.8
Government Expenditure to GDP	…	33.2	35.5	36.9	32.9	33.2	32.6	34.1	…
Government Employment to Total Employment	40.3	40.3*	40.3*	31.0	31.0*	31.0*	31.0*	30.8	30.8*

Source: Bank of Botswana, Statistics Botswana, MFED, NBFIRA, Botswana Stock Exchange Limited and Commercial Banks.
Note: … denotes data not available
1. Figures include Commercial Banks, Statutory Banks and Pension fund Assets only.
* are estimated figures.

Table A2: Risk Assessment Matrix

Risk Type and Underlying Vulnerabilities	Risk Mitigation Measures	Residual Risk
Weak global economic growth Subdued prospects for global economic activity due to the lingering impact of the COVID-19 impact and the adverse impact of geopolitical tensions (e.g., the Russia - Ukraine war and China - Taiwan tensions and associated global supply disruptions)	• Increased local production through import substitution – vegetable ban, ERTP, ISF and other Government policies to boost economic growth • Continued vaccination and application of health measures	**Moderate**
High inflation outlook Persistent high inflation that could lead to entrenched inflation expectations	• Gradual hikes in the policy rate to moderate expectations • The inflation outlook shows that inflation will fall within the Bank's 3 – 6 percent medium term objective in the near term • Government has implemented measures to cushion households against the eroded purchasing power (reduction in the VAT, zero-rating of cooking oil etc.)	**Moderate**
Tightening financial conditions Tightening of policy rates globally and domestically to control inflation expectations	• Policy rate increases are moderate and gradual • Central bank communication through MPC press releases and statements and publication of the Monetary Policy Report provides clarity on the drivers of inflation and expected outcomes, therefore, helps to stabilise expectations	**Moderate**
Credit risk from households Dominance of total credit by households	• The Credit-to-GDP gap is low, demonstrating that the prevailing level of credit will not overheat the economy, and there is scope for further expansion of credit to support growth • Good lending standards, generally • Household credit is dominated by government employees (high job security), scheme loans and deduction from source hence, low NPLs • Households are net savers	**Low**
Climate risk Unfavourable climate conditions and global warming (i.e., droughts, cyclones, earthquakes etc.)	• Global (e.g., the Paris protocol on reducing carbon footprint) and domestic climate adaptation and mitigation have and continue to be developed • Promotion of greening of the economy	**Low**
Funding risk • High dependance on retail deposits from NBFIs and non-financial corporates (NFCs) • Households' pensions placement with pension funds and asset management companies are the main source of deposits	• Well capitalised and highly liquid banking sector • Close monitoring of NBFIs • Strong accounting and audit standards • Regulatory checks and balances • The new 50/50 rule in pension investment abroad is likely to increase retail deposits	**Low**
Contagion risk • The banking sector is highly integrated with NBFIs • NFCs and the real estate sector are integrated with banking sector. These together with NBFIs are the main source of deposits • Concentration risk: the insurance and pension sectors, and micro lenders are dominated by few companies	• Well-regulated and supervised banking and NBFIs • Well capitalised and liquid banks and NBFIs	**Low**
Cybersecurity threat Rapid digitisation of payments and operations and processes (especially in the NBFI sector)	• High Information and Communications Technology (ICT) security implementation • High observance of Know Your Customer (KYC) • Increased compliance to FATF protocols • limits the potential negative impact on financial system.	**Low**
Risks from crypto assets Increased trade in crypto assets, predominantly in EMDEs	• The crypto market in Botswana is small • The Virtual Assets Act, 2022 provides for the regulation of the virtual assets market	**Low**

Chart A1: Financial System Vulnerabilities - Heat Map



Source: Bank of Botswana

Table A3: Annual Sectoral Indicators of Financial Development

Sector	Indicator	2016	2017	2018	2019	2020	2021
Banking							
	Number of branches and outlets	115	125	127	135	135	135
	Bank deposits/GDP (percent)	38.0	37.2	39.0	41.3	48.0	45.2
	Number of branches/thousands population	…	…	…	…	…	…
	Bank assets/total financial assets (percent)	39.9	39.0	42.8	42.7	41.5	42.3
	Bank assets/GDP (percent)	49.1	50.1	52.9	55.28	59.8	62.0
	Total number of deposits taking institutions	12	12	12	11	11	11
Insurance	Number of insurance companies (percent)	24	24	21	23	23	23
	Gross premiums/GDP (percent)	2.7	3.0	3.2	3.2	3.3	3.2
	Gross life premiums/GDP (percent)	1.9	2.2	2.4	2.2	2.5	2.4
	Gross non-life premiums/GDP (percent)	0.8	0.7	0.8	0.8	0.9	0.9
	Insurance assets/GDP (percent)	13.1	14.1	10.8	11.2	11.8	10.4
	Insurance assets/total financial assets	10.6	11.0	8.7	8.6	8.2	7.6
Pensions	Types of pension plans						
	Total number of defined benefit plan	…	…	…	…	…	…
	Total number of defined contribution benefit plan	…	…	…	…	…	…
	Pension fund assets/total financial assets (percent)	37.1	40.4	38.3	40.3	42.3	42.9
	Pension fund assets/GDP (percent)	45.7	49.3	45.8	52.2	61.0	64.3
Mortgage	Mortgage assets/total financial assets(percent)	4.3	4.3	4.5	4.3	4.1	5.3
	Mortgage assets/GDP	7.8	7.8	7.8	7.8	8.3	7.8
Securities dealers	Total number of securities dealers	4	4	4	4	4	4
	Securities dealer's/total financial assets (percent)	…	…	…	…	…	…
	Securities dealer's assets/GDP (percent)	…	…	…	…	…	…
Credit union	Total number of credit unions	…	…	…	…	…	…
	Credit union's assets/total financial assets (percent)	0.2	0.2	0.3	0.3	0.3	0.3
	Credit union assets/GDP (percent)	…	…	…	…	…	…
Foreign exchange markets	Adequacy of foreign exchange (reserves in months of imports)	17.4	17.1	14.7	12.1	9.8	9.1
	Foreign exchange reserves to short-term external debt	0.5	0.5	0.5	0.4	0.4	0.4
Collective investment scheme	Local unit trust and mutual funds						
	Number of local unit trust and mutual funds*	6	6	5	6	6	6
	Local unit trust and mutual funds/total financial assets	0.7	0.7	0.7	0.7	0.8	0.8
	Overseas mutual funds	…	…	…	…	…	
Offshore investments	Offshore investments/total financial assets	22.3	24.4	21.3	24.1	26.9	28.6
	Offshore investments/GDP (percent)	27.5	31.4	26.3	31.2	38.7	42.0

Source: Bank of Botswana, NBFRA, Botswana Stock Exchange
Notes: … Denotes data not available
*These are unit trusts only

Table A4: Size of Selected Asset Markets

Indicator	2022Q1 (P' Million)	Growth 2021: Q1 - 2022Q1 (Percent)	Average Annual Growth 2016 - 2022Q1 (Percent)*
Equities	444.5	149.9	-29.4
Residential Real Estate	14193.0	0.7	11.4
Commercial Real estate	5358.3	13.8	34.0
Treasury securities	18547.0	15.0	124.6
Investment-grade corporate bonds	4043.7	-24.7	4.0

Source: Bank of Botswana
* Shows the average annual growth percent of equities from 2016 - 2021.

NOTES