FINANCIAL STABILITY REPORT

BANK OF BOTSWANA
BANKA YA BOTSWANA

PULA
REPUBLIC OF BOTSWANA
MINISTRY OF FINANCE

NBFIRA
Non-Bank Financial Institutions Regulatory Authority

MAY 2023

FINANCIAL STABILITY COUNCIL

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ABBREVIATIONS

AML/CFT/CPF	Anti-Money Laundering/Combating the Financing of Terrorism/Combating the Financing of Proliferation
ATS	Automated Trading System
AUM	Assets Under Management
BISS	Botswana Interbank Settlement System
BES	Business Expectations Survey
BIHL	Botswana Insurance Holdings Limited
BIS	Bank for International Settlement
BISS	Botswana Interbank Settlement System
BoBCs	Bank of Botswana Certificates
BoE	Bank of England
BPOPF	Botswana Public Officers Pension Fund
BSEL	Botswana Stock Exchange Limited
BTFP	Bank Funding Term Program
CAR	Capital Adequacy Ratio
CorpI	Corporate Bond Index
CSD	Central Securities Depository
DB	Defined Benefit
DC	Defined Contribution
DCI	Domestic Company Index
DCTRI	Domestic Company Total Return Index
DISB	Deposit Insurance Scheme of Botswana
D-SIBs	Domestic Systemically Important Banks in Botswana
D-SIFIs	Domestic Systemically Important Financial Institutions
EFTs	Electronic Funds Transfers
EMDEs	Emerging Markets and Developing Economies
EPS	Electronic Payment Service
ERGRDP	Economic Resilience and Green Recovery Development Policy
ERTP	Economic Recovery and Transformation Plan
ESG	Environmental, Social and Governance
ETF	Exchange Traded Funds
EU	European Union
FATF	Financial Action Task Force
FCI	Foreign Company Index
FIA	Financial Intelligence Agency
FPC	Financial Policy Committee
FSB	Financial Stability Board
FSC	Financial Stability Council
FSR	Financial Stability Report
FX	Foreign Exchange
GCF	Green Climate Fund
GDP	Gross Domestic Product
GFC	Global Financial Crisis
GFSR	Global Financial Stability Report
G-SIB	Global Systemically Important Bank
ICRG	International Cooperation Review Group
IDR	Issuer Default Rating

IMF	International Monetary Fund
ISSB	International Sustainability Standards Board
IT	Information Technology
LTV	Loan-to-Value
Mancos	Management Companies
MoF	Ministry of Finance
MoU	Memorandum of Understanding
MPC	Monetary Policy Committee
MoPR	Monetary Policy Rate
NAV	Net Asset Value
NBFIs	Non-Bank Financial Institutions
NBFIRA	Non-Bank Financial Institutions Regulatory Authority
NFCs	Non-Financial Corporates
NGFS	Network of Central Banks and Supervisors for Greening the Financial System
NPLs	Non-Performing Loans
NPS	National Payment System
RIA	Regulatory Impact Assessment
ROAA	Return on Average Assets
ROE	Return on Equity
RPC	Regulatory Policy Committee
SACU	Southern African Customs Union
SARB	South African Reserve Bank
SDR	Special Drawing Rights
SNB	Swiss National Bank
SOEs	State Owned Enterprises
S&P	S&P Global Ratings
SRO	Self-Regulatory Organisations
SSA	Sub-Saharan Africa
SVB	Silicon Valley Bank
TCFD	Task Force on Climate-related Financial Disclosures
TNDP	Transitional National Development Plan
UK	United Kingdom
USA	United States of America
VAT	Value added Tax
WEO	World Economic Outlook

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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. 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 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, and has since been subsumed into the terms of reference of the FSC.

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 resilience of the global financial system continues to be tested by adverse shocks, and risks to global financial stability remain elevated**. According to the April 2023 International Monetary Fund (IMF)'s Global Financial Stability Report (GFSR), a combination of a high inflationary environment and tight financial conditions have resulted in episodes of financial distress in some parts of the global financial system, leading to complex and challenging trade offs for central banks in the pursuit of price and financial stability objectives. Under these circumstances, the velocity of monetary policy tightening in major central banks has moderated as threats to financial stability arising from the collapse of Silicon Valley Bank (SVB) and Signature Bank in the United States of America (USA) and Switzerland's Credit Suisse in March 2023 occupied policymakers' minds. In a way, policymakers eased pressure on monetary policy targets to support financial stability but would need to reinforce their commitment to bring inflation to target once financial stability concerns abate.

1.2. **The domestic financial system continues to be resilient to a wide range of shocks, including vulnerabilities emanating from credit, liquidity and funding concentrations and interest rate risk.** The latest stress tests for banks, based on the December 2022 data, as well as a series of solvency and liquidity stress test together with sensitivity analysis of the banking sector by the Financial Sector Assessment Program validate this strong solvency and resilience. Strong leverage and capital position, liquidity buffers, profitability and effective regulatory and supervisory framework anchors this stability. 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. In the circumstances, macroprudential reactions or responses are not warranted, rather the reversal of regulatory and prudential concessions granted during the COVID-19 pandemic was considered appropriate following the reopening of the economy and resumption of normal economic activities[1].

1.3. **The macroeconomic environment remains conducive for financial stability despite sovereign vulnerabilities (that is, reduced fiscal and external buffers) due to the prevailing depressed global economic environment combined with long-term structural trends.** The April 2023 IMF's World Economic Outlook (WEO) projects a rocky global economic recovery in 2023, with a fall in output from 3.4 percent in 2022 to 2.8 percent in 2023, on account of the possibility of sustained high global inflation, tight financial conditions, and geopolitical risks. Domestically, the Ministry of Finance (MoF) expects real GDP to grow moderately by 4 percent in 2023, compared to the 5.8 percent in 2022, buoyed by the continued recovery of mining activity. Meanwhile, specific short-term fiscal support measures introduced by the Government in August 2022 to cushion households from the effects of rising global inflation lapsed in January 2023 viz., zero rating of cooking oil and liquid petroleum gas, while value added tax (VAT) was restored to 14 percent on April 1, 2023, from 12 percent. At the same time, salt, sanitary pads, vegetables, cooking oil, infant formula, condoms, baby diapers and liquified petroleum gas were zero rated for VAT.

1.4. **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 4.8 percent in the year to March 2023 and was lower than the 5.4 percent growth in the corresponding period in 2022. The lower credit growth is due to a deceleration in household credit, which is a possible reflection of the effects of the policy tightening in the second and third quarters of 2022 by the Bank of Botswana, which had a dampening effect on demand. Credit to households grew by 3.5 percent in the year to March 2023, less than the 5.2 percent growth in the corresponding period in 2022. Notwithstanding, credit to households continued to dominate commercial bank's loan book at 66.4 percent. Household debt also dominates credit granted by the non-bank financial institutions (NBFI) sector, although at a lesser magnitude than commercial banks. Meanwhile, lending to the business sector increased by 7.3 percent in the year to March 2023, higher than the 5.7 percent expansion in the corresponding period in 2022.The ratio of non-performing loans (NPLs) to total loans was modest at 3.8 percent in December 2022. These developments, along with a negative Credit-to-GDP gap do not suggest any indication of excessive or rapid credit growth that could overheat the economy.

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[1] At its December 1, 2022, meeting, the Monetary Policy Committee decided to restore the punitive rate on the credit facility, reduced the tenure on repos and reverse repos and rescinded the regulatory forbearance measure relating to the provisioning of non-performing loans under the payment moratorium arrangements with effect from January 1, 2023. Other measures were maintained and may be reviewed as may be necessary, from time to time.

1.5. **Average daily market liquidity in the banking system fell significantly from P4.65 billion in January 2023 to P3.45 billion in February 2023, largely driven by a decline in government spending and foreign exchange outflows**. 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 17 percent in December 2022, which is above the statutory requirement of 10 percent. Therefore, banks remained unconstrained in providing and growing the range of financial services to support the economy.

1.6. **Macro-financial linkages remain strong and pose a risk of contagion.** Notwithstanding the financial resilience and stability, strong and concentrated sectoral linkages, with the banking sector at the epicentre of the system, remain elevated and present possibilities for increased intersectoral risk transmissions. Effective regulatory and supervisory measures, which continue to evolve as authorities modernise acts and introduce new standards and bodies, such as the building of financial safety nets, in alignment with international best practice, as well as proper governance and accountability structures continue to mitigate this risk.

1.7. **Overall, vulnerabilities remain generally contained in the financial and non-financial sectors since the opening of the economy**. The heat map (Appendix Chart A1), which is the vulnerability indicator, shows a high level of contagion risk, moderate level of macroeconomic risks and low risk from the external sector, as well as credit and liquidity markets. Notably, vulnerabilities could be worsened by rising geopolitical tensions, increased risk of recession in advanced economies and continued exposure to cyber threats due to increasing usage of technology, as well as climate related financial risks.

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 overdependence on external trade and related revenue, that is, the Southern African Customs Union (SACU) receipts and mineral exports revenue. This vulnerability to external macroeconomic developments and shocks is exacerbated by the narrow export base, dominated by diamonds, which poses a threat to the balance of payment outcomes. Nevertheless, for the twelve months to December 2022, the overall balance of payments was in a cumulative surplus of P4.5 billion, compared to a deficit of P2.9 billion in the year to December 2021, reflecting improved (diamonds) export performance.

External buffers low but recovering

2.2. Foreign exchange reserves were estimated at P60.5 billion in January 2023, an increase of 3.8 percent from P58.3 billion in January 2022. In foreign currency terms, the estimated level of foreign exchange reserves fell by 6 percent from USD5 billion in January 2022 to USD4.7 billion in January 2023 and by 2.8 percent from SDR3.6 billion to SDR3.5 billion over the same period. The estimated level of foreign exchange reserves was equivalent to 8.4 months of import cover of goods and services in January 2023 and remains relatively low by historical standards.

(b) Global Financial Stability Trends

Risks to global financial stability elevated

2.3. According to the April 2023 GFSR, the global financial system has lately been tested by severe shocks and global financial stability risks remain elevated. Vulnerabilities built-up during the period of prolonged low interest rates and high liquidity have become more pronounced as central banks rapidly tightened monetary policy to control high inflation. Evidently, the recent failures of SVB and Signature Bank in the USA, and Credit Suisse in Europe exposed fragilities in the global financial system propagated by underlying exposures to liquidity, duration and credit risk built during periods of accommodative financial and market conditions. The GFSR also points to worrying household and corporate indebtedness as well as worsening sovereign debt positions especially in emerging markets and low-income countries. Moreover, central banks' normalisation process is challenged by a strain in the financial markets due to poor liquidity and high debt, making it difficult for private investors to absorb additional sovereign debt issuances.

IMF calls for liquidity support to NBFIs by central banks

2.4. The April 2023 GFSR stress test on NBFIs portrays emerging vulnerabilities in the form of elevated leverage, liquidity mismatches, and high levels of interconnectedness, which could amplify the impact of tighter monetary and financial conditions. As such, the GFSR calls for robust surveillance, regulation, and supervision of NBFIs as the first line of defence, while providing a compelling argument for additional measures in the form of central bank liquidity support to NBFIs. Among the credible forms of support available to NBFIs is temporary discretionary market wide intervention targeted at systemically important financial institutions. The framework should be data-driven, with alert metrics to timeously inform authorities to trigger intervention measures.

2.5. The liquidity support facilities for NBFIs would, however, need to be well calibrated, taking into consideration the importance of stress testing in revealing the systemic risks in the NBFIs as well as developing the criteria for solvency and viability of NBFIs, which is not as clearly defined as for banks. The report further underscores the need for regulatory coordination to limit unintended consequences such as spill overs, market fragmentation and regulatory arbitrage from well-intended regulatory actions.

The global financial system withstands banking crises

2.6. The collapse of SVB, Signature Bank and Credit Suisse in March 2023 had global regulators apprehensive about the potency of post global financial crisis of 2008/09 reforms in curbing another financial crisis. The agility and synchronisation of collective supervisory actions, along with effective resolution frameworks contained the consequences of the crisis, with key lessons for crisis management and resolution (Box 2.1). However, the April 2023 GFSR highlights that market sentiments remain fragile and supervisory authorities need to be resolute in restoring market confidence amid heightened risks to global financial stability.

The UK financial system remains resilient

2.7. The Financial Policy Committee (FPC) of the Bank of England met on March 23, 2023 to identify, monitor and limit systemic risks with a view to safeguarding the resilience of the UK financial system. The FPC concluded that the outlook for global activity was uncertain on the backdrop of a sharp decline in the prices of risky assets and uncertain interest rate path following recent banking sector turmoil. The FPC also noted that material geopolitical risks and tighter financial conditions posed a threat to financial stability and could particularly increase the debt service burden of households and businesses. UK banks were, however, judged to be adequately liquid and well capitalised, with increasing profitability, thus resilient and capable of supporting the economy in a high interest rate environment.

2.8. Furthermore, the Bank of England's Systemic Risk Survey cites geopolitical tensions, cyber-attack, inflation, and UK economic downturns as prominent risks to domestic financial stability in the first half of 2023. Overall, the UK financial system was perceived to be stable, with a reduced probability of a high-impact event affecting the system in the short to medium-term.

Coordination critical to addressing climate-related risks.

2.9. The G20 Finance Ministers and Central Bank Governors meeting of October 2022 agreed to coordinate their efforts to tackle climate change and protect the environment, as well as to promote transitions towards greener, more prosperous, and inclusive economies and societies. The meeting called for globally consistent data to effectively address climate-related financial risks. In this regard, the International Sustainability Standards Board (ISSB) was established to advocate for globally consistent, comparable, and reliable climate-related financial disclosures.

2.10. Meanwhile, the FSB in collaboration with the Network for Greening the Financial System published a joint report on "Climate Scenario Analysis by Jurisdictions: Initial Findings and Lessons" in November 2022. The report provides key findings on climate scenario analyses undertaken by financial authorities to assess climate-related financial risks. The results of the exercise were, however, crude and not sufficient to make any policy-oriented judgment mainly on account of data limitations.

Crypto assets activities pose limited risks to the financial sector

2.11. The 2022 FSB Annual Report points to significant market losses in the crypto asset markets lost due to a deteriorating macroeconomic landscape, broader risk-off sentiment, and several prominent project failures. Interlinkages remain strong in the crypto asset ecosystem, presenting immediate contagion risks within the market. That notwithstanding, the crypto assets market is relatively disconnected to the traditional financial system and the real sector, which moderates intersectoral contagion risk. The interlinkages are, however, increasing with potential consequences for financial stability. Specifically, the FSB reports that financial institutions were developing appetite towards crypto assets exposures and activities, exposing traditional financial markets to risks originating from the crypto market ecosystems.

2.12. As a result, and to deal with vulnerabilities of the crypto markets, in October 2022, the FSB produced a framework for International Regulation of Crypto Asset Activities to strengthen the regulatory framework for the crypto ecosphere.

2.13. In Botswana, the crypto asset market is still at infancy and relatively small, thereby posing limited risks to financial stability. Regulatory authorities, however, recognise the potential for pervasive and significant effect of the crypto asset business on their functions and mandates and, in general, the broader domestic financial sector, hence, a Virtual Assets Act 2022 was enacted to regulate trade in virtual assets. A total of 137 suspicious transactions were reported to FIA in the first quarter of 2023 and 67 (49 percent) were related to crypto currency operations. In terms of monetary value, the crypto currency transactions stood at approximately P45 million in the first quarter of 2023.

The FSB drives action plan on climate-related disclosures

2.14. 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. Consequently, the FSB promotes the adoption of globally consistent and comparable disclosure of firm climate-related activities and financial risks. This culminated in the publication of two exposure draft standards on general sustainability and climate-related disclosures, for public consultation by the ISSB under the International Financial Reporting Standards Foundation. The ISSB aims to establish a common global baseline standard that would be interoperable with jurisdictions' frameworks through a building block approach that will drive more comparability and consistency on common climate disclosures across jurisdictions. This will help avoid fragmentation of approaches to climate disclosures and unnecessary costs for preparers of disclosures.

2.15. These developments prompt emerging Markets and developing economies (EMDEs), and developed countries alike, to move towards sustainable and green economy, but specifically challenge EMDEs to balance the application of their abundant fossil fuels to avert emerging global energy crisis and demands for a greener economy.

2.16. In Botswana, risks associated with climate change such as increased frequency and intensity of droughts, unprecedented heatwaves, floods, both house and hailstorms have increased[2]. However, Botswana has not recorded any major climate risk event that threaten domestic financial stability, although the risk continues to be monitored. Notably, the notion of 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.

2.17. To this end, the Transitional National Development Plan (TNDP) lists climate change amongst the six national priorities and hence, the National Climate Change Policy aims to facilitate the integration of climate change into infrastructure planning, design, and development processes through environmental impact assessments during the 2023/24 financial year. For the 2023/24 financial year, the Government has budgeted P1.36 billion towards climate change initiatives and further climate finance funding is expected to be generated through green bonds, as well as access to the Green Climate Fund[3]. A further EURO 3 million has been pledged by the European Union to support Botswana's climate change initiatives. These efforts provide impetus for the development of frameworks for measurement and management of climate-related risks in domestic financial markets.

2 Ministry of Environment, Natural Resources Conservation and Tourism, Botswana (2020).

3 The Green Climate Fund (GCF) is established within the framework of the United Nations Framework Convention on Climate Change as an operating entity of the Financial Mechanism to assist developing countries in adaptation and mitigation practices to counter climate change. The GCF is based in Incheon, South Korea.

Box 2.1: Lessons from the Collapse of Silicon Valley Bank (SVB) and Credit Suisse

Introduction

This box draws key takeaways from the management of SVB and Credit Suisse (a global systemically important bank (G-SIB)) crises in March 2023. Since the Global Financial Crisis (GFC), regulators have implemented various measures to strengthen the resilience of the global financial system including implementation of Basel III capital and liquidity accords, adoption of bank resolution regimes and stress testing for the banking sector. The USA adopted the Dodd-Frank Wall Street Reform and Consumer Protection Act to promote financial stability and consumer protection. The reforms have generally resulted in improved bank capitalisation and effective liquidity management. Therefore, the collapse of SVB and Credit Suisse provides a natural test on the potency of the global financial reforms in averting a financial crisis. The following summarises the underlying causes of failures at the two banks and the regulatory responses that contributed to the smooth exit of the banks.

SVB Failure

SVB was the 16th largest commercial bank in the USA. It provided banking services to nearly half of all USA venture-backed technology and life-science companies. The bank experienced rapid growth between 2019 and 2022, which was influenced by the demand for digital services to curb the spread of COVID-19 virus. This resulted in SVB having a significant volume of deposits and claims against the information technology (IT) sector. As a result, the bank's business was exposed to significant credit concentration and funding liquidity risks from the IT sector, thus making it susceptible to any adverse developments in the sector. Furthermore, a large amount of SVB's deposits were invested during the low interest rate regime, in long-term treasury bonds and mortgage bonds, leading to a high liquidity mismatch. As monetary conditions tightened to contain inflation, SVB's bonds lost value, announcing a USD1.8 billion on sale of securities on March 8, 2023. A depositor run on the bank worsened the bank's financial condition, which ultimately led to its collapse.

Within two days after the collapse of SVB, regulators moved swiftly to protect depositor interests, vowing to cover all deposits including those exceeding the USD 250 000 limit and uninsured deposits. Furthermore, the Fed announced a Bank Funding Term Program (BTFP) to eligible depository institutions to help assure banks have the ability to meet the needs of all their depositors, thus restoring wider confidence in the financial system. The BTFP would be an additional source of liquidity against high-quality securities, eliminating an institution's need to quickly sell those securities in times of stress as was the case with SVB. In the arrangement, the distressed securities were allowed as full market-value collateral for borrowing through the BTFP.

Fundamental conclusions can be drawn from the collapse of SVB, and these relate to the effectiveness of the crisis resolution framework, the agility and cross-agency coordination in containing the crisis. The regulatory authorities conducted a resolvability assessment of SVB, which supported appropriate and effective resolution tools (i.e., creation of a bridge bank). It is also evident that the authorities had a clear communication strategy and spoke in one voice as evidenced by joint a public statement by the Fed, the Federal Deposit Insurance Corporation, and the Treasury Department. The collapse also demonstrated that the availability of emergency liquidity assistance is crucial for the success of a resolution framework. The decision by the Fed to design a BTFP assured banks of backstop funding in times of distress and helped to restore market confidence in the banking system. That notwithstanding, board oversight and effective bank supervision remains critical lines of defense to prevent bank failures and, it is, therefore, vital for banks and supervisors to remain vigilant to the evolving outlook.

Credit Suisse Failure

The failure of Credit Suisse, a G-SIB, was largely due to reputational damage owing to poor governance ethics, which eroded customer confidence that led to higher costs of funding - as investors and customers sought high risk reward. Notable losses due to failures of a few clients also contributed to the poor financial performance of the bank. Amid the SVB-related market panic, efforts to recover and restore the viability of the bank were unsuccessful and merely amplified a run on the bank, with the resultant bank failure. In the ensuing failure, the Swiss National Bank acted swiftly to facilitate the orderly resolution of the bank, and consequent government-backed acquisition by UBS bank, Switzerland. This is testament to the improvement in crisis resolution frameworks since the global financial crisis, and these developments provide a valuable lesson for both regulators and banks.

Conclusion

Key lessons for regulators and banks are evident from the collapse of SVB and Credit Suisse banks, and their related bank resolution management. Importantly, for banks, the crises accentuated the need to diversify funding sources, as well as effective risk management and board oversight. For regulators, the crises point to the importance of the robustness of regulatory frameworks, as well as effectiveness of crisis resolution frameworks that anchor on agility, coordination, and communication to safeguard financial stability. The agility and synchronisation of agency responses is an important aspect of crisis management and ensures that unilateral uncoordinated actions that could further aggravate the severity of market distress are avoided. Similarly, clear, coordinated, timely and unambiguous communication is a critical component of crisis prevention and resolution, particularly in the era where technology aids rapid spread of information, with the potential to cause and/or amplify bank runs. The eventual smooth resolution of SVB and Credit Suisse without severe financial instability provides a benchmark for the design and calibration of effective crisis resolution frameworks and, somewhat, signals the potency of post GFC financial sector reforms.

(c) Regional Financial Stability Trends

South African financial system resilient

2.18. The South African Reserve Bank (SARB) Financial Stability Review (2nd Edition 2022) indicated that the South African financial system was resilient despite heightened volatility and challenging global and domestic conditions. The country's financial stability is, however, challenged by the slow, and inequitable economic growth, unfavourable and hostile business operating environment exacerbated by increased power shortages. 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 risks and implement measures aimed at promoting the robustness of the financial system and these include implementing the deposit insurance framework, and regulation of the financial sector.

2.19. Meanwhile, the recent grey listing of the country by the Financial Action Task Force (FATF) on the back of limited progress in remedying deficiencies identified during the Mutual Evaluation exercise of 2019 could challenge the country's financial and macroeconomic prospects. Spill overs from potential financial imbalances in South Africa are possible, and the FSC of Botswana stands ready to trigger macroprudential policy responses where there are significant implications for Botswana's financial stability.

Output to decline in Sub-Saharan Africa in 2023

2.20. The April 2023 WEO estimates that economic output in Sub-Saharan Africa (SSA) will decrease from 3.9 percent in 2022 to 3.6 percent in 2023, mainly on account of a reduction in aid and access to private finance, which may limit the fiscal space for countries in the region. However, the IMF projects growth in SSA to rebound to 4.2 percent in 2024 in line with global economic recovery, subsiding inflation, and winding down of monetary policy tightening.

2.21. The IMF estimates that the two largest economies in the region, Nigeria, and South Africa, will grow by 3.2 percent and 0.1 percent, respectively, in 2023. Economic growth prospects for South Africa are especially dragged down by weaker external demand, power shortages and structural constraints. Meanwhile, the SARB's March 2023 Monetary Policy Committee (MPC) estimates output to have expanded by 2 percent in 2022 and expect the economy to grow by 0.2 percent and 1 percent in 2023 and 2024, respectively.

3. DOMESTIC VULNERABILITY ASSESSMENT

(a) Sovereign Vulnerabilities

Positive domestic macroeconomic performance

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). Real GDP increased by 5.8 percent in 2022 compared to a growth of 11.9 percent in 2021 and was lower than the 6.7 percent growth estimated by MoF for 2022. The MoF projects the economy to grow by 4 percent in 2023, supported by the continued recovery of mining activity. The March 2023 Business Expectations Survey (BES) is aligned and expects the same growth for 2023.

3.2. Budget outcomes for the ten months into the 2022/23 fiscal year (April 2022 to January 2023) show a surplus of P5.2 billion, with Government revenue receipts constituting 91 percent of the expected total revenue for the 2022/23 fiscal year. However, the final budget outcome projects a deficit of P4.9 billion, which will be an improvement from the original estimated budget deficit of P7 billion. The budget deficit is expected to rise to P7.6 billion in 2023/24 due to the intended implementation of the Economic Recovery and Transformation Plan (ERTP) projects and overall improved delivery of Government programmes and services, in part, due to the RESET Agenda[4]. The increase in the budget deficit also highlights the first year of the two-year TNDP in pursuance of a policy mix that supports growth and promotes economic, export and revenue diversification.

Government borrowing rising but below the statutory limit

3.3. Government debt and guarantees increased to P43 billion in December 2022 from P37.2 billion in December 2021. As a proportion of GDP, government debt fell to 21.6 percent in December 2022 compared to 22.6 percent in December 2021. Total domestic borrowing and guarantees amounted to P28.6 billion (11.8 percent of GDP) in December 2022; thus, within the statutory domestic borrowing limit of 20 percent. External debt is estimated at 9.8 percent of GDP for the same period, also below the 20 percent threshold.

3.4. MoF considers the debt level sustainable even after accounting for the increasing debt service obligations due to the acquisition of new external loans, being the USD250 million (P2.8 billion) loan secured under the Programmatic Economic Resilience and Green Recovery Development Policy (ERGRDP), at the International Bank for Reconstruction and Development, for financing economic recovery. Still under the ERGRDP, a loan amounting to USD100 million from the Organisation of the Petroleum Exporting Countries Fund for International Development (OPEC Fund) was published in the Government Gazette of December 23, 2022. Further, an Act to authorise a loan not exceeding Japanese Yen (¥)15 billion from the Japan International Cooperation Agency, towards the COVID-19 Crises Response Emergency Support Programme was also gazetted on December 23, 2022. Despite the increase, government debt is expected to remain below the statutory limit at a projection of 20.7 percent in 2023/24.

3.5. The increase in external debt demands a robust debt management strategy to manage the interest rate and exchange rate risks. Consequently, MoF uses the Medium-Term Debt Management Strategy of 2016/17 - 2018/19 as a guide. Preparations for the new strategy, which outlines measures of hedging against interest rate risk and exchange rate risk, are underway. The strategy is expected to be published in September 2023.

(b) Credit Growth and Leverage

Commercial Banks

Moderate growth in overall commercial bank credit

3.6. Annual growth in commercial bank credit increased by 4.8 percent in March 2023 but was lower than the 5.4 percent growth registered in March 2022. The decrease in the rate of credit growth was mainly attributable to a lower uptake of loans households compared to the previous year. Household credit grew by 3.5 percent in March 2023, lower than the 5.2 percent growth recorded in the corresponding period in 2022 (Chart 3.1a). The lower growth in household credit was mainly attributable to the decline in growth of personal unsecured loans during the period under review, a possible reflection of the effects of the policy tightening in the second and third quarters of 2022 by the Bank of Botswana, which had a dampening effect on demand. There is also a possibility that banks restricted credit

[4] The RESET agenda outlines five priorities intended to transform the economic landscape of Botswana amid challenges posed by the COVID-19 pandemic. The priorities are to save Botswana's population from COVID-19; reforming the public service; digitalisation; value-chain development; and mind-set change.

supply to guard against an increase in default rates as the cost of credit rose. Meanwhile, motor vehicle, property and credit card-based loans increased in the year to March 2023. Unsecured loans still make a large fraction of household credit, at 69.1 percent, and remains higher than the 24.4 percent and 30.8 percent for South Africa and Namibia, respectively[5]. With the inherently expensive nature of unsecured credit, this significant exposure presents potential debt distress to households, especially when financial and conditions tighten.

3.7. Household credit still dominated total credit at 66.4 percent against 33.6 percent for business credit (Table 3.1). Generally, credit growth was in line with its longterm trend or average and was less likely to overheat the economy (Box 3.1). In this context, there is scope for increased, disciplined, and prudent credit extension to support economic activity.

Increased household borrowing capacity and repayment ability

3.8. The proportion of household debt to income is estimated at 39.7 percent in the fourth quarter of 2022, a decrease from the 45 percent in the same period in 2021[6] (Chart 3.1c). This trend implies increasing borrowing capacity and ability to repay, which remains relatively strong when compared to the 62.8 percent and 69.5 percent for South Africa and Namibia, respectively[7]. Household credit is the main driver of growth in overall credit, underpinned by personal loans (other) and mortgages (Chart 3.1b). The ratio of household NPLs to total household credit was also moderate at 3.1 percent in December 2022, a slight decrease from 3.2 percent in December 2021 and significantly better than the industry average of 3.8 percent in December 2022 (Chart 3.1c).

3.9. Household credit still dominated total credit at 66.4 percent against 33.6 percent for business credit (Table 3.1). 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. Pension assets are important for debt relief in the context of the newly promulgated Retirement Funds Act, where part of the funds can be channelled towards repayment of a mortgage loans. 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 to 43.3 percent in the fourth quarter of 2022 compared to 61.7 percent in the fourth quarter of 2021 (Table 3.2). The reduction in the net worth is attributable to a decline in total assets and increasing debt, while GDP rose.

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

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

7 Namibia Financial Stability Report - April 2022 and SARB Quarterly Bulletin December 2022.

Table 3.1: Sectoral Distribution of Commercial Bank Loans

	2021Q1		2021Q2		2021Q3		2021Q4		2022 Q2		2022 Q3		2022 Q4		2023 Q1	
	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 Mil)	Percent of Total	Amount (P Mil)	Percent of Total	Amount (P Mil)	Percent of Total	Amount (P Mil)	Percent of Total
Business	**12.8**	**34.0**	**12.5**	**34.5**	**12.5**	**34.6**	**11.9**	**33.8**	**25 272**	**33.9**	**25 929**	**34.0**	**25 585**	**33.5**	**25 643**	**33.6**
Parastatals	0.8	6.1	1.0	8.0	1.0	8.2	0.7	6.0	1 516	6.1	1 535	6.1	1 453	5.7	1 593	6.2
Agriculture	0.8	5.9	0.7	5.5	0.7	5.3	0.7	5.6	1 475	5.9	1 585	6.2	1 560	6.1	1 607	6.3
Mining	0.2	1.7	0.3	2.2	0.3	2.1	0.2	1.3	357	1.4	346	1.3	388	1.5	522	2.0
Manufacturing	0.9	6.8	0.8	6.5	0.9	7.0	0.8	6.7	1 996	8.0	2 157	8.4	1 654	6.5	1 603	6.3
Construction	0.5	4.0	0.5	4.0	0.5	3.8	0.5	3.9	908	3.6	912	3.6	1035	4.1	920	3.6
Trade	2.9	22.3	2.4	19.6	2.5	20.0	2.5	20.6	5 157	21.3	5 015	19.5	5 597	20.0	5 614	21.9
Transport[2]	0.3	2.4	0.3	2.0	0.3	2.1	0.2	1.9	500	2.3	669	2.5	614	2.4	639	2.5
Finance[3]	3.2	24.9	3.4	27.1	3.3	26.6	3.2	26.9	6 778	27.0	6 796	26.5	6 807	26.8	6 522	25.4
Real Estate	2.5	19.6	2.4	18.9	2.3	18.6	2.5	20.8	5 359	20.8	5 404	20.0	5523	21.6	5 635	22.0
Electricity and Water	0.0	0.3	0.0	0.3	0.0	0.3	0.0	0.2	80	0.3	99	0.4	95	0.4	119	0.5
Other[4]	0.8	5.9	0.7	5.9	0.7	5.9	0.7	6.4	894	3.5	1 255	4.8	762	3.0	744	2.9
Households	24.9	**66.0**	**23.7**	**65.5**	**23.6**	**65.4**	**23.4**	**66.2**	**49 259**	**66.1**	**50 254**	**66.0**	**50 775**	**66.5**	**50 622**	**66.4**
Unsecured Lending	17.9	71.8	17.1	72.4	17.1	72.5	16.9	72.5	33 754	72.9	34 668	68.7	35 138	68.8	34 919	69.1
Motor Vehicle	1.2	4.8	1.1	4.6	1.1	4.5	1.0	4.4	2 002	4.3	1 986	4.0	2 014	4.2	2 111	4.2
Mortgage	5.8	23.3	5.4	23.0	5.4	22.9	5.4	23.1	10 543	22.8	13 580	27.0	13 578	26.7	13 592	26.9
Total Commercial Bank Credit	**37.8**		**36.1**		**36.1**		**35.3**		**74 531**		**76 184**		**76 360**		**76 267**	

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.

Household Debt Analysis

Personal loans (other) are the major driver of household credit growth

Chart 3.1a: Growth in Household Debt (Percent)

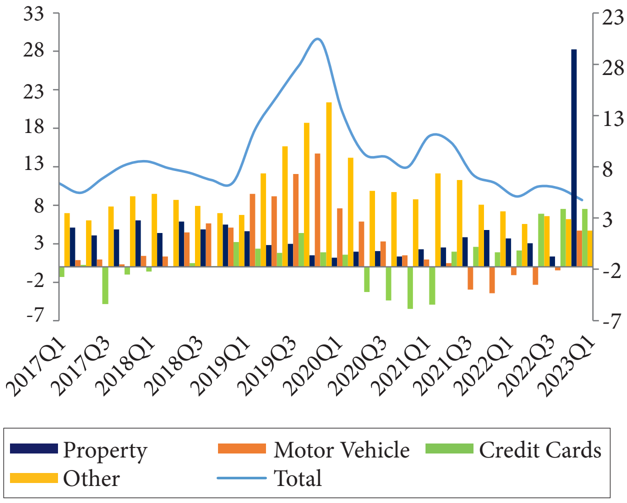
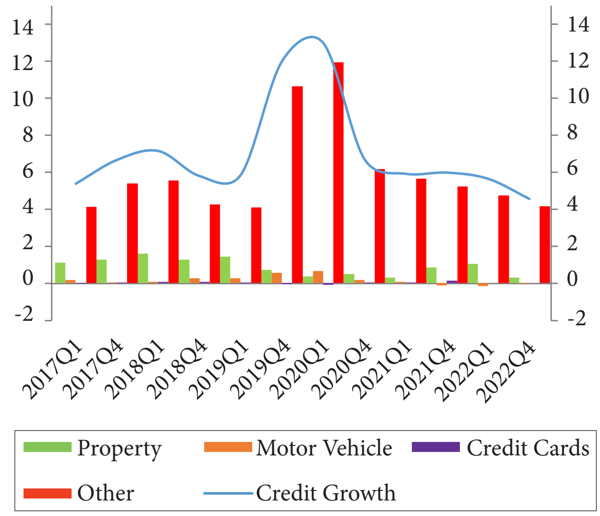
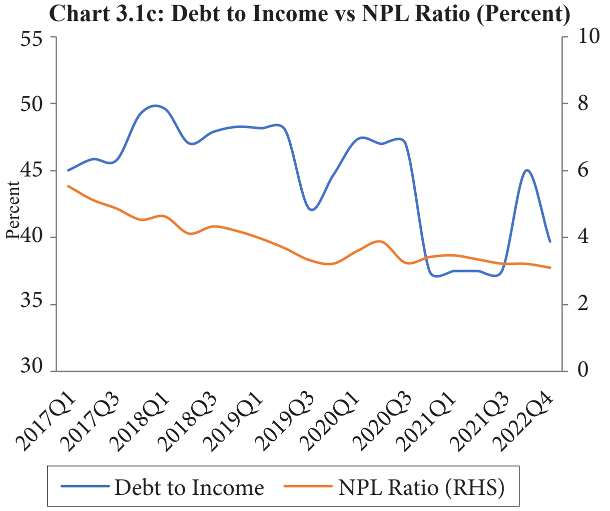


Chart 3.1b: Contribution to Credit Growth (Percent)



Both the debt burden and default rate are decreasing

Chart 3.1c: Debt to Income vs NPL Ratio (Percent)



Personal loans dominate household debt

Chart 3.1d: Composition of Household Debt (P Million)

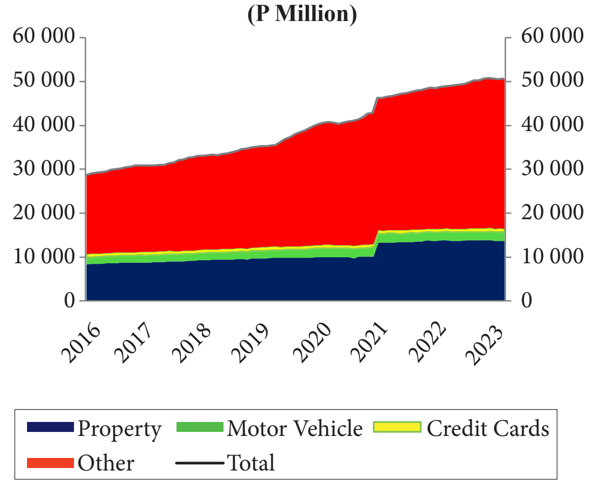


Table 3.2: Household Net Worth

Asset	2021Q3 (P' million)	2021Q4 (P' million)	2022Q1 (P' million)	2022Q2 (P' million)	2022Q3 (P' million)	2022Q4 (P' million)	2023Q1 (P' million)
Retail deposits	18 657.2	19 679.0	18 025	19 391	18 491	18 028	19 033
Pensions	114 269.7	117 549.0	116 314	112 990	113 474	117 955	*123 694*
Insurance contracts	*11 035.0*	*13 423.6*	*10 446*	*10 446*	*10 446*	*10 446*	*10 446*
Mortgage property	10 282.4	10 520.8	10 598	10 543	10 599	10 662	13 593
Motor vehicles	2 034.1	2 022.5	2 016	2 002	1 986	2 014	2 111
Cattle value	*3 500.0*	*3 500.0*	*3 500*	*3 500*	*3 500*	*3 500*	*3 500*
Equity investment	*42.8*	*42.8*	*66*	*66*	*66*	*66*	*66*
Total assets (a)	162 209.8	166 761.1	164 590	158 938	158 562	162 671	172 444
Total household debt (b)	50 819.1	51 460.7	51 988	52 275	53 176	53 697	53 390
Total household net worth (a) – (b)	**111 414.0**	**115 300.4**	**112 936**	**106 663**	**105 387**	**108 973**	**119 055**
Total household net worth as a share of GDP (Percent)	**60.4**	**61.7**	**58.9**	**51.7**	**43.7**	**43.3**	

Source: Bank of Botswana, Botswana Stock Exchange Limited and Statistics Botswana
Notes: Figures in italics are estimates.

Box 3.1: Tools for Assessing Excessive Credit Growth

Introduction

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 build-up of systemic risks to financial stability) by considering the inflation objective range, the projected GDP growth rate, a measure of financial deepening and expert judgement. 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 – 13 percent. Credit growth was 4.8 percent in March 2023, and was higher than the 5.2 percent growth in March 2022, 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.

Domestic bank credit growth is moderate, as measured by the Credit-to-GDP gap of -6 percent, which was below the 10 percent threshold in December 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.

Box 3.1: Tools for Assessing Excessive Credit Growth (Cont'd)

Chart B3.1a: Aggregate Credit-to-GDP Gap (Percent)

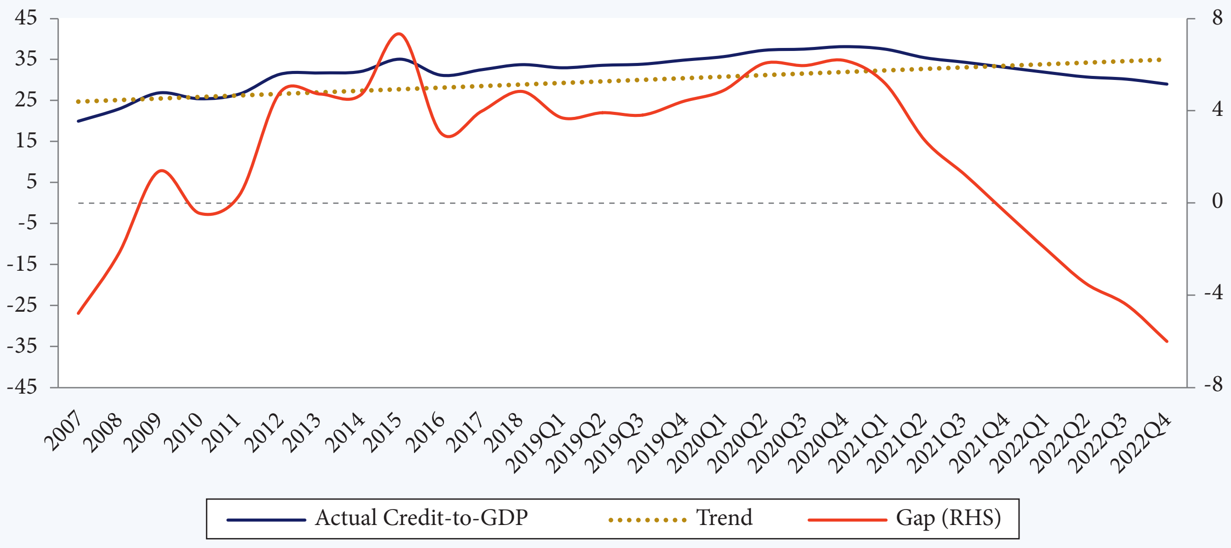


Chart B3.1b: Household Credit-to-GDP Gap (Percent)

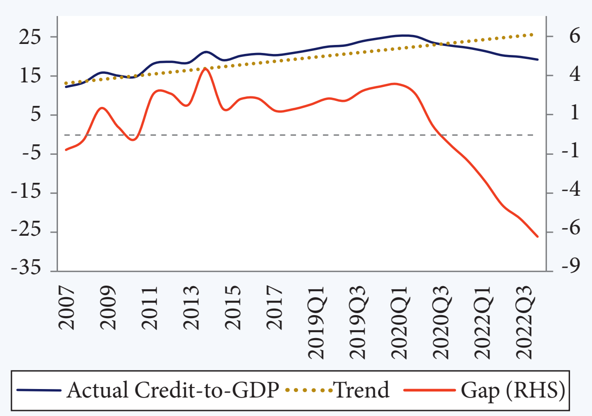
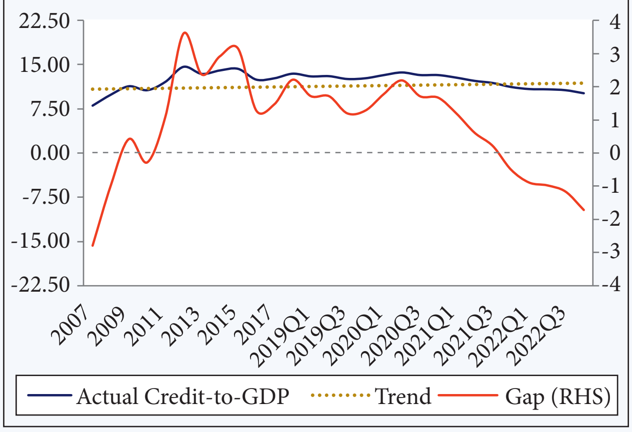


Chart B3.1c: Business Credit-to-GDP Gap (Percent)



Credit to the Non-Financial Corporate Sector

Corporate sector exposures increase

3.10. Total commercial bank credit to the non-financial corporate (NFC) sector increased by 8.4 percent from P21.0 billion in March 2022 to P22.7 billion in March 2023. The proportion of non-financial corporate loans to total commercial banks' credit rose marginally to 29.9 percent in 2023 compared to 28.9 percent in 2022. Relative to GDP, bank credit to the corporate sector was 10.1 percent in December 2022 compared to the 11.9 percent in December 2021 reflecting room for prudent credit extension to support business activity and, in turn, economic growth.

The non-financial corporates recovers but challenged by rising leverage

3.11. Selected financial soundness indicators of the non-financial corporates listed on the Botswana Stock Exchange (BSE) indicate improved corporate sector performance. Profit before and after tax increased, resulting in an increase in the return to equity (Chart 3.2a). The cost-to-income ratio increased from 74.9 percent in 2021 to 81.7 percent in 2022 as companies resumed normal operations, resulting in increased income (Chart 3.2b). Corporate leverage increased, with a Debt-to-Equity ratio of 102.6 percent in 2022 from 85.2 percent in 2021, suggesting that corporates have applied significant external funding in their operations (Chart 3.2d). The increased leverage could pose potential debt distress, especially in the context of tight financial conditions amid inflationary pressures. That notwithstanding, the quality of corporate sector loans improved with the NPLs to total loans in the sector falling to 4.7 percent in December 2022 from 6.2 percent in December 2021, albeit still higher than the banking sector average of 3.8 percent.

Firms expect tight credit markets

3.12. The results of the March 2023 BES suggest that firms' level of optimism about business conditions is the same as in the previous survey (fourth quarter of 2022). Firms anticipate tight access to credit across all markets (Domestic, South Africa and Elsewhere), as central banks continue to tighten monetary policy amid elevated inflation. Firms expect inflation to remain above the Bank's 3 – 6 percent objective range in 2023 and 2024. Notably, firms expect overall output to expand by 4 percent in 2023; in line with MoF projections and the 4.1 percent estimated by the IMF for the same period.

Credit to the Real Estate Sector

Limited risks from commercial real estate

3.13. Credit to the commercial real estate (CRE) increased to P5.7 billion in March 2023, from P5.5 billion in March 2022 and constituted 7.2 percent of total loans (Chart 3.3b). The CRE sector has maintained a moderate level of NPLs (December 2022: 4.3 percent) and, coupled with the minimal exposure, the sector poses limited risks to domestic financial stability although there are existing concerns about concentration (location) risk given that most loans finance properties in or around Gaborone[8].

Non-Financial Corporates (NFC) Indicators

Profitability is increasing since the COVID-19 pandemic

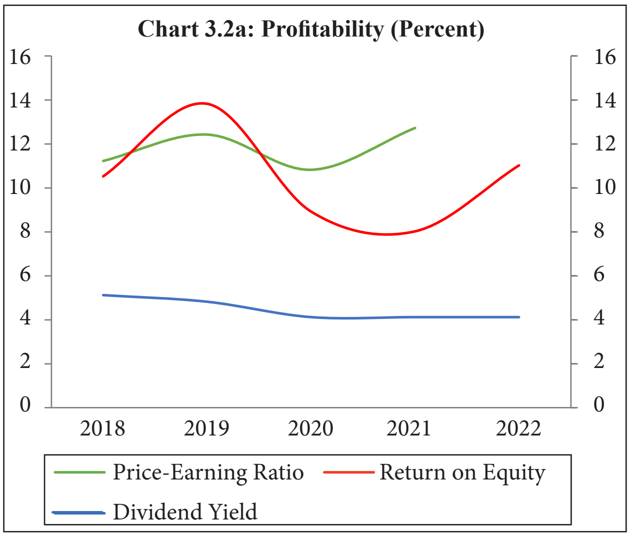


Chart 3.2a: Profitability (Percent)

Costs of production have been increasing since COVID-19 pandemic

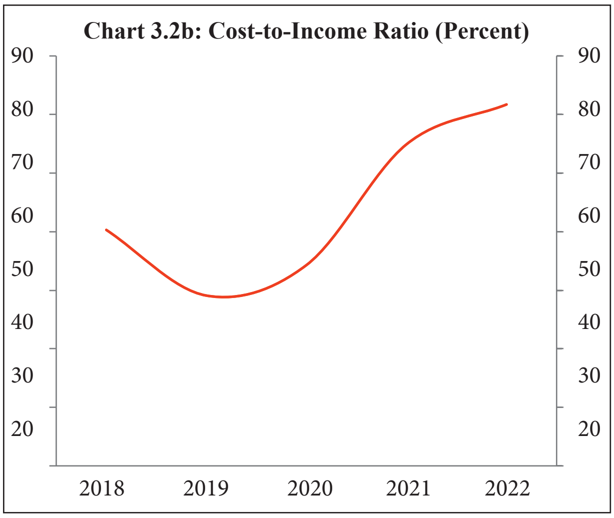


Chart 3.2b: Cost-to-Income Ratio (Percent)

The Credit-to-GDP ratio has reverted to pre-COVID-19 levels

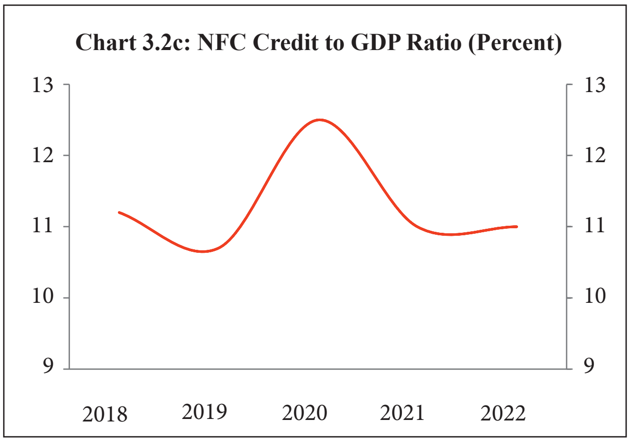


Chart 3.2c: NFC Credit to GDP Ratio (Percent)

Leverage is increasing for the corporates

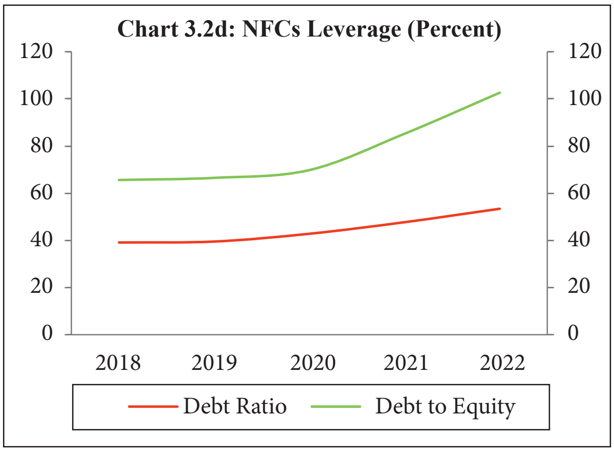


Chart 3.2d: NFCs Leverage (Percent)

[8] Bank of Botswana Residential Property Survey Report (Second quarter of 2022) and Riberry Property Market Report, March 2022.

Mortgage lending short of development needs

3.14. Residential real estate loans, in particular owner-occupied mortgage loans, increased to P14.4 billion in March 2023 from the P13.9 billion in March 2022, constituting 27.1 percent of total household credit and 18.1 percent of total credit (Chart 3.3a). 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[9]. At the same time, growth in incomes could be restrained 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).

Limited credit risk from mortgage lending

3.15. 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[10]. The moderate LTV ratios, as well as security in the form of property financed limit exposure of banks to mortgage credit upon default. The proportion of impaired mortgage loans to total mortgage loans was unchanged at 6.5 percent in December 2022 and December 2021. As such, the lifting of the loan moratoria given to households during the COVID-19 pandemic, as well as the end of repayment holidays seemed to have had little or no effect on households' repayment ability as mortgage NPLs remained moderate. Given the limited exposure, as well as the self-secured nature of real estate facilities, vulnerabilities in the sector pose minimal risk to financial stability, but prospective developments require continuous close monitoring and assessment.

NBFI Sector Developments

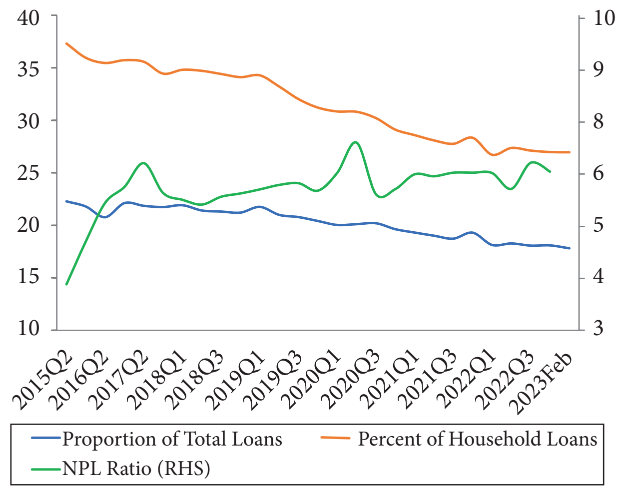
A surge in non-compliance by NBFIs

3.16. NBFIs remain generally safe and, although several compliance enforcement actions were undertaken during 2021-2022 The total number of enforcement actions increased by about 14 percent from 77 in March 2022 to 88 in March 2023. Whilst administrative penalties recorded the highest weight in 2023, directives also increased significantly to 9 in 2023 from 2 in 2022. In March 2023, warnings issued, and cancellations reduced by 33 percent and 31 percent, respectively. Furthermore, more compliance enforcement actions were taken

Property Market Developments

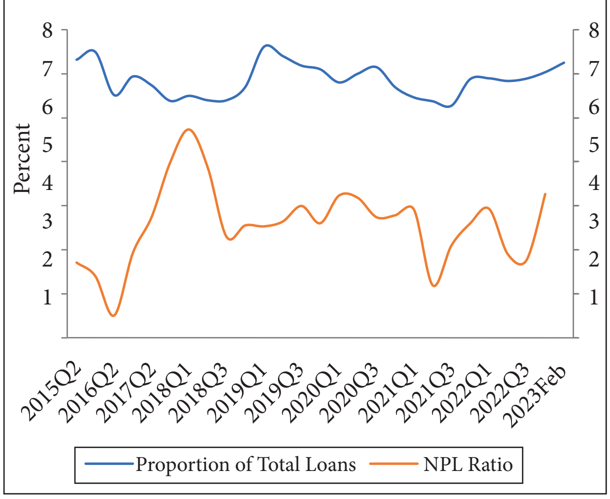
Mortgages as a percentage of both total loans and household loans are decreasing and the NPL ratio is stable

Chart 3.3a: Mortgage Loans



The proportion of commercial real estate loans in total loans is stable and the NPL ratio is volatile

Chart 3.3b: Commercial Real Estate Loans



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

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

against Insurance and Lending Activities at 39 and 33 respectively compared to Capital Markets (15). Only one Retirement Funds entity was non-compliant. NBFIRA continues to monitor NBFIs to ensure compliance and maintain financial stability.

NBFIs highly interconnected with the rest of the financial system

3.17. 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 March 2023, NBFIs had a net lending position to commercial banks (deposits held with banks less loans from banks) of P18.1 billion, a 20.5 percent increase from P14.9 billion reported in March 2022. Similarly, NBFIs had bonds worth about P325 million in the domestic market and an equity market capitalisation of P7.9 billion at the BSE as of April 2023. 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 through which intersectoral risks could be easily transmitted, hence present a potential source of systemic risk. Nevertheless, the risk is moderated by effective regulation and supervision of the domestic financial system.

Micro-lenders remain safe and sound

3.18. In 2022, the non-banking sector lending consisted of 347 entities and was dominated by 233 micro lenders. Micro lenders have had an impressive performance overtime, with assets rising from P3.9 billion in 2017 to P7.2 billion in 2022 representing an 85 percent increase. The systemically important micro-lenders were financially sound, and they held more than 90 percent of the industry assets. Similarly, total liabilities grew significantly from P1.9 billion to P4.7 billion over the same period. Micro-lenders' loan book accounted for 73 percent of the assets (P5.4 billion) and the industry recorded profit of P730 million in 2021, slightly down from P740 million in 2020. All 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 single largest micro-lender remains Letshego Holdings Limited, with group assets at P16.9 billion and Botswana operation had assets of P4.1 billion in 2022 and P3.4 billion in 2021. The assets were 44.7 percent of total micro-lending industry assets in 2022. In 2022, domestic credit from Letshego rose to P1.8 billion from P1.4 billion in 2021, but remains miniscule, when compared to the P73 billion in credit issued by commercial banks in 2021. Overall, the micro-lending industry remains profitable, safe and sound, with limited concerns for financial stability.

(c) Liquidity and Funding Risk

Banking Sector

Average market liquidity increased in March 2023

3.19. Since the onset of the COVID-19 pandemic, average daily market liquidity in the banking sector has been trending downwards mainly due to net foreign exchange outflows because of a persistent trade deficit, payments for external obligations, as well as settlement of some Government bonds. Average daily market liquidity increased to P3.79 billion in March 2023 from P3.45 billion in February 2023. The recovery followed a significant decline from P4.65 billion in January 2023. The increase in market liquidity was due to an increase in the pace of government spending. Despite the generally tighter liquidity conditions, banks maintained adequate liquidity positions, with a Liquidity Ratio (LAR) of 17 percent in December 2022 (January 2023: 17 percent).

Banks are exposed to funding risk due to deposit concentration

3.20. The banking sector remains vulnerable to funding risk arising from a concentrated deposit base. Commercial banks' funding structure is concentrated in wholesale deposits (by few corporate depositors), highlighting the potential increase in funding costs due to the volatile nature of wholesale deposits. The ratio of top 20 deposits to total deposits ranged between 25 and 63 percent in December 2022.

3.21. The banking industry continues to experience high levels of credit intermediation, with an average financial intermediation ratio[11] of 81.7 in January 2023, an increase from the 80.5 percent in December 2022. This level of credit intermediation was slightly outside the 50 - 80 percent range but supports enduring economic growth.

[11] 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.

Money and Capital Markets Developments

Money market interest rates increase

3.22. Following monetary policy reforms implemented by the Bank in April 2022, stop-out yields on T-Bills were adjusted upwards in line with the magnitude of the increase in the Monetary Policy Rate (MoPR).

Non-D-SIBs dominate interbank lending market

3.23. Interbank activity increased to P11.7 billion in March 2023, from P8.7 billion in February 2023. Domestic Systemically Important Banks (D-SIBs) contributed 18 percent to total interbank lending and non-D-SIBS dominated the interbank borrowing by taking up 80 percent of total interbank borrowings.

US Dollar Market

US dollar funding risks remain limited

3.24. Domestic commercial banks' exposure to foreign exchange risks is highly limited and poses no threat to overall financial stability. This is reflected in both the overall net foreign exchange position and USD net open position of the banks. The overall net open position of the banks fell from P535 million in September 2022, which was 7 percent of unimpaired capital, to P101 million (1 percent of unimpaired capital) in December 2022. This is significantly lower than the prudential limit of 30 percent of unimpaired capital (Chart 3.4a). At the same time, the Pula equivalent overall net exposure of the domestic banking system to the US dollar increased to P189 million in December 2022 from P167 million in September 2022. The exposure is equivalent to 1 percent of the industry's unimpaired capital and, therefore, presents limited vulnerabilities from US dollar funding.

The Pula exchange rate generally stable

3.25. 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. Over the twelve months period to March 2023, the nominal Pula exchange rate appreciated by 7.6 percent against the South African rand and depreciated by 10.1 percent against the SDR. Against the SDR constituent currencies, the Pula depreciated by 12.6 percent against the US dollar, 10.4 percent against the euro, 7.3 percent against the British pound, 5.5 percent against the Chinese renminbi and 4.6 percent against the Japanese yen. The movement of the Pula against the SDR constituent currencies largely reflects the performance of the South African rand against the SDR constituent currencies. Therefore, in the same review period, the South African rand depreciated by 16.5 percent against the SDR and depreciated by 18.8 percent against the US dollar.

3.26. The South African rand along with other emerging market currencies, weakened against most major trading currencies amid revived expectations that the Federal Reserve Bank would stick to its monetary policy tightening path, despite subsiding inflation in the US and concerns about slowing global growth. The depreciation of the South African rand was also fuelled by the country' grey listing by FATF, as well as a power shortage crisis which has crippled economic activity and poses a threat to the country's credit rating, which is currently rated two notches below investment grade by Moody's.

3.27. In general, volatility in the Pula exchange rate has been contained since May 2020 (Chart 3.4b), hence presenting limited risks to the domestic financial system and economy. It is worth noting that the rate of crawl of the Pula exchange rate was revised from a downward rate of crawl of 2.87 percent in 2022 to -1.51 percent for 2023. The Pula basket weights were unchanged at 45 percent for the South African rand and 55 percent for the SDR.

Asset Prices

Market capitalisation improves but liquidity declines

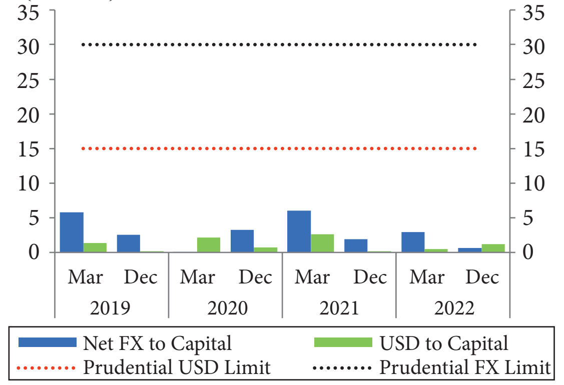
3.28. The total equity market value of domestic listed companies gained 10.2 percent, year-on-year, to P42.3 billion in March 2023 (March 2022: P38.4 billion). The gains reflect the overall recovery of the domestic market due to the opening of the economy and the resultant increase in economic activity. In general, the market is showing signs of recovery, with month-on-month increases in market capitalisation, leading to a cumulative gain of P8.5 billion since March 2021.

3.29. However, liquidity in the local bourse declined significantly with the liquidity ratio falling to 2.9 percent in February 2023 from 5.4 percent

Foreign Currency Funding and Exposure

Banks Foreign Exchange exposure is well below the prudential limits

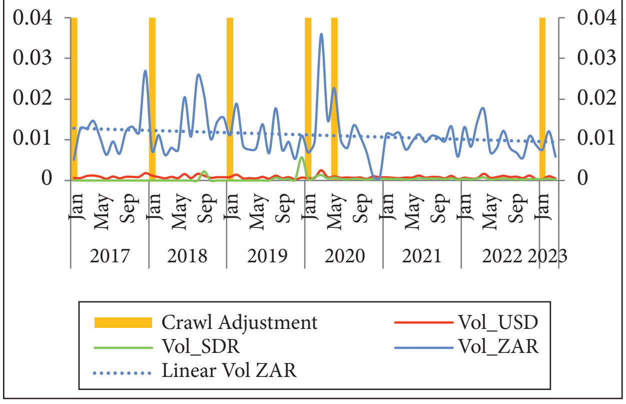
Chart 3.4a: Banks Foreign Exchange Exposure (Percent)



Source: Bank of Botswana

Volatility of the BWP/ZAR nominal exchange rate has reverted to pre-COVID-19 levels

Chart 3.4b: Foreign Exchange Volatility



in February 2022 (Chart 3.5c). This is explained by the purchase of BancABC shares by Access Bank in October 2021, which resulted in the highest turnover in the history of the BSE, injecting unprecedented liquidity into the domestic capital market at the time. The BSE notes that the top three traded companies in 2022 were Letshego, First National Bank (FNBB) and Sefalana, accounting for 63.9 percent of total trading activity, with Letshego accounting for 48.9 percent of total equity turnover. The BSE assesses prospects for the domestic market to be increasingly optimistic as economic activity improves following economic fallout from the COVID-19 pandemic.

The domestic stock market is profitable but volatile

3.30. The Domestic Company Total Return Index (DCTRI) appreciated by 1.8 percent in February 2023 against the 2.7 percent in the corresponding period in 2022. The index illustrates the performance of the domestic stock market. Therefore, the appreciation of the DCTRI, albeit at a slower rate, indicates some positive performance in equity markets.

3.31. Developments in market capitalisation in the twelve months to March 2023 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 from 6865 in 2020, and further increased to 7726 in December 2022, and to 7954 in March 2023, albeit with rising volatility[12] (Chart 3.5d). The rising volatility potentially reflects the inherently risky nature of equity markets. Global economic uncertainty and bank failures in the USA and Switzerland are likely to further worsen investors' risk perceptions and lead to even more volatility in the short-term.

Digitalisation may generate cyber related risks

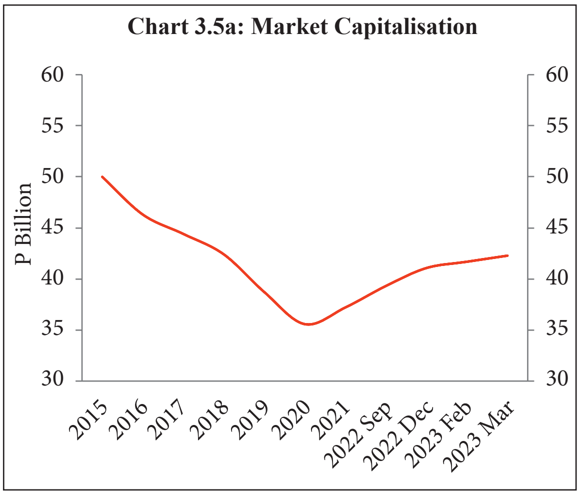
3.32. On the 23rd of September 2022, the BSE went live with a new Central Securities Depository (CSD) system, an Automated Trading System (ATS) and SWIFT connectivity. The systems mark the beginning of a new era of digitalisation of the domestic stock market, presenting innovative technology infrastructure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

3.33. Notwithstanding the potential benefits of these innovative 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 digital public 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.

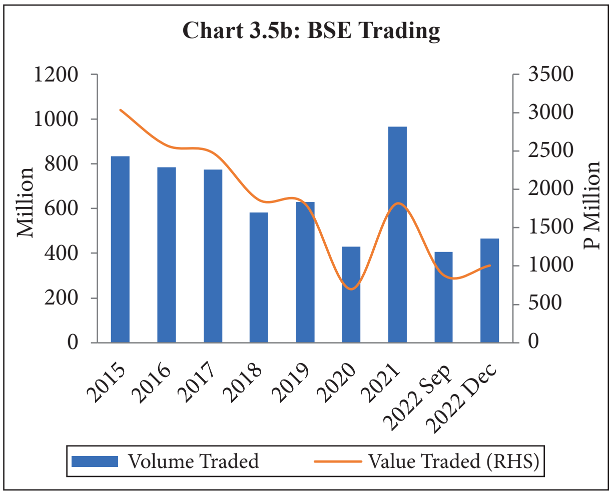
[12] Measured as the 12-month standard deviation of DCI values.

Stock Market Development

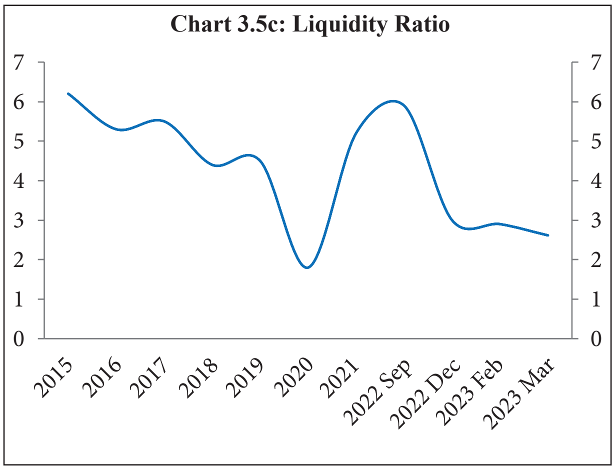
Stock market capitalisation is increasing



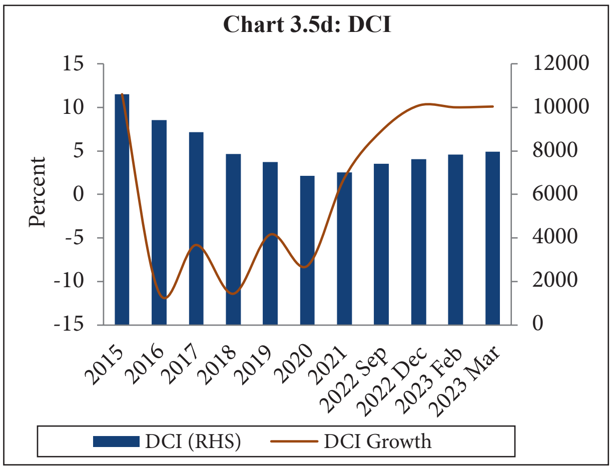
BSE trades by value and volume are below pre-COVID-19 levels



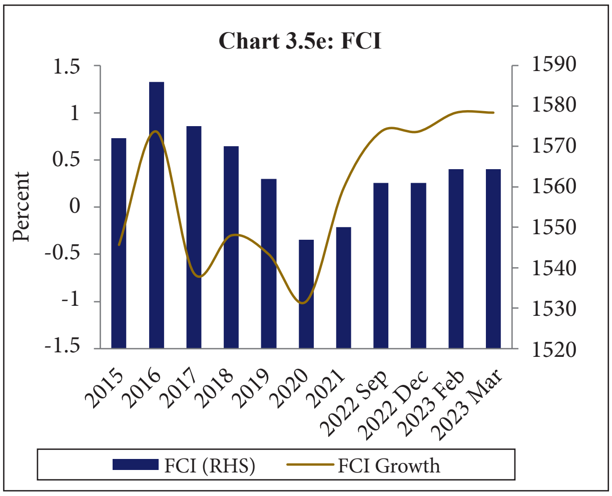
Liquidity in the BSE is declining



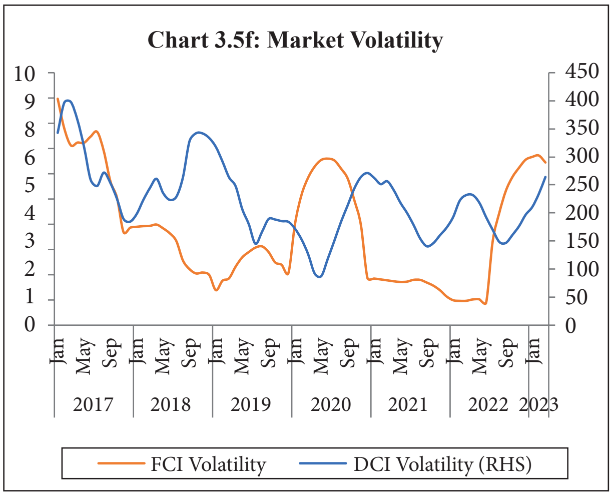
The DCI is improving since opening of the economy



The Foreign Company Index (FCI) is improving



The DCI is highly volatile



Bond Market Performance

Government bonds drive market capitalisation

3.34. Bond market capitalisation increased by 17.3 percent to P26.1 billion in March 2023 (March 2022: P22.3 billion), largely due to the reopening of existing Government bonds (Chart 3.6a). Since December 2021, the re-opening of Government bonds has resulted in a cumulative increase of P4.4 billion in the value of Government bonds[13]. Consequently, the nominal value of Government bonds rose from P18.2 billion in March 2022 to P21.2 billion in March 2023, while corporate bond valuations increased by 0.7 percent to P4.1 billion.

3.35. The proportion of Government bonds in the nominal value of the fixed income market stood at 84.4 percent in March 2023 (March 2022: 81.9 percent). This demonstrates the Government's ongoing commitment to deepen and develop the domestic capital markets under the P30 billion Government Note Issuance Programme. In the long run, the dominance of government securities has the potential to crowd out capital funding from the private sector and may need to be scaled down as the market matures.

Bonds yield spread widens

3.36. The spread between average yields on corporate and government bonds is gradually reverting to pre-COVID-19 levels, with a spread of 0.65 percentage points recorded at the end of March 2023. This is largely reflective of increasing yields for corporate bonds while yields on government bonds are trending downwards. 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 Russia - Ukraine war and faltering economic recovery present significant uncertainty for the domestic capital market. Furthermore, tightening of monetary policy has the potential to increase yields on new bonds, which would depreciate the value of existing bonds as recently witnessed in the USA.

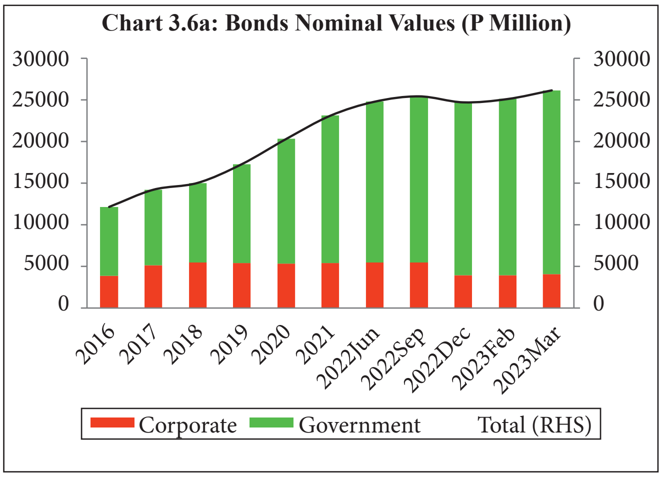
Average corporate bond yields stable

3.37. 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 remained the same at 8.2 percent between December and March 2023. Meanwhile, the risk in corporate bonds, as reflected in the volatility of the corporate bond index (CorpI), has been increasing since March 2021 (Chart 3.6a), and remains in an upward trajectory. The potential for tightening of corporate funding in the bond market, therefore, remains. However, the generally accommodative financial conditions domestically, as judged by the real monetary conditions index, present money markets funding opportunities that would augment any decline in capital market funding.

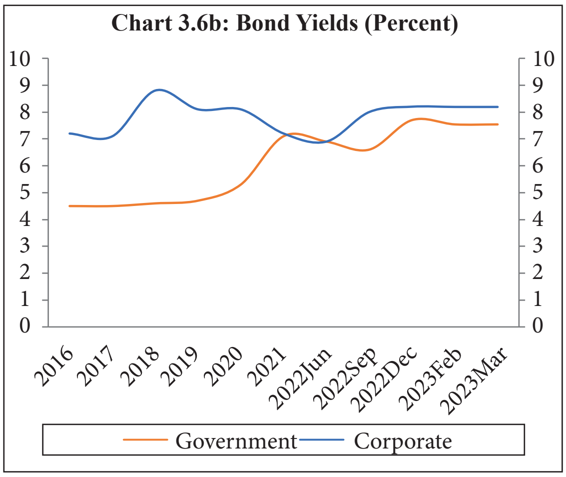
[13] Reissuances were made on Government bonds BOTSGB0931 (P227 million), BOTSGB0640 (P225 million), BOTSGB0943 (P20 million) and BOTSGB0527 (P85 million).

Bond Market Developments

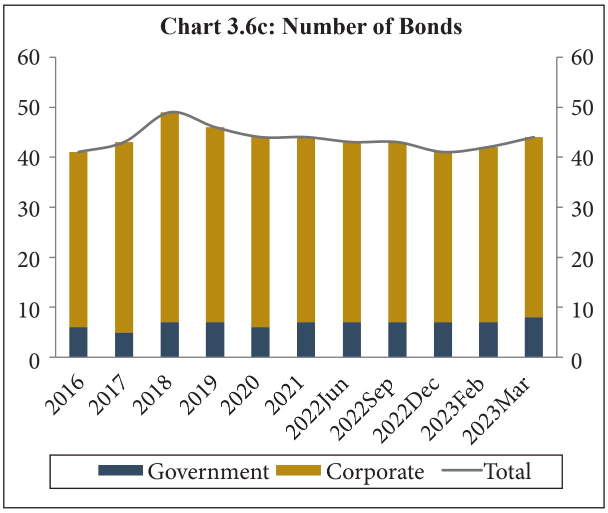
Government bonds dominate the bonds market



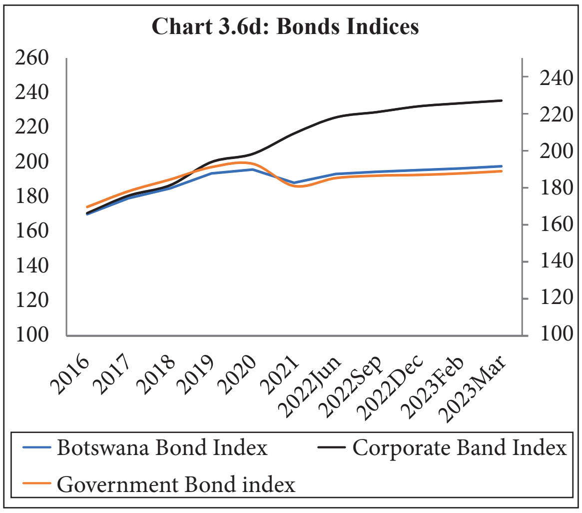
Government bonds yields still above pre-COVID-19 levels, indicating higher uncertainty



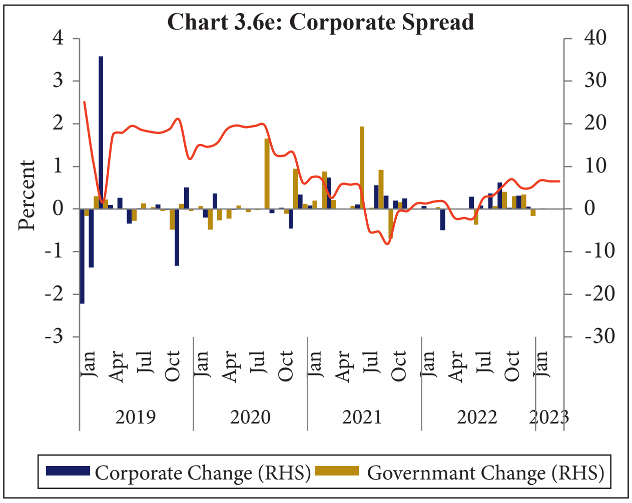
Corporates have many low-value bonds listed on the BSE



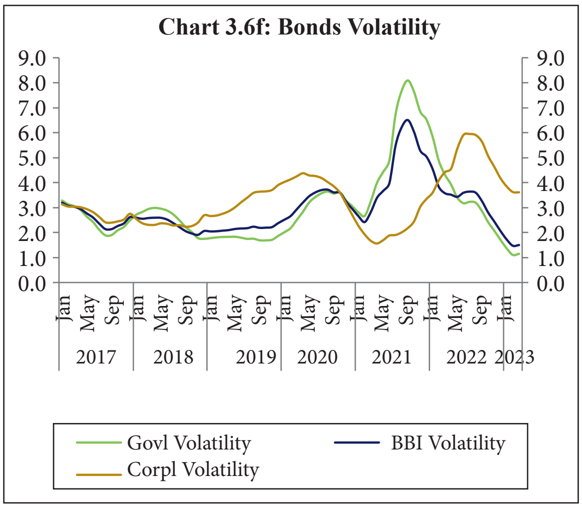
Bond indices are trending upwards



The corporate spread is widening



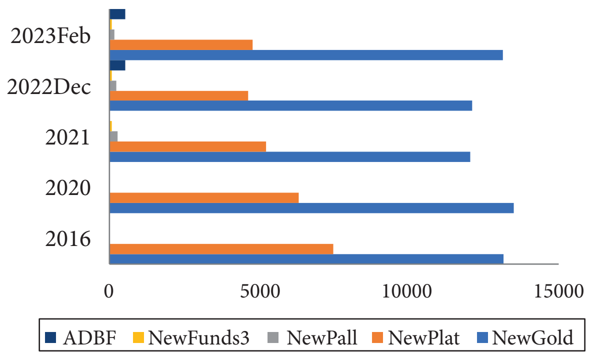
The Corporate Bond Index is most volatile



Net asset value of exchange traded funds falling

3.38. 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 slightly from P18.1 billion in December 2021 to P18 billion in December 2022 despite the listing of a new ETF, ADBF, by African Development Bank during the year (Chart 3.7). 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 December 2022 (December 2021: less than 1 percent), hence pose minimal risk to the stability of the capital markets.

Chart 3.7: Nominal Value of ETFs



(d) Macro-Financial Linkages

Contagion Risk

Significant macro-financial linkages persist

3.39. 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 of their assets, mainly pension assets, held by the sector. In December 2022, non-financial corporations were net lenders to banks, with their deposits accounting for 43 percent of total commercial bank deposits, while their borrowing represented 28.5 percent of commercial bank credit. Meanwhile, deposits from NBFIs accounted for a significant portion of bank funding at 21.8 percent of total deposits in January 2023 (Chart 3.8). A sudden withdrawal of these funds would present a potential funding risk to banks, which warrants a closer attention. In addition, a significant amount of NBFI assets (61.7 percent) were held abroad, exposing them to external financial and economic shocks, albeit providing some portfolio diversification opportunities.

3.40. The interlinkages also extend to state-owned enterprises (SOEs), which accounted for 7.9 percent of bank deposits, while loans to the sector accounted for 2 percent of total bank lending in December 2022. This interconnectedness, with the banking sector at the epicentre of the financial system, presents an opportunity for risks to easily spread across sectors and thus, elevates the risk of contagion in the domestic financial system. Effective regulation and a strong supervisory regime continue to mitigate the risk of contagion in the system. This, in the recent past has included the identification of D-SIBs, which are also subjected to stress tests. NBFIRA is in the process of designating domestic systemically important financial institutions (D-SIFIs).

Financial sector assets increase

3.41. The size of the financial system, as reflected by total assets of banks and NBFIs, increased by 5.5 percent to P284 billion in December 2022 from P269.1 billion in December 2021 (Table 3.3) driven mainly by an increase in assets of both the banking and NBFIs sectors (mainly pension funds). The NBFI sector still accounted for the largest share of financial system assets, at 55.6 percent, compared to the 44.4 percent by the banking sector. The size of the entire financial system represented 112.8 percent of GDP in December 2022, compared to the 129.3 percent in 2021. The reduced share may be due to incomplete and unaudited data, but the overall contribution of the financial sector to the economy remains significant.

Table 3.3: Structure and Size of the Financial System

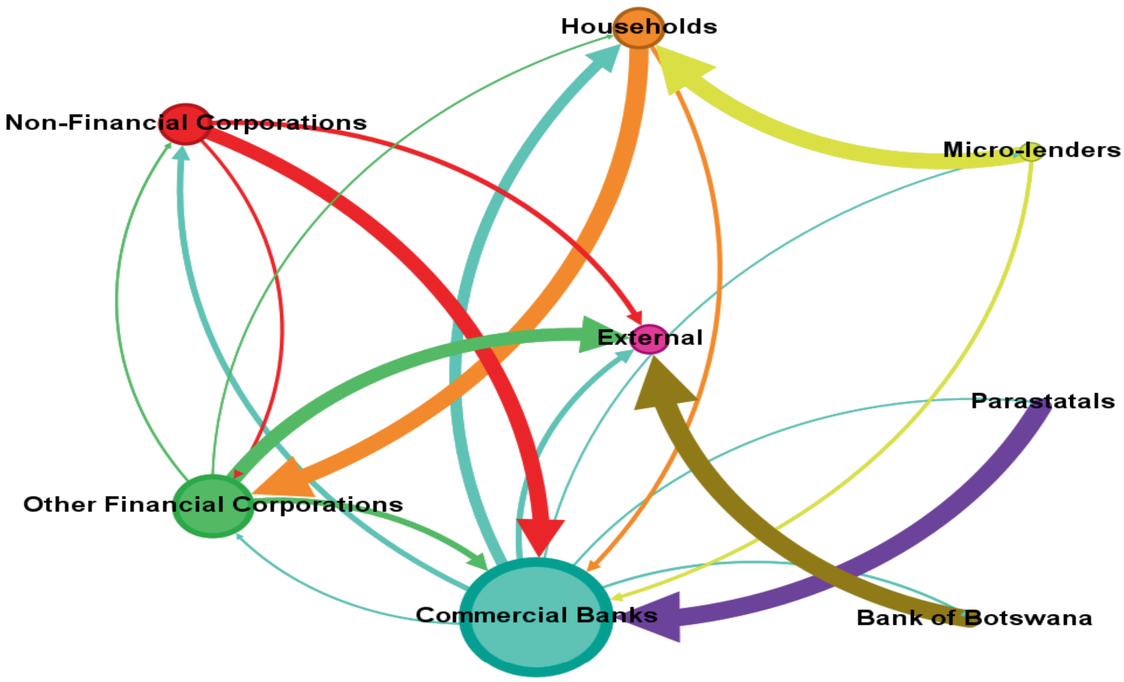
Sector/Sub-Sector	2020				2021				2022			
	Assets (P'million)	Percent of Sector Assets	Percent of Financial System Assets	Percent of GDP	Assets (P'million)	Percent of Sector Assets	Percent of Financial System Assets	Percent of GDP	Assets (P'million)	Percent of Sector Assets	Percent of Financial System Assets	Percent of GDP
NBFIs	**145 384**		**56.6**	**84.7**	**153 205**		**56.9**	**73.6**	**157 924**		**55.6**	**62.7**
Retirement Funds	105 175	72.3	41.0	61.3	117 549	76.2	43.7	56.5	117 955	74.7	41.5	46.9
Insurance	20 386	14.0	7.9	11.9	21 704	14.2	8.1	10.4	*20 937*	*13.3*	*7.4*	*8.3*
Other Financial Corporations	19 823	13.6	7.7	11.6	13 952	9.1	5.2	6.7	*19 032*	*9.7*	*6.7*	*7.6*
Banks	**111 446**		**43.4**	**64.9**	**115 879**		**43.1**	**55.7**	**126 092**		**44.4**	**50.1**
Commercial Banks	103 259	92.4	40.2	60.2	107 452	92.7	39.9	51.6	116 996	92.8	41.2	46.5
Statutory Banks	8 187	7.6	3.2	4.8	8 427	7.3	3.1	4.0	9 126	7.2	3.2	3.6
Total Financial System Assets (P' million)	**256 829**			**149.6**	**269 084**			**129.3**	**284 016**			**112.8**
GDP (P' million)				**171 667**				**208 082**				**251 734**

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

Financial Sector Inter-linkages

Banks are highly interconnected with the rest of the financial system

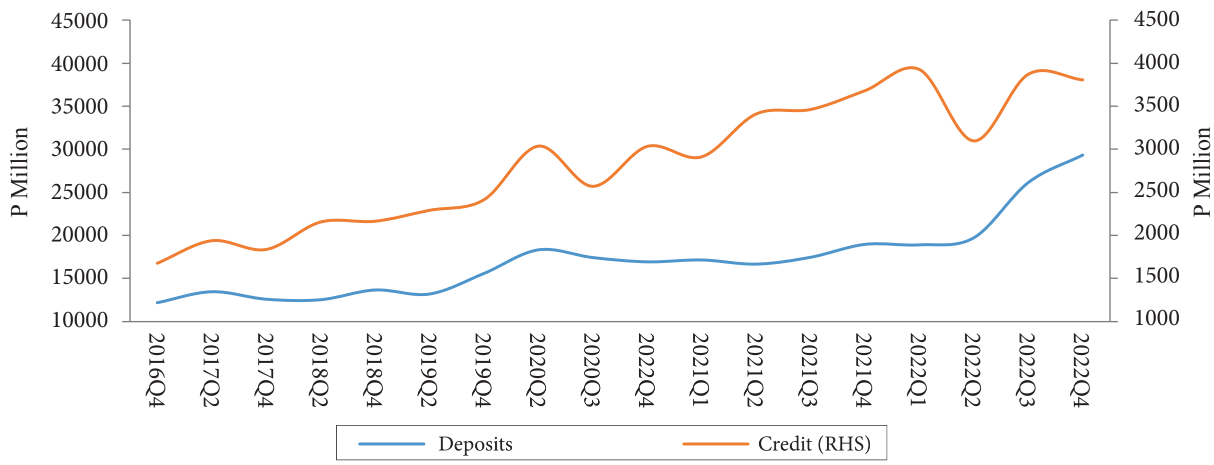
Figure 1: Macro-Financial Linkages (December 2022)



Notes:

1. A large node indicates a higher degree of interconnectedness across the financial system.
2. Thicker edges show a higher proportion of funds flowing out of the sector relative to other sectors.
3. Balances from the Bank to the external sector represent net foreign assets.
4. Balances from other financial corporations to the external sector are pension fund assets invested offshore.
5. Balances from commercial banks to the external sector are commercial banks' balances due from foreign banks.
6. See Table A5 in the Appendix for data on the flow of funds across the system and to the (or from) the external sector.

Chart 3.8: NBFIs Exposure to Commercial Banks



Source: Bank of Botswana

Risk Concentrations

Insurance and pension sectors highly concentrated

3.42. 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 risk to systemically important financial institutions[14]. 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. This condition warrants the need to fast track the D-SIFIs framework to support enhanced monitoring and supervision of such entities[15].

3.43. 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 46.9 percent of GDP in December 2022 (P117.95 billion).

Pension fund assets decline

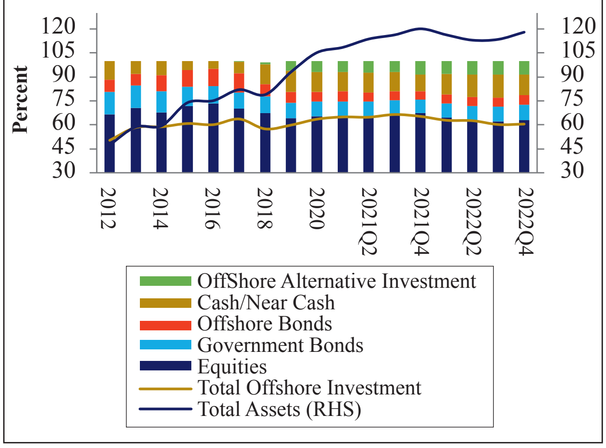
3.44. Pension fund assets declined slightly by 1.8 percent, from P120.1 billion in December 2021 to P117.95 billion in December 2022, driven largely by a decline in offshore equity and bond investments. The equity portfolio declined from P80.8 billion in December 2021 to P74.4 billion in December 2022 but, still accounted for the largest share (63.1 percent) of the portfolio investment allocation of pension funds (Chart 3.12).

3.45. Furthermore, 61.7 percent of the funds were invested offshore in December 2022, compared to 66.3 percent in December 2021. Generally, the investment allocation of pension funds remained generally unchanged with an average of 60 percent invested offshore since 2009. This was in line with the retirement funds prudential regulations that required that at least 30 percent of assets should be invested locally. However, the recently passed Retirement Funds Act, 2022 introduced new provisions that increase the limit of funds which can be invested locally by pension funds from a minimum of 30 percent to a minimum of 50 percent. The repatriation of funds is expected to meet the country's long term financing needs, although there are concerns about the capacity of domestic financial markets to absorb the funds.

Pension Funds' Assets

Most of pension funds' assets are held offshore

Chart 3.9: Investment Allocation of Pension Funds



Source: NBFIRA

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

Pension funds continue to dominate assets under management

3.47. 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

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

15 NBFIRA is developing a framework for identifying and designating insurance D-SIFIs.

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 Analysis

Asset Quality and Performance

Banks are generally solvent, profitable, and well-capitalised

3.48. Financial soundness indicators as at end of December 31, 2022, indicate that the banking sector continues to be adequately capitalised, liquid, and profitable (Charts 3.10a to 3.10d). The NPLs ratio has been stable since the pandemic. However, the lifting of concessions made during the pandemic, and the potential for an increase in lending rates following the liberation of the prime lending rate in April 2023, have the potential to lead to relatively higher default rates, and a deterioration in asset quality.

3.49. Monthly banking sector data for January 2023 also shows that the banking system remains safe and sound, with significant capital and liquidity buffers. As highlighted above, the lifting of the loan moratoria given to customers during the pandemic may lead to an increase in NPLs. As at end of December 2022, renegotiated and restructured loans were 12.7 percent of the total loan portfolio of banks, with the bulk of the exposure being from the commercial real estate sector. The sectors constituting most of the restructured loans are commercial real estate (25,9 percent), business services (16.9 percent), tourism and hotels (11.4 percent) and households (10.7 percent).

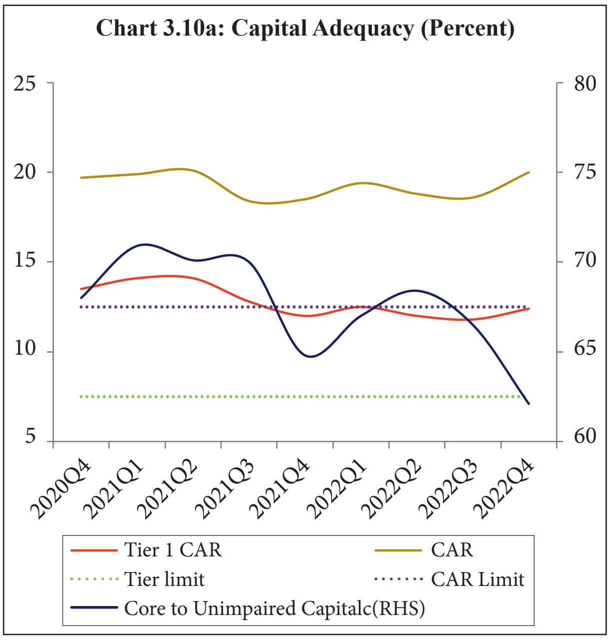
3.50. For the customers given repayment holidays, commercial real estate loans dominate at 26.5 percent of total exposure. Other significant exposures include business services (15.6 percent), households (15.4 percent), trade, restaurants, and bars (13.6 percent) and tourism and hotels (11.6 percent) sectors. These exposures have the potential to fuel credit losses for the banks and the performance of these sectors will continue to be monitored closely.

D-SIBs for 2023

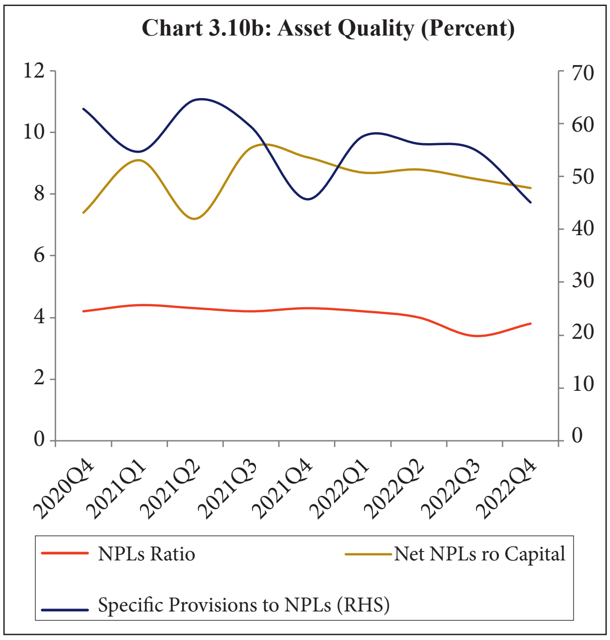
3.51. The Bank conducted the annual exercise to identify and designate D-SIBs. The D-SIBs methodology is based on the Basel Committee on Banking Supervision (BCBS)'s methodology for G-SIBs, which ranks banks on five broad indicators of size, interconnectedness, substitutability, or alternative financial institution infrastructure for the services they render, complexity and domestic sentiment. D-SIBs are, therefore, banks that have the potential to significantly affect the stability of the domestic financial system should they become non-viable. For 2023, FNBB and ABSA Bank Botswana Limited (ABSA) were designated as D-SIBs. The domestic assets of the two banks constitute the largest share of the industry, representing 46 percent of the industry total assets. The two banks were well capitalised, liquid, and profitable. Their geographical presence in terms of the number of bank branches is significant; the combined number of bank branches for the two banks is half of the 108 total bank branches in Botswana.

Banking Sector Financial Soundness Indicators

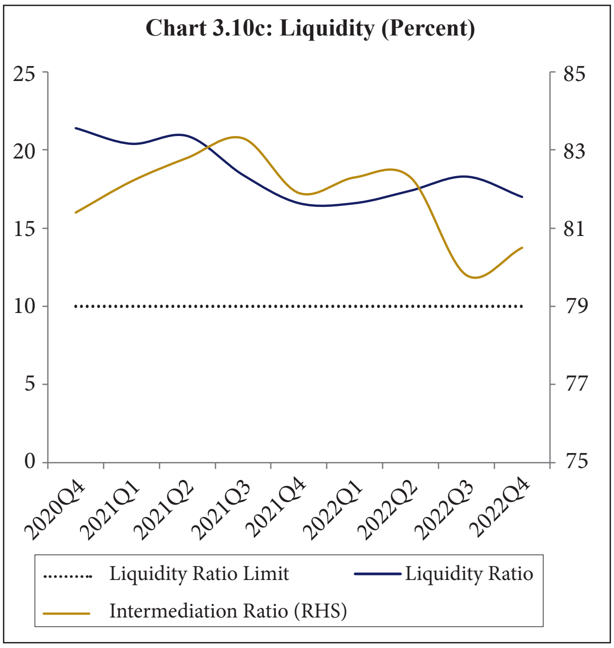
Banks are adequately capitalised



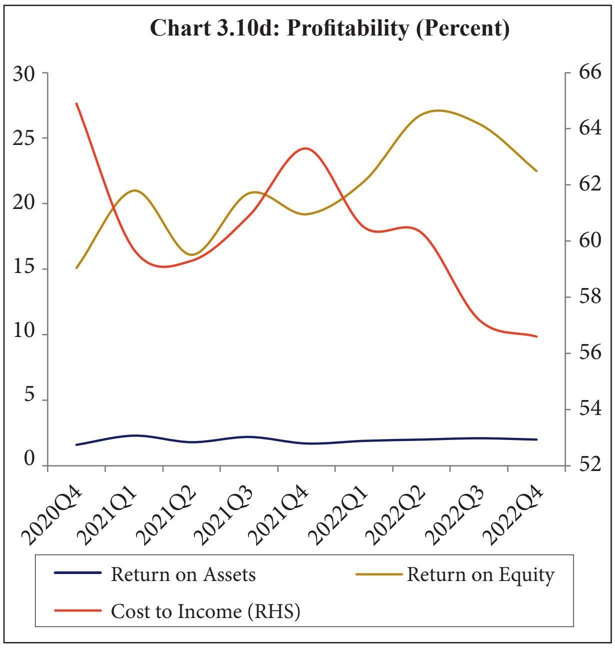
The NPLs ratio is stable



Banks are liquid



Banks are highly profitable, and costs are declining



Source: Bank of Botswana

Stress Tests Scenarios

3.52. The stress test analysis for December 2022 assesses the resilience of the domestic banking sector to plausible moderate and adverse macro-financial shocks. The assumption for the tests is uncertain economic conditions characterised by volatile nominal exchange rates, high inflation rate, declining domestic market liquidity, stagnant household incomes, heightened climate risks, and geopolitical-induced vulnerabilities. In addition, liquidity-related challenges faced by banks in the USA, and governance issues faced by Credit Suisse, a Switzerland-based G-SIB, highlight vulnerabilities and policy challenges currently faced by the global financial system. The high inflation environment is presenting income challenges for businesses and corporates alike, impacting on their capacity to service their loans and support economic recovery. This has the potential to impact negatively on the asset quality of banks.

3.53. Globally, central banks are faced with a policy conundrum on the need to contain inflation without aggravating financial stability risks associated with the erosion of purchasing power resulting from the double impact of interest rate 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 the assumed risks materialise.

Banks are also subjected to sector specific shocks

3.54. 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 underlying risk to the banking sector, especially in the event of a sudden erosion of the households' capacity to service their loans.

D-SIBs subjected to more severe stress conditions

3.55. 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 banks are closed out of funding markets if the post-shock capital adequacy ratio breaches a set hurdle rate.

Stress Test Results

3.56. The stress test covers three tests, namely liquidity, credit, and interest rate shocks (Table 3.4). For the liquidity risk, the simulation assumes a bank run; for the credit risk, it assumes credit losses due to an increase in NPLs; and for the interest rate risk, it assumes an asset repricing due to an increase in the policy rate.

Banks generally resilient but susceptible to severe credit shocks

3.57. 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 11.7 percent, thus breaching the prudential capital adequacy requirement of 12.5 percent. The industry capital position worsens to 2.1 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 3.8 percent to 13.4 percent and 23 percent under moderate and severe scenarios, respectively.

3.58. For the sectoral shocks, under the moderate scenario, banks' capital adequacy ratio falls to 9.5 percent, while the NPLs ratio increases to 15.8 percent. The capital adequacy ratio falls further to 4.6 percent under the severe scenario, and the NPLs ratio increases to 20.6 percent. Regarding credit concentration shocks, banks breach the capital adequacy requirement at 10.1 percent under the assumption that the largest borrower defaults for each bank (moderate scenario). The capital adequacy ratio further falls to 4.7 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 19.1 percent in the moderate and severe scenarios, respectively.

3.59. 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

3.60. 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 3 days. The results do not reveal any apparent disparity between the asset-liability mismatch for D-SIBs and other banks, as they have similar survival horizons.

3.61. 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

3.62. 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 0.2 percentage points for the moderate and severe scenarios, respectively. It is also assumed that government bonds already held by the banks would be repriced/revalued downwards when the policy rate increases. The overall impact considering both the income gain and repricing of bonds is a negligible decrease in the capital adequacy ratio by 0.1 percentage points.

3.63. The increase in profit generally reflects the banking industry's repricing 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 P151 million (3.8 percent increase), while a 2.25 percentage points increase would lead to a gain of P225 million (5.6 percent increase), dominated by large banks (Table 3.4). On the other hand, government bonds would lose value in nominal terms to P163 million and P244 million in the moderate and severe interest rate scenarios, respectively. Nevertheless, it is worth noting that domestic banks are highly liquid and can afford to hold bonds to maturity. As such, there is limited risk stemming from the potential repricing of government bonds.

D-SIBs are resilient to a combination of shocks

3.64. Under the moderate concentration and overall NPL scenarios, D-SIBs are resilient, with a capital adequacy ratio above the prudential limit at 15.1 percent for the concentration shock, and 13 percent for the overall NPL shock. For the severe concentration and overall NPL shocks, the CAR falls to 10.9 percent and 3.7 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 a CAR of 10.4 percent in the moderate scenario and are insolvent in the severe scenario with a CAR of -6.9 percent.

3.65. To capitalise D-SIBs, shareholders or parent companies would have to inject capital amounting to P1.7 billion in the moderate scenario and P7.9 billion in the severe scenario. Because credit mitigants are excluded from the stress test scenario, and the 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. 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 customer deposits, 10 percent for short-term funding and 4 percent for long-term funding.

3.66. Under these assumptions, one of the D-SIBs is closed out of funding markets in the moderate scenario with a total loss of customer deposits and short-term funding amounting to P3.8 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 -6.9 percent and total loss of funding of P11.6 billion. As a result, D-SIBs suffer a liquidity shortfall of P1.2 billion in the severe sensitivity scenario.

Table 3.4: December 2022 Stress Test Results for Commercial Banks

SCENARIOS	CREDIT RISK		
	Concentration Risk	Sectoral Shocks	Overall NPL Shock
BASELINE SCENARIO: BANKING CONDITIONS AS AT DECEMBER 31, 2022	CAR of 20.7 percent. 3.8 percent NPLs/total loans.	CAR of 20.7 percent. 3.8 percent NPLs/total loans.	CAR of 20.7 percent. 3.8 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 10.1 percent. NPLs/total loans ratio increases to 13.1 percent, a sign of increasing vulnerability.	Banking system breaches the prudential limit with CAR of 9.5 percent. NPLs/total loans ratio increases to 15.8 percent, a sign of increasing vulnerability.	Banking system slightly breaches the prudential limit with CAR of 11.7 percent. NPLs/total loans ratio increases to 13.4 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 4.7 percent. NPLs/total loans ratio increases to 19.1 percent, a sign of increasing vulnerability.	Banking system breaches the prudential limit with CAR of 4.6 percent. NPLs/total loans ratio increases to 20.6 percent, a sign of increasing vulnerability.	Banking system breaches the prudential limit with CAR of 2.1 percent. NPLs/total loans ratio increases to 23 percent, a sign of increasing vulnerability.

SCENARIOS	LIQUIDITY RISK	INTEREST RATE RISK
BASELINE SCENARIO: BANKING CONDITIONS AS AT DECEMBER 31, 2022	Perfect asset liability match, leading to 30 days survival.	Banks start off with a CAR of 20.7 percent.
MODERATE SCENARIO		
DESCRIPTION OF SHOCK	Bank run simulation based on assets haircuts and liabilities run-off rates[16].	150 basis points increase in the policy rate.
RESULTS	D-SIBs survive for 14 days. Other banks survive for 14 days. On average, banks survive for 15 days.	20.6 percent CAR (-0.1 percentage points change in CAR). Gain of P151 million in interest income. P163 million unrealised losses due to repricing of bonds

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 3 days. Other banks survive for 3 days. On average, banks survive for 3 days.	20.6 percent CAR (-0.1 percentage points change in CAR). Gain of P225 million in interest income. P244 million unrealised losses due to repricing of bonds

Source: Bank of Botswana

Table 3.5: D-SIBs Stress Testing Results for December 2022

SCENARIOS	CREDIT RISK		SENSITIVITY ANALYSIS
	Concentration Risk	Overall NPL Shock	
BASELINE SCENARIO: BANKING CONDITIONS AS AT DECEMBER 31, 2022	CAR of 21.6 percent. 4.4 percent NPLs/total loans.	CAR of 21.6 percent. 4.4 percent NPLs/total loans.	CAR of 21.6 percent. 4.4 percent NPLs/total loans. P1.3 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 15.1 percent. NPLs/total loans ratio increases to 9.6 percent, a sign of increasing vulnerability.	D-SIBs are resilient with CAR of 13 percent. NPLs/total loans ratio increases to 14 percent, a sign of increasing vulnerability.	D-SIBs breach the prudential limit with CAR of 10.4 percent. Capital needs of P1.7 billion to recapitalise D-SIBs (0.8 percent of GDP). D-SIBs are closed out of short-term funding market
SEVERE SCENARIO			
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 10.9 percent. NPLs/total loans ratio increases to 13.8 percent, a sign of increasing vulnerability.	D-SIBs breach the prudential limit with CAR of 3.7 percent. NPLs/total loans ratio increases to 23.5 percent, a sign of increasing vulnerability.	D-SIBs breach the prudential limit with a negative CAR of -6.9 percent. Capital needs of P7.9 billion to recapitalise D-SIBs (4 percent of GDP). Liquidity shortfall of P1.2 billion due to closure of funding markets.

[16] A haircut refers to a percentage of asset value that a bank cannot access within a short period to meet urgent and high value customer demands. A run-off rate is the value of a liability that a bank has to meet within a short period. Different haircuts and run-off rates are assumed for different categories of assets and liabilities, respectively.

4. FINANCIAL MARKET INFRASTRUCTURE (FMI) AND REGULATORY DEVELOPMENTS

(a) Payments and Settlement Systems

BSE modernises digital services technologies

4.1. The BSE went live with a new CSD system, ATS and SWIFT connectivity in September 2022. These three technology systems represent 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 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

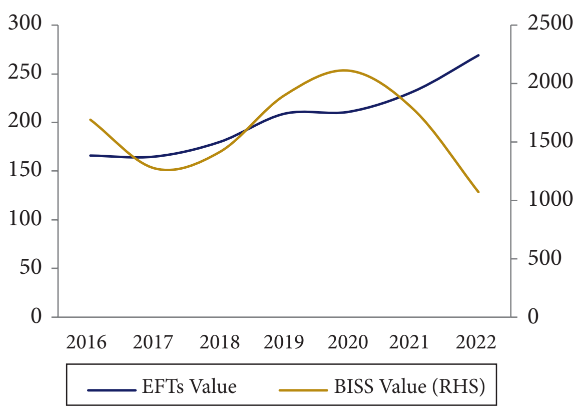
4.3. Clearing systems have been largely resilient in handling large volumes of transactions without any major disruption. Meanwhile, the value and volume of cheque transactions continues to decline (Chart 4.1). As of May 2022, the Bank had licensed twenty-three Electronic Payment Service (EPS) providers. This shows the importance of EPS in the financial system hence increased security and stability risk emanating from EPS.

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

Payments and Settlement Systems Indicators

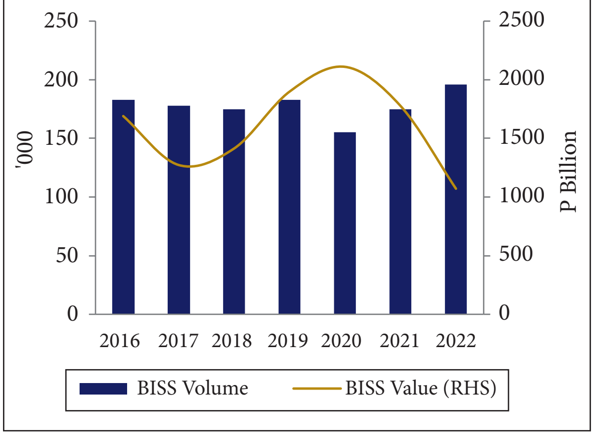
BISS transactions have been falling since COVID-19 and EFTs are trending upwards

Chart 4.1a: Electronic Payments (P Billion)

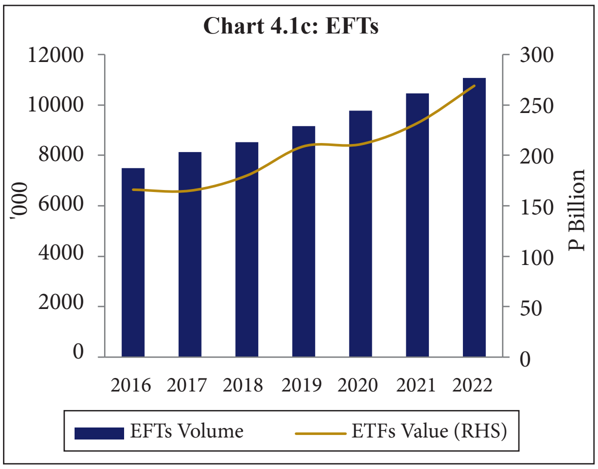


BISS transactions volume is increasing but value is falling

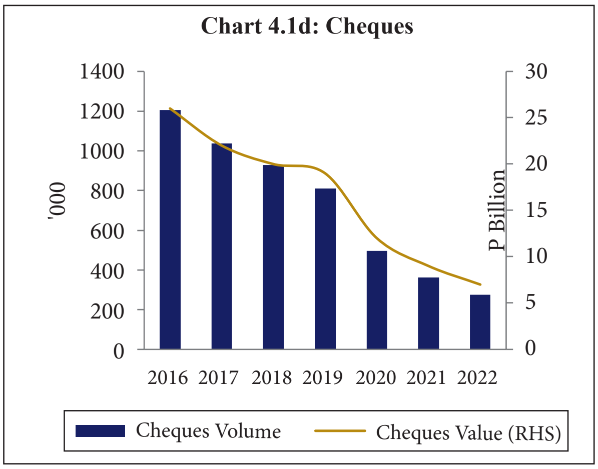
Chart 4.1b: BISS Transactions



EFTs volume and value are trending upwards



Cheques are gradually fading away



(b) Regulatory and Other Developments Relevant to Financial Stability

Governance and accountability issues in the NBFI sector a concern

4.5. Governance and accountability issues in the financial sector, especially in the NBFI sector remain a 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 legislative and supervisory reviews undertaken in the sector, such as the amendment or re-enactments of the NBFIRA Act, the Securities Act, and the Solvency Act, and the newly implemented Virtual Assets Act, 2022 and the Virtual Assets Regulations, 2022, and other reforms in the financial sector aim to close regulatory gaps and harmonise the supervision of NBFIs with international best practice, hence, beneficial for addressing governance issues in the sector.

The FSC met to discuss the financial stability implications of the grey listing of South Africa

4.6. The FSC held an emergency meeting on March 1, 2023, to discuss the potential implications of the grey listing of South Africa by FATF on Botswana's macroeconomic and financial stability. The Council also evaluated available macroprudential policy options that can be used to mitigate any potential systemic risks or spill overs arising from the grey listing of South Africa. The FSC reflected on the possible transmission channels of the grey listing shock, such as, trade, balance sheet structure and payment systems of local banks, as well as the asset distribution of domestic NBFIs through which macroeconomic and financial disturbances in South Africa could be relayed to the domestic market.

4.7. The FSC concluded that the grey listing of South Africa was likely to have minimal impact on trade, and consequently less implications on the SACU receipts. Other risk transmission channels are through interlinkages in the financial system, through the ownership structure of banks and portfolio distribution of investments. Risks to NBFIs are considered limited, given the under-exposure to the market. Bank liquidity exposures are not significant, owing to limited intragroup placements. The FSC concluded that the ongoing risk profiling and risk assessment of South African customers by banks was an adequate response to South Africa's grey listing, especially that South Africa was judged to be cooperating with FATF to address the deficiencies. Meanwhile, the FSC considered several macroprudential policy options which could be triggered in the event the country was blacklisted, including restricting lending and offshore borrowing or assets to South Africa, as well as limiting claims or liabilities of South African banks.

The Insolvency Act is being amended

4.8. The Insolvency (Amendment) Bill, 2023 was published on February 10, 2023, in the Government gazette. The intention of the amendment is to harmonise the Insolvency Act with the Movable Property (Securities Interest) Act, 2022 and with international best practices, especially relating to the treatment of collateral in terms of creditors preference and claim of creditors.

The Banking Bill passed by Parliament

4.9. The Banking Bill was passed by Parliament on April 11, 2023. The Bill aligns the domestic banking law with international regulatory and supervisory best standards. It seeks to strengthen the legal framework to among others, establish a more robust legal foundation for financial safety nets, to ensure compliance with Basel Core Principles, enhance the Bank's sole mandate of licensing deposit taking institutions, as well being a resolution agency. The Bill further permits the sharing of confidential banking information with relevant specified bodies such as credit reference bodies and domestic and external supervisory bodies in order to comply with international obligations regarding AML/CFT and other international best practice requirements.

The Securities Act under revision

4.10. The Securities (Amendment) Bill was published on December 16, 2022, to ensure consistency of definitions between the Securities Act and the NBFIRA Act. The Bill also explicitly defines securities infrastructures business to cover a wide array of businesses dealing with securities, including locally issued debentures and private bonds which were previously not regulated. The amendment empowers NBFIRA to enforce and set governance and probity standards on individuals and institutions to enhance integrity in the NBFIs sector.

The Bank of Botswana (Amendment) Act, 2022 commences

4.11. The Bank of Botswana (Amendment) Act of 2022 was promulgated on February 14, 2023. 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 establishment of a Deposit Insurance Scheme (Scheme) for Botswana, as well as establishment of a statutory FSC. Modalities to operationalise the Scheme started in January 2023 and its establishment is expected to strengthen domestic crisis management and resolution frameworks.

NBFIRA Act being re-enacted to align with best international practice

4.12. A draft bill seeking to re-enact, with amendments to the NBFIRA Act was published on January 16, 2022, in the Government Gazette. The Bill intends to enhance the regulatory capacity of NBFIRA and align it with international requirements and best practices. The Bill also aims to empower NBFIRA to enforce corporate governance in regulated entities, by giving NBFIRA powers to require and provide reporting arrangements, administrative rules and set guidelines relating to appointment and removal of key office bearers in regulated entities. Further the Bill enhances NBFIRA's role is mergers, acquisitions, winding up and general resolution of NBFIs.

The NBFI Tribunal operational

4.13. The Non-Bank Financial Institutions Tribunal (NBFIT) commenced operations in October 2022. The Tribunal is an independent, adjudicative body made up of independent industry experts in the legal and the non-bank financial services sector. The Tribunal is responsible for reviewing decisions made by NBFIRA to ensure that the Regulatory Authority is executing its mandate in a fair, equitable and transparent manner, thereby improving the operational effectiveness and corporate governance in the NBFIs sector.

The MoPR maintained at 2.65 percent

4.14. At its meetings held in April 2023, the Monetary Policy Committee (MPC) maintained the Monetary Policy Rate (MoPR) at 2.65 percent. The MPC observed low inflationary pressures emanating from base effects associated with the increase in administered prices in 2022, as well as the impact of downward adjustment of domestic fuel prices in the first quarter of 2023, while aggregate demand was modest. Overall, the MPC projected that the economy will operate below full potential in the short to medium term and, therefore, not creating any demand-induced inflationary pressures; thus, the decision to maintain the MoPR to support 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.

4.15. 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.

The Bank withdraws some COVID-19 relief measures

4.16. On December 1, 2022, the Bank announced its decision to withdraw some of the COVID-19 relief measures with effect from January 1, 2023. Although COVID-19 continues to be a threat to public health, the Bank recognises that prevention measures and availability of effective vaccines, as well as other mitigation strategies have allowed for the reopening of economies and resumption of normal economic activities.

4.17. The withdrawals are as follows: the punitive interest rate for involuntary access to the Credit Facility has been reinstated and is set at 8 percentage points above the prevailing MoPR; the maturity of repos and reverse repos facility is reduced from 92 days to overnight; and the pool of eligible collateral for credit facilities provided to banks by the BoB is maintained to support listing on the BSEL, as well as liquidity of the market. Additionally, the suspension of provisioning for NPLs under the payment moratorium arrangements has been withdrawn.

Box 4.1: Approximating the Financial Cycle of Botswana

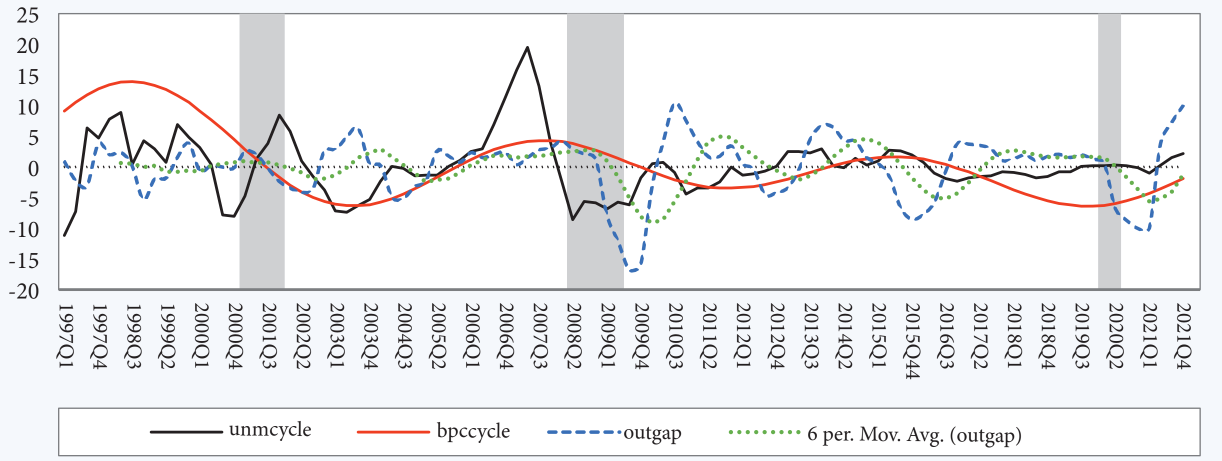
Background

In recent years, macroprudential policy has become a critical function for central banks and other regulatory authorities worldwide. In line with this trend, a Macroprudential Policy Framework for Botswana was adopted by the FSC in 2019. This framework is primarily focused on limiting systemic risk through adopting tools and instruments for intervention during periods of financial instability. In this context, the Bank is continually developing measures to enhance the assessment of financial stability risks. The latest developments relate to the measurement of the financial cycle for Botswana using credit and equity data, to provide insights on the risk-taking behaviour of economic agents at various phases of the financial cycle. This measure expands the macroprudential toolkit by enhancing the Bank's ability to identify and assess financial stability risks associated with the boom-bust phenomena of financial cycles.

Summary of Results

Three approaches, namely the turning point analysis, filter-based and the unobserved components approaches are used to estimate the financial cycle The tripartite methodology ensures that the results from the different approaches validate or provide robustness for one another The results show that the equity cycle generally drives most variations in the domestic financial cycle. Additionally, credit booms precede economic and or financial crises in line with existing literature. Finally, the analysis reveals a long and deep (larger amplitude) financial cycle than the domestic business cycle, proxied by the six-period moving average of the output gap, in line with international experience. The financial cycle for Botswana has a duration ranging between 6 to 15 years.

Chart B4.1 Financial Cycles (Percent)



Conclusion

The domestic financial cycle generally captures movements along the business cycle, with peaks reflecting the cumulative build-up of risks during booms that ultimately burst. Results further show that cyclicality in equity prices drive the local financial cycle, with movements along the equity cycle closely tracking the mean financial cycle. To that end, identifying the phases of the equity cycle, and the financial cycle in general, inform effective calibration of macroprudential tools to confront evolving risks to financial stability.

5. CONCLUSION AND OUTLOOK

5.1. Notwithstanding the challenges resulting from the 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 services 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 (i.e., 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 expansive TNDP, 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	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec
	2020				2021				2022			
Relative Size of Financial Sector (percent of GDP)[1]	100.2	99.7	99.4	149.6	129.3	129.3	129.3	129.3	115.3	126.9	111.7	12.8
Pension Funds' Assets (percent of GDP)	48.6	54.0	58.6	61.5	63.1	61.7	60.2	61.5	57.2	53.3	47.1	46.9
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	32.2	28.3	28.3
Corporate Sector (Percent)												
Corporate Sector Debt to GDP	13.2	13.6	13.1	13.1	12.8	12.6	12.5	11.9	11.7	11.8	9.4	8.3
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	24.2	23.2	22.5	21.9	21.1	20.0	19.6	18.3
Household Debt to Income	47.3	47.0*	47.0*	58.6	58.6*	58.6*	58.6*	45.0*	45.0*	45.0*	45.0*	37.9
NPL (household)	3.6	3.9	3.2	3.4	3.5	3.3	3.2	3.2	3.2	3.2	3.5	3.1
Real Estate (Percent)												
Mortgage Loans to Total Loans	20.0	20.1	20.2	19.6	19.3	19.0	18.7	19.3	18.1	18.3	18.1	18.0
NPL (mortgages)/Total mortgage loans	6.5	7.2	6.0	6.1	6.3	6.4	6.5	6.5	6.5	6.1	6.7	6.7*
Total Mortgage Loans/GDP	7.1	7.5	7.7	8.2	8.1	7.6	7.4	7.0	6.4	6.2	6.0	5.7
General Economic Indicators												
Economic growth	2.2	-5.3	-7.3	-8.7	-8.7	5.2	8.6	11.4	7.0	5.6	6.3	5.8
Inflation	2.2	0.9	1.8	2.2	3.2	8.2	8.4	6.7	10.0	10.3	13.1	12.2
Foreign Exchange Reserves (percent of GDP)	30.3	34.1	32.4	29.5	30.5	27.3	27.4	26.7	26.2	25.6	22.6	21.7
Current Account Balance (P' Million)	-3 791	-6 575	-3 848	-18 251	-11 684	-7 341	-1 449	-6 897	1965	5087	3577	…
Months of Import Cover	11.5	11.8	10.9	9.9	10.1	9.6	9.8	9.1	9.1	9.8	9.9	8.4
Exports (percent of GDP)	35.4	28.5	29.6	31.4	37.6	42.1	46.6	40.5	41.1	44.4	50.1	…
Imports (percent of GDP)	45.3	43.9	45.2	46.5	49.2	50.8	48.2	52.1	44.8	39.7	46.6	…
Government												
Government Debt to GDP	19.2	19.8	20.0	19.5	20.3	26.5	18.1	33.1	20.2	19.3	17.5	17.1
Government Debt to Revenue	53.9	61.0	63.1	74.4	103.8	51.5	47.5	19.1	62.6	50.4	…	…
Government Guaranteed Debt/GDP	4.5	4.6	4.8	4.8	4.4	4.5	4.2	4.0	3.9	3.3	2.9	2.7
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	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	0.0	0.0	0.0
Government Deposits to GDP	1.2	1.0	1.5	1.5	1.1	0.9	1.0	1.0	0.7	1.3	0.8	0.6
Government Expenditure to GDP	…	33.2	35.5	36.9	32.9	33.2	32.6	34.1	33.5	33.8	…	…
Government Employment to Total Employment	40.3	40.3*	40.3*	31.0	31.0*	31.0*	31.0*	30.8	30.8*	30.8*	30.8*	29.7

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

Note: … denotes data not available

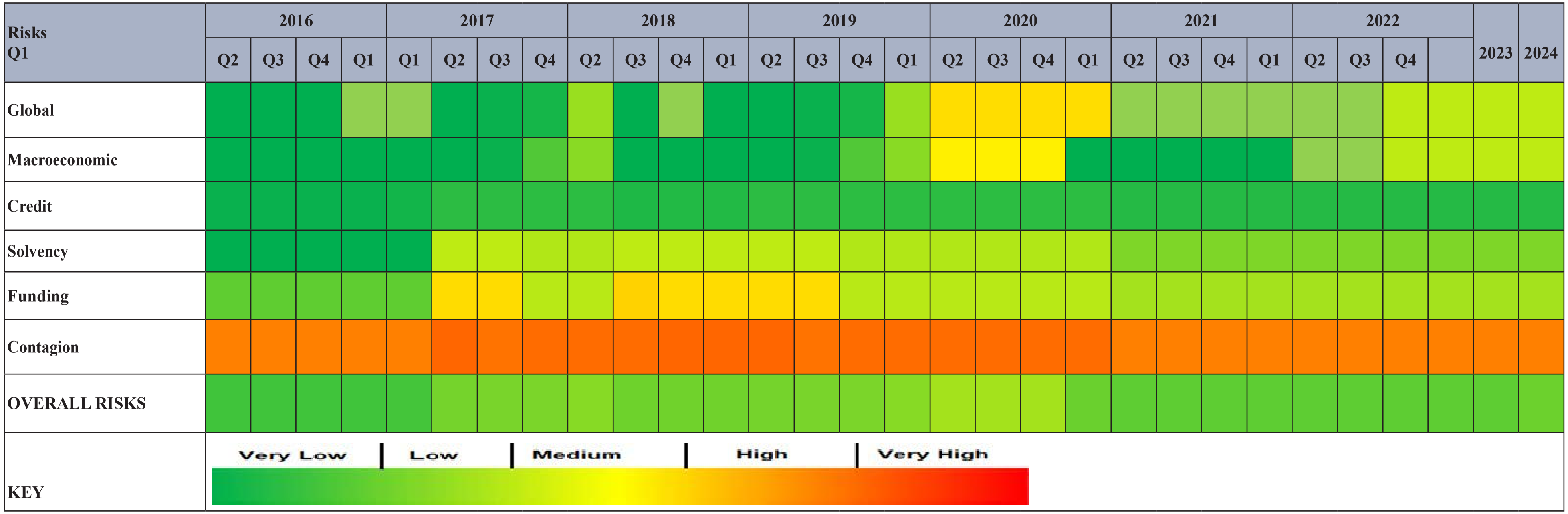
[1] Figures include commercial banks, statutory banks, and pension fund assets only

* Represents 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, including the two-year TNDP.	**Moderate**
High inflation Persistent high inflation that could lead to entrenched inflation 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 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 wholesale 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.	**Moderate**
Cybersecurity threat Rapid digitisation of payments and operations and processes (especially in the NBFI sector).	High ICT security implementation. High observance of 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 Bill, 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	2022
Banking	Number of branches and outlets	115	125	127	135	135	135	147
	Bank deposits/GDP (percent)	38	37.2	39	41.3	48	45.2	36.1
	Bank assets/total financial assets (percent)	39.9	39	42.8	42.7	41.5	42.3	44.4
	Bank assets/GDP (percent)	49.1	50.1	52.9	55.28	59.8	62	50.1
	Total number of deposits taking institutions	12	12	12	11	11	11	11
Insurance	Number of insurance companies (percent)	24	24	21	23	23	23	23
	Gross premiums/GDP (percent)	2.7	3	3.2	3.2	3.3	3.2	3.2
	Gross life premiums/GDP (percent)	1.9	2.2	2.4	2.2	2.5	2.4	2.4
	Gross non-life premiums/GDP (percent)	0.8	0.7	0.8	0.8	0.9	0.9	0.9
	Insurance assets/GDP (percent)	13.1	14.1	10.8	11.2	11.8	10.4	8.3
	Insurance assets/total financial assets	10.6	11	8.7	8.6	8.2	7.6	7.4
Pensions	Pension fund assets/total financial assets (percent)	37.1	40.4	38.3	40.3	42.3	42.9	41.5
	Pension fund assets/GDP (percent)	45.7	49.3	45.8	52.2	61	64.3	46.9
Mortgage	Mortgage assets/total financial assets (percent)	4.3	4.3	4.5	4.3	4.1	5.3	5.1
	Mortgage assets/GDP	7.8	7.8	7.8	7.8	8.3	7.8	5.7
Securities dealers	Total number of securities dealers	4	4	4	4	4	4	4
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	0.3
Foreign exchange markets	Adequacy of foreign exchange (reserves in months of imports)	17.4	17.1	14.7	12.1	9.8	9.1	8.4
	Foreign exchange reserves to short-term external debt	0.5	0.5	0.5	0.4	0.4	0.4	0.4
Collective investment scheme	Number of local unit trust and mutual funds*	6	6	5	6	6	6	6
	Local unit trust and mutual funds/total financial assets	0.7	0.7	0.7	0.7	0.8	0.8	0.8
Offshore investments	Offshore investments/total financial assets	22.3	24.4	21.3	24.1	26.9	28.6	25.1
	Offshore investments/GDP (percent)	27.5	31.4	26.3	31.2	38.7	42	28.3

Source: Bank of Botswana, NBFIRA, Botswana Stock Exchange
Notes: … denotes data not available
*these are unit trusts only

Table A4: Size of Selected Asset Markets

Indicator	2022 (P' Million)	Growth: 2021 - 2022 (Percent)	Average Growth 2018 - 2022 (Percent)
Equities	1 177	-35.2	7.2
Residential Real Estate	14 450	-0.85	2.1
Commercial Real estate	5 358	8.4	8.1
Treasury Securities	20 748	17.3	18.2
Investment-grade Corporate Bonds	3 961	-27.0	-21.2

Source: Bank of Botswana and Botswana Stock Exchange

Table A5: Interlinkages Data (December 2022)

Source	Target	Amount (P Billion)
Bank of Botswana	External	54.1
Commercial Banks	Households	47.8
Commercial Banks	Non-Financial Corporations	20.8
Commercial Banks	External	20.2
Commercial Banks	Bank of Botswana	4.8
Commercial Banks	Other Financial Corporations	3
Commercial Banks	Parastatals	1.5
Commercial Banks	Micro-lenders	0.9
External	Commercial Banks	5
Households	Other Financial Corporations	118
Households	Commercial Banks	18.8
Micro-lenders	Households	5.6
Micro-lenders	Commercial Banks	0.6
Non-Financial Corporations	Commercial Banks	35.3
Non-Financial Corporations	External	9.3
Non-Financial Corporations	Other Financial Corporations	4.1
Other Financial Corporations	External	71.3
Other Financial Corporations	Commercial Banks	25.9
Other Financial Corporations	Non-Financial Corporations	3.5
Other Financial Corporations	Households	0.3
Parastatals	Commercial Banks	7.5

Source: Bank of Botswana

Notes: Source indicates the sector with asset holdings in the target sector and vice-versa.

NOTES