BANK OF SIERRA LEONE

FINANCIAL STABILITY REPORT 2021

NUMBER 05

December |2022

Published by: Bank of Sierra Leone

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ABBREVIATIONS

ACH	Automated Clearing House
AFREXIMBANK	African Export and Import Bank
ATM	Automated Teller Machines
BN	Billion
BSD	Banking Supervision Department
CAR	Capital Adequacy Ratio
CBs	Community Banks
COMFI	Credit Only Microfinance Institutions
COVID	Corona Virus Disease
CRR	Cash Required Reserves
DTMFI	Deposit Taking Microfinance Institutions
EFT	Electronic Funds Transfer
EMDES	Emerging Market Developing Economies
EURO	European Currency
FIU	Financial Intelligence Unit
FMD	Financial Markets Department
FSA	Financial Services Association
FSD	Financial Stability Department
FSI	Financial Soundness Indicators
FSR	Financial Stability Report
FX	Foreign Exchange
G2P	Government-to-People
GDP	Gross Domestic Product
HHI	Herfindahl-Hirschman Index
IFRS	International Financial Reporting Standards
IMF	International Monetary Fund
LE	Leones
LIC	Low-income countries
MFIs	Micro-Finance Institutions
MIX	Microfinance Information Exchange
MPR	Monetary Policy Rate
NASSIT	National Social Security Insurance Trust
NGO	Non-Governmental Organization
NPLs	Non-Performing Loans
OFISD	Other Financial Institutions Supervision Department
PAPSP	Pan African Payments And Settlement Platform
POS	Point of Sales
Q4	Quarter four
QAERP	Quick Action Economic Recovery Programme

ROA	Return on Assets
ROE	Return on Equity
RTGS	Real Time Gross Settlement
RWA	Risk Weighted Assets
SLICOM	Sierra Leone Insurance Commission
TN	Trillion
TSA	Treasury Single Account
USD	United States Dollar
WAMZ	West African Monetary Zone

GOVERNOR'S FOREWORD

I am pleased to publish the fifth edition of the Financial Stability Report (FSR) to the public. Every year, my staff put in considerable effort to prepare this report. This year's report presents a thorough assessment of the financial system with greater emphasis on the banking sector. This year the assessment of the financial sector is even more important given the intensification of global supply chain disruptions, the evolving global energy crisis and the consequential rapidly and marked tightening in global financial conditions. The potential adverse impact of these developments on both the Sierra Leone and global financial system cannot be underestimated. Thus a stable and resilient financial system is essential for any country to withstand such challenges.

Set against the background of a partial recovery of the domestic economy from the COVID shock, this report highlights that the Sierra Leone financial system remains sound. That said, given the lingering impact of COVID and the downside risks to the external environment, this is not the time to be overly sanguine. In the domestic banking system, vulnerabilities persist in some areas, for example, the continuing high level of non-performing loans (NPLs). However, the Bank of Sierra Leone (the Bank) is now in a better position to deal with current and potential emerging future challenges. The continued use of the risk-based supervision strategy, and the ongoing review of the prudential guidelines will help to further strengthen the banking system. The Bank is also working on new corporate governance guidelines which will further strengthen banks' corporate governance posture.

Banking sector assets continued to increase in the year under review (2021). Consequently, the Bank lunched its second National Strategy for Financial Inclusion during this 2022 The priority of the Bank is to develop a financial system that is not only stable but also inclusive and accessible to all. To this end, the Bank intends to promote the development of, and expand access to, client-centric financial products and services geared towards the main underserved population groups.

Finally, in a bid to increase the efficiency of doing business and reducing transaction costs, the Bank officially circulated the new redenominated Leone this July. This involved cutting off three zeros from the old Leone notes in circulation.

Finally, the Bank will continue to design and implement policies that ensure that the financial regulatory framework adapts to the latest development in both domestic and global markets to deal with emerging challenges to financial system stability. It is my hope that stakeholders in the financial system will find this publication useful and put it to good use. More generally, through the FSR and other avenues, the Bank will continue to provide the necessary guidance and communication on financial stability issues to the public.

Kelfala M. Kallon (Prof.)

Governor

EXECUTIVE SUMMARY

Global Backdrop

Global growth experienced its strongest post-recession growth in 80 years in 2021 at a rate of 6 percent after receding by 3 percent in 2020. This was mainly due to the relaxation of COVID pandemic restrictions in many countries which helped boost global demand. Growth rebounded to 5.2 percent in Advanced Economies and to 6.6 percent in Emerging Markets and Developing Economies (EMDE) in 2021, but world growth is projected to moderate significantly in 2022 to 3.2 percent and 2.3 percent in 2023.[1]

Global financing conditions were broadly accommodative in 2021. Advanced economy central banks were signaling policy rate hikes and the gradual phasing out of long-term asset purchase programs, yet the policy stance mostly remained accommodative. In contrast, in a number of EMDEs, facing increasing inflation and currency depreciation pressures and deteriorating risk sentiment, central banks raised policy rates.

Global financial stability has been recently challenged by the impact of the Russian invasion of Ukraine. This has increased the risk of higher and more permanent global inflation and rapidly changed the views about the likely size of monetary policy tightening by major central banks. The invasion has the potential to hold back the global economic recovery and has given rise to significant uncertainties in global markets, leading to downside risk to global growth. Pre-existing inflationary pressures from prolonged supply chain disruptions have been worsened by sharp increases in food and fuel prices. As a result, the Fed continued its rate hike cycle in 2022 aggressively, which led to a significant tightening of global financial conditions.

Sierra Leone Economic Developments

Sierra Leone’s real GDP was estimated to have rebounded by 4.1 percent in 2021, from a contraction of 2 percent in 2020. Growth though was slower than before the pandemic. Recovery was fairly broad-based including in agriculture, trade, tourism and travel, and manufacturing and also unexpectedly in mining. The easing of COVID-related restrictions, the fiscal response to the pandemic, the easing of inflationary pressures in the first half of 2021 and the resumption of pre-pandemic reforms helped to stimulate private consumption and investment. Growth is projected by the IMF to moderate to 2.4 percent in 2022. In addition, downside risks have recently intensified due to rising inflation – driven by rising food and fuel

[1] Growth figures are from the IMF World Economic Outlook, October 2022 edition.

prices and exchange rate depreciation – exacerbated by the Ukraine-Russia crisis, tighter global financial conditions, and recession risks in several large, advanced economies.

Local Banking Sector

The Sierra Leone banking sector is liquid, profitable and growing. The total assets of the banking sector increased by almost 21 percent in 2021. The banking sector continued to hold the lion's share of assets and deposits in Sierra Leone's financial system. The sector has remained relatively sound as evident by high capital adequacy, reasonable profitability and robust liquidity. However, challenges persist in the area of asset quality and business model.

The banking sector's current business model is not sustainable over the long term as it relies overly on government financing. The banking sector's assets became even more heavily concentrated in lending to the government as indicated by the size of its government securities portfolio. Treasury bills and bonds made up the largest share of banks' total assets in 2021 overtaking loans to the private sector. This reflects the better risk-reward characteristics of government securities which continue to offer high return while maintaining an extremely favorable – zero percent – credit risk rating and are regarded as highly liquid. As a result, banking sector financial intermediation remains low even by regional standards. Consequently, high measured regulatory liquidity and capital has come at the expense of low efficiency and the core role of a banking system to provide credit to the private sector to stimulate higher economic growth

The asset quality of the banking sector remains weak. In terms of the loan portfolio, credit risk was elevated in 2021 due to the residual effects of the COVID pandemic restrictions on certain economic activities. Banks' non-performing loans (NPLs) ratio increased to 15.2 percent during 2021 from 12.7 percent at end December 2020, above the maximum regulatory target threshold of 10 percent. The NPL ratio of the Mining & Quarrying and the Business Services sectors in particular, deteriorated to 32 percent and 19 percent in 2021 from 17 percent and 8 percent in 2020, respectively.

During the pandemic, the BSL intervened in a timely manner to support lending to the real economy. Gross loans and advances increased by 21 percent in 2021. This was driven mainly by the reintroduction of the Special Credit Facility (SCF), the launch of the Agricultural Credit Facility and the resumption of economic activities after the removal of all COVID pandemic related restrictions. The BSL introduced the SCF in April 2020 to provide loans through the banking sector to support the production, procurement and distribution of essential goods and services in the country. The SCF was re-launched in September 2021 (SCF II).

The banking sector's Capital Adequacy Ratio (CAR) was well above the BSL minimum regulatory requirement. The CAR at end 2021 was 41 percent and the Tier 1 CAR was 36 percent, both much higher than the minimum regulatory thresholds of 15 and 7.5 percent respectively. This indicates that the banking sector is solvent and in a good position to absorb losses that could emanate from shocks to the sector. All but two banks were able to meet the minimum CAR threshold of 15 percent.

According to the core regulatory indicators, the banking sector remained highly liquid and seems to be in a sound position to meet its short-run obligations. The measured liquid assets to total assets ratio remains very high after a marginal increase to 74 percent in 2021. Also, the liquid assets to short-term liabilities ratio increased to 92 percent in 2021 from 89 percent in 2020. Conversely, banking sector profitability fell in 2021 but remained robust. The return on equity decreased to 24 percent in 2021 while the return on assets declined to 5.36 percent. The decline in profits could be attributed to increasing staff costs and admin & other costs furthermore, the deterioration in asset quality which led to an increase in loan loss provisions.

The stress test of the banking sector indicates that it is generally resilient to adverse shocks that might emerge in the future, despite the conservative assumptions. However, extreme, albeit highly unlikely, shocks could still lead to a systemic banking crisis. None of the individual macro-economic shock scenarios considered would cause the sector's CAR to fall below 15 percent. The is because banks' have high CAR levels emanating from the large holdings of government securities that are assumed to be risk free and provide very high returns. However, the banking community should consider placing higher weights on alternative financial stability indicators as the risk-weighted assets is significantly biased by the large government securities portfolios of the banks, which is unlikely to be sustainable over the medium-long run. The test also shows that vulnerabilities do exist in the banking sector which arise mainly from a few weak banks in the sector. Some of these banks are already under enhanced supervision.

Non-bank Financial Sector

Non-bank financial institutions continued their expansion as the assets and the capital of both the Deposit Taking Micro-Finance Institutions (DTMFIs) and Credit Only Micro-finance Institutions (COMFIs) increased further. The total assets of DTMFIs and COMFIs increased by 43 and 53 percent, respectively, in 2021. DTMFIs remained highly profitable though challenged by low asset quality. The DTMFIs sector's NPLs was 8 percent in 2021, above the Microfinance Information Exchange (MIX) standard of 4.8 percent. All DTMFIs failed to meet this MIX standard, implying the need for substantial improvement in credit management and loan recovery strategy. The COMFI sector made significant improvements in asset quality and profitability in 2021. The consolidated portfolio at risk (PaR) for all twenty-six COMFIs covered decreased to 7.6 percent in 2021 from 13.2 percent in 2020. Individually, only five COMFIs met the MIX requirement, indicating high credit risk for individual COMFIs which need to be addressed.

In contrast, the Sierra Leone Insurance Commission (SLICOM) reported that the insurance sector continued to exhibit slow growth. The total assets of the insurance industry grew by only 2 percent in 2021 (to Le381.1bn). The slight pick-up in growth may be attributed to the removal of COVID related restrictions in 2021. The key financial soundness indicators suggest that the industry remained relatively stable in 2021.

The assets of the NASSIT pension scheme expanded by 15.5% during 2021. NASSIT continues to generate sufficient funds to meet customers' needs. Although total income declined by 1.7 percent in 2021, contribution income still surpassed benefits payments by a wide margin, and remained sufficient to meet the fund's total expenses, giving rise to surplus for future investment or future use.

Financial Markets

The primary market auctions for government securities exhibited was under subscribed in the 91-days and 182-days tenures but mostly oversubscribed in the 364-days tenure. The total stock of government securities increased by 3 percent in 2021. Holdings of marketable government securities increased by all creditors – the BSL (11 percent), the commercial banks (30 percent) and especially the non-bank public (75 percent). Consequently, the balance sheet of the banking sector is heavily dependent on the domestic government debt market. Government debt market on the other hand is also heavily dependent on the banking sector – this potential risk of sovereign-banking is definitely a rising risk in the SL banking sector as in a number of developing countries.

Trading of foreign currency in the foreign exchange market increased by 8 percent in 2021. The major sectors that bought forex from the commercial banks were trade related payments, service industry, and payments for petroleum products. Total diaspora remittances increased by 68 percent to USD227 million during 2021. The official BSL, commercial banks, bureaus, and parallel market exchange rates depreciated by 11.2 percent, 11.8 percent, 10.9 percent, and 11.6 percent respectively during 2021.

Payment System

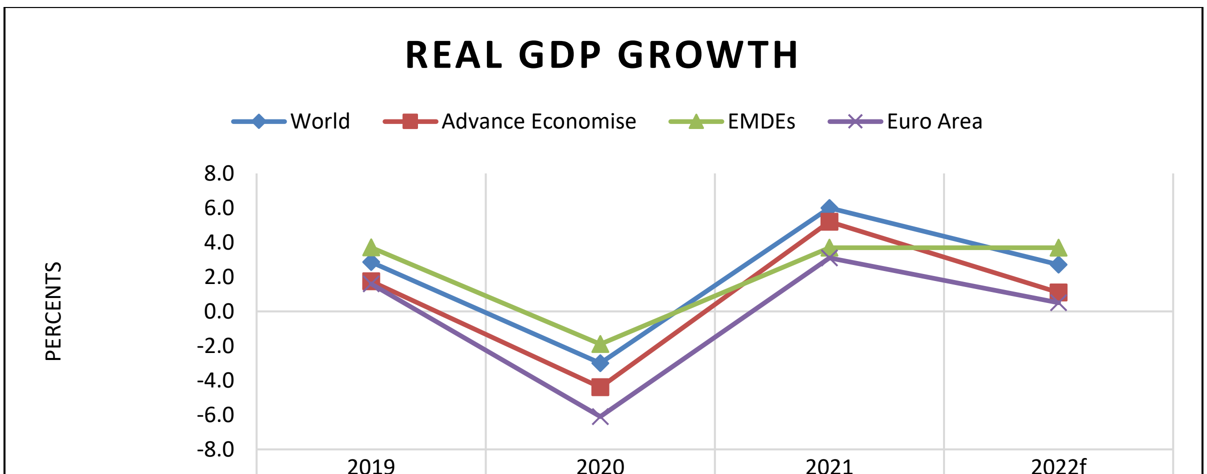
The Bank continues to monitor and assess the performance of the National Payment System for its safety and efficiency. In addition, the Bank is quite advanced in the procurement and implementation of the National Payment Switch System, under the “Sierra Leone Financial Inclusion Project”. To this end, the value and volume of transactions of the wholesale payment system, the Real Time Gross Settlement System, continued to increase, indicating the general acceptability of the system for interbank transactions. In contrast, on the retail front, cheque transactions were more widespread than the use of direct debits. The gap between the total values of cheque and direct debit transactions has narrowed but remained sizeable. However, the use of direct credit as a means of interbank transactions has been sustained and has a prospect to improve in the near future.

1 MACROECONOMIC AND FINANCIAL DEVELOPMENTS

1.1 Global Macroeconomic Developments

Global growth surged to 6.1 percent in 2021 after GDP receding by 3.1 percent in 2020 according to IMF (April 2022) estimates. This was the strongest post-recession growth in 80 years and was mainly due to the relaxation of COVID pandemic restrictions in many countries which helped boost global demand. Growth in Advanced Economies rebounded to 5.2 percent in 2021 from -4.5 percent in 2020 and is projected to moderate to 3.2 percent in 2022 and 2.3 percent in 2023. Emerging Markets and Developing Economies (EMDE) experienced faster growth in 2021 (6.8 percent) compared with -2 percent in 2020. Nonetheless, growth in EMDEs was held back by low vaccination levels, the scarring effect of the pandemic and limited policy space to respond.

Figure 1.1: Annual Real GDP Growth (%)

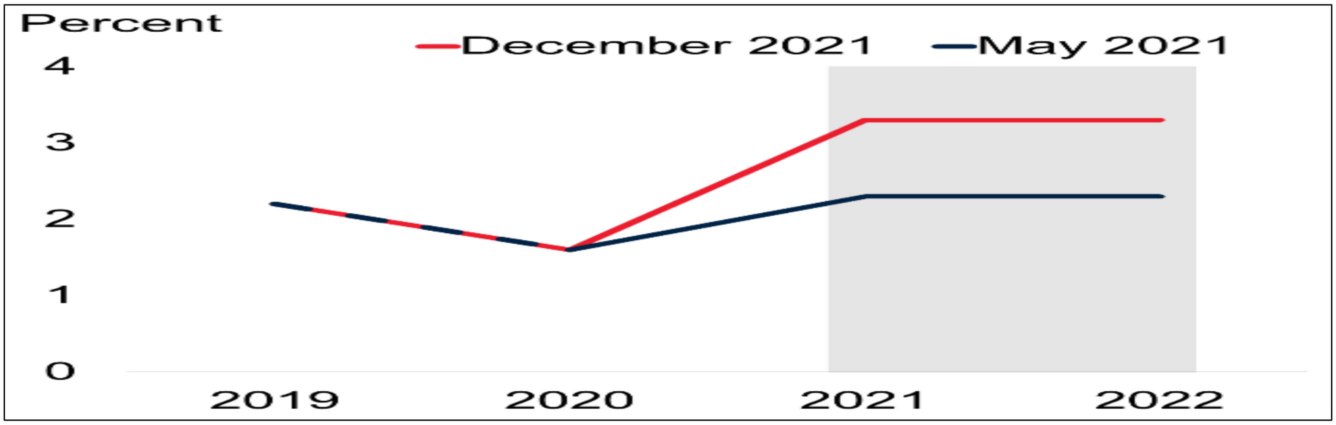


	2019	2020	2021	2022f
World	2.9	-3.0	6.0	2.7
Advance Economise	1.7	-4.4	5.2	1.1
EMDEs	3.7	-1.9	3.7	3.7
Euro Area	1.6	-6.1	3.1	0.5

Data source: IMF, World Economic Outlook April 2022

Global inflationary pressures emerged in 2021 with median headline annual inflation reaching 4.6 percent in October 2021 in contrast to a pandemic-related level of 1.2 percent in May 2020. The resumption of economic activity and the rebound of global demand in mid-2020, rising food prices and energy prices and supply chain disruptions are the primary reasons for higher headline inflation in many countries. In addition, global core consumer price inflation which excludes food and energy has also increased. To put a check on inflationary pressure, central banks around the world have started gradually to unwind the accommodative monetary policies adopted initially during the Great Financial Crisis and reinforced during the pandemic to further stimulate demand.

Figure 1.2: Consensus Median Inflation Forecasts



Sources: World Bank Global Economic Prospect January 2022, Shaded Area Indicates Forecasts.

1.2 Global Financial Developments

Financing conditions at the global level continued to be broadly accommodative. Advanced economy central banks were signaling policy rate increments and the gradual phasing out of long-term asset purchase programs, yet the policy stance mostly remained accommodating. In contrast, in a number of EMDEs, where risk sentiment was deteriorating, tighter monetary policy stance were adopted. This was mainly due to efforts by EMDE central banks to deal with increasing inflation and currency depreciation.

The equity market in advance economies was boosted by strong corporate earnings leading to higher equity prices. International Bond issuance by EMDEs was generally robust in 2021 but portfolio flows to EMDEs declined. This reflected a broader deterioration in EMDEs' risk sentiment in addition to uncertainty about the prospects for monetary policies of major central banks. The growth of remittances also moderated after a strong performance in 2020. However, foreign direct investment inflows to EMDEs resumed, albeit with notable variations across countries and industries, with pandemic-related uncertainties amplifying pre-COVID weaknesses, particularly in Lower Income Countries, LICs (UNCTAD).

1.3 Global Financial Stability

Since 2022, global financial stability has been challenged by the Russian invasion of Ukraine. This has increased the risk of higher and more permanent global inflation and rapidly changed the views about the likely size of tightening of monetary policy by major central banks. The invasion has the potential to hold back the global economic recovery and has given rise to significant uncertainties in global markets, leading to downside risk to global growth. Pre-existing inflation pressures and inflation expectations have been worsened by sharp increases in food and fuel prices and with prolonged supply chain disruptions.

Risks to global financial stability have arisen from a number of directions. For example, a sudden repricing of risk due to an escalation of the Russia-Ukraine crisis may expose and exacerbate vulnerabilities built up during the pandemic, thus leading to sudden declines in asset prices. To this end, the war has the potential to affect global financial markets through inflation pressure caused by commodity price shocks, direct and indirect exposure of banks and nonbank financial institutions, commodity market disruptions, counterparty risk exposure etc. In addition, poor market liquidity and funding constraints may pose a serious risk to financial stability. Finally, the resilience of the financial market infrastructure and the broad market functionality may be challenged by cyber-attacks, leading to disruptions of financial markets.

However, though the financial system has been resilient to recent shocks such as the COVID pandemic, future shocks could be more devastating if the global financial system does not brace itself to deal with adverse events such as climate change. In the short run though policy makers should take decisive actions to deal with current financial vulnerabilities and to curb rising inflation. Over the medium term, it is imperative that policy makers speed up the transition to greener economies and in the process address the problem of energy security exposed by the Russian-Ukrainian crisis.

1.4 Domestic Macroeconomic Developments

1.4.1 GDP Growth and Inflation

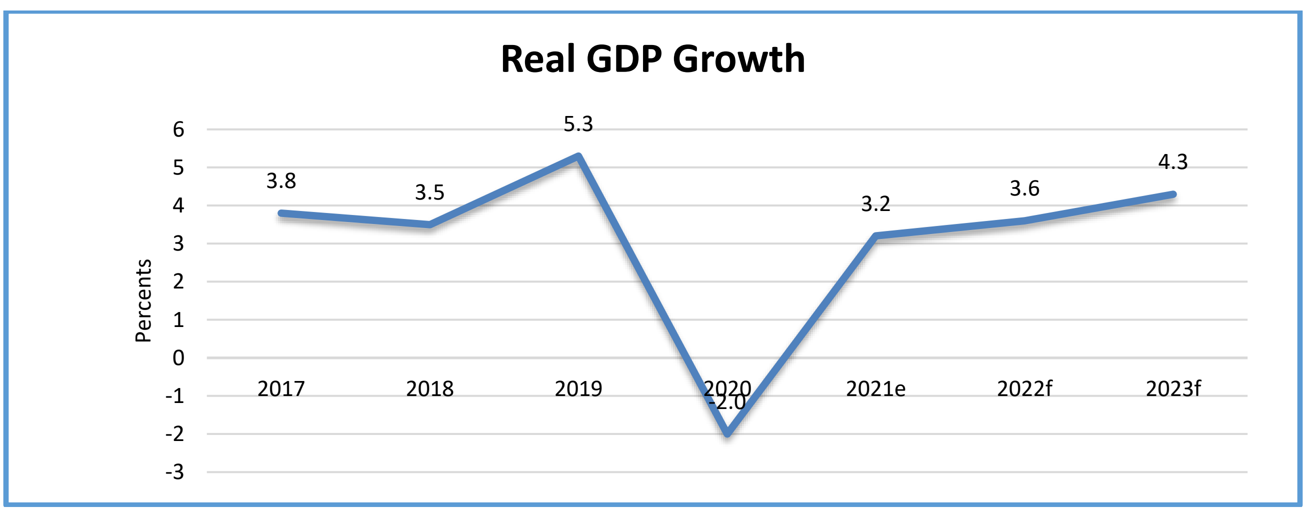
Sierra Leone's economy recovered from the COVID contraction, but growth was slower than before the pandemic. Real GDP is estimated to have rebounded to 4.1 percent in 2021, from a contraction of 2 percent in 2020. This mainly reflected recovery in Agriculture, Trade, Tourism and travel, manufacturing but also the unexpected increase in mining output. The easing of COVID-related restrictions, the fiscal response to the pandemic, the easing of inflationary pressures in the first half of 2021 and the resumption of pre-pandemic reforms helped to stimulate private consumption and investment. Growth is projected by the IMF for the Sierra Leone economy to decline to 2.4 percent in 2022 on the back of global supply chain disruption and the rising energy prices. Thus, risks remain on the upside due to rising inflation – driven by rising food and fuel prices – which has reduced real household incomes, a deterioration in prospects for mining production and the highly uncertain global economic backdrop.

Agriculture, Industry and Services – which are the major sectors of the economy – all contributed to the rebound in GDP. The easing of the COVID-related restrictions boosted activities in the services and industry sectors, and both recorded positive growths after receding in 2020 due to the pandemic.

For the first time since 2016, headline inflation fell to single digits in early 2021 down to 8.9 percent in March. This was due to the fall in the demand for nonfood items as food supply constraints eased.

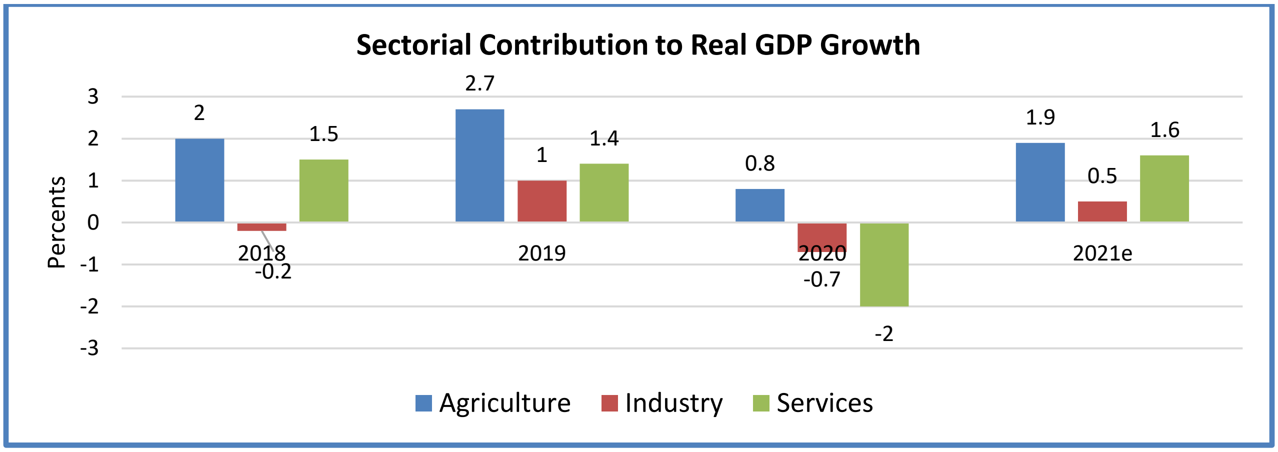
But in the second half of the year, inflation started to increase again on the back of rising global food and energy prices and ongoing widespread disruptions to supply chains. The depreciation of the Leone put further upward pressure on domestic prices. The upsurge in inflation continued in early 2022, further bolstered by the supply disruptions caused by the Russian-Ukrainian war and the weaker exchange rate, reaching historically high levels above 20 percent. Inflation may stay elevated in the coming quarters implying increased policy rate which can lead to high domestic nominal lending and T-bill rates.

Figure 1.3: Real GDP growth Rate in Sierra Leone



Source: IMF (*Note: e=estimate; f= forecast)*

Figure 1.4: Sectorial Contribution to Real GDP Growth



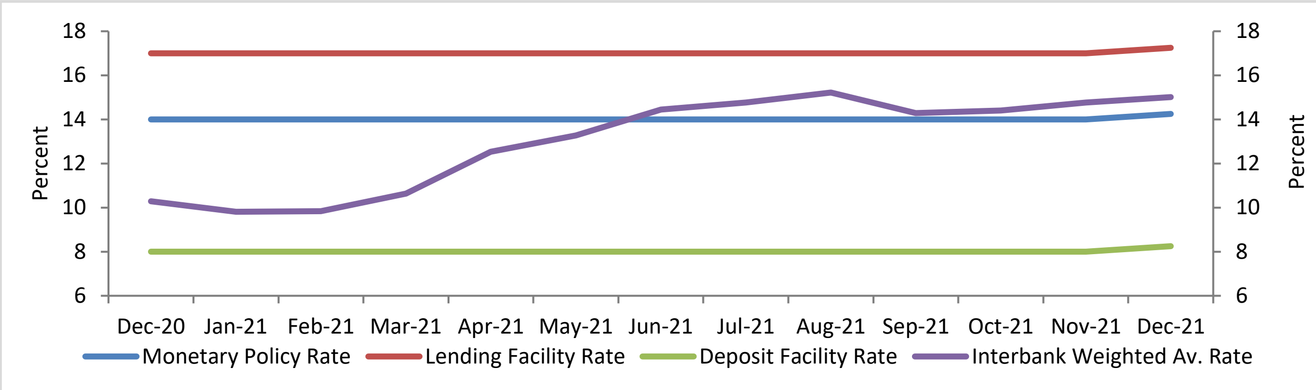
Source: Data Source: Statistics Sierra Leone (Note: e=estimate; f= forecast)

The exchange rate was relatively stable in the first half of 2021, however, a negative terms-of-trade shock put downward pressure on the Leone. The increased demand pressure for foreign currency, especially from importers of petroleum and rice, was evident in the second half of 2021. To mitigate this demand pressure, the BSL extended the Special Credit Facility and provided foreign currency to Oil Marketing Companies and importers of essential commodities through direct sales of forex to their respective commercial banks. These measures helped to dampen pressure on the exchange rate though depreciation was evident across all segments of the Leone-US dollar foreign exchange market. The Leone depreciated against the US dollar by more than 11 percent during 2021 including both the Official BSL rate, the commercial banks' rate, and the parallel market exchange rate. The premium between official and parallel market exchange rates narrowed as the volume of banks' forex transactions increased after the BSL removed some restrictions.

1.5 Monetary Policy Management

With the inflation rate on track to fall within its target of single digit levels, the BSL loosened its monetary policy stance in 2020 to stimulate economic growth and to make credit conditions more favorable for SMEs that were badly affected by the pandemic. However, the emergence of inflation pressures in the second half of 2021 led the BSL to adopt a tight monetary policy stance. The MPR was increased by 25 basis points in December 2020 and by a further 75 basis points in March 2022, reaching 15.00 percent.

Figure 1.5: BSL Policy Rates & Interbank Weighted Average Rate



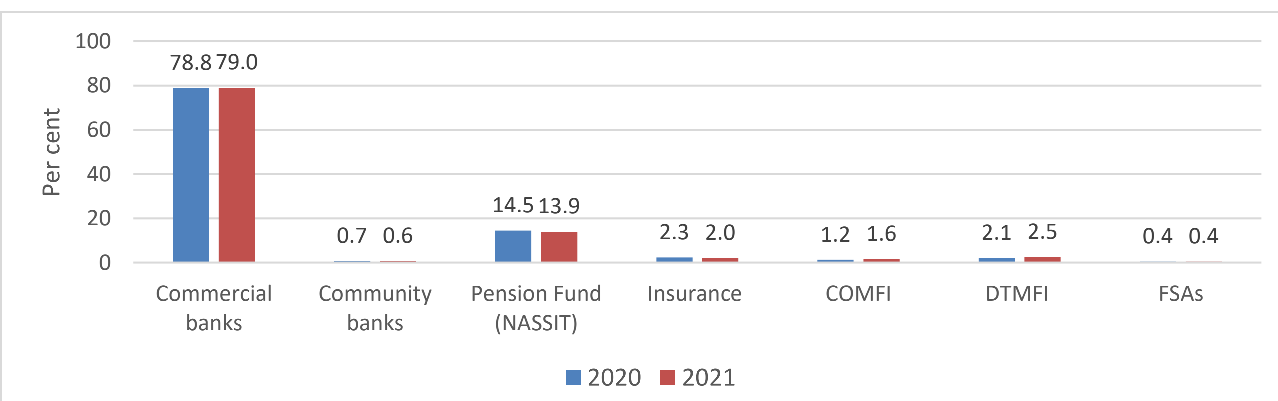
Source: FMD, BSL

The BSL managed to keep interbank interest rates within its overnight interest rate corridor but the gradual increase of interbank rates within the corridor since Q1 2021 and their position above the MPR more recently, hints at tightening liquidity conditions.

1.6 Structure of the Financial System

The financial system remains dominated by the banking sector which accounted for over four-fifths (81 percent) of total financial system assets as at end December 2021. Pension funds ranked second with 12 percent of total financial sector assets whilst the rest accounted for 7 percent. The banking sector consists of fourteen commercial banks – two state-owned, two domestic privately-owned and ten foreign-owned mainly Nigerian. The banking sector continued to expand and was adequately capitalized, sufficiently liquid and highly profitable in 2021.

Figure 1.6: Share of Financial System Assets by Sector



Source: BSL, NASSIT and SLICOM

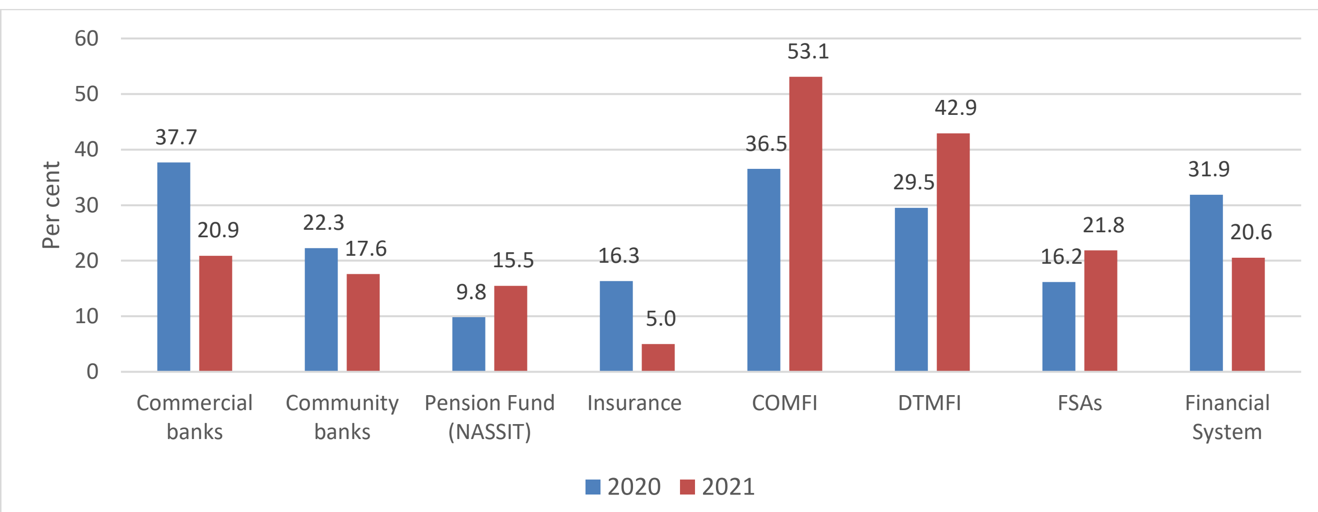
Box 1: Financial Institutions in Sierra Leone, end 2021

The number of financial institutions regulated by the BSL decreased to 230 from 251 in 2020. There are fourteen (14) commercial banks, four (4) deposit-taking microfinance institutions (DTMFIs), seventeen (17) community banks, fifty-nine (59) financial service associations (FSAs), and three (3) mobile money service providers. On the other hand, credit-only microfinance institutions (COMFIs) increased to forty-five (45) in 2021 from forty-one (41) in 2020 whilst the number of Foreign Exchange Bureaus declined to eighty-eight (88) in 2021 from ninety-six (96) in 2020. The number of insurance companies regulated by SLICOM remained at twelve (12) and there is one pension fund (NASSIT).

1.7 Total Assets of the Financial System

Total assets of the financial system grew by 18 percent during 2021 reaching 43 percent of GDP. The increase was broad-based with all sectors of the financial system contributing. The two Microfinance sectors registered asset growth of more than 40 percent highlighting the rapid growth in the sector. The banking sector's assets grew by 21 percent but still only representing 6.2 percent of GDP. Figure 1 shows the assets of the various sectors of the Sierra Leone financial system.

Figure 1.7: Growth of Sierra Leone's Financial System Assets by Sector



Source: BSL, NASSIT and SLICOM

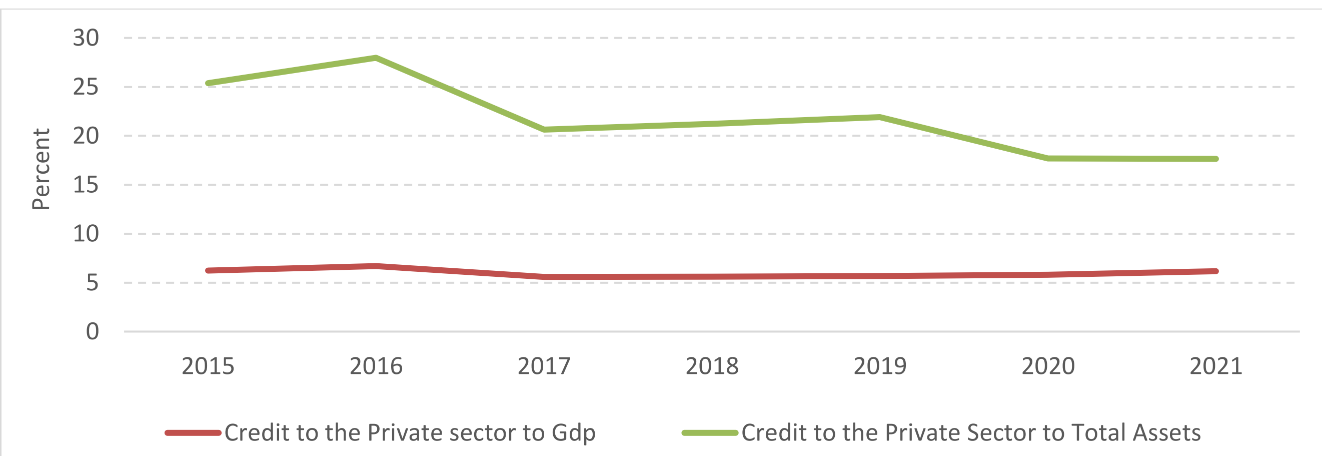
2 BANKING SECTOR ASSESSMENT

2.1 Summary

The banking sector is liquid, profitable and growing. The total assets of the banking sector increased by 20.8 percent in 2021. The banking sector held the lion's share of assets and deposits in Sierra Leone's financial system. The sector has been relatively sound over the years evident by high capital adequacy, reasonable profitability and robust liquidity. However, challenges persist in the area of asset quality and business model.

The banking sector's assets have become even more heavily concentrated in lending to the government as indicated by the size of its investment portfolio (overwhelmingly government securities, i.e. Treasury Bills and Treasury Bonds), these made up the largest share of banks' total assets in 2021 overtaking loans to the private sector. This reflects the better risk-reward characteristics of government securities which continue to offer high return while maintaining an extremely favorable – zero percent – risk rating. As a result, banking sector financial intermediation remains low even by regional standards.

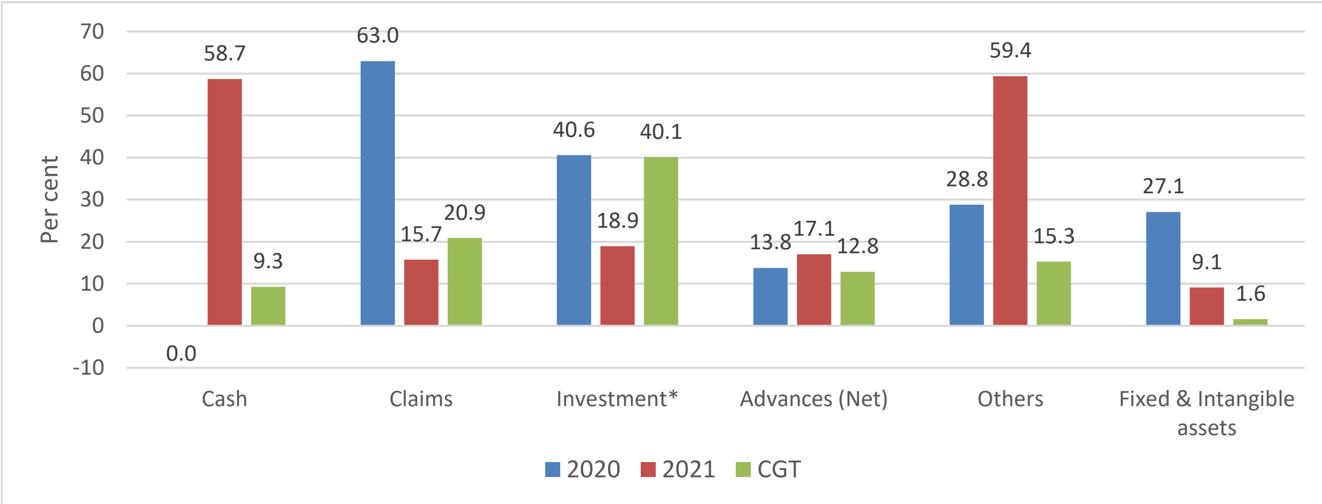
Figure 2.1: Credit to the Private Sector to GDP and Total Assets



Source: FSD/BSL

In 2021, banks' assets grew by 21 percent roughly in line with nominal GDP growth amid the recovery of the economy after the recession in 2020. The growth of banking sector assets was broad based. The growth rate of banks' vault cash was an astounding 59 percent, indicating the high level of cash reserve and liquidity in the Banking sector (*Figure 2.2*), but it may also hint at growing uncertainty and increasing concerns about inflation.

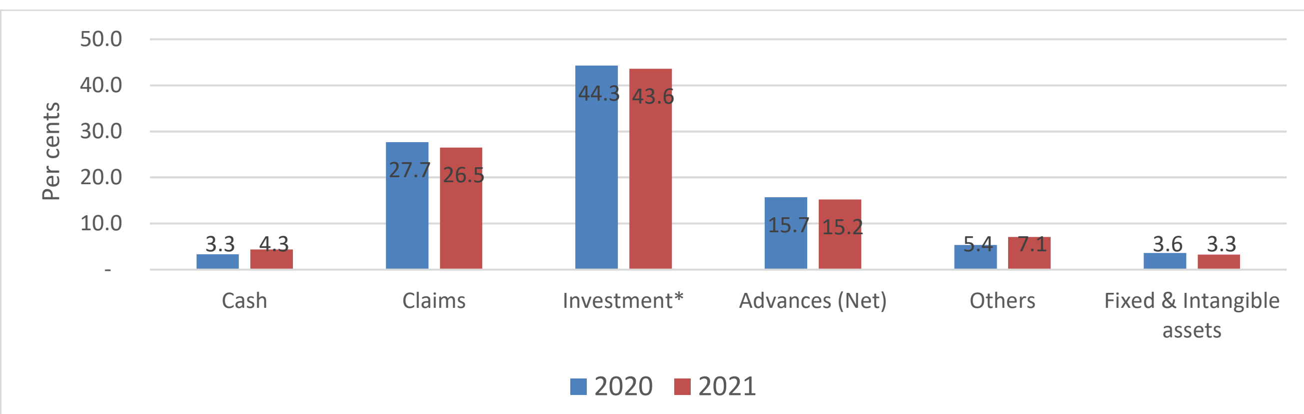
Figure 2.2: Growth of Banking Sector Assets by Composition 2020-2021



Source: FSD-BSL, CGT Means Contribution to Growth

The asset with the largest share in 2021 was Investment which comprise of 44 percent of total banking sector assets. Investment consists mainly of holdings of Sierra Leone government treasury bills and bonds. The share of the different asset components(claims, investment including goverment securities, advances and fixed and intangible assets) declined in 2021 relative to 2020 reflecting banks' switching into cash and other assets (*Figure 2.3*). Claims comprises of claims on BSL, local banks, foreign banks, interbank placements, placements with discount houses and on foreign and domestic residents.

Figure 2.3: Share of Banking Sector Assets by Asset Type



Source: FSD-BSL

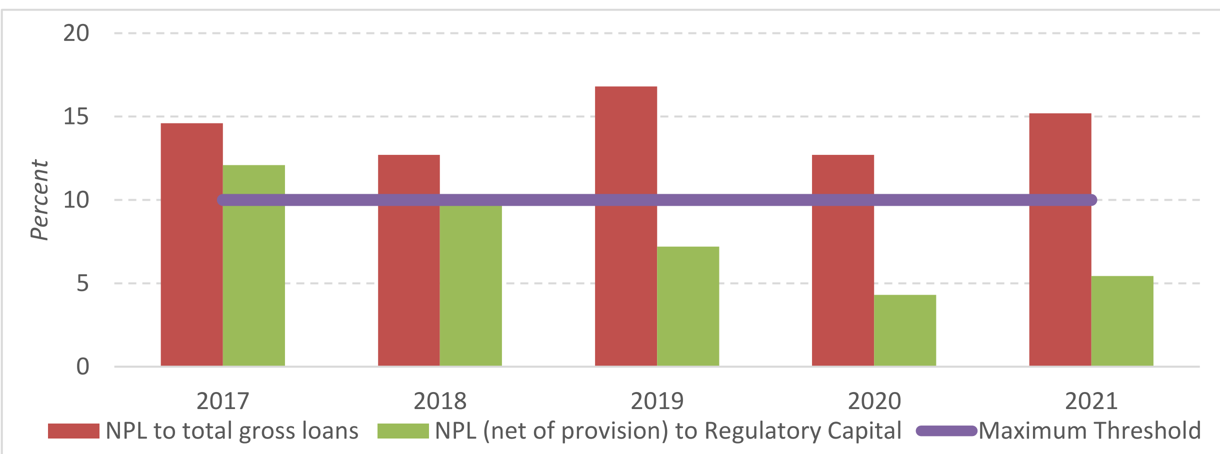
2.2 Credit Risk and Asset Quality

2.2.1 Non-Performing Loans (NPLs) and Provisioning

The asset quality of the banking sector deteriorated due to the impact of COVID on business activity. Banks' NPLs ratio increased to 15.2 during 2021 from 12.7 percent at end December 2020, above the maximum threshold of 10 percent. The NPL ratio of the Mining & Quarrying and the Business Services sectors in particular deteriorated to 32 percent and 19 percent in 2021 from 17 percent and 8 percent in 2020, respectively.

The ratio of non-performing loans net of provisions to regulatory capital, increased to 5.4 percent in 2021 from 4.3 percent in 2020 despite an increase in regulatory capital. This underscored the further deterioration in asset quality and the diminishing capacity of the banking sector to absorb losses that can arise from NPLs. However, with the removal of the restrictions related to COVID, the resumption of economic activity and the enhanced supervision of banks with high NPLs, the BSL expects NPLs in the banking sector to fall going forward.

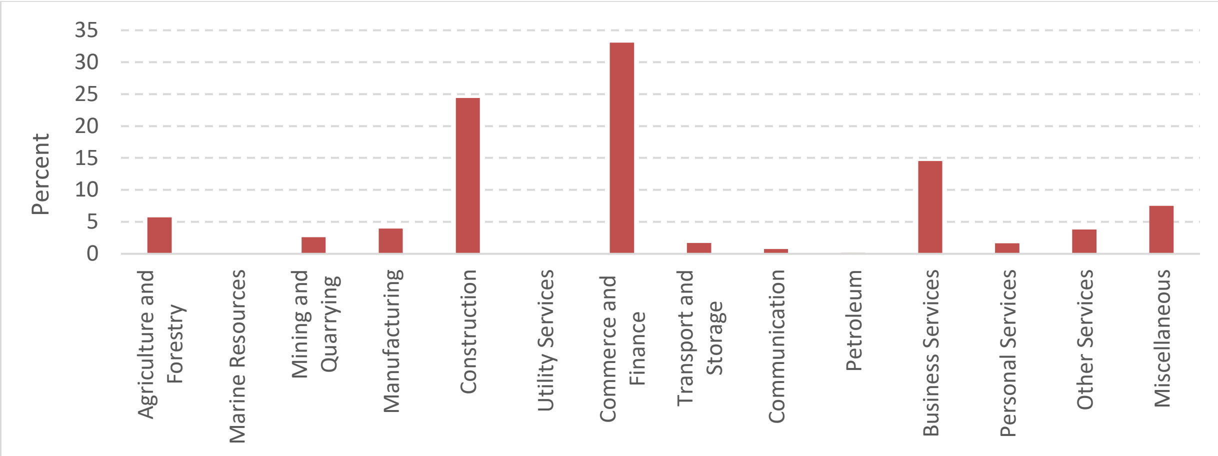
Figure 2.4: Asset Quality Indicators of the Banking Sector



Source: FSD-BSL

In 2021, the commerce & finance sector contributed the most, 33 percent to total NPLs. This was followed by the construction sector and the business services sector, contributing 24 percent and 15 percent respectively. The large contribution of the above sectors is because they are the three largest recipients of loans in the banking sector in 2021.

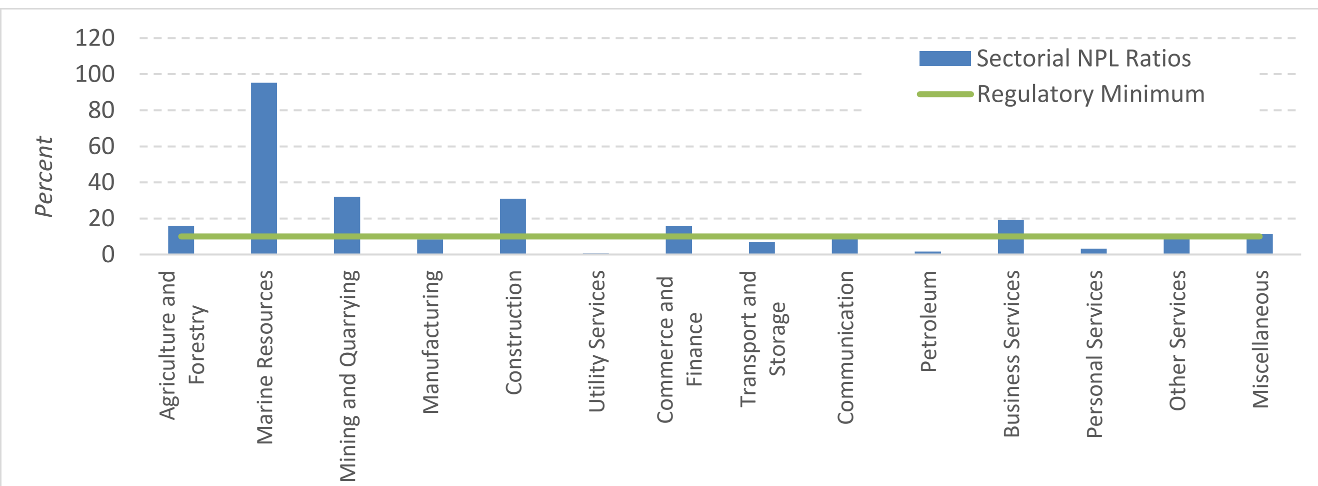
Figure 2.5: Sectorial Contributions to NPLs



Source: FSD/BSL

The sector in which banks had their largest NPLs relative to exposures was the Marine Resources sector with an NPL ratio of 95percent. This was followed by the Mining and Quarrying and the Construction sectors with NPL ratios of 32 and 31 percent respectively. *Figure 2.6*[2] shows the NPLs against total exposure allocated to each sector in the banking sector.

Figure 2.6: Sectorial NPL Ratios



Source: FSD/BSL

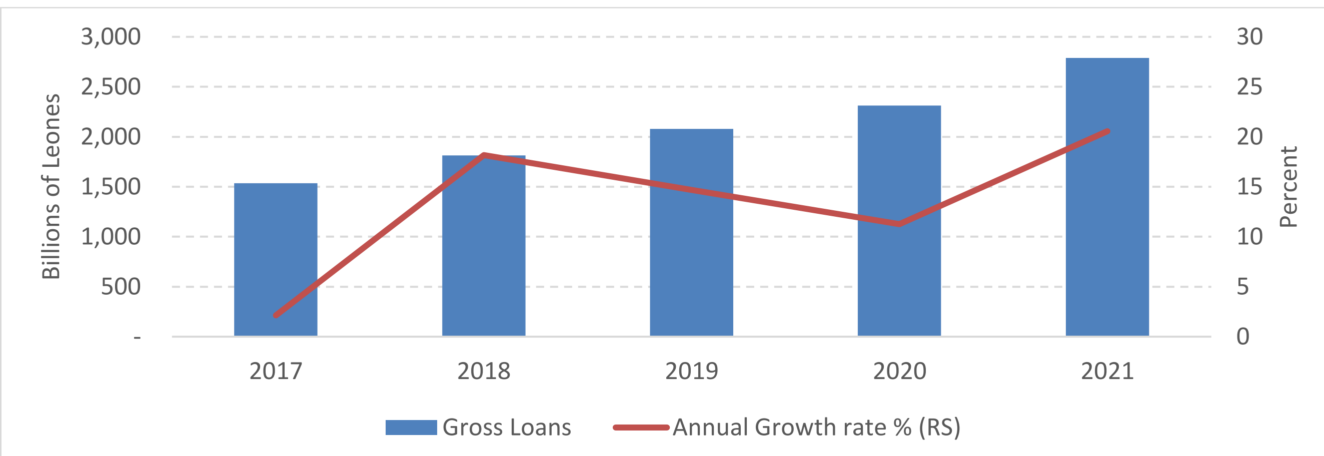
[2] The marine resources sector had the highest NPLs. Over 95 percent of the loans of the marine resources sector were not performing. However, the sector accounts for only 0.1 percent of gross loans, involving two customers and one bank, so its effect on banks' overall volume of NPLs is still marginal.

2.2.2 Credit Risk

Gross loans and advances increased by 21 percent in 2021 (Figure 2.7) driven mainly by the reintroduction of the Special Credit Facility (SCF), the launch of the Agricultural Credit Facility and the resumption of economic activities after the removal of all COVID pandemic related restrictions. The BSL introduced the SCF in March 2020 to support the production, procurement and distribution of essential goods and services in the country. The SCF was re-launched in September 2021 (SCF II).

The banking sector's portfolio of government securities grew by 29 percent during 2021. Banks are investing a large proportion of their funds in government securities since they have very high yields but are counted as risk free for regulatory purposes. This could be viewed as crowding out the private sector. Also, the banks have limited business opportunities considering the nature of the Sierra Leone economy therefore prefer to invest more in government securities. As such, the bank loan to deposit ratio is only 24 percent – far below the prudential threshold of 80 percent.

Figure 2.7: Level and Growth of Gross Loans



Source: FSD/BSL

2.2.3 Credit Risk from Sectorial Shocks

Banks directed a large proportion of their loans to the commerce & finance, construction and business services sectors in 2021. These three sectors account for 54 percent of gross loans advanced, with the commerce & finance sector alone accounting for 31 percent of total loans (*Figure 2.8*).

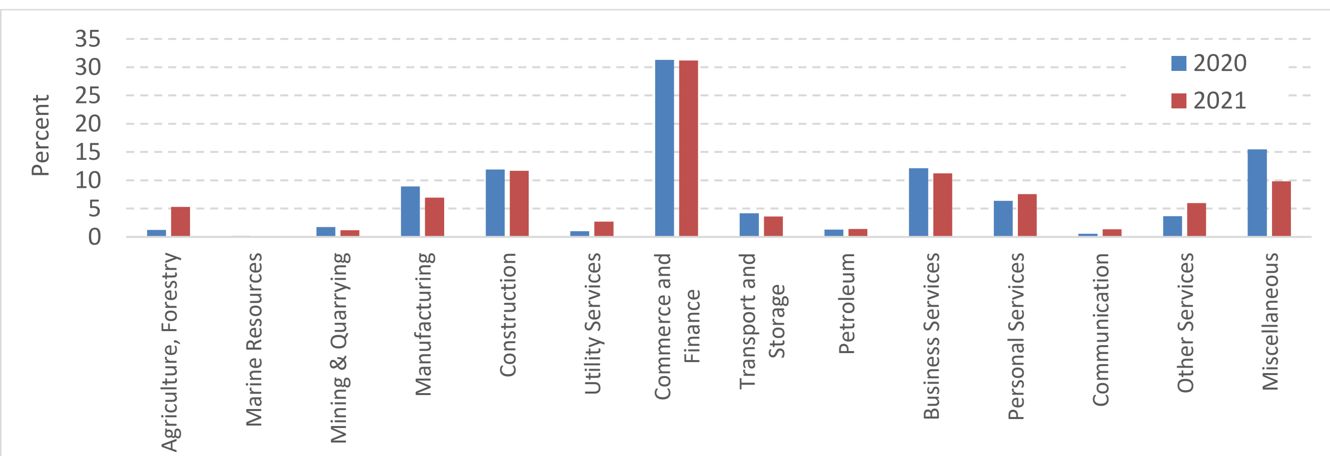
The commerce & finance sector is mainly involved in importing and distributing goods in the economy, This reflects that the Sierra Leone economy is heavily import dependent for most of its basic needs including food. Banks in Sierra Leone mostly make short-term loans with most loan tenure below one year. This is matched on the demand side since most firms in the commerce & finance sector need short-term revolving credit lines or commercial loans to support their business operations.

However, banks' high exposure to the commerce and finance sector constitutes both an elevated concentration and credit risk. Indirectly, this makes the banks vulnerable to disruptions in global supply chains like those seen in 2020-2021. However, the impact on global supply chain disruptions was minimized by the introduction of the SCF by the BSL for the Sierra Leone economy. This was because importers that benefited from the facility were able to stock up large quantities of goods which they could sell to the public.

The Construction sector is dominated mainly by government contractors constructing roads and bridges. Thus, loans in this sector are vulnerable to government fiscal space. When there is fiscal tightness, loans to this sector tends to be non-performing. Therefore, the sector has high contribution to overall NPLs.

The Business services sector includes legal services, accounting, tax and auditing services and other business consultancies. This sector is highly sensitive to the performance of the domestic economy and is the third largest contributor to NPLs in 2021.

Figure 2.8: Sectorial Distribution of Gross Loans



Source: FSD- BSL

2.2.4 Large Exposure Risk

The 50 largest credit exposures accounted for 71 percent of the banking sector's aggregate exposures and 108 percent of its capital base in 2021. The largest single borrower alone accounted for 13 percent of total exposures and 20 percent of the capital base. The data reveal a very high level of concentration in loan books, which increases banks' vulnerabilities to credit shocks to the largest customers.

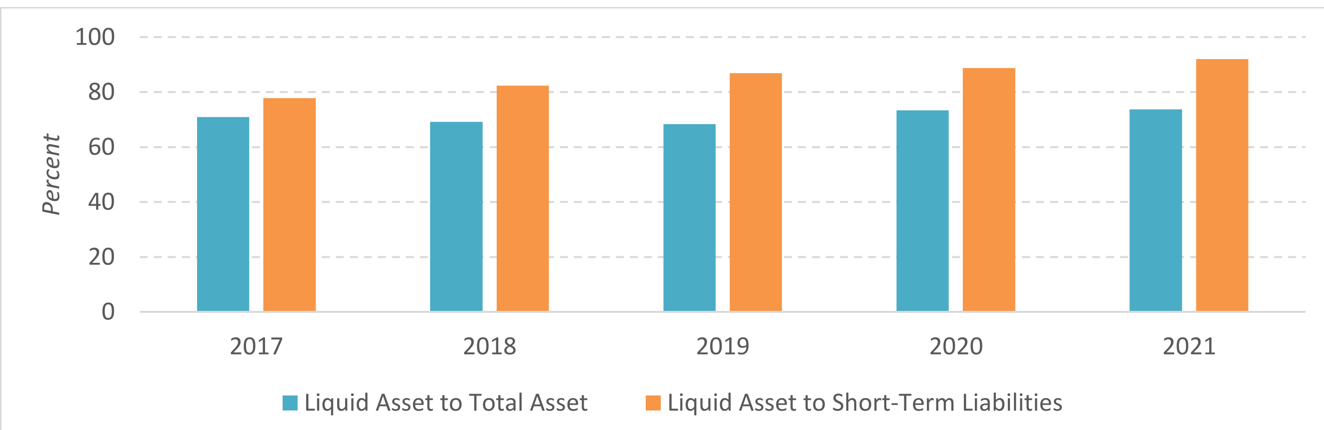
Large exposures increased by 31 percent in 2021, which may partly be a negative side effect of the SCF facility that was introduced by the BSL in 2020. The SCF is a lending facility provided by BSL to importers of essential goods through commercial banks. The facility allows importers to import large quantities of essential goods to avoid supply chain disruptions during the COVID pandemic.

2.3 Liquidity Risk

2.3.1 Liquid Assets

The Banking sector continued to have very high liquidity and is in sound position to meet its obligations as revealed by the core liquidity indicators. The liquid assets-to-total assets ratio remains high after a marginal increase to 74 percent in 2021. Also, the liquid assets-to-short-term liabilities ratio increased to 92 percent in 2021 from 89 percent in 2020. Thus, the banking sector is well prepared to meet both its long term and short-term obligations (*Figure 2.9*).

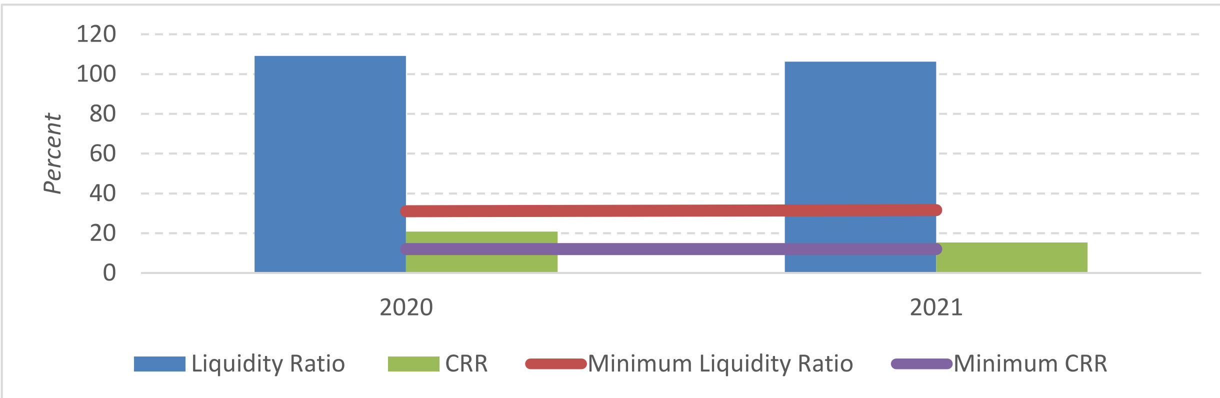
Figure 2.9: Liquidity Indicators of the Banking Sector



Source: FSD-BSL

However, the Cash Reserve Ratio (CRR) declined significantly during the review period to 15 percent though it remains above the minimum requirement (12 percent). The Liquidity ratio declined marginally during 2021 to 107 percent but remains well above the minimum requirement (31.6 percent). This is because the banking sector holds large volume of government securities which are highly liquid. It is important to note that the 28 days maintenance period instituted to deal with liquidity in the banking sector during the outbreak of the COVID pandemic continues to be in force (*Figure 2.10*).

Figure 2.10: Banking Sector Liquidity Performance against the Minimum Liquidity Requirements

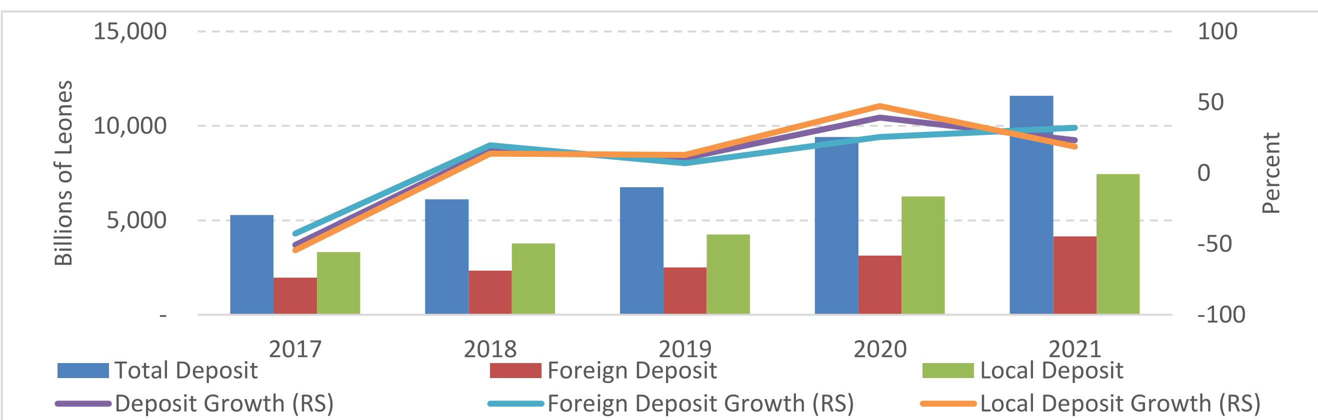


Source: FSD-BSL

2.3.2 Sources of Funding

The banking sector continue to enjoy healthy inflows of deposits, its main source of funding. Total deposits of the banking sector grew by 19 percent in 2021 much less than the 39.2 percent growth in 2020. Deposits are largely composed of local currency deposits, though foreign currency deposits are also increasing. The share of foreign currency deposits increased to 36 percent in 2021 from 33 percent in 2020, though concentrated in a few banks (*Figure 2.11*).

Figure 2.11: Banking Sector Deposits



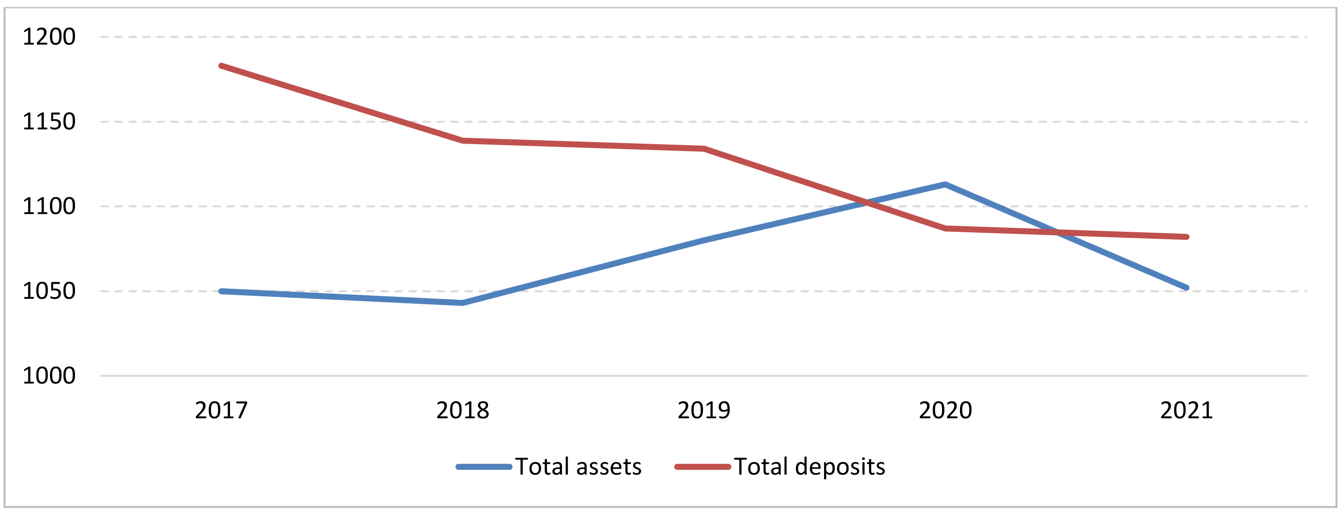
Source: FSD- BSL

Deposit concentration deteriorated during the review period as the 20 largest depositors accounted for 37.4 percent of the sector's total deposit in 2021from 33.9 percent in recorded in 2020. The single largest depositor on the other hand slightly improve from 8.3 percent in 2020 to 8.2 percent in 2021. The increase in the level of the 20 largest depositors in the banking sector could mean that bank engaged in more deposit mobilization from the few large depositors during the period. This might have further implication as it has the potential of making banks more vulnerable to the activities of these depositors should there be any sudden withdrawals on their deposit. This could lead to liquidity shocks which will have further implication for the banking sector at large.

2.3.3 Risk of Contagion

Generally, the level of banking sector concentration is low in Sierra Leone given the size and nature of the country's banking market. Concentration increased slightly in 2021. The five largest banks' deposit share increased by 0.7 percentage point to 66.8 percent in 2021 whilst their share of total assets increased by 0.6 percentage point to 65 percent. The Herfindahl-Hirschman Index (HHI), the standard metrics for concentration, suggests a quite un-concentrated credit and deposit markets (*Figure 2.12*).

Figure 2.12: Herfindahl-Hirschman Index



Note: Theoretically, an HHI of less than 1500 is considered a competitive market. The HHI values for bank loans and deposits were 1052 and 1082, respectively, indicating that the banking sector in Sierra Leone is competitive.

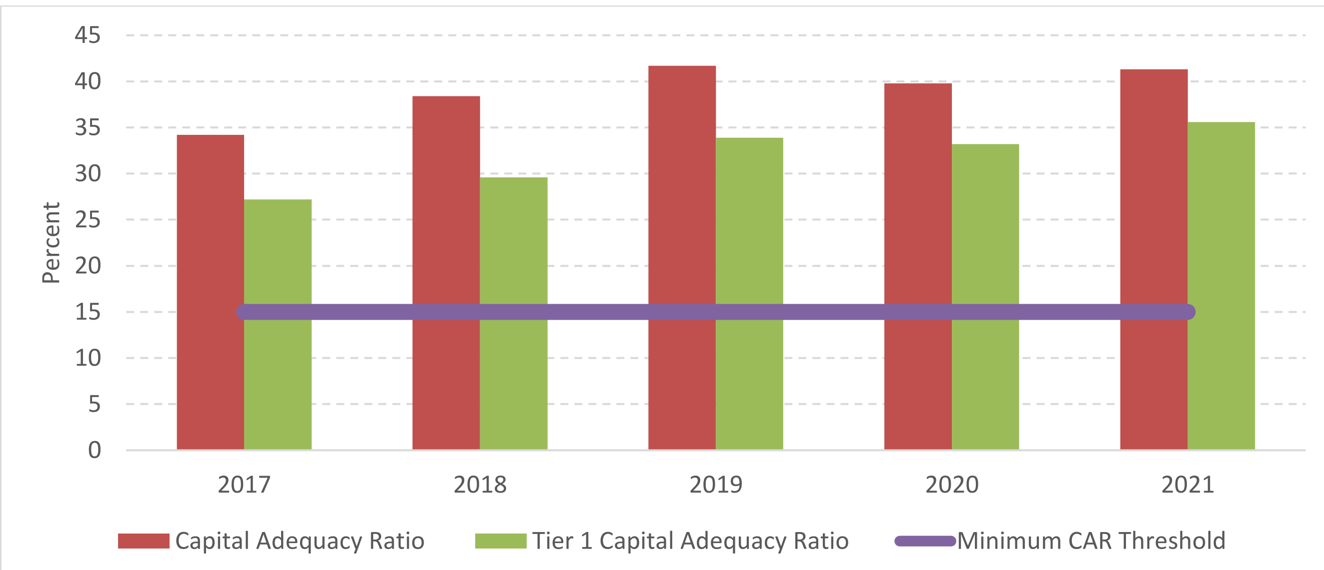
Source: FSD- BSL

2.4 Resilience

2.4.1 Capital Adequacy Ratio

The banking sector Capital Adequacy Ratio (CAR) was well above the BSL regulatory minimum. The CAR at end 2021 was 41 percent and the Tier 1 CAR was 36 percent, both much higher than the minimum regulatory thresholds of 15 and 7.5 percent respectively (*Figure 2.13*). This indicates that the Banking sector is solvent and in a good position to absorb losses that could emanate from shocks to the system. All but two banks were able to meet the minimum CAR threshold of 15 percent. When compared to 2020, both the CAR and Tier 1 CAR improved marginally, driven by the increase in the minimum paid up capital of most banks and the increasing share of government securities in total assets.

Figure 2.13: Capital Adequacy Ratios of the Banking Sector

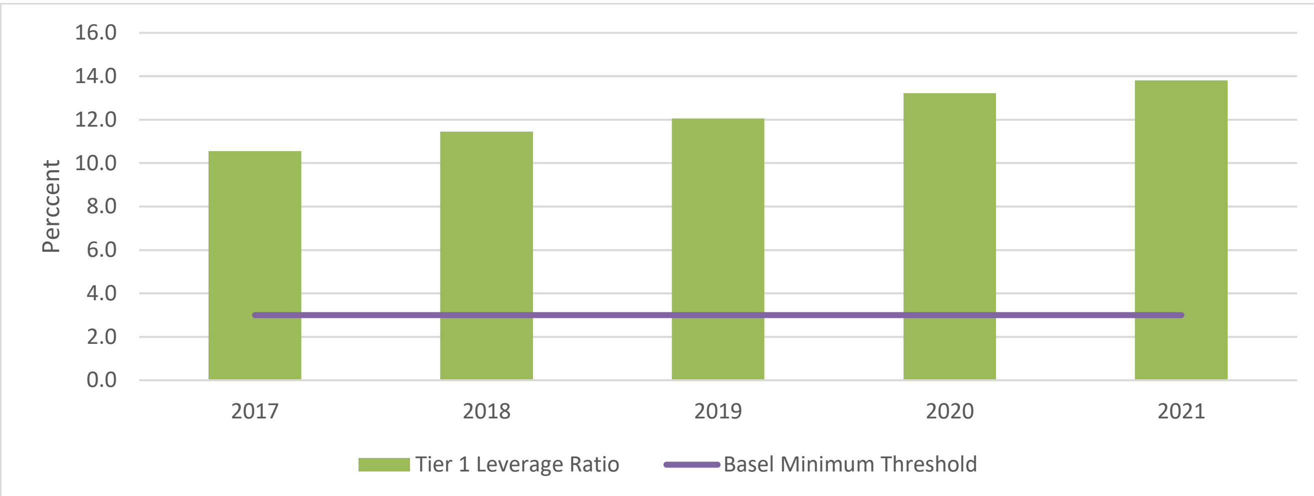


Source: FSD-BSL

The CAR is heavily influenced by banks' huge holdings of government securities which are considered as risk free in the calculation of risk-weighted assets (RWA). Hence, most banks have significantly smaller RWAs than total assets causing the CAR to be higher. Thus, banks with large holdings of government securities and small loan portfolios tend to have high CARs.

However, the Tier 1 Leverage Ratio shows that the banking sector is well capitalized and healthy. The tier 1 leverage ratio increased marginally to 13.8 percent in 2021 from 13.2 percent and it was above the Basel III minimum threshold of 3 percent. This ratio was presented to give a true picture of the health of the banking system since banks' have large holdings of government securities that are risk free, thus leading to higher CARs. The Tier 1 Leverage Ratio was introduced by Basel III standards and is one of the most important ratios for assessing bank's health.

Figure 2.14: Banking Sector Tier 1 Leverage Ratio.



Source: FSD-BSL

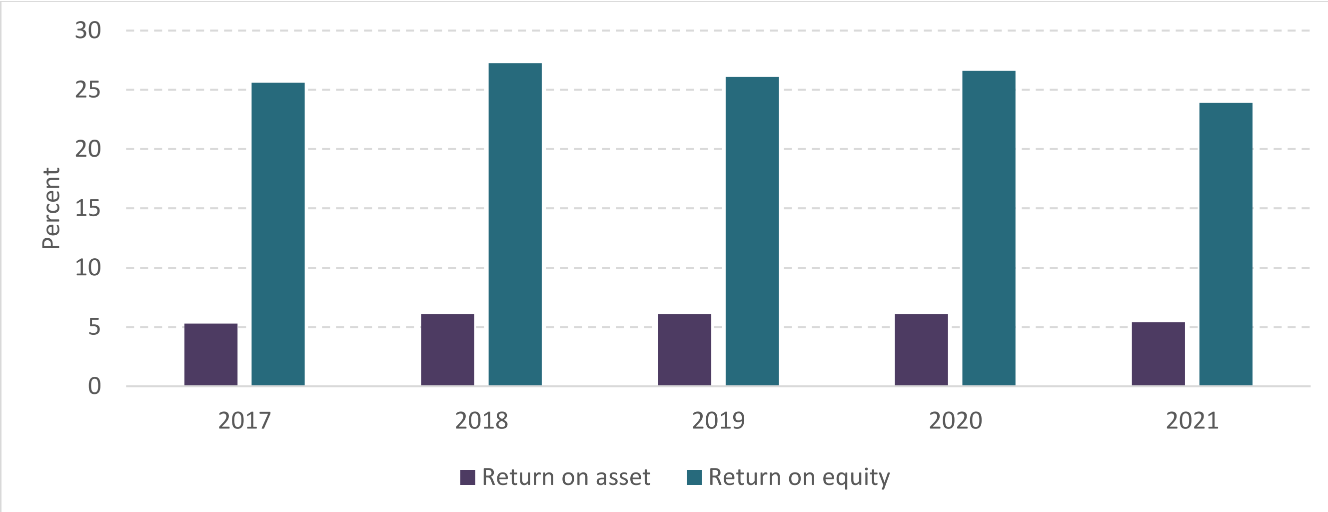
Furthermore, in nominal terms 10 out of 14 banks met the new minimum paid up capital of Le85billion as at end December 2021, representing about 64 percent of the banking sector. The four banks that did not meet the minimum paid up capital were required to provide plans to the BSL as to how they intend to meet the minimum paid up capital by the end of the first half of 2022.

Shareholders' funds grew by 26 percent during 2021 while regulatory capital grew by 37 percent. The growth in shareholders' fund was a result of increase in profit and minimum paid up capital respectively, as banks were required to increase regulatory capital to Le85 billion by end December, 2021from Le65 billion in 2020.

2.4.2 Profitability

Banking sector profit fell during last year but remained robust. The return on equity decreased to 24 percent in 2021 while the return on assets declined to 5.36 percent. The decline in profits can be attributed to increasing staff costs and admin & other costs and the deterioration of asset quality which led to an increase in loan loss provisions. On an individual basis, all the banks were profitable except one.

Figure 2.15: Banking Sector Profitability Indicators

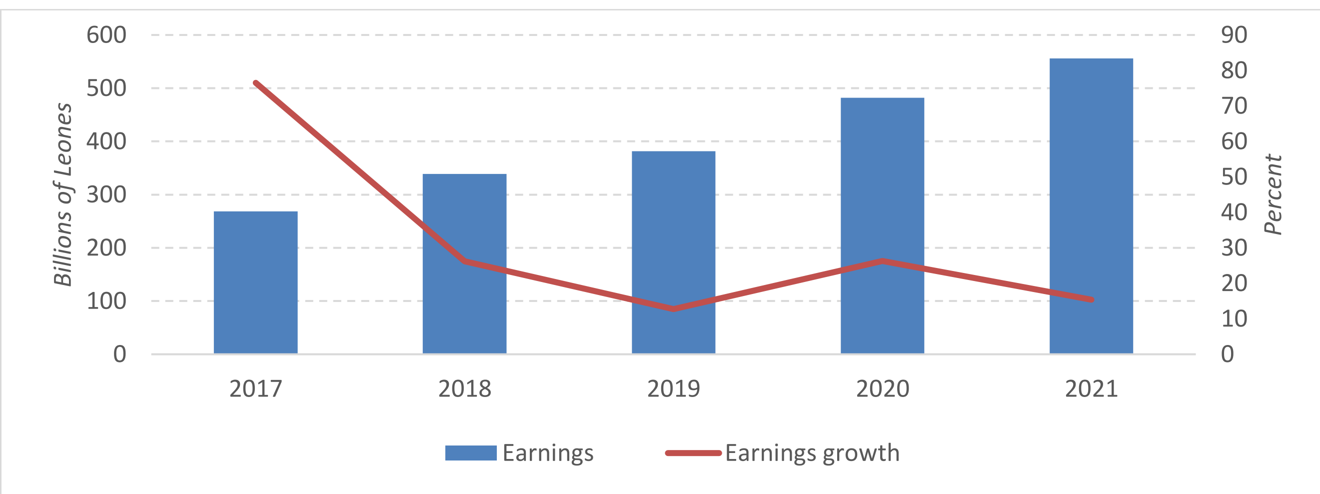


Source: FSD-BSL

In absolute terms, banking sector pre-tax profits increased by about 17 percent in 2021. Both income and expenditures increased at a slower pace than in 2020 but costs outpaced income so that the cost-to-income ratio of the banking sector rose to 62.5 percent in 2021 from 60.9 percent the previous year.

Earnings growth declined significantly to 15 percent in 2021 from 26 percent in 2020 (*Figure 2.16*). The viability of the banking sector in the long run rest on its ability to generate sufficient earnings to protect its capital base. Losses erode capital and reduce the trust of the public at large.

Figure 2.16: Banking Sector Earnings, 2017-2021

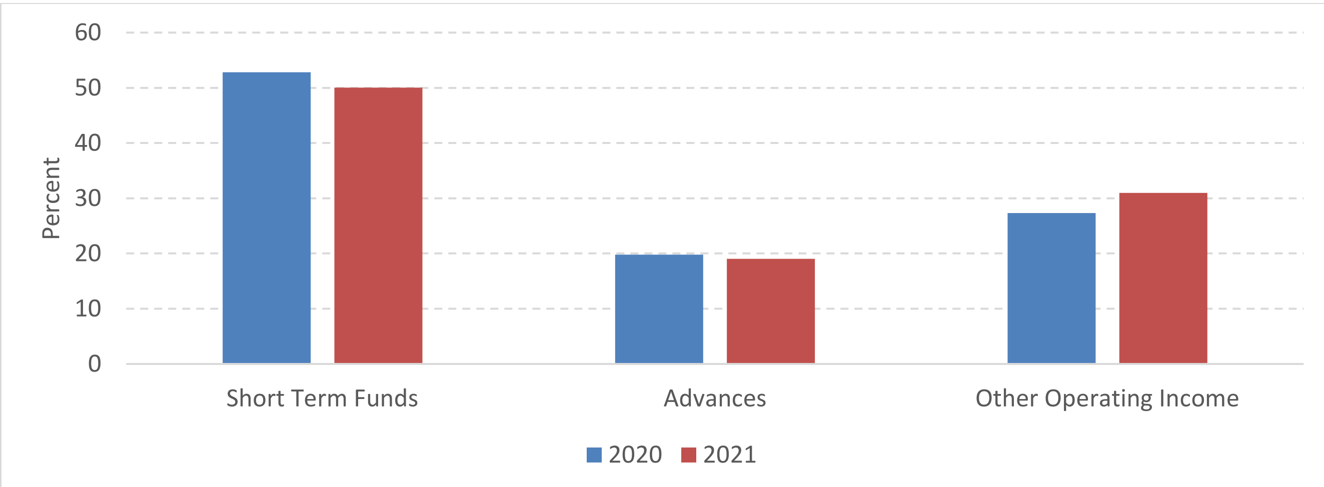


Source: FSD-BSD

The main contributor to earnings was short-term investments in government securities. Income from short-term investment accounted for one-half of the banking industry's total income whilst interest from loans & advances and other operating income contributed 19 and 31 percent, respectively (*Figure 2.17*).

Relying on income from government securities may not be a sustainable business model in the long run. Nominal interest rate are likely to be lower in the medium-term once inflation returns to target and the government improves its fiscal position and thus reduces the growth in supply of government securities. In the meantime, there may be a risk of financial repression that would reduce yields on government securities.

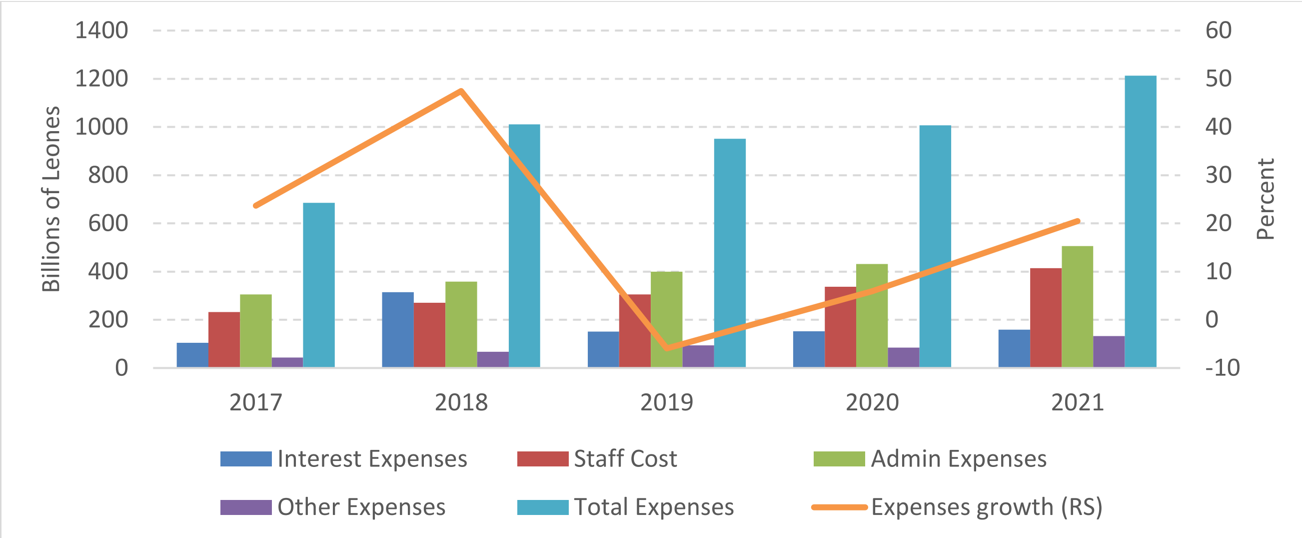
Figure 2.17: Composition of Income in the Banking Sector



Source BSD/FSD

Banking sector expenses on the other hand, grew by 20 percent in 2021. The growth was driven mainly by administrative expenses and staff costs. (*Figure 2.18*).

Figure 2.18: Sectorial Distribution and Growth of Expenses in the Banking Sector



Source: FSD-BSL

2.5 Banking Sector Regulatory Developments

The Bank of Sierra Leone continues to provide regulatory and supervisory oversight of the banking system using the Risk-based approach towards adopting over time the Basel 2 and Basel 3 frameworks. The enhanced supervision of four banks including the two state-owned banks remains in force in order to strengthen their capacity to handle unexpected shocks.

The BSL is in the process of reviewing Prudential Guidelines and introducing separate guidelines on corporate governance. It is also working on introducing Cyber Security guidelines for Financial Institutions.

The BSL with technical assistance from the US Treasury Department, is working on setting up a Deposit Protection Fund. A Deposit Protection Bill has been presented to Parliament for enactment and the BSL will set up the fund once the bill has been passed into law. This is in line with the Bank's policy of setting up an effective crisis management and resolution framework.

2.6 Conclusion

The banking sector remains relatively sound. Regulatory capital and liquidity ratios remained very high whilst profitability moderated for the reporting period. This mainly was attributed to banks' high exposures to the government which increased further during the year. There is the risk of crowding out bank finance to the private sector especially with the expected recovery of the economy in 2022. However, the Tier1 leverage ratio improved and was above the minimum regulatory threshold of 7.5 percent.

Credit risk was also elevated in 2021 as asset quality deteriorated due to the residual effects of the COVID pandemic restrictions on certain economic activities. However, credit risk is expected to improve as economic activities resume partially in 2022. Concentration risks increased slightly but remains low both in terms of asset and deposits. Exchange rate risk is high due to the continued depreciation of the leone against major trading currencies and is expected to be elevated in the immediate future resulting mainly from the ongoing market tightening of monetary policy in major central banks due especially to the current global inflationary shock and uncertainties of the Russia-Ukraine War.

3 SYSTEMIC RISKS ASSESSMENT

3.1 Stress Tests of the Banking Sector

To evaluate the resilience of the banking sector to shocks that might arise in the future, the BSL conducted stress tests on the banking sector using a modified 'Cihak' stress testing template. The Stress tests evaluated the resilience of the banking sector to severe but plausible shock scenarios that can impact the banking sector in the future. These shock scenarios were applied to the balance sheet and profit and loss account data of banks using end of December 2021 data. The stress tests evaluated credit, liquidity, interest rate, foreign currency and contagion risks of the banking sector. The tests were only carried out with regard to the banking sector which controls 79 percent of total financial sector assets and whose stability is crucial for the overall stability of the financial sector. Other non-bank financial sectors are either interconnected with the banking sector or do not pose a threat to overall financial stability due to their limited size.

The stress test analysis for end December 2021 covered fourteen banks in Sierra Leone. The tests were used to verify whether the banking sector can withstand different levels of economic shocks. The scenarios are built based on assumptions, using future potential shocks that may disrupt the financial system whilst at the same time taking past events that affected the financial system into consideration when designing the scenarios.

The credit risk stress tests consider three shock scenarios and include (i) proportional increase in NPLs, (ii) sectorial shocks to NPLs and (iii) shocks to large exposures. The stress tests also assessed contagion risk based on the size of banks' interconnectedness and exposures via inter-bank placements and takings. Interest rate risk stress tests measure the impact of an adverse change in Treasury bill yields on banks' capital. Given the banks' overreliance on investment into government securities, this is a very important scenario. It differs from usual interest rate risk stress scenarios in that it assumes a large drop in yields. Foreign exchange risk is evaluated to determine how foreign exchange shocks can impact on the CAR of banks. Finally, liquidity risk is evaluated to determine whether banks will be able to meet their short-term obligations under stressed situations.

3.2 Risk Scenarios for Stress Testing

3.2.1 Baseline

The baseline is based on the current forecasts and expectations of the BSL. GDP continues to rebound and grow by 3.6 percent in 2022 and 3.4 percent in 2023. Inflation peaks around 28 percent year-on-year in the second half of 2022 and then starts declining gradually towards the medium-term target. Foreign trade continues to improve on the back of resumption of iron ore production and favourable export prices while food and energy prices will exhibit a moderate downward trend. Donor financing remains strong and committed. Consequently, the exchange rate will become relatively more stable, and the annual depreciation will return to the 10-15 percent range by the second half of 2023.

3.2.2 Terms-of-trade Shock

The report does not cover this scenario in detail as the existing business models of the banks, the lack of FX-loans and the limited response of banks' customer rates to either the exchange rate or the MPR, make its effects quite counter-intuitive. In essence, the combination of weaker exchange rate and higher inflation and interest rates in the wake of a negative ToT-shock, would lead to better financial position and higher capital of the banks due to the rising T-bill yields.

3.2.3 Switch to FX-borrowing by the Government or large Downside Inflation Shock

This scenario is built on favourable macroeconomic developments, but the very specific situation of the banking sector makes it an adverse scenario for financial stability.

Under this scenario, the interest rate level, and especially the T-bill yields, decline considerably, reducing banks' interest income and profit. The assumption is a 15 percentage point's fall in 364-day T-bill rates since commercial banks mainly invest in this tenure due to their high relative yield. The size of the shock is based on historical evidence. In the past, even bigger falls were experienced over a couple of months long period but at that time the BSL did not have its overnight interest rate corridor in place which can serve as a floor to interest rate.

The scenario can be activated by the following macroeconomic developments.

- Favorable balance of payments developments – such as the improvement in the current account or the increase in foreign grants and official loans – lead the government to cut back the issuance of domestic T-bills. The resulting collapse in T-bill supply pushes T-bill rates down, close to the lower edge of the O/N interest rate corridor.

- Inflation declines significantly towards the BSL's medium-term inflation target of single-digit inflation.[3] The BSL cuts interest rates and the T-bill yields decline significantly.

The exchange rate remains relatively stable due to the underlying benign macroeconomic environment, e.g. the higher FX inflows associated with the scenario. Consequently, the GDP figures are not affected.

This scenario affects banks very adversely as most banks have very large portfolios of government T-bills providing them with huge interest revenues that make up a large part of their overall income. More specifically, the interest income is about 70 percent of banks' total income, and 72 percent of the interest income, i.e., half of total income comes from the government portfolio.

3.2.4 Recession

Under this adverse scenario, the economy slips back to recession due to one of or a combination of the following factors:

- Due to a resurgence of a new variant of the COVID virus, Sierra Leone must undergo another wave of lockdowns.
- Fuel and food inflation increases further while the cash constrained government piles up arrears and postpones or cancels capital expenditures. Companies in turn cut back spending.
- Demand for Sierra Leone's main export items vanes as Chinese growth also tanks.

Real income of households decreases as the necessary fiscal restraint prevents salaries and pensions to keep the pace with inflation. Consequently, both investments and consumption falls. Net export also deteriorates. On the production side the fall is mainly driven by construction and commerce & finance. The recession hits both households and corporates hard after a COVID-related recession in the recent past.

This scenario involves real GDP falling by 5 percent, which would take it around 8-9 percent lower than the baseline. Originally, three sub-scenarios were investigated to assess the impact on the deteriorating loan portfolio on banks' financial position.

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[3] For example, inflation reached single digit levels in the spring of 2021.

1) The NPLs increase uniformly by 40% and reach more than 20 percent of total loans.

2) The sectors are affected in different ways, therefore the NPLs also increase by different magnitudes depending on the sectors. *Table 3.1* summarizes the assumptions.

3) The NPLs predominantly increase because of difficulties with the loans of large companies contracted by the government. The assumption is that the 10 biggest loan of each bank defaults.

Table 3.1: Assumed Sectorial Shocks
(percentage of Performing Loans in the Sector Becoming NPLs)

Sector	Shock
Commerce and Finance	25
Construction	41
Business Services	29
Personal Services	13
Manufacturing	23
Agriculture and Forestry	25
Transport and Storage	17
Utility Services	10
Communication	18
Petroleum	11
Others	22

Source: FSD, BSL

The rise in NPL is quite different under these sub-scenarios. The largest effect comes from the large-exposure sub-scenario, while the distributional effects were not qualitatively different across the sub-scenarios. Therefore, the report focuses on the large-exposure sub-scenario when describing the effect of combined scenarios.

3.2.5 The Combined Scenario: Recession and Financial Repression

This adverse scenario builds on the previous ones but adds further negative effects from fiscal policy. As the recession puts strains on the budget, there is increased pressure to cut expenditures. This weighs down on the corporate sector and the increasing credit risk is captured by applying the large exposure sub scenario here as well. On top of delaying public investments, the government also embarks on cutting back its interest expenditures by curtailing domestic financing via T-bills, and rather resorting to BSL financing. The large liquidity overhang and the insufficient T-bill supply results in a large downward pressure on yields at the T-bill auctions. The BSL's O/N deposit instrument and its rate will serve as the main support for T-bill yields so that overall T-bill yields decrease by 15pp.

As inflation remains high, banks and their customers search for yield and increasingly shift their savings to foreign exchange, leading to more depreciation. The leone is assumed to depreciate by another 20 percent within the next 6 months, pushing year-on-year inflation above 40 percent.

3.2.6 Liquidity Shock

Liquidity stress is expressed as a liquidity drain on the banks that can come from various sources. These typically could be due to a perceived increase in solvency risk, which first manifests itself as deteriorating liquidity situation.

There are two different liquidity stress scenarios used in the stress testing exercise. The impact of the liquidity stress scenarios is shown for each bank in terms of the number of days it would be able to survive without resorting to liquidity from outside (other banks or the central bank). Of course, in real life the central bank may very well intervene through its lender-of-last-resort function.

- The first scenario affects all banks in the system proportionally (similar run on all banks) depending on their volumes of demand and time deposits. The scenario assumes that banks endure a daily withdrawal from LCY demand deposits, FX demand deposits, LCY time deposits and FX time deposits of 15, 10, 15 and 1 percent, respectively.
- The other scenario stands for "flight to safety," where the liquidity drain starts in the smallest or weakest banks and the stress test shows how this can affect the larger or stronger banks. The stress test investigates three possible measures of "bank safety": (i) total assets; (ii) total assets, with a premium for state ownership; and (iii) the perceived pre-shock rating. In the first case, depositors perceive bank safety as linked to the size of the bank, approximated by total assets. In the second case, they also perceive state-owned banks safer than privately-owned banks (because of an explicit or implicit government guarantee in the former case). In the third case, depositors' perceptions of bank safety are correlated with the banks' recent financial performance proxied during the stress testing exercise by the BSL's own rating.

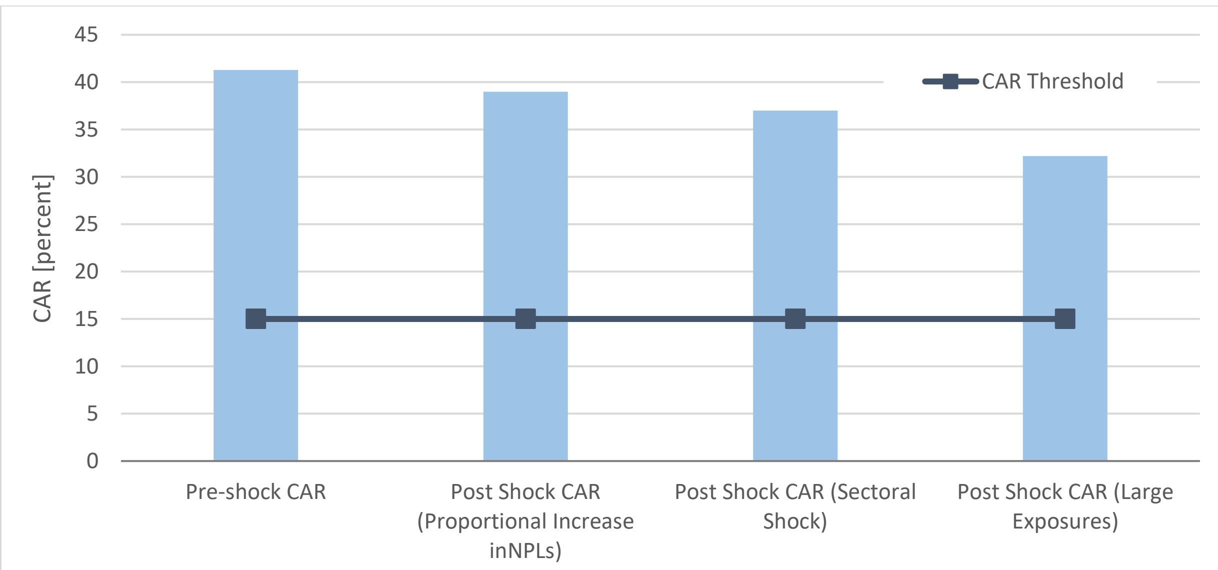
The scenario assumes that banks endure a daily deposit withdrawal from LCY demand deposits, FX demand deposits, LCY time deposits and FX time deposits ranging from zero to 25, 15, 25 and 5 percent, respectively. For each bank, the size of the withdrawal within that range depends on its perceived safety.

For both scenarios, on any given day banks can utilize 75 percent of their outstanding liquid assets and 1 percent of their non-liquid assets. The liquidity scenarios are evaluated over a five-day horizon, corresponding to a week in calendar terms.

3.3 Results of the Stress Tests

3.3.1 Stress Testing Credit Risk

Figure 3.1: Impact of Shocks on the banking sector CAR ratio



Source: FSD, BSL

The stress test on credit risk considers three scenarios that were dictated by possible shocks to the macro economy.

1) The first scenario assumes proportional increase in NPLs as a deep recession ensues due to a large terms of trade shock. Under this scenario, existing NPLs increase by 40 percent in each bank. That is, banks that had more NPLs in the past, are assumed to incur more NPLs because of the shock.

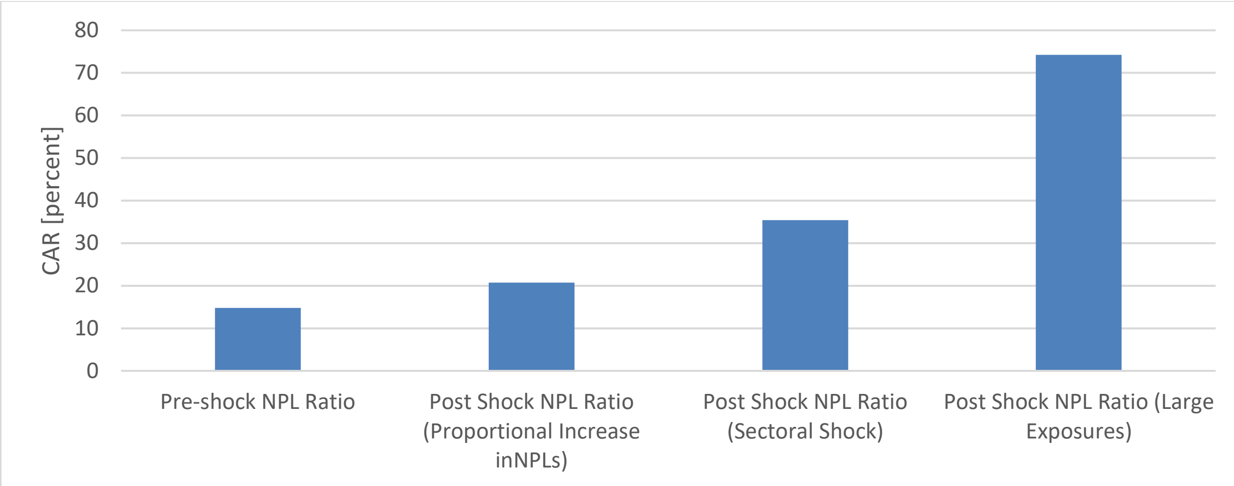
2) The second scenario includes sectorial shocks to NPLs under the same macroeconomic situation. In this scenario, the NPLs of loans to each of the sectors increase in line with the assumed shocks in *Table 3.1*. The increase in NPLs in each sector is assumed to be proportional to the bank's credit exposure to that sector, approximated by the bank's total loans to that sector. The shocks were determined based on the historical performance of the sectors.

3) The final scenario builds on a shock to large exposures under the same macroeconomic conditions. This scenario tests the resilience of the banking sector to credit risk based on a loan concentration model. In this scenario, it is assumed that in each bank 10 of the largest creditors' loans become NPLs and the provisioning rate is 50 percent.

The results of these stress tests indicate that the banking sector is resilient to credit risk based on all three tests conducted. The current strong capital base of the banking sector was robust enough to absorb the impact of the shocks. The scenario with the largest impact on CAR was the large exposure scenario. The sector CAR after this test declined from a pre-shock CAR of 41.3 percent to a post-shock CAR of 32.2 percent which is far above the prudential threshold of 15 percent. The reason for the small impact is the banks' unique business model that relies mostly on investment into government securities and results in relatively low exposure to credit risk. The loan portfolio is only 15.2 percent of total banking sector assets whilst holdings of government securities constitute 43.6 percent. Government securities have very high return coupled with zero risk weighting driving risk weighted assets lower. This explains why the CARs are so high even under extreme shock scenarios (see *Figure 3.1*).

However, the impact on the banking sector NPLs were significant, causing the NPLs to increase from a pre-shock level of 14.8 percent to 74.2 percent under the extreme large exposure scenario (*Figure 3.2*). This ratio is far above the prudential limit of 10 percent NPLs, serving as a main source of vulnerabilities, especially in periods when yields on government securities may decline or government decides to redeem some of its securities. Thus, efforts should be made by banks to improve the quality of their assets.

Figure 3.2: Impact of Large Exposure Shocks on the Banking Sector NPL Ratio

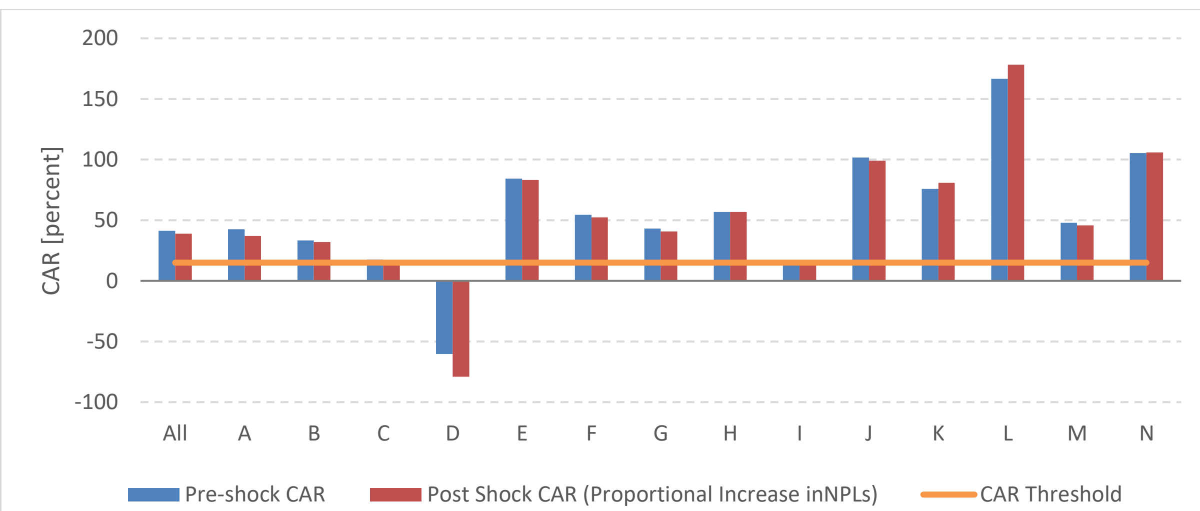


Source: FSD, BSL

3.3.2 Impact of Proportional Increase in NPLs Shock on Individual Banks

The results indicate that the banking sector as a whole remains resilient after a proportional increase of NPLs by 40 percent. However, for individual banks, only one bank fails to meet the CAR threshold of 15 percent. The bank that failed the test is not systemic in nature (*Figure 3.3*).

Figure 3.3: Stress Test Results of Proportional Increase in NPLs

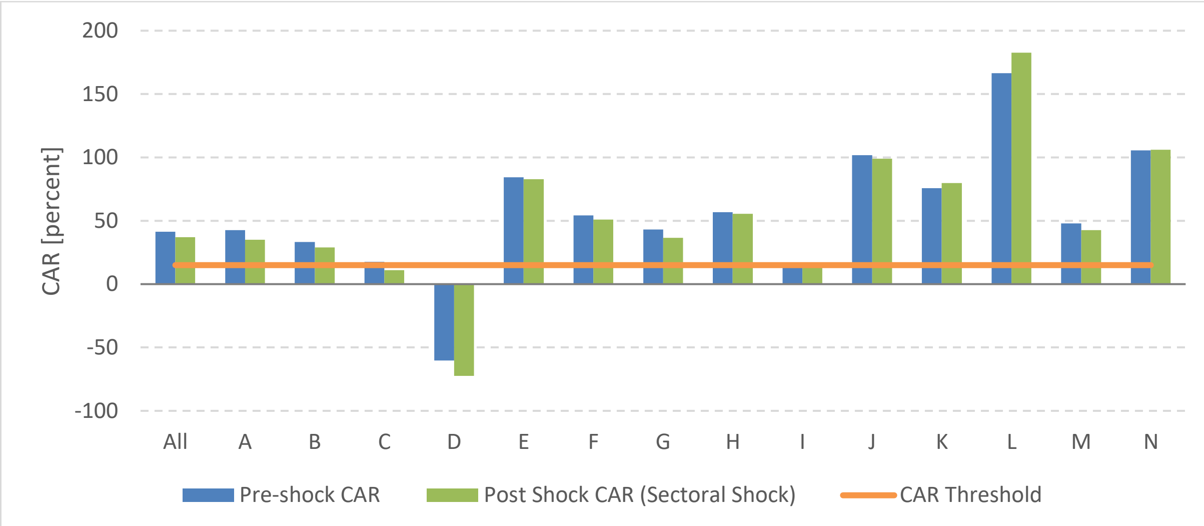


Source: FSD, BSL

3.3.3 Impact of Sectorial Shocks on CAR

The results of the stress test indicate that the banking sector is resilient to sectorial shocks as the system CAR remained well above the prudential threshold of 15 percent. However, when we consider individual banks, two banks saw their CAR falling below the prudential threshold of 15 percent and one getting very close to it (*Figure 3.4*).

Figure 3.4: Results of Sectorial Shocks to NPLs on Individual Banks

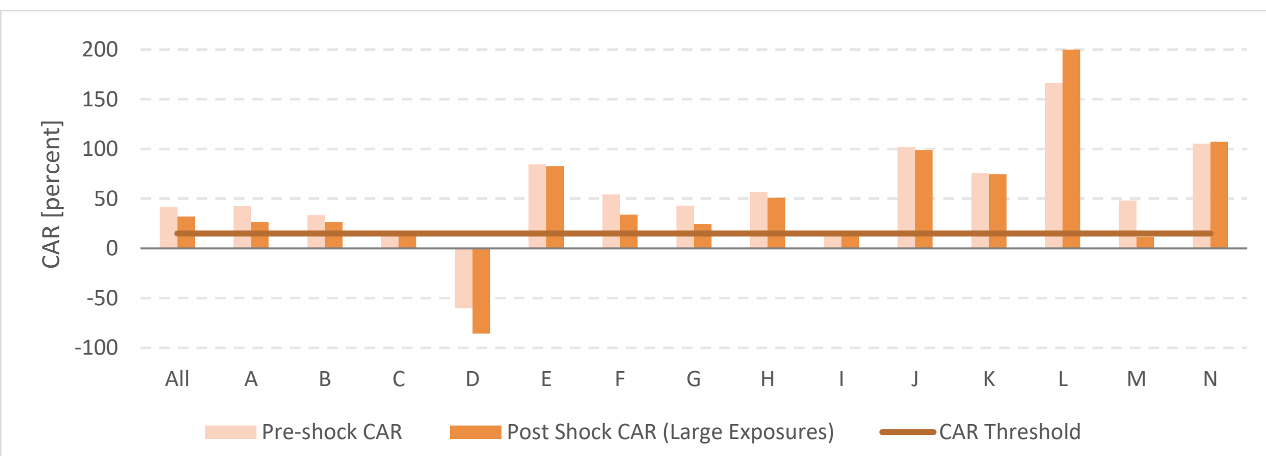


Source: FSD, BSL

3.3.4 Impact of Large Exposure Shocks on CAR

The results of the large exposure (or loan concentration) shock reveals that the banking sector is resilient to such shocks. However, when we consider individual banks, the CARs of four banks fell below the prudential threshold of 15 percent (*Figure 3.5*). It was observed that banks with less holdings of government securities were more impacted by this shock, whilst banks with large holdings of government securities were shielded despite the extreme degree of the shock.

Figure 3.5: Results of the Ten Large Exposures of the Banking Sector Becoming NPLs



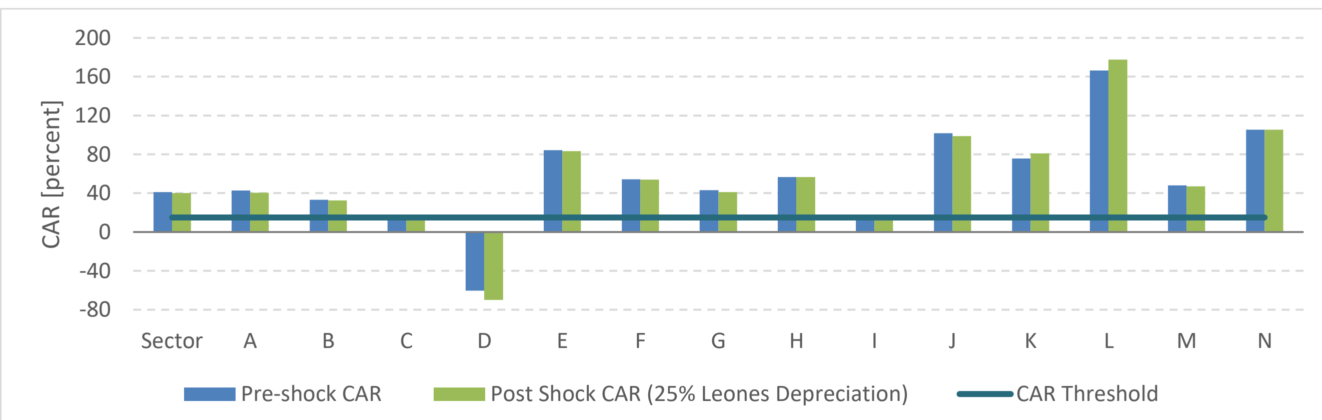
Source: FSD, BSL

3.3.5 Stress Testing Foreign Exchange Risk

The foreign exchange risk is the risk that exchange rate changes affect the local currency value of financial institutions' assets, liabilities, and off-balance sheet items. In this test, we consider only the direct solvency risk arising from banks' net open positions (NOP) in foreign currency. The indirect solvency risk arising from the impact on the creditworthiness of foreign exchange loan borrowers was not considered since the banking sector cannot give out foreign currency loans as set out by regulation. The direct exchange rate risk was tested using the NOP in foreign exchange. A depreciation will have positive impact on banks that have a long (positive) NOP in foreign currency and a negative impact on banks that have a short (negative) NOP in foreign currency. The assumption of the direct foreign exchange shock is that the Leone will depreciates by 25 percent.

The result of the test shows that the impact of the foreign exchange shock on the resilience of the banking sector was minimal. The pre-shock system CAR of 41.2 percent declines only marginally to a post-shock level of 40.2 percent. Most of the banks have short (negative) NOPs, however, the direct depreciation effects were still small due to the relatively small size of the open positions. Thus, the key takeaway from this test is that the impact of a depreciation shock on the banking sector through the direct channel is minimal (*Figure 3.6*).

Figure 3.6: Result of Direct Forex Shocks



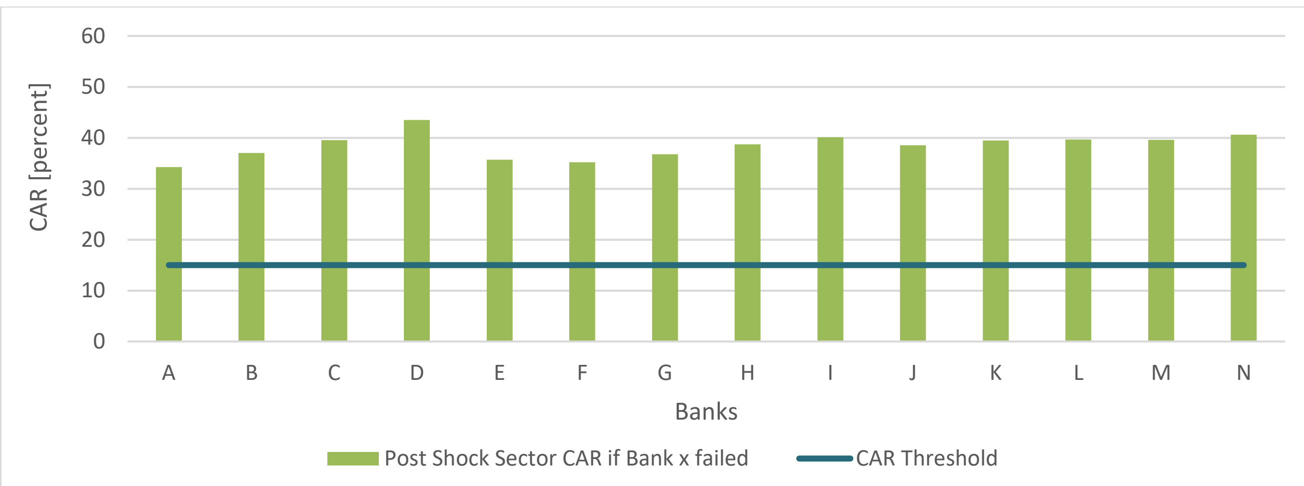
Source: FSD, BSL

3.3.6 Stress Testing the Interbank Market (Contagion risk)

Contagion risks arise due to the interconnectedness of banks through interbank placements and takings. The interbank or contagion stress test is modelled in two dimensions. First, the "pure" contagion test shows what would happen with the capital of the banking sector and individual banks if one bank failed and defaulted on all its interbank borrowing. It can also be interpreted as a measure of systemic importance of individual banks. That is, the bigger the decline in the banking sector CAR due to the failure of bank "X" the more systemically important is bank "X". The "macro" interbank contagion test is modelled in the case when bank failures are triggered by macroeconomic developments that affect each bank in the sector leading to the failure of more than one bank.

The result of the test shows that the banking sector is resilient to "pure" contagion shock. The banking sector's post-contagion CAR is far above the CAR threshold of 15 percent and none of the individual banks would fail due to the default of another bank (*Figure 3.7*). The results are not surprising as the level of interconnectedness between banks is very low. The volume and value of interbank transactions is very low relative to the asset size of the banks.

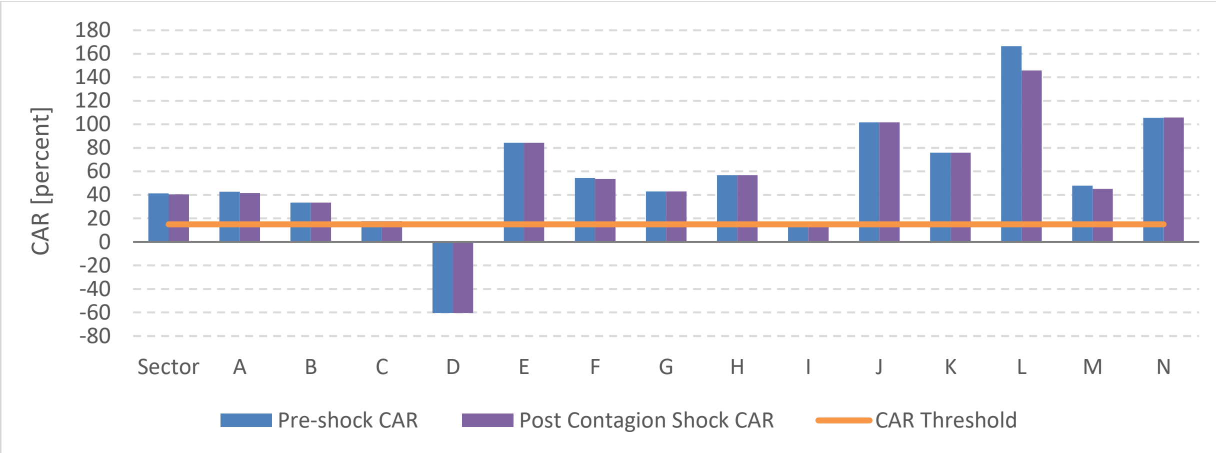
Figure 3.7: Results of the "Pure" Interbank Contagion Shock



Source: FSD/BSL

The result of the "macro" contagion test reaffirmed the resilience of the banking sector to contagion shocks. The impact of the contagion on the banking sector CAR is insignificant and arise from only three banks in the sector. Thus, the post-shock banking sector CAR only declined by 0.7 percentage point to 40.6 percent from a pre-shock CAR of 41.3 percent, far above the CAR threshold of 15 percent. In addition, all the individual bank CARs are above the 15 percent threshold, except for one bank that has been already in breach before the shock (*Figure 3.8*).

Figure 3.8: Results of "Macro" Contagion Stress Test



Source: FSD, BSL

3.3.7 Stress Testing Liquidity Risk

The liquidity stress test consists of two tests: (i) simple test for liquidity shock (similar run on all banks) and (ii) a flight to safety liquidity shock test (banks are affected differently).

The simple test models liquidity drain that affects all banks in the sector proportionally, depending on their volumes of demand and time deposits. This assumes that customers do not switch deposits from one bank to another but rather reduce deposits from all domestic banks. The result of the simple liquidity stress test indicates that no banks will be illiquid after the first day, and only one after the second day. As the liquidity drain assumptions are extremely conservative and the BSL's liquidity facilities are available to the banks, the results imply low overall liquidity risk. Even after the fifth day, only four banks would become illiquid (*Table 3.2*).

The flight to safety test is based on "liquidity contagion" and it models liquidity such that the liquidity drain starts in the smallest or weakest banks and the impact of this effect on the larger or stronger banks is tested. That is, banks' customers consider stronger banks as safer than weaker banks. The result of the flight to safety liquidity test indicates that three banks will become illiquid after second day. The number of illiquid banks increases to five on the fifth day (*Table 3.2*). As the liquidity drain assumptions are even more severe than in the case of the simple test and as the liquidity drain affects the weaker banks disproportionally more under this scenario, the results are in line with expectations. However, the affected banks should take action to increase their liquidity levels.

Table 3.2: Simple Liquidity Stress Test Results

Days after shock	Number of illiquid banks	
	Run on all banks	Flight to safety/contagion
After day 1	0	3
After day 2	1	3
After day 3	3	4
After day 4	3	4
After day 5	4	5

Note: The assumed shock is 20 percent daily withdrawals of deposits for five days

Source: FSD, BSL

3.3.8 Stress Testing Interest Rate Risk

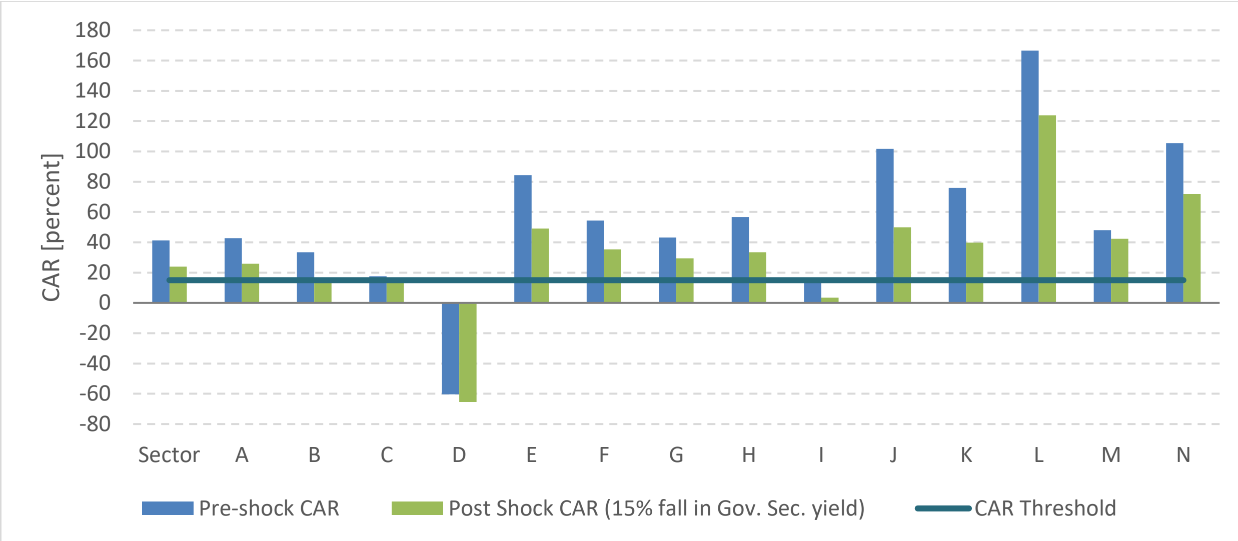
In the interest rate stress test, we tested the resilience of the banking sector to direct interest rate risk. Direct interest rate risk is the risk incurred by banks when there is a mismatch between the volumes of interest rate sensitive assets and liabilities. The test does not consider indirect interest rate risk although banks are exposed to it.[4]

The result of the test indicates that the CAR of the banking sector is resilient to interest rate shock, even though the post-shock CAR is significantly lower. The post-shock CAR decline to 24 percent from the pre-shock CAR of 41.3 percent but remained above the prudential threshold.

Individually, only two banks breached the prudential threshold of 15 percent as a result of the interest rate shock. However, one of the banks had already breached the CAR threshold before the shock (*Figure 3.9*).

[4] Indirect interest rate risk is the risk arising from the impact of interest rate changes on the creditworthiness and ability to repay of borrowers.

Figure 3.9: Results of Interest Rate Shock



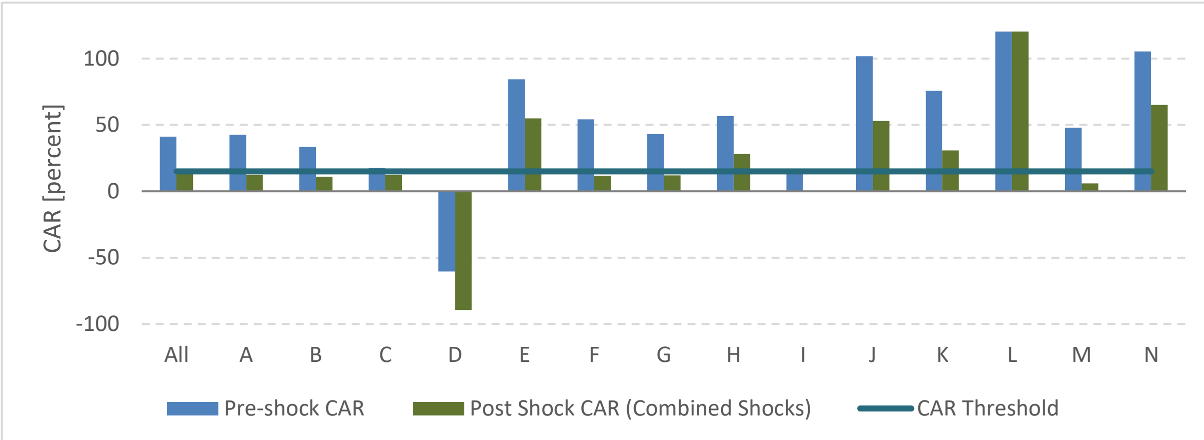
Source: FSD, BSL

3.3.9 Combined Stress Test (Recession and financial repression)

The combined stress test was used to test the resilience of the banking sector to multiple shocks emanating from credit risk (large exposures), exchange rate depreciation, declining government security yields, liquidity shock and interbank contagion shock. The test adds up the impacts of multiple shocks to arrive at an aggregate impact on the CAR of the banking sector. This scenario tests the resilience of the banking sector to extremely adverse events that might arise such as a pandemic that significantly affect the economy leading to a recession. This exercise is technical in nature, the probability of the combined scenario is marginal.

The results indicate that the banking sector will not withstand a combined shock on asset quality, depreciation, interest rate decline and interbank contagion. The post-shock banking sector CAR is significantly lower at 13 percent than the pre-shock CAR of 41.3 percent. It is two percentage points below the regulatory threshold of 15 percent. When we consider individual banks, only 6 out of the 14 banks were able to meet the regulatory capital threshold of 15 percent. Five out of the remaining 8 banks is seen to be able to reach the CAR threshold again relatively soon and with relative ease as their CARs are not far from the regulatory minimum. Only three banks saw their CARs dipping below 10 percent. However, one of these banks had already breached the CAR threshold. The need to strengthen banks that are currently weak will help to salvage this situation. The key takeaway is that shock of this nature will lead to systemic banking sector crisis. However, caution must be taken when interpreting these results as this is a very extreme situation.

Figure 3.10: Result of Combined Stress Scenario Test



Source: FSD, BSL

3.4 Conclusion and Recommendations

In sum, the results of the stress test have shown that the banking sector is generally resilient to adverse shocks that might emerge in the future, despite the conservative assumptions. However, extreme shocks can still lead to systemic banking crisis even though the probability of this is marginal. None of the individual macro shock scenarios considered would cause the sector's CAR to fall below 15 percent. The reason for this is the banks' already high CAR levels emanating from the unique business model followed by most banks, which is based on large holdings of government securities that are considered risk free and provide very high returns. Therefore, even with extreme shocks to credit risk, the banking sector's CAR continues to remain adequate. However, the banking community should consider placing higher weights on alternative financial stability indicators as the risk-weighted assets is significantly biased by the large government securities portfolios of the banks, which may not be sustainable over the long run.

Vulnerabilities do exist in the banking sector which arise mainly from a few weak banks in the sector. Some of these banks are already under enhanced supervision. The BSL will consider whether additional banks should be put under enhanced supervision. Thus, the following recommendations are proffered to strengthen the banking sector and eliminate its vulnerabilities.

- Prompt Corrective Action steps should be taken to strengthen the bank that has already breached the regulatory capital threshold.

- BSL should give timeline for banks that are currently weak to take steps to strengthen their capital base. Banks that failed to meet the deadline should be placed under enhanced supervision.
- Government should take action to reduce its deficit and by implication its borrowing requirement. This will help to reduce the crowding out effect of government borrowing from the banking sector. Thereby creating space for lending to eligible private sector enterprises.
- Banks should provide more details when reporting credit information. It will be of great value if a breakdown is also provided on borrowing by the government, individuals, non-profit organizations, corporate and non-corporate businesses etc.
- Banks should be encouraged to improve on their capital base over time to increase resiliency to shocks as they diversify their asset portfolio.
- Even though the stress test results on foreign exchange risk shows that the impact of a foreign exchange test is minimal, foreign exchange risk can arise from placement of forex funds with parent companies and other foreign banks. Tus there is need for robust coordination with supervisors of Central Banks of countries that host the parent companies of banks operating in the country.

4 NON-BANK FINANCIAL SECTOR ASSESSMENT

4.1 Deposit Taking Microfinance Institutions (DTMFIs)

4.1.1 Performance of DTMFIs

The DTMFIs continue to expand in terms of asset, equity and deposits. The total assets of DTMFIs increased by 43 percent in 2021 to Le492.72 billion. The total equity of the DTMFIs increased by 35 percent to Le110.35 billion in 2021. Total deposits grew by 12.8 percent to Le185.3 billion in 2021.

The main components of DTMFIs' assets are loans and government securities. The DTMFIs' gross loans grew by 39.1 percent to Le264.62 billion in 2021. Similarly, investment in government securities increased by 29.6 percent in 2021 to Le58.53 billion. Interest rates on loans increased from 25 percent per annum to 30 percent per annum in 2021, whilst savings interest rate on deposits remained unchanged ranging between 3 to 5 percent.

Table 4.1: Activities of the DTMFIs

Deposit-taking Microfinance Institutions	2020	2021
Total deposits (Le'bn)	164.31	185.34
Total assets (Le'bn)	344.78	492.72
Total loans (Le'bn)	190.28	264.62
Investment in Government Securities (Le'bn)	45.16	58.53
Interest rate on loans (average), in %	25	30
Interest rate on deposits (average), in %	3-5	3-5
Number of clients	56,336	65,647
Number of DTMFIs	4	5

Source: OFISD, BSL

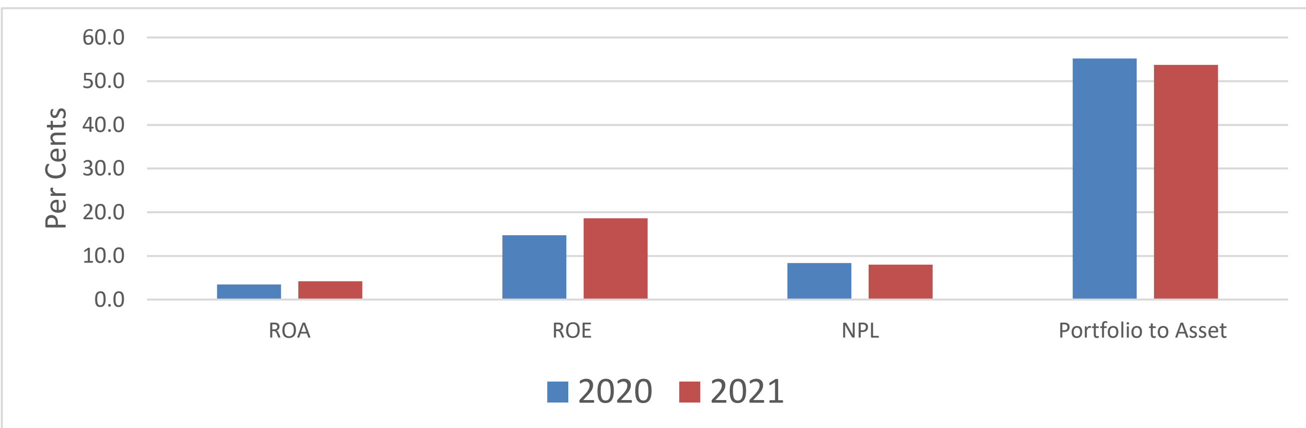
4.1.2 Financial Stability Indicators (FSIs) of DTMFIs

The DTMFIs remained to be highly profitable though asset quality is lower than required as the NPLs are above the Microfinance Information Exchange (MIX) standard in 2021. Overall, as of December 2021, the DTMFIs' portfolio at risk ratio marginally reduced to 8.02 percent from 8.33 percent recorded as at end December 2020 and is above the required MIX standard of 4.8 percent.

Profitability of DTMFIs improved in 2021. The DTMFIs' ROA increased to 4.18 percent as at end December 2021 from 3.47 percent recorded as at end December 2020, indicating improvement in the use of asset generating income. However, three out of four DTMFIs did not meet the minimum MIX requirement of 2.1 percent, implying that individual profitability performance was poor. Also, DTMFIs' ROE as at end December 2021, recorded 18.60 percent, which is above the MIX benchmark of 13.7 percent, thus indicating improvement on returns on the owners' assets. However, only two out of four DTMFIs recorded a ROE above the MIX benchmark (*Figure 4.1*).

Individually, all DTMFIs recorded a satisfactory portfolio to assets ratio, an indication that they are performing their core operational function. Overall, the DTMFIs' portfolio to assets ratio stood at 53.7 percent, slightly lower when compared to December 2020 which was 55.2 percent.

Figure 4.1: Selected FSIs of DTMFIs Sector



Source: OFISD, BSL

4.2 Credit-only Microfinance Institutions (COMFIs)

4.2.1 Performance of COMFIs

There was significant increase in the assets of COMFIs in 2021. The assets of the COMFIs increased by 53.1 percent as at end December 2021 to Le310.94 billion. The main driver of this increase was a 49.8 percent increase in gross loans in 2021 to Le259.06 billion. The COMFIs held 1.6 percent of the total financial sector assets at the end of 2021. Consequently, the number of borrowers increased by 38.52 percent to 155,762 by December 2021. The interest rates on loans were stable but remained high. The increase in loans was financed by long term borrowing and collateral savings deposits which collectively increased by 80.04 percent to Le181.03 billion. Total equity increased by 26.70 percent to Le129.91

billion in 2021 (*Table 4.2*). This increase was the result of a huge jump in reported profits (229.10 percent), while paid up capital increased only moderately (8.63 percent).

Table 4.2: Activities of COMFIs

Credit-only Microfinance Institutions	2020	2021
Total Assets *(Le'bn)*	203.08	310.94
Total Loans *(Le'bn)*	172.95	259.06
Total Equity *(Le'bn)*	102.53	129.91
Interest Rate on Loans (Average), *in %*	25-30	25-30
Number of Borrowers	112,451	155,762
Number of COMFIs	41	41

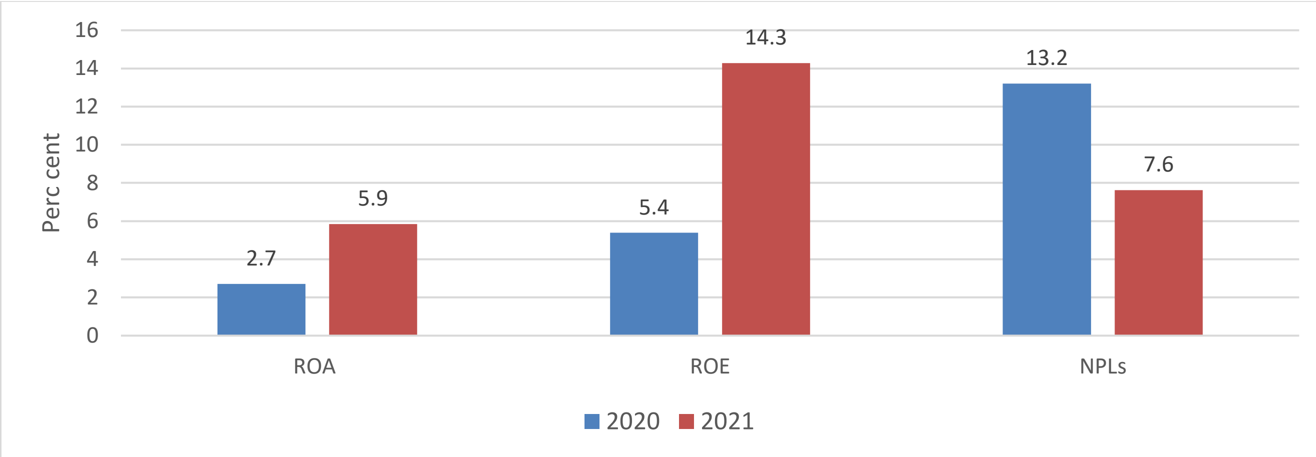
Source: OFISD, BSL

4.2.2 FSIs of COMFIs

The COMFI sector made significant improvement in asset quality and profitability in 2021. The consolidated portfolio at risk (PaR) for COMFIs decreased to 7.62 percent in 2021 from 13.2 percent in 2020. This might be due to the recovery of economic activities as a result of the removal of all COVID pandemic related restrictions. Individually, only five COMFIs met the MIX requirement, indicating high credit risk for individual COMFIs which need to be addressed.

The consolidated ROA of the COMFI sector increased to 5.9 percent in 2021 from 2.71 percent in 2020. Individually, fourteen out of twenty-six COMFIs met the minimum MIX benchmark of 2.1 percent. The consolidated ROE of COMFIs increased significantly, to 14.28 percent in 2021 from 5.39 percent in 2020 (*Figure 4.2*). This indicates an increase in the yearly yield on shareholders' equity. Only half of the COMFIs met the minimum MIX requirement of 13.7 percent.

Figure 4.2: Selected FSIs of COMFIs



Source: OFISD, BSL

Consolidated yield on gross loans was satisfactory and accounted for 24.10 percent as at end December 2021 in contrast to 20.17 percent in 2020. In terms of operational self-sufficiency (OSS), fifteen out of twenty-six COMFIs met the minimum MIX requirement of 112 percent at the end of 2021 but the overall consolidated performance improved and was satisfactory at 160.11 percent.

4.3 Community Banks (CBs)

4.3.1 Performance of Community Banks (CBs).

The total assets of the community banking sector increased by 17.6 percent to Le129.78 billion as at end December 2021. The assets of community banks accounted for only 0.6 percent of total financial sector assets. Loans have the largest share in assets, and their disbursement increased by 32.5 percent to Le94.92 billion in 2021. The three largest CBs held 32.03 percent of the asset of the sector as at end December 2021.

The increase in the assets was funded mainly by an increase in equity. The total equity of CBs grew by 41.82 percent, mainly because of a 228.39 percent (Le7.05 billion) increase in current year profit. Paid-up capital and donated equity also rose by 10.13 percent and 41.15 percent respectively. In contrast, total deposits practically stagnated as they increased by a meagre 0.46 percent, which was driven largely by time deposits that grew almost eleven-fold to Le5.63 billion.

Table 4.3: Activity of Community Banks

Community Banks	2020	2021
Total Assets (Le'bn)	110.34	129.78
Total Loans (Le'bn)	71.12	94.21
Total Deposits (Le'bn)	57.80	58.63
Interest Rate on Loans (Average), in %	24	24
Number of borrowers	34,589	37,695
Number of depositors	128,667	102,904
Number of Community Banks	17	17

Source: OFISD, BSL

The increase of Le23.10 billion in gross loans was the result of the increase of the number of borrowers by 3,106 in 2021 (*Table 4.3*). Interest rates on loans remained unchanged at a relatively high level of 24% percent. Despite a stable deposit volume, the number of depositors declined by 20 percent over the year.

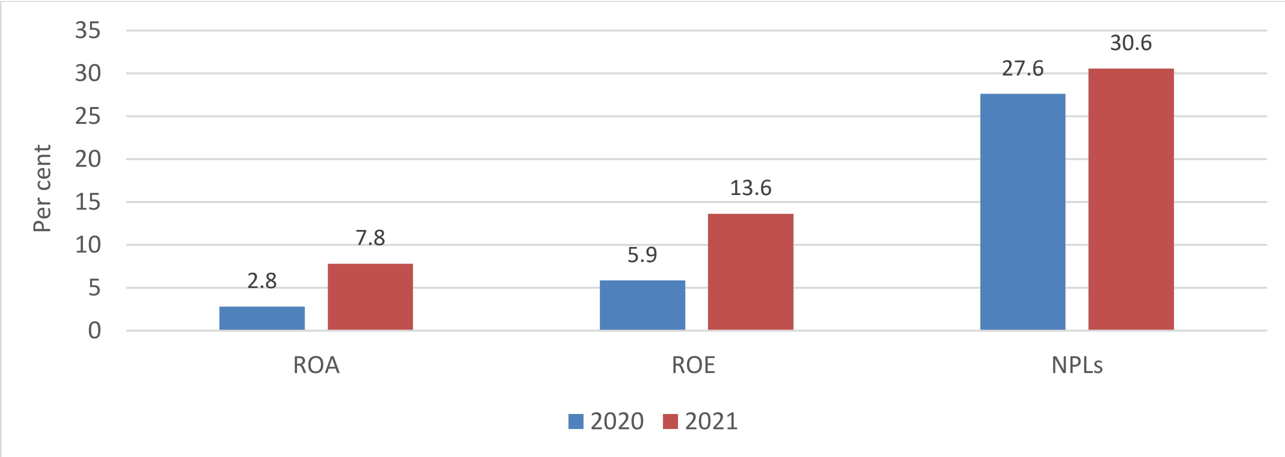
4.3.2 FSIs of Community Banks (CBs).

The community banks sector was highly profitable in 2021, though challenged by deteriorating asset quality. NPLs of the CBs continued to remain very high and increased to 30.6 percent in 2021 from 27.6 percent in 2020. The implication is that a large proportion of the loan portfolios of these CBs are at a higher risk and there is a high potential for future financial losses to be incurred.

However, despite the high NPLs, CBs sector ROA ratio increased to 7.81 percent in 2021 from 2.80% in 2020. Similarly, CBs ROE increased to 13.6 percent in 2021 from 5.9 percent in 2020 (*Figure 4.3*).

Ten out of seventeen CBs met the MIX standard of 13.7 percent. The consolidated pre-tax profit increased more than three-fold to Le10.14 billion in 2021 from Le3.09 billion in 2020. All CBs made profits in 2021 compared to only nine in 2020. The increase in profit was mainly due to a huge increase in the net financial income by Le7.27 billion while operating expenses only increased by a trivial Le0.15 billion.

Figure 4.3: Selected FSIs of Community Banks



Source: OFISD, BSL

4.4 Financial Services Associations (FSAs)

4.4.1 Performance of Financial Services Associations (FSAs).

The total assets of FSAs increased by 21.9 percent to Le84.08 billion as at end December 2021. FSAs hold 0.4 percent of total financial sector assets. Share capital rose by Le2.32 billion in 2021 to Le26.58 billion. The loan portfolio increased by 14.7 percent to Le62.53 billion. The number of active loan clients increased by 8.24 percent to 38,585 in 2021 (*Table 4.4*).

Table 4.4: Activity of the Financial Services Associations (FSAs)

Financial Services Associations (FSA)	2020	2021
Total Assets (Le'bn)	69.00	84.08
Share Capital (Le'bn)	24.26	26.58
Total Loans (Le'bn)	54.54	62.53
Number of Active Loan Clients	35,648	38,585
Number of FSAs	59	59

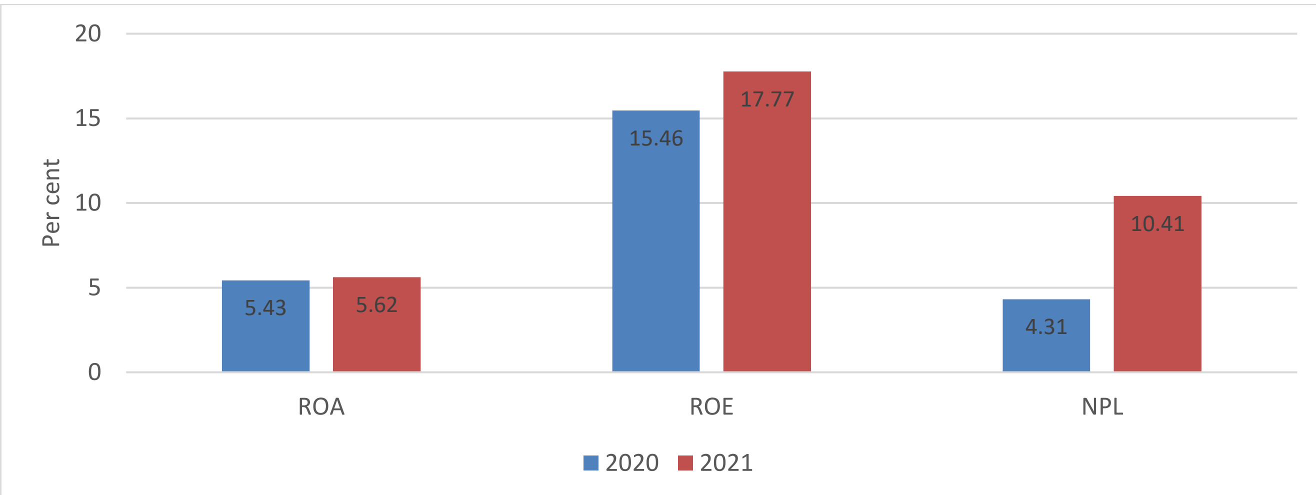
Source: OFISD, BSL

The performance of FSAs as at end December 2021 was satisfactory. Total income of Le 14.85 billion was largely contributed by interest on loan income which increased by 26.0 percent to Le 13.70 billion from Le10.88 billion as at end December 2020. The increase was mainly due to increases in total loan by 14.65 percent to Le 62.53 billion from Le 54.54 billion as at end December 2020. Financial expense and administrative and personnel expense on the other hand, accounted for 14.4 percent and 85.6 percent respectively of total expenses of Le 10.13 billion.

4.4.2 Selected FSIs of Financial Services Associations (FSAs).

Similarly to CBs, the FSAs' asset quality continued to deteriorate though profitability has improved. The NPLs increased in 2021 from a level within the MIX standard of 4.8 percent to well above it at 10.41 percent.

Figure 4.4: Selected FSIs of FSAs



Source: OFISD, BSL

However, the return on assets (ROA) of the FSA sector increased marginally. The consolidated ROA ratio for FSAs in 2021 was 5.62 percent, 0.19 percentage points higher than in 2020, and above the MIX standard of a minimum of 2.1 percent. Similarly, the consolidated ratio of the ROE increased by 2.31 percentage to 17.77 percent in 2021, which is above the minimum MIX requirement of 13.7 percent.

4.5 Discount Houses (DHs)

4.5.1 Performance of DHs

The DH sector remained a very small fraction of the financial system in Sierra Leone, accounting for 0.1 percent of total financial sector assets. The DHs exhibited moderate asset growth driven by more investment into government securities. In contrast, the volume of loans (repos) decreased and accounted for only about 6 percent of total assets. The volume of deposits doubled in 2021 but remained low, accounting for only 8 percent of total assets. Total equity had the largest share, accounting for half of total liabilities, making the DH sector practically a government security investment vehicle (*Table 4.5*). As the T-bill yields were very high, the DHs' profit almost doubled in 2021.

Table 4.5: Activity of DHs

Discount Houses	2020	2021
Total Assets *(Le'bn)*	20.11	21.73
Placement (Deposits) *(Le'bn)*	0.87	1.74
Total Equity *(Le'000)*	10.54	10.89
Investment in Gov't Securities (Le'bn)	5.53	6.90
Loan (Repo) (Le'bn)	1.47	1.37

Source: OFISD, BSL

4.5.2 Selected FSIs of Discount Houses

The DHs have low profitability, staying below the regulatory standards, despite their lucrative government security portfolio due to their very high operating expenses. In 2021, the ratio of operating expenses to operating income reached 327.8 percent indicating extreme inefficiency.

Table 4.6: Selected FSIs of DHs

Discount Houses	2020	2021
ROA (Net Income/Total Assets, in %	0.71	1.29
ROE (Net Income/Capital), in %	1.42	1.86
Operating Expenses/Operating Income (%)	157.89	327.76

Source: OFISD, BSL

4.6 Mobile Money Operators (MMOs)

There are three licensed MMOs in the country - Orange Mobile Finance, AfriMoney and QMoney. Significant growth was recorded in the activities of the Mobile Money Operators as the number of agents, accounts, active accounts, transactions, and value of transactions all increased over the year (*Table 4.7*).

Table 4.7: Activity of the Mobile Money Providers

Activity of MMOs	2020	2021
Number of Agents	24,120	37,772
Number of Accounts	4,279,918	6,839,718
Number of Active Accounts	2,029,439	3,064,492
Number of transactions	59,150,786	81,106,582
Value of transactions (Le'bn)	8,342.86	13,427.85

Source: Source: OFISD, BSL

At the end of 2021, there were 37,772 registered mobile money agents, a 57 percent increase, with a total outstanding balance of Le25.80billion. Although, the outstanding balance is still small, the dynamic increase and the experience of other countries raises the probability for a much more important role for the sector over the medium term. The number of registered mobile money accounts in the country increased by 59.8 percent to 6.8 million in 2021, while the number of active customers increased by 51 percent to 3.1 million during the review period, which shows an increase in both financial deepening and of the economy and financial inclusion.

At the end of 2021, the balance in the escrow deposit account stood at Le248.5 billion compared to Le117.7 billion in 2020. Total e-money in circulation was Le239.7 billion at the end of 2021.

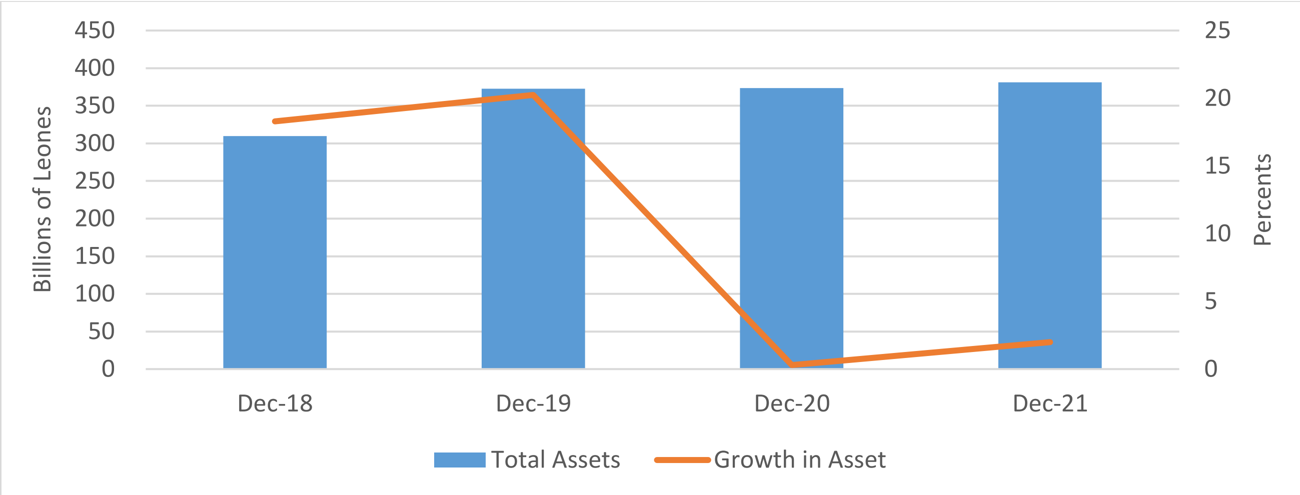
There was a high number of fraud-related issues ranging from fake job calls to fraud messages. The total number of fraud messages was 6,060 which is a cause for concern and may merit regulatory action.

4.7 The Insurance Sector

4.7.1 Performance of the Insurance Sector

The insurance sector is supervised by the Sierra Leone Insurance Commission (SLICOM). The sector continued to exhibit slow growth. The total assets of the insurance industry grew by a meagre 2 percent in 2021 (to Le381.1 billion), following a growth of only 0.3 percent in 2020 (*Figure 4.5*). The slight pick-up in growth may be attributed to the removal of COVID related restrictions in 2021. Growth in the industry's assets was driven mainly by the increase in investments and receivables in 2021.

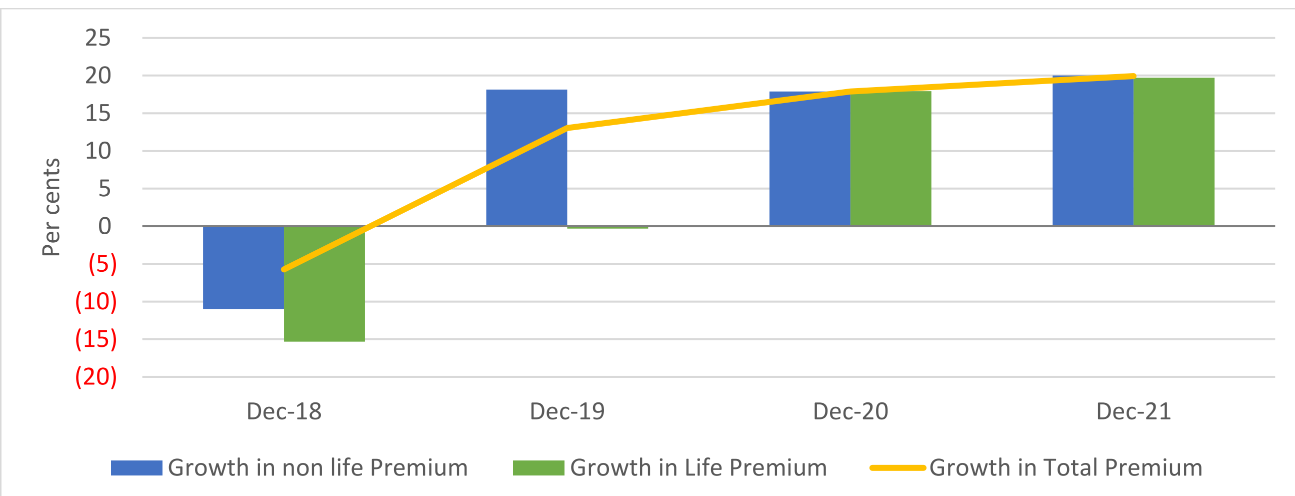
Figure 4.5: Growth of Insurance Industry Asset



Source: SLICOM

Furthermore, premiums have been also improving in the industry recently. In 2021, the total premium grew by 19.9 percent, following 17.9 percent growth in 2020. The increase in premiums was similar in both the non-life and life insurance categories, showing 20 and 19.7 percent growth in 2021, respectively.

Figure 4.6: Growth of Insurance Industry Premium



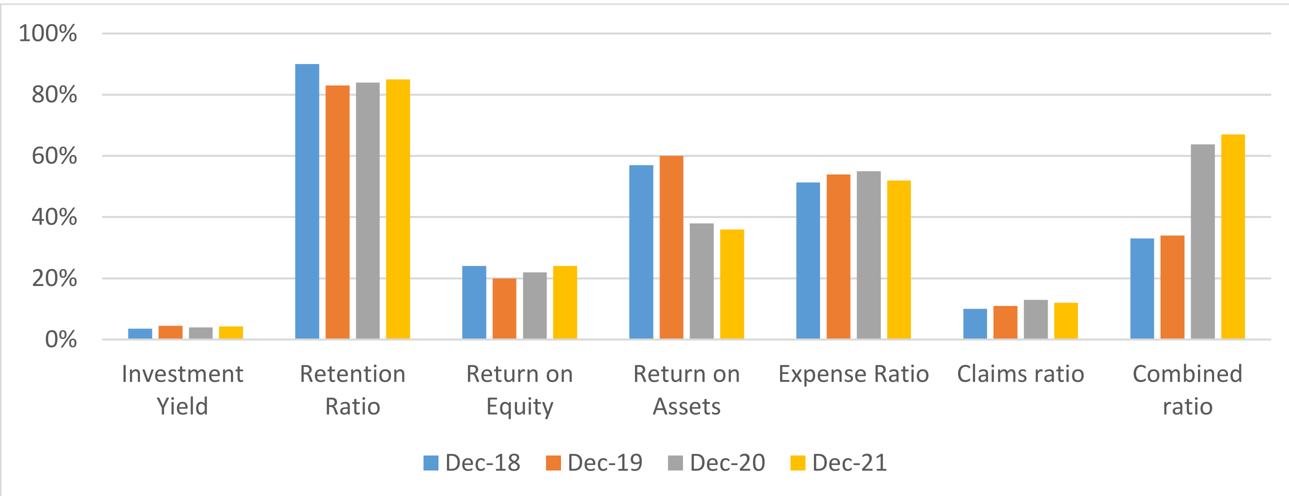
Source: SLICOM

4.7.2 Risk Assessment of the Insurance Industry

The insurance industry in Sierra Leone continued to be relatively stable in 2021 as indicated by the key financial soundness indicators. The industry honored most of its genuine claims and all registered insurance companies are protected by adequate reinsurance arrangements.

The FSIs of the non-life category, which generate most of the industry's premium, improved in 2021. For example, the investment yield increased by 50 basis points to 4.5 percent in 2021, whilst the retention ratio increased from 84 to 85 percent. The non-life insurance sector remained profitable with a relatively high return on equity and return on asset. The ROE increased from 22 to 24 percent in 2021 whilst the ROA declined from 38 to 36 percent, though it remains relatively high (*Figure 4.7*).

Figure 4.7: Financial Soundness Indicators of the Non-life Insurance Category



Source: SLICOM

Furthermore, there is clear reputational risk posed by the seemingly low public confidence towards insurance, especially in the payment of the group life insurance claims. SLICOM will continue to nudge all insurers to settle all genuine claims promptly and equitably to curb reputational risk. Credit risk has been mitigated by the "No premium, No cover" regime in the Insurance Act of 2016.

The sector is also exposed to market risk due to currency depreciation, especially when making payments for reinsurance and claims. This is especially the case since premiums are paid in local currency and reinsurance premium paid overseas are done in foreign currency.

Another risk affecting the industry is price risk. Generally, the premiums charged by insurers should be commensurate to the risk they carry. However, there are exceptional occasions wherein insurers would provide an inadequate price having a negative impact on their operations. Currently the life and motor insurance businesses are affected by pricing risk. However, SLICOM in collaboration with the insurers and the government are working with a view to stabilize the situation and revise the relevant tariffs.

4.7.3 Policy Prescription and Outlook

SLICOM has initiated action and made a number of steps to alleviate problems in the insurance sector. In particular, SLICOM

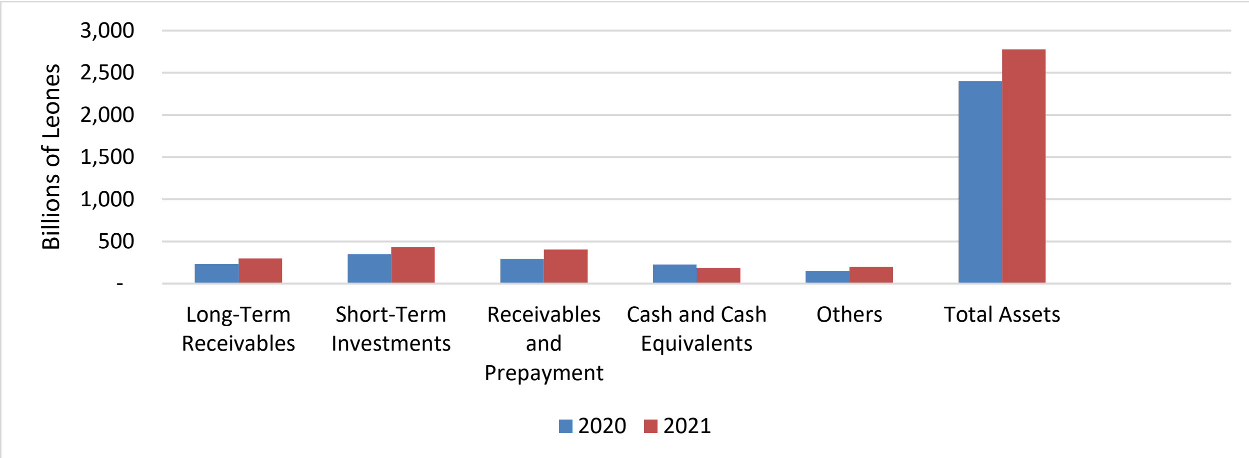
- discussed with service providers the potential for the digitization of motor insurance business and premium payments systems;
- organized a virtual seminar for the insurance industry where consultants provided expert advice on the implementation of IFRS 17;
- In collaboration with Sierra Leone Insurers Association met to finalize the new motor insurance tariff and benefits;
- continues to collaborate with stakeholders on the implementation of risk-based supervision;
- prepared new insurance regulations that is yet to be passed into law;
- launched a textbook on insurance education but authorities are yet to adopt the program;
- opened branch offices which are very instrumental with insurance education on the compulsory insurance product and handling of claims complaints;
- sensitized insurers to re-capitalize;
- continues to collaborate with the market for full implementation of the Insurance Act of 2016;
- continues to work closely with the ministry of education for the implementation of the insurance curriculum in secondary schools; and
- plans to set up a local insurance institute affiliated to the CII of Great Britain.

4.8 National Social Security and Insurance Trust (NASSIT)

4.8.1 Performance of NASSIT

The NASSIT pension scheme expanded during the review period. At the end of 2021, total pension fund assets amounted to Le2,776 billion increasing by 15.5 percent from 2020. The increase in assets was driven by ‘receivables and prepayment’ which increased by 38.5 percent in 2021. This fully offset the 19.1 percent decline of ‘cash and cash equivalents’ (*Figure 4.8*). The strong growth of the fund in 2021 is attributable mainly to recovery of the economy from the economic downturn brought about by the COVID pandemic.

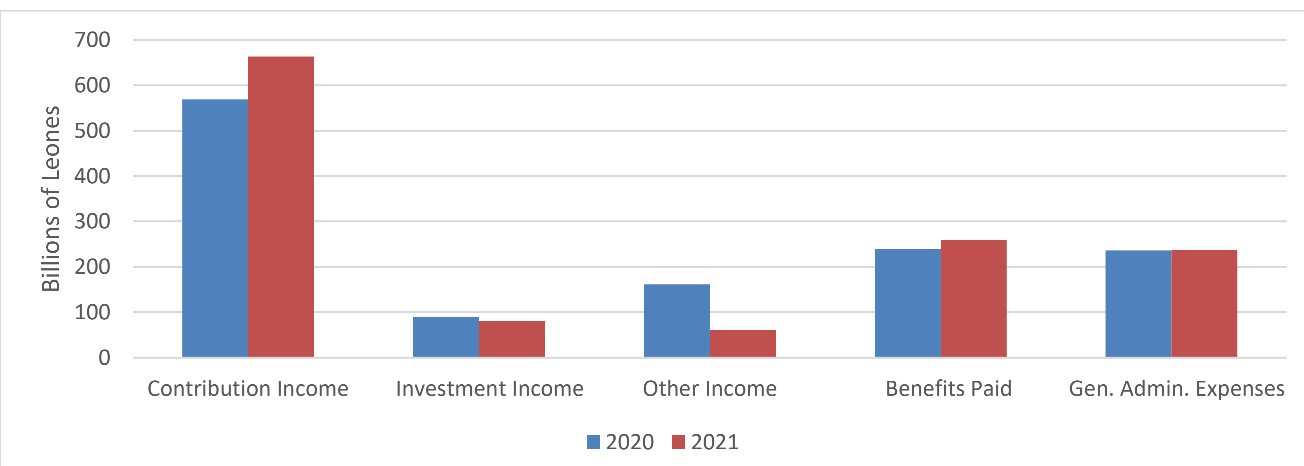
Figure 4.8: Total Asset and Asset Composition of NASSIT



Source: NASSIT

The fund continues to generate sufficient funds to meet customers' needs though total income declined by 1.7 percent. Contribution income increased by 16.6 percent and surpassed benefits payments by 156 percent in 2021. Whilst benefit paid increased by 8.1 percent, general admin expenses only increased marginally by 0.4 percent. However, investment income and other income declined by 9.7 and 61.8 percent respectively. None the less, contribution income was sufficient to meet the fund's total expenses, giving rise to surplus for future investment or future use (*Figure 4.9*).

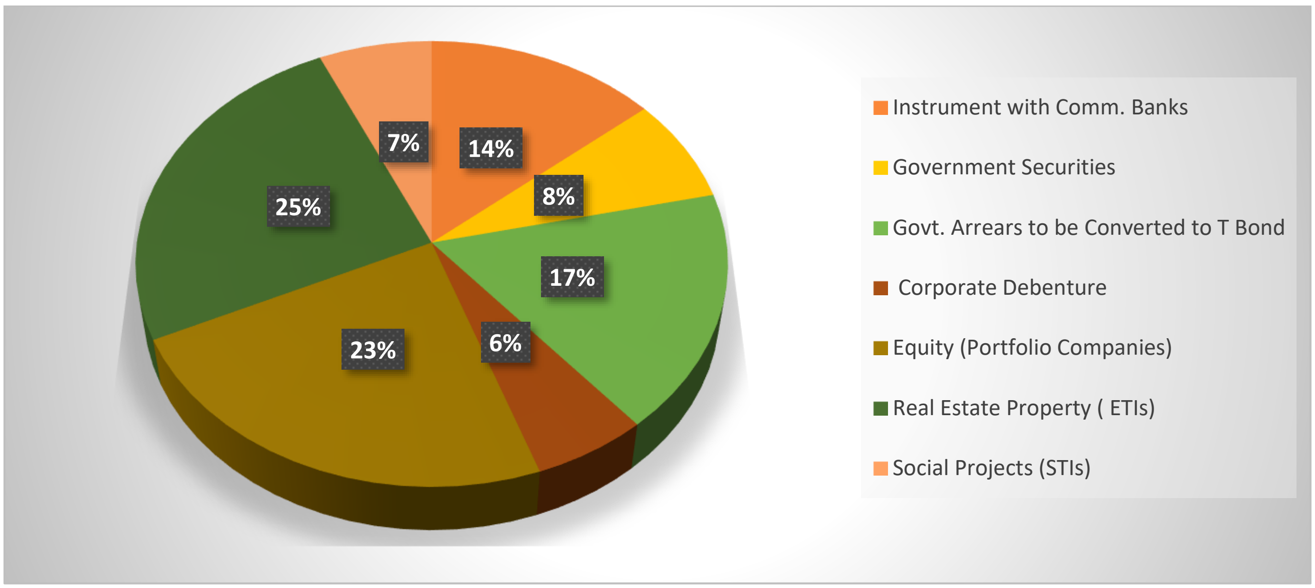
Figure 4.9: Sources and Uses of Pension Funds



Source: NASSIT

Total investment of the fund increased by 27.5 percent to Le2,406.1 billion in 2021. Liquid assets comprise 38.8 percent of the 2021 investments while 61.2 percent are long term investments. The main investment destination of the scheme's funds is real estate, representing 25 percent of the total investment of the fund. This is followed by equity stakes in other companies, consisting of 23 percent of total investment (*Figure 4.10*).

Figure 4.10: Investment Profile of NASSIT



Source: NASSIT

The fund also has huge arrears from government, consisting of 17 percent of total investment. These arrears are expected to be converted to a government bond. The fund also had 14 percent of its investment with banks in 2021 in the form of call deposits, private placements and term deposits (*Figure 4.10*).

The downside risks to the performance of the scheme include the delays in the payment of contributions by government, non-compliance by the private sector, increasing benefit payments, limited investment options and weak investment outturn.

4.8.2 Key Challenges

Among the challenges faced by the Trust in 2021, the following are worth noting:

- Compliance by employers meeting their obligations with NASSIT has been challenging throughout 2021. Efforts by NASSIT to improve compliance have proved costly and increased administrative costs for the Trust. On average, compliance rates for public and private sector establishments remained 82.30% and 37.07% respectively. This indicates that the challenge is more with the private sector.

- Frequent delays in payment of government contributions and monthly contributions-arrears remain a challenge to the Trust.
- The ineffectiveness of the Trust's ICT Infrastructure (NAPOS II) continues to affect the effectiveness and efficiency of payment of benefits. Efforts are being made to address this problem that has plagued the Trust over the years.
- Increased informality in the economy is a serious challenge. The informal sector continued to expand throughout 2021.
- The investment environment is unfavorable with limited investment options to choose from. The non-functionality of the stock market is a major problem in this direction.

4.8.3 Policy Prescription/Ongoing Efforts

With an understanding of the many challenges facing the Trust, the NASSIT management has directed attention to specific areas that are critical to the long-term sustainability of the scheme in the face of a volatile economy. These areas include the following: continue the rebranding of NASSIT and improve its public image, especially in the area of service delivery; ensure sufficient liquidity for benefit payments and operating expenses, through aggressive compliance enforcement strategies and prudent investment undertakings; design and operationalize a fully functional web-based biometric pension administration system and customer call-centre; design and operationalize an informal sector scheme; invest in the construction of affordable student hostels for universities; construct a state-of-the-art diagnostic center with interested partners; develop a funding policy for the scheme; revise key elements in the Trust's operating policies and the current NASSIT Act No. 5 of 2001; and monitor and adjust the annual administrative expenses.

5 DOMESTIC AND FOREIGN EXCHANGE MARKET DEVELOPMENTS

5.1 Domestic Debt Market Developments

5.1.1 Auction Outcomes

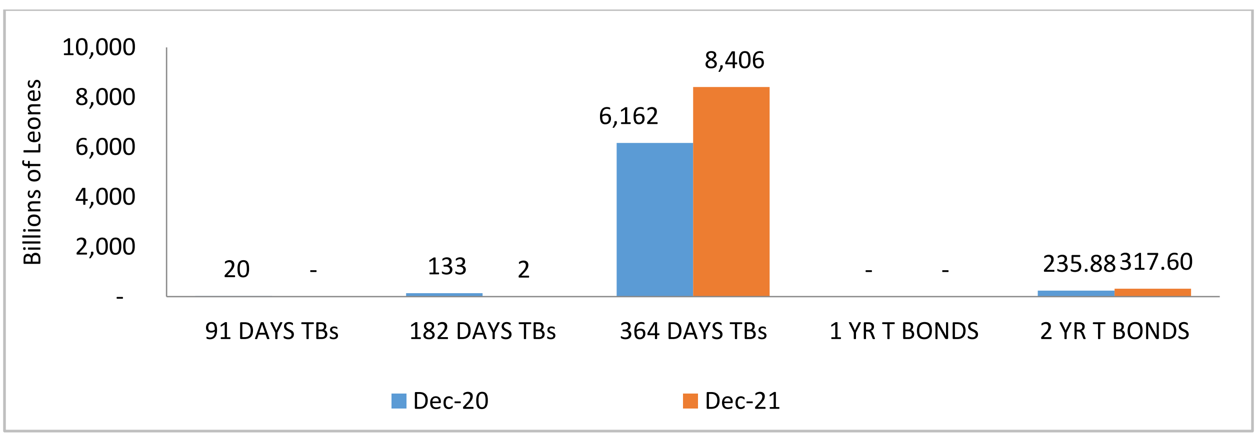
The primary market auctions for Government Securities exhibited mixed outcomes in 2021. The 91-days and 182-days tenures were largely undersubscribed, whilst the 364-days tenure was mostly oversubscribed. As such, the demand for government treasury bills continued to be skewed towards the 364 days tenure because of its high interest rate, with commercial banks being the leading participants. However, the non-bank public was the dominant participant in the 91-days and 182-days tenures of the treasury bills auctions.

5.1.2 Stock of Government Securities

The total stock of Government securities increased by Le2,227bn (3percent) during 2021. Marketable securities which mainly comprised of 91-364 days T-bills and 2-year Treasury bond accounted for the lion's share (92 percent) of the total stock of government securities whilst non-marketable longer-term (3-10 years) securities accounted for the remainder.

The stock of marketable securities increased by 33 percent during 2021, largely on account of an increase in 364-days T-bills. The issuance of new treasury securities during the review period was mainly to finance the government's budget. Non-marketable securities increased by 8 percent, mainly due to the new issuance of 3-year Treasury bonds.

Figure 5.1: Stock of Marketable Government Securities by Tenure

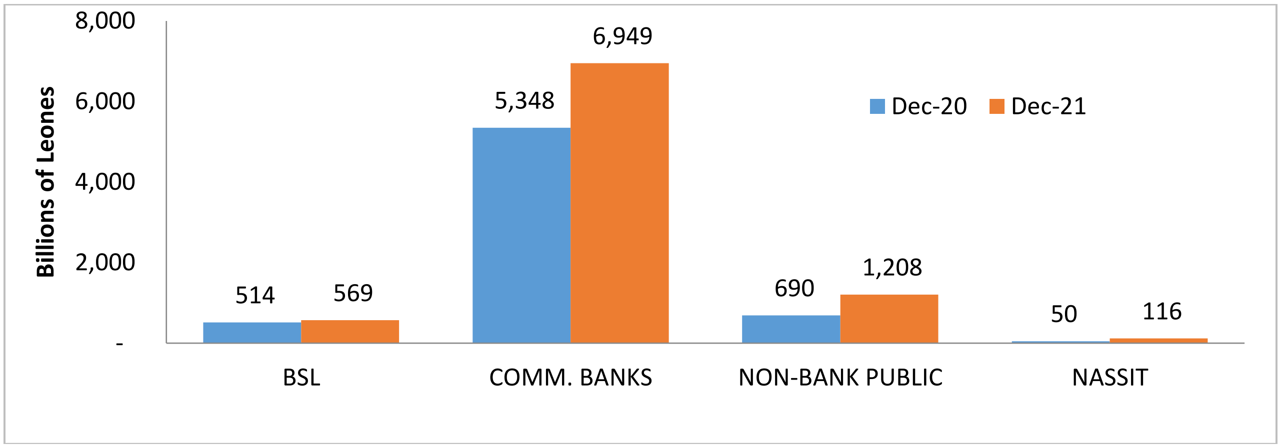


Source: FMD/BSL

5.1.3 Distribution of the Stock of Government Securities by Sector

There was a large increase in holdings of marketable government securities in all four sectors (*Figure 5.2*) BSL (10.7 percent), commercial banks (29.9 percent) and especially the non-bank public (75.1 percent) and NASSIT (132 percent). The increase in BSL's holdings were mainly on the secondary market through an outright purchase of treasury bills from the commercial banks.

Figure 5.2: Holdings of Marketable Government Securities by Sector



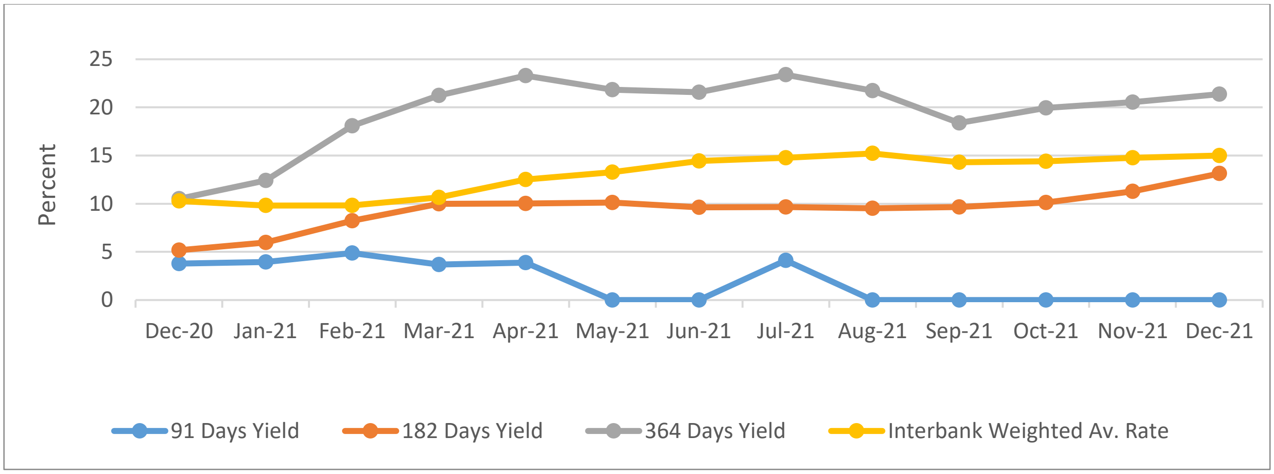
Source: FMD/BSL

5.1.4 Trends in Yields of Government Securities in the Primary Market and Interbank Market

The yields of all the tenures of treasury bills generally increased but with mild fluctuations **(***Figure 5.3***)**. The monthly average annual yield of the 91-days treasury bills increased by 33 basis points from 3.78 percent in December, 2020 to 4.11 percent in July, 2021, however, there was no demand for the tenure after September. The yield of the 182 days T-bills increased by almost 8 percent from 5.17 percent in December, 2020 to 13.13 percent in December, 2021. Similarly, the annual yield of the 364-days treasury bills significantly increased by more than 10 percent from 10.51 percent in December, 2020 to 21.38 percent in December, 2021. The interbank weighted average yield increased by 472 basis points from 10.29 percent in December, 2020 to 15.01 percent in December, 2021.

The increase in the rates in both the primary and the interbank markets reflected the observed liquidity tightness in the banking system, especially in the second half of 2021.

Figure 5.3: Trends in Yields of Government Securities in the Primary and the Interbank Market



Source: FSD/BSL

5.1.5 Secondary Market Outcomes

The level of intermediation in the interbank money market deepened during the review period, as the volume of interbank transactions almost tripled to Le5,865bn. The BSL's intervention in the secondary market through outright purchase of Treasury Bills increased by one-third to Le777.30bn.

5.1.6 Implications for Financial Stability

The banking sector holdings of marketable government securities increased by 30 percent in 2021 accounting for almost four-fifths of total holdings. Consequently, the balance sheet of the banking sector is heavily dependent on the domestic debt market. Thus the movement of rates in the debt market has implications on interest rate risk and by extension the profitability and stability of the banking sector. This is a major source of banking sector vulnerability. Negative shocks to GDP can reduce government revenue and can lead to increase government borrowing and as such has the potential – at least in the short run – to improve banks' performance. The situation is reversed in face of a positive shock such as the boom in iron ore prices and production in 2012/ 2013. Given this vulnerability banks should put measures in place to diversify their portfolios.

5.2 Foreign Exchange Market Developments

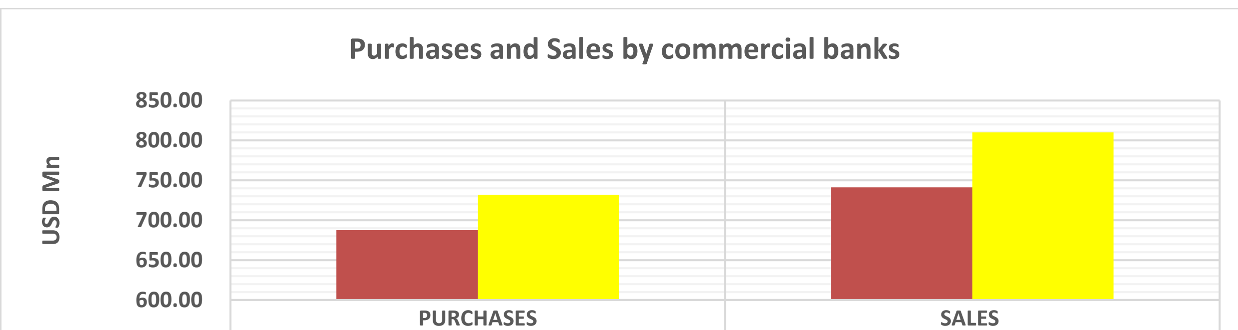
5.2.1 Foreign Exchange Flows

Trading of foreign currency in the foreign exchange market increased by 8 percent in 2021 to USD1.54 billion. This increase could have been the result of support given to the beneficiaries of the BSL SCF's customers for the importation of essential commodities to cushion the impact of COVID.

5.2.2 Purchases and Sales of Forex by Commercial Banks

Total purchases of foreign currency by banks from their customers in 2021 increased by 6 percent to USD0.73 billion (*Figure 5.4*). The increase was largely due to purchases from the mining sector, International NGOs, bureaus remittances, and the service sector. Consequently, the total sale of foreign exchange by commercial banks also increased by a similar amount to USD0.81 billion. The major sectors that bought forex from the commercial banks were trade related payments, service industry, and payments for petroleum products.

Figure 5.4: Purchase and Sales of Foreign Currency by Commercial Banks



	PURCHASES	SALES
JAN - DEC 2020	687.64	741.08
JAN - DEC 2021	731.93	810.19

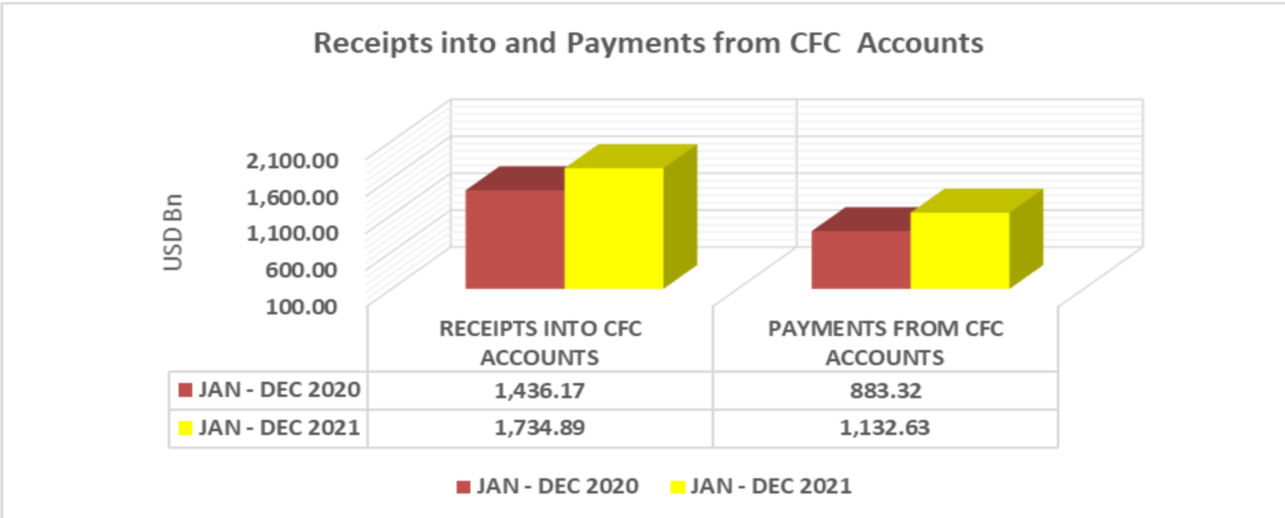
Source: FMD/BSL

5.2.3 Receipts into and Payments from Customers Foreign Currency (CFC) Accounts

Receipts into customer foreign currency accounts increased by 21 percent to USD1.73 billion in 2021 (*Figure 5.5*). The key drivers were the mining sector, service industry, bureaus and migrant remittances/money transfer agencies. The mining companies with significant receipts of foreign currency consisted of just three (3) customers. The CFC accounts are accounts of bank customers that are denominated in foreign currency, mainly USD.

Similarly, payments from customer foreign currency accounts increased by 28 percent to USD1.13 billion in 2021. The payments from CFC accounts/outflows were mainly for trade-related imports, rice imports, service industry, mining industry, and petroleum products.

Figure 5.5: Receipts into and Payment from Customers' Foreign Currency Accounts

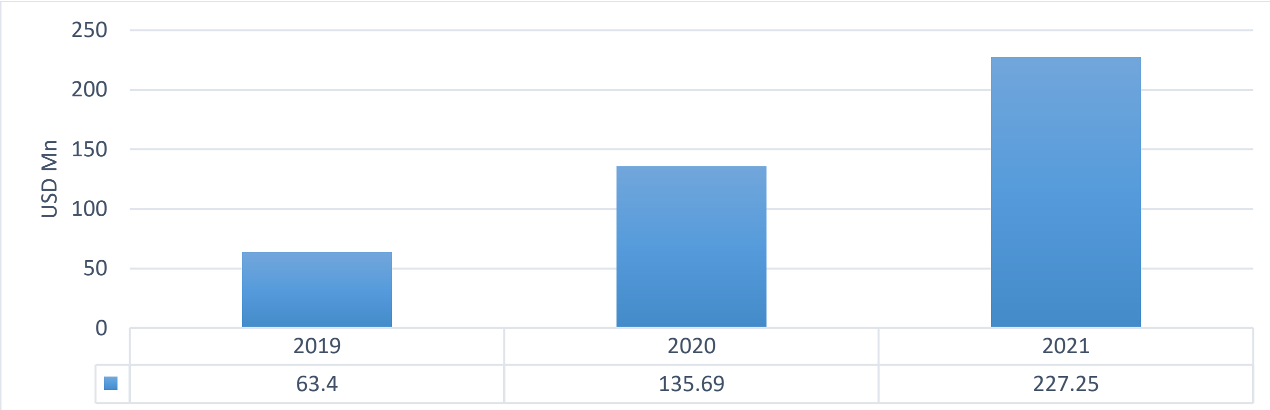


Source: FMD/BSL

5.2.4 Diaspora Remittances

Total Diaspora remittances increased by 68% to USD227 million during last year **(***Figure 5.6).* This increase may be attributable to the removal of COVID related restrictions in most western countries which are the main sources of remittances to Sierra Leone.

Figure 5.6: Diaspora Remittances



Source: FMD/BSL

5.2.5 Foreign Exchange Rate Movements

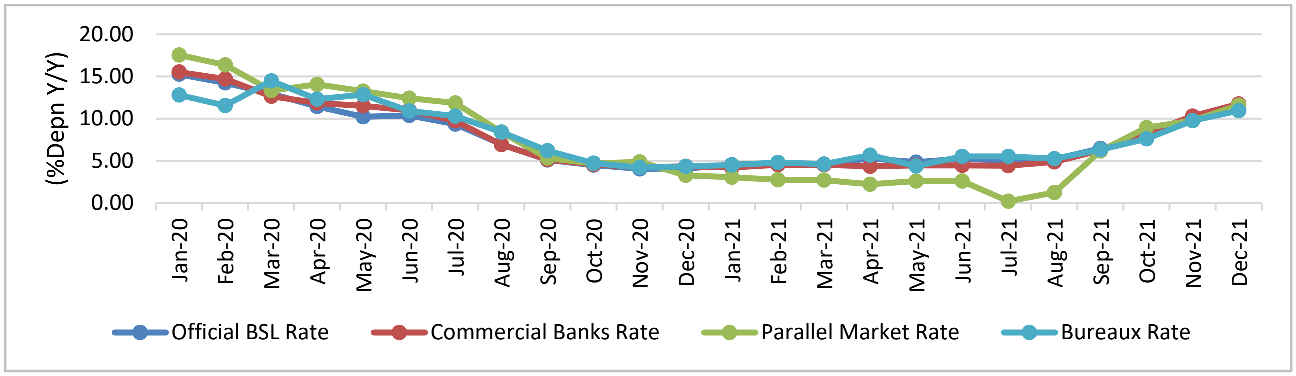
The BSL continued to deploy its foreign exchange management instruments to ensure liquidity and stabilize the foreign exchange market. The Bank's intervention in the foreign exchange market through the direct sale of FX to commercial banks at the beginning of the year helped stabilize the Leone during the first quarter of 2021. This stability continued until mid-year, despite the market exhibiting some signs of tightness.

However, challenges emerged in the foreign exchange market in Q3 2021, with heightened demand pressure for foreign currency for importing essential goods, mainly food and petroleum products. This exerted pressure on the exchange rates across all market segments resulting in a depreciation of the Leone/US dollar.

The public notice issued by the Bank in Q3, 2021 with regards the redenomination of the Leone also led to some speculative activities in the FX market adding more pressure to an already challenged FX market. These challenges continued in the fourth quarter of 2021 resulting in further currency depreciation.

The official BSL, commercial banks, bureaus, and parallel market exchange rates depreciated by 11.2 percent, 11.8 percent, 10.9 percent, and 11.6 percent respectively during the year as a whole.

Figure 5.7: Leone Depreciation Against the US Dollar (Year-on-Year (%))

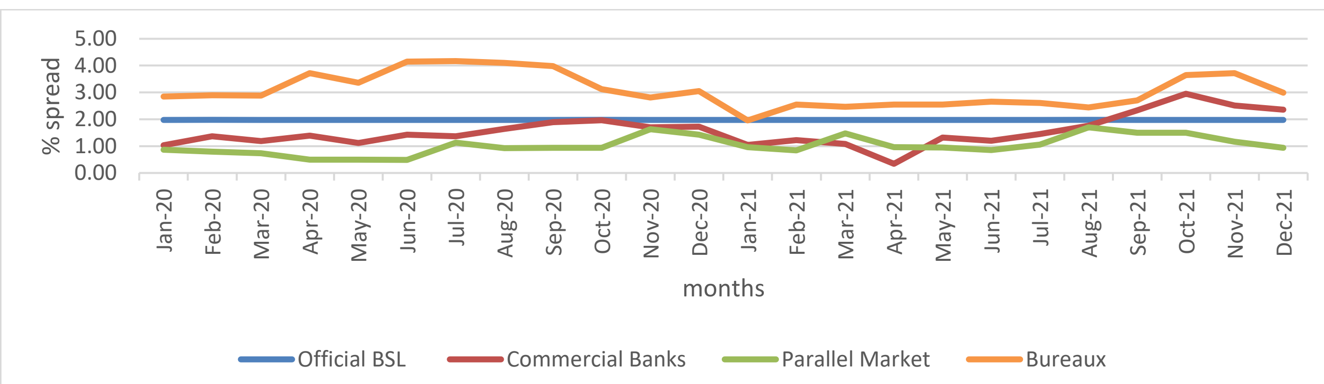


SourSource: FSD/BSL

5.2.6 Spreads in the Various Markets

The percentage spread between the average official BSL buying and selling rates was constant at 1.98 percent during the year (*Figure 5.8*). However, the spreads in the commercial banks, bureau and parallel market varied. The percentage spread in the commercial banks' rate widened in 2021, recording a maximum spread of 2.36 percent. In contrast, the percentage spread in the foreign exchange bureau rate to 2.99. Similarly, the spread in the parallel market rate narrowed with a maximum spread of 0.94 percent.

Figure 5.8: Average Monthly Percentage Spread of the Leone/USD Exchange Rate



Source: FMD/BSL

5.2.7 Outlook of the Market for 2022

The stability of the exchange rate will remain a priority, given the potential effects of Leone depreciation on the price level in the Sierra Leone economy. This is likely to be challenged given the backdrop of tightening monetary policy in major central banks and global uncertainty as a result of the Ukraine-Russia War.

6 NATIONAL PAYMENTS SYSTEM

6.1 Introduction

Financial Market Infrastructure plays a critical role for financial stability. A stable and efficient payment system is required to maintain a stable financial system. The orderly, efficient and effective settlement of transactions is necessary for the smooth functioning of the payments system. Thus the proper functioning of the payments system will enhance not only financial stability, but will also promote improve financial market liquidity and the effectiveness of monetary policy implementation. To this end, the Bank of Sierra Leone continues to monitor and assess the performance of the national payments system for the achievement of safety and efficiency. In addition, the Bank is quite advanced in the procurement and implementation of the national payment switch system, under the “Sierra Leone Financial Inclusion Project”.

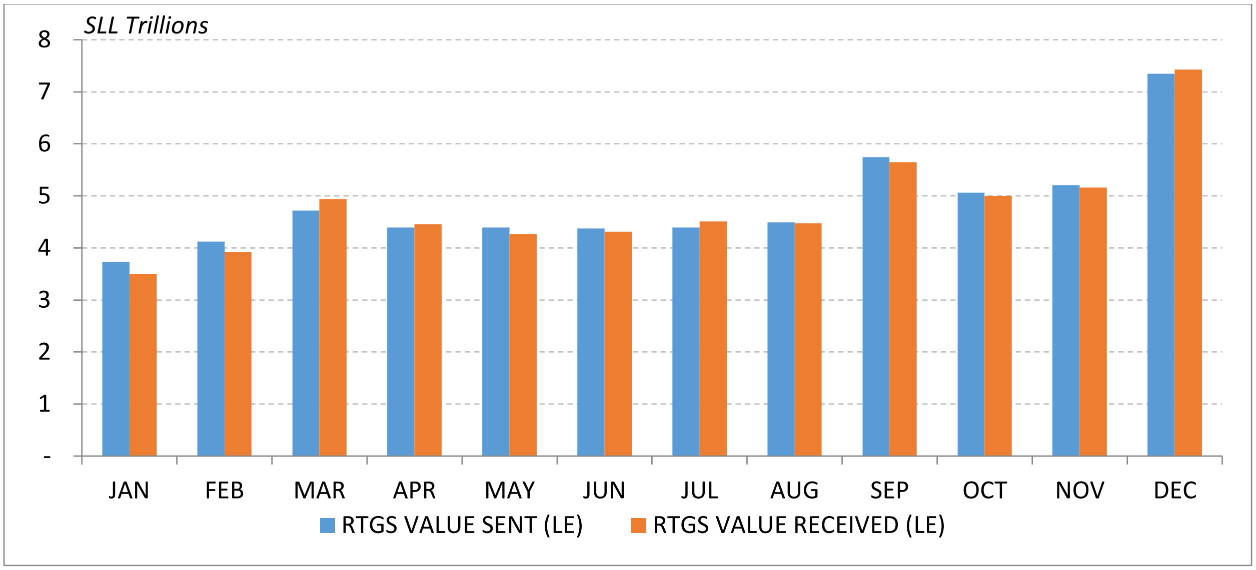
6.1 National Payments System Landscape

Sierra Leone has a dual payment system that is cash-based and non-cash-based payment system. The volume of cash transactions is very high while non-cash transactions also continue to increase. Since the launch of the Real Time Gross Settlement (RTGS) system in 2013, there has been significant improvement in the volume of non-cash payment. The non-cash transactions are categorized into retail and large-value transactions based on the value and the interbank systems that support the transactions.

6.1.1 Real Time Gross Settlement (RTGS) system

The Real Time Gross Settlement (RTGS) system is the large-value transactions settlement system of Sierra Leone. The RTGS is an electronic funds transfer system for the settlement of large value payments between and amongst banks in the country. It settles transactions on a real time basis. The system effects final settlement of inter-bank fund transfer on a continuous, transaction-by-transaction basis throughout the business day. Participating financial institutions can settle transactions and transfer funds among each other through the RTGS virtually and promptly.

Figure 6.1: The Value of Received and Sent RTGS Transactions in 2021



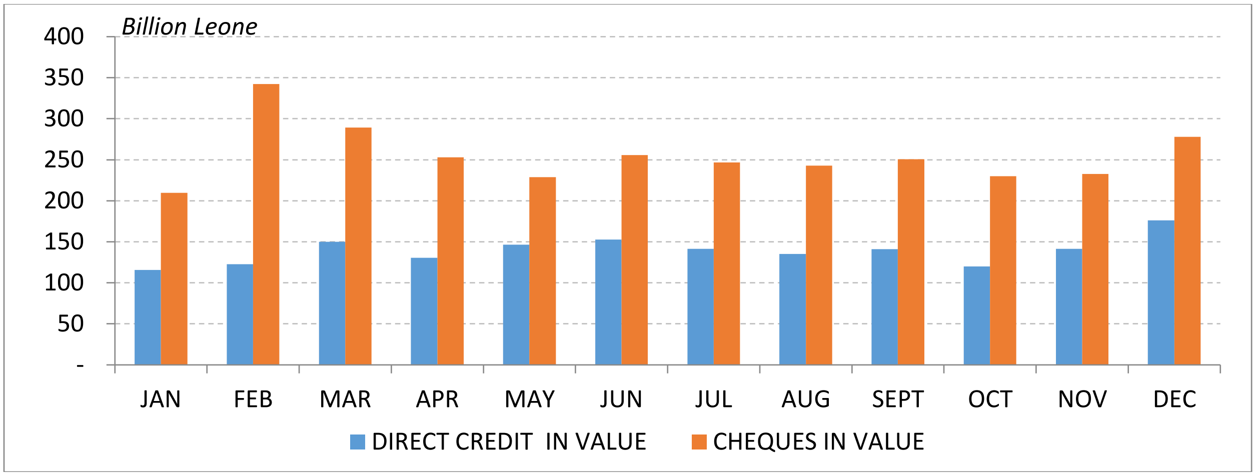
Source: Banking Department/BSL

Both the value and volume of transactions exhibits upward trends indicating the general acceptability of the system for interbank transactions. There is a clear pattern of large increases in both volume and value during the last month of the quarter (*Figure 6.1*).

6.1.2 Automated Clearing House

The Automated Clearing House (ACH) is the retail payment system through which a vast number of payment items (both paper-based and electronic) are cleared. These are mainly low-value (Not more than fifty million Leones) high-volume retail payment cheques. The ACH is providing more controls over the clearing and settlement system and has greatly reduced the clearing cycle from (T+ 9) to (T + 1) thereby making the system more efficient, that is processing transactions at least cost and at a faster rate.

Figure 6.2: Value of ACH Transactions in 2021



Source: Banking Department/BSL

The use of cheques is more widespread than the use of direct debits. The gap between the total values of cheque and direct debit transactions has narrowed but remained sizeable (*Figure 6.2*). In contrast, the use of direct credit as a means of interbank transactions is sustained and has prospect to improve in the near future.

6.1.3 Other Retail Payment Systems

The COVID lockdowns led to a temporary halt in the spread of ATMs and POS terminals in 2020 but 2021 saw the return to the upward trend, although the increase was much more prominent in the case of ATMs. The public acceptability of electronic means of transactions processing has clearly strengthened but the spread of ATMs and POS terminals mainly affects the Western Area (capital city), which still accounts for 77.12% of all ATMs and 89.22% for POS terminals as December 2021 (Table 6.1 and Table 6.2).

Table 6.1: Regional Spread of ATMs

Regions	2017	2018	2019	2020	2021
Northern province	14	8	16	10	18
Southern province	6	6	9	7	10
Eastern province	5	9	6	5	7
Western area	69	49	76	59	118
Total	94	72	107	81	153

Table 6.2: Regional Spread of POS Terminals

Regions	2017	2018	2019	2020	2021
Northern province	14	6	17	12	12
Southern province	16	11	14	8	9
Eastern province	4	3	2	3	4
Western area	209	211	268	205	207
Total	243	231	301	228	232

Source: Banking Department/BSL

The uneven distribution of ATMs and POS terminals leads to the de facto exclusion of large swaths of the population from the use of these payment services. Therefore, the planned implementation of a new digital financial services solution that would ensure the smooth flow of funds, especially from Government to people (G2P), is crucial for deepening financial inclusion.

6.2 Planned Payment Systems and Developments

6.2.1 Automating the Treasury Single Account (TSA) Management

The Bank has implemented an automated revenue sharing mechanism from the TSA institutions in 2021. Before automation, revenues from TSA institutions were manually calculated and shared among relevant beneficiaries as required by law on a weekly basis. This has aid revenue collection and make sharing seamlessly among beneficiary entities based on percentages required by law on a daily basis.

6.2.2 National Switch

The World Bank funded project targets the establishment of interconnectivity and interoperability of all retail payment infrastructures for increased efficiency and faster delivery of financial services. The national switch is also expected to help improve rural connectivity. The Bank is at the advanced stage of implementation of the National Payment Switch System, under the "Sierra Leone Financial Inclusion Project". The finalization of this project will enable commercial banks and other financial institutions to electronically talk to each other. When fully implemented, the National Switch will allow customers of one financial institution to seamlessly use the Automatic Teller Machines (ATMs) of other financial institutions and to use Point of Sale Machines to make payments in the country. The National switch is scheduled to go live by the end of 2022.

6.2.3 Electronic Fund Transfer (EFT) Project

The ETF is funded by Ministry of Finance. Its main objective is to facilitate the interoperability between the Bank of Sierra Leone's Core Banking Application, the so called T24, and the Accountant General's Integrated Financial Management Information System (IFMIS) in order to eradicate the manual processing of payments to banks through cheques and letters to electronic transfers. Currently, the project is at the testing stage.

6.2.4 Review of the Payment System Act

The ongoing modernization and improvement in the various payment system infrastructures in the country made it necessary to review the Payment Systems Act, which was established in 2009. In order to catch up with modern trends in the payment and settlement systems, the Act has been reviewed by the relevant stakeholders and it is now awaiting to be passed into law by the Parliament of Sierra Leone.

6.2.5 AFREXIMBANK – Pan-African Payments and Settlement System (PAPSS)

AFREXIMBANK, in collaboration with central banks in the WAMZ region, is working on a payment and settlement platform to resolve the challenges of cross border payments in the sub-region. PAPSS has introduced an instant payment solution that will interconnect the national payment systems within WAMZ and subsequently ECOWAS to promote regional trade.

The Bank of Sierra Leone is working with PAPSS on this project and are now at the stage of doing controlled transactions in the live environment.

6.3 Currency Redenomination

The Bank worked relentlessly on the redenomination of the local currency by removing three zeroes from the Leone. The design and security features of the redenominated currency were finalized by early 2021. The printing of the new notes and the minting of new coins have also been finished. A nationwide public education and sensitization campaign was done whilst the Bank of Sierra Leone and other major stakeholders recalibrated their IT infrastructures and accounting systems. The redenomination officially started on the 1st of July 2022, and it is planned to last until November 2022.

7 OUTLOOK

Global growth is projected to decline to 3.2 percent in 2022, after growing by 6 percent in 2021. Growth is projected to fall further to 2.7 percent in 2023 as forecasted by the IMF. The global outlook is challenged by the ongoing Russia-Ukraine war and tensions in the South China Sea region. Inflationary pressure is expected to persist in the near future with Advance Economies (AEs) and EMDEs inflation rates in 2022 projected at 7.2 percent and 9.9 percent respectively. Inflation is expected to moderate to 4.4 percent and 8.1 percent in AEs and EMDEs respectively in 2023.

Growth in the Sierra Leonean economy is projected by IMF to moderate to 2.4 percent in 2022 and increase to 3.3 percent in 2023. This growth outlook is challenged by significant downside risks and uncertainties arising from the war in Ukraine, the 2023 general elections, and the path of the COVID pandemic. Furthermore, inflation is projected to increase to 29.1 percent in 2022 but to drop to 27.6 percent in 2023 as assessed by the BSL's just concluded Monetary Policy Committee (MPC) meeting. The major risk factors to inflation include global food and energy prices and the depreciation of the Leone.

Global financial stability risks are expected to remain high amid the highest inflation in decades, extraordinary uncertainty resulting from the Ukraine war, and extreme market volatility. Global financial conditions are expected to remain tight as major central banks battle with rising inflation. This is expected to be the case in both advanced economies and emerging markets.

The banking sector is expected to remain sound in the near feature. Regulatory capital and liquidity ratios will remain very high as long as banks continue to hold large amount of government securities. However, the flipside of this is that the crowding out of bank finance to the private sector will remain a critical issue. Credit risk will remain a challenge in the near future and has the potential to lead to further deterioration in credit quality if the Russia-Ukraine war is prolonged beyond 2022. Exchange rate risk is expected to remain high as the Leone continues to depreciate against major trading currencies due especially to the current global inflationary shock and the uncertainties of the Russia-Ukraine War.

The outlook from the stress tests indicates that the banking sector will remain generally resilient to adverse shocks that might emerge in the future, despite the conservative assumptions. However, extreme shocks can still lead to systemic banking crisis even though the probability of this is marginal.

The outlook for OFIs is optimistic as the economy recovered partially from the COVID pandemic. The emergence of new fintech institutions and the improved use of technology is expected to make OFIs more efficient and stable. The insurance sector is expected to remain stable as the level of reinsurance has improved significantly. In addition, NASSIT is expected to improve its performance as more investment opportunities emerge after the COVID threat subside. However, that can be challenged by global risk factors such as the tight global financial conditions, the uncertainty from the Ukraine war, rising energy prices and global inflationary pressure.

The stock of government securities is expected to continue increasing while the rate of the 364-day treasury bills is expected to stay elevated, providing attractive investment opportunities for banks and supporting their bottom lines. This is all the more important because revenue from traditional bank business is expected to underperform due to the downward revision of the GDP growth forecast for 2022. The stability of the exchange rate will remain a challenge on the backdrop of tightening monetary policy in major central banks and global uncertainty as a result of the Ukraine-Russia War.

Finally, the payment infrastructure landscape will be greatly boosted with the go-live of the National Switch. The national switch is expected to boost efficiency and security of transactions in the financial system whilst improving interbank and rural connectivity. The Bank is at the advanced stage of implementation of the National Payment Switch System, under the "Sierra Leone Financial Inclusion Project". It is expected that the switch will go live by the end of 2022.