JUNE 2022
No. 03 | Year 03

FINANCIAL STABILITY REPORT

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Foreword

In light of the powers conferred by Law no. 1/92 of 3 January[1], the Banco de Moçambique (BM) has the mission of preserving the value of the national currency and promoting a sound and inclusive national financial sector.

To this end, the Banco de Moçambique implements, among others, macro-prudential policy, aimed at ensuring the stability of the financial system, with a focus on the banking sector, seeking to guarantee adequate levels of solvency and liquidity to enable it to contribute to crisis resolution and management, minimising global systemic risk.

The BM defines financial stability as maintaining a robust, efficient and resilient financial system, both to shocks and financial imbalances, which ensures the preservation of confidence among economic agents and contributes to mitigating systemic risk.

In order to assess systemic risk, the BM relies on a quantitative matrix that presents the dynamics of risk in the domestic financial system, with a view to measuring the resilience of the financial system and enabling timely decision-taking.

The BM issues the Financial Stability Report (REF) to reinforce communication on financial stability between the BM and the general public. This edition lists the main vulnerabilities and risks in the international and domestic macro-financial context, the performance of the Mozambican financial system, as well as the macro-prudential measures and regulatory initiatives implemented by the BM and other entities with legal powers, during 2021, which contribute to maintaining and reinforcing the stability of the financial system.

The Governor

Rogério Lucas Zandamela

[1] Law 1/92, of 3 January, Organic Law of the BM.

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Acronyms

BM	Banco de Moçambique (central bank of Mozambique)
Bp	Basis points
CE/GDP	Ratio of Credit to the Economy over Gross Domestic Product
COVID-19	Infectious disease caused by the SARS-CoV-2 virus or coronavirus, discovered in 2019.
DD	Demand Deposits
D-SIBs	Domestic Systemically Important Banks
DTI	Debt to Income
DUAT	Right of Land Use and Exploitation
IMF	International Monetary Fund
FC	Foreign Currency
FSR	Financial Stability Report
GDP	Gross Domestic Product
GFSR	Global Financial Stability Report
HHI	Herfindahl-Hirschman Index
ICSF	Credit Institutions and Financial Companies
ISSM	Insurance Supervision Institute
LTV	Loan to Value

MEF	Ministry of Economy and Finance
MVM	Securities Market
MZN	Metical
NFS	National Financial System
NPL	Non-Performing Loan
ROA	Return on Assets
ROE	Return on Equity
SADC	Southern African Development Community
S&P	Standard and Poor's
TD	Term Deposits
USD	United States dollar

Executive Summary

In 2021, global economic activity saw an upturn, although conditioned by the emergence of new variants of COVID-19, resulting from the relaxation of preventive measures against the pandemic. This performance contributed to the resilience of financial institutions worldwide, which showed robust levels of capital and liquidity and maintained the non-performing loan ratio at internationally acceptable levels.

Domestically, the national financial system continued to develop its financial intermediation and payment services activities in a context of military instability and adverse climatic events. In fact, the first months of 2021 were marked by the deterioration of the investment environment, due to the armed conflict in Cabo Delgado and cyclone Eloise in the central region of the country. However, the advances in combating military instability, in the second semester of 2021, as well as the relief of the restrictive COVID-19 containment measures, allowed for the recovery of the economy[2], contributing to the resilience of the financial system.

The banking sector recorded an annual increase in the solvency ratio of 13 bp, a growth in assets of 3.57%, an increase in profits of about 52.71%, liquidity that allows business continuity and no significant change in asset quality (10.60%). In turn, the overall production of companies in the insurance sector grew by about 10.8%, more than double the growth of 2020 (4.9%), in line with the performance of the domestic economy in the period under review, and market capitalisation, the main indicator of the Securities Market, had a positive variation of about 10.4%.

Systemic risk remained moderate, in spite of the downward trend in the financial stability index and the vulnerabilities of the domestic financial system. The reduction in the financial stability index was influenced by a reduction in the market risk and profitability and solvency categories, in a context in which the sovereign risk category remained severe, influenced by the increase in the balance of public debt.

[2] With a cumulative growth of 2.2% recorded for the year, following the 1.2% contraction in 2020.

To contain the risks and mitigate the vulnerabilities of the National Financial System, the BM decided to maintain all the macroprudential policy instruments. In the period under review, the capital conservation buffers for domestic systemically important and quasi-systemically important banks remained at 2.0% and 1.0%, respectively. The macroprudential lending requirements, imposed on credit institutions and financial corporations (ICSFs), namely the loan-to-value ratio (LTV) and debt service to income ratio (DTI) both remained capped at 100%.

I. INTERNATIONAL MACRO-FINANCIAL ENVIRONMENT

In 2021, global economic activity saw an upturn, albeit conditioned by the emergence of new variants of COVID-19, resulting from the relaxation of preventive measures against the pandemic including progress in inoculation programmes and economic support policies worldwide.

Expectations of a normalisation of monetary policy in the United States of America and the ongoing challenges of the COVID-19 pandemic worldwide, influenced the global financial markets with an increase in aversion to risk and, consequently, increased premiums associated with financial assets.

Globally, financial institutions remain resilient as a result of robust levels of capital and liquidity and the maintenance of the non-performing loan ratio at internationally acceptable levels.

The recent results of stress tests in the advanced economies (USA, Euro Zone and United Kingdom) and in some emerging economies (South Korea, China, Singapore and South Africa) show that the financial system remains prepared to withstand additional shocks, having influenced the decision to remove limitations imposed, at the beginning of the pandemic, by regulators in some economies[3] on the distribution of dividends.

Some European countries assessed their vulnerabilities upwards, especially those in the real estate market (Denmark, Czech Republic, Norway and Sweden), and as a result raised countercyclical capital buffers or signalled future increases.

Regionally, the South African financial system has a degree of resilience constrained by the volatility of its financial markets and asset price adjustments, yet it has maintained a remarkable performance and stress test results show a capacity to withstand a more severe adverse scenario.
This performance would have been more pronounced without the influence of some factors, external and internal, such as:

(i) the expected tightening in global financial conditions, as major economies scaled back stimulus and raised interest rates;

[3] Bank of England, European Central Bank, Federal Reserve - USA, Financial Services Commission (South Korea), and Monetary Authority of Singapore.

(ii) the slowdown in Chinese economic growth, a relevant trading partner of the South African economy; and

(iii) the popular demonstrations in South Africa in July 2021.

The Central Bank of Mauritius, which became the macroprudential authority in August 2021, reported improvements in banking sector resilience indicators in 2021, with capital and liquidity buffers held by banks at levels to contain financial shocks and preserve financial stability.

II. RISKS AND VULNERABILITIES OF THE MOZAMBICAN FINANCIAL SYSTEM

The first half of 2021 was characterised by intensified military instability in the northern region of the country, the occurrence of extreme climatic events (cyclones and floods) and the second wave of COVID-19, with an impact on public expenditure and revenue. Vaccination of the population, the easing of restrictive measures and progress in combating military instability marked the other half of the year.

Systemic risk remained moderate in December 2021, notwithstanding the reduction in the financial stability index compared to the previous year.

2.1. System vulnerabilities

The national financial system continued to develop its financial intermediation and payment services activities without disturbance, despite the vulnerabilities resulting from the successive shocks that have been shaking the domestic economy.

Among the main vulnerabilities are the deterioration of the investment environment due to military instability in Cabo Delgado, adverse climatic factors, especially cyclone Eloise, public sector debt and the international market confidence in the country.

2.1.1. Military instability in the central and northern regions of the country

The first months of 2021 were marked by the intensification of military instability in the province of Cabo-Delgado, which experienced its most dramatic moment with the terrorist attack on the district headquarters of Palma, which culminated in the suspension of the Mozambique LNG project in April of the same year and led the population to abandon the affected regions.

The deterioration of the military situation allowed for receiving international aid to combat the action of terrorists, as relative calm and stability marked the second half of 2021. Even so, the resumption of multinationals' oil projects was conditional on the restoration of a stable and sustainable climate of security.

The central region of the country recorded relative military stability, especially in the second half of the year, in a year marked by financial constraints for advancing the Disarmament, Demobilisation and Reintegration (DDR) process.

The military instability in the country has influenced economic activity and increased government spending on military logistics and humanitarian assistance, in addition to limiting financial inclusion.

The destruction of public and private infrastructure, including bank branches, and the looting of deposited cash has affected the cost structure of credit institutions in the affected districts.

This situation had financial implications for domestic economic agents involved in exploring local content opportunities and eligible to service projects related to energy resource exploration, as well as it affected the international market confidence in the country.

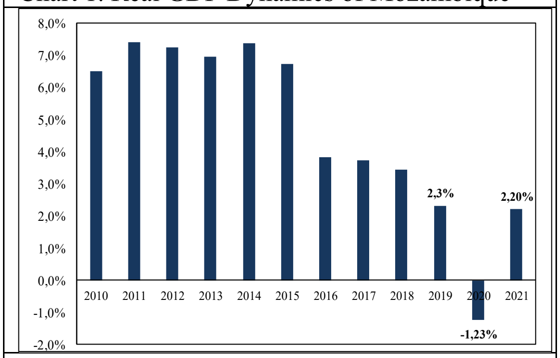
2.1.2. Adverse climatic factors

Mozambique has been repeatedly affected by adverse climatic events due to its geographical location, posing a huge threat to macroeconomic stability and the national financial system.

In January 2021, the provinces of Manica, Sofala and Zambézia, in the central region of the country, were affected by cyclone "Eloise", confirming the increased frequency of extreme events, with an impact on infrastructure (roads, factories, crop fields, among others) and on the well-being of the population, generating economic and social costs.

In addition, these events impacted production levels, affecting the ability of families and companies to honour their commitments to the banking sector, and overall conditioned economic growth, as a result of the destruction of infrastructure and production (Chart 1).

Chart 1. Real GDP Dynamics of Mozambique



Source: INE

2.1.3. Public sector debt

In 2021, the State's domestic debt, an indicator that affects the evolution of systemic risk, increased by 30.5 billion meticais, reflecting the use of Treasury Bills to finance the current account deficit, in a context of weak demand for public debt securities (Treasury Bonds) in the capital market.

This performance of domestic debt, in a year in which the external debt was reduced considerably, influenced the dynamics of the total debt stock (Table 1).

Table 1. Public Debt Stock - billions of meticais

Description	Dec-19	Dec-20	Dec-21
External Debt	599,48	701,7	663,3
Domestic Debt	154,60	196,92	227,45
Total Debt	**754,08**	**898,62**	**890,75**

Source: MEF

The 2021 budget execution (Table 2) shows that the pressure on the public expenditure side resulted from spending in the health and social welfare sector, justified by the effort to contain the impacts of the COVID-19 pandemic and mitigate its effects on household income, as well as on account of spending to combat military instability.

Table 2. Evolution of Public Expenditure and Revenue – billions of meticais

Description	Dec-19	Dec-20	Dec-21
State Revenue	281,71	236,32	266,79
State Expenditure	305,86	340,22	356,70
Deficit/Financing	**24,15**	**103,90**	**89,91**

Source: MEF

2.1.4. International market confidence in the country

In 2021, the international market confidence in the country showed signs of improvement, driven by the start of legal proceedings in light of the undisclosed debts case and the negotiations with the IMF for the resumption of the financing programme, coupled with advances made in the military environment in Cabo-Delgado.

In effect, international market[5] confidence in the country remained at the substantial risk level[6], even though Moody`s rating agency improved its rating from stable Caa2 to positive Caa2.

Table 3. Country ranking in the international market[4]

Agency	Dec 18	Dec 19	Dec 20	Dec-21
Moody's	Caa3 (negative)	Caa2 (stable)	Caa2 (stable)	Caa2 (positive)
Standard & Poor's	SD	CCC+ (stable)	CCC+ (stable)	CCC+ (stable)
Fitch Ratings	RD	CCC	CCC	CCC

Source: Moody's; S&P; Fitch

The substantial risk classification in the international market imposes restrictions on access to international financial markets, which may increase market risk in the domestic financial system[7] in the exchange rate and interest rate components (Table 3).

Compared to the countries of the SADC region, Mozambique has one of the lowest ratings, and this may be a penalising factor in attracting investment to the country (Table 4).

Table 4. Ranking of the SADC countries in the international market

Countries/Agency	Moody's	Standard & Poor's	Fitch Ratings
Mozambique	Caa2 (positive)	CCC+ (stable)	CCC
South Africa	Ba2 (negative)	BB- (Stable)	BB-
Angola	B3	B-	B-(stable)
Zambia		SD	RD
Botswana	A3	BBB+	
Mauritius	Baa2		
Malawi			B-

Source: Moody's; S&P; Fitch

2.1.5. The COVID-19 Pandemic

The emergence of three waves of COVID-19 (associated with three new variants) during the year led to the adoption of restrictive measures, previously relaxed in times of improvement, to contain the spread of the pandemic, and affected the pace of recovery of economic activity.

In the period under review, the implementation of restrictive measures reduced, on the demand side, the income and confidence of companies, as well as households, which adjusted consumption patterns to the reduction in income.

Regarding supply, the most direct transmission channel was associated with

[4] **CCC+**: substantial risk; **Caa2:** substantial risk; **Caa3: substantial risk; CCC**: substantial risk; **SD:** default; **RD:** default.

[5] The country's confidence in the international market is used by investors to make investment decisions in a given economy.

[6] Rating achieved in October 2019, after the removal of the financial *default* category.

[7] Considering the weight of the banking sector in the domestic financial system.

the impossibility of certain activities being developed, especially the tourism sector (hotel and restaurant business), with the potential to increase the level of default credit in the banking sector.

Despite the constraints created by the pandemic, the country recorded accumulated growth of 2.2% in 2021 (against a contraction of 1.2% observed in 2020), explained in large part by the easing of the restrictive COVID-19 containment measures at favourable times, consolidating the prospects of economic recovery, with the potential to reduce the country's exposure to this vulnerability and contribute to the stability of the financial system.

2.2. Systemic risk assessment

The systemic risk assessment is based on a matrix, which is a quantitative tool, presenting the dynamics of risk in the Mozambican banking sector.

The matrix is composed of nineteen indicators grouped into the following six categories:

(i) macroeconomic risk;

(ii) sovereign risk;

(iii) profitability and solvency risk;

(iv) credit risk;

(v) funding and liquidity risk; and;

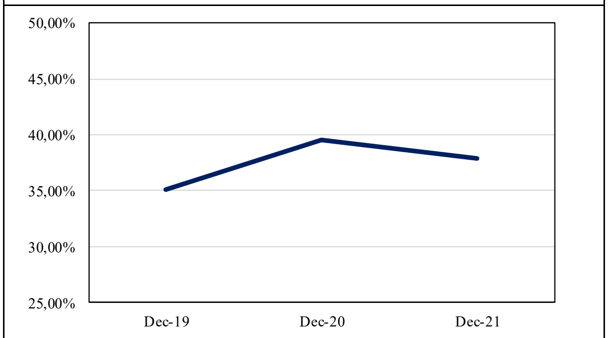
(vi) market risk.

Systemic risk is measured through a financial stability index, which can be classified as low, moderate, high and severe.

In December 2021, systemic risk remained moderate, notwithstanding the reduction in the financial stability index by 1.74 pp, compared to the same period in 2020, to 37.85% (box 1 - methodology for calculating the financial stability index).

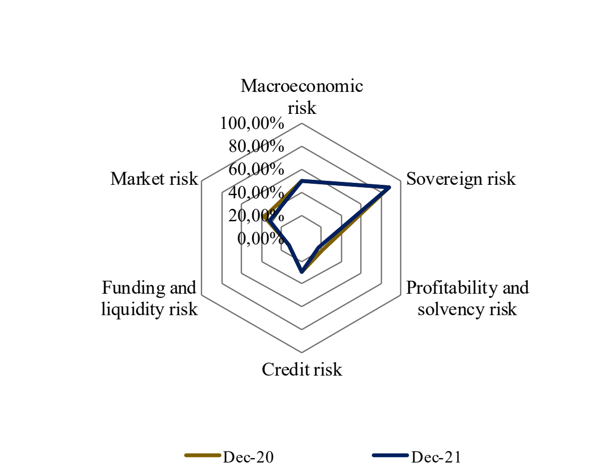
This slowdown in the financial stability index was influenced by the reduction in the market risk and profitability and solvency indices, which fell from 37.50% and 20.83% in December 2020 to 31.25% and 16.67% in December 2021, respectively (see Charts 2 and 3, where risk increases from the centre to the outside of the web).

Chart 2. Systemic risk index



Source: BM

Chart 3. Evolution of Systemic Risk (%)



Source: BM

The assessment by risk category allows us to make the following observations:

2.2.1. Macroeconomic risk

In December 2021, macroeconomic risk remained high due to the rise in inflation, despite the acceleration in economic activity.

In effect, inflation rose from 3.52%, low risk, in December 2020, to 6.74%, high risk, in December 2021. In turn, GDP growth went from -1.77%, severe risk, in the fourth quarter of 2020, to 3.32%, moderate risk, in the same period of 2021.

The behaviour of the indicators in this risk category was influenced by the following factors:

- With regard to economic growth, (i) the easing of internal and external restrictive measures in relation to the Covid-19 pandemic (with an impact on the improvement of internal and external demand) and, (ii) the favourable evolution of the prices of the main export commodities;
- As for inflation, (i) the reduction in the domestic supply of agricultural products, resulting from the climatic shocks that hit the country in 2021 and, (ii) the increase in freight costs of goods in the international market.

2.2.2. Sovereign risk

In December 2021, sovereign risk remained severe, due to the maintenance of the upward trend in the ratios of credit to government/total credit and public debt/GDP.

In effect, the ratio of credit to government to total credit rose from 39.76% in December 2020 to 44.74% in December 2021 and the public debt to GDP ratio rose from 97.35% to 89.85%. over the same period.

These deteriorations were basically influenced by the increase in the public debt balance, in a context of a slight expansion of economic activity after the contraction registered in the previous year.

The increase in the ratio of credit to the Government/Total Credit shows that banking institutions continue to favour investments in Government securities to the detriment of credit to the economy.

2.2.3. Profitability and solvency risk

In December 2021, the profitability and solvency indicators remained satisfactory, namely at low and moderate risk, which shows that the banking sector remains robust, is sufficiently capitalised and was resilient to the adversities seen in the period.

In December 2021, the solvency ratio for the banking sector was 26.19%[8] , which is 14.19 pp higher than the minimum legal limit set by law for banks.

With regard to profitability, the sector showed a positive performance, contributing to maintaining the category's low risk, with an increase in the respective indicators (ROA and ROE) during 2021.

In fact, in the period under analysis, the banking sector had a positive net result equivalent to 3.10% of total assets (ROA) and 25.15% of shareholders' equity (ROE), after a positive result equivalent to 2.20% and 18.75%, of total assets and shareholders' equity, respectively, in the same period of the previous year.

2.2.4. Credit risk

In December 2021, credit risk remained moderate.

On the one hand, the NPL ratio remained stable, at around 10.00%, high risk, despite the negative effects of the adversities that hit the country during the period in question, reflecting the banks' increased prudence in managing their respective credit portfolios.

On the other hand, the indicators of growth of credit to the economy and the gap of the ratio of credit to the economy over gross domestic product (CE/GDP) in its long-term trend remained at low risk.

Growth in credit to the economy decelerated by 11.96 pp, from 14.62% in December 2020 to 2.66% in December 2021.

[8] After 26.06% in December 2020.

2.2.5. Funding and liquidity risk

In 2021, funding and liquidity risk remained low.

Both the loan-to-deposit ratio and the short-term liquidity coverage ratio remained at low risk during the period, as a result of the high liquidity in the market and the weak growth of credit to the economy.

2.2.6. Market risk

In December 2021market risk remained moderate, despite the reduction of the respective index by 6.25 pp compared to the same period in 2020, to 31.25%.

This decrease was influenced by the reduction in the volatility of the Metical exchange rate against the US dollar, which settled at low risk in December 2021, after having registered a moderate risk percentage in December 2020.

The other risk indicators of the category, namely the ratio of foreign currency (FC) deposits to total deposits, the ratio of FC loans to total loans and the financial system's prime rate were stable during the period under review, favouring the maintenance of the moderate market risk.

Box 1. Methodology for the calculation of the Financial Stability Index

The systemic risk assessment is based on a financial stability index that is determined through a systemic risk matrix, composed of 19 risk indicators, grouped into six risk categories, which correspond to the main sources of systemic risk in the Mozambican banking sector, namely:

- macroeconomic risk;
- sovereign risk;
- profitability and solvency risk;
- credit risk;
- funding and liquidity risk; and
- market risk.

For each of the indicators, four risk intervals have been defined, namely: low, moderate, high and severe risk, and the respective thresholds have been set on the basis of regulatory prudential limits, supervisory judgements, good practices and international experiences.

To determine the financial stability index, weightings were established to represent the risk situation of each indicator, whereby low risk was weighted at a maximum threshold of 27.5%, moderate risk at 50.0%, high risk at 72.5% and severe risk at 95.0%.

The first step in determining the general financial stability index is to calculate the index for each risk category, which is obtained from the average of the weighted risk values of the respective indicators. In turn, the financial stability index is determined through the average of the indices of the risk categories.

For the financial stability index, both the risk categories and the overall systemic risk, four risk ranges have been defined:

5.0% - 27.5% - low risk;

27.5% to 50.0% - moderate risk;

50.0% to 72.5% - high risk;

72.5% - 95.0% - severe risk.

In other words, financial stability is inversely proportional to the value of the respective indicator. In other words, systemic risk is greater the higher the value of the financial stability index.

Box 2. Real Estate Credit

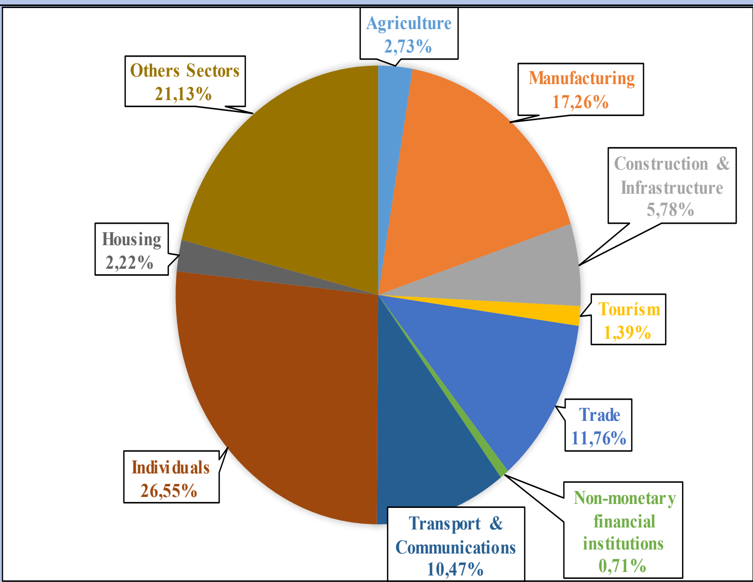
Home loans are one of the most important components of bank loans, especially for an emerging economy. This product is offered by financial institutions for the purchase, construction or renovation of real estate.

Chart 4, reports the distribution of credit by activity sectors, according to the Classification of Economic Activities of Mozambique (CAE_Rev.2). The most financed sectors are individuals (26.55%), miscellaneous (21.13%), manufacturing (17.26%), commerce (11.76%) and transport and communications (10.47%).

It is noted that the share for housing stood at about 2.22%.

The low adherence to the sector may be related to some limitations with emphasis on:

Chart 4. Credit to the economy by sector



Source: BM

- Banks require several documents to undertake the process, namely:
  - ✓ Promissory contracts, title deeds, real estate certificates, insurance, among others, for the acquisition of real estate already built;
  - ✓ Right of Land Use and Exploitation (DUAT), building permits from municipalities, fees and others, for the purpose of self-construction;

- Low income in Mozambique (GDP per capita of around USD 467.00), which has worsened due to the recessive scenario[9] and the history of high interest rates[10] (Chart 5);
- High property prices on the market, given the income of most of the Mozambican population;
- The economic cycle that the country is undergoing, characterised by weak aggregate demand and fears about the capacity of families and companies to honour their commitments.

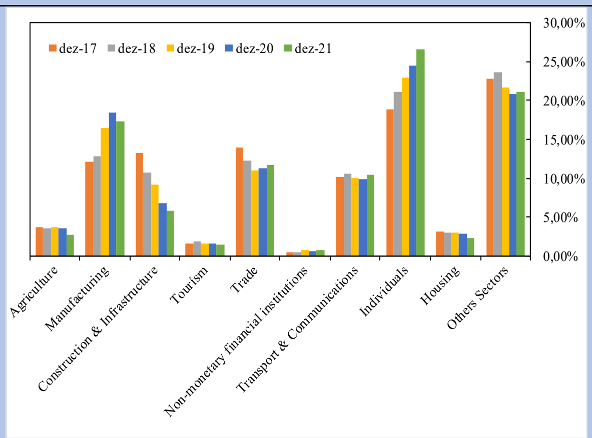
However, this figure should be interpreted with caution, since due to various factors (misclassification, financial literacy, excessive bureaucracy, etc.) a considerable part of the credit to individuals and sundry or miscellaneous may be going to the real estate sector[11] .

Chart 5. Interest rates on loans in local currency (%)

Source: BM

The other highlight is the fact that credit to individuals has grown over the last five years, similarly to that allocated to manufacturing (Chart 6).

Chart 6. Credit to the economy by sector



Source: BM

The difficulties in discerning the various uses to which loans to individuals and various types of loans are directed require caution in the banking sector's exposure to this type of credit, particularly in a context where the quality of the sector's assets is not desirable. This fact perhaps justifies, in part, the reduced percentage of financing for housing.

In effect, by analysing data on housing credit and loans to individuals, on a quarterly basis, from December 2002 to December 2021, it can be concluded that the housing market may represent a key element to consider[12] , when trying to measure the costs of a potential default in the credit portfolio, particularly with regard to the evolution of NPL and credit risk, the most relevant banking risk.

In fact, NPL tends to worsen and there is still a growth trend in non-performing loans, measured in flows, although at a less pronounced pace (Chart 7), suggesting the need for contingency plans to ensure the banking sector's resilience in the event of shocks.

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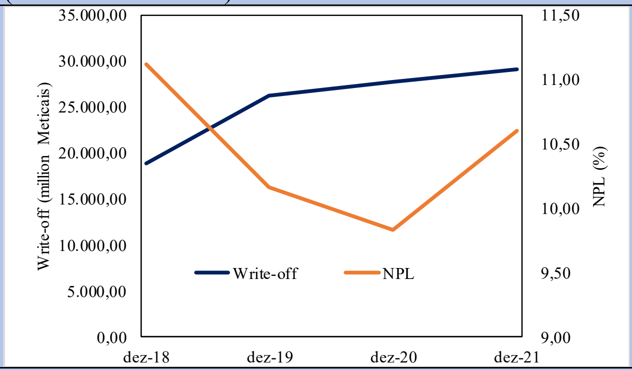
[9] GDP growth rate of -1.23% in 2020

[10] The lending interest rates for one-year maturity stood at 20.32% for the portfolio and 17.59% for new operations.

[11] As can be seen in Chart 4, around half of the credit (49.90%), is geared towards families, with a large part of this financing being associated with the real estate sector.

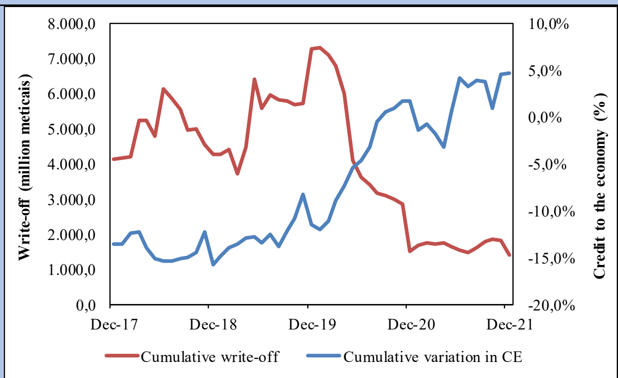
[12] On the assumption that a large proportion of private credit is for housing and other durable goods.

Chart 7. Evolution of NPL(%) and performing loans (millions of meticais)



Source: BM

Chart 8. CE variation vs cumulative variation in write-off



Source: BM

Chart 8 shows that the CE continued with the growth trend in the system, highlighting the financing to private companies and private individuals, respectively.

Over the period under review, non-performing loans decelerated, thanks in part to the loan relief and renegotiation measures implemented by the banks.

These two phenomena reinforce the permanent need for monitoring, essentially in the business and private sectors, to reduce the risk associated with credit and to better manage crises.

III. PERFORMANCE OF THE FINANCIAL SYSTEM

3.1. Banking sector

Notwithstanding the effects of the COVID-19 pandemic and military instability, the banking sector, which dominates the provision of financial services, remains sound, stable, profitable and liquid, even if NPL remain high.

Capital and liquidity levels are above regulatory requirements; therefore, profitability and solvency and liquidity risks remain low.

However, credit risk remains a concern, due to the high rate of credit defaults, which has been contributing to the deterioration in asset quality.

3.1.1. Structure and composition of the banking sector

As of December 2021, 27 credit institutions (15 banks, 11 microbanks and 1 cooperative) and 5 financial companies (2 investment companies and 3 foreign currency institutions) were in operation in the banking system (Table 5).

Table 5. Banks operating in Mozambique

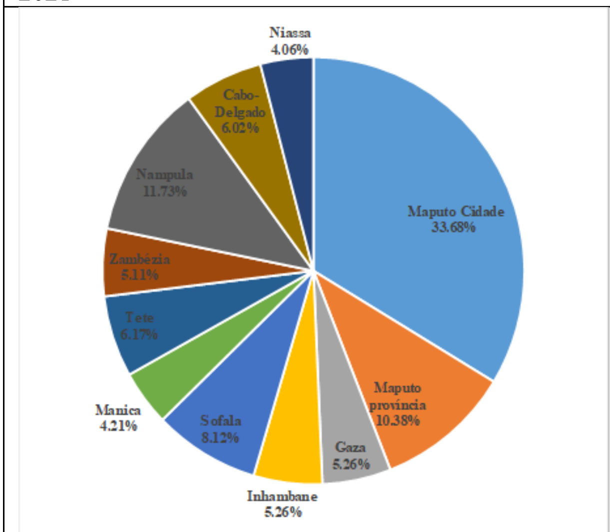
Nº	Institution	Capital
1	ABSA Bank Moçambique, SA	Private Foreign
2	Access Bank Moçambique, SA	Private Foreign
3	Banco Comercial e de Investimentos, SA	Private Foreign
4	Banco de Investimento Global, SA	Private Foreign
5	Banco Internacional de Moçambique, SA	Private Foreign
6	Banco Nacional de Investimento, SA	Public
7	Ecobank Moçambique, SA	Private Foreign
8	First Capital Bank (Mozambique), SA	Private Foreign
9	FNB Moçambique, SA	Private Foreign
10	Banco Letshego, SA	Private Foreign
11	Moza Banco, SA	Private Domestic
12	Nedbank, SA	Private Foreign
13	Standard Bank Moçambique, SA	Private Foreign
14	Banco Société Générale Moçambique, SA	Private Foreign
15	United Bank for Africa Moçambique, SA	Private Foreign

Source: BM

In terms of the geographical coverage of the credit institutions' branch network throughout the national territory, in the period concerned, the banking system was composed of 747 branches, namely 665 banks, 81 micro-banks and 1 credit cooperative.

In terms of distribution across the country, bank branches are concentrated in Maputo City, Nampula, Maputo Province and

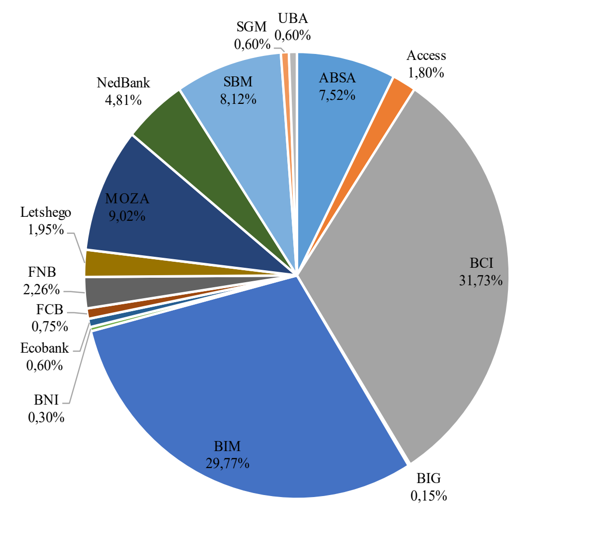
Chart 9. Bank branches by province as of December 2021



Source: BM

Sofala Province with 33.68%, 11.73%, 10.38% and 8.12%, respectively (Chart 9). Regarding the number of branches in operation, BCI leads the market share of banks with about 31.73% of the total, followed by BIM, MOZA, Standard Bank and ABSA with 29.77%, 9.02%, 8.12% and 7.52%, respectively (Chart 10).

Chart 10. Branches by bank in December 2021

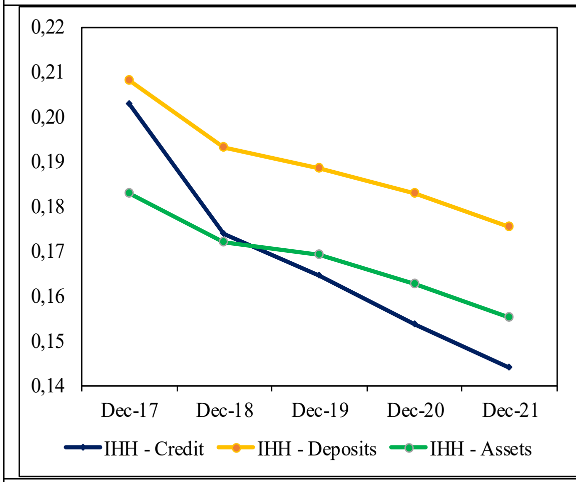


Source: BM

3.1.2. Concentration levels in the banking sector

In the period under analysis, the level of banking concentration, measured by the Herfindhal - Hirschman index (HHI) was moderate, standing between 0.14 and 0.18 (Chart 11), maintaining the downward trend of recent years, due to the entry into operation of new credit institutions, a change in composition, an increase in the branch network and a consequent increase in turnover, which translates into an improvement in competition in the banking sector.

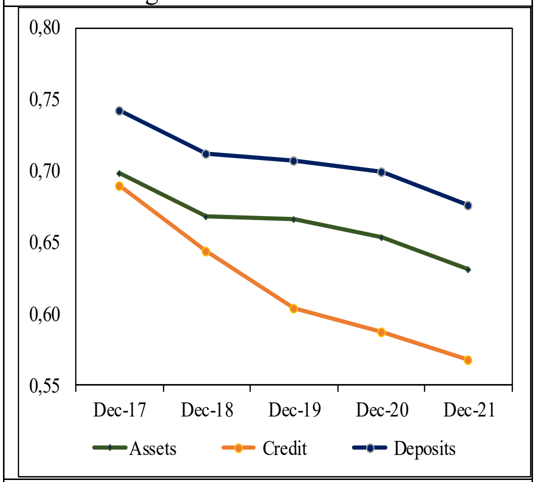
Chart 11. Evolution of concentration levels in the banking sector - Herfindahl-Hirshmann Index (HHI) - December 2021



Source: BM

The three systemically important banks, namely Banco Internacional de Moçambique (BIM), Banco Comercial e de Investimentos (BCI) and Standard Bank, accounted for **63.16%, 67.63%** and **56.80%** of all deposits, assets and credits in the banking sector, respectively (Chart 12).

Chart 12. Evolution of concentration levels of the three largest banks - December 2021



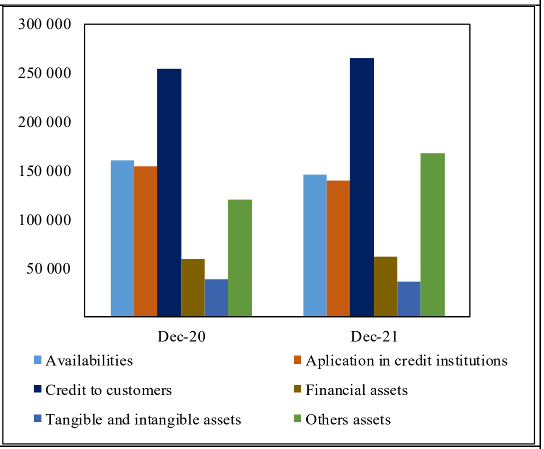
Source: BM

3.1.3. Balance Sheet Structure

3.1.3.1. Assets

At the end of the financial year 2021, the total assets of the banking sector amounted to 814.4 billion meticais, a growth of 3.57% compared to the same period of the previous year, and a decrease, in relation to GDP, from 80.00% in December 2020 to 77.00% in December 2021. This variation was mainly influenced by the increase in other assets (39.68%) and financial assets (4.48%) (Chart 13).

Chart 13. Asset items - December 2020



Source: BM

Credit institutions continued to favour investment in highly liquid, profitable and lower-risk assets. These assets, consisting of cash and cash equivalents, investments in credit institutions and financial assets, accounted for 42.50% of total assets (against 47.62% in December 2020).

Credit, net of impairments, continues to represent a substantial portion of the banking sector's balance sheet, reaching the weight of 32.51% (32.30%, in December 2020)

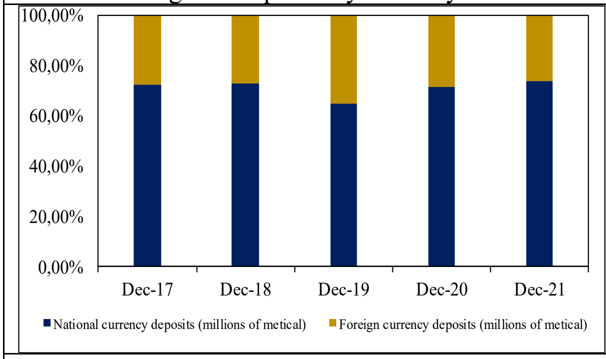
3.1.3.2. Liabilities and equity

In the period under review, the total liabilities of the banking sector stood at 662.1 billion meticais, an expansion of 9.8 billion meticais (1.51%) compared with the figure for the same period in 2020.

This variation resulted fundamentally from the increase in deposits of 5.8 billion meticais, or 1.03% in relation to the previous year. Deposits constitute the greatest source of funding of credit institutions and represent 86.65% of total liabilities.

Deposits stood at 573.7 billion meticais, of which 74.16% (425.4 billion meticais) were in national currency and 25.84% (148.3 billion meticais) in foreign currency. Over the period concerned, deposits in national currency increased by 19.2 billion meticais (4.72%) while deposits in foreign currency decreased by 13.3 billion meticais (8.25%). The weight of foreign currency deposits in the total deposit structure has been decreasing as a result of the measures taken to reduce the dollarisation of the economy (see Chart 14).

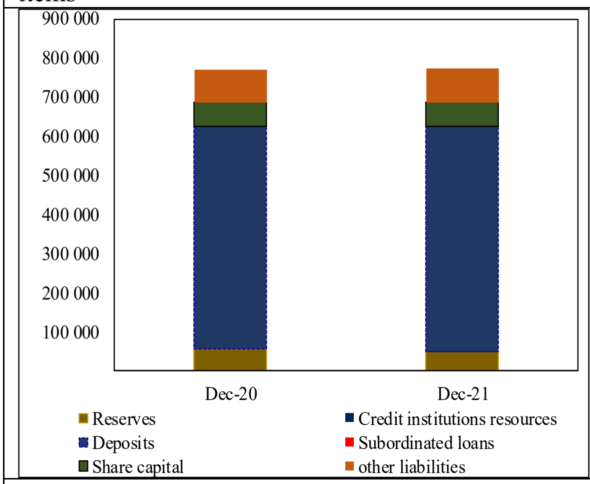
Chart 14. Weight of deposits by currency



Source: BM

The equity of the banking sector totalled 152.3 billion meticais, an absolute increase of 18.2 billion meticais (13.60%) over that in December 2020, mainly due to the growth in net income for the year by 52.71%. Of the total equity, approximately 61.6 billion meticais (40.42%) corresponded to share capital (Chart 15).

Chart 15. Main liabilities and shareholders' equity items



Source: BM

3.1.4. Financial strength indicators

3.1.4.1. Capital adequacy

The domestic banking sector remained sufficiently capitalised to face economic and financial risks, as evidenced by capital ratios that were well above regulatory minimums.

The aggregate solvency ratio increased by 0.13 pp compared to the previous year, to 26.19% (14.19 pp above the regulatory minimum of 12.00%), justified by the increase in eligible own funds (12.74%), which was lower than the increase in risk-weighted assets (12.19%).

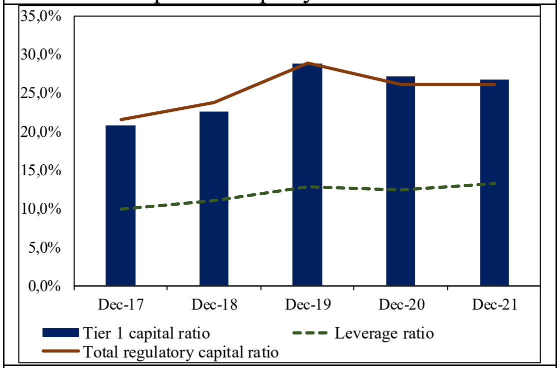
The core solvency ratio (Tier I)[13] on risk-weighted assets stood at 26.71% (27.18% in December 2020), having deteriorated by 0.46 pp, due to the growth in risk-weighted assets (12.19%) higher than the increase in Tier I (10.28%). This variation represents a slight deterioration in the coverage of higher quality capital over risk-weighted assets.

The leverage ratio[14] stood at 13.27% (12.46% in December 2020), another capital adequacy indicator that provides information on the extent to which assets are financed by equity (see Chart 16).

[13] Tier I corresponds to the sum of Basic Own Funds, in accordance with **Notice 09/GBM/2017, of 5 June.**

[14] It establishes the relationship between Tier 1 and total assets less intangibles.

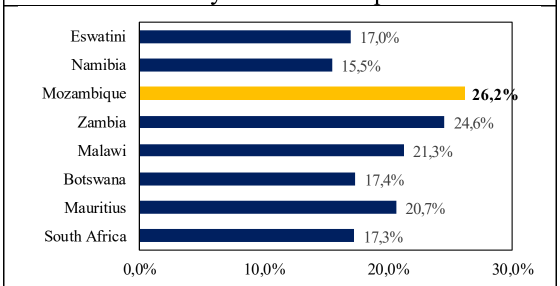
Chart 16. Capital Adequacy



Source: BM

Compared to some countries in the southern African region, the solvency ratio of the domestic banking system is high (Chart 17).

Chart 17. Solvency – SADC comparison



Source: IMF

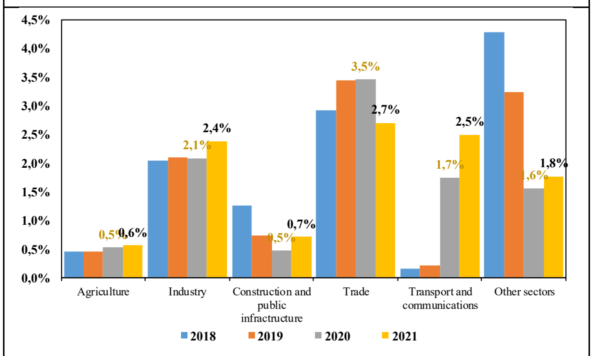
3.1.4.2. Quality of assets

Poor quality assets and a concentration of applications may lead to insolvency problems, compromising growth expectations, competition and the continuity of the credit institution. It is therefore necessary to ensure prudence and diversification when granting credit.

In the period under review, asset quality, as measured by NPL, remained relatively unchanged and above the conventional benchmark of 5%. In fact, the non-performing loan ratio[15] (NPL) was 10.60%, against 9.83% for the same period of 2020.

In terms of NPL contribution by activity sectors in December 2021, trade, as in 2020, had the largest contribution with 2.7%, followed by transport and communications with 2.5%[16] and industry with 2.4% (Chart 18).

Chart 18. NPL contribution by activity sectors



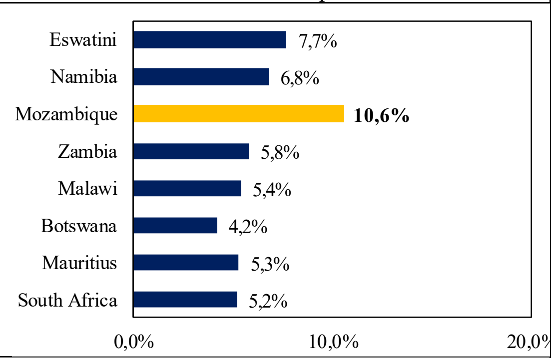
Source: BM

[15] Credit more than 90 days overdue on total credit.

[16] This sector has seen marked growth in recent years.

Compared to some countries in the Southern African region, the level of default in Mozambique is the highest (Chart 19).

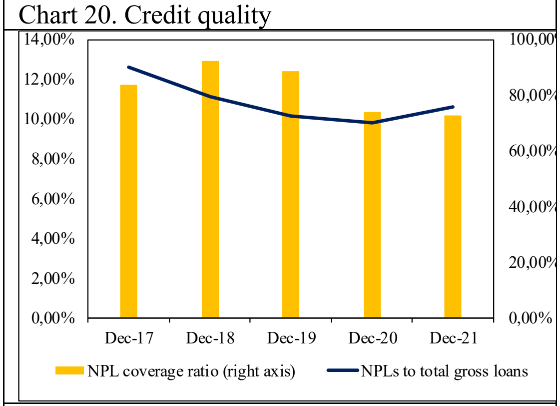
Chart 19. NPL – SADC comparison



Source: IMF

The NPL coverage ratio by specific provisions decreased from 74.1% in December 2020 to 72.6% in December 2021 (Chart 20).

Chart 20. Credit quality



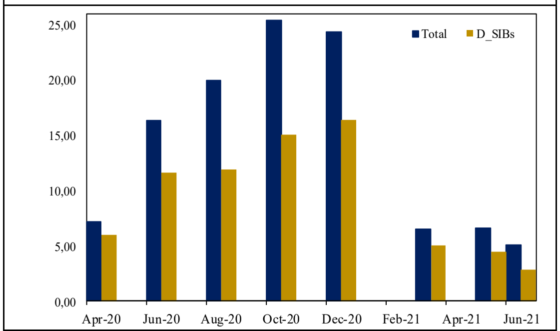
Source: IMF

The NPL could have a more expressive value if the BM, in order to safeguard financial stability and mitigate the impact of the COVID-19 pandemic on the banking sector, had not granted an exceptional authorisation for credit institutions and financial companies not to make additional provisions in cases of renegotiation of the terms and conditions of loans, prior to their maturity, for clients affected by this pandemic.

Restructured credit

In April 2020, restructured credit was 7.2 billion meticais, peaking at 25.4 billion meticais in October 2020 and reaching a low of 5.1 billion meticais in June 2021 (Chart 21).

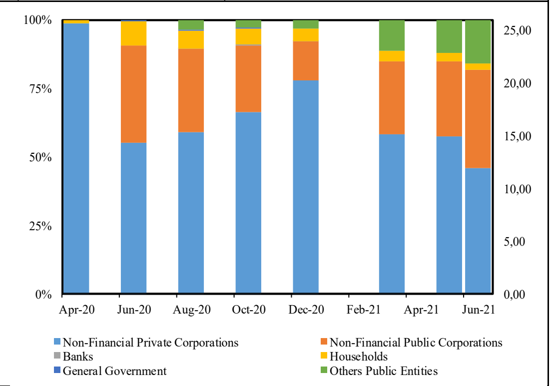
Chart 21. Volume of restructured credit



Source: BM

These restructurings were more pronounced for systemically important institutions (Chart 21), which hold more than 60.0% of the sector's total credit portfolio, throughout the period of adoption of the COVID-19 pandemic relief measures in the financial system, a trend that slowed until June 2021.

Chart 22. Distribution of restructured credit (billions of meticais)



Source: BM

With regard to the sectors that have benefited most from restructuring, private companies stand out, followed by public companies, other public entities and private individuals (Chart 22).

3.1.4.3. Profitability

Despite the adversities caused by the economic and health crisis due to the global pandemic (Covid-19), the banking sector continued to record profits, with net income for the year increasing by 8.5 billion meticais to 24.5 billion meticais in December 2021. This variation is justified by the increase in net commissions by 3 billion meticais (25.30%), net interest income by 8.9 billion meticais (corresponding to 18.30%) and income from financial operations by 0.6 billion meticais (7.23%).

In December 2021, the main profitability indicators of the banking sector had a mixed performance compared with the same period of the previous year (see Table 6):

Table 6. Key Profitability Indicators

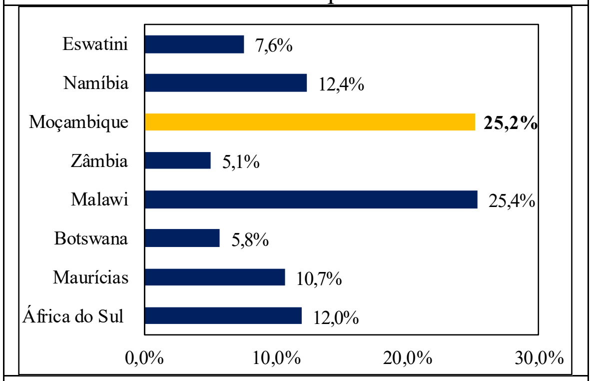
Description	Dec-19	Dec-20	Dec-21
ROA	2.96%	2.20%	3.10%
ROE	24.93%	18.75%	25.15%
Net Interest Margin Ratio	67.55%	65.89%	64.08%
Cost-to-income ratio	59.25%	62.05%	53.75%

Source: BM

- Return on assets (ROA) stood at 3.10% (2.20% in December 2020);
- Return on equity (ROE) stood at 25.15% (18.75% in December 2020) ;
- The weight of net interest income in operating income decreased from 65.89% in December 2020 to 64.08% in December 2021, which shows the decline of financial intermediation in the generation of results;
- The cost-to-income ratio stood at 53.75% (62.05% in December 2020), down 13.39 pp, indicating an improvement in banking efficiency.

The profitability of the domestic banking sector, as measured by ROE, was higher than most of the SADC countries included in the sample below, with the exception of Malawi (Chart 23).

Chart 23. ROE – SADC comparison



Source: IMF

3.1.4.4. Liquidity and fund management

In the period under review, liquidity indicators maintained the growth trend of the last three years, which ensures the continuity of the banking sector's financing operations (Table 7).

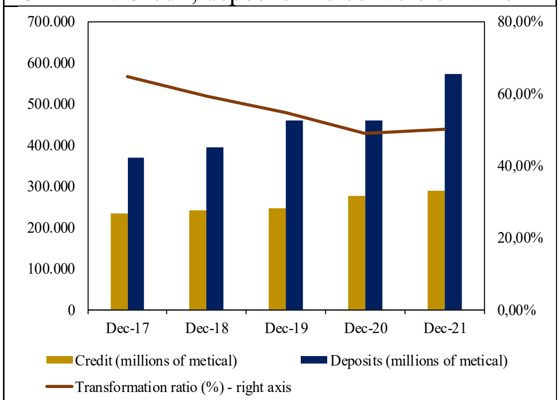
Table 7. Principal Indicators of Liquidity

Ratio	Dec-20	Dec-20	Dec-21
Liquid Assets / Total Deposits	57.14%	58.89%	67.98%
Net Assets/Total Assets	39.32%	42.53%	47.89%
Short-term liquidity coverage	56.13%	58.54%	68.30%
Rate of conversion of deposits into credit	54.74%	48.94%	50.22%

Source: BM

The rate of conversion of deposits into credit stood at around 50.22%, due to the 3.72% increase in credit, which exceeded the rate of growth in deposits by 1.08% (Chart 24).

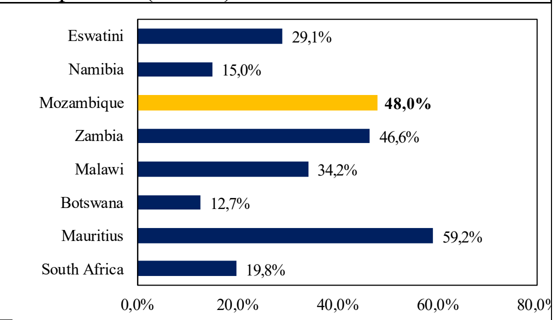
Chart 24. Credit, deposits and conversion ratio



Source: BM

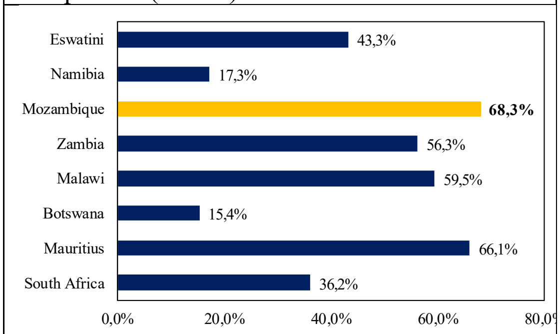
The level observed in liquidity indicators was higher than the average of the economies of some SADC countries (Charts 25 and 26).

Chart 25. Net assets /total assets ratio - Regional comparison (SADC)



Source: IMF

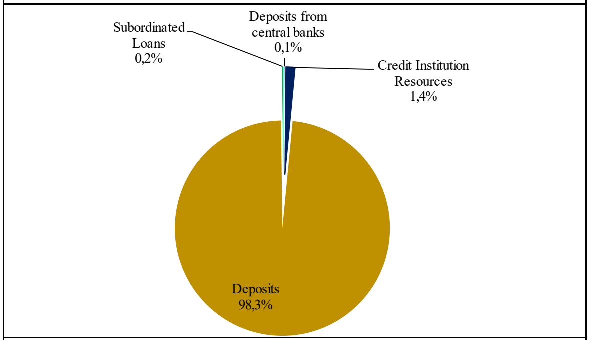
Chart 26. Net assets /total assets ratio - Regional comparison (SADC)



Source: IMF

Meanwhile, deposits remained the banking sector's main and most stable source of funding, with a weight of 98.30% (98.56% in December 2020) of the total, with the other sources of funds maintaining a residual weight (Chart 27).

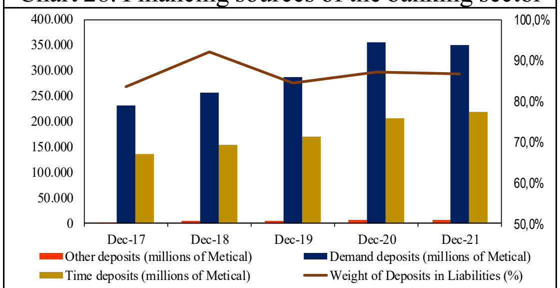
Chart 27. Sources of funding for the banking sector



Source: BM

As regards the structure of deposits, 61.02% corresponded to demand deposits, with the remainder being equivalent to term deposits (37.97%) and other deposits (1.01%). Term deposits increased by about 5.96%, while demand deposits and other deposits fell by 1.59% and 11.59%, respectively (Chart 28).

Chart 28. Financing sources of the banking sector



Source: BM

Box 3. Financial and business cycles in Mozambique

The 2007-09 financial crisis, which started in one market segment of the US financial system and spread to the entire global financial sector, causing the world economy to shrink, demonstrated the extent to which financial cycles can affect real economic activity. The crisis also revealed that real economic activity is interconnected with financial activity, a situation that can affect the depth and intensity of the business cycle. This scenario has raised the interest of many academics and central bankers in identifying and better understanding the cyclical behaviour of financial activity (the financial cycle) and its interaction with the business cycle (the real cycle). The central idea of this effort is to identify the position of the economy within the financial cycle, as well as the position in the real cycle, with the aim of a judicious management of macroprudential policy.

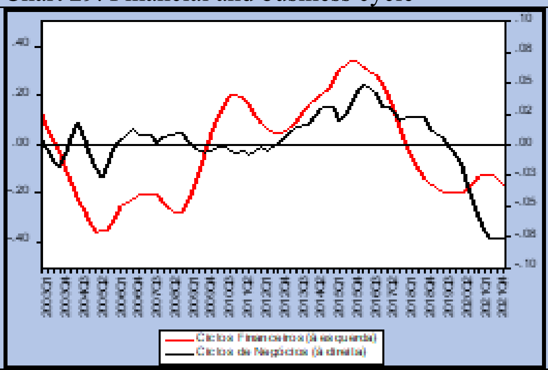
The financial cycle is the deviation of financial variables (usually the ratio of credit to the economy in relation to the GDP) from their long-term trend. This cycle is characterised by periods of expansion followed by retraction of financial activity. The main characteristics of the financial cycle advanced in the literature are: (i) it has a lower frequency compared with the traditional business cycle; (ii) its peaks are strongly associated with financial crises; (iii) they help to better detect risks affecting the financial sector; (iv) the length and amplitude of financial cycles depend on the economic policy regime; and (v) financial cycles are not synchronised with business cycles.

Business cycles refer to the deviation of real economic activity from its long-term trend, characterised by periods of expansion followed by periods of recession in economic activity. During expansions, the economy grows, in real terms, excluding the effects of inflation. As regards recessions, these refer to periods when the economy contracts. Each business cycle has four phases: (i) expansion; (ii) peak; (iii) contraction; and (iv) trough. The variables commonly used to describe the business cycle are: GDP, employment, wages, consumer spending, among others. Essentially, the business cycle indicates the position of the economy in relation to its equilibrium level and probable impacts on inflation developments.

Therefore, the correct identification of financial and business cycles, historically and in real time, allows, at the macroprudential and monetary level, the choice of appropriate policy measures to dampen the impacts on monetary and financial stability. In terms of policy implications, three main points can be drawn from the existing literature: (i) the joint assessment of financial and business cycles allows for the comprehensive identification of risks to economic growth and financial stability during the conduct of monetary policy. This is because an increase or a decrease in the interest rate simultaneously affects the economy and financial stability; (ii) the longer duration of the financial cycle than of the business cycle requires the conduct of monetary policy to be more forward-looking, in order to find the right balance between the maintenance of macroeconomic stability and financial stability, given the differences in the lengths of their cycles and (iii) on the macroprudential side, measures may include, among others, requiring greater countercyclical buffers and using tighter loan-to-value (LTV) ratios in circumstances of rapid growth in house prices and credit (rather than just credit), as recessions associated with large changes in the two financial variables are longer and deeper. Buffers (of capital or liquidity) need to be larger for those markets that tend to suffer deeper recessions with more severe financial downturns, which at least until the recent financial crisis, happened more in emerging markets than in advanced countries.

In Mozambique, as in other realities, the results show that the fluctuation of the financial cycle is more pronounced and longer than the fluctuation of the business cycle. This derives from the analysis of the financial and business cycles based on the calculation of the deviation of the ratio of credit to the economy in relation to GDP from the respective long-term trends. The cycles were determined by using the Hodrick-Prescott filter (HP filter), a methodology recommended by the Basel III Committee as appropriate for the purpose. It should be noted that business cycle recessions lasted on average about 4 quarters in the first half of the sample under study. However, there is an increase in the duration of recessions in the second half of the sample, with an average duration of around 10 quarters.

Chart 29. Financial and business cycle



Source: INE and BM

In conclusion, the interconnection of business cycles and financial cycles makes it possible to identify the most relevant periods in the macroeconomic interruptions. Moreover, this exercise makes it possible to clearly present financial cycles, whose peaks tend to coincide very closely with financial crises and, therefore, with serious damage to economic activity.

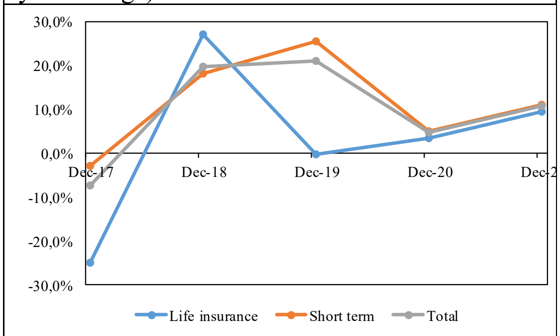
3.2. Insurance sector

In Mozambique, the overall production of insurance companies registered, in 2021, a growth of 10.8%, more than double the expansion of 4.9% in 2020.

This performance was determined by the favourable economic environment in the year, marked by the easing of restrictive measures in the country and prospects of improved economic activity and external demand.

The increase in production in both the life (9.4%) and non-life (11.0%) businesses drove this evolution (Chart 30).

Chart 30. Overall production of insurers (year-on-year change)

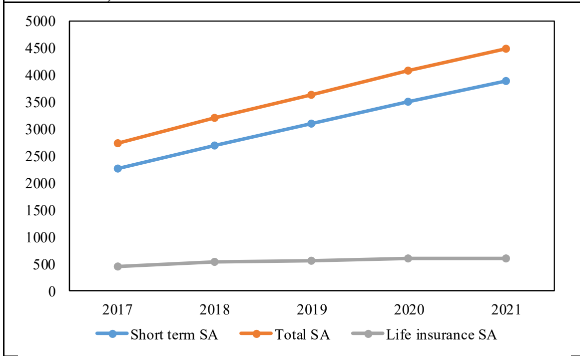


Source: ISSM

This evolution of the insurance sector in the country has been accompanied by an increase in insurance subscriptions, by companies and individuals, a fact motivated in part by the prospects of economic recovery.

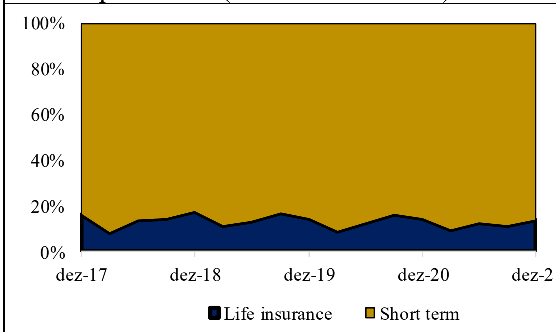
In absolute terms, overall production grew in the period under review by around 430 million meticais, determined by the production of the non-life branch, whose contribution to total production was around 380 million meticais (Chart 31), 86.1% of the total sector (Chart 32).

Chart 31. Overall production of insurers (millions of meticais)



Source: ISSM

Chart 32. Share of the branches in the insurers' overall production (millions of meticais)

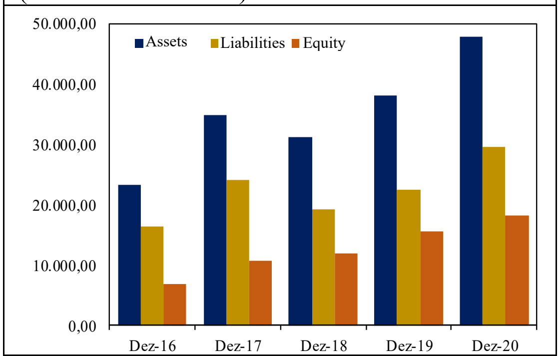


Source: ISSM

Additionally, the financial situation and assets of the insurance sector in Mozambique recorded, in 2020, a growth in net assets of 17.6% compared to 2019, standing at around 18.4 billion meticais.

In effect, the fact that equity has registered consecutive growth in recent years[17] (Chart 33), indicates that the insurance sector has a certain margin to cushion a probable demand resulting from an adverse context that the country may eventually go through.

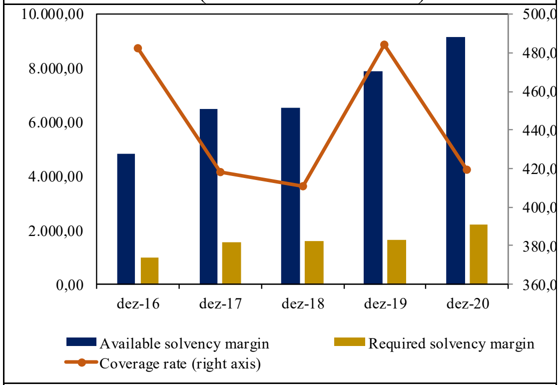
Chart 33. Insurance sector asset structure (millions of meticais)



Source: ISSM

On the other hand, the coverage rate of the solvency margin[18] available in the insurance sector is well above the required level (Chart 34), standing, in the last three years, at a figure always above 400.0%, which shows that own resources are approximately four times the minimum value required, with the solvency ratio having reached an adequate level in the sector.

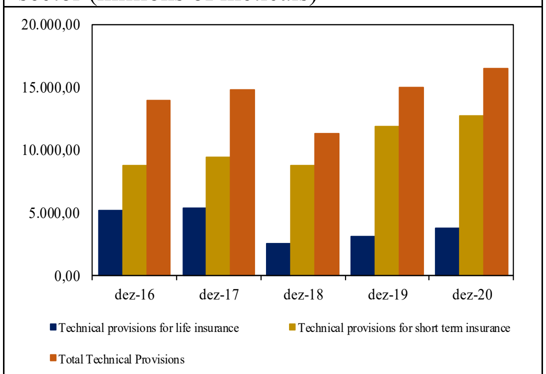
Chart 34. Evolution of the solvency margin in the insurance sector (millions of meticais)



Source: ISSM

From 2019 to 2020, total technical provisions[19] increased by about 1.5 billion meticais in the Mozambican insurance sector (Chart 35), influenced by the increase by 633 million meticais and 0.9 billion meticais in life and non-life, respectively.

Chart 35. Technical provisions in the insurance sector (millions of meticais)



Source: ISSM

[17] 17,6% (2020); 29,7% (2019); 11,9% (2018); 56,4% (2017); e 22,1% (2016).

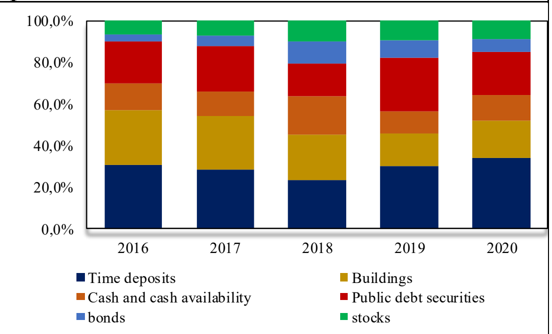
[18] Pool of resources consisting of uncommitted own assets available to insurance companies to face uncertainties inherent to the insurance business risk.

[19] In order to meet their liabilities to policyholders and beneficiaries, insurance undertakings shall establish adequate and sufficient technical provisions, all of which shall be represented by equivalent assets to serve as collateral for the commitments undertaken.

Diversification of the composition of the assets is important, observing respect for quantitative limits and ensuring correspondence with security, liquidity and profitability imperatives.

From this perspective, at the end of 2020, the structure of investments representing technical provisions in the Mozambican insurance sector continued to be dominated by financial investments, with about 82% of the total (Chart 36), while investments in buildings accounted for 18%, with their weight declining in recent years[20] .

Chart 36. Investments representing technical provisions



Source: ISSM

It should be highlighted that in the set of financial investments, the weight of the public debt component in financial investments has been increasing in recent years, rising from around 6% in 2015 to around 21% in 2020.

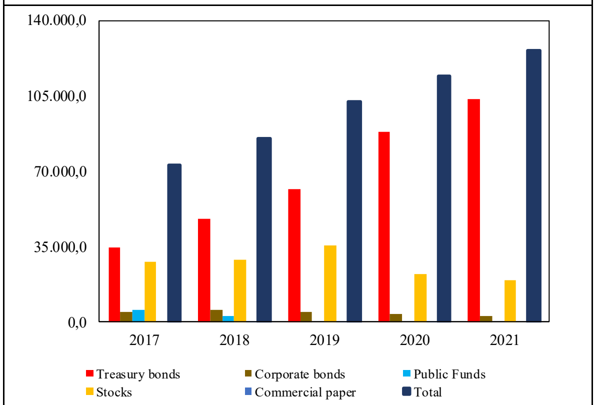
This posture signals the preference of the financial system in general and the insurance sector in particular for investments in public fixed income securities to the detriment of investments in other corporate debt instruments (namely shares and bonds), increasing the exposure of the insurance sector to sovereign risk and with the potential to impact on financial stability as a whole.

[20] This type of investment has already accounted for over 50.0% of the insurance sector's investments.

3.3. Securities Market

Market capitalisation, which is the main indicator of the Mozambican securities market, increased by 10.4%, rising from 114,215.7 million meticais in 2020 to 126,105.4 million meticais in 2021 (Chart 37). This performance was influenced by the dynamics of Treasury bonds.

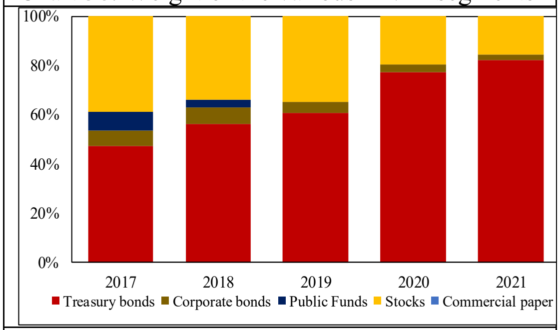
Chart 37. Market capitalisation (millions of meticais)



Source: BVM

Treasury bonds accounted for about 82.0% of market capitalisation in 2021 (77.3% in 2020), indicating the high weight of the State in the securities sector[21] (Chart 38), which increases the sovereign risk to which holders of these securities are subjected, particularly those in the banking and insurance sectors, and also influencing systemic risk and financial stability in general.

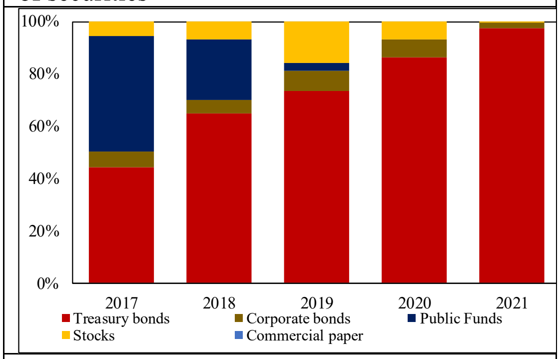
Chart 38. Weight of the various MVM segments



Source: BVM

With regard to the volume of transactions by category of listed securities, treasury bonds once again recorded the greatest weighting in 2021, with approximately 97.34% of the total, followed by corporate bonds and shares, with 2.34% and 0.32%, respectively (Chart 39).

Chart 39. Weight of trading volume by category of securities



Source: BVM

On the other hand, the low volume of transactions in the equity and corporate bond segments suggests that the capital market is still not an alternative for private corporate financing.

[21] The weight of treasury bonds has been increasing consistently over the last five years. It should be noted that treasury bonds represent only 10.89% of the total public debt.

This fact can also be confirmed by the number of instruments listed by each segment of the Securities Market (MVM), where corporate bonds and shares have a relatively small participation if compared to government bonds[22] (Table 8).

Table 8. Issues listed on the BVM

	2017	2018	2019	2020	2021
Treasury bonds	17	26	31	35	33
Corporate bonds	13	16	15	13	9
Public Funds	1	1	0	0	0
Stocks	6	7	10	11	12
Commercial paper	0	1	1	3	0
Total	**37**	**51**	**57**	**62**	**54**

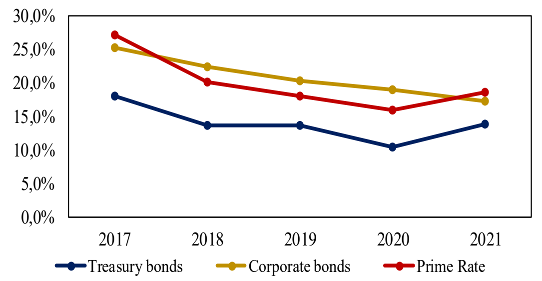
Source: BVM

This dynamic does not favour the widening of financing alternatives for companies, which could eventually contribute towards reducing their financing costs in the banking sector.

In effect, increased competition in private financing allows resources to be obtained at more attractive rates, which would impact on the reduction of market risk, with a consequent improvement in the financial stability index.

Additionally, the fact that an important part of brokers are, at the same time, banking sector stakeholders, seems to condition the growth dynamics of private corporate financing through MVM, causing corporate bond rates to be aligned with retail banking sector rates (Chart 40).

Chart 40. Interest Rates on Bonds listed on BVM and Prime Rate



Source: BVM

[22] In 2021 they represent 61.1% of the total number of issues listed on the MVM.

IV. MACRO-PRUDENTIAL POLICY MEASURES

The BM, as the national macro-prudential authority, defines and executes macro-prudential policy. The BM regularly analyses the financial system to identify current and future vulnerabilities and risks under more likely and adverse scenarios, identifying, monitoring and assessing systemic risks.

The aim of macro-prudential policy is to make the financial system resilient to risk absorption, ensuring adequate levels of financial intermediation and contributing to sustainable economic growth.

In 2021, the BM decided to maintain the macroprudential policy measures already established to mitigate systemic risk, namely:

- Capital conservation buffer for D-SIBs set at a minimum of 2.0%;

- Capital conservation buffer for domestic quasi-systemically important banks (Quasi D-SIB) set at 1.0%;

- 100.0% limit on the LTV indicator in the granting of loans to customers of Credit Institutions and Financial Companies (ICSF);

- 100% cap on DTI indicator in loans to customers by ICSF;

- Establishment of the countercyclical capital buffer of own funds as a tool to prevent and mitigate excessive credit growth and excessive leverage.

It is important to note that the countercyclical capital buffer is an additional capital requirement for smoothing the effects of variations in the economy's credit cycle.

The non-activation of this buffer is due to the low or negative nominal growth of credit to the economy and the fact that the credit-to-GDP ratio continues to grow below the potential long-term trend.

Box 4. Impact of cyber risk on the financial system

1. Concept of cyber risk

Cyber risk is the possibility of a specific threat exploiting the internal and external vulnerabilities of an organisation or one of the systems it uses, causing damage to the organisation and its tangible or intangible assets.

This risk is measured by combining the probability of threats occurring and their impact (a reasonably identifiable circumstance or event), with a potential adverse effect on the security of networks and information systems.

To mitigate this risk and protect networks, information systems, users and other affected persons from cyber threats, cyber security activities are carried out, which involve the prevention and detection of cyber incidents[23] as well as their response and recovery.

2. Implications of cyber risk

In the current scenario of constant innovation and globalisation of the economy, any sector is affected and influenced by the technological revolution, driven by the emergence of new paradigms and technologies[24] , which, despite bringing benefits to economies, also introduce new risks and challenges for organisations, particularly the financial sector.

In this interconnected and dynamic context, cybersecurity constitutes one of the top priorities for most organisations. As regards financial institutions that increasingly offer products and services supported by information technologies, and are therefore significantly more vulnerable to cyber-attacks, cyber risk becomes a concern in a scenario where supervisory approaches developed specifically to assess the soundness of banks' cyber security are still evolving.

Over the last few years, faced with the growing evolution of cyber risk, national regulators, international bodies and the private sector have launched initiatives to mitigate this type of risk and increase the cyber resilience of the financial system.

In Mozambique, these initiatives have taken the following into account:

i. The absence of a legal framework for strengthening the cyber resilience of credit institutions and financial companies (ICSFs);

[23] These incidents can be purposeful or unintentional, and range from (i) accidental disclosure of information; (ii) attacks on companies and critical infrastructure; (iii) theft of personal data; (iv) interference in democratic or electoral processes; and/or (v) general disinformation campaigns aimed at influencing public debates.

[24] Example: cloud computing, Internet of Things (IoT) and digital transformation.

ii. The need for the BM to regulate and oversee the cybersecurity management of ICSFs that ensures financial stability and protects the interests and rights of banking consumers (customers); and

iii. The potential increase in risk to the functioning of the central bank, with cyber-attacks progressively more destructive and with the capacity to disrupt sectors and businesses vital to the functioning of the economy.

The instability caused by cyber risk can be assessed in two major areas: (i) financial and legal impacts that may lead to material losses; and (ii) operational and reputational impacts that may cause the disruption of services with repercussions in the loss of consumer confidence in financial services.

3. Challenges and mechanism for mitigating cyber risk in the financial system

The main challenges in the context of the national financial system are:

- Delays in the enactment of laws, which may contribute to the untimeliness of regulations due to rapid technological change;
- The deficiency of cybersecurity skills and resources;
- Limited digital cybersecurity literacy, which contributes to the increasing vulnerability of banks to cyber-attacks;
- The lack of standardised laws, policies and guidelines guiding ICSF cyber risk regulation and oversight initiatives;
- The non-consistent focus on cyber resilience measures and recovery testing of ICSFs;
- The increase in teleworking, during the Covid-19 pandemic, increasing users' vulnerability to phishing ;[25]
- The poor sharing of information and intelligence between central banks and stakeholders; and
- The constant increase in attacks from information technology service providers.

As a mitigation mechanism, the establishment of a cyber risk governance structure was deemed pertinent in order to ensure a resilient cybersecurity environment, and the BM outlined a set of actions, namely:

a) Improving regulatory and supervisory legislation;
   - public consultations between different stakeholders,
   - understanding the comprehensive cybersecurity implementation roadmap, and
   - exchange of experiences.

b) Development of a cyber security training and awareness programme;

c) Establishment of cooperation and information sharing mechanisms, especially between SADC Central Banks;

d) Promoting advocacy with partners (government and private sector) for data protection, privacy and cybersecurity regulation;

e) Reflection on the adoption of general and sectoral legislative measures on the protection of personal data.

[25] It is a technique used to trick computer system users into obtaining confidential information such as username, password and credit card details. These are spoofed or falsified communications that appear to come from a trusted source.

Glossary

Risk Weighted Assets - the result of weighting each asset by a risk coefficient for the purpose of calculating the solvency ratio. Its determination complies with the requirements stipulated in Notice no. 09/GBM/2017, of 5 June.

Cost-to-income - indicator calculated by the ratio between operational costs and banking product and measures the efficiency of the organisation.

Operating costs - sum of Staff costs, Other administrative costs and Depreciation and Amortisation for the year.

Economic Scarring - deterioration in the financial situation of individuals and of the economy as a whole that may result from the prolongation of a recessionary situation.

Forward-looking - prospective vision of a certain policy, model, or situation.

Own Funds - concept used in banking supervision as a fundamental reference for the application of various ratios and prudential rules.

Impairment - the book value recorded in the financial statements to cover expected losses related to assets. This amount should be deducted from the value of the respective asset with the objective of correcting its value considering the probability of associated losses.

NPL - loans that do not generate positive flows and profitability for banks.

Banking product - set of revenues received by a financial institution: commissions, interest, trading, interbank operations.

Risks - factors associated with uncertainties and which, if they materialise, will have an impact on targets and results.

ROA - Return on Assets, which is the return on assets obtained by dividing net income by net assets and measures the profit generated by each monetary unit of **assets**.

ROE - the return on equity obtained by dividing net profits by shareholders' equity.

TIER 1 - basic own funds, which include the best quality capital (share capital, reserves and retained earnings) and which primarily meet the commitments assumed by the institution.

Vulnerabilities - set of characteristics that show the weaknesses of a certain system.