FINANCIAL STABILITY REPORT

OCTOBER 2023

FINANCIAL STABILITY COUNCIL

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REPUBLIC OF BOTSWANA
MINISTRY OF FINANCE

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ABBREVIATIONS

AML/CFT	Anti-Money Laundering and Combating the Financing of Terrorism
AUM	Assets Under Management
BBI	Botswana Bond Index
BCBS	Basel Committee on Banking Supervision
BES	Business Expectations Survey
BIHL	Botswana Insurance Holdings Limited
BIS	Bank for International Settlements
BISS	Botswana Interbank Settlement System
BoBCs	Bank of Botswana Certificates
BPOPF	Botswana Public Officers Pension Fund
BSEL	Botswana Stock Exchange Limited
CAR	Capital Adequacy Ratio
CorpI	Corporate Bond Index
CPF	Counter Proliferation Financing
CRE	Commercial Real Estate
DCI	Domestic Company Index
DCTRI	Domestic Company Total Return Index
DIC	Deposit Insurance Committee
DISB	Deposit Insurance Scheme of Botswana
D-SIBs	Domestic Systemically Important Banks
D-SIFIs	Domestic Systemically Important Financial Institutions
DTI	Debt-to-Income
EFTs	Electronic Funds Transfers
EMDEs	Emerging Markets and Developing Economies
EPS	Electronic Payment Services
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
GovI	Government Bond Index

G-SIB	Global Systemically Important Bank
IMF	International Monetary Fund
IOSCO	International Organisation of Securities Commissions
ISO	International Organisation for Standardization
IT	Information Technology
LAR	Liquid Asset Ratio
LHS	Left Hand Side
LTV	Loan-to-Value
MoF	Ministry of Finance
MPC	Monetary Policy Committee
MoPR	Monetary Policy Rate
MVTSP	Money Value Transfer Service Providers
NAV	Net Asset Value
NBFIs	Non-Bank Financial Institutions
NBFIRA	Non-Bank Financial Institutions Regulatory Authority
NFCs	Non-Financial Corporates
NFS	Non-Financial Sector
NIIP	Net International Investment Position
NPL	Non-Performing Loans
NPS	National Payment System
OFCs	Other Financial Corporations
PFR	Pension Fund Investment Rule
RSA	Republic of South Africa
RHS	Right Hand Side
RMCI	Real Monetary Conditions Index
RPC	Regulatory Policy Committee
RSF	Resilience and Sustainability Facility
SACU	Southern African Customs Union
SARB	South African Reserve Bank
SCF	Standing Credit Facility
SDR	Special Drawing Rights
SDF	Standing Deposit Facility
SNB	Swiss National Bank
SOEs	State Owned Enterprises
STR	Suspicious Transactions Report
SSA	Sub-Saharan Africa
TNDP	Transitional National Development Plan
UK	United Kingdom
USA	United States of America
USD	United States Dollar
WEO	World Economic Outlook

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The October 2023 issue of the Financial Stability Report (FSR) was prepared by the Bank of Botswana (the Bank) in collaboration with the Ministry of Finance (MoF), the Non-Bank Financial Institutions Regulatory Authority (NBFIRA), the Financial Intelligence Agency (FIA), the Deposit Insurance Scheme of Botswana (DISB) and the Botswana Stock Exchange Limited (BSEL). The Report was approved for publication by the Financial Stability Council (FSC/Council), a statutory body established by the Bank of Botswana (Amendment) Act, 2022. The Council consists of five members, being the Governor of the Bank of Botswana (Chairperson); Permanent Secretary of the Ministry of Finance; Chief Executive Officer, NBFIRA; Director General, FIA; and Director, DISB; while the Chief Executive Officer, BSEL is an observer member, thus a non-voting member.

BANK OF BOTSWANA BANKA YA BOTSWANA

REPUBLIC OF BOTSWANA MINISTRY OF FINANCE

NBFIRA Non-Bank Financial Institutions Regulatory Authority

DEPOSIT INSURANCE SCHEME OF BOTSWANA DISB

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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/Council). 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 (that is 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 economic and trade disruptions induced by geopolitical tensions and economic fragmentation; 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 a statutory body as per Section 30 (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 signed in February 2019, and has since been subsumed into the FSC Charter.

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 **Global financial stability risks remain elevated** since April 2023, according to the October 2023 International Monetary Fund (IMF)'s Global Financial Stability Report (GFSR), due to high inflation, sustained tight financial conditions and debt sustainability. This outlook by the IMF is shared by the Financial Stability Board (FSB) Chair's letter to the G20 on September 5, 2023, and the 2023 Annual Report, which raised concerns about the high interest rate environment due to long and sustained monetary policy tightening, and higher debt servicing costs as risks to global financial stability. The 2023 Annual Economic Report of the Bank for International Settlements (BIS) indicates that the global economy has reached a critical juncture where policymakers are facing a unique combination of challenges on a global scale, with tight financial conditions having led to episodes of financial distress in some parts of the global financial system in March 2023, hence disarray for central banks in the pursuit of price and financial stability objectives. The BIS Quarterly Review of September 2023 asserts that the March 2023 banking crises in advanced countries brought renewed attention to bank deposits, with deposit funding rotating from the non-financial sector (NFS) to non-bank financial institutions (NBFIs) in the global market.

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 adjustments. The latest stress tests for banks, based on the June 2023 data, as well as a series of solvency and liquidity stress tests, together with sensitivity analysis of the banking sector by the Financial Sector Assessment Programme[1] 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, while financial market infrastructures remain stable and robust, thus promoting domestic financial stability. In the circumstances, macroprudential policy reactions or responses are not warranted. Meanwhile, the reversal of regulatory and prudential concessions granted during the COVID-19 pandemic was considered appropriate, following reopening of the economy and resumption of normal economic activities[2].

1.3 **Sovereign vulnerabilities relating to reduced fiscal and external buffers persist** due to the prevailing subdued global economic environment, combined with long-term structural trends, but the macroeconomic environment remains conducive for financial stability. In its October 2023 World Economic Outlook (WEO), the IMF projects that global growth will fall from an estimated 3.5 percent in 2022 to 3 percent in 2023 and 2.9 percent in 2024 on account of sustained high global interest rates, tight financial conditions, and geopolitical as well as geoeconomic fragmentation risks. Domestically, real gross domestic product (GDP) grew by 5 percent in the twelve months to June 2023, compared to a higher growth of 6.7 percent in the year to June 2022. The Ministry of Finance (MoF) expects real GDP growth to fall from 5.8 percent in 2022 to 3.8 percent in 2023, reflecting an anticipated decline in diamond production and prices this year, as well as the impact of weaker global growth on other exports. Economic activity, however, remains robust, supported by mining activity, and government interventions to facilitate productive capacity, accelerate structural transformation and an expansive Transitional National Development Plan (TNDP) and thus, anticipated to bounce back to 4.1 percent in the medium term.

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 5.5 percent in the year to August 2023 and was lower than the 6.2 percent growth in the corresponding period in 2022. The fall in credit growth is attributable to a lower uptake of loans by both households and businesses. Credit to households grew by 3.7 percent in the year to August 2023, and was lower than the 4.6 percent growth in the corresponding period in 2022 due to the decline in growth of personal unsecured loans during the

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[1] The Bank coordinated a joint IMF and The World Bank FSAP of Botswana, from June 2022 to March 2023. The FSAP is designed to assess the stability of the financial system and assist countries identify and remedy weaknesses in the financial sector, thereby enhancing resilience to macroeconomic and financial shocks. The previous FSAP for Botswana took place in 2007.

[2] 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 necessary, from time to time.

period under review. That notwithstanding, credit to households continued to dominate the commercial banks' loan book at 64.9 percent, but the credit quality was maintained, with a non-performing loans ratio (NPLs) of 3.6 percent in August 2023. Meanwhile, lending to the business sector increased by 9 percent in the year to August 2023, but was lower than the 9.5 percent growth in the corresponding period in 2022. However, the Credit-to-GDP gap, which is a measure of credit growth against its long-term trend, remained negative, indicating limited risks from credit growth that could overheat the economy.

1.5 **The average daily market liquidity in the banking system increased from P9.8 billion in August 2023 to P10.6 billion September 2023** due to an increase in the pace of government spending[3]. As a result, banks maintained a healthy liquidity position, with an above threshold average liquidity ratio of 18.4 percent. Consequently, 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 domestic financial system's resilience and stability, strong and concentrated sectoral linkages persist, and present a possibility for increased intersectoral risk transmissions. Effective regulatory and supervisory measures, which continue to evolve as authorities strengthen the financial regulatory landscape with new standards and institutional arrangements, such as the widening of financial safety nets in alignment with international best practice, as well as proper governance and accountability structures mitigate this risk.

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

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

2. FINANCIAL STABILITY DEVELOPMENTS AND TRENDS

(a) Global Financial Stability Trends

Risks to financial stability remain elevated

2.1 Concerns about rising inflation, financial instability in China, rising debt in many countries across the world, and sharp repricing of assets has the IMF, in the October 2023 GFSR, worried about persistent, tight global financial conditions. While the report notes that concerns about bank failures in March and April 2023 in advanced countries have dissipated, it warns of new challenges posed by potential reversal of optimism about disinflation and soft-landing of the global economy. In particular, the October 2023 GFSR notes that the impact of higher interest rates is beginning to be seen in some jurisdictions, and that this is evidenced by the squeeze in the repayment capacity of corporate and household borrowers. Nevertheless, the IMF acknowledges that central banks might need to keep interest rates high for longer to continue to anchor inflation expectations. Given uneven economic performance across the world, whereby advanced countries are seen to be coping well with tight financial conditions, while emerging and developing economies face sovereign financing challenges, the IMF urges monetary policy and macroprudential policy authorities to balance the risks of high inflation and higher interest rates and implement policy mixes suitable for their specific jurisdictions.

2.2 Although NBFIs are less prominent in emerging markets, they have become increasingly important in the global financial system over the past decade, hence vulnerabilities in the NBFI sector are a concern and could be exacerbated by high interest rates and deterioration in credit quality. The IMF notes that increased exposure to credit markets by investment funds make them susceptible to market disruptions, wherein large outflows would require fire sales of assets, whereas holdings of riskier lower-rated bonds and illiquid private credit assets by pension funds and insurers expose them to market stress in the event of sizable policy surrenders or margin calls. To mitigate the risk from NBFIs, the IMF calls for continued regulatory coordination and enhanced supervision of NBFIs. Critically, the IMF calls for the closing of data gaps, strengthening of disclosures, identification of systemic risks, and increased supervisory effort to rein in excessive liquidity mismatches and leverage in the NBFIs.

High interest rates and debt threaten financial stability

2.3 The FSB is concerned that high interest rates, sustained monetary policy tightening and apparent slow-down in global economic recovery, coupled with higher debt servicing costs pose risks to financial stability. To mitigate these risks, the FSB's letter to the G20 on September 5, 2023, called on authorities to closely monitor the asset quality of sectors which are sensitive to interest rate changes, such as the real estate sector, and ensure that risk exposures to those sectors are properly managed. The FSB, nevertheless, judges that the global financial system has remained relatively stable and resilient to shocks as demonstrated by the successful containment of bank crises in the United States of America (USA) and Europe in March 2023. The FSB attributes the resilience of the financial sector to post-global financial crisis reforms, although noting some institution-specific vulnerabilities relating to poor liquidity and interest rate risk management as well as governance lapses. In this case, strong and effective supervision is necessary, hence the FSB calls for full and consistent implementation of the Basel III framework to further strengthen the resilience of the banking sector.

The risk of financial stress remains high due to persistently high policy rates

2.4 The BIS's 2023 Annual Economic Report paints a more optimistic picture of the inflationary environment. It contends that inflation is generally subsiding from multi-decade highs in most economies, owing mainly to monetary policy tightening, improving supply chains, and falling commodity prices. However, BIS warns that global labour markets are still tight and price growth in the services sectors remains elevated. It therefore cautions that there is a risk that adaptive inflation expectations will take hold, where wage and consumer price increases start to reinforce each other, potentially leading to persistently high interest rates.

2.5 The BIS Report indicates that central banks tightening monetary policy against a backdrop of rising debt and asset prices, a legacy of risk-taking in financial markets when interest rates were low for long contributed to global bank closures in early 2023. In addition, the BIS quarterly report of September 2023 suggest that international banks' deposit has shifted from non-financial sector as main providers of bank funding to non-bank financial intermediaries (NBFIs) during the crises. The report postulates that the shift could be reflective of concerns about the health of the banking system or a search for higher yields. Moreover, it notes that deposit funding from NBFIs can be particularly sensitive to changes in market conditions and that, while fears of funding shortages in the March 2023 crises did not generally materialise, the continued changes to the composition of bank funding can have implications for financial stability.

Global economic growth to slow down in 2023

2.6 According to the October 2023 WEO, global growth will slow down from 3.5 percent in 2022 to 3 percent in 2023 and 2.9 percent in 2024. Growth remains slow and uneven, and it is challenged by growing global divergences. However, IMF is of the view that the global economy has been remarkably resilient against a plethora of challenges, which included the COVID-19 pandemic, Russia's invasion of Ukraine, the cost-of-living crisis and high interest rate environment. The global economic outlook remains uncertain amid prolonged high inflation, tight monetary conditions, geopolitical and economic fragmentation risks and increased debt vulnerabilities.

Regulatory framework for crypto asset activities produced

2.7 The FSB in July 2023 published the global regulatory framework for crypto asset activities to promote the comprehensiveness and international consistency of regulatory and supervisory approaches. Production of the framework recognises that crypto asset markets are fast evolving and could potentially represent a threat to global financial stability due to their scale, existing structural vulnerabilities, and increasing interconnectedness with the financial system. The FSB contends that risks from crypto activities are not confined to financial stability but can also filter into the macroeconomy to affect risks relating to monetary sovereignty, integrity of payments, capital flow volatility and fiscal policy. Under these circumstances, the FSB and IMF released a synthesis paper[4] detailing a comprehensive approach to identify and respond to macroeconomic and financial stability risks associated with crypto assets. The paper recommends a comprehensive regulatory and supervisory oversight of crypto assets as the baseline, and sets out a roadmap to ensure effective, flexible, and coordinated implementation of the policy response to crypto-related risks. It identifies nine elements that can help members develop a comprehensive, consistent, and coordinated policy response to crypto assets. The nine elements are meant to safeguard monetary sovereignty and stability by granting crypto assets official currency or legal tender status and introducing measured to guard against excessive capital flow volatility. In addition, authorities are to develop and enforce prudential, conduct, and oversight requirements for all crypto market actors and establish joint monitoring framework across different domestic agencies and authorities in addition to pursuing international collaborative arrangement aimed at enhancing supervision and enforcement of crypto asset regulations, develop digital infrastructures and alternative solutions for cross-border payments and finance.

FSB issues a framework on climate-related financial risks

2.8 Climate change continues to be a priority for global regulators and standard setting bodies. For instance, the FSB issued a "Climate-Related Financial Risk Factors in Compensation Frameworks" in April 2023[5] in effort to gauge, encourage and guide the incorporation of environmental, social and governance (ESG) aspects and drive accountability for delivering outcomes in financial institutions and decision making. In recognition of the need for a just and orderly green transition of the global economy, the GFSR calls for the development of a clear taxonomy of climate related financial risks, as well as a well-defined architecture of climate change that will enable rich analytical conclusions to inform policy. In addition, addressing climate financing needs in emerging market and developing economies requires significant financing and a comprehensive

[4] FSB and the IMF, 2023. IMF-FSB Synthesis Paper: Policies for Crypto-Assets https://www.fsb.org/wp-content/uploads/R070923-1.pdf

[5] See, https://www.fsb.org/wp-content/uploads/P204023.pdf

set of policies would be important for capital attraction. The Resilience and Sustainability Facility (RSF) of the IMF is expected to be a catalyst for private finance through its policy conditionality, supporting reforms that can help attract private capital.

The UK financial system remains resilient

2.9 The Financial Policy Committee of (FPC) of the Bank of England met on September 26 and October 5, 2023, to deliberate on the financial stability stance in the United Kingdom (UK). The responsibility of the Committee is to identify, monitor, and take action to reduce systemic risks with a view to protecting and enhancing the resilience of the UK financial system. The FPC concluded that the overall risk environment continues to be challenging, and near-term global growth prospects remain subdued. Long-term interest rates, particularly in the USA, have risen to materially higher levels, and there is significant uncertainty. Risks to the outlook for growth and inflation a, and from geopolitical tensions remain, thus increasing vulnerability to some parts of the banking system and financial markets. Furthermore, higher interest rates continue to weigh on the ability of households and businesses in advanced economies to service and refinance their debts, but UK banks remain in a strong position to support borrowers should they face difficulties servicing their debts. UK banks are generally judged to be well capitalised, liquid, profitable and resilient to the negative economic outlook and have the capacity to support households and businesses even if economic and financial conditions were to be substantially worse than expected.

(b) Regional Financial Stability Trends

Risks to financial stability in South Africa are elevated

2.10 The SARB's Financial Stability Review (1st Edition 2023) indicates that systemic risk increased since the previous review in November 2022, mainly due to further monetary policy tightening, global banking turmoil, volatile financial markets, and downward revisions of domestic and global economic growth projections. Lingering recession fears and geopolitical tensions, as well as domestic issues such as the threat of a national power grid failure due to repeated power outages contributed to heightened systemic risk. Notably, persistent underlying vulnerabilities to the financial system include lower liquidity in bond markets, low borrowing and high saving by corporates, highly indebted households, and a high level of government debt.

SARB financial stability mandate enhanced

2.11 The SARB in its endeavour to promote the robustness of the financial system in South Africa established the deposit insurance entity (Corporation for Deposit Insurance) as a legal entity with effect from March 24, 2023, through the Financial Sector Laws Amendment Act 23 of 2021, which commenced on March 24, 2023. The amendment Act facilitates the implementation and operationalisation of the resolution and deposit insurance frameworks, among others.

Sub-Saharan Africa outlook projected to decline

2.12 The October 2023 WEO estimates that economic output in Sub-Saharan Africa (SSA) will decline to 3.3 percent in 2023 before picking up to 4.0 percent in 2024. This is a downward revision of 0.2 percentage points and 0.1 percentage points, respectively, from the July 2023 WEO Update forecasts. The outlook for SSA reflects, in part, worsening weather shocks, the global slowdown, and domestic supply issues, including, in the electricity sector. For Emerging Market and Developing Economies (EMDEs), growth is estimated at 4 percent in both 2023 and 2024, however, with divergences in economic performance across countries. For instance, in China, growth is projected to moderate, owing, in part, to the property market crisis, while in India growth is anticipated to remain resilient due to stronger than-anticipated consumption. The IMF estimates that the two largest economies in the region, Nigeria and South Africa will grow by 2.6 percent and 1.6 percent, respectively, in 2023.

(c) Domestic Financial Stability Trends

The domestic financial system resilient

2.13 The Financial Stability Council (FSC/Council) met on November 2, 2023, to assess conditions in the financial sector, related developments, and vulnerabilities, evaluate emerging and prospective issues, and to consider the need for policy and regulatory responses, with a view to ensuring maintenance of financial stability. The Council concluded that the domestic financial system continues to be resilient to a wide range of shocks, including vulnerabilities emanating from credit, liquidity, and funding concentrations, as well as interest rate risk as evidenced by the stress test results. Vulnerabilities in the financial and non financial sectors are generally contained. The resilience and effectiveness of the financial system in providing financial services to the economy is anchored on strong capital and liquidity buffers, profitability, continuous innovation, and adaptability, as well as an enabling and robust regulatory environment.

Risks to domestic financial stability remain

2.14 The FSC observed that risks to financial stability mainly relate to global and regional developments and include maintenance of high interest rates to combat inflation and, therefore, adversely affecting debt service and sustainability for sovereigns (governments), businesses and households; the threat to viability of banks with business models premised on maintenance of low and stable interest rates; as well as economic and trade disruptions induced by geopolitical tensions and economic fragmentation. Therefore, robust monitoring of risks and vulnerabilities was essential and, where necessary, appropriate macroprudential policies should be implemented to restore financial stability.

The MoPR maintained at 2.65 percent

2.15 The October 2023 MPC meeting maintained the Monetary Policy Rate (MoPR) at 2.65 percent. Headline inflation increased from 1.2 percent in August to 3.2 percent in September 2023, reverting to within the Bank's medium term objective range of 3 – 6 percent. The MPC observed low inflationary pressures emanating from base effects associated with the dissipating impact of the increase in domestic fuel prices in the corresponding period in 2022, as well as the impact of downward adjustment of domestic fuel prices on June 21, 2023. Overall, the MPC projected the economy to operate below full potential in the short-term and, therefore, not generate any demand driven inflationary pressures. Concomitantly, 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).

Botswana responds to climate change

2.16 Climate change risk has increased as demonstrated by the persistence and intensity of droughts, heatwaves, and floods. The ploughing period for 2022/23 was, for example, declared a drought year due to erratic weather patterns that have resulted in poor crop yields. As a result, the Government of Botswana has adopted relief measures to cushion the society and farmers from the economic consequences of the drought, with implications on the fiscus. In addition to adaptation and mitigation of climate change, Botswana is also poised to embark on a green transition in a manner that adds to economic, social, and external sustainability. The notion of a green economy creates new focus on the economy, investment, capital and infrastructure, employment and skills and positive social and environmental outcomes. As discussed in the Bank's 2022 Annual Report theme chapter[6], climate mitigation and transition to a green economy presents endless opportunities that have the potential to drive economic performance and diversification, in the process, generating sufficient fiscal resources to avert sovereign risks and economic challenges in general. Botswana's adaptation to climate change is anchored on the National Climate Change Strategy for Botswana and the TNDP identifies climate change as a national priority. In these circumstances, the government continues to explore ways to fund the green transitioning and support climate mitigation strategies. These efforts provide impetus for the development of frameworks for measurement and management of climate-related risks in domestic financial markets.

[6] https://www.bankofbotswana.bw/sites/default/files/publications/Annual%20Report%202022.pdf

Illegal deposit taking on the rise

2.17 There is a growing concern on rising misconduct risk in the crypto assets market. During the period January to September 2023, a total of 550 suspicious transactions reports (STRs) were reported to the Financial Intelligence Agency (FIA) and these were mostly by banks, followed by money value transfer service providers (MVTSP). Most of the reports of reports pointed to illegal deposit taking by unlicensed entities and individuals, where funds were solicited from the public with a promise to invest in virtual assets. A chunk of STRs reported by MVTSPs mostly related to fund transfers suspected to be for illicit drug trade, while others were scam related. The total value of suspicious transactions reported was P335.2 million. The domestic crypto asset market is still at infancy and relatively unsophisticated, 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 of 2022 was enacted to regulate trade in virtual assets.

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 percent in the twelve months to June 2023, compared to a higher growth of 6.7 percent in the year to June 2022. The slowdown is mainly attributable to the deceleration in mining sector production. Mining sector GDP grew by 7.3 percent in the year ending June 2023. This is a notable deceleration from the 16.4 percent recorded in the year to June 2022, due to a slower growth in output of most sub-sectors, led by mining of diamonds. Output of mining sub-sectors such as mining of gold, mining of soda ash and salt, other metal ores and mining support services activities decreased in the year to June 2023. MoF projects the economy to grow by 3.8 percent in 2023 and by 4 percent in the medium term, supported by the continued recovery of mining activity. Meanwhile, results of the September 2023 Business Expectations Survey (BES) show that firms expect output to grow by 4.3 percent in 2023 and this coincides with IMF projections, but higher than the 3.8 percent projected by the Ministry of Finance for the same period.

3.2 The preliminary budget outturn for the 2022/23 fiscal year was a surplus of P0.1 billion compared to the earlier envisaged deficit of P4.9 billion. The better than envisaged revenue performance continued in to the 2023/24 fiscal year, as government recorded a budget surplus of P5.1 billion in the first quarter (June 2023). A deficit of P7.6 billion is expected for the 2023/24 fiscal year, mainly associated with the 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[7]. The expected 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 increased to P45.6 billion in the first quarter of the 2023/24 fiscal year (June 2023) compared to P42.0 billion in June 2022 but was less than P46.1 billion recorded at the end of the 2022/23 fiscal year (March 2023). Government debt remains within the statutory limit and sustainable at 18.6 percent of GDP in June 2023, compared to 19 percent in June 2022. The MoF intends to keep debt sustainable even after accounting for the increasing debt service obligations due to the recent acquisition of new external loans. Parliament approved a bill to borrow an additional USD179.66 million from the African Development Bank towards financing the economic recovery support programme in August 2023. Despite the increase, government debt is expected to remain below the statutory limit.

New fiscal policy rule under consideration

3.4 In line with the 2022 Budget Speech and as envisaged in National Development Plan 11, Government is considering implementing a fiscal rule to specify the percentage of mineral revenues that should be spent on capital formation and a percentage that will be saved for future generations. The current proposal is that 60 percent of mineral revenue should be allocated to investment and 40 percent to intergenerational financial savings, with recurrent expenditure financed solely by non-mineral revenue. The proposed fiscal rule, together with measures to stem large budget deficits, and efforts to promote debt sustainability, are developments which are in tandem with promotion of financial stability.

(b) External Sector Vulnerability Assessment

Botswana susceptible to external sector shocks

3.5 The external sector presents the greatest potential for elevated financial stability risks to the domestic economy due to a narrow export base and significant dependence on trade revenues, that is, the Southern African Customs Union (SACU) receipts and mineral export revenue. Nevertheless, the external position of the country improved in 2022 to a surplus of P4.5 billion from a deficit of P2.9 billion in 2021, due to strong diamond exports and

[7] 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.

capital inflows. In 2023, the current account is expected to continue benefiting from higher transfers from the SACU revenue pool and a recovery in diamond sales. However, a possible slowdown in some advanced economies and a period of global financial tightening threaten this position.

External buffers low but recovering

3.6 The foreign exchange reserves were estimated at P68.4 billion in August 2023, an increase of 26 percent from P54.5 billion in August 2022. In foreign currency terms, the level of foreign exchange reserves increased by 22 percent from USD4.1 billion to USD5.0 billion and by 25 percent from SDR3.2 billion to SDR4 billion over the same period. This level of foreign exchange reserves was equivalent to 9.5 months of import cover of goods and services. The external buffers are expected to continue on a recovery path due to fiscal consolidation efforts, government plans to compress the importation bill and recovery in market conditions.

NIIP positive but declining

3.7 The net international investment position (NIIP), viz., foreign assets less foreign liabilities, reduced to P67.5 billion in 2022 from P83.8 billion in 2021. The country's foreign assets are significantly made up of portfolio assets by the pension funds followed by foreign exchange reserves and expected to decline further following the repatriation of pension assets under the new pension rules. The downward trend in the net investment position implies less external sector resilience, which may culminate into weaker domestic financial stability safeguards. At the same time, significant exposure to external markets exposes Botswana assets to external shocks, although providing the needed diversification benefits.

(c) Credit Growth and Leverage

Commercial Banks

Moderate growth in overall commercial bank credit

3.8 Annual growth in commercial bank credit increased by 5.5 percent in August 2023, and was lower than the 6.2 percent growth registered in August 2022. The fall in the rate of credit growth was attributable to decreased overdraft credit utilisation and revolving credit facilities, as well as some loan repayments. Meanwhile, household credit grew by 3.7 percent in August 2023, lower than the 4.6 percent growth recorded in the corresponding period in 2022 (Chart 3.2a) on the backdrop of a decline in growth of personal unsecured loans and credit card-based loans during the period under review. The drawback in household credit growth, in part, reflects the effects of the Bank's 2022 policy tightening on credit demand and to some extent, rationed supply of credit to avert potential losses associated with increased cost of credit.

3.9 That notwithstanding, the inherently expensive unsecured loans still dominate household credit at 66.9 percent (Chart 3.2b), which presents potential debt distress to households, especially when financial and borrowing conditions could suddenly and sharply tighten. Overall, household credit still dominated total credit at 64.9 percent against 35.1 percent for business credit (Chart 3.1b).

Composition of Banking Sector Loans[1]

Household loans dominate commercial banks' loan portfolio

Chart 3.1a: Sectoral Loans-to-GDP

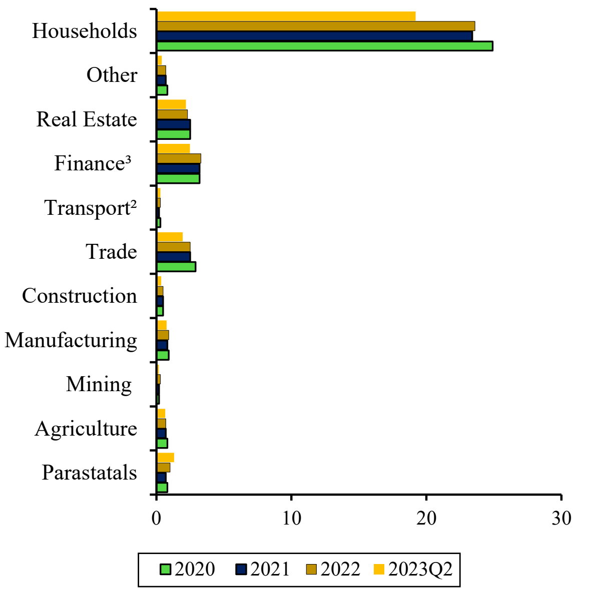
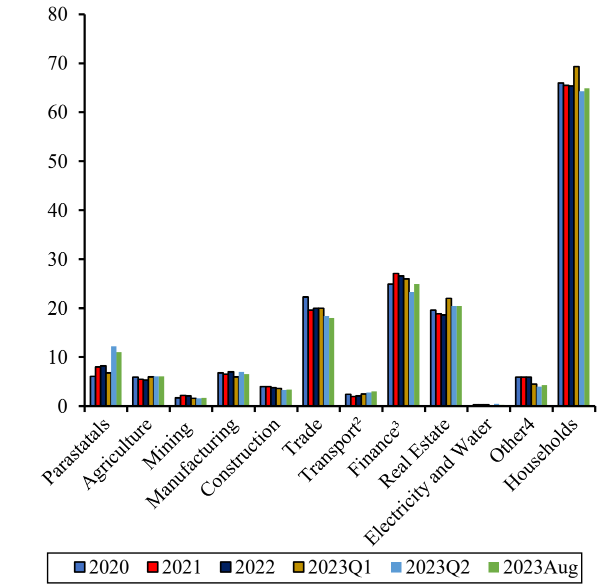


Chart 3.1b: Sectoral Loans-to-Total Loans



Notes:

[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.

Source: Bank of Botswana

3.10 Generally, credit growth is judged to be in increased, disciplined, and prudent credit extension to support economic activity

Increasing household borrowing capacity

3.11 The proportion of household debt to income was estimated at 39.7 percent in the fourth quarter of 2022, a decrease from the 45 percent in the same period in 2021[8] (Chart 3.2c). This trend implies increasing borrowing capacity and ability to repay financial obligations, which remains relatively strong when compared to the 62.8 percent and 69.5 percent for South Africa and Namibia, respectively[9]. Moreover, the results of the Household Indebtedness Survey indicate that household debt posed minimal risks to financial stability in 2022 (Box 3.2). The quality of the household loan book, for the largest credit provider (banks), was relatively good and credit extension remains positive for economic activity and wealth creation. The results of the Survey show that households had debt-to-income (DTI) and debt-service-to-income ratios of 58 and 60 percent, respectively. Based on the two metrics, households in Botswana are less indebted compared to countries in the region, for example, South Africa and Namibia, which reported a DTI of 62.8 percent and 69.5 percent, respectively.

3.12 On the other hand, the household portfolio exhibited a modest credit quality with an NPL ratio of 3.3 percent in September 2023 (September 2022: 3.5 percent), which was lower than the banking industry average of 3.8 percent (Chart 3.2c).

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

[9] Namibia Financial Stability Report April 2022 and SARB Quarterly Bulletin December 2022.

Table 3.1: Household Net Worth

Asset	2022Q1 (P' million)	2022Q2 (P' million)	2022Q3 (P' million)	2022Q (P' million)	2023Q1 (P' million)	2023 Q2 (P' million)	2023 Aug (P' million)
Retail deposits	18 025	19 391	18 491	18 028	19 033	20 082	20 251
Pensions	116 314	112 990	113 474	117 955	124 348	130 542	131 560
Insurance contracts	10 446	10 446	10 446	10 446	10 446	10 446	10 446
Mortgage property	10 598	10 543	10 599	10 662	13 593	13 526	14 793
Motor vehicles	2 016	2 002	1 986	2 014	2 111	2 110	2 159
Cattle value	3 500	3 500	3 500	3 500	3 500	3 500	3 500
Equity investment	66	66	66	66	66	66	66
Total assets (a)	164 590	158 938	158 562	162 671	173 124	180 273	182 775
Total household debt (b)	51 988	52 275	53 176	53 697	53 404	53 489	53 848
Total household net worth (a) – (b)	**112 936**	**106 663**	**105 387**	**108 973**	**119 720**	**126 784**	**128 926**
Total household net worth as a share of GDP (Percent)	**58.9**	**51.7**	**43.7**	**43.3**	**46.1**	**47.8**	**N/A**

Source: Bank of Botswana, Botswana Stock Exchange Limited and Statistics Botswana

Notes: Figures in italics are estimates.

Household Debt Analysis

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

Chart 3.2a: Growth in Household Debt (Percent)

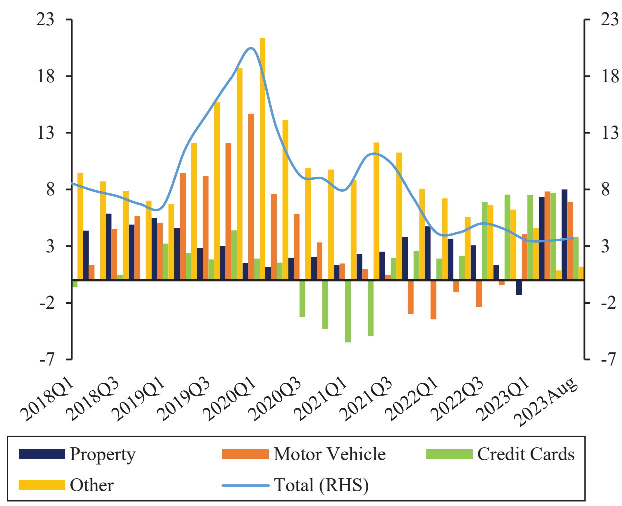
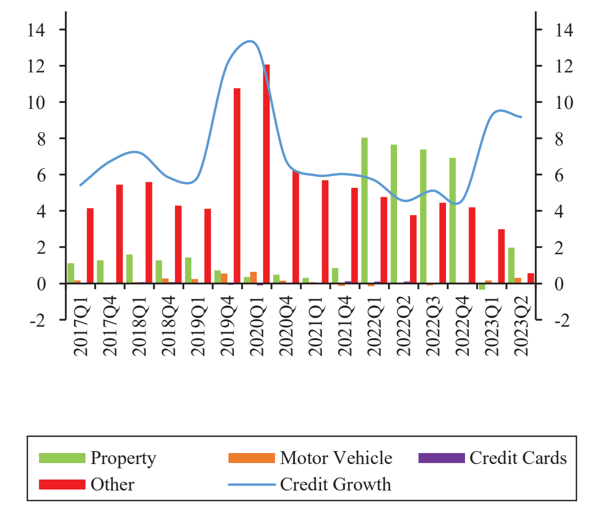
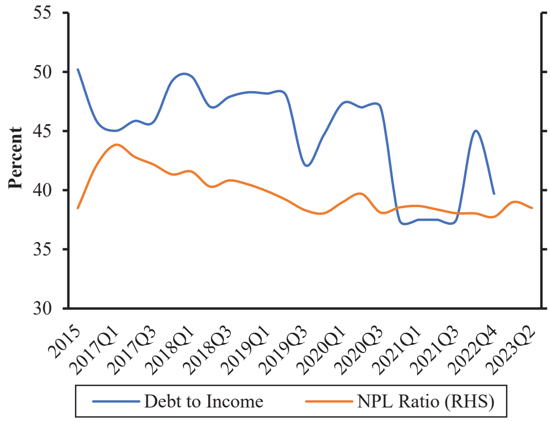


Chart 3.2b: Contribution-to-Credit Growth



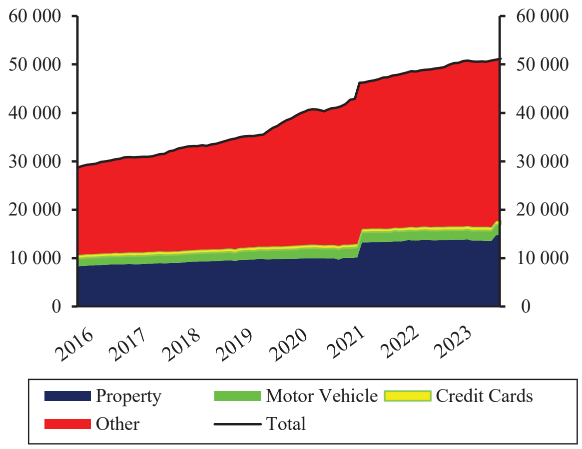
Both the debt burden and default rates are decreasing

Chart 3.2c: Debt-to-Income vs NPL Ratio



Personal loans dominate household debt

Chart 3.2d: Composition of Household Debt (P Million)



Source: Bank of Botswana

Box 3.1: Tools for Assessing Excessive Credit Growth

Background

One of the objectives of macroprudential policy is to mitigate systemic financial stability risks, which are sometimes precipitated by excessive credit growth. Credit growth that is out of line with trends in economic growth often leads to the build-up of systemic risks to financial stability, which may trigger banking crises. It is, therefore, important to monitor growth in credit. In this regard, the Bank is continually developing and adopting means and tools of assessing whether or not credit growth is excessive. Currently, the Bank measures excessive credit growth based on the indicative range for credit growth and the Credit-to-GDP Gap.

The Indicative Range for Credit Growth

The Bank calculates an indicative range for an acceptable level of credit growth (i.e., credit growth, which is not excessive, and is unlikely to lead to the 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 5.5 percent in August 2023, and was lower than the 6.2 percent growth in August 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.

Credit-to-GDP gap was negative at –5.6 percent, and below the 10 percent threshold in June 2023 (Chart B3.1a). The low Credit-to-GDP gap reflects room for sustained economic expansion.

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

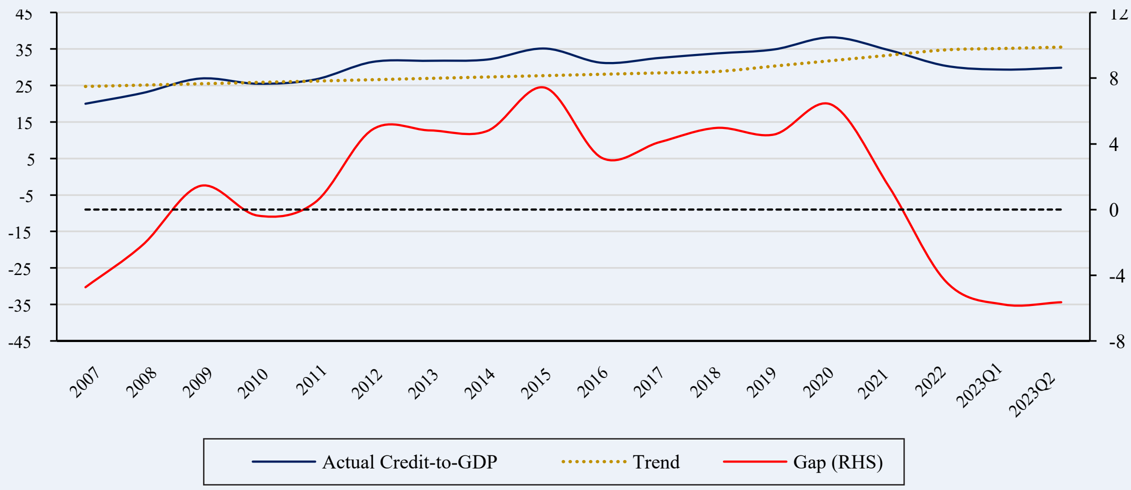


Chart B3.1b: Household Credit-to-GDP Gap (Percent)

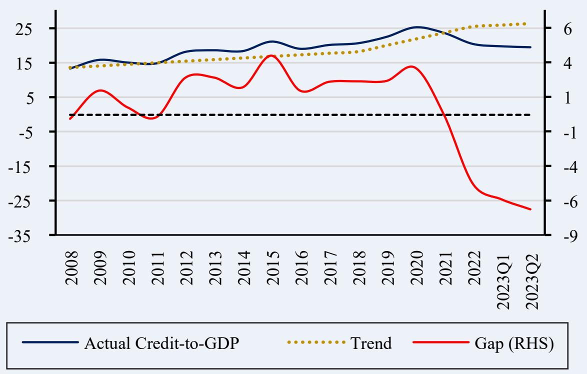
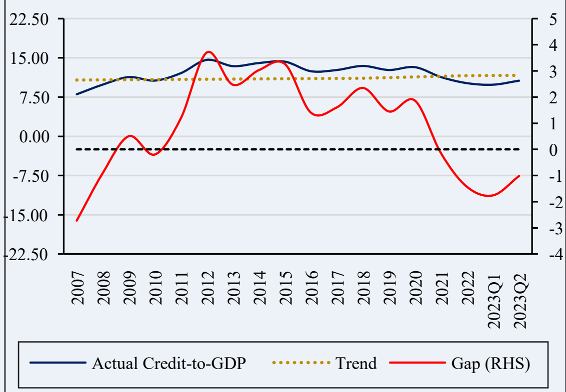


Chart B3.1c: Business Credit-to-GDP Gap (Percent)



Source: Bank of Botswana

Box 3.2: Summary of the 2022 Household Indebtedness Survey

Introduction

In recent years, the Bank has observed that commercial bank lending is highly concentrated in the household sector, and particularly on unsecured loans. This concentration has the potential to undermine financial and economic stability in the event of wide-spread employment losses. With a view to enhance understanding of household borrowing across the full spectrum of the financial system, the Bank has undertaken to conduct an annual household indebtedness survey covering banks, micro-lenders and hire purchase stores.

The Survey was undertaken in the context of tightening global financial conditions amid price pressures resulting from the consequences of the Russia-Ukraine war and global fragmentation on account of heightened geopolitical tensions, disrupting global value chains. However, the domestic macroeconomic environment was characterised by relatively strong economic performance despite heightened inflationary pressures and monetary policy tightening by the Bank.

Summary of Findings

As at December 2022, estimated total household debt was relatively unchanged at P58.3 billion, comprising P46.5 billion (79.8 percent) commercial bank loans, P11.7 billion (20.1 percent) micro-lender loans and P67.5 million (0.1 percent) being hire purchase loans. As a percentage of GDP, total household debt was 23.2 percent; a significant decline from the 29.9 percent reported in 2021. Furthermore, the results of the Survey show that households had debt-to-income (DTI) and debt-service-to-income ratios of 58 and 60 percent, respectively. Based on the two metrics, households in Botswana are less indebted compared to other countries, for example, South Africa and Namibia, which reported a DTI of 62.8 percent and 69.5 percent, respectively.

Consistent with the findings of past surveys, the demographic profile of the respondents shows that borrowing by households is dominated by males and persons aged between 30 and 49 years. This is consistent with the Quarterly Multi-Topic Survey for December 2022, which found that a higher proportion of the labour force comprises men (48.1 percent) compared to women at 41.3 percent. Nevertheless, it is necessary that the Bank and the Government, together with the private sector, continue to pursue policies and strategies that promote gender-balanced financial opportunities to support a sustainable and inclusive economic growth model.

A breakdown of household borrowing by income groups shows that banks and micro-lenders lend mostly to clients with average monthly earnings between P9 001 and P15 000, followed by those earning between P15 001 and P25 000. For banks, high income earners (more than P35 000) make up the bulk of the loan portfolio, while low-income earners (less than P3 000) dominate total micro-lender loans.

Considering the distribution of loans by employment source, banks have the highest amount of loans with government employees, while micro-lenders lend mostly to private sector employees and the unemployed. Furthermore, private sector employees' bank loans are spread across customers with different employment (not just government) and the diversity has the potential to alleviate credit losses in the event of widespread private sector stress. The Survey also finds that of all total household loans, an average of 57 percent are scheme loans, and 63 percent of those have deduction from source arrangements. The deduction from source arrangement contributes to the stability of the loan book and a relatively high-quality credit portfolio. This is supported by the low risk of widespread employment losses by government and private sector employees.

Default rates were generally low for banks in 2022, with the non-performing loans to total loans ratios ranging from 1 percent to 7.3 percent. Most of the banks assessed the default rates for 2022 to be medium, and to slightly improve expected in 2023. The optimism surrounding household loan performance was due to anticipated increases in household income and increasing economic activity.

On the cost of borrowing, interest rates charged on micro-lenders and hire purchases reduced from an average of 29 percent in 2021 to an average of 27 percent in 2022. Prime lending rates for mortgages and motor loans were lower at 12.8 percent and 13.1 percent, respectively, and generally reflected the low and stable interest rate environment experienced during most of 2022. Overall, credit card loans are the most expensive, with a maximum prime lending rate of 42.6 percent, followed by unsecured loans with a maximum of 28.8 percent.

Conclusion

Generally, the Survey suggests that the level of household indebtedness in 2022 posed minimal risks to financial stability. Credit was largely extended to the clientele that had the most secure jobs and the quality of the household loan book, for the largest credit provider (banks), was relatively good. To that extent, credit extension remains positive for economic activity and wealth creation, albeit costly for some categories of loans.

3.13 Moreover, households are net savers when considering their non-discretionary contractual pension savings. Pension assets are important for mortgage debt relief under the Retirement Funds Act of 2022, but also improve the long-term financial welfare of households and, in general, underpin wealth creation and financial security for retirees. Table 3.1 indicates a positive net worth of households, which underpin a good financial standing. Nevertheless, household net worth as a percentage of GDP fell to 47.8 percent in the second quarter of 2023 from 51.7 percent in the second quarter of 2022 due to a slower increase in net worth, compared to the growth in GDP.

Credit to the Non-Financial Corporate Sector

Corporate sector exposures increase

3.14 Total commercial bank credit to the non-financial corporate sector increased by 9.7 percent, from P22.7 billion in August 2022 to P24.9 billion in August 2023. The proportion of corporate loans to total commercial banks' credit rose from 30 percent to 31.2 percent over the same period. Relative to GDP, bank credit to the corporate sector was 10.6 percent in June 2023, compared to the 10.9 percent in June 2022, reflecting room for prudent credit extension to support business activity and, in turn, economic growth. The corporate debt to GDP is fairly small, compared to South Africa's 32 percent in December 2022[10] and Namibia's 72 percent at the end of 2022[11].

Corporate sector recovering but challenged by rising leverage

3.15 Selected financial soundness indicators of corporates listed on the Botswana Stock Exchange (BSE) indicate improved sector performance. Profit before and after tax increased, resulting in an increase in the return to equity (Chart 3.3a). 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 3.3b). 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 3.3d). The increased leverage could cause corporate debt overhang and distress, especially in the context of tight financial conditions amid inflationary pressures. Nevertheless, the quality of corporate sector loans improved, with an NPLs ratio of 5.1 percent in September 2023 (September 2022: 4.8 percent), albeit still higher than the banking sector average of 3.8 percent.

[10] SARB Financial Stability Review, First Edition 2023.

[11] Namibia Financial Stability Report, April 2023.

Corporates Indicators

Profitability for NFCs is increasing since the COVID-19 pandemic

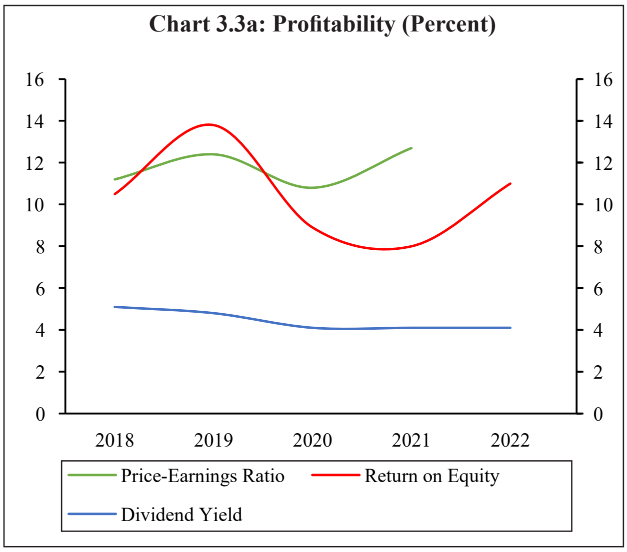


Chart 3.3a: Profitability (Percent)

The cost of production has been increasing since the COVID-19 pandemic

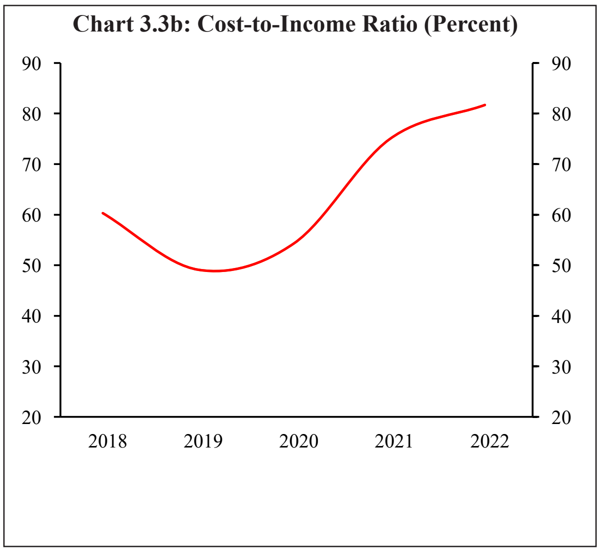


Chart 3.3b: Cost-to-Income Ratio (Percent)

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

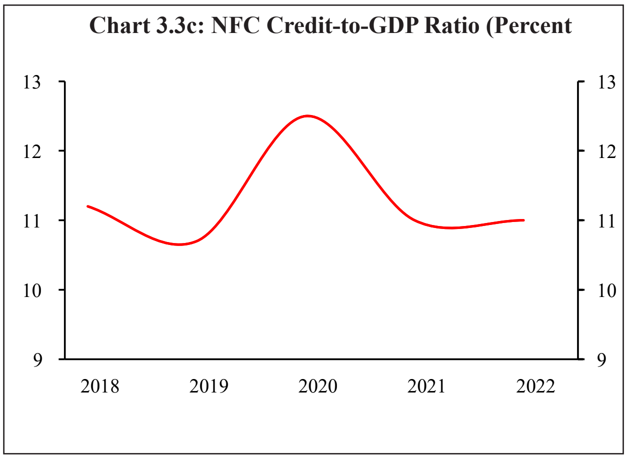


Chart 3.3c: NFC Credit-to-GDP Ratio (Percent

Leverage is increasing for the corporates

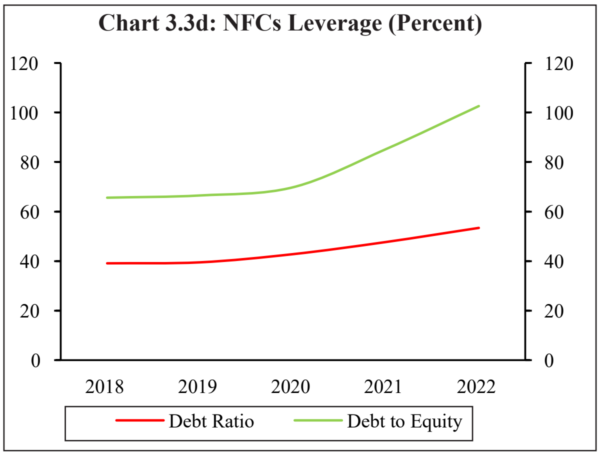


Chart 3.3d: NFCs Leverage (Percent)

Source: Botswana Stock Exchange Limited

Firms optimistic about business conditions

3.16 The results of the September 2023 BES suggest that firms were more optimistic about business conditions in the third quarter compared to the second quarter of 2023, as well as in the 12-month period to September 2024, consistent with the anticipated continued domestic economic recovery. Firms expect cost pressures to be elevated in the third quarter of 2023, attributable to relatively high fuel prices. However, firms expect inflation to decline to within the Bank's 3 – 6 percent objective range in 2023 and remain there in 2024. As such, firms plan to increase the volume of borrowing from all markets in the 12-month period to September 2024. This is consistent with the expected rise in investment, production capacity, sales volume, and profitability and the anticipated improvement in domestic economic performance.

Credit to the Real Estate Sector

Limited risks from commercial real estate

3.17 Credit to the commercial real estate (CRE) increased to P5.8 billion in August 2023, from P5.7 billion in August 2022 and constituted 7 percent of total loans (Chart 3.4b). The CRE sector has maintained a moderate level of NPLs (June 2023: 3.7 percent) and, coupled with the minimal exposure, poses limited risks to domestic financial stability. There are, however, outstanding concerns about concentration (location) risk given that most loans finance properties in or around Gaborone[12].

Mortgage lending short of development needs

3.18 Residential real estate loans slightly increased to P14.8 billion in August 2023 from the P10.6 billion in August 2022, constituting 29 percent of total household credit and 18.8 percent of total credit (Chart 3.4a). These proportions compare unfavourably with RSA and Namibia, where mortgages constituted 61 percent and 70 percent, respectively, of total household loans, thus suggests that the level of domestic 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[13] . 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).

Property Market Developments

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

The proportion of CRE loans in total loans is stable and the NPL ratio is volatile

Chart 3.4a: Mortgage Loans

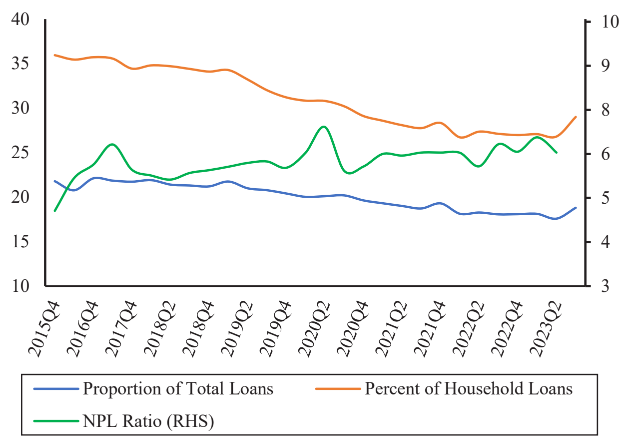
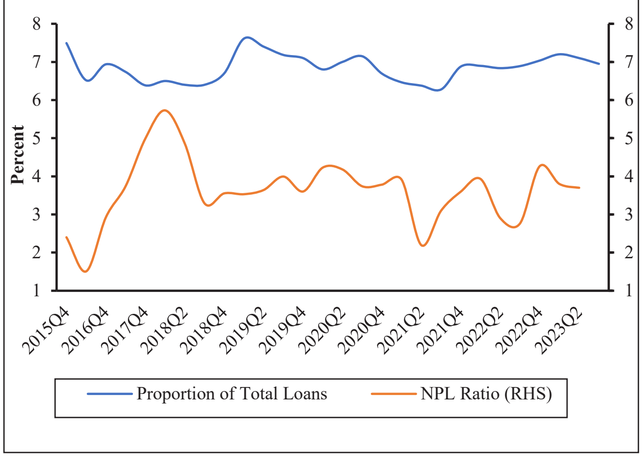
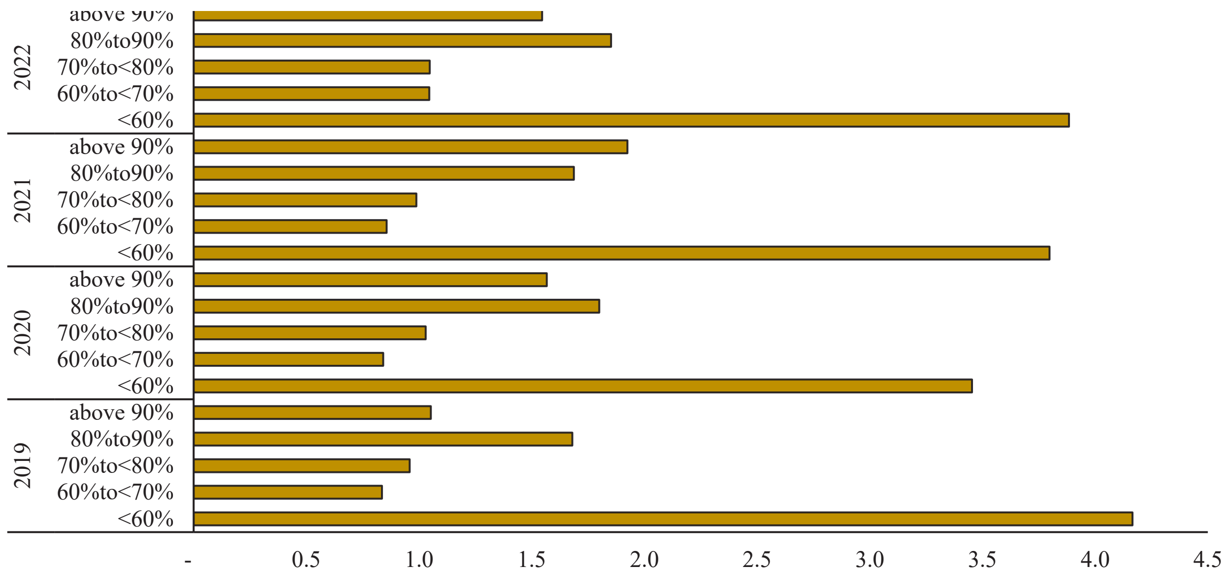


Chart 3.4b: Commercial Real Estate Loans



Source: Bank of Botswana

Chart 3.5: Distribution of Mortgages by LTV Ratios



Source: Bank of Botswana

[12] Bank of Botswana Residential Property Survey Report (Second quarter of 2022) and Riberry Property Market Report, June 2023.

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

Limited credit risk from mortgage lending

3.19 Credit risk in the mortgage sub-sector remains low, with commercial banks maintaining moderate Loan-to-Value (LTV) ratios, although the ratios have reached 105 percent in some isolated cases (Chart 3.5). The moderate LTV ratios, as well as security in the form of property financed limit the expected losses of banks from mortgage credit default. The proportion of impaired mortgage loans to total mortgage increased from 6.1 percent in June 2022 to 6.5 percent in June 2023, possibly due to the increase in mortgage lending rates following the policy tightening in 2022, which consequently increased the household debt burden. However, 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

3.20 NBFIs remain generally safe and sound, although several compliance enforcement actions were undertaken. Compliance enforcement actions increased by 45 percent from 11 to 16 in the period between March and June 2023. The increase was led by the insurance sector, which recorded 11 actions (69 percent), followed by capital markets which recorded 3 actions (19 percent). The most common actions during the period were administrative penalties, at six actions, followed by warnings with 4 actions. During the reporting period, one insurance entity was put into statutory management, while two insurers were subjected to Fit and Proper enforcement actions. NBFIRA continues to monitor NBFIs to ensure compliance and maintain financial stability.

NBFIs highly interconnected with the rest of the financial system

3.21 NBFIs are interconnected with the rest of the financial system through multiple channels, such as deposits held with banks, funding avenues and capital market activities. In August 2023, NBFIs had a net lending position to commercial banks (deposits held with banks less loans from banks) of P19.0 billion, which is a 1 percent decline from the P19.1 billion recorded in August 2022. Similarly, NBFIs had bonds worth about P3.3 billion in the domestic market and a listed equity market capitalisation of P26.3 billion as at August 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 contagion risk 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.

The micro-lending and insurance sectors remain safe and sound

3.22 In June 2023, the non-banking sector lending was dominated by 245 micro-lenders. Household debt also dominates credit granted by the NBFIs sector, although at a lesser magnitude than commercial banks. Even though the sector's assets increased from 2018 to 2023, there was a reduction of 3 percent from P7.96 billion in 2022 to P7.69 billion in June 2023 (3.1 percent of GDP). Household loans formed majority of microlenders' assets at P6.7 billion. Asset quality, measured in terms of the ratio on non-performing loan to total loans remained modest at 2.1 percent in 2023. Systemically important micro-lenders were financially sound, and they held 93 percent of the industry assets. All entities managed to meet the minimum capital adequacy ratio (CAR) of 5 percent and the liquidity ratio of 2 percent as per the Prudential Rules for systemically important micro-lenders.

3.23 The insurance industry assets increased by 15 percent from P20 billion in December 2018 to P23 billion in June 2023. However, the assets decreased by 6 percent from P25 billion in December 2022 to P23 billion in June 2023. In 2022, the ratio of the insurance sector assets to nominal GDP was 10 percent, which is a slight decline from the 11 percent in 2021. The life insurance sector remains highly concentrated as the top five entities in the sector constituted P19 billion (97 percent) of industry assets. The concentration is slightly lower for general insurers as the top five entities contributed 85 percent to the total non-life insurance assets. Moreover, data shows that the number of insurance policies issued increased by 11 percent from 564 700 in 2021 to 625 000 in 2022. Claims and cancellations decreased by 9 percent from P4 billion to P3 billion, while

Gross Written Premiums increased by 3 percent in the same period. Therefore, the insurance industry remains safe and sound and poses no threat to domestic financial stability.

(d) Liquidity and Funding Risk

Banking Sector

Average market liquidity increased in September 2023

3.24 The average daily market liquidity increased from P9.8 billion in August 2023 to P10.6 billion September 2023 in due to an increase in the pace of government spending. The increase in market liquidity shows a resurgence in liquidity conditions following the COVID-19 pandemic shock and ongoing challenges posed by the disruptions to global value chains amid growing global fragmentation. In line with the improving liquidity conditions, banks maintained adequate liquidity positions, with a Liquid Asset Ratio (LAR) of 18.4 percent in August 2023.

Deposit concentration exposes banks to funding risks

3.25 The banking sector remains vulnerable to funding risk arising from a concentrated deposit base. Commercial banks' funding structure is concentrated on 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 was 36.4 percent in June 2023, a fall from 38.8 percent in June 2022. This shows a significant improvement from an upper extremum of 70.5 percent in March 2023.

3.26 The banking industry continues to experience high levels of credit intermediation, with a financial intermediation ratio[14] of 81.5 percent in June 2023, from the 80.5 percent in December 2022. This level of credit intermediation was slightly outside the 50 – 80 percent range but continues to support enduring economic growth.

Money and Capital Markets Developments

Non-D-SIBs dominate the interbank lending market

3.27 Interbank activity increased from P2 billion in August 2023 to P5 billion in September 2023, despite the overall increase in market liquidity. Domestic Systemically Important Banks (D-SIBs) contributed only 14.5 percent to total interbank lending, but they dominated interbank borrowing by taking up 85.4 percent of total interbank borrowings.

US Dollar Market

US dollar funding risks remain limited

3.28 Domestic commercial banks' exposure to foreign exchange risks is highly limited and poses minimal 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 P958 million in June 2022, to P486 million (3 percent of unimpaired capital) in June 2023. This is significantly lower than the prudential limit of 30 percent of unimpaired capital (Chart 3.6a). At the same time, the Pula equivalent overall net exposure of the domestic banking system to the US dollar fell to P247.6 million in June 2023 from P576 million in June 2022; translating to 1 percent of the industry's unimpaired capital and, therefore, showing limited risks from US dollar funding.

The Pula exchange rate generally stable

3.29 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. In the year to October 2023, the nominal Pula exchange rate appreciated by 1.4 percent against the South African rand but depreciated by 4.2 percent against the SDR. The movement of the Pula against the

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

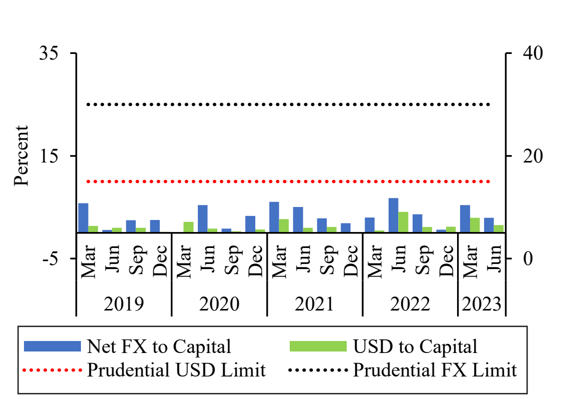
SDR constituent currencies largely reflects the performance of the South African rand against SDR constituent currencies. Therefore, in the same review period, the South African rand depreciated by 5.6 percent against the SDR and 3.6 percent against the US dollar. In general, volatility in the Pula exchange rate has been contained since May 2020 (Chart 3.6b), hence presenting limited risks to the domestic financial system and economy.

increase in listed equity valuations has been mainly due to increase in share prices of some companies with Chobe Holdings leading the charge with gains of 86.6 percent in share prices followed by Standard Chartered Bank at 76 percent. Other observed share price gains averaged above 10 percent for domestic listed companies.

Foreign Currency Funding and Exposure

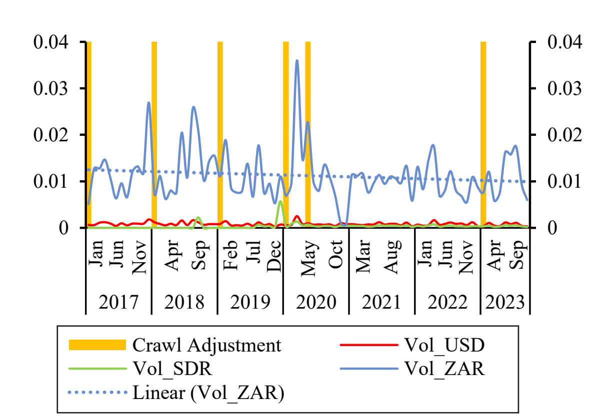
Banks FX exposure is well below the prudential limits

Chart 3.6a: Banks FX Exposure



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

Chart 3.6b: FX Volatility



Source: Bank of Botswana

Asset Prices

Market capitalisation improves and liquidity is increasing

3.30 The total equity market value of domestic listed companies gained 17 percent, year-on-year, to P46.4 billion in September 2023 (September 2022: P39.3 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 P9 billion since January 2022. The

3.31 Due to the revaluation of listed companies, turnover recorded for traded equities increased significantly over the last 12 months (Chart 3.7c). This led to a surge in the liquidity ratio from 2.1 percent in August 2023 to 9.6 percent in September 2023 (September 2022: 5.9 percent). This development is indicative of both the BSE's public awareness campaigns and recovery from the impact of the COVID-19 pandemic. During the pandemic, listed companies' equity prices fell significantly, and the prices have been trending upwards since the opening of the economy, especially for the tourism sector.

The domestic stock market is profitable but volatile

3.32 Profitability in the domestic market improved significantly as demonstrated by a 20.2 percent appreciation in the Domestic Company Total Return Index (DCTRI) in September 2023 against the depreciation of 0.4 percent in the corresponding period in 2022[15] . Furthermore, developments in market capitalisation in the twelve months to September 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 8662 in September 2023, albeit with rising volatility[16] (Chart 3.7d). The rising volatility potentially reflects the inherently risky nature of equity markets.

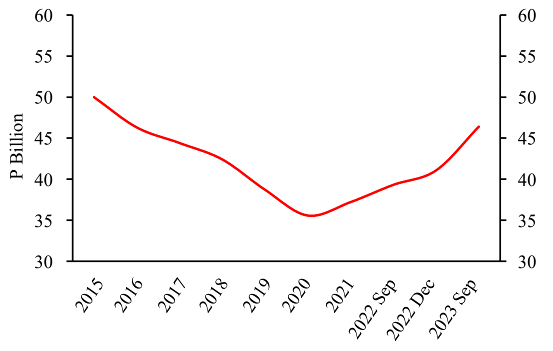
[15] The DCTRI shows gains (or losses) in equity positions due to market capitalisation appreciation (or depreciation) and dividend returns.

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

Stock Market Developments

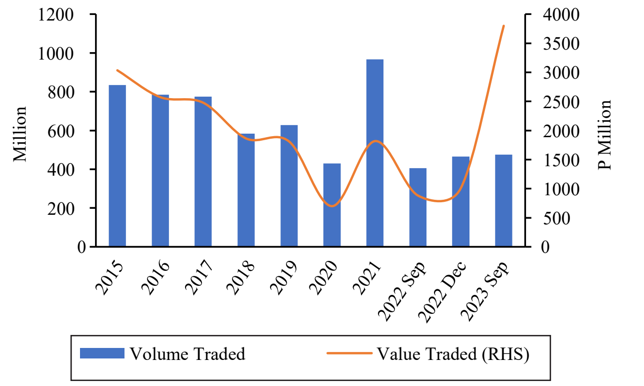
Stock market capitalisation is increasing

Chart 3.7a: Market Capitalisation



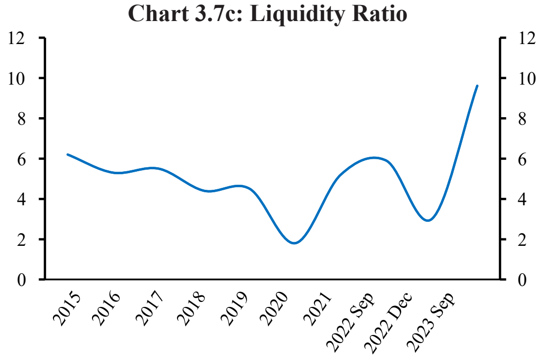
BSE trade by value and volume is below pre-COVID-19 levels

Chart 3.7b: BSE Trading



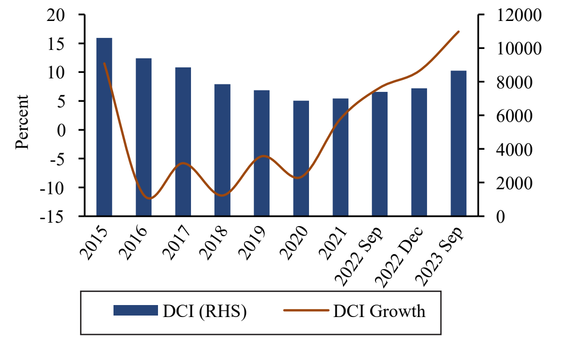
Liquidity in the BSE is increasing

Chart 3.7c: Liquidity Ratio



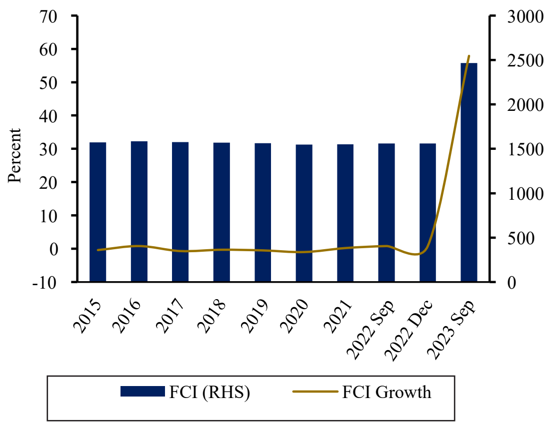
The DCI is improving since opening of the economy

Chart 3.7d: DCI



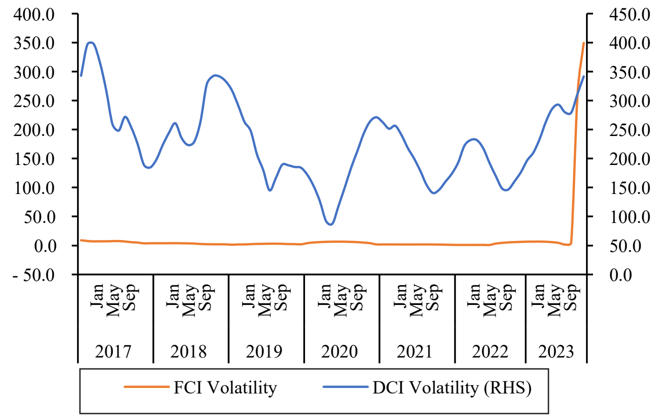
The Foreign Company Index (FCI) is improving

Chart 3.7e: FCI



Both DCI and FCI are highly volatile

Chart 3.7f: Market Volatility



Source: Botswana Stock Exchange and BoB Calculations

3.33 There is also a notable increase in the volatility of the Foreign Companies Index, owing to significant upward revaluations of equity prices for Anglo-American Company, CA Sales and Investec over the twelve months to September 2023.

Bond Market Performance

Government bonds drive market capitalisation

3.34 Bond market capitalisation increased by 3.2 percent to P26.3 billion in September 2023 (September 2022: P25.9 billion), due to the listing of new corporate bonds on the stock exchange and reopening of Government bonds (Chart 3.8a). 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[17]. Consequently, the nominal value of Government bonds rose from P20 billion in September 2022 to P21.3 billion in September 2023, while corporate bond valuations declined by 10.5 percent to P4.9 billion. It is also worth noting that redemption of a government bond in June 2023 led to the nominal value of listed bonds falling momentarily to P24.1 billion in June 2023 from P24.8 billion in June 2022.

3.35 The proportion of Government bonds in the nominal value of the fixed income market stood at 81.4 percent in September 2023 (September 2022: 78.6 percent) and continues to demonstrate the Government's ongoing commitment to deepen and develop the domestic capital markets. Nevertheless, a sustained dominance of government securities has the potential to crowd out capital funding from the private sector and may need to be scaled down as capital markets mature.

Bonds yield spread remains narrow

3.36 The spread between average yields on corporate and government bonds fell slightly from 0.48 percentage points in August 2023 to 0.46 percentage points in September 2023. The marginal decrease in the spread largely reflects increasing yields on corporate bonds. At the same time, yields on government bonds have increased significantly in the second half of 2023, and they are currently above COVID-19 pandemic levels. This is indicative of a growing risk premium placed on government securities by investors. Meanwhile, 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.

[17] 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

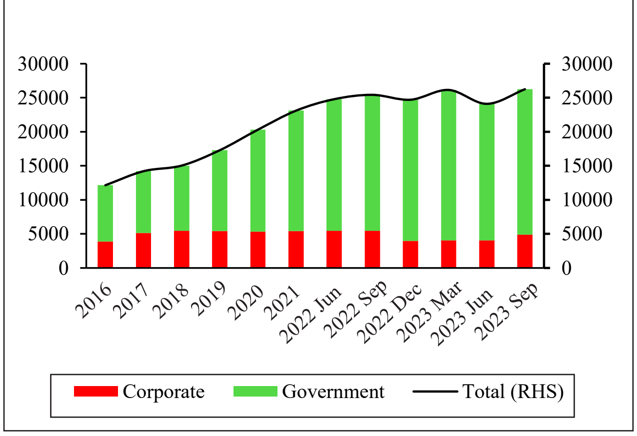


Chart 3.8a: Bond Nominal Values (P Million)

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

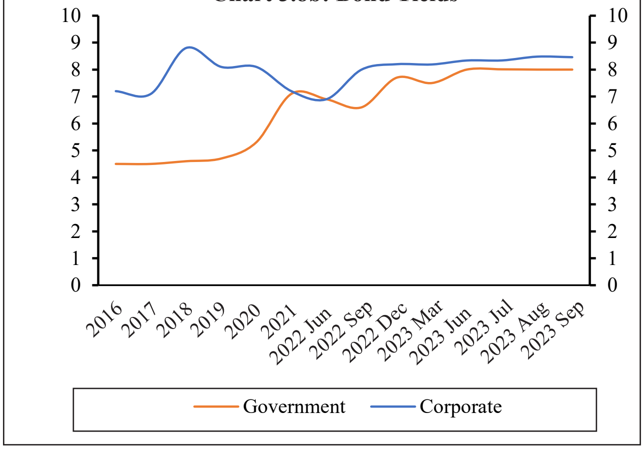


Chart 3.8b: Bond Yields

Corporates have many low-value bonds listed on the BSE Chart

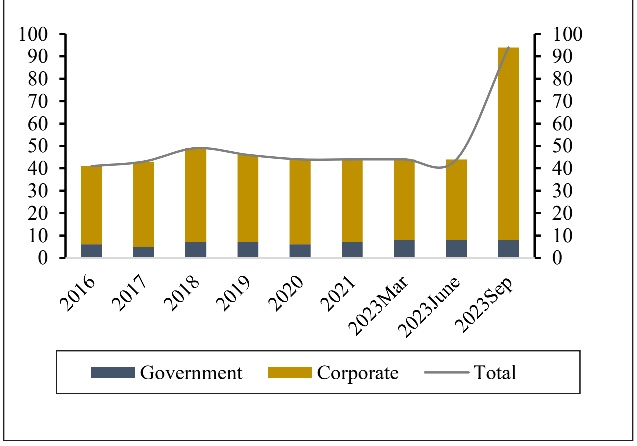


Chart 3.8c: Number of Bonds

Bond indices are trending upwards

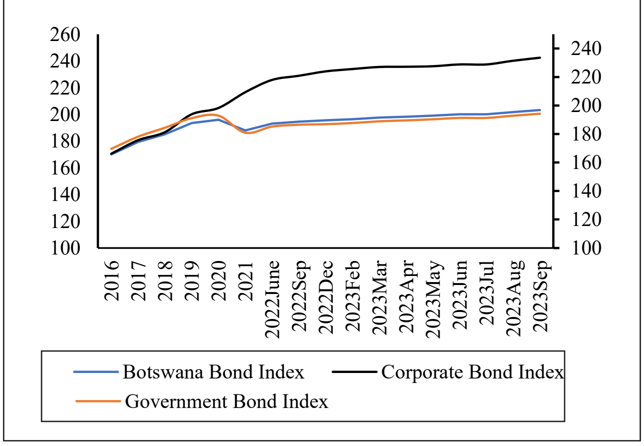


Chart 3.8d: Bonds Indices

The corporate spread is widening

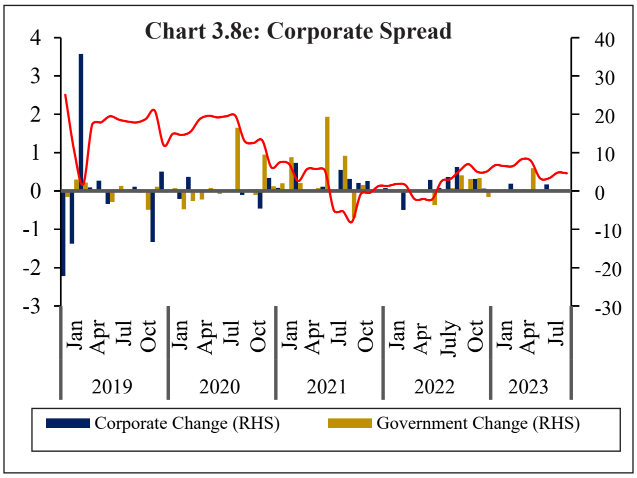


Chart 3.8e: Corporate Spread

The Corporate bond index is most volatile

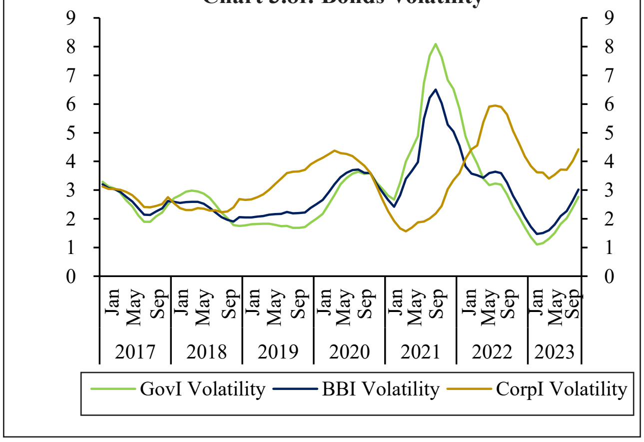


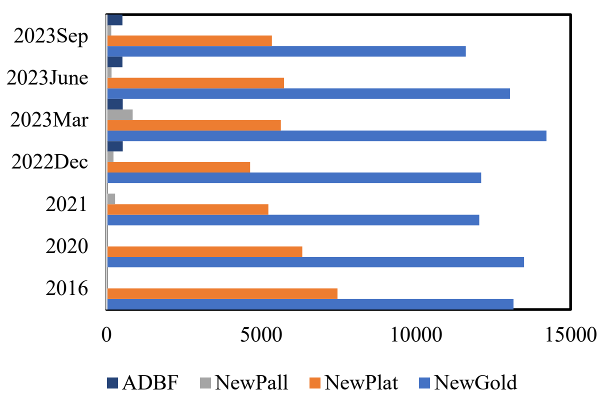
Chart 3.8f: Bonds Volatility

Source: Botswana Stock Exchange and BoB Calculations

Average corporate bond yields stable

3.37 The average corporate bond yield has been on an upward trajectory since June 2022 to reach 8.5 percent in September 2023. Meanwhile, the risk in corporate bonds, as reflected in the volatility of the corporate bond index (CorpI), has been increasing since March 2023 (Chart 3.8f), 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 (RMCI), present money markets funding opportunities that would augment any decline in capital market funding.

Chart 3.9: Nominal Value of ETFs



Source: Botswana Stock Exchange

Net asset value of exchange traded funds improving

3.38 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 and require constant monitoring. In September 2023, the net asset value (NAV) of ETFs listed on the BSE stood at P17.7 billion, an increase from the P16.6 billion recorded in September 2022 (Chart 3.9). Asset valuations were mainly driven by the increase in the nominal value of NewPlat, which gained P1.2 billion in value. In terms of market capitalisation, ETFs valuations represented less than 1 percent of total equity market capitalisation, hence pose minimal risk to the stability of the domestic capital markets.

(e) Macro-Financial Linkages

Contagion Risk

Significant macro-financial linkages persist

3.39 Significant interlinkages persist in the financial system, with the banking sector at the epicentre of the system. The banking sector is largely exposed to households (Figure 3.1) and households are highly exposed to NBFIs, with most of their assets, mainly pension assets, held by the sector. In August 2023, corporates were net lenders to banks, with their deposits accounting for 38.2 percent of total commercial bank deposits, while their borrowing represented 27.2 percent of commercial bank credit. Meanwhile, deposits from NBFIs accounted for a significant portion of bank funding at 21.2 percent of total deposits in August 2023. A sudden withdrawal of these funds would squeeze bank's funding and, therefore, warrant a closer supervisory attention. In addition, a significant amount of NBFI assets (62.7 percent) were held abroad, exposing them to external financial and economic shocks, albeit providing the needed portfolio diversification benefits.

3.40 The interlinkages also extend to state owned enterprises (SOEs), which accounted for 13.1 percent of bank deposits, while loans to the sector accounted for 3.8 percent of total bank lending in August 2023. This interconnectedness, with the banking sector at the epicentre of the financial system, presents an opportunity for risks that could easily spread across sectors and thus, elevate 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).

Structure of the Financial System

The structure of the financial system has not changed much since 2016

Chart 3.10a: Structure of the Financial System in 2016

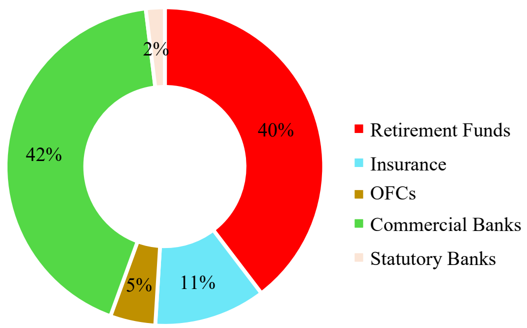
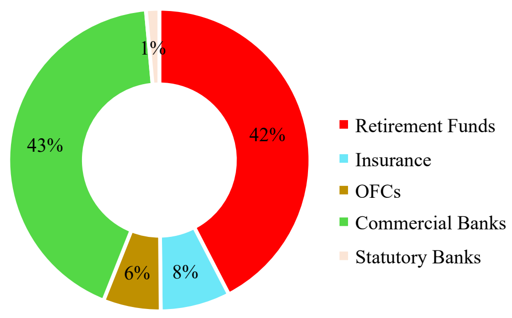
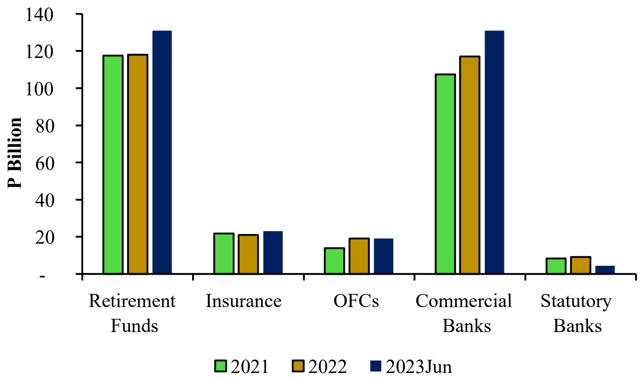


Chart 3.10b: Structure of the Financial System in June 2023



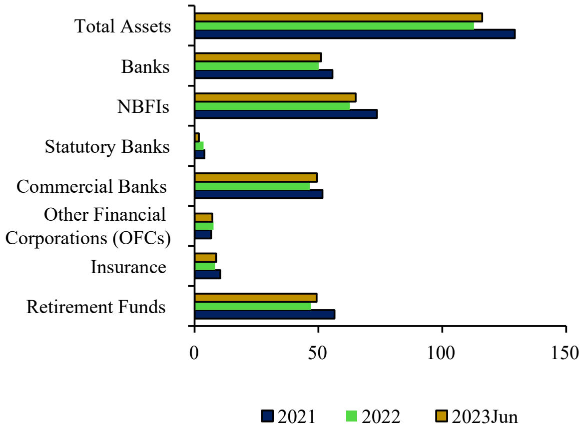
Retirement funds and commercial bank assets are relatively high

Chart 3.10c: Financial System Assets



NBFIs have the largest proportion to GDP due to relatively large size of retirement funds

Chart 3.10d: Financial System Assets to GDP

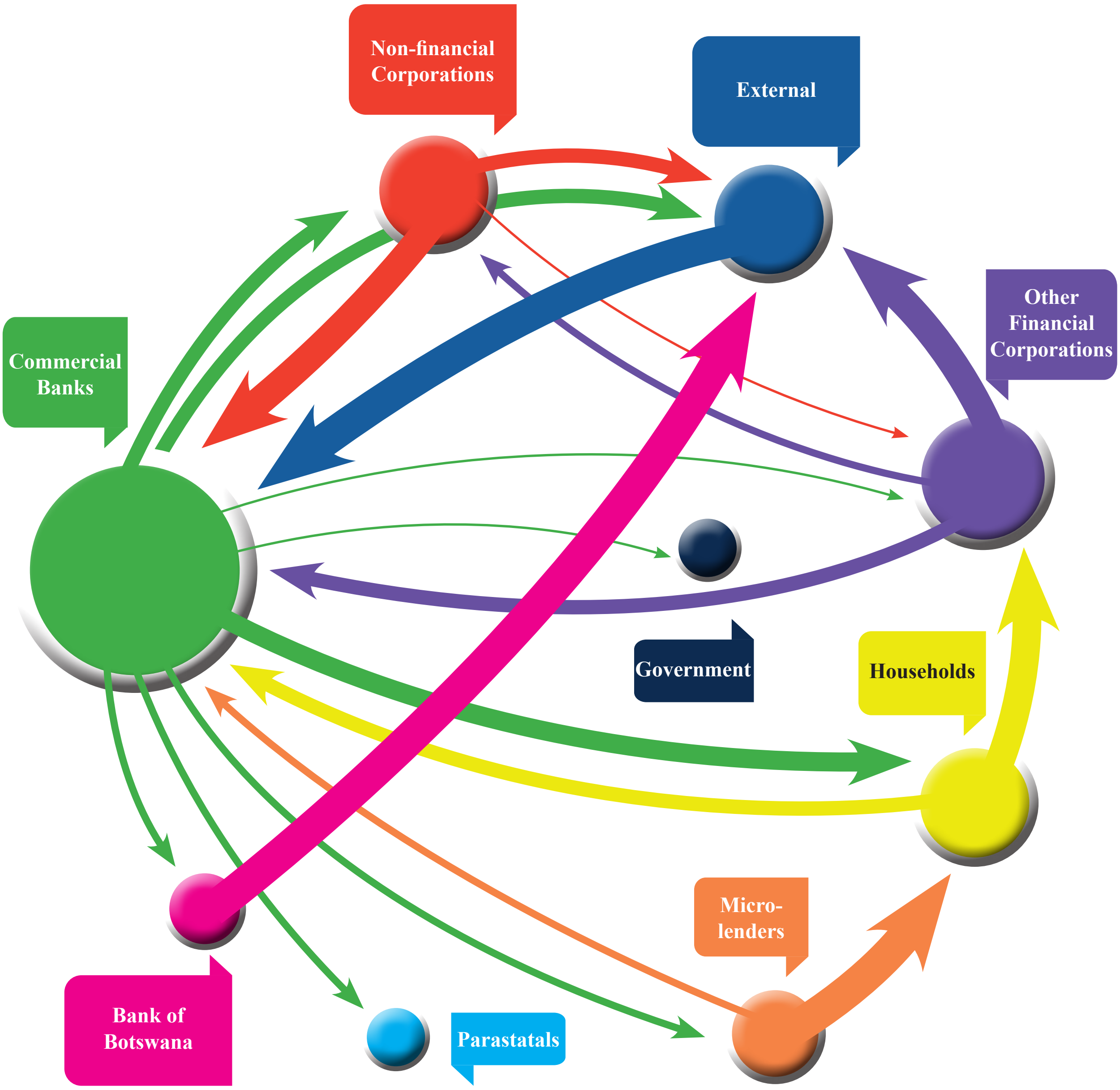


Source: Bank of Botswana and NBFIRA

Financial Sector Inter-linkages

Banks are highly interconnected with the rest of the financial system

Figure 3.1: Macro-Financial Linkages (August 2023)



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.
7. For other financial corporations, 76 percent are retirement funds assets.

Source: Bank of Botswana and NBFIRA

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. Financial assets, in NBFIs (mainly, pension funds) grew due to improved performance in global financial markets. In June 2023 the NBFI sector still accounted for the largest share of financial system assets at 56 percent, compared to the 44 percent by the banking sector. The size of the entire financial system represented 116.1 percent of GDP in June 2023, compared to the 122.9 percent in 2022. The reduced share may be due to incomplete and unaudited data, but the overall contribution of the financial sector to the economy remains significant.

Risk Concentrations

Insurance and pension sectors highly concentrated

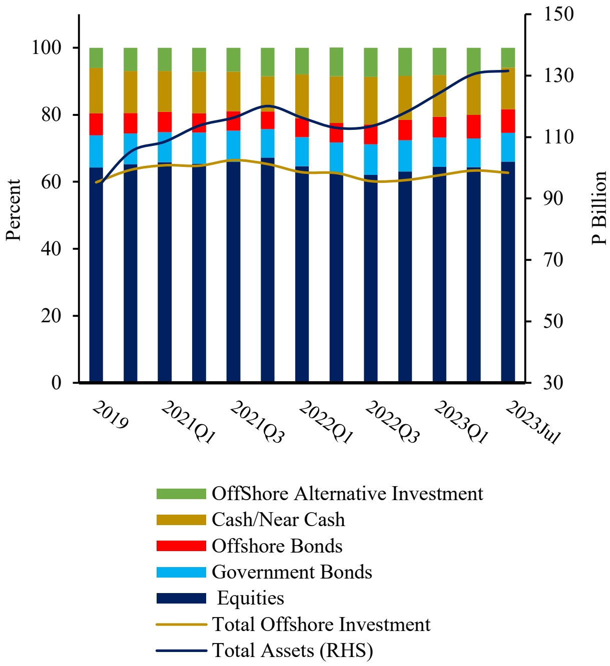
3.42 Insurance companies could affect financial stability and contribute to systemic risk through three potential transmission channels, namely, failure to provide critical services; inability to mitigate risk and compensate for loss with respect to systemically important counterparties; and risk to systemically important financial institutions[18]. In a highly concentrated market, substitutability may be difficult upon failure of a dominant market player. 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[19].

3.43 The dominance of Botswana Insurance Holdings Limited (BIHL) in the local insurance sector exacerbates these risks and warrants enhanced supervision. The top five largest life insurance companies have a market share 97 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 49.2 percent of GDP in June 2023 (P130.5 billion).

3.44 Pension funds' assets increased to P131.6 billion in July 2023, and were 12.4 percent higher than the P117.1 billion recorded in July 2022. Investment in both domestic Government and offshore bonds increased from P17.2 billion in July 2022 to P20.6 billion in July 2023. The equity portfolio also increased from P74. billion in July 2022 to P86.8 billion in July 2023, and still accounted for the largest share (66.0 percent) of the portfolio investment allocation of pension funds (Chart 3.11). The increase is due to improved private equities and local equities in the financial markets.

3.45 Furthermore, 63.2 percent of the funds were invested offshore in July 2023, compared to 62.7 percent in July 2022. Generally, the portfolio distribution of pension assets remained relatively unchanged with an average of 60 percent invested offshore since 2009. At these proportions, 13.2 percent of the offshore portfolio will need to be repatriated by 2027 to comply with the revised investment limits under the Pension Fund Investment Rule (PFR2) of 2023. Rule 9 of PFR2 requires that pension funds invest a minimum of 50 percent onshore and these funds are expected to meet the economy's long term financing needs.

Chart 3.11: Investment Allocation of Pension Funds



Source: NBFIRA

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

[19] NBFIRA is developing a framework for identifying and designating insurance D-SIFIs.

AUM increased and dominated by pension funds

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 by providing 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. As such, the asset management sub-sector is highly interconnected with other parts of the financial system through ownership linkages, common asset exposures and the provision of wholesale funding to banks. However, the level of systemic risk posed by the sub-sector is mitigated by profitability and adequate capitalisation of asset management companies.

(f) Banking Sector Analysis

Asset Quality and Performance

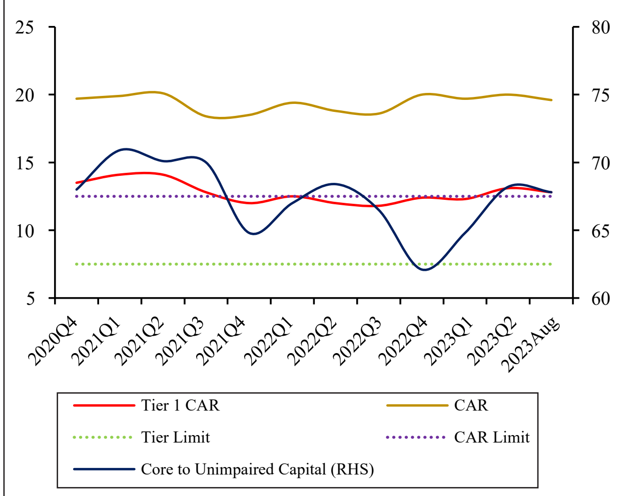
Banks are generally solvent, profitable, and well capitalised

3.47 The financial soundness indicators as at end of July 2023 indicate that the banking sector continues to be adequately capitalised, liquid, and profitable (Charts 3.12a to 3.12d). The NPLs ratio has been stable since the COVID-19 pandemic. However, the lifting of concessions made during the pandemic, and the possible increase in lending rate could lead to relatively higher default rates, and a deterioration in asset quality.

Banking Sector Financial Soundness Indicators

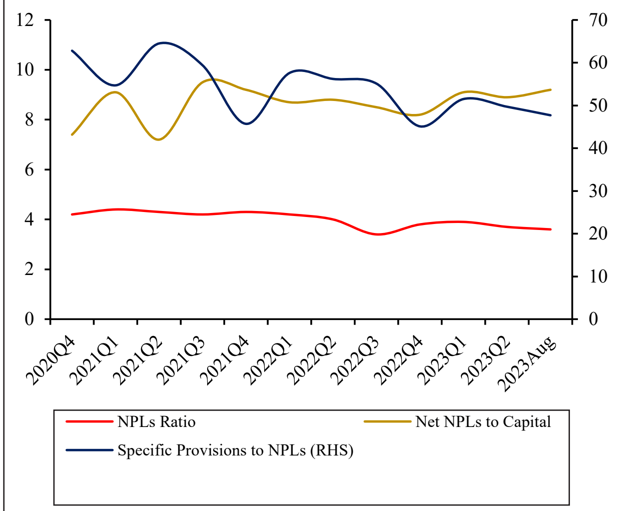
Banks are adequately capitalised

Chart 3.12a: Capital Adequacy



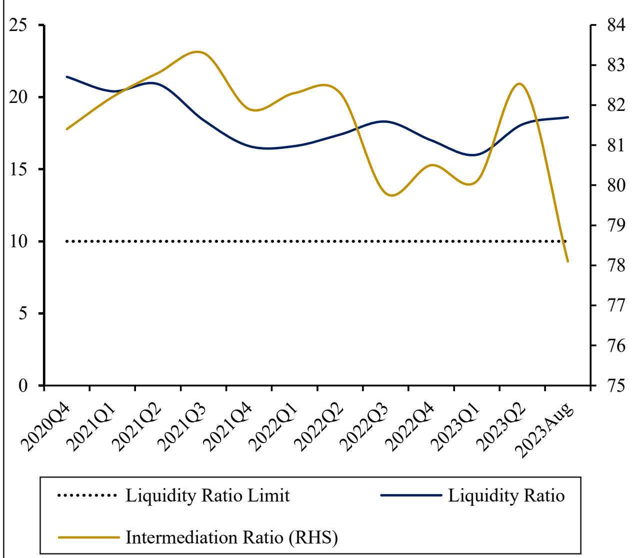
The NPLs ratio is stable

Chart 3.12b: Asset Quality



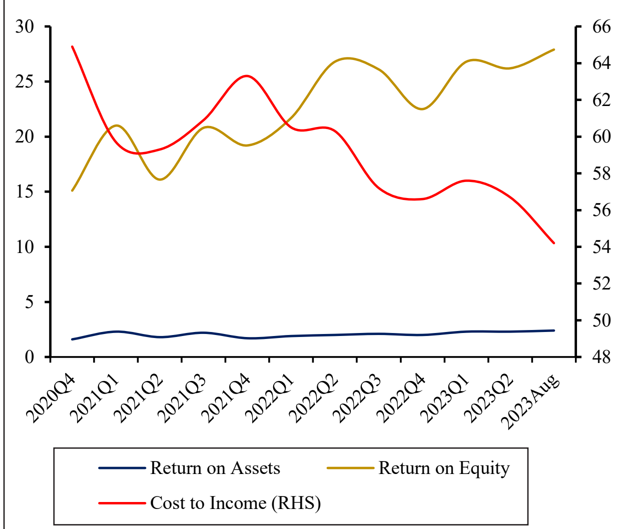
Banks are liquid

Chart 3.12c: Liquidity



Banks are highly profitable, and costs are declining

Chart 3.12d: Profitability



Source: Bank of Botswana

D-SIBs for 2023

3.48 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, First National Bank of Botswana (FNBB) and ABSA Bank Botswana Limited (ABSA) were designated as D-SIBs based on an assessment of several metrics across the forementioned indicators.

Stress Tests Scenarios

3.49 The June 2023 stress test 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 global inflation rate, declining domestic market liquidity, stagnant household incomes, heightened climate risks, and geopolitical-induced vulnerabilities. The economic environment is assumed to present income challenges to businesses and corporates alike, impacting on their capacity to service their loans and support economic recovery, with a negative impact on the asset quality of banks.

3.50 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 business operating costs. 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.

3.51 The tests involve simulation of credit losses due to an increase in NPLs for the credit risk, bank runs for the liquidity risk and an increase in the policy rate affecting repricing gaps and the pricing of bonds for the interest rate risk. The policy increase simulation considers a case where, as a result of upside inflationary pressures, inflation rises and breaches the objective range, prompting a policy tightening.

Banks are subjected to credit shocks

3.52 Credit risk tests include the aggregate NPL shock, the concentration shock and sector specific credit risk shocks. In the aggregate NPL shock it is assumed that 10 percent of performing loans are going to become non-performing in the moderate scenario, and 15 percent in the severe scenario. For the concentration shock, one largest exposure becomes non-performing in moderate scenario and two largest exposures become non performing in the severe scenario.

3.53 Sector specific tests were also conducted to capture the idiosyncratic impact of credit shocks across all sectors of the economy. With the subdued global economic performance, 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.

Banks are also subjected to liquidity and interest rate shocks

3.54 The liquidity shock simulates stress on banks lasting 30 days where banks' liabilities are demanded at specific rates for each liability category (run-off rates) and banks' assets are discounted at certain percentage rates (haircuts) when they go to the market to finance their liquidity needs. The purpose of the liquidity stress is to test the ability of banks to meet near-term payment obligations when faced with the loss of funding and counterparty cash drains. The test uses haircuts for asset holdings and run-off rates for liabilities to estimate the number of days a bank is likely to survive a bank run without assistance of the central bank or any other sources of financing.

3.55 The interest rate test considers the direct interest risk, incurred by a financial institution when the interest rate sensitivities of assets and liabilities of banks are mismatched. The test simulates changes in interest income and interest expenses resulting from the gap between the flow of interest on the holdings of assets and liabilities in each category. The gap in each time band or repricing category shows how net interest income will be affected by a given change in interest rates.

3.56 Under the moderate scenario, we assume that the interest rate will increase by 150 basis points and for severe scenario, it would increase by 225 basis points. We assume upward shocks to the policy rate despite inflation forecasts that indicate that inflation will be within the Bank's objective range of 3 to 6 percent in the medium term. This is due to the fact that the GFSR notes that there will be potential surprises to inflation due to reversal of optimism about soft-landing globally, leading to central banks needing to keep interest rates higher for longer to anchor low inflation expectations.

D-SIBs subjected to more severe stress conditions

3.57 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 threshold for the CAR is set such that the banks are closed out of funding markets if the post-shock CAR breaches set hurdle rates.

Stress Test Results

3.58 The stress test covers three tests, namely liquidity, credit, and interest rate shocks (Box A1). For the liquidity risk, the simulation assumes a bank run, while credit risk scenarios assume credit losses arising from an increase in NPLs and large credit counter party defaults. The interest rate risk scenario assumes an asset repricing due to an increase in the policy rate.

Banks generally resilient but susceptible to severe credit shocks

3.59 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 11.6 percent, thus slightly breaching the prudential capital adequacy requirement of 12.5 percent. The industry capital position worsens to 1.7 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 3.2 percent to 12.9 percent and 22.5 percent under moderate and severe scenarios, respectively (Chart 3.13d).

3.60 For the sectoral shocks, under the moderate scenario, banks' CAR falls to 9.4 percent, while the NPLs ratio increases to 15.2 percent. The CAR falls further to 4.5 percent under the severe scenario, and the NPLs ratio increases to 20.0 percent. Regarding credit concentration shocks, banks breach the capital adequacy requirement at 9.8 percent under the assumption that the largest borrower defaults for each bank (moderate scenario). The CAR further falls to 4.9 percent under the severe scenario, which assumes that the largest two counterparties will default.

3.61 Under the moderate concentration and overall NPL scenarios, D-SIBs are resilient, with a CAR above the prudential limit at 15.1 percent for the concentration shock, and 13.2 percent for the overall NPL shock. For the severe concentration and overall NPL shocks, the CAR falls to 11.8 percent and 3.8 percent, respectively (Chart 3.13a).

3.62 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

3.63 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 17 days. Under the severe stress conditions, all banks would be able to withstand drawdowns for 5 days while D-SIBs and non-D-SIBs will survive for 4 and 5 days, respectively. The results show that non-D-SIBs have slightly better liquidity positions owing to diversity of portfolios/funding sources.

3.64 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.

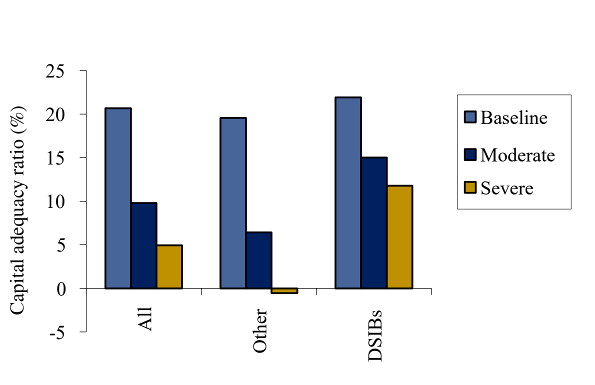
Bank profitability to rise with a policy rate increase

3.65 Results of the moderate interest rate shock indicate that increases in the policy rate are associated with an overall increase in bank profitability, but the combined impact of interest income gains and repricing of bonds leads to fall in the CAR by 0.1 percentage points in the severe scenario. The CAR is unchanged in the moderate scenario showing the balancing of the impact of income gains and repricing of bonds.

June 2023 Stress Test Results
Credit Shocks

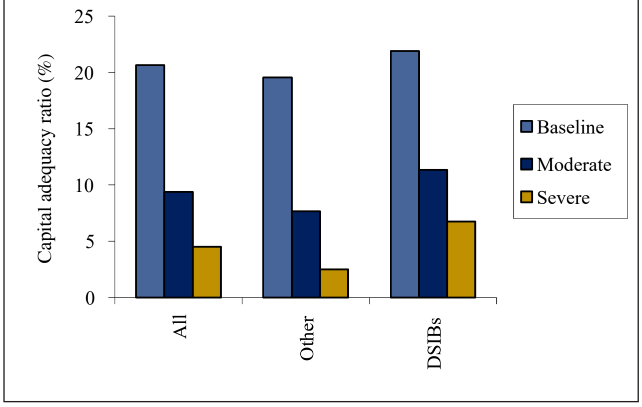
Banks are generally resilient to credit concentration shocks

Chart 3.13a: Concentration Shock



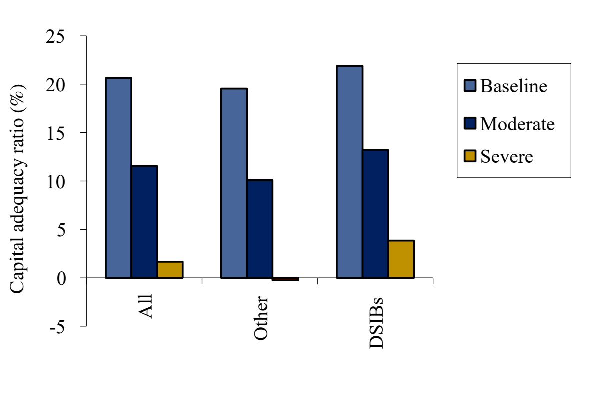
Sectoral shocks are more prominent than concentration shocks in the severe scenarios

Chart 3.13b: Sectoral Shock



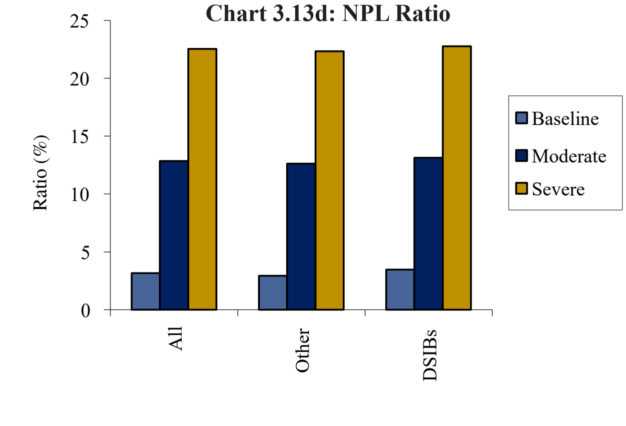
A severe aggregate credit shock would deplete banks' capital

Chart 3.13c: Overall NPL Shock



The NPL ratio for the aggregate credit shock increases significantly in the severe scenario, but non-D-SIBs are highly resilient to credit shocks

Chart 3.13d: NPL Ratio

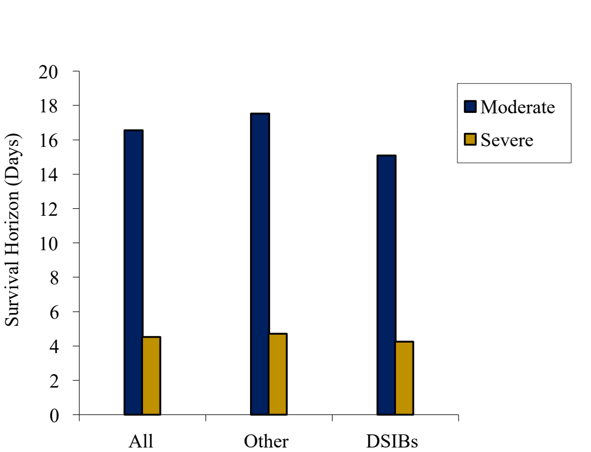


Source: Bank of Botswana

Liquidity and Interest Rate Shocks

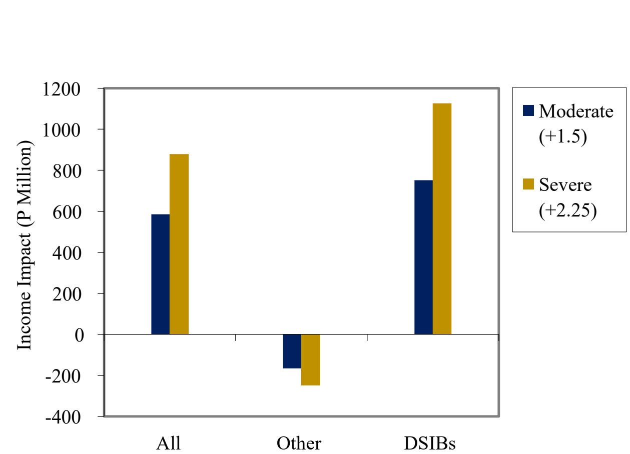
Banks generally have low survival horizon under a severe liquidity shock

Chart 3.13e: Liquidity Test



Other banks have more liabilities than assets maturing over 12 months, and will incur losses from a policy rate increase

Chart 3.13f: Interest Rate Test



Source: Bank of Botswana

3.66 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 P56 million, while a 2.25 percentage points increase would lead to a gain of P87 million, dominated by D-SIBs (Chart 3.13f). On the other hand, government bonds would lose value in nominal terms by P71.2 million and P253 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

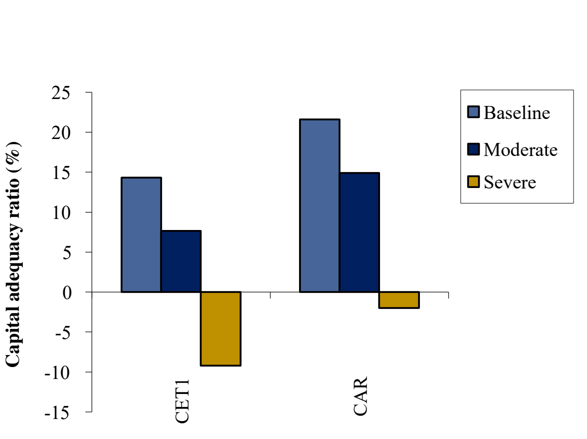
3.67 Considering a combination of shocks for scenario analysis, D-SIBs are resilient to moderate shocks with a CAR of 15.9 percent in the moderate scenario and they are insolvent in the severe scenario with a CAR of -0.3 percent (Chart 3.14a).

3.68 To capitalise D-SIBs, shareholders or parent companies would have to inject capital amounting to P115 million in the moderate scenario and P5.7 billion in the severe scenario. Given that 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, although 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 CAR 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. Under these assumptions, none of the D-SIBs is closed out of funding markets in the moderate scenario and there is no loss of customer deposits and short-term funding. Therefore, the banks would not experience any liquidity shortfall. However, in the severe scenario, both D-SIBs are closed out of all funding markets, with an average CAR of -0.3 percent and total loss of funding of P12.2 billion. As a result, D-SIBs suffer a liquidity shortfall of P2.3 billion in the severe scenario.

D-SIBs Scenario Analysis

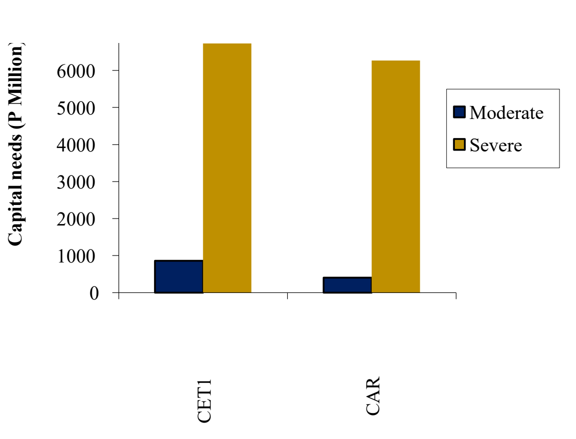
Severe stress scenario would completely erode D-SIBs' capital base

Chart 3.14a: Capital Adequacy



D-SIBs would need significant capital injection to recapitalise under severe stress conditions

Chart 3.14b: Capital Needs



Source: Bank of Botswana

4. FINANCIAL MARKET INFRASTRUCTURE AND REGULATORY DEVELOPMENTS

(a) Payments and Settlement Systems

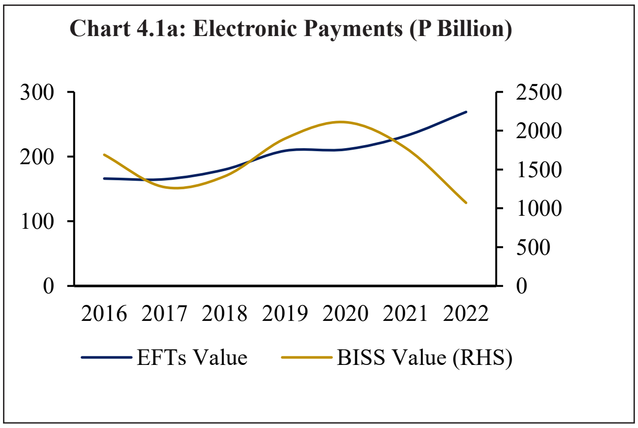
FMIs largely resilient

4.1 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, while electronic fund transfers (EFTs) continue to increase (Chart 4.1). The discontinuation of cheques as a means of payment in Botswana in December 2023 will promote digitalisation in the domestic banking system. As of August 31, 2023, the Bank had licensed twenty-three Electronic Payment Service (EPS) providers under the EPS Regulations of 2019, with an agency network of more than 1500 countrywide. The digitalisation of the banking system presents a variety of benefits, such as improved efficiency and convenience, as well as some risks such as fraud and other cyber security risks. These risks will continue to be monitored to enable the safety and soundness of the banking system.

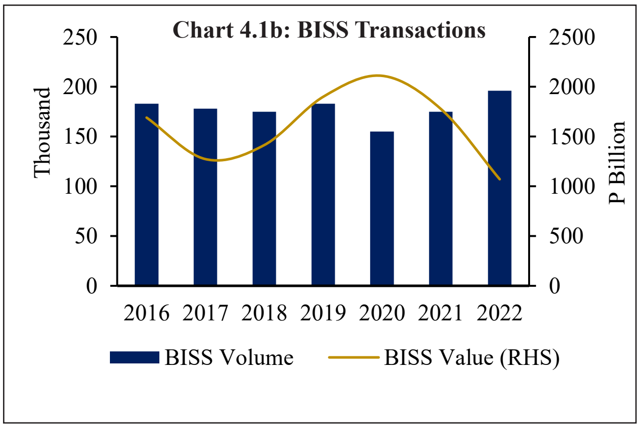
4.2 In addition to the Bank's roles of operating the BISS and facilitating modernisation of the national payment system, through implementation of the NPS Vision and Strategy and oversight, the Bank continues to lead the ongoing adoption of International Organisation for Standardization (ISO) standards, in particular the ISO 20022 message standard in the country. The ISO 20022 message standard would allow for new technologies and business innovations to reduce friction and increase the speed with which funds move domestically and across borders. Generally, FMIs consisting of payment systems, central securities depository, and securities settlement systems, remain stable and resilient, thus strengthening and preserving domestic financial stability and preserving domestic financial stability.

Payments and Settlement Systems Indicators

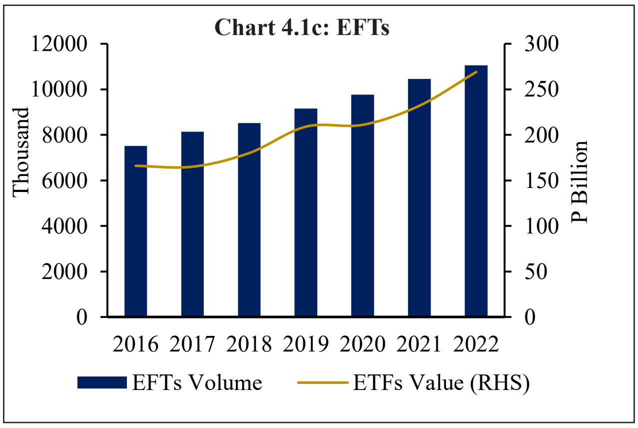
BISS transactions have been falling since COVID-19 and EFTs are trending upwards



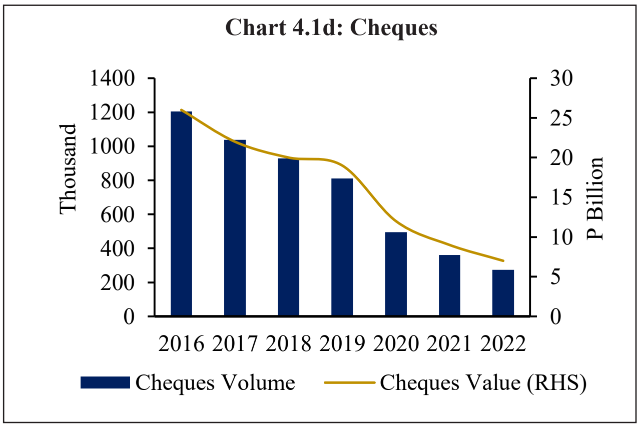
BISS transactions volume is increasing but value is falling



EFTs volume and value are trending upwards



Cheques are gradually fading away



Source: Bank of Botswana

(b) Regulatory and Other Developments Relevant to Financial Stability

Banking (Amendment) Regulations being drafted

4.3 Following the re-enactment and publication of the Banking Act, 2023 on May 26, 2023, to align it with the best international practice, support evolving domestic and international financial systems, and to promote sound, competitive and inclusive financial sector, the Government, together with Bank are working on the Banking (Amendment) Regulations, 2023, Banking (Deposit-Taking Institutions) Regulations, 2023 and the Banking (Appeal Tribunal) Regulations, 2023 to align them with the Banking Act. These Regulations will enhance the well-functioning of the Bank in carrying out its mandate, hence augurs well for financial stability.

The Non-Bank Lenders Bill to ensure a safe and conducive non-bank lending environment

4.4 The Non-Bank Lenders Bill, 2023 is expected to consolidate the regulatory framework for micro-lenders, pawnshops, financing, and leasing companies. The objective of the Bill is to create an effective regulatory and supervisory framework for NBFIs as a way of promoting a conducive and safe non-bank lending environment. Similarly, plans are afoot in drafting bills meant to promote effective regulation and supervision of medical aid and health insurance funds, in order to enhance financial soundness in these two industries.

Deposit Insurance Scheme Regulations published

4.5 Following the establishment of the DISB in January 2023 by the Bank of Botswana Amendment Act, 2022, the DISB regulations were published in the Government Gazette on July 21, 2023. The Regulations state the governance of the DISB, membership and premium contributions, deposits to be covered and the maximum level of cover, and funding and payment of deposits in the event of a bank failure. The regulations are expected to facilitate full operationalisation of the DISB. Box 4.1 provides a detailed overview of the role and operations of the DISB.

Parliament passes the NBFIRA and Securities Amendment Bills

4.6 On August 10, 2023, the Botswana Parliament passed the NBFIRA and the Securities (Amendment) Bills in to Acts. The NBFIRA (Amendment) Act, 2023 seeks to enhance the regulatory capacity of NBFIRA and align it with international requirements and best practices. The Securities Act provides for the regulation and supervision of securities institutions and markets, and it amends clauses 2 to 18 of the Securities Act to ensure consistency and align definitions in the Act with definitions under the NBFIRA Act. For NBFIRA to be admitted as a member of the International Organisation of Securities Commissions (IOSCO), an internationally recognised body that brings together the world's securities regulators and the global standard setter for the securities sector, it is required to reform the Securities Act and amend the NBFIRA Act in line with IOSCO expectations.

Muted impact of the grey listing of South Africa

4.7 Since the grey listing of South Africa by FATF in February 2023, commercial banks and NBFIs continue to enforce measures to mitigate potential risks emanating from the grey listing of South Africa through enhanced due diligence when on-boarding and transacting with an entity that is established in South Africa. These include increase scrutiny and monitoring of payments to and from South Africa for possible indications of money laundering, terrorism financing and proliferation financing (ML/TF/PF). Commercial banks have also increased the jurisdiction risk factor rating for South Africa. To date, no domestic bank, including banks with South African parent banks, has reported a case of de-risking or any fallout by correspondent banks or any foreign institutions resulting from grey listing. Similarly, no fallout or negativity has been reported by NBFIs. Similarly, the franchise risk is judged to be minimal, given the independence of operations and governance structures of franchise institutions in Botswana. However, the FSC stands ready to trigger macroprudential policy responses to circumvent threats of domestic financial instability. Importantly, the different regulatory and supervisory authorities continue to engage with respective financial institutions to establish emerging risks from the grey listing.

Preparations for the third round of mutual evaluation by FATF undergoing

4.8 Botswana hosted the Eastern and Southern Africa Anti-Money Laundering Group 46th Task Force of Senior Officials, 23rd Council of Ministers meeting and the 6th Private Public Sector Dialogue on September 1 – 9, 2023 in Kasane. The Council of Ministers approved the schedule of the third round of mutual evaluations (ME), which will commence in 2025. According to the approved schedule, Botswana's ME, subject to FATF's intervention, is expected to commence in January 2027. As such, in preparation for the ME, with a view to avert a negative listing, the country will undergo a mock evaluation for the period 2018 to 2022, to identify deficient areas and response action. The country is also conducting its second National Risk Assessment to identify ML/TF/PF risks that the country is exposed to help in the design of effective counter measures to mitigate the risks.

BSE becomes a full member of WFE

4.9 The BSE was admitted to full membership of the World Federation of Exchanges (WFE) effective May 2023. This follows an evaluation visit by WFE delegates to assess the quality, depth and breadth of market, the regulatory environment, the information technology infrastructure, risk management as well as anti-money laundering practices in the Botswana stock market. The WFE is a global industry association for exchanges and clearing houses that works with standard setters, policy makers, regulators, and government organisation to support and promote the development of fair, transparent, stable, and efficient markets. The full membership to WFE is thus a testament of BSE's continuous efforts to be a world-class securities exchange that conforms to international best practice and the membership would help the BSE to maintain high standards and further improve on its mandate.

BSE records historically high debt listing

4.10 On August 3, 2023, the BSE recorded a 100 percent increase in listed debt securities, as 46 new securities got listed. The new listings comprised 27 bonds, with a value of P2.4 billion (0.9 percent of GDP), and 19 commercial papers with a value of P465.3 million (0.2 percent of GDP). The commercial papers are for Letshego Holdings Limited (LHL), and the bonds are from various companies such as, LHL, ABSA Bank Limited, BBS Bank Limited, Botswana Development Corporation and FNBB. This growth shows efforts to create an enabling environment for debt securities to be listed on the BSE. In 2022, the BSE implemented the revised Debt Listings Requirements to promote and support the listing of different types of debt securities such as Commercial Paper, Asset Backed Debt Securities and, most recently, Sustainable Bonds. The new listings reflect the interlinkages between domestic financial institutions, but it is a positive development that ensures the growth and development of the domestic financial sector.

Box 4.1: The Deposit Insurance Scheme of Botswana

Introduction

The DISB is a public scheme that is responsible for guaranteeing the repayment of a protected deposit in the event of failure of a member institution, which is licenced to operate banking or deposit taking business. The Bank of Botswana (Amendment) Act 2022, that came into operation on February 14, 2023, provides for the establishment, through regulations, of DISB. The Bank of Botswana (Deposit Insurance Scheme) Regulations, 2023 came into operation on July 21, 2023.

Progress Towards Full Operationalisation of DISB

Since the coming into operation of the Bank of Botswana (Deposit Insurance Scheme) Regulations, the DISB, in collaboration with the Central Bank, is in the process of constituting members of DISB governing body, being the Deposit Insurance Committee (DIC). The MoF, the Bank of Botswana, DISB and the Bankers Association of Botswana will have a representative in the DIC in addition to the three other independent members to be appointed by the Minister responsible for Finance. DISB has also published a list of members of the Scheme in the Government Gazette and in two newspapers as required by the Regulations.

Mandate of the DISB

DISB has a "paybox plus" mandate. The mandate allows for the pay out of depositors when a member institution fails, and involves additional functions, such as monitoring the condition of the banking industry to estimate provision for insurance losses based on aggregate risk of member institutions and taking action to forestall such losses. The "paybox plus" mandate also enables DISB to play a key role in the resolution of failed banks and is deemed to be the most appropriate for Botswana because it is less costly and easy to administer. Furthermore, this mandate does not duplicate the functions of existing prudential regulation and supervision authorities.

Role/Function of a Deposit Insurer

A deposit insurer contributes to the general stability of the financial system in the unlikely event that a member institution fails. This is achieved by lowering the possibility of a bank run i.e., a significant number of bank depositors withdrawing their funds all at once when a member institution fails. Prior to establishment of DISB and coming into operation of the Bank of Botswana (Deposit Insurance Scheme) Regulations, in July 2023, deposits held with banks and deposit taking institutions in Botswana were neither explicitly insured nor protected against insolvencies or failures. DISB is therefore an essential component of broader domestic financial safety nets geared towards promoting financial stability and protecting small depositors against losses when member institutions fail.

Importantly, a deposit insurer is one of the frameworks and tools for crisis preparedness and management which facilitates orderly exit of failed institutions and maintenance of financial stability. Furthermore, a deposit insurer will avail financial resources (liquidity) for timely intervention during the failure of a member institution and complements the actions and policies of banking supervision regime in risk management and minimisation. Ultimately, it attenuates any interruption to economic activity occasioned by any adverse impact on the relationship between a failing member institution and its customers and mitigates the risk of a bank run.

Thus, the deposit insurer ensures that the depositors continue to have confidence in the financial system in both good and bad times by promising depositors that they will swiftly have access to their protected deposits if a member institution fails. More importantly, a deposit insurer reduces the implicit government guarantee as well as possible need for compensation of depositors or other forms of support by the Government.

DISB Member Institutions

All banks and deposit-taking institutions are member institutions of DISB, and the membership is compulsory. Members of DISB can primarily be identified by a membership certificate that is visibly displayed in all their respective head office, branches and outlets. Furthermore, ATM screensavers and all advertisements by member institutions should mention membership of DISB. Effective July 21, 2023, members of DISB are all the nine commercial banks and Botswana Savings Bank.

Coverage Limit

DISB insures deposits up to a maximum of P250 000 per depositor per member institution if a member institution fails. It protects deposits held by member institutions of natural persons as well as legal entities, whether they are from Botswana or from any other country. Deposits held by each member institution are insured separately, while deposits in different branches of the same member institution are not insured separately. Deposit balances over the coverage limit are uninsured and will therefore be paid from the liquidation proceeds after the assets of the failed member institution have been sold off. The amount to be paid will depend on the recoveries made by the liquidator.

Types of Deposits Eligible for Protection by DISB

All ownership categories of deposit accounts, i.e., individual (single or joint), business (corporate, partnership or associations accounts) and trust accounts are eligible for protection by DISB. Terms and conditions will apply in the reimbursement of beneficiaries of trust accounts.

Excluded Deposits

Deposits from persons or entities listed below are not eligible for deposit protection by DISB:

a) Government or institutions wholly or partly owned by the Government;
b) Banks and NBFIs;
c) Owners, directors, and senior management of a failed member institution;
d) Subsidiary or associate company of a member institution;
e) International Financial Services Centre licensed banks;
f) Negotiable certificates of deposits or any other tradable debt funding instrument; and
g) Deposits arising from transactions that are linked to financial crime.

5. CONCLUSION AND OUTLOOK

5.1 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, 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 challenges resulting from the subdued and fragile global growth; high inflation and tight global financial conditions, persistent geopolitical risks, as well as the high and rising sovereign debt burden. Further, the increasing interconnectedness of the volatile crypto assets market with the rest of the financial system, presents a challenge for regulators in developing 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 but open other opportunities from green solutions and climate change mitigation as well as adaptation measures. Similarly, improving data quality would greatly enhance identification and assessment of climate-related risks and the costs of greening the financial system.

APPENDIX

Table A1: Macroeconomic and Financial Stability Indicators

Financial Sector (Percent)	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun
	2020				2021				2022				2023	
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	112.8	112.7	113.4
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	47.9	49.2
Pension Funds Offshore Investments (percent of GDP)	28.3	33.9	37.3	39.1	41.0	40.0	40.0	40.2	36.1	32.2	28.3	28.3	29.7	31.2
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	9.9	10.6
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	19.5	20.2
Household Debt to Income	47.3	47.0	47.0	58.6	58.6	58.*	58.6	45.0	45.0*	45.0*	45.0*	37.9	39.7*	39.7
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	3.5	3.4
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	18.1	18.8
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	6.5	6.9	6.5
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	5.5	5.9
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	5.4	5.0
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	9.9	4.6
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	23.2	24.9
Net International Investment Position (P' Million)				64266				83824				67526	…	…
Current Account Balance (P' Million)	-2580	-7243	-4527	-3388	4001	-3211	1698	-5410	1483	2957	3532	-581	2577	6771
Months of Import Cover	11.5	11.8	10.9	9.9	10.1	9.6	…	9.1	9.1	9.8	9.9	8.4	7.7	9.7
Exports (percent of GDP)	35.4	28.5	29.6	31.4	37.6	42.1	…	40.5	41.1	44.4	50.1	34.8	37.6	32.5
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	34.9	31.3	31.1
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	16.6	
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 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	0.7	
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

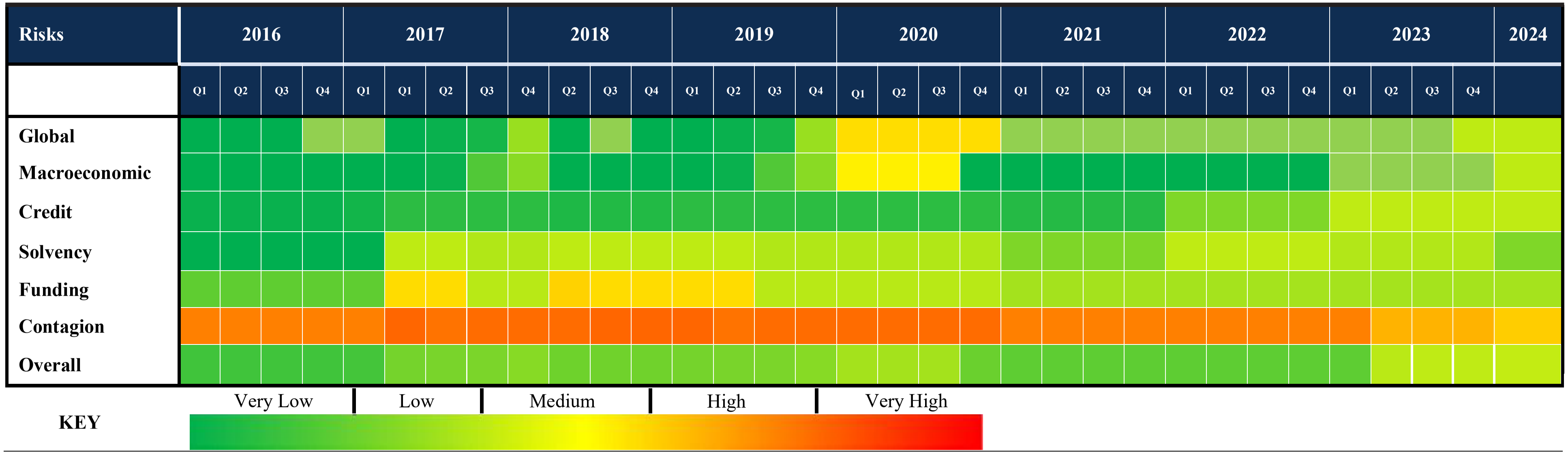
[1]Figures include commercial banks, statutory banks, and pension fund assets only.

* 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 adverse impact of geopolitical tensions (e.g., the Russia - Ukraine war and associated global supply disruptions), increased geo-economic fragmentation and rising public and corporate debts levels.	Increased local production through import substitution - vegetable ban, ERTP, ISF and other Government policies to boost economic growth.	**Moderate**
High inflation outlook A possible rise in inflation that could lead to entrenched inflation expectations.	The MPC projects that inflation will rise but remain within the objective range in the medium term. However, there are possibilities of a higher rise in inflation than anticipated due to the projected increase in international oil and food prices.	**Low**
Tightening financial conditions Potential tightening of policy rates to control inflation expectations.	• The MPC maintained the MoPR at 2.65 percent since the beginning of the year and this signals a lull in tightening. • 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.	**Low**
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 dependence 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. NFCs and NBFIs are the main sources of bank 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
	Number of branches/10 000 adults	…	0.92	0.92	0.85	0.82	0.89	0.77
	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
	Formal labour force/pension membership (percent)	61.2	67.2	66.6	63.1	58.3	66.1	…
Mortgage	Mortgage assets/total financial assets (percent)	4.3	4.3	4.5	4.3	4.1	5.3	5.1
	Mortgage assets/GDP (percent)	7.8	7.8	7.8	7.8	8.3	7.8	5.7
Credit union	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
Capital markets	Number of listed bonds	41	43	49	46	44	44	43
	Number of listed equities	26	26	26	24	24	23	23
	Market Capitalisation/GDP (percent)	28	27	24	22	21	18	16
	10 corporates capitalisation/domestic market capitalisation (percent)	70.2	77.4	72.8	76.9	77.9	78.4	79.6
	Domestic FIs capitalisation/domestic market capitalisation (percent)	…	…	…	52.6	52.5	54.5	55.7
	Government bonds value/ total bonds value (percent)	68.0	63.9	36.2	68.6	73.6	76.5	78.6
	Corporate bonds value/total bonds value (percent)	32.0	36.1	36.2	31.4	26.4	23.5	21.4
	Value traded/market capitalisation	5.6	5.6	4.4	4.7	2.0	4.9	2.9
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 (August 2023)

Source	Target	Amount (P Billion)
Bank of Botswana	External	64.3
Commercial Banks	Households	51.7
Commercial Banks	Government	0.3
Commercial Banks	Non-Financial Corporations	21.7
Commercial Banks	External	5.0
Commercial Banks	Bank of Botswana	11.3
Commercial Banks	Other Financial Corporations	3.0
Commercial Banks	Parastatals	3.1
Commercial Banks	Micro-lenders	0.9
External	Commercial Banks	6.5
Households	Other Financial Corporations	131.6
Households	Commercial Banks	19.9
Micro-lenders	Households	11.9
Micro-lenders	Commercial Banks	0.6
Non-Financial Corporations	Commercial Banks	39.0
Non-Financial Corporations	External	9.3
Non-Financial Corporations	Other Financial Corporations	4.1
Other Financial Corporations	External	82.5
Other Financial Corporations	Commercial Banks	21.7
Other Financial Corporations	Non-Financial Corporations	3.5
Other Financial Corporations	Households	0.3
Parastatals	Commercial Banks	13.4

Source: Bank of Botswana

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

Box A1: Stress Tests Assumptions

Credit Risk

Credit risk is the potential that a borrower or counterparty to a credit transaction will fail to meet obligations in accordance with the agreed terms. The level of NPLs is an indicator of credit risk for a bank. In the Stress Testing Model, the credit shock scenario models a general decline in the asset quality of individual banks subject to calibrated shocks. Generally, the increase in NPLs can be a certain percentage of either existing NPLs or existing performing loans. In the moderate scenario, the stress tests assume ten percent of existing performing loans become non-performing, while the shock applied in the severe scenario is 15 percent. An increase in NPLs means that the bank has to undertake additional provisioning; the increased provisioning requirements will reduce the value of Risk Weighted Assets as well as capital. This assumed transmission mechanism would lead to a decline in the CAR.

Liquidity Risk

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

In the case of liquidity stress testing, a haircut refers to a 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. In the severe shock, the magnitudes of haircuts and run-off rates are higher than in the moderate scenario for some asset and liabilities classes. The survival horizon is given as number of days out of 30 days.

Interest Rate Risk[1]

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

[1] The model assumes 150 basis points (in the moderate scenario) and 225 basis points (in the severe scenario) cuts in the Policy Rate and assesses how this interest rate shock affects banks' net income and balance sheets.

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