# 2021 FINANCIAL STABILITY REPORT

CENTRAL BANK OF LESOTHO

BANKA E KHOLO EA LESOTHO

CENTRAL BANK OF LESOTHO

# FINANCIAL STABILITY REPORT

December 2021 | Issue No.6

The *Financial Stability Report* is available on the Central Bank of Lesotho website at **www.centralbank.org.ls**.

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# GOVERNANCE, MISSION & OBJECTIVES

## Ownership and Governance

The Central Bank of Lesotho is a statutory organisation
fully owned by the Government of Lesotho.

The Central Bank enjoys a fair amount of independence in formulating and implementing monetary policy. The Governor, who is also the chairman of the Board of Directors, together with the two Deputy Governors, are appointed by His Majesty The King on the advice of the Prime Minister.
The Minister of Finance appoints the other Board Members.

## Mission Statement

The Mission of the Central Bank of Lesotho is to achieve and maintain monetary and financial system stability to support balanced macroeconomic development of Lesotho.

## Objectives

The principal objective of the Central Bank of Lesotho, as stipulated in the Central Bank of Lesotho Act of 2000, is to achieve and maintain price stability.
Other related objectives which are supportive to this mission are:

- To foster the liquidity, solvency and proper functioning of a stable market-based financial systems;
- To formulate, adopt and execute the monetary policy of Lesotho;
- To issue, manage and redeem the currency of Lesotho;
- To formulate, adopt and execute the foreign exchange policy of Lesotho;
- To license, register and supervise institutions pursuant to the Financial Institutions;
- To own, hold and manage its official international reserves;
- To act as a banker and advisor to, and as fiscal agent of the Government of Lesotho;
- To promote the efficient operations of the payments system;
- To promote the safe and sound development of the financial system; and
- To monitor and regulate the capital market.

# PREFACE

Financial stability refers to the resilience of the financial system to adverse shocks while continuing to function smoothly and supporting the ability of households and firms to use their financial assets with confidence. A stable financial system contributes towards broader economic growth and improved standard of living for all people.

The CBL has the mandate to promote the stability and soundness of the financial system of the country. It achieves this objective through delivering on its core functions, notably: fostering the liquidity, solvency, and proper functioning of a stable market-based financial system; promoting the safe and sound development of the financial system; conducting effective supervision and regulation of banks; and providing efficient, reliable and safe payment and settlement systems.

This Financial Stability Report is a tool used by the Central Bank of Lesotho (CBL) for financial stability surveillance. The report seeks to play a role in preventing crises by identifying risks and vulnerabilities in the financial system and assessing the resilience of the financial system to domestic and external shocks, as well as highlighting policies that may mitigate systemic risks, thereby contributing to global financial stability and the sustained economic growth. The CBL publishes the Financial Stability Report once a year, in June. Through this Report, the CBL seeks to enhance awareness of the soundness of Lesotho's financial system ❑

# LIST OF ABBREVIATIONS

| | |
|---|---|
| AGOA | Africa Growth Opportunity Act |
| BIS | Bank for International Settlements |
| CAR | Capital Adequacy Ratio |
| CBL | Central Bank of Lesotho |
| CMA | Common Monetary Area |
| CPSS | Committee on Payment and Settlement Systems |
| CSD | Centralised Securities Depository |
| EU | European Union |
| EWI | Early Warning Indicator |
| GDP | Gross Domestic Product |
| IOSCO | International Organisation of Securities Commission |
| LACH | Lesotho Automated Clearing House |
| LSW | Lesotho Wire |
| MNO | Mobile Network Operators |
| MFI | Micro-finance Institution |
| MTI | Money Transfer Institution |
| NPL | Non-performing Loans |
| NSDP | National Strategic Development Plan |
| OFC | Other Financial Corporations |
| PAL | Payments Association of Lesotho |
| PFMI | Principles for Financial Market Infrastructures |
| ROA | Return on Assets |
| ROE | Return on Equity |
| RTGS | Real Time Gross Settlement System |
| RWA | Risk Weighted Assets |
| SA | South Africa |
| SACU | Southern African Customs Union |
| SIPS | Systemically Important Payment Systems |
| UK | United Kingdom |
| US | United States |
| MoF | Ministry of Finance |

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# EXECUTIVE SUMMARY

1. Improved economic conditions have reduced near-term tail risks to the global financial stability. As the world continues to wheather the Covid-19 pandemic, financial stability risks remain contained and decelarating, largely due to the rebound of the global economy and the monetary and fiscal policy support put in place.

2. Despite the realised recovery in economic activity since the last FSR, there is considerable uncertainty surrounding the near-term and long-term global financial stability outlook. While financial conditions have eased further in advanced economies, the sense of optimism that had propelled markets in the first half of 2021 faded somewhat towards the end of the year. Investors have become increasingly concerned about the economic outlook amid rising and recurring Covid-19 flareups across the globe, greater uncertainty about the strength of the recovery, inflationary pressures and the geo-political developments in particular the Russia-Ukrain war.

3. Economic activity in South Africa (SA) remains sluggish. However, there has been a slow but healthy bounceback from the woes of the pandemic. Notwithstanding the observed bounceback, the Covid-19 virus remains a major risk, in a series of current risks to SA's economic growth outlook, which includes rising inflation, weaker commodity exports prices, stagnant investment, and the longer-term impact of the pandemic and the July 2021 unrest. In addition, ongoing energy supply constraints are likely to have lasting effects on investor confidence and job creation, impeding recovery in labour-intensive sectors which were the hardest hit by the lockdowns.

4. The Covid-19 shock continues to weigh on the fiscal position, economic activity, and depress investment and job creation in the domestic economy. Growth remains subdued. This is primarily on account of Covid-19 induced supply-side disruptions and subdued demand in Lesotho's trading partners. However, growth in the sub-Saharan African region is expected to accelerate in the near to medium-term as Covid-19 induced restrictions continue to be loosened. The textile production contracted due to the decline in orders from the United States of America (USA) and SA, which are the major destinations for Lesotho's exports. Conditions also remain less encouraging for diamond exports following the growth of synthetic diamonds and the low global growth exacerbated by the tension in US-China trade relations. Furthermore, low domestic and Southern African Customs Union (SACU) revenues continue to put severe pressure on the fiscal and external positions.

5. The favourable trends seen in the banking sector in the past years changed significantly in 2020 and 2021. The sector remains exposed to risks emanating from the challenging Covid-19 induced economic environment and credit concentration. While the banking sector continued to be adequately capitalised, profitability declined noticeably in 2020 while it bounced back in 2021. Liquidity levels and asset quality also improved in the review period. Furthermore, the stress-test results demonstrate that the current capitalisation, liquidity, and profitability levels guarantee a high degree of resilience to the assumed shocks.

# EXECUTIVE SUMMARY

6. The overall financial performance of the other financial corporations (OFCs) remained robust despite the challenging economic environment. The insurance sector continued to be resilient and financially sound but the sector saw declining profits and increasing expenses during the review period. The microfinance institutions (MFIs) sector maintained a healthy credit portfolio and its asset base continued to grow. However, the sector saw increasing liquidity risk.

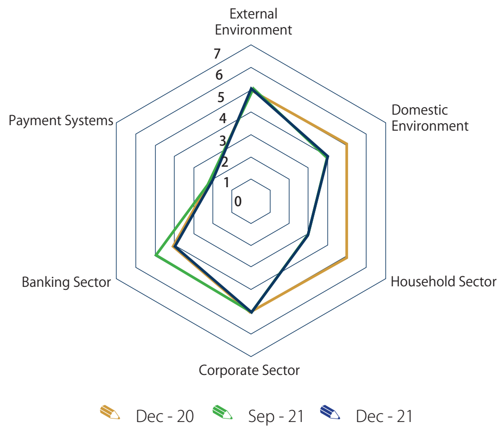
7. The payment system and infrastructure operated effectively and efficiently during 2021 and continued to anchor financial stability. The systemically important payment systems maintained high system-availability and registered a lower transaction density in 2021 relative to 2020. The mobile money business has grown tremendously since 2012 and has bridged the financial inclusion gap. However, growth rates have fallen significantly. This shows that the market has entered its maturity phase and much lower growth rates can be expected in the future. Vulnerabilities related to mobile money operations have been minimal during the review period and pose minimal systemic threats ❑

# FINANCIAL STABILITY RISKS

## 1. FINANCIAL STABILITY RISKS

**Improved economic conditions have reduced near-term tail risks to financial stability, thereby decreasing vulnerabilities and lessening financial stability concerns.** Since the last Financial Stability Report (FSR), vulnerabilities emanating from the domestic environment, and household sector have decreased, mostly due to the pick-up in economic activity as a result of increasing Covid-19 vaccination coverage and fewer disruptions to economic activity brought about by lockdowns. This provided a certain degree of stability and enabled households to foucus on income generating activities. The vulnerabilities emanating from the remaining sectors remain relatively unchanged as shown in Figure 1.

Figure 1 Financial Stability Risk Map




Source: Central Bank of Lesotho

Since the last FSR, vulnerabilities emanating from the domestic environment and household sector have decreased.

## 2. MACRO-FINANCIAL ENVIRONMENT

### 2.1 International Developments

The surge in global economic recovery witnessed from the first quarter of 2021 stabilised towards the end of the year. The recovery in global economic activity was supported by robust growth in the United States (US) and large emerging market economies (EMEs). In addition, the resurgence of the pandemic seems to have had a limited impact despite the rapid growth of the virus. Nonetheless, the uncertainty brought about by the Omicron variant has led to heightened volatility in financial markets and the tightening of global financial conditions. As a result, portfolio flows to EMEs lost momentum due to concerns regarding growth prospects coupled with rising inflationary pressures in these countries. However, they rebounded slightly at the end of the reporting period due to the risk-off sentiment.

On the other hand, significant downside risks to economic activity persist. They include the recurring Covid-19 outbreaks, intensifying inflationary pressures, and a possible briskly tightening of global financial conditions. In addition, climate change[1] may intensify commodity price volatility, especially in agriculture, and result in poor food production, leading to high food prices in majority of EMEs. Consequently, given limited policy space in EMEs to support economic activity if needed, these downside risks increase the possibility of a hard landing.

The impact of the pandemic is likely to continue into 2022 and weigh heavily on recovering trade and economic activity in SA. Despite the accommodative monetary policy stance in SA, the country's debt levels are increasing. This increase has been fuelled, by amongst other factors, increased borrowing intended to curb and mitigate the spread of Covid-19. Furthermore, increasing strain on public finances over the past couple of years has raised concerns about debt sustainability in the long-term. However, about 90 percent of public debt is denominated in local currency, which mitigates the refinancing and exchange rate risks. Nevertheless, non-residents hold a large part of SA's government securities, making it vulnerable to changes in market sentiment.

#### Vulnerabilities and risks associated with international developments

Weak global economic activity affects the financial institutions' balance sheets through macro-financial linkages. Lesotho is a small, open economy with many industries that are dependent on the good performance of the global economy. If international growth remains weak for protracted periods, it may have major repercussions for Lesotho's economy through the export channel. Exporting companies are highly dependent on banks for their funding hence any shock to their revenues could compromise their ability to service their debt which could ultimately affect banks' profitability. In addition, with global growth expected to remain weak, amid continued uncertainty about the outlook of the Covid-19 pandemic and world trade, long-term interest rates are still relatively low but are expected to begin rising as economic recovery takes momentum.

Improving demand and economic sentiment leave developing economies like Lesotho vulnerable to a sudden normalising of monetary policy in AEs. There is a risk that financial conditions in EMEs and developing economies may tighten markedly, especially if policymakers in AEs take steps toward rapid policy normalisation. This may result in large portfolio outflows and trigger significant currency depreciation and widening fiscal budgets due to large financing needs arising from Covid-19 related expenditure. In addition, policy normalisation in AEs will make it difficult for Lesotho to service its foreign loans because a rise in interest rates renders repayment of loans more expensive and stretch the already thin fiscal budget. Moreover, with the government, the main source of business for the private sector, an increase in foreign loan repayments may cause the government to postpone projects[2] offered to the private sector while at the same time, delaying payments for the services

[1] For instance, above normal rainfall experienced in Southern Africa, resulted in poor crop production as the land is always wet and rots the plants. Moreover, too much rain has resulted in floods that also destroy crops and the likely result is higher food prices in the near-term due to poor food production.

[2] Tenders.

rendered by the private sector. This will result in an increase in non-performing loans (NPLs) from the private sector, which will ultimately hurt the banking sector's balance sheets.

The rand remains very sensitive to international policy and political developments, changes in commodity prices, global financial market developments, and investors' sentiment. Lesotho's macroeconomic stability is anchored upon the loti's peg to the rand, which is crucial in containing inflation and strengthening the country's close economic and financial ties with SA. Therefore, a volatile rand becomes a threat to Lesotho's financial system stability. The value of the loti is mostly affected by changes in capital flows to EMEs and global risk perception through the rand-loti peg. The appreciation of the currency against major international currencies reduces Lesotho's export competitiveness while the depreciation of the loti increases input costs since raw materials are sourced from international markets. Coupled with the weak global demand, these issues adversely affect the trade balance.

SA's subdued economic activity and deteriorating public finances remain a potential source of vulnerabilities and spillover risk for the domestic financial system. Loss of confidence in SA by investors could trigger capital outflows and generate negative feedback loops due to extensive macro-financial linkages between SA and the rest of the world. Such linkages could amplify shocks given SA's high reliance on external finance and banks' increasing role in intermediating capital flows. The resulting capital outflow may lead to a higher cost of capital and reduced access to funding. This increases contagion risks since two-thirds of banks operating in Lesotho are subsidiaries of South African banks.

**Table 1** Selected Economic Indicators (%)

| | GDP Growth | | △ pps | Interest Rates | | △ pps | Inflation | | △ pps |
|---|---|---|---|---|---|---|---|---|---|
| | 2020 | 2021 | y/y | 2020 | 2021 | y/y | 2020 | 2021 | y/y |
| **Advanced Economies** | | | | | | | | | |
| US | (2.50) | 5.50 | **8.00** | 0.25 | 0.25 | **0.00** | 1.40 | 7.00 | **5.60** |
| UK | (7.80) | 6.50 | **14.30** | 0.10 | 0.25 | **0.15** | 0.60 | 5.40 | **4.80** |
| Euro Area | (5.10) | 4.60 | **9.70** | 0.25 | 0.25 | **0.00** | (0.30) | 5.00 | **5.30** |
| Japan | (1.20) | 5.40 | **6.60** | (0.10) | (0.10) | **0.00** | (1.20) | 0.80 | **2.00** |
| **Emerging Market Economies** | | | | | | | | | |
| Brazil | 1.10 | 1.60 | **0.50** | 2.00 | 9.25 | **7.25** | 4.52 | 10.06 | **5.54** |
| Russia | (1.80) | 5.00 | 6.80 | 4.25 | 8.50 | **4.25** | 4.90 | 8.39 | **3.49** |
| India | 0.40 | 5.40 | **5.00** | 4.00 | 4.00 | **0.00** | 4.59 | 5.59 | **1.00** |
| China | 6.50 | 4.00 | **(2.50)** | 3.85 | 3.80 | **(0.05)** | (0.50) | 1.50 | **2.00** |
| SA | (4.10) | 1.70 | **5.80** | 3.50 | 3.75 | **0.25** | 3.10 | 5.90 | **2.80** |

*Source: Federal Reserve Bank, OECD data, Bank of Japan, ECB, SARB, STATS SA, Bank of Brazil, Reuters, Bank of India, Trading Economics.*

## 2.2 Domestic Developments

The domestic economy remains under pressure due to the impact of the Covid-19 pandemic and other longstanding structural economic challenges. Covid-19 is still a major concern for the country, making pandemic control the top priority for the government. On the other hand, growth had been subdued for several years, and the government finances had struggled to cope with the volatility of transfers from SACU receipts, which account for the majority of the government budget. There is expected recovery in the medium-term, which is set to be led by a rebound in mining, manufacturing (including textiles), and construction activities on the back of supportive external demand conditions and improved business and consumer confidence.

The country has been experiencing twin economic shocks resulting from the pandemic and a decline in SACU revenues that have proved to be very volatile and have continued to dwindle with time. The Omicron variant of Covid-19 discovered towards the end of 2021 brought unpleasant challenges to the economy as most AEs closed borders for Southern African Countries. Lesotho's economy has solely been dependent on the Lesotho Highlands Water Project (LHWP) revenues, textile factories, and Sothern African Customs Union (SACU) revenue for the past years. The textile and apparel industry has been hit hard by the Covid-19 pandemic which caused economic deterioration, and the key traders including South Africa (SA), the European Union (EU), and the United States (US) were amongst the hardest hit by the pandemic which led to a decline in the demand for Lesotho made products. The country's sluggish growth has been attributed to poor performance in every sector of the economy particularly in the manufacturing sector as the result of the pandemic. The contribution of the manufacturing sector to the GDP of the country has been declining due to the effects of Covid-19 on the export market. Exports have declined in light of the economic contractions in many countries and remittances, on which Basotho households rely on, have dropped significantly. Lesotho's growth trajectory and recovery are highly dependent on the path of the pandemic in the SACU region, especially recovery in SA given the close economic ties between the two countries.

The macro-financial environment continued to be affected by the Covid-19 pandemic. The loti continued to depreciate against major currencies. In addition, inflation increased in the last quarter of 2021. The financial markets in the country have been operating with low-interest rates that were implemented to weather the impact of the Covid-19 pandemic on economic activity. However, there was a slight increase in the CBL rate in the review period from 3.5 percent to 3.75 percent towards the end of 2021.

The fiscal position has worsened owing to the growing Covid-19 related expenditure and low government revenues. Recurring bouts of political instability and infighting within the government amid an overall weak institutional capacity constrain the government's ability to adjust fiscal policy and push forward reforms and exacerbate problems with public-finance management. The widening of the fiscal deficit is expected to be driven by a combination of a fall in revenues and an increase in expenditures. The increase in government spending was largely driven by spending on health care to fight the pandemic. The government has suspended other mitigation measures that were put in place during the early stages of the pandemic such as social grants to some groups in the country. The pandemic has exacerbated Lesotho's weak macroeconomic performance and budgetary constraints, leading to limited capacity to respond to shocks. Financing Covid-19 pandemic response initiatives turned out to be a double blow to the budget, both reducing revenue and increasing expenditure in the country.

# MACRO-FINANCIAL ENVIRONMENT

## Box 1 - Financial Sector Stability Review and Financial Sector Assessment Programme Missions

During 2021, the Central Bank of Lesotho hosted two important virtual missions, the Financial Sector Stability Review (FSSR) and Financial Stability Assessment Programme (FSAP).

### Financial Sector Stability Review (FSSR)

The FSSR is a demand-led technical assistance (TA) instrument that provides a baseline diagnostic review and proposes prioritized capacity building, through a TA roadmap, to deliver sound financial sector reform in support of development, financial stability, financial deepening, and inclusion, especially to low- and lower-middle-income countries (LLMICs). The scope of the mission, which was agreed between the IMF and Lesotho authorities during the scoping (virtual) mission held in January 2021, comprised of financial stability and macroprudential policy frameworks, stress testing, early intervention, crisis management and resolution, financial stability implications of financial inclusion and fintech. Following a thorough review, the mission proposed a TA roadmap (TARM) to strengthen the authorities' capacity to detect risks and conduct effective prudential oversight. The FSSR's financial stability module focused on the financial stability and macroprudential policy frameworks, stress testing, early intervention, crisis management and resolution, and analyzed the financial stability implications of financial inclusion and fintech. The financial sector statistics module focused on data gaps hampering financial stability analysis and statistical reporting to the IMF Statistics Department (STA).

The Mission Team met with the the Central Bank of Lesotho's (CBL) Governors and the senior staff as well as the technical staff. The Mission Team also met with government officials from the Ministry of Finance; the Ministry of Development and Planning, the Ministry of Small Business, Cooperatives and Marketing, the Ministry of Trade and Industry, the Bankers Association, the Insurers Association; senior executives from public and private sector financial institutions; and liaised with the World Bank.

### The Financial Sector Assessment Program (FSAP)

The Financial Sector Assessment Program (FSAP) provides in-depth examinations of countries' financial sector. FSAPs are done jointly by World Bank and IMF staff in developing and emerging market countries and by the IMF alone in advanced economies. FSAPs have two main components: the financial stability assessment and—in developing and emerging market countries—the financial development assessment. These components may be assessed at the same time during a joint IMF-World Bank mission or at different times in separate stability and development "modules" conducted by the Fund and the Bank, respectively.

A World Bank (WB) team conducted a virtual mission to Lesotho during June 1-25, 2021, to undertake an assessment under the Financial Sector Assessment Program (FSAP) – Development Module. The team was made up of the WB staff and external experts. The mission assessed access to finance and financial inclusion, financial infrastructure, pensions sector regulation and development, and insurance sector regulation and development. The FSAP was conducted in close coordination with the International Monetary Fund (IMF). At the end of the Mission, the Team produced an Aide Mémoire (the main report) and Technical Notes on "Financial Inclusion", "Access to Finance", "Pensions Sector Regulation and Development" and "Insurance Sector Regulation and Development".

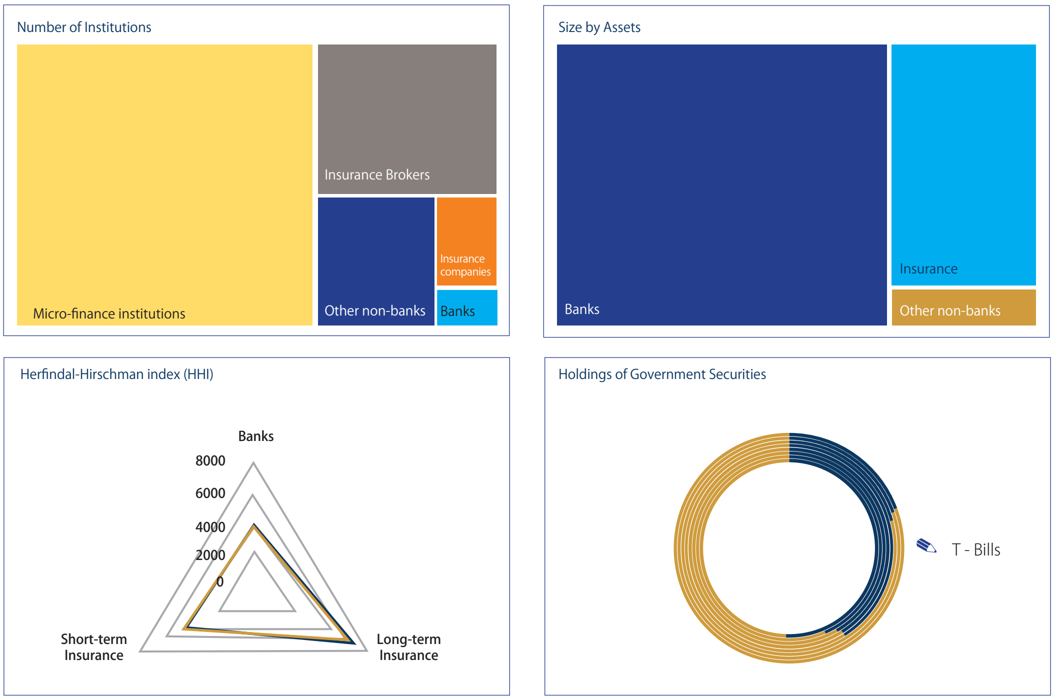
The mission met with officials from various departments of the CBL, the Ministry of Finance, Ministry of Development and Planning, Ministry of Agriculture. Ministry of Small Business Development, Cooperatives and Marketing, Ministry of Trade and Industry, Ministry of Justice, Master's Office, Financial Intelligence Unit, Lesotho Revenue Authority, Ministry of Home Affairs, Ministry of Social Development, Public Officers DC Fund, Lesotho National Development Corporation, and representatives from banks, microfinance institutions, insurance companies, and other financial institutions.

# 3. FINANCIAL STABILITY DEVELOPMENTS AND TRENDS

## 3.1 The Structure of the Financial System

Lesotho's financial sector consists of four commercial banks (three subsidiaries of South African banks and one government-owned bank), ten insurance companies, 46 insurance brokers, 118 microfinance institutions (MFIs), two asset management firms, six stockbrokers, and two money transfer institutions (MTIs) as shown in Figure 2[3]. The financial sector is dominated by the banking industry with total assets constituting 67.1 percent of the total financial sector assets and about 58.2 percent of the gross domestic product (GDP)[4] at the end of December 2021. The Insurance industry is the second largest industry of Lesotho's financial system, with a share of 28.8 percent of the total financial system assets and 28.0 percent of GDP. The share of other non-bank financial institutions, including MFIs, to total financial system assets, is 4.0 percent, while total financial system assets to GDP stood at 85.6 percent. The financial markets in Lesotho comprise mainly of money markets and securities markets with the latter being the larger of the two markets. In both markets, government securities make up the entire portfolio of investments. This shows that Lesotho's financial market is still shallow, concentrated, and has limited investment options. The Central Bank of Lesotho (CBL) is the sole regulator of all the financial institutions in the country.

**Figure 2 Financial System Structure**




Source: Central Bank of Lesotho

[3] Insert footnote: Other non banks include: Stock brokers/Advisors - 6, Asset managers - 2, Foreign exchange bureau and money transfer - 2, Credit bureau - 1, Financial leasing - 1, Mobile money issuers in Lesotho - 5, Pension funds - 5, Pension fund intermediaries - 1, Pension fund administrators - 3

[4] Source: Bureau of Statistics Lesotho (GDP in current market prices).

The banking sector is composed of four commercial banks, with 50 branches across the country. The sector is characterised by limited competitiveness and is highly concentrated with a Herfindal-Hirschman index[5] (HHI) of 3 767. As at December 2021, the total banking industry assets were M21.6 billion. On an annual basis, the banking industry's total assets grew by 8.0 percent from M20.0 billion. The foreign-owned banks control about 90.0 percent of the banking industry's assets, revenue, and deposits.

The insurance industry accounted for 87.4 percent of total financial assets for Non-Bank Financial Institutions (NBFIs) as at December 2021. Out of the ten insurance companies, six companies provide long-term insurance, four provide short-term insurance and one provides both long-term and short-term insurance. The insurance sector is highly concentrated in both the long-term and short-term categories. The HHI for long-term and short-term categories is 6 089 and 5 584, respectively. The Pension industry is also under the CBL's purview following the enactment of the Pension Funds Bill. The Pension Funds Act confers powers on CBL to register, regulate, supervise, and dissolve pension funds in the country.

The legal and regulatory environment in Lesotho further provides for both deposit-taking MFIs as well as credit-only MFIs. However, during the period under review, there were no deposit-taking MFIs operating in Lesotho. The six largest MFIs command a larger share of the market. The MFIs industry has grown rapidly but poses no systemic risks. The sector saw increasing numbers on total credit extended in the review period. The rapid increase in the level of credit, if not sustainable, may have systemic implications due to the growing interconnectedness among industries in the financial system.

[5] The Herfindal-Hirschman index (HHI) is a measure of market concentration which, unlike other methods, takes into account the relative size and number of institutions in the industry. It can assume values from zero (a situation close to perfect competition) to 10000 (a situation that reflects monopolistic behaviour). There are three HHI thresholds that determine the market structure of an industry: (1) less than 1000 suggests a competitive industry, (2) 1000 to 1800 indicates a moderately concentrated industry, and (3) a value greater than 1800 depicts a highly concentrated industry.

## 3.2 Cross Linkages in the Financial Sector

The following sections highlight the level of Lesotho's financial sector interconnectedness among the sub-sectors of the financial system, as well as with the Government of Lesotho. The level of interconnectedness in the financial sector and linkages thereof are very important for macroprudential surveillance and financial stability. A shock in one sector can have spillover effects on other sectors or the rest of the financial system through these linkages. Therefore, it is important that the CBL monitor vulnerabilities emanating from the inter-linkages among the financial institutions and ensure that it takes prompt corrective actions to prevent or remedy contagion risk within the financial system.

### 3.2.1 Linkages between banks

The linkages between domestic banks are predominantly in a form of placements for purposes of payments and settlements instead of interbank loans. Similarly, cross-border linkages are predominantly placements with parent banks. Furthermore, banks hold deposits of/lend to other non-bank financial corporations. Risks associated with placements with banks from abroad expose domestic banks to exchange rate risks (except in the case of SA due to the loti's peg to the South African rand). Moreover, integration among global banks increases the likelihood of contagion risk amongst banks and the real economy.

### 3.2.2 Linkages between financial institutions and Government

Financial sector development is an important determinant of economic growth. Sound and efficient financial systems channel capital to its most productive use that is beneficial for sustaining economic development. Besides linkages between various sub-sectors of the financial system, linkages between the financial sector and the government can be a critical source of systemic risk. The Government of Lesotho's debt held by the financial sector primarily consists of Treasury securities[6]. Table 2 shows outstanding Treasury securities held by the financial sector.

| Table 2 Financial Sector Exposure to Lesotho Government Securities in Thousands of Maloti | | | | | | | |
|---|---|---|---|---|---|---|---|
| Period | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | △YoY |
| **Total Financial Sector Exposure** | **1 021.3** | **1 251.6** | **1 932.6** | **3 118.9** | **3 344.4** | **3 687.0** | **10.2 pct** |
| % of Total Government Debt | 76.1 | 74.4 | 78.6 | 88.4 | 87.7 | 86.8 | -1.0 pp |
| ***T-Bill Holders' Amounts Outstanding*** | **423.3** | **511.6** | **644.4** | **647.7** | **654.9** | **709.1** | **8.3 pct** |
| *% of Total, of which* | 41.5 | 40.9 | 33.3 | 20.8 | 19.6 | 19.2 | -0.4 pp |
| Commercial Banks | 38.7 | 38.2 | 32.1 | 20.5 | 20.6 | 22.7 | 2.0 pp |
| Insurance Companies | 2.8 | 2.7 | 1.2 | 0.3 | 0.2 | 0.1 | -0.1 pp |
| Non-Bank Financial Corporations | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | -0.2 pp |
| ***Bond Holders' Amounts Outstanding*** | **597.9** | **740.0** | **1 288.2** | **2 471.2** | **2 689.5** | **2 978.0** | **10.7 pct** |
| *% of Total, of which* | 58.5 | 59.1 | 66.7 | 79.2 | 80.4 | 80.8 | 0.4 pp |
| Commercial Banks | 45.6 | 41.9 | 40.7 | 77.6 | 75.6 | 86.7 | 11.1 pp |
| Insurance Companies | 12.9 | 17.2 | 26.0 | 35.3 | 33.9 | 40.8 | 7.0 pp |
| Non-Bank Financial Corporations | 0.0 | 0.0 | 0.0 | 14.9 | 29.7 | 26.6 | -3.1 pp |

***Source**: Central Bank of Lesotho*

[6] Treasury Bonds and Bills.

## 4. BANKING SECTOR

The favourable trends seen in the financial sector in the past years changed significantly in 2020 and 2021. The sector was predominantly exposed to risks emanating from the challenging Covid-19-induced economic environment and credit concentration. While the banking sector continued to be adequately capitalised, profitability declined noticeably in 2020 and improved slightly in 2021. Liquidity levels and asset quality improved in the review period and there was a notable increase in exposure to foreign exchange. Furthermore, the stress-test results demonstrate that the current capitalisation, liquidity, and profitability levels guarantee a high degree of resilience to the assumed shocks.

**Table 3** Bank Health Index

| Risk Types | 2017 | 2018 | 2019 | 2020 | 2021 |
|---|---|---|---|---|---|
| Overall Industry Health | -2.7 | 1.1 | 0.5 | -2.0 | -2.2 |
| Capital Adequacy | -0.1 | -0.2 | 0.5 | 1.0 | 0.7 |
| Asset Quality | 0.9 | -0.1 | -0.8 | -0.1 | 1.7 |
| Earnings | -0.7 | 0.2 | 0.3 | -1.3 | -1.4 |
| Liquidity | -0.1 | 0.6 | -1.9 | 0.0 | 0.2 |
| Leverage | 0.1 | 0.4 | 1.2 | 0.4 | 0.2 |
| Sensitivity to Market Risk | 1.1 | 0.1 | 0.4 | 2.2 | 0.2 |

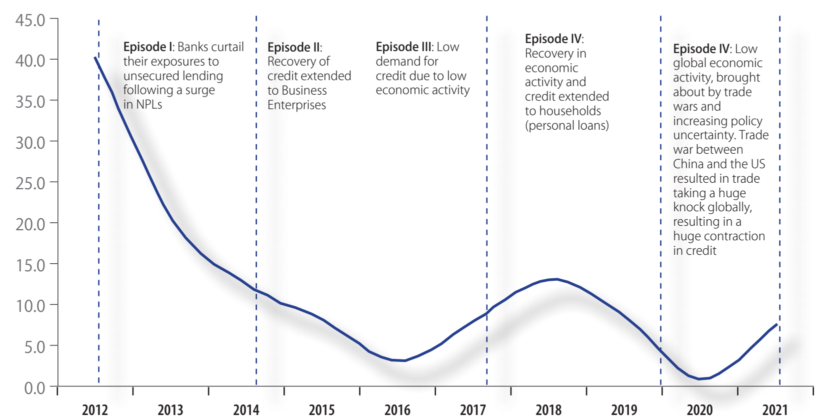
***Source**: Central Bank of Lesotho*

Credit extension increased in 2021 relative to 2020, and as shown in Figure 3, the growth rate has slowed down significantly since 2018.

### 4.1 Credit Developments

Credit extension increased in 2021 relative to 2020, and as shown in Figure 3, the growth rate has slowed down significantly since 2018. Year-on-year, credit grew by 6.4 percent to M7.94 billion. Despite the slight improvement, low global economic activity due to the Covid-19 pandemic and dwindling demand, trade tensions, and increasing protectionism policies continue to weigh on credit extended to the key sectors of the economy, most of which export their output.

**Figure 3** Annual Credit Growth (%)

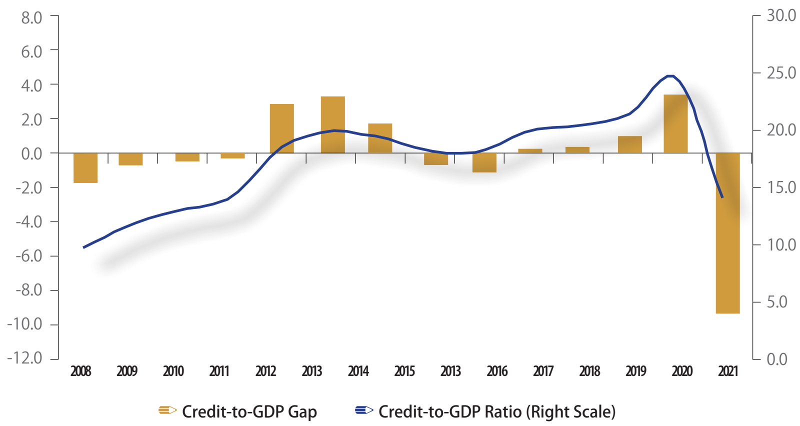



Source: Central Bank of Lesotho

Figure 4 shows the evolution of the annual credit-to-GDP gap. The credit-to-GDP gap[7] is regarded as a useful early warning indicator (EWI) of banking crises or severe distress. A large positive gap is an indication that the private sector borrows at a level that is perhaps not justified by the current output-producing capacity of the economy while a negative gap theoretically implies that there is scope for additional safe borrowing for consumption or investment purposes. The credit-to-GDP gap in Lesotho has been positive but narrowing since 2013, turning negative in 2015 & 2016 and turning positive again in 2017-2020 from whence it turned sharply negative (see Figure 4). This shows that, over time, the credit-to-GDP ratio has mostly been positive with marginal gaps remaining almost at par with its long-term trend although it has fallen significantly during 2021 - an indication of the reduced likelihood of a credit crisis.

Figure 5 shows the distribution of credit by economic sectors. Credit to households, consisting of personal loans and mortgages, constituted 72.7 percent of the banks' loan book during 2021. Out of the 72.7 percent, personal loans constituted 55.0 percent. This shows the extent to which the banking sector is exposed to the household sector. On an annual basis, personal loans grew by 5.6 percent to M4.4 billion while mortgage loans increased by 8.0 percent to M1.4 billion. Moreover, credit to business enterprises grew by 2.8 percent to M2.1 billion.

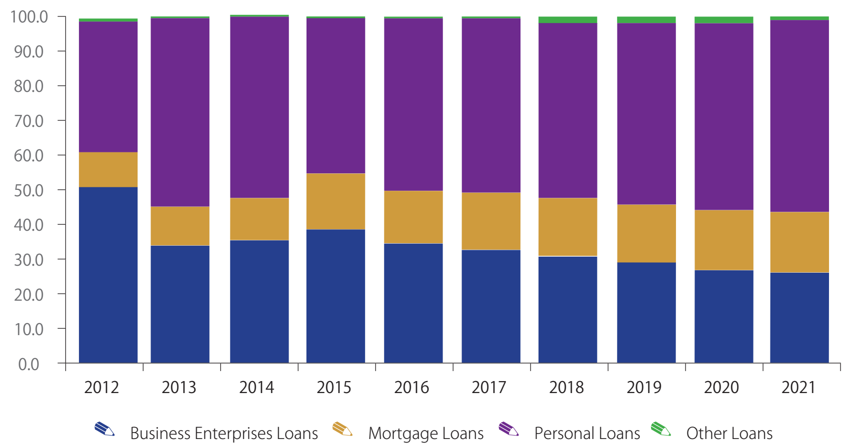
Figure 4 Annual Credit-to-GDP Gap (%)




Source: Central Bank of Lesotho

[7] The credit-to-GDP gap is defined as the deviation of the credit-to-GDP ratio from its long-run trend.

Figure 5 Distribution of Loans by Sector to Total Loans (%)

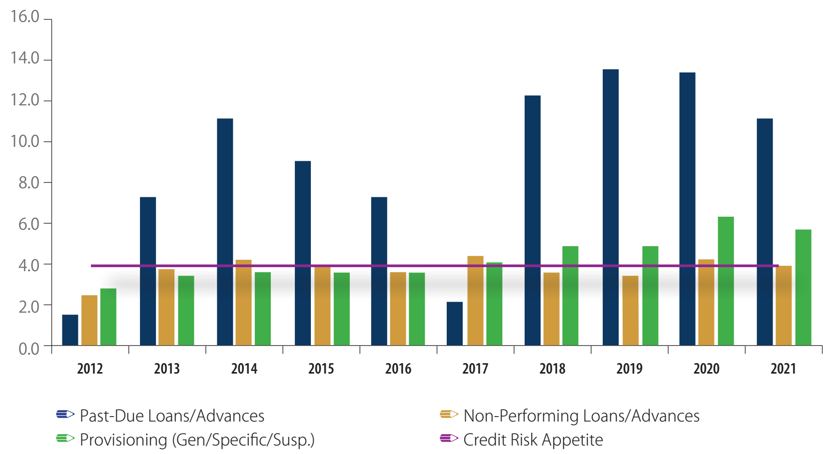



Source: Central Bank of Lesotho

Credit risk remains moderate during the review period but the concentration in certain loan types and exposures to single or group of borrowers remains a concern.

Credit risk remains moderate during the review period but concentration in certain loan types and exposures to single or group of borrowers remains a concern. The ratio of NPLs to total loans decreased from 4.2 percent in December 2020 to 4.1 percent in December 2021. The increase in past-due loans (Figure 6) remains the main downside risk to the NPLs' outlook. However, past-due loans decreased by 11.1 percent, thus reducing the downside risk. While total NPLs increased by 2.9 percent to M322.5 million in 2021, provisioning levels fell by 2.8 percent to M456.1 million in December 2021.

Figure 6 Non-Performing Loans & Provisions as a percent of Total Loans (%)



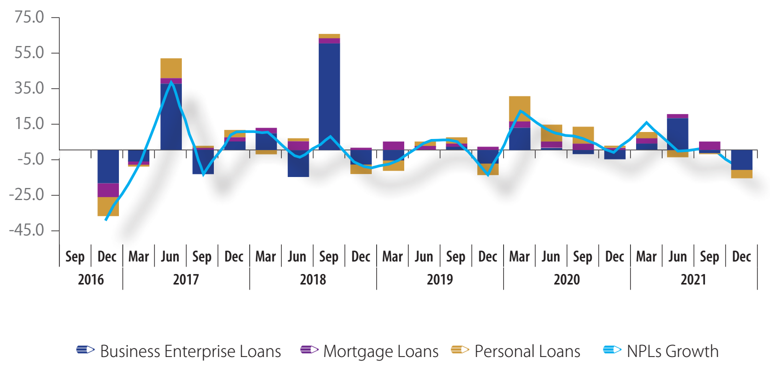

Source: Central Bank of Lesotho

The ratio of NPLs to total loans decreased from 4.2 percent in December 2020 to 4.1 percent in December 2021.

Sectoral analysis of NPLs revealed that the business enterprises component of the banks' loan portfolio realised the least growth in NPLs during the review period while personal loans' NPLs declined significantly as shown in Figure 7. The mortgage loan portfolio realised only minimal growth in NPLs.

The mortgage loan portfolio realised only minimal growth in NPLs.

Figure 7 Growth in NPLs (%)




Source: Central Bank of Lesotho

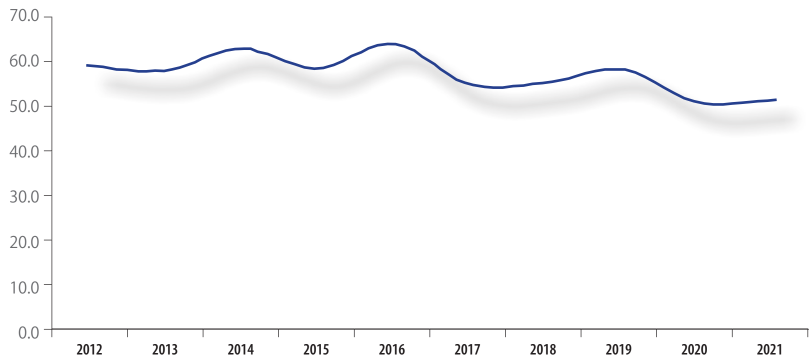
## 4.2 Liquidity Developments and Funding Structure

Capital is arguably the most important safety buffer for banks since it provides the resources to recover from substantial losses of any nature and gives depositors dealing with the bank confidence in its safety. However, the proximate cause of bank failures is usually a liquidity problem that makes it impossible to survive a classic "bank run" or a modern equivalent, such as an inability to access the debt markets for new funding. It is entirely possible for a bank to be solvent - have the economic value of a bank's assets more than sufficient to cover all of its claims - and yet go bust because its assets are illiquid and its liabilities have short-term maturities.

The Loan to deposits ratio, shown in Figure 8, is an important indicator used to determine the financial institutions' short-term viability. A lending institution that accepts deposits must have a certain level of liquidity to maintain its normal daily operations. The ratio increased by 0.7 percentage points (pps) to 51.4 percent in 2021. This means that the banking industry lends out about 51 - 52 lisente(cents) on every loti held as deposits and keep the rest for immediate liquidity needs.

# BANKING SECTOR

Figure 8 Loan to Deposit Ratio (%)

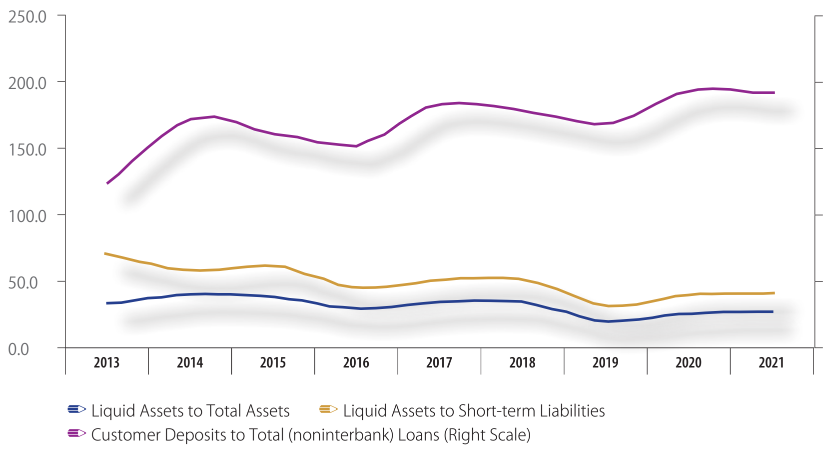



Source: Central Bank of Lesotho

The banking industry lends out about 51 – 52 lisente (cents) on every loti held as deposits and keep the rest for immediate liquidity needs.

The ratio of liquid assets to short-term liabilities increased from 41.9 percent in 2020 to 43.2 percent in 2021 (see Figure 9). Liquid assets (cash & cash items and transferable deposits) increased significantly in the review period, due primarily to a 41.8 percent increase in transferable deposits with the banks in Lesotho. The increase in transferable deposits was due to the relaxation in Covid-19 protocols, which led to increased business activity coupled with a increase in income to households who were now able to work and earn income. In the meantime, both households and business sectors were able to accumulate their deposits with banks.

Figure 9 Liquidity Ratios (%)




Source: Central Bank of Lesotho

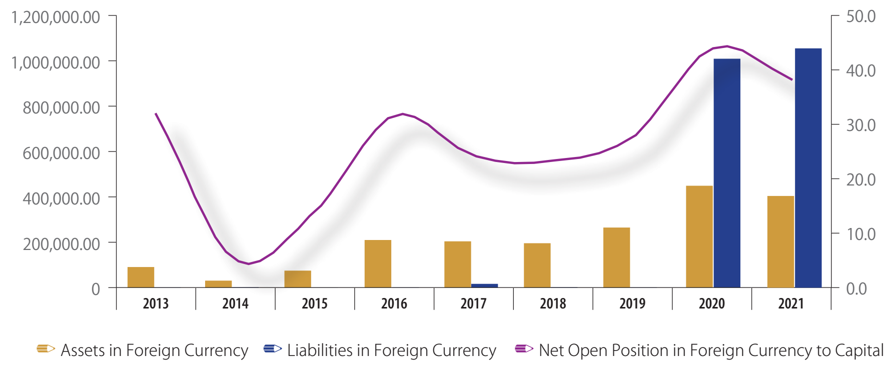
The ratio of liquid assets to short-term liabilities increased from 41.9 percent in 2020 to 43.2 percent in 2021 .

The ratio of liquid assets to total assets shows, on an on-going basis, the extent to which liquid assets can support the asset base. In the year ending in December 2021, the ratio increased by 1.3 pps from 41.9 percent that was observed in 2020. This shows that banks invested over two-fifths of their funds in liquid assets. The ratio of customer deposits to total (non-interbank) loans is another measure of banks' liquidity quality. It compares the stable deposit base with gross loans excluding interbank activity[8]. For the year ending in December 2021, the ratio was 192.8 percent reflecting a decline of 2.3 pps from the rate observed in 2020. The ratio decreased due to a 5.1 percent increase in deposits relative to a 6.3 percent increase in total gross loans relative to the previous year.

## 4.3 Market Risk

Market risk encompasses the risk of financial loss resulting from movements in market prices such as interest and exchange rates. In this report market risk is assessed based on one financial soundness indicator (FSI), the net open position in foreign exchange to capital, due to the limitted amount data of required to assess interest rates exposure. Banks with a short open position in a foreign currency get exposed to exchange rate risk in an instance where the foreign currency appreciates, while those with a long open position get exposed in a case where foreign currency depreciates.

Figure 10 Sensitivity to Market Risk (%)




Source: Central Bank of Lesotho

Minimum CAR serves to protect depositors and promote the stability and efficiency of the financial system.

## 4.4 Capital Adequacy

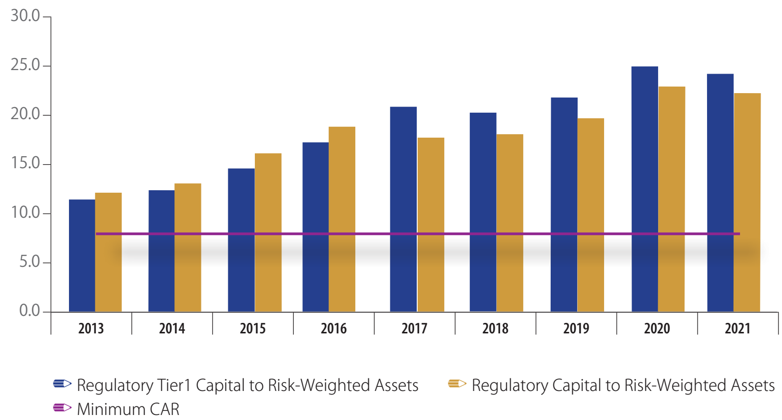
Capital adequacy ratios (CAR)[9] measure the bank's health and soundness concerning the risk of insolvency. Minimum CAR serves to protect depositors and promote the stability and efficiency of the financial system[10]. The purpose of having a minimum CAR is to ensure that banks can absorb a reasonable amount of losses before becoming insolvent and before depositors' funds are lost. The higher the capital adequacy ratio a bank has, the greater the level of unexpected losses it can absorb.

[8] IMF (2006) Financial Soundness Indicators, Compilation Guide.

[9] Currently, the minimum requirement for CAR is eight percent.

[10] http://www.rbnz.govt.nz/finstab/banking/regulation/0091769.html

Figure 11 Capital Adequacy Ratios (%)



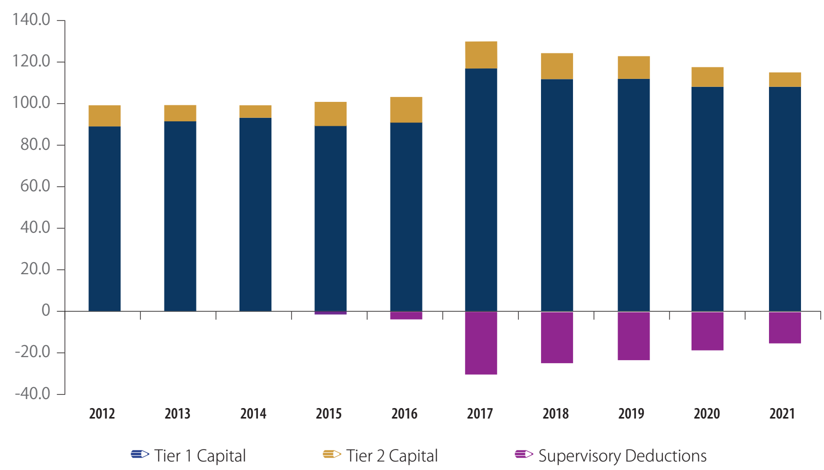

Source: Central Bank of Lesotho

The ratio of total regulatory capital to risk-weighted assets stood at 22.2 percent, slightly lower than the level observed in December 2020.

The banking sector in Lesotho maintained CAR above the minimum requirement during 2021 as shown in Figure 11. The ratio of total regulatory capital to risk-weighted assets (RWA) stood at 22.2 percent, slightly lower than 23.0 percent observed in December 2020. Similarly, the ratio of tier-1 capital to RWA decreased slightly from 24.9 percent in 2022 to 24.1 percent in 2021. The banking industry continued to maintain core capital buffers higher than the prudential minimum requirement, which is a positive sign in regards to the resilience of the sector. Figure 12 shows the breakdown of total regulatory capital as at December 2021.

The ratio of tier–1 capital to risk-weighted assets decreased slightly from 24.9 percent in 2022 to 24.1 percent in 2021.

Figure 12 Composition of Total Ragulatory Capital (%)

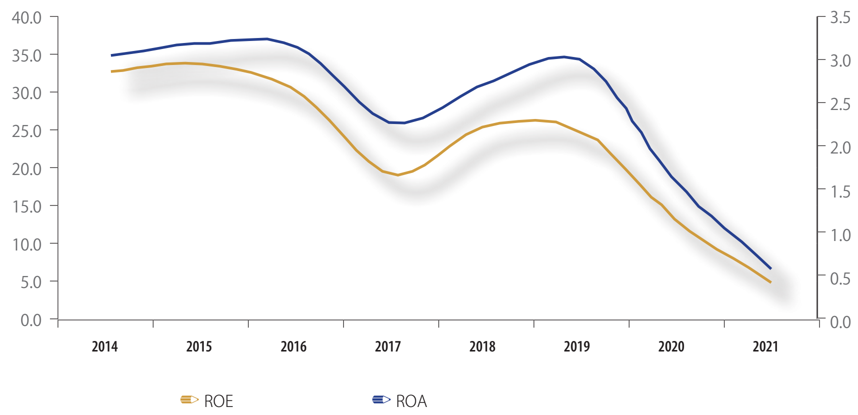



Source: Central Bank of Lesotho

## 4.5 Earnings and Profitability

Profitability ratios assess the ability of a company to generate earnings, profits, and cash flows relative to the amount of money invested. The industry remained profitable during the year 2021. However, profitability declined slightly due to the impact of the Covid-19 pandemic, which weighed heavily on economic activity during 2019 and 2020. During the review period, ROA declined by 1.0 pps to 0.6 percent as illustrated in Figure 13. Likewise, ROE declined by 8.2 pps to 5.0 percent. The main driver behind the decline in the profitability ratio is the decline in annualized net income due to higher tax paid by banks as a result of increased gross-income. Interest expenses declined significantly due to the low policy rate environment. Therefore, gross-income increased due to a pick-up in economic activity as a result of the relaxation of Covid-19 restrictions and lower expenses. A rise in gross-income result in higher taxation and a reduction in net-income.

Figure 13 Profitability Ratios (%)




Source: Central Bank of Lesotho, ROE (rhs)

The ratio of net interest margin to gross income increased marginally in 2021, recording 57.4 percent relative to 56.1 percent recorded in 2020.

The ratio of net interest margin to gross income increased marginally in 2021, recording 57.4 percent relative to 56.1 percent recorded in 2020. At this level, the ratio shows that over half of the banks' income came from their core business, which is intermediation. Likewise, the ratio of non-interest expense to gross income increased from 65.6 percent in 2020 to 77.6 percent in 2021 as a result of a decline in noninterest expenses. The ratio indicates that over half of the income generated during the year went into administrative expenses as opposed to expenses on income-earning assets ❑

# 5. OTHER FINANCIAL CORPORATION'S FINANCIAL PERFORMANCE

## 5.1 Insurance Sector

The structure and the composition of the insurance sector remained the same as in the previous year. The sector consists of ten (10) insurers, with six (6) being long-term (LT) insurers and four (4) short-term (ST) insurers. Furthermore, the sector had 46 insurance brokers at the end of December 2021. The LT insurance industry had most of its net written premiums from the life cover (59.6%), followed by the endowment (31.2%) and credit life (5.1%). On the other hand, the ST insurance business consists largely of motor and property insurance products with a combined share of 70.8 percent of total ST insurance net written premiums.

Overall, both LT and ST insurance industries remain sound and stable. On yearly basis, the sector experienced an increase in assets of 11.5 percent. The growth in assets was driven by increases in the investments made by the sector.

**Table 4** Insurance Industry Selected Ratios

| | Dec 19 | Dec 20 | Dec 21 | %△Y/Y |
|---|---|---|---|---|
| ***Short-term insurance*** | | | | |
| *Claims* | 59.6 | 31.2 | 77.9 | **149.7** |
| *Expense* | 82.4 | 73.9 | 39.5 | **(46.5)** |
| *Combined* | 142.0 | 105.1 | 117.4 | **11.7** |
| *Investment Returns* | 1.7 | 2.0 | 3.1 | **55** |
| *Net Investment Income* | 14.2 | 12.0 | 18.6 | **55** |
| *Underwriting Expense* | 79.2 | 58.3 | 96.5 | **65.5** |
| ***Long-term insurance*** | | | | |
| *Claims* | 52.8 | 56.4 | 71.5 | **26.8** |
| *Expense* | 25.0 | 24.2 | 22.1 | **(8.7)** |
| *Combined* | 77.8 | 80.6 | 93.6 | **16.1** |
| *Investment Returns* | 2.2 | 1.4 | 1.7 | **21.4** |
| *Net Investment Income* | 28.7 | 16.9 | 26.0 | **53.8** |
| *Underwriting Expense* | 71.8 | 71.4 | 87.3 | **22.3** |

***Source:*** *Central Bank of Lesotho*

### Investment Mix: LT insurance and ST insurance

The LT insurance held 56.0 percent of their investment assets in non-money market investment funds while 7.2 percent of the investment assets were held in money markets at the end of December 2021. A sizeable proportion of the industry's investment assets were held in various asset classes such as government securities, non-governmental securities, investment property, and investment in subsidiaries and affiliates. The LT saw declining deposits with local banks. The cause for the decline in deposits held with banks could have been caused by low-interest rates in the banking sector in the review period. On the other hand, the ST insurance held 45.9 percent of its investment assets in money market funds while non-money market funds constituted 13.8 percent of the investment assets. Similarly, as in the case of the LT insurance, the other ST assets classes included government securities, investment property, and investment in subsidiaries and affiliates.

### Investment performance and profitability

Notwithstanding the effects of the Covid-19 pandemic, the LT insurance remained profitable with investment ratios improving in the review period. The investment return (return on investment – ROI) and the net investment income ratios increased in the review period. The ST insurance also remained profitable in the review period. The sector experienced increases in the ROI and net investment income. The increases were attributed to the improving economic activity and reduced severity of containment measures of the pandemic.

## 5.2 Microfinance Institutions (MFIs)

In terms of size, the MFI sector is relatively small compared to the banking sector and the insurance sector. As at end of December 2021, MFIs constituted 4.0 percent of the total assets of the financial sector. This was a 11.1 percent increase from December 2020. The MFI sector comprises 118 licensed credit-only microfinance institutions.

The MFIs asset base increased during the period ending in December 2021. The sector experienced an increase in loans repayable within one year, while loans repayable beyond one year declined in the review period. Despite the difficult conditions brought by the Covid-19 pandemic on the economy where most people lost jobs or experienced income reductions, the sector saw total loans increasing by 0.7 percent.

The asset mix of the MFIs sector remained broadly unchanged from the previous year. The loans constituted the majority of the assets of MFIs with a share of 89.2 percent. Placements in banks constituted 7.0 percent at the end of the review period. Other assets categories of MFIs include accounts receivables 0.2%) and net intangible assets (0.2%).

The MFIs industry remained profitable during the review period. The sector, however, saw a decline in profits. The decrease in profit was attributed to the increases in expenses related to accommodation and computer charges in the review period. The sector was able to generate income from the assets it owned and the equity it held.

Table 5 MFIs Performance Indicators (Summary)

| Indicators | 2018 | 2019 | 2020 | 2021 |
|---|---|---|---|---|
| Assets | 797 047 | 949 153 | 1 046 612 | 1 288 067 |
| Total Loans | 739 717 | 875 288 | 1 012 840 | 1 148 469 |
| Net profit/loss | 79 048 | 66 566 | 98 482 | 71 372 |
| ROA | 9.9 | 7.5 | 10.0 | 8.0 |
| ROE | 33.7 | 22.8 | 28.1 | 22.1 |

***Source***: *Central Bank of Lesotho*

# FINANCIAL MARKETS INFRASTRUCTURE

## 6. FINANCIAL MARKETS INFRASTRUCTURE

Financial market infrastructures (FMIs) – such as payment systems, settlement systems, central counterparties, central securities depositories, and trade repositories – deliver services that are vital to the smooth functioning of the financial system and the domestic economy. The services provided by FMIs enable payments for goods and services to be made, allow securities to be held and sold, and facilitate risk management.

The CBL is also mandated to provide efficient, reliable, and safe payment and settlement systems. In line with this mandate, the Payment Systems Act 2014, Section 2(a) empowers the CBL to oversee, inspect and monitor the national payment systems in Lesotho. This mandate is not only achieved by ensuring that the payment system in Lesotho complies with the domestic legal and regulatory framework, but also with other international standards and best practices in the payment system sphere[11].

### 6.1 Systemically Important Payment Systems

The systemically important systems (SIPS) in Lesotho include Lesotho Wire (LSW) and Centralised Securities Depository (CSD) operated by the CBL, Lesotho Automated Clearing House (LACH) operated by Payments Association of Lesotho (PAL). The failure of these systems could pose significant negative repercussions for financial stability, monetary policy implementation, and financial inclusion, among others. Safe and efficient systems are fundamental to money being an effective means of payment and to the smooth functioning of financial markets. A well designed and managed system helps to maintain financial stability by preventing or containing financial crises and help to reduce the cost and uncertainty of settlements, which could otherwise act as an impediment to economic activity[12].

[11] These include the CPSS-IOSCO Principles for Financial Market Infrastructures (PFMI's) and the CPSS-BIS Central Bank Oversight of Payment and Settlement Systems.

[12] CBL Payment System Oversight Policy Framework.

LSW (real-time gross settlements system (RGTS) is the most critical payment system because it processes and settles large values and time-critical payments between system participants and also has linkages with other payment systems such as LACH and CSD. Therefore, its failure could have a systemic impact; with negative repercussions for financial stability within the country. Moreover, this system must meet high safety[14] and efficiency standards to manage and/or mitigate all risks arising from its operations.

There are many ways through which risks may manifest in large-value payment systems such as LSW. These include (a) protracted system unavailability (downtimes), (b) the degree of utilization, and (c) inability of system participants to settle their obligations (could lead to credit events). Therefore, close monitoring of these key aspects in LSW is crucial as they represent the main operational and financial risks that could adversely affect LSW and potentially culminate in a systemic crisis. In 2021, LSW transaction volumes had increased by 7.7 percent while the value of transactions processed increased by 17.4 percent in comparison to 2020. The transaction density was lower in 2021 compared to 2020, by averages of M1.96 million and M2.21 million per transaction, respectively.

As a large-value payment system, LSW must be available to all the participants at all times during the business day to process and settle interbank transactions. Any system availability rate below 98 percent is not acceptable as it has the potential to undermine the smooth functioning of the financial sector in the economy. In 2021, the system remained available to participants over 99.0 percent of the time, above the tolerable system availability and relatively similar to the previous year. The system downtime incidents were on account of intermittent disruptions on the internet and/or server connections. However, such disruptions were resolved within a reasonable time. Therefore, overall a substantial number of large-value and time-critical payments could be processed and settled despite the experienced disruptions.

[13] Among other safety threats, which continue to escalate globally, is cyber-crime. Therefore, there is a need to continue to improve security measures and to launch cyber-crime awareness campaign to help people protect themselves this type of crime. In addition, cyber security law is of paramount importance to protect the financial system.

## 6.2 Mobile Money

The rapid proliferation of mobile money services can be considered a triumph of financial inclusion, with money in circulation in 2021 at M431.7 million. This aggregated trust account balance shows the amount of money held in trust account balances for each loti of mobile money in circulation as a prudential measure. It also acts as a proxy for the size of the market observed over time, which grew by 31.9 percent in 2021, a growth rate down by 10.3 pps from 2020. An important feature of the mobile money market to note is that growth rates have fallen significantly since mobile money services were introduced in 2012, where annual growth rates above 1000 percent were not uncommon. This indicates that the market has entered its maturity phase and much lower growth rates may be expected in the future ❑

# FINANCIAL SYSTEM RESILIENCE

## 7. FINANCIAL SYSTEM RESILIENCE

The Central Bank Act of 2000 gives the CBL the mandate and powers to promote and safeguard the stability and soundness of the financial system in Lesotho. The Bank uses stress-testing[14], among other tools, to achieve its objective of promoting the resilience of the domestic financial system and mitigating vulnerabilities arising from financial and economic shocks. In 2021, the CBL ran two stress-tests to determine the resilience of the banking system in Lesotho to adverse and plausible credit, interest-rate, and liquidity shocks[15]. The tests covered all four commercial banks. The results covered in this report highlight June and December 2021 stress-test results and their implications to the banking industry and Lesotho's economy as a whole. The stress-tests results demonstrate that the banking sector is highly resilient and could withstand shocks of the nature assumed in the stress-test.

The level of non-performing loans (NPLs) is normally used as an indicator of credit risk inherent in a bank's loan portfolio.

## 7.1 Stress-test Key Assumptions and Shocks

### 7.1.1 Credit Risk Shocks

Credit risk is defined as the potential that a bank borrower, or counterparty, will fail to meet its payment obligations as stipulated in the contractual terms agreed with the bank. The level of NPLs is normally used as an indicator of credit risk inherent in a bank's loan portfolio. A non-performing loan is the sum of borrowed money for which the debtor has not made his or her scheduled payments for at least 90 days[16]. Banks normally set aside funds to cover for potential losses on loans in the form of loan-loss provisions. Consequently, since loan-loss provisions are an expense to a bank, they erode the capital levels of the institution by decreasing retained earnings as well as reducing the value of the RWA. The credit risk shock transmission channel is summarised in Figure 14.

Figure 14 Credit Risk Shock Transmission


Source: Central Bank of Lesotho

### 7.1.2 Liquidity Risk

Liquidity risk is the risk that a bank will not be able to meet its current and future cash-flow and collateral needs, both expected and unexpected, without materially affecting its daily operations or overall financial condition. Liquidity stress-tests are used to assess banks' resilience against maturity mismatches between short-term assets and liabilities or in a case where banks experience unexpected adverse events such as a bank run. The CBL runs stress-tests that entail the latter. The bank-run type of shock can be transmitted within the banking sector as indicated in Figure 15.

[14] The Bank uses a simple sensitivity test model which is static and does not perform any form of forecasting. A static model assesses the impact of a particular shock or a group of shocks at a certain point in time. The stress-testing approach applied is a top-down one. This implies that CBL collected necessary data and conducted stress-testing based on the information received.

[15] Shocks are defined as exceptional but plausible idiosyncratic and/or system-wide adverse economic events. They are classified in different levels of severity ranging from low to severe, and are used to stress various risk-factors to determine their resilience. The calibration of shocks is made on the basis of both historical and hypothetical approaches. The historical approach uses past-crises information to formulate shocks and scenarios while the hypothetical approach is used in the absence of such information.

[16] Financial Institutions (Loan portfolio classification) Regulations 2016.

**Figure 15** Liquidity Risk Shock Transmission


Source: Central Bank of Lesotho

Liquidity risk is the risk that a bank will not be able to meet its current and future cash-flow and collateral needs, both expected and unexpected, without materially affecting its daily operations or overall financial condition.

### 7.1.3 Interest Rate Risk Shocks

Interest rate risk can have both a direct and indirect impact on the banks' balance sheets. Direct interest rate risk is the risk incurred by a bank when its interest-rate-sensitive assets and liabilities maturities are not matched. In contrast, a bank is exposed to indirect interest rate risk through the impact of interest rate changes on the borrower's creditworthiness and ability to repay. Direct interest rate 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 bucket. The gap in each time bucket provides a relative magnitude of the impact of the shock on the net interest income (NII) given a change in interest rate. Interest income is the most important source of revenue for banks and an indicator of profitability. The test run by CBL assumed shocks in the form of an equal change in all rates (parallel yield curve shift). The shocks are calibrated using historical changes in policy rates. Figure 16 shows the transmission of interest rate shocks.

### 7.1.4 Foreign Exchange Rate Risk

Foreign exchange risk is the risk that a bank's balance sheet may fluctuate because of changes in the value of a local currency relative to the currency with which the bank's assets are denominated as shown in Figure 17. For instance, if a bank has foreign-currency (FX) denominated assets and liabilities, its balance sheet will be prone to fluctuations in currency markets. The larger an exposure the bank has to FX-denominated assets and liabilities, the more sensitive its balance sheet will be to swings in currency markets. Foreign exchange stress-test scenarios assumed shocks of 20, 25, and 30 percent depreciation of local currency for low, moderate, and severe scenarios, respectively.

**Figure 16** Interest Rate Risk Shock Transmission Channel


Source: Central Bank of Lesotho

Interest rate risk is a risk to income and capital of a bank brought about by movements in market interest rates.

Figure 17 **Foreign Exchange Risk Shock Transmission Channel**


Source: Central Bank of Lesotho

Foreign exchange risk is the risk that a bank's balance sheet may fluctuate because of changes in the value of a local currency relative to the currency with which the bank's assets are denominated.

## 7.2 Stress-test Results

### 7.2.1 Credit Risk

*Credit risk stress-test* results revealed that all banks would have been sufficiently capitalised to absorb losses as a result of the assumed sector-wide increase in NPLs in both the June and December 2021 tests. As illustrated in Table 6, for Group I shocks, all banks' CAR would have remained well above the eight percent minimum requirement and stayed solvent. Therefore, based on the assumptions made and the types of shocks assumed, the credit risk related to an increase in NPLs can be regarded as low because all banks would have had adequate capital to absorb losses induced by high NPLs.

Table 6 Credit Risk Stress Test Results

| Risks | | Number of banks below 8.0% CAR | Assets share of banks< 8.0% CAR | Number of Insolvent Banks | Capital Deficiency Relative to CAR | Capital Deficiency Relative to Minimum Capital |
|---|---|---|---|---|---|---|
| June 2021 | | | | | | |
| Group I: System level credit risk | | | | | | |
| Shock I: | NPLs increase by 60% | 0 | 0 | 0 | 0 | 0 |
| Shock II: | NPLs increase by 120% | 0 | 0 | 0 | 0 | 0 |
| Shock III: | NPLs increase by 180% | 0 | 0 | 0 | 0 | 0 |
| Group II: Concentration Risk | | | | | | |
| Shock I: | Largest 1 Borrower Defaults | 0 | 0 | 0 | 0 | 0 |
| Shock II: | Top 3 Borrowers Default | 0 | 0 | 0 | 0 | 0 |
| Shock III: | Top 5 Borrowers Default | 1 | 14.5 | 0 | 17 468 | 0 |
| December 2021 | | | | | | |
| Group I: System level credit risk | | | | | | |
| Shock I: | NPLs increase by 60% | 0 | 0 | 0 | 0 | 0 |
| Shock II: | NPLs increase by 120% | 0 | 0 | 0 | 0 | 0 |
| Shock III: | NPLs increase by 180% | 0 | 0 | 0 | 0 | 0 |
| Group II: Concentration Risk | | | | | | |
| Shock I: | Largest 1 Borrower Defaults | 0 | 0 | 0 | 0 | 0 |
| Shock II: | Top 3 Borrowers Default | 0 | 0 | 0 | 2 058 | 0 |
| Shock III: | Top 5 Borrowers Default | 1 | 14.2 | 0 | 29 292 | 0 |

**Source**: *Central Bank of Lesotho*

*Concentration risk* in banks' loan books was stress-tested to assess the resilience of banks to their large exposures. In Group II shocks where the top-five borrowers' default, one bank failed the tests conducted in June and December 2021. This shows that its capital would not have been sufficient to absorb the losses incurred as a result of the assumed shocks and would have fallen below the eight percent CAR threshold. Moreover, it would have required recapitalisation to meet the regulatory capital requirement under both the scenario where top-three and top-five creditors would have defaulted in December 2021 while recapitalisation would have been required under the most severe scenario in June 2021. Concentration risk associated with large exposure can be regarded as high since some banks would not have had adequate capital to cover the losses. However, this could be mitigated by ensuring that the collateral pledged is adequate and of good quality to cover the losses.

Table 7 shows the test results regarding the banking industry's exposure to two economic sectors, namely the household and business enterprises sectors. Firstly, mortgage and personal loan portfolios are stressed by assuming a 30 percent and 45 percent increase in NPLs, respectively. A shock of this magnitude would have had a minimal impact on the mortgage loan portfolio and all banks would have remained with post-shock CAR above the minimum requirement and therefore would have needed no recapitalisation in both June and December 2021. For the personal loans portfolio, one bank failed the test in both June and December 2021. Moreover, recapitalisation of M126.5 million and M156.1 million relative to CAR would have been needed in both periods, respectively.

Second, business lines which constitute over half of the loans to the business sector were stress-tested. These are manufacturing, construction, and mining & quarrying. If the scenario envisaged for the construction industry were to materialise, three banks with a combined assets market share of 90.7 percent would have breached both the regulatory and unimpaired capital requirements in June 2021, prompting a combined recapitalisation of about M554.9 million. In addition, two banks would have become insolvent. Conversely, in December 2021, two banks with a combined assets market share of 35.7 percent would have breached both the regulatory and unimpaired capital requirements, prompting a combined recapitalisation of about M429.5 million. Moreover, one bank would have been insolvent. However, in the scenario involving a surge in NPLs of the mining and quarrying together with manufacturing industries, none of the banks would have required recapitalization in the periods under review.

| Table 7 | Sectoral Credit Risk Stress-Test Results | | | | |
|---|---|---|---|---|---|
| Risks | Number of banks below 8.0% CAR | Assets share of banks< 8.0% CAR | Number of Insolvent Banks | Capital Deficiency Relative to CAR | Capital Deficiency Relative to Minimum Capital |
| June 2021 | | | | | |
| Group III: Sectoral level credit risk (20 percent increase in NPLs) | | | | | |
| Household Sector | | | | | |
| Mortgages | 0 | 0 | 0 | 0 | 0 |
| Personal loans | 1 | 54.4 | 0 | 126 500 | 0 |
| Business Sector | | | | | |
| Manufacturing | 0 | 0 | 0 | 0 | 0 |
| Construction | 3 | 90.7 | 2 | 477 930 | 76 956 |
| Mining & quarrying | 0 | 0 | 0 | 0 | 0 |
| December 2021 | | | | | |
| Group III: Sectoral level credit risk (20 percent increase in NPLs) | | | | | |
| Household Sector | | | | | |
| Mortgages | 0 | 0 | 0 | 0 | 0 |
| Personal loans | 1 | 54.9 | 0 | 156 126 | 0 |
| Business Sector | | | | | |
| Manufacturing | 0 | 0 | 0 | 0 | 0 |
| Construction | 2 | 35.7 | 1 | 282 118 | 147 359 |
| Mining & quarrying | 0 | 0 | 0 | 23 133 | 0 |

***Source***: *Central Bank of Lesotho*

### 7.2.2 Liquidity Risk

The results for the bank-run Scenario I show that in both June and December 2021 stress tests, all banks would have remained liquid after five days of continuous withdrawals of deposits. This shows that the amount and quality of liquidity the banks held would have been enough to absorb a shock of the nature assumed in this test. In the same way, in Scenario II, all banks would only have sustained the bank-run for five days. However, the run would have necessitated several rounds of liquidation by the fifth day.

On the one hand, Scenario I would have resulted in M6.43 billion withdrawn against deposits of M15.45 billion that banks were holding as at December 2021, causing the balance sheet to shrink by 33.5 percent. In the June stress test, results showed that about M6.01 billion would have been withdrawn from banks' deposits of M14.47 billion causing the banking industry balance sheet to shrink by 33.8 percent. On the other hand, Scenario II would have led to withdrawals of M10.42 billion from M15.45 billion worth of deposits held by banks as at December 2021 causing the banking industry balance sheet to shrink by 51.8. In a similar manner, the June stress test shows that M9.75 billion of M14.47 billion worth of deposits would have been withdrawn under this stress scenario causing the banking industry balance sheet to shrink by 52.7 percent. These results are largely similar, implying that the resilience of the banking system has not changed much in 2021 based on results of both test periods.

Therefore, liquidity risk could also be regarded as minimal since banks would have sustained a bank-run type event for a period of five days under both scenarios, allowing the banks and the CBL a window of five days to one week to work on a solution that would restore confidence in the industry. It is however worth noting that, measured by total assets, the banking industry would emerge considerably smaller from such bank-run scenarios, especially scenario II.

| Table 8 | Daily Withdrawals | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | June 2021 | | | | December 2021 | | | |
| | Scenario I | | Scenario II | | Scenario I | | Scenario II | |
| | Daily Withdrawals (%) | No. of illiquid Banks (out of 4) | Daily Withdrawals (%) | No. of illiquid Banks (out of 4) | Daily Withdrawals (%) | No. of illiquid Banks (out of 4) | Daily Withdrawals (%) | No. of illiquid Banks (out of 4) |
| 1st day | 5 | 0 | 5 | 0 | 5 | 0 | 5 | 0 |
| 2nd day | 5 | 0 | 10 | 0 | 5 | 0 | 10 | 0 |
| 3rd day | 5 | 0 | 15 | 0 | 5 | 0 | 15 | 0 |
| 4th day | 10 | 0 | 20 | 0 | 10 | 0 | 20 | 0 |
| 5th day | 10 | 0 | 25 | 0 | 10 | 0 | 25 | 0 |

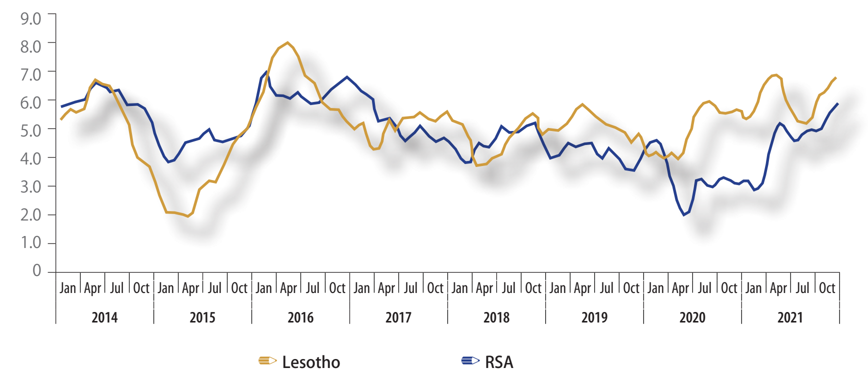
**Source**: *Central Bank of Lesotho*

Moreover, the large depositors' bank run stress-test results revealed that if the largest depositor(s) of each bank had simultaneously withdrawn their deposits, non of the four banks would have failed to meet the minimum liquid asset requirement of 25 percent[18] as per the results of in both June and December 2021 stress-tests. Furthermore, the results show that if the top-three depositors were to withdraw their funds, one bank would have failed to meet the same requirement in both June and December 2021 stress-tests. In the extreme case scenario, where the top-five depositors-run was assumed, only one bank failed the test in both the June and December 2021 stress-tests. As the results show, the liquidity position appears to have remained more or less the same in June and December 2021. On the positive side, the results showed a high level of resilience since none of the banks would have ended up with exhausted liquidity even in the severe scenario involving the top-five depositors' run ❑

[18] Minimum liquid assets requirements (prudential hurdle rate) as per Financial Institutions (Liquidity Requirements) Regulations 2000.

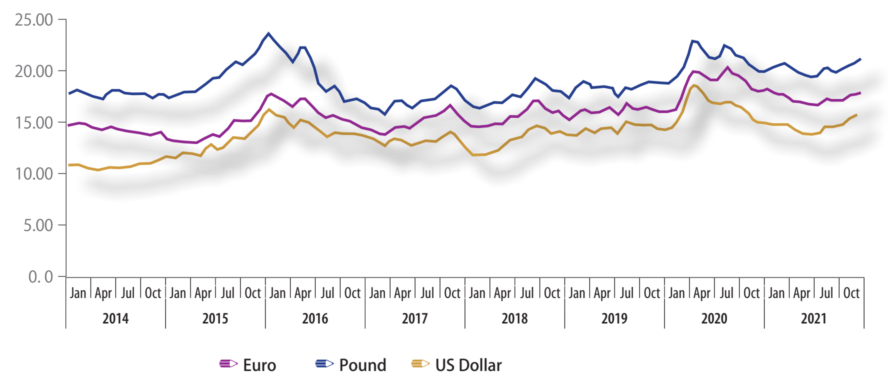
# APPENDICES

Appendix 1A Lesotho and RSA Inflation (%)



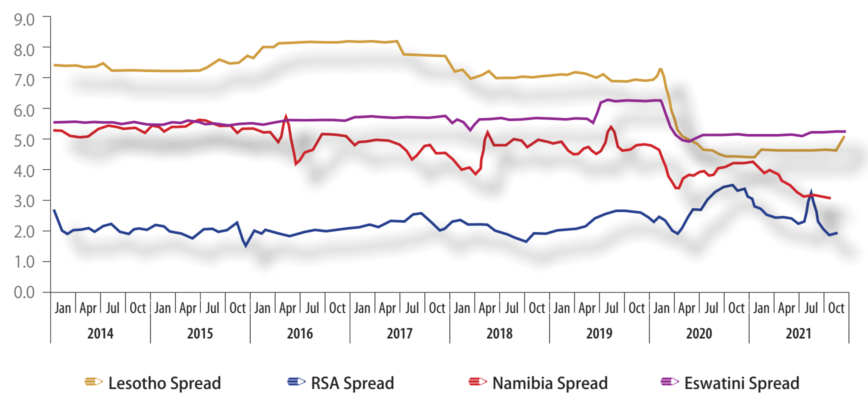

Source: Central Bank of Lesotho

Appendix 1B Loti Exchange Rate to the Euro, Pound & US Dollar



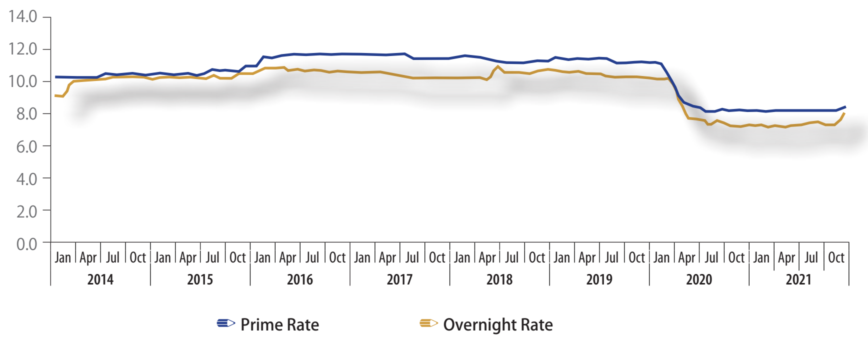

Source: Central Bank of Lesotho

Appendix 1C Intermediation Spread (%)




Source: Central Bank of Lesotho

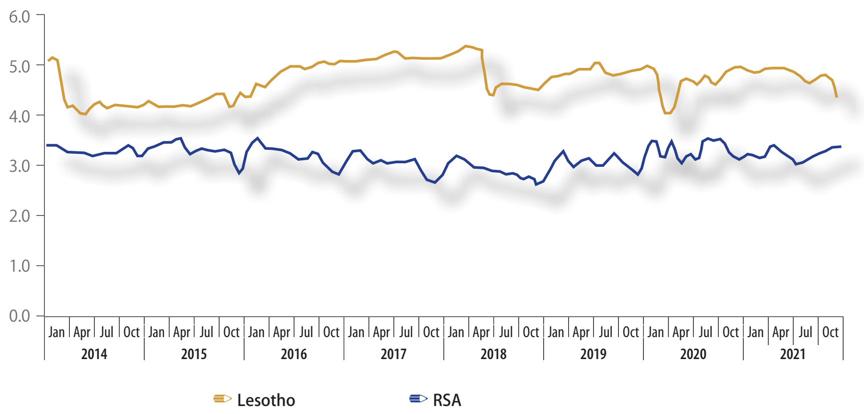
Appendix 1D Money Market Spread (%)




Source: Central Bank of Lesotho

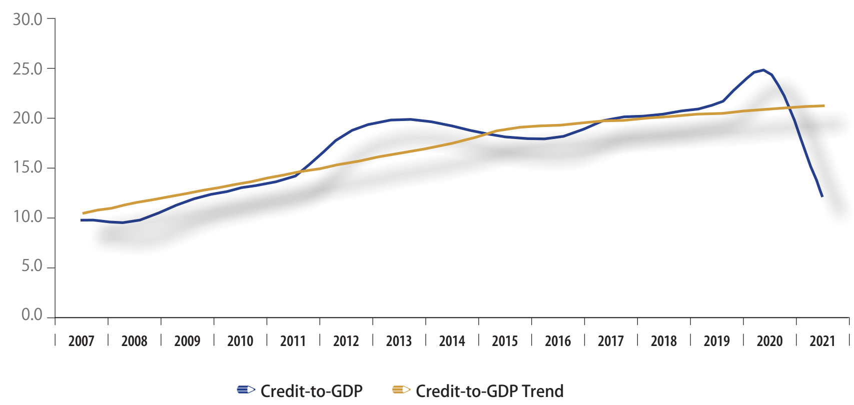
# APPENDICES

Appendix 1E Lesotho and RSA Risk Premium (%)



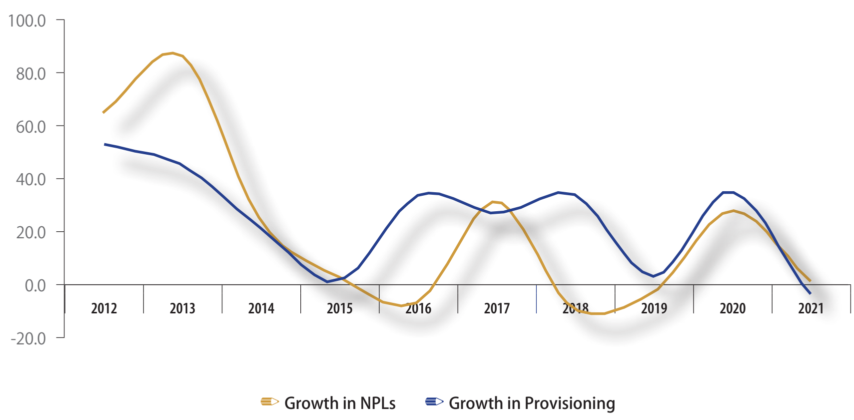

Source: Central Bank of Lesotho

Appendix 1F Credit-to-GDP Ratio and its Trend (%)



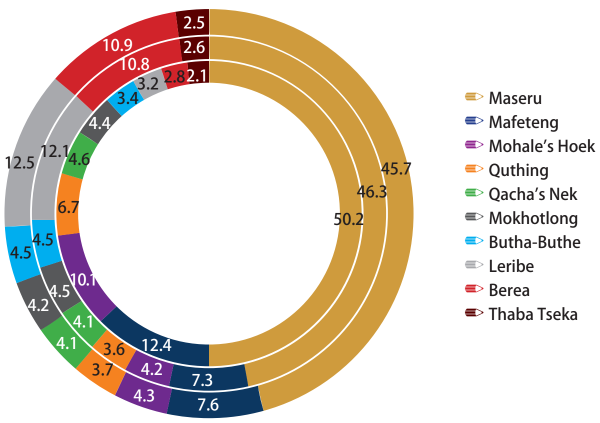

Source: Central Bank of Lesotho

Appendix 1G Growth in NPLs and Provisions (%)




Source: Central Bank of Lesotho

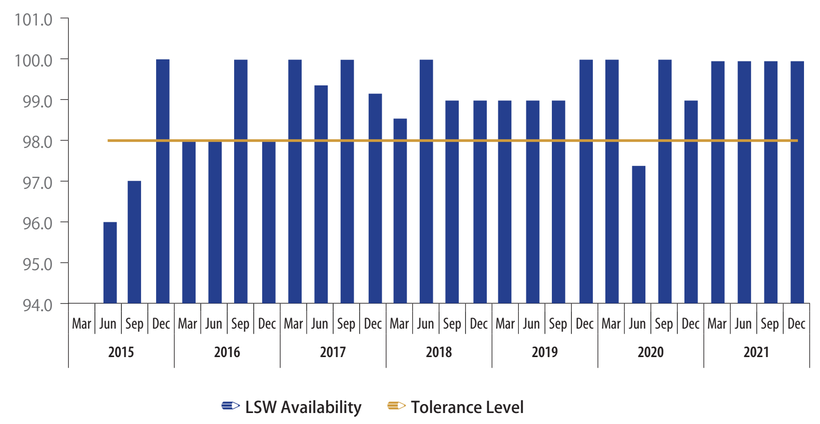
Appendix 1H Mobile Money Agents (% per district)




Source: Central Bank of Lesotho

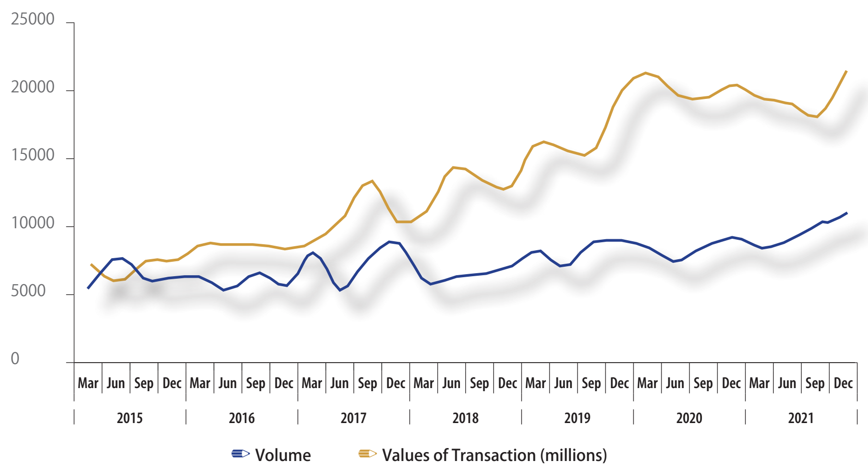
# APPENDICES

Appendix 1I LSW Availability (%)




Source: Central Bank of Lesotho

Appendix 1J LSW Transactions and Values




Source: Central Bank of Lesotho

| Appendix II | Assumptions and Shocks | | |
|---|---|---|---|
| **Index** | **Description** | **Shock** | **Description** |
| 1. General Credit Risk | | | |
| Shock 1.1 | Uniform NPL increase | 60% | Indicates an increase in NPLs of 60 percent across the credit spectrum. |
| Shock 1.2 | Uniform NPL increase | 120% | Indicates an increase in NPLs of 120 percent across the credit spectrum. |
| Shock 1.3 | Uniform NPL increase | 180% | Indicates an increase in NPLs of 180 percent across the credit spectrum. |
| 2. Sectoral Credit Risk | | | |
| Shock 2.1 | Mortgages | 20% | Indicates the percentage increase in NPLs across the Mortgages sector. |
| Shock 2.2 | Resident household (personal loans) | 20% | Indicates percentage increase in NPLs across the Resident household (personal loans) sector. |
| Shock 2.3 | Non-bank (Non-depository) financial institutions | 20% | Indicates the percentage increase in NPLs across the Non-bank (Non-depository) financial institutions sector. |
| 3. Credit risk Exposure by Lines of Business | | | |
| Shock 2.4 | Manufacturing | 20% | Indicates the percentage increase in NPLs across the Manufacturing sector. |
| Shock 2.5 | Construction | 20% | Indicates the percentage increase in NPLs across the construction sector. |
| Shock 2.6 | Mining and Quarrying | 20% | Indicates the percentage increase in NPLs across the Mining and Quarrying sector. |
| Shock 2.7 | Community, Social and Personal services | 20% | Indicates the percentage increase in NPLs across the Community, Social and Personal services sector. |
| Shock 2.8 | Real Estate and Business Services | 20% | Indicates the percentage increase in NPLs across the Real Estate and Business Services sector. |
| 4. Concentration Risk | | | |
| Shock 3.1 | Largest Borrower Defaults | 1 | Indicates a default of the largest borrower. |
| Shock 3.2 | Top Three Borrowers Default | 3 | Indicates a default of the largest three borrowers. |
| Shock 3.3 | Top Five Borrowers Default | 5 | Indicates a default of the largest five borrowers. |
| Detail 1 | Assumed provisioning rate | 20% | To calculate provisioning expense for large borrower default. |
| 5. Reverse Stress Testing | | | |
| Shock 4.1 | Reverse Testing - Deterioration of performing loans | 7.9% | Deterioration of performing loans which causes capital to go below 8 percent. |
| 6. Interest Rate Risk | | | |
| Shock 5.1 | Interest shock | 150 bps | Indicates an increase in market-wide interest rates of 150 basis points. |
| Shock 5.2 | Interest shock | 200 bps | Indicates an increase in market-wide interest rates of 200 basis points. |
| Shock 5.3 | Interest shock | 250 bps | Indicates an increase in market-wide interest rates of 250 basis points. |
| Shock 5.4 | Interest shock | -150 bps | Indicates a decrease in market-wide interest rates of -150 basis points. |
| Shock 5.5 | Interest shock | -200 bps | Indicates a decrease in market-wide interest rates of -200 basis points. |
| Shock 5.6 | Interest shock | -250 bps | Indicates a decrease in market-wide interest rates of -250 basis points. |
| 7. Foreign-Exchange Risk | | | |
| Shock 6.1 | Depreciation of LSL | 20% | Indicates a depreciation of the LSL of 20 percent. |
| Shock 6.2 | Depreciation of LSL | 25% | Indicates a depreciation of the LSL of 25 percent. |
| Shock 6.3 | Depreciation of LSL | 30% | Indicates a depreciation of the LSL of 30 percent. |
| Shock 7.1 | Standard FX Loans Default | 20% | Indicates percentage increase in NPS of 20 percent due to FX changes. |
| Detail 1 | Assumed provision rate | 50% | Indicates percentage increase in NPS of 50 percent due to FX changes. |

***Source**: Central Bank of Lesotho*

# APPENDICES

| Appendix II | Assumptions and Shocks (continued) | | |
|---|---|---|---|
| Index | Description | Shock | Description |
| 8. Multi-Factor Risk Scenarios | | | |
| Shock 8.1 | Aggregate NPLs Increase | 60% | Indicates simultaneous increase in NPLs of 60 percent, a depreciation of the LSL by 20 percent, and an increase in market-wide interest rates of 150 basis points. |
| | Depreciation of LSL | 20% | |
| | Interest rate shock | 150 bps | |
| Shock 8.2 | Aggregate NPLs Increase | 120% | Indicates simultaneous increase in NPLs of 120 percent, a depreciation of the LSL by 25 percent, and an increase in market-wide interest rates of 200 basis points. |
| | Depreciation of LSL | 25% | |
| | Interest rate shock | 200 bps | |
| Shock 8.3 | Aggregate NPLs Increase | 180% | Indicates simultaneous increase in NPLs of 180 percent, a depreciation of the LSL by 30 percent, and an increase in market-wide interest rates of 250 basis points. |
| | Depreciation of LSL | 30% | |
| | Interest rate shock | 250 bps | |
| 9. General Liquidity Risk | | | |
| Shock 9.1 | Withdrawal of deposits: 1st day by | 5% | An outflow of deposits is assumed. Liquidity is generated through the fire sale of assets. Haircuts are assumed for all assets. Liquid assets generate the most liquidity, while non-liquid assets are assumed to generate not more than 1 percent liquidity after fire sale. It is also assumed that after 5 days, there is a cooling-off period to allow banks and the central bank to restore confidence. |
| | Withdrawal of deposits: 2nd day by | 10% | |
| | Withdrawal of deposits: 3rd day by | 15% | |
| | Withdrawal of deposits: 4th day by | 20% | |
| | Withdrawal of deposits: 5th day by | 25% | |
| Detail 1 | Fire sale volume assumption: liquid assets | 80% | The assumption is that 80 percent liquidity can be generated through a fire sale. |
| Detail 2 | Fire sale pricing haircut: liquid assets | 75% | The assumption is that 75 percent liquidity can be generated through a fire sale. |
| Detail 3 | Fire sale volume assumption: non-liquid assets | 1% | The assumption is that 1 percent liquidity can be generated through a fire sale. |
| Detail 4 | Fire sale pricing haircut: non-liquid assets | 100% | |
| 10. Liquidity Concentration Risk – large-depositor bank run | | | |
| Shock 9.2 | Withdrawal of deposits by large depositor | 1 | This affects liquidity ratios. Withdrawals are deducted from liquid assets, short term assets and total assets before the new ratio is calculated. |
| | Withdrawal of deposits by large depositors | 3 | |
| | Withdrawal of deposits by large depositors | 5 | |
| Detail 5 | Assumed liquidity ratio hurdle rate | 25% | The minimum liquidity ratio rate. |

***Source***: *Central Bank of Lesotho*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