2018 FINANCIAL STABILITY REPORT

CENTRAL BANK OF LESOTHO

BANKA E KHOLO EA LESOTHO

CENTRAL BANK OF LESOTHO

FINANCIAL STABILITY REPORT

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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 can be viewed as 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 Central Bank of Lesotho (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.

The Financial Stability Report is a tool used by the CBL for the purpose of financial stability surveillance. It identifies risks and vulnerabilities in the financial system and assesses resilience of the financial system to domestic and external shocks. The CBL publishes the Financial Stability Report once a year, in March. The Report reviews international and domestic macro-financial developments and assesses potential risks to the stability of the domestic financial system. 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
bps	Basis Points
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
HHI	Herfindal-Hirschman Index
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
NBFI	Non-Bank Financial Institutions
NPL	Non-performing Loans
NSDP	National Strategic Development Plan
OFC	Other Financial Corporations
PAL	Payments Association of Lesotho
PFMI	Principles for Financial Market Infrastructures
pp	Percentage Points
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

CONTENTS

EXECUTIVE SUMMARY

1. **The world's financial system remained resilient during 2018 despite the headwinds fuelled by rising trade tensions, increased trade policy uncertainty and weakening financial market sentiment**. While the global economic activity remained subdued and uneven across countries, global financial conditions remained largely accommodative and supportive of growth. However, financial conditions in some emerging market economies have tightened. This tightening has been driven mostly by country-specific factors, worsening external financing conditions, as well as geo-political and trade tensions. As a result, near-term risks to financial stability have increased modestly, while medium-term risks remain elevated because of persistent financial vulnerabilities linked to high debt levels and stretched asset valuations.

2. **The global financial stability outlook is clouded by uncertainty**. Escalation of trade tensions, geo-political risks and policy uncertainty in major economies, could lead to a sudden deterioration in risk sentiment, triggering a broad-based correction in global capital markets and a sharp tightening of global financial conditions. In addition, faster-than-anticipated monetary policy normalisation in advanced economies could lead to sudden tightening of global financial conditions. These challenges, if not carefully managed, could put gains in growth at risk and have spillover effects to the rest of the world.

3. **Since the previous Financial Stability Report, risks to the Lesotho's financial system emanating from international developments remained elevated and relatively unchanged**. Feeble international economic activity, fluctuations in commodity prices and global financial markets, as well as low investor-sentiment, continue to worsen macro-financial vulnerabilities. The rand, which is pegged 1:1 to the loti, remained sensitive to these international developments and has put a lot pressure on the financial sector. This has exacerbated contagion risk.

4. **Domestic shocks emanating from the fragile fiscal position and weak economic activity remained relatively unchanged since the last Financial Stability Report**. A sharp drop of Southern African Customs Union (SACU) revenues and subdued economic growth continue to put severe pressure on the fiscal position. Nonetheless, economic growth recovered in 2018, supported largely by the buoyed performance of the mining and quarrying, manufacturing and financial subsectors. Inflation rate slowed down during 2018. However, exchange rate volatility, among other factors, continue to pose an upside risk to the inflation outlook.

5. **The favourable trends seen in Lesotho's banking sector in past years continued into 2018**. The banking system continued to be sound and stable but remains exposed to risks emanating from credit concentration and the challenging economic environment. Stress-test results, however, demonstrate that the current levels of capitalisation, liquidity and profitability for the banking sector guarantee a high degree of resilience to the nature and magnitude of assumed shocks.

6. **The overall financial performance of the OFCs remained robust despite the challenging economic environment**. The insurance industry continued to be resilient and financially sound with minimal systemic threats. The overall performance of the collective investment schemes industry has shown a stable and sound financial position. The Credit-only MFIs industry has maintained a good quality of credit portfolio and its asset base continued to grow.

7. **The payment system and infrastructure operated effectively and efficiently during 2018 and continued to anchor financial stability**. The systemically important payment system maintained high system availability despite low system utilisation rate. Mobile money business has grown tremendously since 2012 and has bridged the financial inclusion gap. However, a large share of mobile money market in Lesotho remained untapped during 2018. Nonetheless, the number of active agents and customers, the transactions volumes and values continued to grow over time. Vulnerabilities related to mobile money operations have been minimal during the review period and pose no systemic threats ❑

MACRO-FINANCIAL ENVIRONMENT

1.1 INTERNATIONAL DEVELOPMENTS

Since the 2017 Financial Stability Report, the global economic activity continued to grow but at a slow pace and unevenly. While global financial conditions remain largely accommodative and supportive of growth in the near term, financial conditions in some emerging market economies have tightened. This tightening has been driven mostly by country-specific factors, worsening external financing conditions, as well as geo-political and trade tensions. As a result, near-term risks to financial stability have increased modestly, while medium-term risks remain elevated because of persistent financial vulnerabilities linked to high debt levels and stretched asset valuations.

The global financial stability outlook is clouded by uncertainty. Escalation of trade tensions, as well as rising geo-political risks and policy uncertainty in major economies, could lead to a sudden deterioration in risk sentiment, triggering a broad-based correction in global capital markets and a sharp tightening of global financial conditions. Furthermore, a rise in political and policy uncertainty could adversely affect financial market confidence. For example, uncertainty about fiscal policy in some highly indebted euro area countries could damage confidence in financial markets, while growing anxiety about a breakdown in Brexit negotiations could give rise to contractual and operational uncertainties in the United Kingdom and elsewhere in Europe.

In addition, faster-than-anticipated monetary policy normalisation in advanced economies could lead to sudden tightening of global financial conditions. Such tightening could, for instance, be caused by firmer-than-expected inflation in the United States stemming from capacity constraints created by procyclical fiscal policy or increases in import tariffs. Emerging market economies would remain vulnerable to spillovers from monetary policy normalisation in advanced economies. These growing vulnerabilities are threatening to derail the economic recovery when shocks occur and pose a potential threat to the global financial stability.

Vulnerabilities and risks associated with international developments

Weak international economic activity affects the financial institutions' balance sheets through macro-financial linkages. Lesotho is a small, open economy with a number of industries that are dependent on good performance of the global economy. If international growth remains weak for protracted periods, it may have major repercussions for the 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 will ultimately affect banks' profitability.

The rand remains very sensitive to international policy and political developments, changes in commodity prices, global financial markets developments and investors' sentiments. 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 loti is mostly affected by changes in capital flows to EMEs and global risk perception through the rand-loti peg. Depreciation of the currency against major international currencies increases headwinds to the inflation outlook and can lead to further monetary policy tightening in SA.

SA's subdued economic activity and deteriorating public finances remain potential sources 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 will ultimately lead to higher cost of capital and reduced access to funding.

1.2 DOMESTIC DEVELOPMENTS

Domestic shocks emanating from the fragile fiscal position and weak economic activity remained relatively unchanged since the last Financial Stability Report. A sharp drop of Southern African Customs Union (SACU) revenues and slim prospects for a quick recovery continue to put severe pressure on the fiscal account. In 2018, however, economic growth rebounded and was shielded against the SACU revenue shock by the recovery in domestic revenue and grants. Real GDP is estimated to have grown by 1.4 per cent in 2018, relative 0.1 per cent recorded in 2017. The expansion was largely driven by the buoyed performance of the mining and quarrying subsectors as well as strong growth realised in the manufacturing and financial sector industries.

The fiscal position is expected to have recovered in 2018/19 fiscal year. However, despite the recovery in domestic revenue, it remains generally subdued due to pressures emanating from the shortfall in key components of domestic revenue and SACU revenues. Volatility in SACU revenues continues and is expected to remain in the medium-term because of weak prospects for a quick recovery, given the slow economic growth in South Africa (SA). The Government budgetary operations are estimated to have registered a surplus of 0.6 percent of GDP during the fiscal year 2018/19 compared with a deficit of 1.5 percent of GDP realised in 2017/18.

Similarly, the external sector position recovered in 2018 and registered a surplus of 3.9 percent of GDP in contrast to a 6.5 per cent deficit registered in the previous year. The overall balance of payments was boosted by improved performance in the current account and the financial account. Although the current account remained in deficit, the financial account was boosted by growth in foreign assets held by commercial banks. As a result, gross official reserves rose to 4.4 months of import cover in 2018 from 3.9 months in 2017. In terms of the outlook, the trade balance is expected to further deteriorate as construction of the second phase of the Lesotho Highlands Development Project has already commenced.

Inflationary pressures have subsided domestically because of a slowdown in food prices despite the deteriorating weather conditions in the region. The rate of inflation, measured as the percentage change in the Consumer Price Index (CPI), slowed down to an average of 4.7 per cent in 2018 from 5.2 per cent recorded in 2017. However, a weaker exchange rate and the recovery in the oil prices in the second half of the year exerted an upward pressure on domestic non-food inflation and remain potential threats to the overall inflation trajectory.

Monetary policy remains accommodative. The key policy interest rates were increased twice and reduced once during 2018 to strike a balance between the observed inflationary pressures and weak economic activity. The CBL policy rate closed the year at 6.75 percent. The cost of intermediation in Lesotho remained the highest amongst the CMA countries. On average, the lending rate in Lesotho was higher than in SA, while deposit rate in Lesotho was lower than that in SA by 420 basis points (bps). In the domestic money market, the spread measured by the difference between the prime lending and overnight rates, narrowed relative to the rate observed in 2017 as a result of an increase in the overnight rate. The money market spread declined by 60 bps from the rate observed in 2017. The spread was largely influenced by the prime lending rate, which declined by 19 bps during the same period while the overnight rate increased by 42 bps. In addition, the risk premium was higher in Lesotho than in SA at the end of 2018. The average yearly premia were 4.9 percent and 2.9 percent in Lesotho and SA, respectively. Year-on-year, the risk premium decreased by 6 bps in SA while it increased by 12 bps in Lesotho. Higher risk premium can be an indication of higher charges for credit assessments and therefore a reflection of the perceived level of risk in the credit market.

Table 1 Selected economic indicators (%)

	GDP Growth		%△	Interest Rates		%△	Inflation		%△
	2017	2018	y/y	2017	2018	y/y	2017	2018	y/y
Advanced Economies									
US	2.50	3.10	**24.0**	1.25-1.50	2.00-2.50	**66.7**	2.10	1.90	**(9.5)**
UK	1.60	1.30	**(18.8)**	0.50	0.75	**50.0**	3.00	2.10	**(30.0)**
Euro Area	2.70	1.20	**(55.6)**	0.25	0.25	**0.0**	1.40	1.60	**14.3**
Japan	2.40	0.00	**(100.0)**	-0.10	-0.10	**0.0**	1.00	0.30	**(70.0)**
Emerging Market Economies									
Brazil	2.10	1.10	**(47.6)**	7.00	6.50	**(7.1)**	2.95	3.75	**27.1**
Russia	0.90	2.70	**200.0**	7.75	7.75	**0.0**	2.50	4.30	**72.0**
India	7.20	6.60	**(8.3)**	6.00	6.50	**8.3**	5.21	2.19	**(58.0)**
China	6.80	6.40	**(5.9)**	4.35	4.35	**0.0**	1.80	1.90	**5.6**
South Africa	1.40	0.80	**(42.9)**	6.75	6.75	**0.0**	4.70	4.50	**(4.3)**

Source: Federal Reserve Bank, OECD, Bank of Japan, ECB, SARB, STATSSA, Bank of Brazil, Reuters, Bank of India, Trading Economics.

Vulnerabilities and risks associated with domestic developments

Despite registering a budget surplus, the domestic fiscal position has been under immense pressure because of increasing domestic claims and the decline in SACU revenues. The private sector in Lesotho survives largely by doing business with government. Therefore, when government experiences a shortfall in revenues, spending declines and businesses experience difficulties with regard to their profitability hence their ability to service debt. Two important areas for commercial bank lending, which are likely to get affected negatively, are personal loans and construction sub-sector. With government being a major employer and source of construction contracts, the anticipated cutbacks in government spending during the fiscal adjustment could weigh heavily on banks' loan portfolios.

Lesotho's weak international competitiveness makes it harder to achieve greater export growth. Lesotho's current trade strategy is undiversified and requires a move away from reliance on exports of low-value added apparel to the US under AGOA. Uncertainty surrounding the future of Lesotho's AGOA privileges underscores the need for reform and a urgency in policy action. Future export growth will be challenged by the emergence of new low-wage competitors in Asia and Africa and the expected erosion of preferential market access in main export destinations in the near future. The consequences of this is that Lesotho could experience further increases in unemployment and low export revenues. The textile manufacturing firms are the second largest employers in Lesotho after the government, employing around 43 000 people. With deteriorating competitiveness, most firms would relocate to jurisdictions with favourable conditions and leave a lot of factory workers unemployed. This will have knock-on effects on the broader economy. For example, workers who have loans from banks and micro-financial institutions would no longer service their loans, causing an increase in bad loans. Moreover, most firms' profitability will take a knock and affect their ability to service their obligations. This would affect commercial banks' balance sheets adversely and put them under stress.

High volatility in both exchange and interest rates can threaten financial stability. During the review period, exchange rate volatility continued to pose an upside risk to the inflation outlook, thereby signaling the possibility of further interest rate hikes. First, in a fixed exchange rate regime, volatility in exchange rate poses a challenge to monetary policy authorities because there is limited scope to deal with exchange rate shocks. Second, higher interest rates increase the cost of borrowing which may result in higher probability of defaults ❑

FINANCIAL STABILITY DEVELOPMENTS & TRENDS

2.1 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), nine insurance companies, 50 insurance brokers, 11 microfinance institutions (MFIs), two asset management firms, 72 money-lenders, and two money transfer institutions (MTIs). The financial system is dominated by the banking sector with total assets constituting 70.5 percent of the total financial industry assets and about 199.2 percent of the gross domestic product (GDP) in the review period. The insurance sector is the second largest industry of Lesotho's financial system, with a share of 26.2 percent of the total financial system assets and 74.2 percent of GDP. The share of microfinance institutions (MFIs) assets to total financial system assets was 3.3 percent, while total assets were 9.3 percent of GDP. The total financial system assets to GDP stood at 282.6 percent of GDP.

2.1.1 Banking Sector

The banking sector is composed of commercial banks only, with a total of 50 branches across the country. The sector is characterised by limited competitiveness and is highly concentrated with a Herfindal-Hirschman index (HHI) of 3712[1]. As at December 2018, the total banking industry assets were M17.4 billion. On an annual basis, the banking industry's total assets grew by 8.8 percent from M16.0 billion. The foreign-owned banks control about 90.0 percent of the banking industry assets, revenue and deposits.

2.1.2 Insurance, Collective Investment Schemes and Pension Sectors

The insurance sector accounted for 88.8 percent of total financial assets for Non-Bank Financial Institutions (NBFIs). Out of the nine insurance companies, five 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 5396 and 3818, respectively. The pension sector is not yet regulated by CBL and regulation and supervision of the sector will commence once the Pension Funds Bill is enacted.

2.1.3 Other non-bank sectors

The legal and regulatory environment in Lesotho provide for both deposit taking MFIs as well as the credit-only MFIs. During the period under review, there were 11 licensed Credit-Only MFIs and no licensed deposit taking MFIs operating in Lesotho. The MFIs industry is predominantly foreign owned and the market share is highly concentrated towards two largest credit-only MFIs. The MFIs industry has grown rapidly over the past five years but currently it poses no systemic risks to the financial sector, as they are mostly not funded by banks, but mainly rely on owners' funds and other strategic investors. However, data generated from the Credit Bureau suggest some emergence of high levels of indebtedness in the entire credit market. This is at the back of some prominence of aggressive lending and lack of proper assessment of credit worthiness. The rising level of indebtedness is an early warning sign and may have systemic implications due the growing interconnectedness among industries in the financial system.

[1] 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.

2.1.4 Financial Markets

The Financial Markets in Lesotho comprise mainly of money markets and securities markets with the latter being the larger of the two markets (see Table 2). In both markets, government securities make up the entire portfolio of investments. This shows that Lesotho's financial markets are shallow, concentrated and have limited products options.

sector are very important for macroprudential surveillance and financial stability. A shock in one sector can have spillover effects to other financial institutions or the rest of the financial system through these linkages. Therefore, it is important that the CBL monitors 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.

Table 2 Amounts outstanding in Financial Markets, in millions of Maloti

	2014	2015	2016	2017	2018
Money Markets	239.5	398.2	396.4	485.9	388.9
Treasury Bills	**236.5**	**398.2**	**396.4**	**485.9**	**388.9**
Securities Markets	**373.9**	**423.7**	**440.8**	**516.1**	**992.5**
Government Securities(bonds)	373.9	423.7	440.8	516.1	992.5
Total	**613.3**	**821.8**	**837.2**	**1 002.0**	**1 381.5**

Source: Central Bank of Lesotho

The Financial Markets in Lesotho mainly compromise of money and securities markets.

2.2 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 and linkages, thereof, in the financial

2.2.1 Linkages with banks

The linkages between domestic banks are predominantly in a form of placements for purposes of payments and settlements instead of interbank loans as shown in Table 3. Similarly, cross border linkages are predominantly placements with parent banks. In addition, banks also hold deposit of and lend to other

Table 3 Financial System Interconnectedness, in million Maloti

Financial System Interconnectedness	Million Maloti				
	2014	2015	2016	2017	2018
Interbank placement/due from banks abroad[2]	3 142.7	3 944.8	3 049.6	4 701.2	5 369.7
Interbank deposits/due to banks abroad	106.2	222.2	149.0	212.7	189.3
Interbank placement/due from domestic banks	2 149.5	2 344.0	2 127.8	2 157.6	1 779.3
Interbank deposits/due to domestic bank	2 271.9	2 296.0	2 002.7	1 987.4	1 767.5
Deposits from pension funds	-	-	-	-	-
Deposits from insurance companies	-	-	-	246.5	333.3
Deposits from MFIs	-	-	14.8	13.1	32.6
Foreign Liabilities	5.7	11.9	17.5	50.6	5.9
Foreign Assets	74.2	201.7	530.4	519.9	493.3

Source: Central Bank of Lesotho

[2] Include banks from SA.

non-bank financial corporation. Domestic banks' balances due from banks abroad increased by 14.2 percent during 2018, while balances due to foreign banks decreased by 11.0 percent. Balances due from domestic banks and balances due to other domestic banks decreased by 17.5 and 11.1 percent, respectively, on an annual basis. Deposits of the insurance sector with the commercial banks stood at M333.3 million for the period ending in December 2018, an increase of 35.2 percent from the previous year. On the other hand, deposits from MFIs were M32.6 million. Foreign liabilities decreased by 88.4 percent from the rate observed in 2017. Foreign liabilities to foreign assets ratio stood at 1.2 percent during the review period. Risks associated with placements with banks from abroad exposes 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.

2.2.2 Linkages between financial institutions and Government

This section highlights the interconnectedness of the financial sector with the government and potential vulnerabilities thereof. Over and above linkages between various sub-sectors of the financial system, linkages between the sector and the government can also be a critical source of systemic risk. Sovereign debt crises usually trigger financial crises if the financial sector is over exposed to government debt.

The government primarily raises debt financing through issuance of treasury securities namely, bills and bonds. Table 4 shows outstanding T-bill and bonds held by the financial sector. For the past five years, the financial sector held anywhere between three and four fifths of all outstanding government securities. Banks and insurance companies hold more securities compared to other sectors of the economy.

The financial sector holdings of government securities are more inclined to treasury bonds than bills. It is important to note that bonds have a longer maturity profile and are consequently less liquid. This can pose maturity mismatch challenges, especially for banks. The financial system's bond holdings for the period ending in December 2018 were 66.7 percent of the total outstanding government securities. On the other hand, T-bill holdings were 33.3 percent. On aggregate, T-bill holdings by the financial sector have generally declined while the bond holdings have increased.

Table 4 Financial Sector Exposure to Lesotho's Sovereign debt, in millions of Maloti

Period	2014	2015	2016	2017	2018
Total Financial Sector Exposure	**860.2**	**979.5**	**1 021.3**	**1 251.6**	**1 932.6**
% of Total Government Debt	75.5	80.4	76.1	74.4	78.6
T-Bill Amount Outstanding	**436.2**	**425.9**	**423.3**	**511.6**	**644.4**
% of Total, of which	50.7	43.5	41.5	40.9	33.3
Commercial Banks	47.3	40.4	38.7	38.2	32.1
Insurance Companies	3.4	3.1	2.8	2.7	1.2
Non-Bank Financial Corporations	0.0	0.0	0.0	0.0	0.0
Individuals Investors					
Bond Amount Outstanding	**423.9**	**553.6**	**597.9**	**740.0**	**1 288.2**
% of Total, of which	49.3	56.5	58.5	59.1	66.7
Commercial Banks	37.3	47.7	45.6	41.9	40.7
Insurance Companies	11.9	8.8	12.9	17.2	26.0
Non-Bank Financial Corporations	0.0	0.0	0.0	0.0	0.0
Individuals Investors					0.0

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

BANKING SECTOR

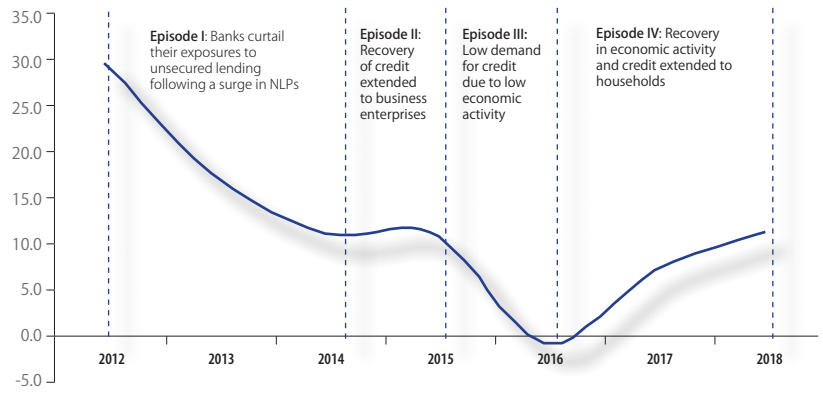
The favourable trends seen in the financial sector in past years continued into 2018. The banking sector continued to be adequately capitalised and profitable. It maintained high liquidity levels and good quality of assets. The sector is, however, exposed to risks emanating from credit concentration and the challenging economic environment. However, stress-test results demonstrate that the current capitalisation, liquidity and profitability levels of the banks guarantee a high degree of resilience to the assumed shocks.

3.1 CREDIT DEVELOPMENTS

Credit growth in the economy increased in 2018 relative to 2017. Year-on-year, credit increased by 10.8 percent and credit advanced by banks stood at M6.5 billion. As shown in Figure 1, for a three year period, credit increased by 7.3 percent, recovering from a contraction experienced from 2014 to 2016. This came as a result of low demand for credit due to low economic activity after the 2008 economic and financial crisis. On the supply side, the reduction in lending due to rising NPLs following a surge in credit extension prior to 2012[3] contributed to the decline. Banks revised their lending parameters on personal loans in an attempt to "re-balance" their loan books by shifting to asset backed loans (mortgages) from unsecured lending (personal loan). However, growth in mortgages could not offset the fall in personal loans and as a result overall credit declined up to the year ending in 2016. From 2016 going forward, credit showed some upward trend and this is attributed to the further recovery in the economic growth.

Figure 2 shows the evolution of annual credit-to-GDP gap. The credit-to-GDP gap[4] is used to capture build-up of excessive credit in a financial system, which is a prominent lead indicator to financial crises. From a policy perspective, it is regarded as a reliable early warning indicator (EWI) of banking crises or severe distress. A higher positive gap means 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, turned negative in 2015 and continued on this downward trajectory until 2016 as shown in Figure 2. This shows that credit-to-GDP ratio has been falling and is below its long-term trend - an indication of reduced likelihood of a crisis.

Figure 1 Annual Credit Growth (%)



Source: Central Bank of Lesotho

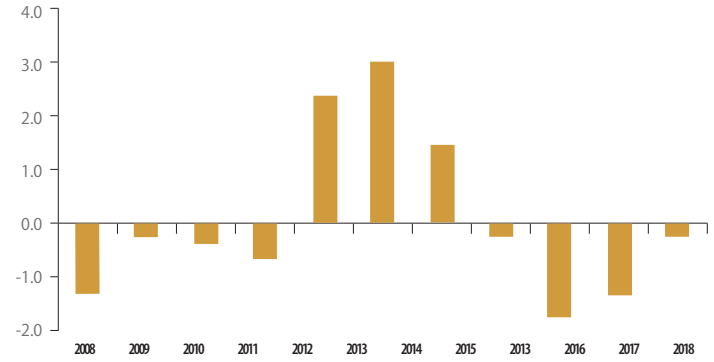
Credit growth in the economy increased in 2018 relative to 2017.

[3] Structural reforms, in particular the 2012 Land Act, allowed land to be used as collateral, which led to a surge in credit.

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

BANKING SECTOR

Figure 2 Annual Credit-to-GDP Gap (%)



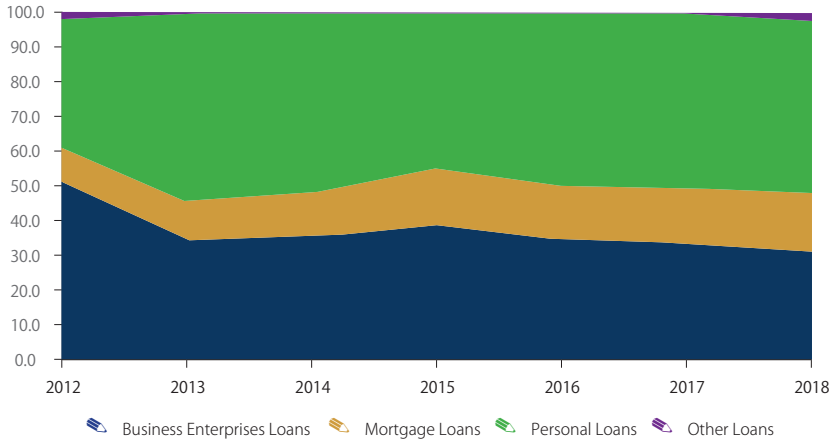
Source: Central Bank of Lesotho

Credit-to-GDP gap narrowed further during 2018 but remained negative.

Figure 3 shows distribution of credit by economic sectors. Credit to households, consisting of personal loans and mortgage, constituted 67.1 percent of the banks' loan book during 2018. Out of the 67.1 percent, personal loans constituted 50.1 percent. This shows the extent to which the banking sector is exposed to the household sector. On a yearly basis, personal loans grew by 12.7 percent to M3.4 billion while mortgage loans increased by 15.9 percent to M1.7 billion. Credit to business enterprises increased by 6.4 percent in 2018 to M 2.1 billion.

Credit risk moderated 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 4.5 percent in 2017 to 3.7 percent in 2018. However, the surge in past-due loans (Figure 4) remains a huge upside risk to NPLs outlook. Past-due loans increased by 537.3 percent to M848.0 million while NPLs decreased by 8.1 percent to M250.4 million in December 2018, as shown in Figure 5. Consequently, provisioning levels grew by 33.5 percent to M334.5 million in December 2018.

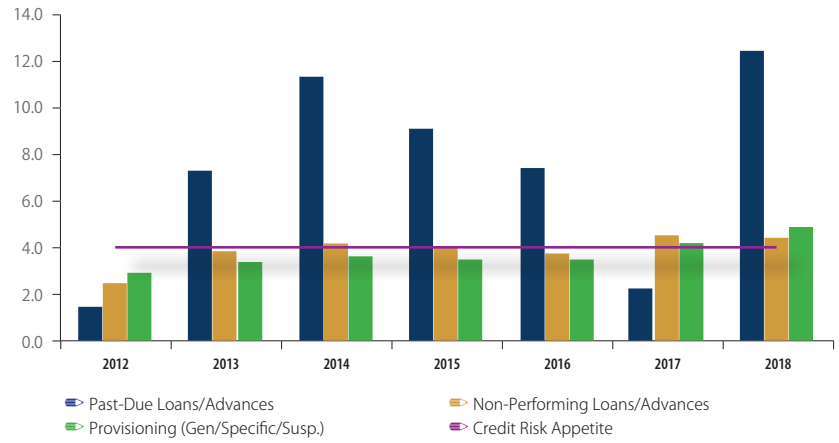
Figure 3 Distribution of Loans by Sector to Total Loans (%)



Source: Central Bank of Lesotho

Credit risk remained moderate during the review period. However, concentration risk in certain loan types remains a concern.

Figure 4 Non-Performing Loans & Provisions as a percent of Total Loans (%)

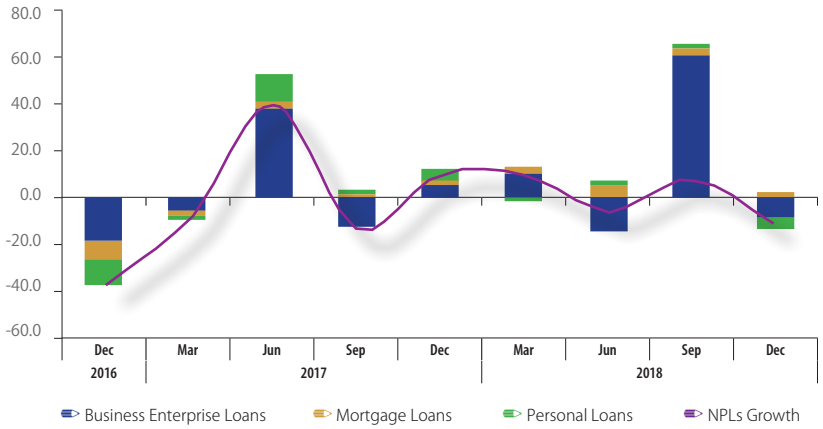


Source: Central Bank of Lesotho

The surge in past-due loans remains the main upside risk to the NPLs outlook.

Sectoral analysis of NPLs revealed that business enterprises and mortgage components of banks loan portfolio realised the highest growth in NPLs during the review period while in personal loans, NPLs remained relatively constant. The growth in NPLs in the business enterprise loans is attributed to the arrears in payments from government due to the stress in the fiscal position while in mortgage loans the weak balance sheet position resulting from low economic activity was the major factor.

Figure 5 Growth in NPLs (%)



Source: Central Bank of Lesotho

3.2 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 also 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.

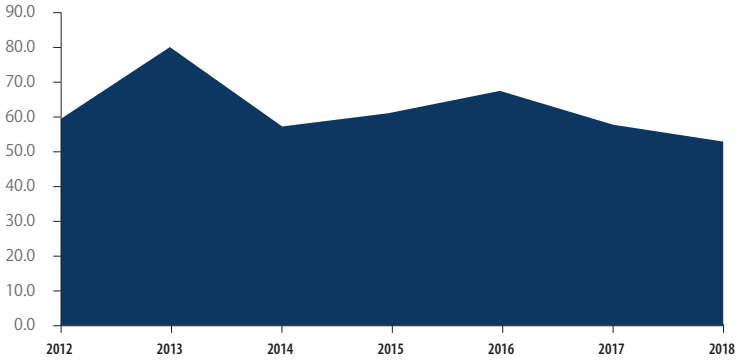
The Loans to deposits ratio[5], shown in Figure 6, is an important indicator used to determine the financial institutions short-term viability. A lending institution that accepts deposits must have a certain level

[5] Too high LTD means that the bank may not have enough liquidity to cover any unforeseen fund requirements, and conversely, too low LTD, the bank may not be earning as much as it could be.

of liquidity to maintain its normal daily operations. The ratio decreased by five percentage points (pps) to 52.5 percent in 2018. This means that the banking industry lends out about 52 cents on every loti held as deposits and holds the rest for immediate liquidity needs.

The ratio of liquid assets to short-term liabilities increased from 52.8 percent in 2017 to 52.9 percent in 2018. Both the liquid assets and short-term liabilities increased during the review period as shown in Figure 7. The growth was primarily driven by accumulation in government securities and balances with foreign banks.

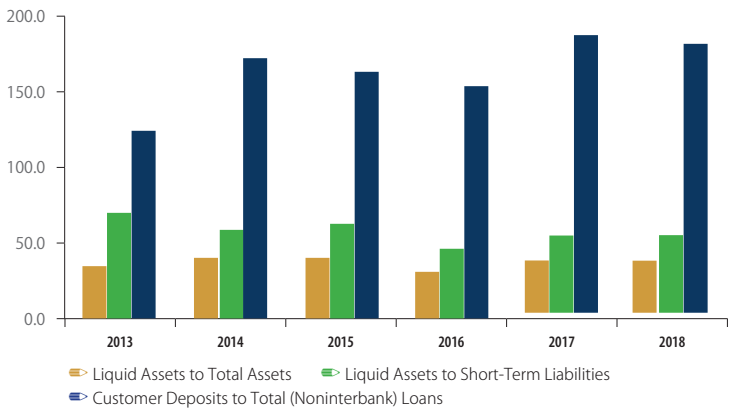
Figure 6 Loan to Deposit Ratio (%)



Source: Central Bank of Lesotho

Loan to deposit ratio declined during the review period.

Figure 7 Liquidity Ratios (%)



Source: Central Bank of Lesotho

Banks' liquidity position deteriorated slightly during 2018.

The ratio of liquid assets to total assets is used to assess on an on-going basis the extent to which liquid assets can support the asset base. For the year ending in 2018, the ratio decreased by 0.2 pps from 36.3 percent that was observed in 2017. This shows that banks invested over a third of their funds in liquid assets. The ratio of customer deposit to total (non-interbank) loans is another measure of banks' liquidity quality. It compares the stable deposit base with gross loans excluding interbank activity[6]. For the year ending in December 2018, the ratio was 179.8 percent reflecting a decrease of 4.9 pps from 184.6 percent

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

observed in 2017 due to a rise in both customer deposits and total gross loans during the review period.

3.3 MARKET RISK

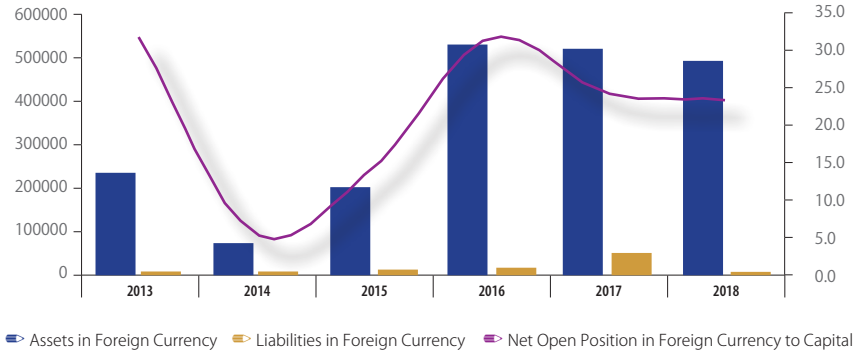
Market risk encompasses the risk of financial loss resulting from movements in market prices[7], such as interest and exchange rates. In this report, market risk is assessed on the basis of one FSI, the net open position in foreign exchange to capital[8], due to unavailability of required data to assess 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 appreciate, while those with a long open position get exposed in a case where foreign currency depreciate.

During the review period, the banks' maintained a long position in foreign currency assets as a result of a surge in transferrable deposits with non-resident banks. Consequently, the ratio of net open position in foreign exchange to capital decreased marginally from 24.6 percent in 2017 to 23.6 percent in 2018, as shown in Figure 8. This exposed banks a bit to revaluation risk in an instance where the loti appreciates against foreign currencies but would benefit the banks when the loti depreciates.

3.4 CAPITAL ADEQUACY

Capital adequacy ratios (CAR) measure the bank's health and soundness in relation to risk of insolvency. Minimum CAR serves to protect depositors and promote the stability and efficiency of the financial system[9]. The purpose of having 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. Currently, the minimum requirement for CAR is eight percent.

Figure 8 **Sensitivity to Market Risk (%)**



Source: Central Bank of Lesotho

Market risk encompasses the risk of financial loss resulting from movements in market prices such as interest and exchange rates.

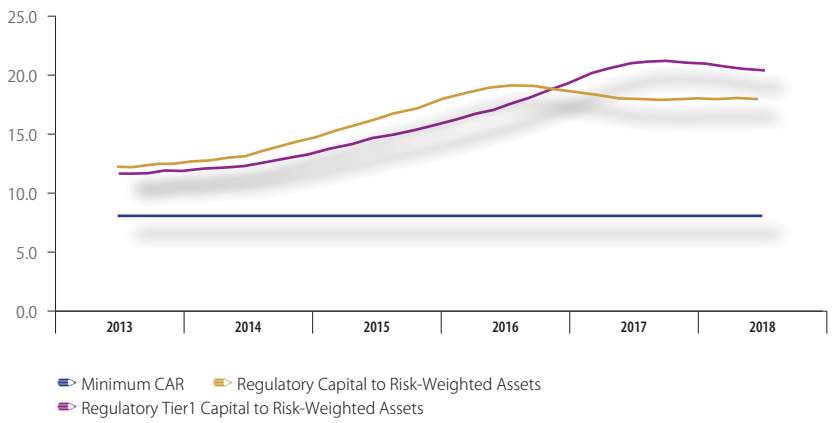
[7] www.federalreserve.gov/bankinforeg/topics/market_risk_mgmt.html.

[8] Open position is described as a situation where the value of asset/inflow exposures in one currency is not equal to the value of liability/outflow exposures in that currency. Open positions may be short (liabilities exceed assets) or long (assets exceed liabilities).

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

BANKING SECTOR

Figure 9 Capital Adequacy Ratios (%)

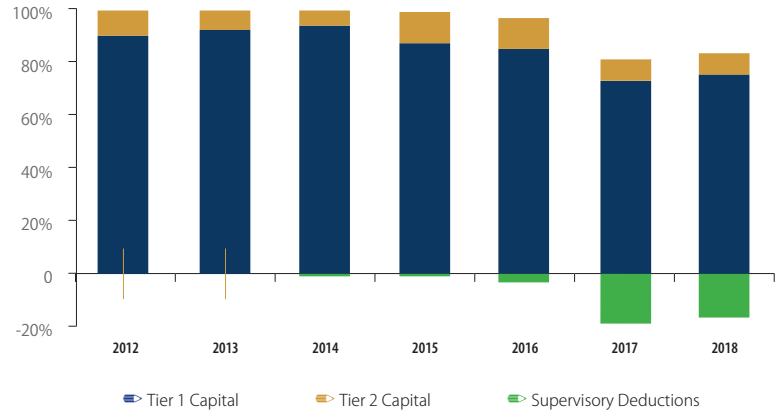


Source: Central Bank of Lesotho

The banking industry maintained CAR levels above the minimum prudential requirements during 2018.

The banking sector in Lesotho maintained CAR above the minimum requirement during 2018 as shown in Figure 9. The ratio of total regulatory capital to risk-weighted assets stood at 17.9 percent, slightly higher than 17.8 percent observed in the same period in the previous year. Similarly, the ratio of tier-1 capital to risk-weighted assets decreased from 20.9 percent in 2017 to 20.2 percent in 2018. Despite the marginal decrease in the ratio during the review period, the banking industry continued to maintain core capital buffers higher than the prudential minimum requirement, which is a positive sign with regards to the resilience of the sector. Figure 10 shows the breakdown of total regulatory capital in the year ending in 2018.

Figure 10 Composition of Total Ragulatory Capital (%)



Source: Central Bank of Lesotho

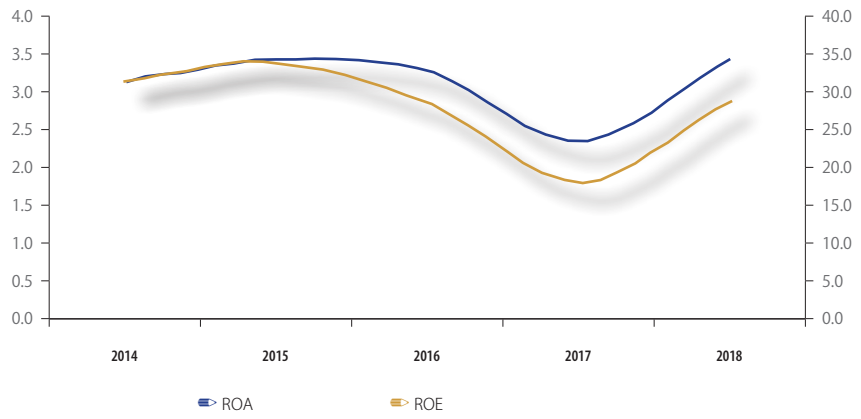
Bank's capital is largely composed of core capital (tier–1). This is a positive sign of the industry's resilience.

3.5 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[10]. The industry remained profitable during the year 2018, and this indicates that banks efficiently utilised their resources (assets and capital) to generate income. During the review period, ROA increased by 1.1 pps to 3.4 percent as illustrated in Figure 11. Moreover, ROE increased significantly by 10.6 pps to 28.6 percent relative to 18.0 percent that was observed in 2017.

The ratio of net interest margin to gross income increased marginally in 2018, recording 60.4 percent relative to 59.6 percent recorded in 2017. At this level, it shows that over half of banks income came from their core business, which is intermediation. In contrast, the ratio of non-interest expense to gross income decreased from 62.2 percent in 2017 to 60.7 percent in 2018. This shows that administration expenses relative to income had decreased by 1.5 pps as compared to 2017. The growth rate of gross-income was greater compared to the growth rate in expenses in the year under review. A higher ratio could be an indication that a large portion of income goes into administrative expenses as opposed to expenses on income earning assets ❑

Figure 11 Earnings and Profitability Ratios (%)



Source: Central Bank of Lesotho, ROE (rhs)

The banking industry remained profitable during 2018.

[10] http://www.readyratios.com/reference/profitability/.

OTHER FINANCIAL CORPORATION'S FINANCIAL PERFORMANCE

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 with minimal systemic threats. The insurance sector is profitable and liquid although its contribution to the overall economy remains low relative to regional peers. There is a huge gap in terms of insurable economic activities in the country where the insurance industry could play a crucial role through more competition and appropriate innovation.

During the review period, both the short-term and long-term insurance sectors reflected some improvement in underwriting business. The short-term insurance sector realised an annual increase of 16.6 percent to M408.9 million for the year ending in December 2018. Similarly, assets for the sector grew by five percent on a yearly basis. The long-term insurance sector's gross premium grew by of 4.1 percent to M1.3 billion during the review period and the sector's assets registered an increase of 4.8 percent on a yearly basis.

The overall performance of the collective investment schemes industry has shown a stable and sound financial position. As at September 2018, the combined asset portfolio under fund managers grew from M34.0 million in June 2018 to M37.0 million in September 2018. The fund's consolidated operating profits and combined income totalled M4.0 million in September 2018. The combined income comes from the operating activities and improved shareholders' funds which grew by 17.9 percent, while profit increased by 61.4 percent when compared to June 2018.

The asset base of the MFI sub-sector as at June 2018 stood at M796.0 million. Moreover, non-current assets of the MFIs for the same period stood at M692.0 million, an increase of 33.5 percent from March 2018, while non-current liabilities were M96.0 million as at June 2018. The sector realised profits of M40.9 million for the period ending in June 2018. Interest income constituted 81.3 percent of total income for the MFIs for the period ending in June 2018, while fees constituted 18.0 percent. Return on assets in the microfinance sub-sector for the period ending in June 2018 was 17.9 percent and the return on equity was 31.2 percent for the same period.

For the period ending in June 2018, Credit-only MFIs' NPLs as a percentage of total outstanding loans were 4.8 percent. NPLs stood at M36.3 million and this was a 17.5 percent increase from the NPLs observed in March 2018 (M30.9 million). This increase provides an early warning sign of over-indebtedness prevailing in the market. Despite this increase, the Credit-only MFIs sector is seen to have maintained a good quality of its credit portfolio❑

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[11], 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 2018, the CBL ran stress-tests to determine the resilience of the banking system in Lesotho to adverse and plausible credit, interest-rate and liquidity shocks[12]. The tests covered all the four commercial banks. The results covered in this report highlight June and December 2018 stress-test results and their implications to the banking industry and Lesotho's economy as a whole. The stress-test results demonstrate that the banking sector is highly resilient to the chosen adverse scenarios. Banks would have enough capital buffers to absorb adverse shocks and maintain their overall capital ratio sufficiently above the regulatory threshold of eight percent even under a very adverse scenario.

5.1 STRESS-TEST KEY ASSUMPTIONS AND SHOCKS

5.1.1 Credit Risk Shocks

Credit risk is defined as the possibility that a bank's 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[13]. 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 reducing retained earnings as well as reduce the value of the risk-weighted assets (RWA). The credit risk shock transmission channel is summarised in Figure 12.

Figure 12 **Credit Risk Shock Transmission**

Source: Central Bank of Lesotho

Credit risk is the risk that a bank's borrower or counter party will fail to honor its payment obligation as stipulated in the contractual terms agreed with the bank.

5.1.2 Liquidity Risk

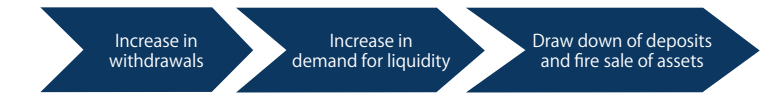
Liquidity risk is the risk that a bank will not be able to meet its current and future cash-flow and collateral needs, both expected and unexpected, without materially affecting its daily operations or overall financial condition. Liquidity stress-test is used to assess banks' resilience against maturity mismatches between short-term assets and liabilities or in a case where banks experience unexpected adverse events such as a bank run. 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 13.

[11] 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.

[12] 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.

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

Figure 13 **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 obligations without materially affecting its financial position.

5.1.3 Interest Rate Risk Shocks

Interest rate risk is a risk to income or capital of a bank brought about by upward or downward movements in market interest rates. Changes in market interest rates can increase funding costs (interest expenses) for the banks or reduce interest income from investments. This risk is measured by the difference or mismatch in maturity (fixed rate) and repricing periods (floating rate) for assets versus liabilities and off-balance sheet items. A bank with a positive repricing gap experiences an increase in net-interest income (NII) when assets reprice faster than liabilities while a bank with a negative repricing gap experiences a decline in NII when interest rates increase. The test that was 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 14 shows the transmission of interest rate shocks.

5.1.4 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 in, as shown in Figure 15. 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.

Figure 14 **Interest rate risk shock transmission channel**

Source: Central Bank of Lesotho

Market risk is the risk to income and capital of a bank brought about by movements in market prices such as exchange and interest rates.

Figure 15 **Foreign exchange risk shock transmission channel**

5.2 STRESS-TEST RESULTS

5.2.1 Credit Risk

Credit risk stress-test result revealed that all banks would be sufficiently capitalised to absorb losses as a result of the assumed sector-wide increase in NPLs in both June and December 2018. As illustrated in Table 5, for Group I shocks, all the four banks' CAR would remain well above the eight percent minimum requirement and stay solvent. Therefore, based on the assumptions made and the types of shocks anticipated, the credit risk related to an increase in NPLs can be regarded as moderate because banks would have adequate capital to absorb losses induced by high NPLs.

Table 5 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[14]	Capital Deficiency Relative to Minimum Capital[15]
June 2018					
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	2	81.1	0	269 145	3 870
Shock III: Top 5 Borrowers Default	2	81.1	1	415 532	81 909
December 2018					
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	1	0	0	18 822	0
Shock II: Top 3 Borrowers Default	3	91.9	0	220 061	18 595
Shock III: Top 5 Borrowers Default	3	91.9	2	383 014	77 512

Source: Central Bank of Lesotho

Concentration risk in banks' loan books was stress-tested by assessing resilience of banks to their large exposures. In Group II shocks, in both the moderate (shock II) and the extreme (shock III) scenarios, where the top-three and top-five borrowers default, respectively, up to two banks failed in June, while three banks failed in December 2018. This shows that their capital would not be sufficient to absorb the losses incurred as result of the assumed shocks and would fall below the eight percent CAR threshold. Moreover, they would need to be recapitalised to meet the regulatory unimpaired capital requirements. Concentration risk associated with large exposures can be regarded as high since some banks would not have adequate capital to cover the losses should their top-three and top-five borrowers default. However, this could be mitigated by ensuring that collateral pledged is adequate and of good quality to cover the losses.

Table 6 looks at the banking industry exposure to two economic sectors, namely the household and business enterprises sectors. First, mortgage and personal loans portfolios are stressed by assuming a uniform 20 percent increase in NPLs. A shock of this magnitude would have a minimal impact on the mortgage loans portfolio and all banks would remain with post-shock CAR above the minimum requirement and therefore need no recapitalisation. For the personal loans portfolio, however, in June 2018, one bank failed the stress- test. A twenty percent

[14] In millions of Maloti.
[15] In millions of Maloti.

increase in NPLs would have left the banks' CAR below the 8 percent minimum requirements and with a capitalisation deficit of M22.5 million. Furthermore, business lines, which constitute over half of loans to the business sector, were stress-tested. These are manufacturing, construction and mining & quarrying. The test results show that the shock impact is minimal; hence all the banks passed the test and would remain with CARs well above eight percent in both June and December 2018.

5.2.2 Liquidity Risk

The stress test results for the bank-run shock in Scenario I show that, in both June and December 2018, all banks but one passed the test and would remain liquid after 5 days of continuous withdrawals of deposits. This shows that the amount and quality of liquidity the banks hold is enough to absorb a shock of the nature assumed in this test. However, in Scenario II, all banks could only sustain the bank-run for three days. On the fourth and fifth day, some banks would become illiquid as shown in Table 7. Therefore, liquidity risk could also be regarded as moderate since banks would sustain a bank-run type of event for a period of five days, allowing the banks and CBL a window of up to a week to work on a solution that would restore confidence in the industry.

Moreover, the large depositors bank-run stress-test results revealed that should the top-one depositors withdraw their

Table 6 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[16]	Capital Deficiency Relative to Minimum Capital
June 2018					
Group III: Sectoral level credit risk (20 percent increase in NPLs)					
Household Sector					
Mortgages	0	0	0	0	0
Personal loans	1	7.7	0	22 528	0
Business Sector					
Manufacturing	0	0	0	0	0
Construction	0	0	0	0	0
Mining & quarrying	0	0	0	0	0
December 2018					
Group III: Sectoral level credit risk (20 percent increase in NPLs)					
Household Sector					
Mortgages	0	0	0	0	0
Personal loans	0	0	0	0	0
Business Sector					
Manufacturing	0	0	0	0	0
Construction	0	0	0	0	0
Mining & quarrying	0	0	0	0	0

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

[16] In millions of Maloti.

Table 7 Daily Withdrawals

	June 2018				December 2018			
	Scenario I		Scenario II		Scenario I		Scenario II	
	Daily Withdrawals (%)	# of illiquid Banks (out of 4)	Daily Withdrawals (%)	# of illiquid Banks (out of 4)	Daily Withdrawals (%)	# of illiquid Banks (out of 4)	Daily Withdrawals (%)	# 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	1	10	0	20	1
5th day	10	1	25	3	10	0	25	3

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

funds, one bank would fail to meet the minimum liquid asset requirement of 25 percent[17]. Furthermore, the results showed that if top-three and top-five depositors withdraw their funds, three banks would fail to meet the same requirement. On the positive side, the results showed that none of the banks would end up with exhausted liquidity even under the severe shock where the top-five depositors withdraw their funds ❑

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

NATIONAL PAYMENT SYSTEMS VULNERABILITIES

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 practice in the payment system sphere[18].

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) and other retail payment systems. 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 crisis and help to reduce the cost and uncertainty of settlements, which could otherwise act as an impediment to economic activity[19].

Lesotho Wire (Real Time Gross Settlements (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[20] and efficiency standards to manage and/or mitigate all risks arising from its operations.

There are a number of ways through which risks may manifest in large value payment systems such as Lesotho Wire (LSW). These include (a) system unavailability (downtimes), (b) the degree of utilisation and (c) inability of system participants to settle their obligations. 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. The LSW system utilisation indicates that in the fourth quarter of 2018, the transaction volumes had declined by 19.4 percent while the value of transactions processed increased by 24.4 percent compared to the fourth quarter of 2017. This means that the transaction density was lower in 2018 in comparison to 2017, with averages of M1.4 million and M2.0 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 a potential to undermine the smooth functioning of the financial sector in the economy. In 2018, the system remained available to participants for about 99.1 percent of the time, 1 percent higher than the tolerable system availability but lower than the 99.6 percent recorded in 2017. The system downtime incidents were on account of intermittent disruptions in internet and/or server connectivity. However, such disruptions were resolved within a reasonable time period. Overall, a substantial number of large value and time-critical payments were processed and settled despite the experienced disruptions.

[18] Minimum liquid assets requirements (prudential hurdle rate) as per Financial Institutions (Liquidity Requirements) Regulations 2000.
[19] CBL Payment System Oversight Policy Framework.
[20] 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 campaigns to help people protect themselves from this type of crime. In addition, cyber security law is of paramount importance to protect the financial system.

6.2 MOBILE MONEY

Improvements in technology coupled with financial innovation have increased financial inclusion. For example, mobile money is one initiative which has been implemented to overcome some of the barriers to financial inclusion through the introduction of new technologies. Mobile banking in Lesotho started in 2012, and has continued to gain momentum since then. It has allowed the rapid expansion of services to reach populations which were previously excluded from the financial system. In addition, it simultaneously reduced the costs of service delivery[21]. However, there are risks to financial stability that may emanate from increasing usage of mobile money. For instance, the risk that customers may not get their money when they want to redeem it. It is, therefore, important that mobile money services are regulated to a proper degree considering the risks associated with it. Safety of customers' money should, therefore, be a priority for both mobile money operators (MNOs) and regulators.

Certain risks posed by licensed non-bank mobile money providers can be successfully mitigated through prudential requirements that safeguard funds entering the system and meet customer's demand to cash out electronic value. The regulator can put various measures into place. Three most commonly used measures include prudential requirements, minimum capital requirements and interest-bearing mobile money accounts. These measures are intended to mitigate credit and liquidity risks and might include minimum capital ratios, capital adequacy measurement systems, reserve requirements, and other measures intended to preserve the liquidity of the provider. One common approach is to require assets to be ring-fenced and held in a bank account. The funds can be deposited in one or several commercial banks that are fully prudentially regulated. This way, any amount that passes through the mobile money system is backed 100 percent by the pooled account or accounts.

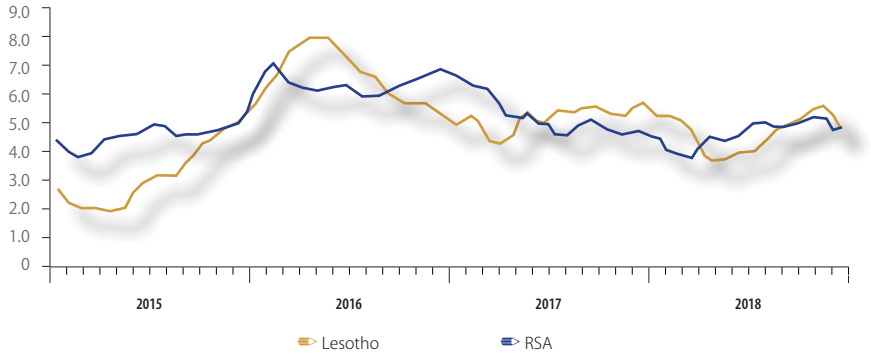
In 2018, the registered mobile money customers (end-users) were recorded at 1 261 985 throughout the country compared to 1 345 114 that were registered in 2017. This amounts to approximately 6.2 percent decline from the number observed in 2017. However, there are some challenges since about 53.6 percent of the registered agents were located in Maseru with 46.4 percent in other districts. This was due to unavailability of agents (or inactive agents) in some parts of the country and this acts as an obstacle to people who have registered for mobile money services for different uses but cannot access the services.

In light of the foregoing, MNOs in collaboration with the Ministry of Finance (MoF), CBL as well as other relevant stakeholders in the mobile money ecosystem should devise strategies that can be used to build a strong and active agent network in the country; especially in the districts where there are few agents. A strong and broad active agent network is a backbone of mobile money and it strengthens the payment system efficiency. Besides an inactive agent network, another challenge facing mobile money, as a tool for increasing financial inclusion, is that the number of active mobile money customers (users) remains very low relative to the total number of registered users. In this regard, a large share of mobile money market in Lesotho remained largely untapped during the period ending in December 2018. Furthermore, in accordance with the observed increase in the number of active agents and customers, the mass and volume of transactions continue to grow over time and bridge the financial inclusion gap. Vulnerabilities related to mobile money operations have been minimal during the review period and pose fewer systemic threats ❑

[21] http://www.lesothoreview.com/financial-services-investment-2015.php

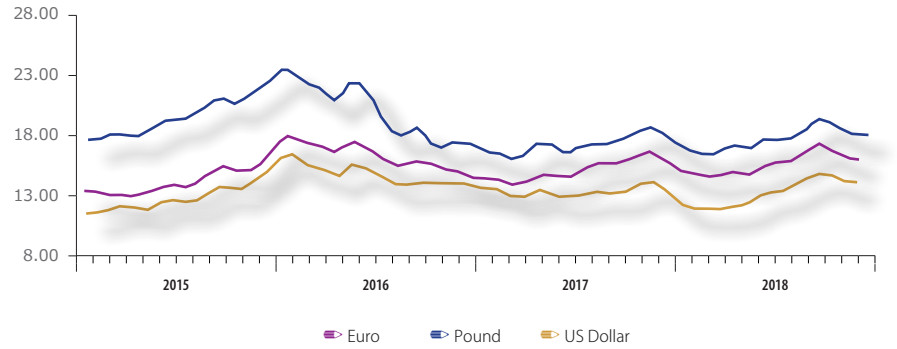
APPENDIX I: GRAPHS

Graph A Lesotho and RSA Inflation (%)



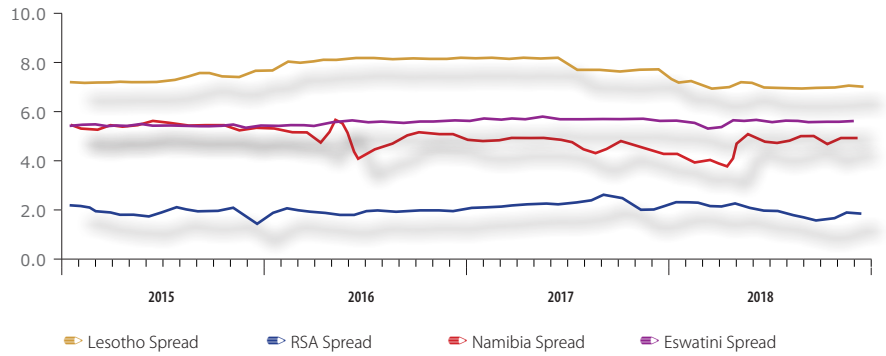
Source: Central Bank of Lesotho

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



Source: Central Bank of Lesotho

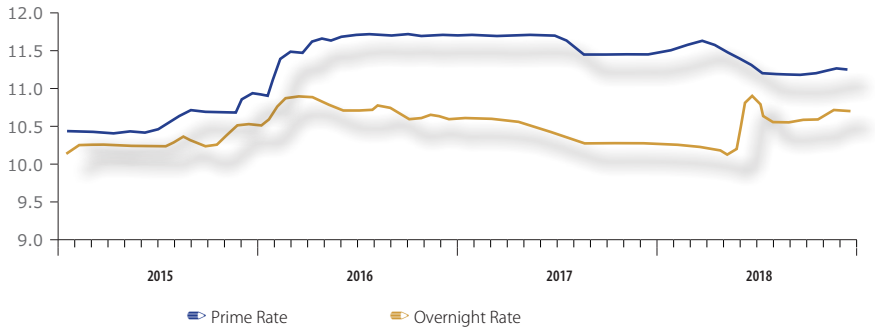
Graph C Intermediation Spread (%)



Source: Central Bank of Lesotho

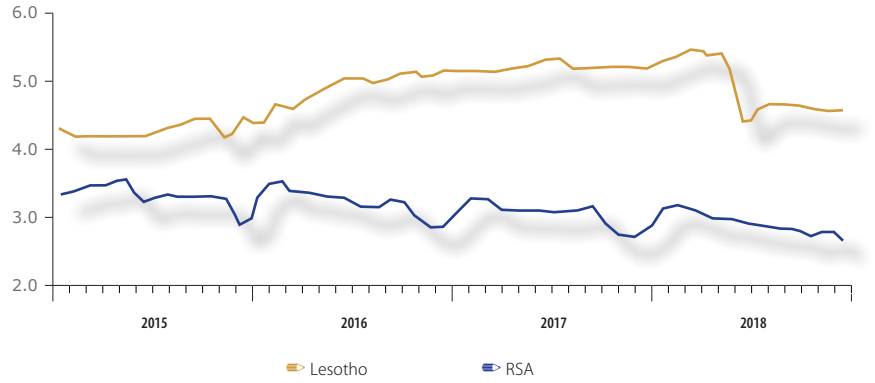
APPENDIX I: GRAPHS

Graph D **Money Market Spread (%)**



Source: Central Bank of Lesotho

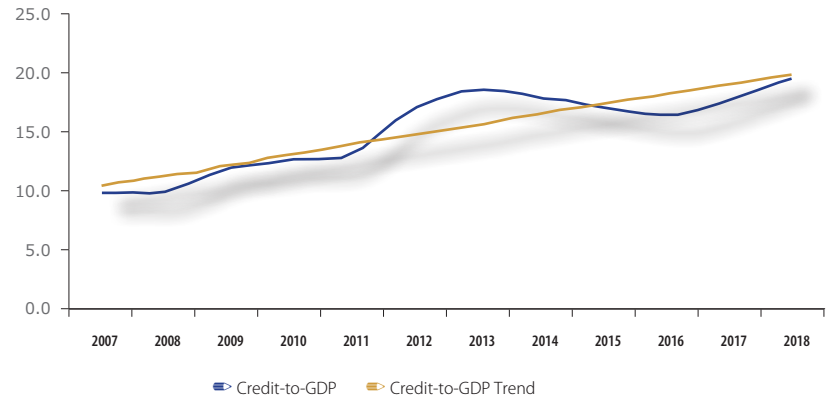
Graph E **Lesotho and RSA Risk Premium (%)**



Source: Central Bank of Lesotho

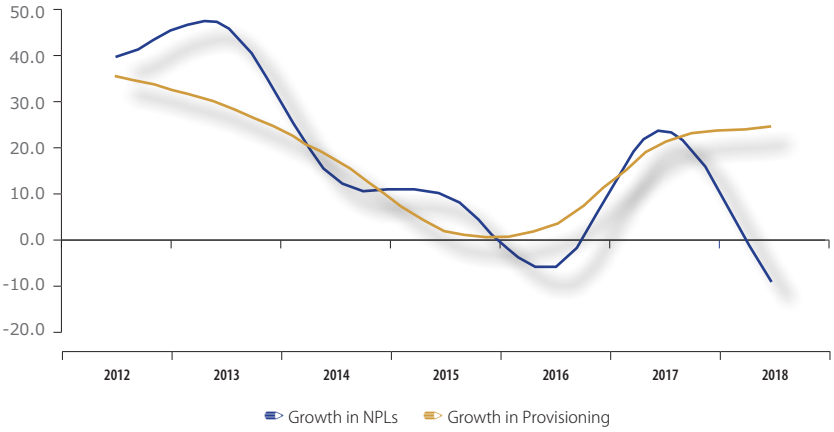
APPENDIX I: GRAPHS

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



Source: Central Bank of Lesotho

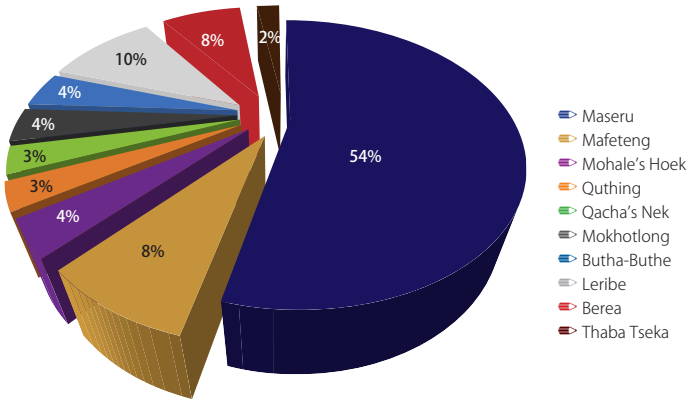
Graph G Growth in NPLs and Provisions (%)



Source: Central Bank of Lesotho

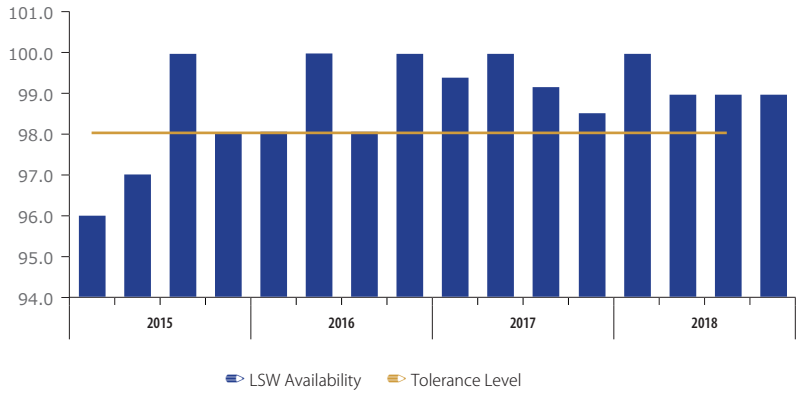
APPENDIX I: GRAPHS

Graph H **Mobile Money Agents (% per district)**



Source: Central Bank of Lesotho

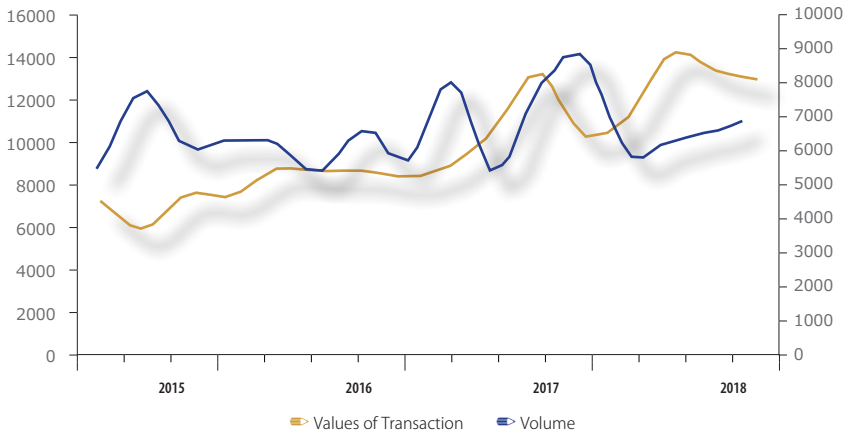
Graph I **LSW Availability (%)**



Source: Central Bank of Lesotho

APPENDIX I: GRAPHS

Graph J **LSW Transactions and Values**



The Primary Axis is in Millions while the Seconday Axis is in Thousands.

Source: Central Bank of Lesotho

APPENDIX II: TABLES

Appendix	Assumptions and Shocks		
Index	Description	Shock	Description
1. General Credit Risk			
Shock 1.1	Uniform NPL increase	60%	Indicates increase in NPLs of 60 percent across the credit spectrum
Shock 1.2	Uniform NPL increase	120%	Indicates increase in NPLs of 120 percent across the credit spectrum
Shock 1.3	Uniform NPL increase	180%	Indicates increase in NPLs of 180 percent across the credit spectrum
2. Sectoral Credit Risk			
Shock 2.1	Mortgages	20%	Indicates 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 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 percentage increase in NPLs across the Manufacturing sector
Shock 2.5	Construction	20%	Indicates percentage increase in NPLs across the construction sector
Shock 2.6	Mining and Quarrying	20%	Indicates percentage increase in NPLs across the Mining and Quarrying sector
Shock 2.7	Community, Social and Personal services	20%	Indicates percentage increase in NPLs across the Community, Social and Personal services sector
Shock 2.8	Real Estate and Business Services	20%	Indicates 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 increase in market-wide interest rates of 150 basis points
Shock 5.2	Interest shock	200 bps	Indicates increase in market-wide interest rates of 200 basis points
Shock 5.3	Interest shock	250 bps	Indicates increase in market-wide interest rates of 250 basis points
Shock 5.4	Interest shock	-150 bps	Indicates decrease in market-wide interest rates of -150 basis points
Shock 5.5	Interest shock	-200 bps	Indicates decrease in market-wide interest rates of -200 basis points
Shock 5.6	Interest shock	-250 bps	Indicates 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*

APPENDIX II: TABLES

Appendix	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 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*

NOTES

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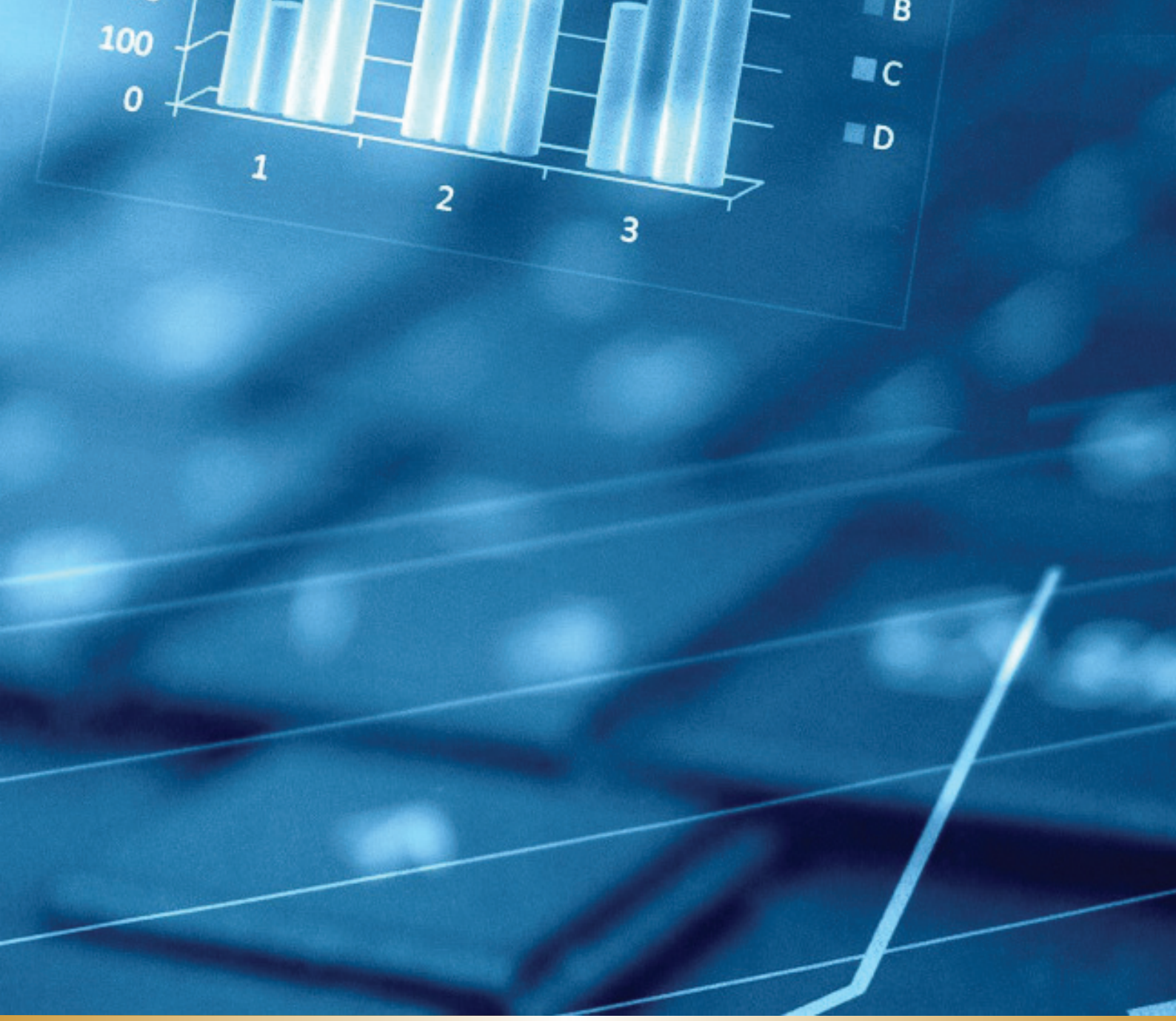

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