Financial Stability Report

October 2024

Bank of Zambia

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This *Financial Stability Report* (FSR) is published pursuant to section 34 (2) of the Bank of Zambia Act, 2022. The report highlights key vulnerabilities and risks that may result in systemic risk concerns and thereby compromise financial stability. It also highlights macroprudential policy tool(s) that may be deployed to mitigate risks to the financial system.

The FSR was approved by the Financial Stability Committee ("FSC" or "Committee") in October 2024 and contains information available as at the time of approval.

As prescribed under section 32 (1) of the Act, members of the FSC are as follows:

1. Governor – Chairperson (Dr. Denny H. Kalyalya);
2. Deputy Governor responsible for financial stability – Vice Chairperson (Dr. Francis Chipimo);
3. Deputy Governor responsible for administration (Ms. Rekha C. Mhango);
4. Bank of Zambia senior management staff responsible for research (Dr. Jonathan M. Chipili);
5. Bank of Zambia senior management staff responsible for legal matters (Ms. Namwandi Ndhlovu);
6. Bank of Zambia senior management staff responsible for financial stability (Mr. Goodson Kataya);
7. Representative of the Securities and Exchange Commission (Mr. Philip K. Chitalu); and
8. Representative of the Pensions and Insurance Authority (Ms. Namakau M. Ntini);

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Preface

The Bank monitors the build-up of systemic risk wherein various indicators associated with components of the financial system are analysed individually and as a group. Specifically, the Bank monitors and analyses developments in the macroeconomic environment, financial markets, institutions and financial markets infrastructure. Developments in financial markets infrastructure relate to activities in the payment systems, legal and regulatory environment.

Pursuant to section 5(1) of the Bank of Zambia Act, 2022, the Bank of Zambia formulates and implements monetary and supervisory policies to achieve and maintain price and financial system stability. Regarding the financial stability mandate, the FSC meets twice a year, in April and October, to review systemic risk developments over the past six months and decide on appropriate macroprudential policy measures.

The macroprudential decision-making process starts with the assessment of whether the buildup in systemic risk is strong enough and requires action. Thereafter, an assessment of the macroprudential tool(s) that should be activated to mitigate the risk are identified. The activation of a macroprudential tool involves determination of the type of instrument used, its timing (when) and its calibration (level). If an instrument is already active, a decision must be made whether to increase, maintain or decrease its level. While the FSC has several policy instruments at its disposal, the countercyclical capital buffer (CCyB) is its key instrument for macroprudential policy.

Glossary of Key Terms

Unless or otherwise stated, in this report,

Financial stability means that the financial system, comprising financial intermediaries, markets, and market infrastructure, is resilient to adverse shocks and can smoothly conduct its core tasks of intermediation of financing, transmission of payments, pricing of instruments and redistribution of risks appropriately to effectively contribute to sustained economic growth.

Systemic risk refers to the possibility that distress or failure of individual financial institutions, markets, infrastructure, or instruments triggers severe instability or collapse of the entire system and has negative consequences for the real economy.

A vulnerability is described as a weakness or pre-existing condition which, if it interacts with a realized risk, would amplify the financial system stress.

Resilience refers to the capacity of financial institutions, markets, or payments system to absorb shocks and prevent them from amplifying and causing distress.

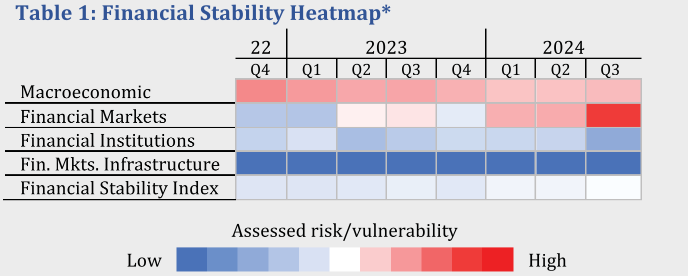
Macroprudential means the use of prudential tools to limit systemic risks by strengthening the resilience of the financial system and decreasing the build-up of vulnerabilities, thereby ensuring a sustainable contribution of the financial sector to economic growth.

1. Overview of the Financial Stability Assessment

Since the *May 2024 Financial Stability Report*, risks to financial stability have edged up slightly due to weakening economic activity amid a drought-induced electricity supply shortage (Table 1 and Chart 1). Key vulnerabilities include the electricity supply deficit, low financial intermediation, sovereign-bank nexus, concentration of banks' loans and deposits, dollarisation of loans as well as maturity mismatches. With regards to risks, extended periods of loadshedding, lower domestic growth, higher inflation, higher exchange rate volatility (caused by demand and supply timing mismatches), and rising geopolitical tensions could pose threats to financial stability.

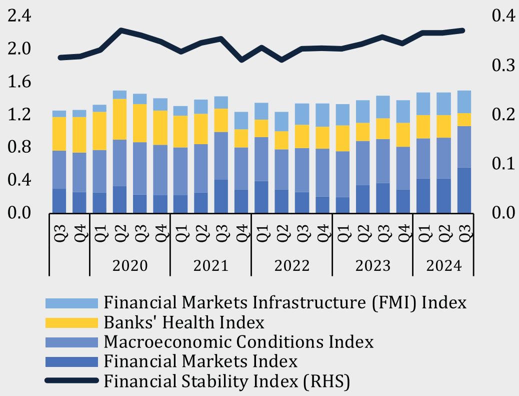
The results of the inaugural *Systemic Risk Survey (SRS)* also indicated an expected increase in systemic risk in the near-term. Respondents cited heavy reliance on hydro power, undiversified economic system, high concentration of credit, and funding and liquidity mismatches as key vulnerabilities. In terms of risks, climate risk, increased loadshedding, higher inflation, liquidity risk, and lower domestic growth were identified as key risks to financial stability.

Table 1: Financial Stability Heatmap*



Note: * The **Appendix** provides details on how to interpret the heatmap. ** The Financial Stability Index , **Chart 1**, depicts the evolution of systemic risk in the financial system. An increase in the index implies increasing systemic risk while a decrease represents a decline. It also shows the evolution of risk in the main segments of the financial system and their contribution to the overall financial

Chart 1: Financial Stability Index**



Financial stability risks and vulnerabilities in the macroeconomic environment have risen since the *May 2024 Financial Stability Report*. Domestic economic conditions have weakened, with growth dragged down by the electricity supply deficit. Inflationary pressures have also persisted as food and energy prices continue to rise. Despite steady growth in the flow of credit to corporates, businesses and households, financial intermediation remains low at about 40 percent. While external buffers have been augmented primarily by the strengthening of reserves adequacy, risks to the external sector have grown in light of the escalation in geopolitics.

In the money market, liquidity conditions improved as the Bank of Zambia maintained the Policy rate at 13.5 percent and conducted accommodative open market operations. Consequently, volatility in interest rates reduced. In the near-term, however, interest rates could rise if the Bank resumes tightening monetary policy to rein in inflation which has remained above target. Regarding the foreign exchange market, the volatility of the local currency reduced on account of improved supply. Exchange rate volatility could be shaped by the evolution of the stock of unfilled demand orders as businesses grapple with the electricity supply deficit in the near-term.

Commercial banks' capital and liquidity buffers have continued to reinforce the resilience of the financial system. However, there remains some vulnerabilities on their balance sheets including the growing maturity mismatch, an elevated share of foreign currency exposures and concentration of loans and deposits. Insurance and private pension companies have remained stable. However, their resilience will be tested by the subdued economic activity and higher inflation in the near-term.

The Financial Stability Committee maintained the Countercyclical Capital Buffer (CCyB) at 0.0 percent considering that the banking system has remained resilient on the back of high capital buffers, GDP growth has significantly slowed, and the credit-to-GDP gap has remained below the Basel III threshold of 2 percentage points.

2. Systemic Risk Analysis

Table 2: Macroeconomic Environment Heatmap

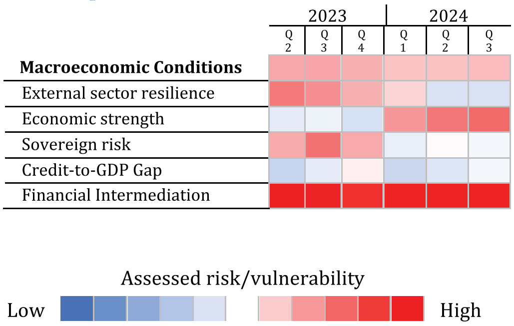


Chart 2: Macroeconomic Conditions Index

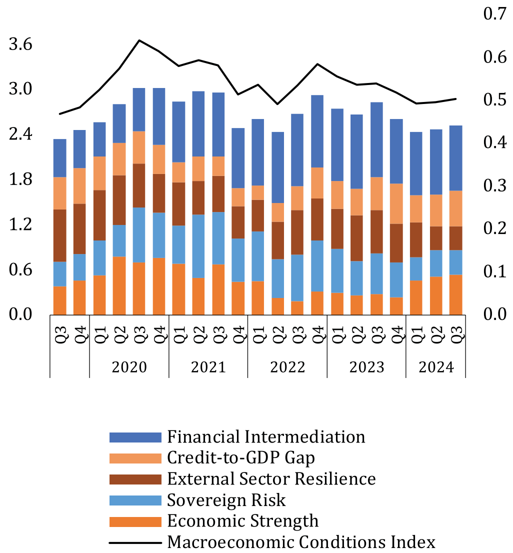
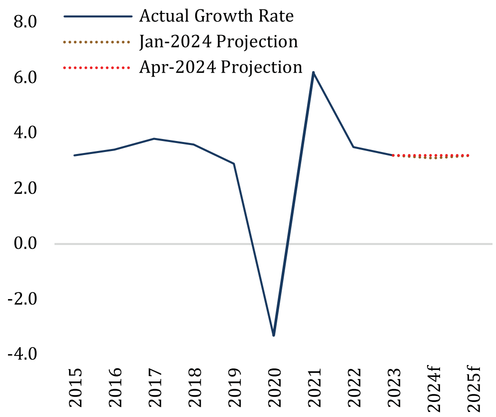


Chart 3: Global GDP Growth (percent)



Source: IMF World Economic Outlook (WEO) Update, April 2024 and Bank of Zambia Compilations

Macroeconomic Conditions

Financial stability risks and vulnerabilities in the macroeconomic environment have risen slightly (Table2 and Chart 2) since the May 2024 Financial Stability Report. While external buffers have been augmented primarily by the strengthening of reserves adequacy, risks to the external sector have grown in light of the escalation of geopolitics. Domestic economic conditions have weakened, with inflationary pressures rising and growth dragged down by the electricity supply deficit. Despite steady growth in the flow of credit to corporates, businesses and households, financial intermediation remains low at about 40 percent.

Global Growth Outlook Brightens as Monetary Conditions Ease

Prospects for global economic activity have brightened as monetary conditions are expected to ease due to further interest rate cuts by major central banks. According to the IMF, the global economy is projected to expand by 3.2 percent in 2024, unchanged from the April forecast, but the projection for 2025 has been slightly upgraded by 0.1 percentage points to 3.3 percent (Chart 3). With the Federal Reserve – and other major central banks – having commenced the interest rate cutting cycle with a more-than-expected reduction of 50 basis points mid-September (Chart 4), global growth is likely to be bolstered by further easing of monetary policy in the near-term. The interest rate cut, and the aggressive stimulus package also announced in September by the Peoples' Bank of China (PBOC) to help boost domestic demand, revive the failing property market, stymie deflation, and get the Chinese economy back on the target growth trajectory of 5 percent would also push global growth. Consequently, global asset valuations (stocks and bonds), which have recently been buoyed by softening monetary conditions and expectations of further interest rate cuts, would remain buoyant in the near-term (Chart 5 and Chart 6).

However, there are growing downside risks to global growth and financial stability. Prominent amongst these are the worsening geopolitics, and relatedly the rising geoeconomic fragmentation. Besides the lingering Russian- Ukraine conflict, international relations in the Middle East are degenerating as what started as the Israeli-Hamas conflict is increasingly extending beyond Isreal and Palestine and raising risks of disturbances to global trade and finance. The escalation of conflict in the Middle East may worsen supply chain challenges and lead to increases in food and energy prices. The outcome of the US elections in November may also have an impact on the state of the current Middle East conflict and geoeconomic fragmentation with potential to worsen further.

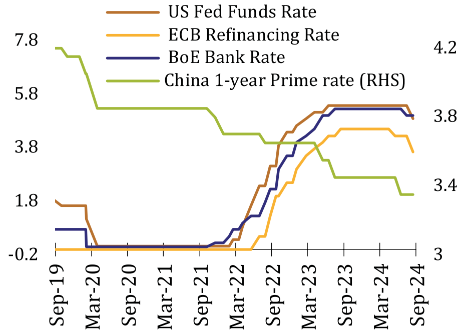
External Sector Buffers Improve Amid Risks

Despite growing risks in the external environment, the external sector buffers have improved. The external sector buffers have been reinforced by higher copper prices (Zambia's primary export), a build-up in reserves adequacy, and to some extent an improvement in the current account balance (Table 3, Chart 7 and Chart 8). Whereas buoyant copper prices could boost future export earnings and consequently bolster the supply of foreign exchange, the strengthening of reserves adequacy, which rose to 4.5 months of import cover at the end of August from 3.9 in March, is suggestive of the country's improved capacity to absorb external shocks.

Since the *May 2024 Financial Stability Report*, both downside and upside risks to the country's external sector resilience have significantly changed. On the upside, the key source of tailwinds to external resilience is expected to be the moderation in global financial conditions as major central banks embark on monetary policy easing, should disinflation continue. Lower US dollar interest rates and potentially a broad-based depreciation of the US dollar could increase capital flows into the Zambian economy and induce a turnaround in the exchange rate in terms of the kwacha strengthening. Given a strong exchange rate passthrough to consumer prices, the potential appreciation of the domestic currency would lead to reduced inflationary pressures and consequently lower interest rates and credit risk on financial institutions' balance sheets. Increased capital inflows would also lead to deposit growth and boost financial institutions funding capacity. This would potentially result in increased flow of credit to the private sector. Increased capital inflows would also further boost reserves adequacy and the capital account, thereby reinforcing the economy's ability to absorb external shocks.

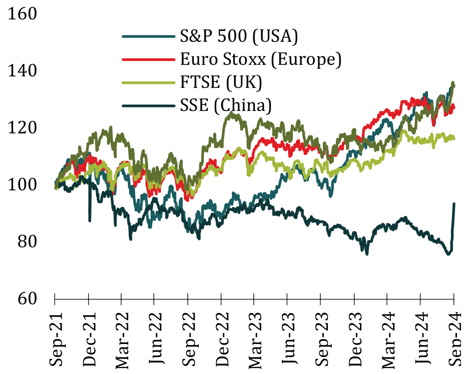
On the contrary, Zambia could experience higher food and energy costs and balance of payments challenges through higher foreign exchange outflows should geopolitics and trade tensions worsen. In turn, this could pile pressure on the exchange rate, inflation and the cost of borrowing. This would subsequently pose higher market, liquidity and

Chart 4: Selected Central Bank Policy Rates (Percent)



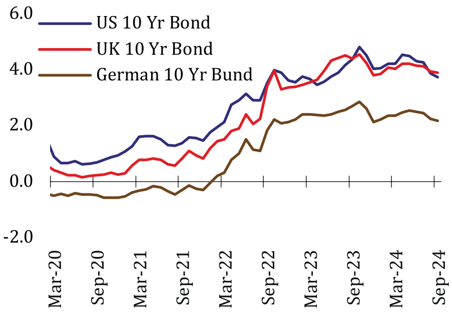
Source: Reuters and Bank of Zambia Compilations

Chart 5: Selected Stock Market Indices



Source: Reuters and Bank of Zambia Compilations

Chart 6: US, UK, and German Average 10-Year Benchmark Bond Yield Rates



Source: Reuters and Bank of Zambia Compilations

Table 3: External Sector Resilience Heatmap

	2023		2024		
	Q 3	Q 4	Q 1	Q 2	Q 3
External Sector Resilience					
Current a/c bal-GDP					
Price of copper					
Reserves adequacy					
NRIGS					

Note: NRIGS stands for non-resident investments in government securities and GIR for gross international reserves.

Chart 7: Copper prices (US$/ton)

Chart 8: International Reserves Adequacy

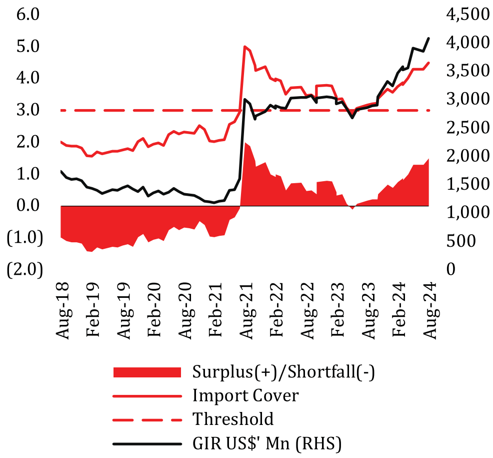
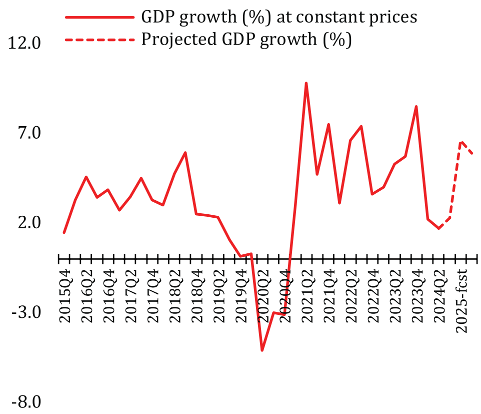


Table 4: Economic Strength Heatmap

	2023		2024		
	Q3	Q4	Q1	Q2	Q3
Economic Strength					
Real GDP growth (%)					
Inflation					

Chart 9: Real GDP Growth



Source: ZSA, Ministry of Finance, BoZ Staff Calculations

credit risks to financial institutions.

Electricity Supply Deficit Is Subduing Economic Activity, Compounding Price Pressures and Raising Risks to the Stability of the Financial System

The drought-induced electricity supply deficit has dragged down economic activity, compounded price pressures and raised risks to financial stability (Table 4). The latest preliminary figures from Zambia Statistics Agency (ZSA) suggest that annual growth in output significantly fell to 1.7 percent in June compared with 2.2 percent in March (Chart 9) as the electricity crisis took its toll on domestic demand and production. The latest inflation print shows that consumer prices inched up 10 basis points to 15.6 percent in September (Chart 10), despite a relatively stable exchange rate (see *Kwacha Exchange Rate Volatility Tapers* section).

On balance, near-term risks to economic growth and financial stability have significantly tilted to the downside since the *May 2024 Financial Stability Report*. Tipping the balance of risks is the deepening vulnerability associated with the electricity supply deficit. Latest estimates indicate that there is a deficit of about 1,381 megawatts (MW) or 57.5 percent in electricity supply, which expanded post-September after a thermal electric plant, a supplementary power source, shutdown for routine maintenance amid dwindling water levels at Lake Kariba, the primary water reservoir. Going forward, this deficit could widen and strain business and industrial activity even more severely. While more businesses would look to alternative energy sources to sustain the production of goods and services, the cost of production would shoot up due to pricey backup energy solutions. This would probably manifest itself in higher inflation and interest rates. Elevated interest rates coupled with lower incomes would in turn lead to higher loan delinquencies and reduced capital buffers on financial institutions' balance sheets.

The impact of the electricity supply deficiency on economic activity and the risk it poses to the resilience of the financial system could be moderated by the projected higher precipitation levels in 2024/2025, implementation of stop gap measures, including the sustained importation of electricity, wholesale solar power plants and a large-scale adoption of alternative energy solutions by businesses and households. Other upside risks could come from the expected ramp-up in mining sector output. Copper production is projected to rise 7.1 percent to 748,050 tons in 2024 due to the expected output expansion at FQM Trident and Kansanshi. Copper output is expected to gain momentum and expand substantially at 23.9 percent to 926,900 tons in 2025, and 14.0 percent to 1,056,500 tons in 2026 due to broad-based production expansions at major mines, including Mopani and Konkola Copper Mines. Seeing that the mining sector is the primary foreign exchange earner, and one of the largest employers, exchange rate and credit risks could recede as supply rises and associated businesses and households experience income growth.

Sovereign Risk Moderates Post Debt Restructuring

Sovereign risk is assessed to have moderated in the aftermath of the public debt restructuring. There have been widespread expectations that the country's debt is on the path of sustainability after the application of haircuts and a stretched repayment horizon. The country is also on the right path to fiscal consolidation, with the fiscal deficit narrowing further (Table 5) since the *May 2024 Financial Stability Report*. Relatively lower debt servicing costs and a narrower fiscal gap would not only strengthen fiscal resilience but also unlock resources for discretionary spending in terms of increased expenditure on activities that would help revive growth.

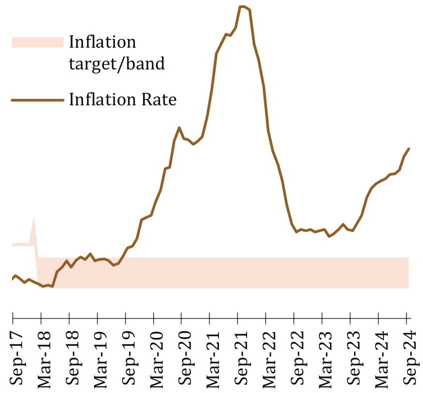
With the ongoing power shortages as well as anemic economic activity, there are downside risks to fiscal resilience in the near-term. There is a risk that the treasury may not generate sufficient revenues and meet the revenue target of 21.3 percent of GDP as businesses struggle to sustain their production levels. Fiscal spending could also shoot up, and the fiscal deficit widen, if the treasury step in to help the state-owned power utility company meet the shortfall should electricity import costs turn out to be higher than planned.

Flow of Credit to the Private Sector Grows but Financial Intermediation Remains Muted

The flow of credit[1] to the private sector grew between March and August 2024. It is noteworthy that the increase in credit was to some extent influenced by the depreciation in the exchange rate during the period considering that about 41 percent of the banks' loan book is denominated in foreign currency. While total private credit posted a nominal growth of 17 percent (Chart 11), it grew by 5.1 percent in real terms after the stock of foreign exchange loans posted a real growth of 6 percent and local currency denominated loans 10 percent. This growth in credit is assessed to be moderate as the private credit to GDP gap

[1] Total loans underwritten by banks and non-bank financial institutions (NBFIs)to non-financial corporates (NFCs) and households/individuals.

Chart 10: Annual Inflation (%)



Source: ZSA,BoZ Staff Calculations

Table 5: Sovereign Risk Heatmap

	2023		2024		
	Q3	Q4	Q1	Q2	Q3
Fiscal resilience					
Public debt-to-GDP					
Fiscal deficit					

Chart 11: Private Credit (K'billion)

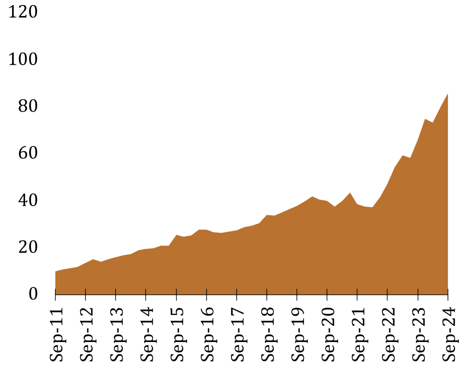


Chart 12: Private Credit to GDP/Gap (percent/PPts)

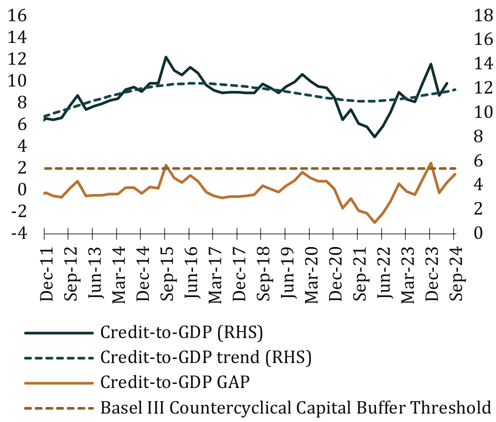


Chart 13: Financial Intermediation (%)

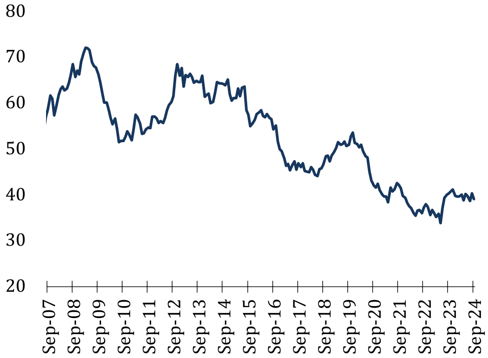
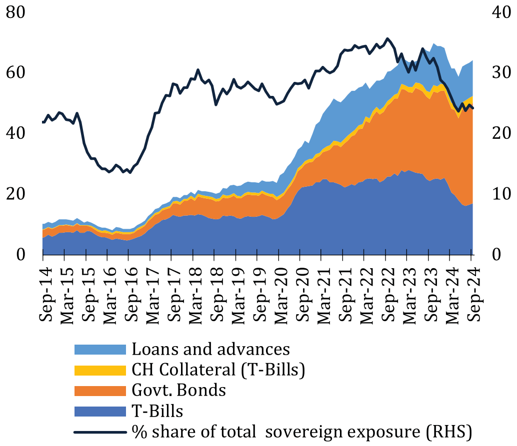
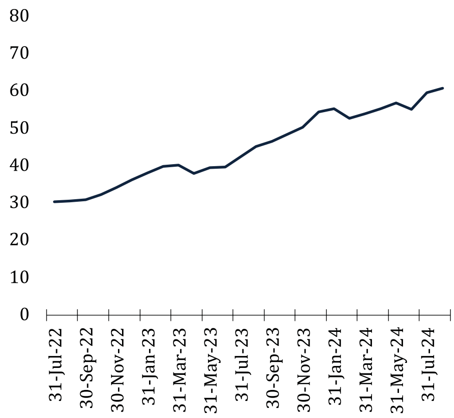


Chart 14: Sovereign-Bank Interlinkages, by Banks' Exposure to Govt (K'Billion)



Note: Loans and advances include banks' exposures to the central government, state owned enterprises (SOEs), local government, statutory bodies and public service workers.

Chart 15: Banks Credit to NFCs (K' billion)



was posted at 1.4 percentage points in September, well below the Basel III threshold of 2.0 percentage points[2] . Private credit only accounts for 13.4 percent of GDP, with a 13-year average standing at 11.4 percent (Chart 12).

Businesses and households have broadly continued experiencing limited access to finance from commercial banks, evidenced by muted financial intermediation (Chart 13). Since the *May 2024 Financial Stability Report*, financial intermediation, which is calculated by dividing commercial banks' aggregate stock of credit by total customer deposits (referred to as the loan-to-deposit ratio), remained unchanged at 39.1 percent. This implies that banks only lend out about 40 ngwee for every kwacha they receive in deposits.

As analysed in the *May 2024 Financial Stability Report*, banks' search for higher returns and consequently increased investments in local currency sovereign securities has come at the expense of financial intermediation. This tendency has led to the deepening of their interlinkages with the government or the sovereign-bank nexus[3] , with the share of their total exposure to the sovereign now standing at 24.2 percent of their total assets (Chart 14). It raises the risk of contagion as any failure by the sovereign to meet its obligations to banks could lead to material liquidity shortages, credit losses and capital deficiencies across the banking sector. The sovereign could also face funding and liquidity constraints should banks that it is materially interconnected with (through deposits or equity stake) fail.

In as much as a low LDR implies that banks face low liquidity risk, it also suggests that they are not lending out sufficient funds to businesses and households that may be needed for current and capital investments, as well as consumption. A low LDR could create a systemic risk which can have negative implications for the financial system and the real economy. It limits the flow of liquidity in the economy to support growth, which in turn can lower income levels of borrowers and thereby raise default risk for lenders. Increased levels of non-performing loans (NPLs) would imply higher provisioning and impairments, which would constrain banks' ability to sustain profitability and boost solvency from retained earnings.

[2]Kindly refer to the *May 2024 Financial Stability Report* for more information on credit growth, credit-to-GDP and Basel III threshold a
[3]The sovereign-bank nexus refers to the interconnectedness that exists between government and commercial banks in terms of the latter's exposure to the former (loans and securities) and government's shareholding, deposits and other claims on banks.

Hence, commercial banks should consider improving their intermediation function through increased financing of alternative power solutions for businesses and households to help them weather the challenges coming with the electricity deficit, and mitigate systemic risk.

Non-Financial Corporates Debt Steady

Non-financial corporates (NFCs) debt grew steadily amidst a challenging environment. Banks' claims on businesses stand at K60.8 billion (Chart 15) or 9.5 percent of GDP. However, banks' credit to NFCs is notably unbalanced as it has remained biased towards a few sectors including manufacturing, agriculture and energy which are reeling from the adverse impact of the drought and the ensuing electricity supply deficit (Chart 16).

Evidence of the ravaging effects of the electricity crisis on businesses can be drawn from the latest results of the Stanbic Bank Zambia Purchasing Managers Index (PMI) which recorded the "sharpest decline" post-covid (to 45.6 in September), indicating a rapid contraction in private sector activity (Chart 17). Purchasing managers polled cited the electricity supply deficit as the trigger for weaker demand, falling new orders, higher costs and a sharp contraction in output. The level of employment also slowed as firms resorted to downsizing their workforce to contain rising costs. Further, firms passed on higher costs to consumers to sustain mark-ups on their products and services, a development which is inflationary.

While their indebtedness remains steady, the Systemic Risk Survey (SRS) results (see *Box A*) indicate that the materialization of climate risk, higher inflation, and a further contraction in business activity could raise NFCs liquidity risk and subsequently credit risk for financial intermediaries.

Households Indebtedness on a Gradual Rise

Household indebtedness rose gradually amid slowing economic activity. Household debt, measured by banks' lending to individuals, rose 8.5 percent since the *May 2024 Financial Stability Report* (Chart 18). Digital credit (loans extended by financial intermediaries via mobile money platforms) disbursements have equally been steady, but lower than the peak of K2.3 billion posted during 2021 Q4 (Chart 19). In fact, average disbursements have fallen below the K500 mark for the first time since 2022 Q2. Consumers usually access digital credit to bridge short-term cashflow gaps and cover bills, including telecommunication services and utilities.

Chart 16: Sectoral Distribution of NFC Loans

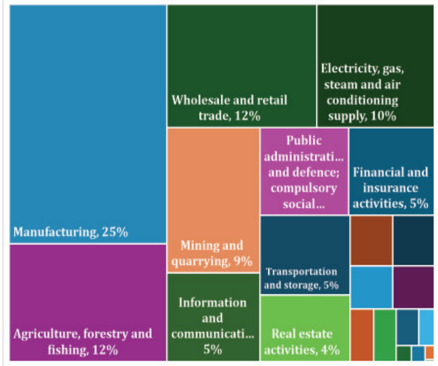
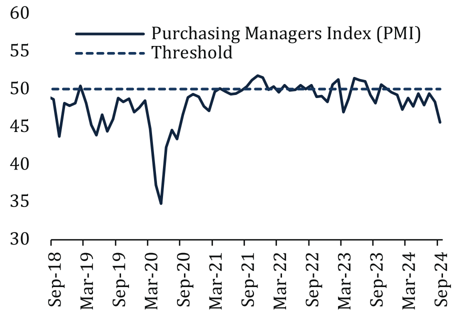


Chart 17: Purchasing Managers' Index (PMI)



Source: S&P Global, BoZ Staff Calculations

Note
The Stanbic Bank Zambia PMI™ is compiled by S&P Global from responses to questionnaires sent to purchasing managers in a panel of around 400 private sector companies. The panel is stratified by detailed sector and company workforce size, based on contributions to GDP. The sectors covered by the survey include agriculture, mining, manufacturing, construction, wholesale, retail, and services. Survey responses are collected in the second half of each month and indicate the direction of change compared to the previous month. A diffusion index is calculated for each survey variable. The index is the sum of the percentage of 'higher' responses and half the percentage of 'unchanged' responses. The indices vary between 0 and 100, with a reading above 50 indicating an overall increase compared to the previous month, and below 50 an overall decrease. The indices are then seasonally adjusted. The headline figure is the Purchasing Managers' Index™ (PMI). The PMI is a weighted average of the following five indices: New Orders (30%), Output (25%) Employment (20%), Suppliers' Delivery Times (15%) and Stocks of Purchases (10%).

Chart 18: Household Exposure to Banks and NBFIs (K' billion)

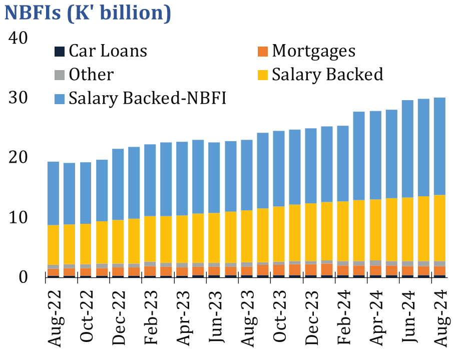


Chart 19: Household Digital Credit

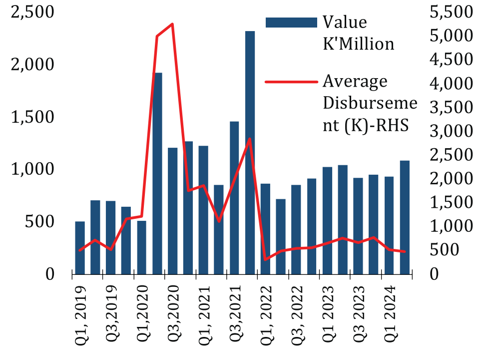


Table 6 : Financial Markets Heatmap

	2023		2024		
	Q3	Q4	Q1	Q2	Q3
Financial markets					
Interest rates					
Exchange Rate Volatility					
Equity Volatility					

Chart 20: Financial Markets Index

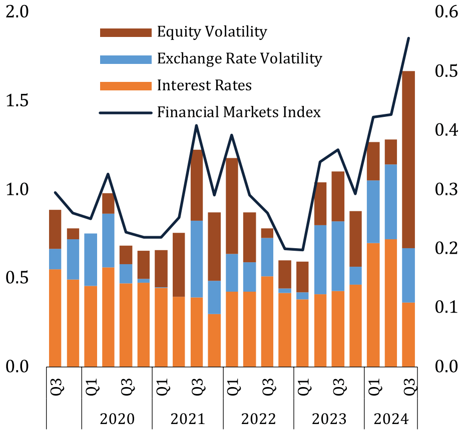
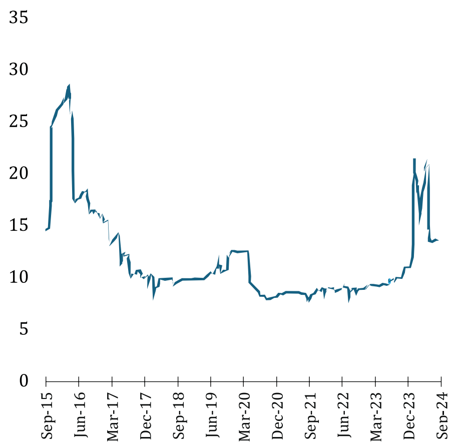


Table 7: Interest rates Heatmap

	2023		2024		
	Q3	Q4	Q1	Q2	Q3
Interest Rates					
T-bill composite yield					
G-bonds yield					
Av. E/bonds spread					
IB Interest rates spreads					
IB rate volatility					

Chart 21: Overnight Interbank Rate (%)



Household indebtedness poses minimal risks to financial stability and the reasoning is threefold. Firstly, at K30.1 billion, banks' credit to households represents only 11.8 percent of total bank assets, and 4.7 percent of GDP. Secondly, over 90 percent of household loans relate to salary backed loans (Chart 18) with a low probability of default. Thirdly, the share of households NPLs out of the total remains low at 9.3 percent.

Financial Markets

Interest rate and exchange rate risk were assessed to have reduced slightly. Volatility in interest rates reduced following improved money market liquidity conditions while volatility in the exchange rates was muted on account of improved supply (Table 6 and Chat 20). In the near-term, interest rate risk could remain elevated considering the broadly weak local currency and elevated inflationary pressures. Exchange rate risk would be shaped by the evolution in the stock of unfilled demand orders whilst businesses grapple with the electricity supply deficit.

Interest Rate Conditions Moderate

Interest rate and money market liquidity conditions have somewhat moderated (Table 7) after BoZ maintained its Policy Rate in August and undertook accommodative Open Market Operations (OMOs). The total current account balance spiked to K6.4 billion by end-June from K1.1 billion by end-March, before retreating to K4.8 billion by the end of September, and the overnight interbank rate declined sharply by 4 percentage points to reach parity with the Policy Rate at 13.5 percent (Chart 21). Similarly, the average overnight interbank rate spread narrowed (Chart 22), and volatility, which measures short-term interest rate risk, retreated (Chart 23).

Conversely, the yield on Zambia's new 2033 Eurobond climbed to 10.1 percent from its opening trading rate of 6.9 on 13 June (Chart 24), possibly reflecting investors' fears about the potential adverse impact of the drought on sovereign funding. Considering the past trend, the spreads significantly narrowed, on net, due to improved sovereign debt sustainability. The 2033 bond yield rate had dropped significantly to 5.4 percent after the IMF Board approved Zambia's access to SDR433.34 million (around US$569.6 million) under the ECF Arrangement. Yields on local currency denominated government securities rose on the back of weak demand (Chart 25). In secondary market for government bonds the spread between the bond market value and nominal value declined at the end of June (Chart 26).

In the near-term, market liquidity could be relatively tighter, and interest rate risk high, considering the elevated inflationary pressures. Borrowing costs could also remain elevated and may raise credit risk for financial institutions. This could lead to a sharp rise in the share of NPLs and undermine their liquidity and capital buffers. Further, a drastic depreciation of the exchange rate would raise inflationary pressures and interest rate risk.

Kwacha Exchange Rate Volatility Tapers

Volatility in the exchange rate tapered in the six months to September 2024 (Chart 27), with the kwacha weakening steadily against the US dollar amid the decline in pipeline demand orders while supply increased mostly from the mining sector. Further, the kwacha benefited from positive market sentiments following a sovereign credit rating upgrade by Fitch Ratings and Moody's Investor Services in light of the progress made on external debt restructuring, and the IMF Board's approval of the Third Review under the Extended Credit Facility (ECF) Arrangement on June 26. The slowdown in exchange rate variations also came on the back of the implementation of foreign exchange market rules and guidelines, whose objective is to improve transparency, efficiency, and effectiveness in the domestic foreign exchange market. The introduction of a negotiable threshold of at least US$1.0 million led to compression in daily spreads to as low as 1.73 percent (see *August 2024 Monetary Policy Report*).

Near-term movements in the exchange rate would be shaped by the evolution in the stock of unfilled demand orders as business activity continues to be strained by the shortage in electricity supply. Demand for foreign exchange could increase in the wake of increased appetite for energy imports in particular electricity and oil given the drastic shift to alternative energy sources. On the other hand, variations in the US dollar-kwacha pair could be influenced by a rise in foreign exchange supply emanating from the projected rise in mining production and exports thereof. The anticipated lower US dollar interest rates and potentially a broad-based depreciation of the US dollar could increase capital flows into the economy, and augment foreign currency supply. This could help subdue volatility and generally market risk for businesses, households and financial institutions.

Equity Price Volatility Heightens

Equity price volatility for the Lusaka Securities Exchange All-Share Index (LASI) increased substantially following a rise in stock valuations (Chart 28). The LASI maintained its

Chart 22: Interbank Interest Rate Spread

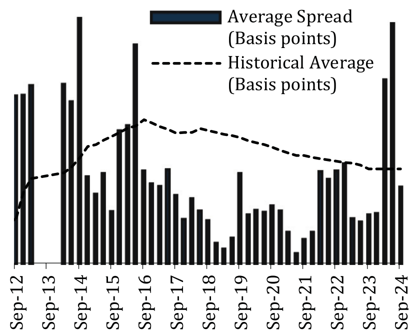


Chart 23: Interbank rate 21-Day volatility (%)

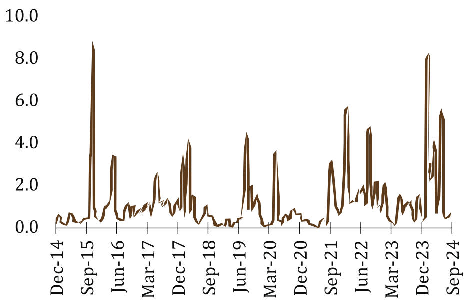


Chart 24: Zambia 2033 Eurobond Yield (%)

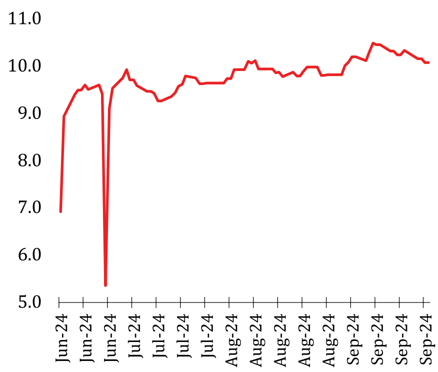


Chart 25:Composite Government Securities yields (%)

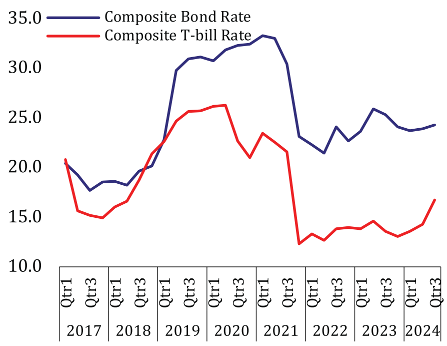
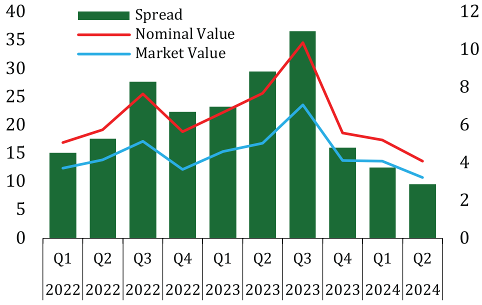


Chart 26: Market and nominal bond values in secondary market



Source: Securities and Exchange Commission (SEC), BoZ Staff Calculations

Chart 27: Daily 21-Day Forex volatility (%)

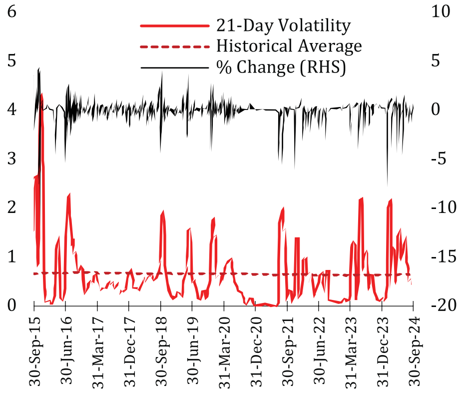


Chart 28: Equity volatility (%)

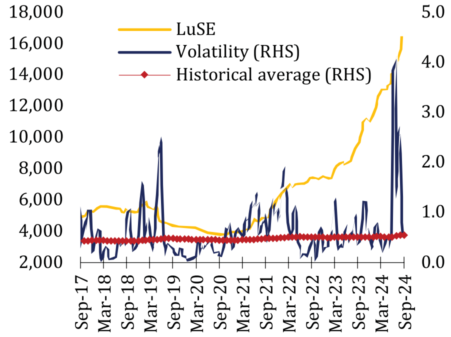


Table 8: Banks' Health Heatmap

	2023		2024		
	Q3	Q4	Q1	Q2	Q3
Banks' Health					
Capital Adequacy					
Asset Quality					
Earnings					
Liquidity					
Market risk					

upward growth momentum, surpassing the 16,000 mark to reach 16,540.21 points at the end of September. This represented a 28 percent gain which was a result of broad-based net-gains across the sectors, including hospitality, energy, manufacturing, mining and retail stocks.

While the observed equity variations was triggered by higher stock valuations in the review period, it somewhat raises financial stability concerns as excessive volatility, which measure market risk, is indicative of increased probability of price movements, in either direction. High volatility could discourage discerning investors from making placements in the domestic capital market for fear of incurring capital losses. With restricted access to credit markets, access to alternative capital raising channels such as capital markets could be further constrained.

Financial Institutions

Commercial banks' capital and liquidity buffers have continued to reinforce the resilience of the financial system (Table 8). Yet, there remains concerns about fragilities on their balance sheets including the growing maturity mismatch, an elevated share of foreign currency exposures and concentration of loans and deposits. Insurance and private pension companies were stable during the review period. However, their resilience in the near-term will be tested by the subdued economic activity and higher inflation.

Commercial Banks

Banking Sector's Robust Solvency and Liquidity Continue to Reinforce the Financial System's Resilience

Commercial banks' capital and liquidity buffers have continued to reinforce the resilience of the financial system. The banking sector's capital adequacy (total capital to risk-weighted assets) has remained strong at 23.3 percent (Chart 29) whereas their holdings of liquid assets in relation to deposits and short-term liabilities was recorded at 39.2 percent (Chart 30). Their strong solvency demonstrates their ability to absorb shocks like unexpected losses while the strong liquidity standing demonstrates their ability to meet short-term obligations as they fall due.

While banks' accumulation of capital buffers shores up the financial system's resilience to unexpected risk events, it has come at the expense of financial intermediation. They are not supplying sufficient credit to businesses and households to support economic growth. This is evidenced by their aggressive investments in local currency sovereign securities over the last few years (Chart 31), as they have shifted towards less risky assets and borrowers, and consequently, higher returns which have led to the rapid accumulation of retained earnings in their capital structure (Chart 32).

Credit Risk Rises While Banks Contend with Concentration of Credit

Credit risk has risen since the *May 2024 Financial Stability Report*. The share of NPLs rose 1.1 percentage points to 4.8 percent at the end of September 2024, albeit remained well below the prudential threshold of 10 percent (Chart 33). This notwithstanding, there remains concerns around the concentration of their credit portfolio. This relates to the concentration of credit towards a few sectors, the elevated share of large loan exposures as well as foreign currency denominated loans.

The sectoral distribution of credit has remained uneven, tilted to a few sectors, namely manufacturing, agriculture and energy. These top three sectors collectively account for about 50 percent of credit on banks' balance sheets (See *Non-Financial Corporates Debt Steady* Section). Considering that these sectors are grappling with a number of common challenges, including the electricity supply shortages and rising production costs, banks could suffer material losses and depleted capital buffers should their related counterparties experience liquidity challenges and renege on their obligations to them. Relatedly, the share of large exposures is elevated and raises financial stability concerns. Banks are heavily exposed to the top twenty borrowers, whose share has remained high at 62.2 percent (Chart 34). This implies that lenders face concentration risk as they are exposed to common counterparties. Hence, in the absence of a well-diversified credit portfolio, lenders would incur substantial credit losses in the event that common borrowers they are exposed to default.

The quality of banks' credit is also somewhat being weakened by the elevated share of foreign currency-denominated loans on their balance sheets, especially in light of exchange rate risk. The proportion of foreign exchange exposures has risen marginally to 40.1 percent in the six months to September 2024 (Chart 35). The high share of foreign currency loans brings to the fore risks associated with the partial dollarization of credit in the financial system: exchange rate and credit risks. As highlighted in the *May 2024 Financial Stability Report*, an elevated share of foreign-currency-denominated exposures indirectly raises credit risk through the exchange rate

Chart 29:Chart 32: Banks' Capital Adequacy Ratio (%)

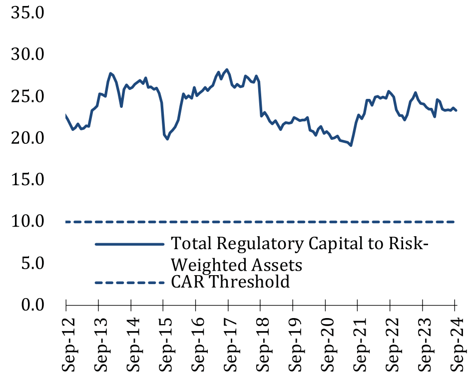


Chart 30: Liquidity Ratio (%)

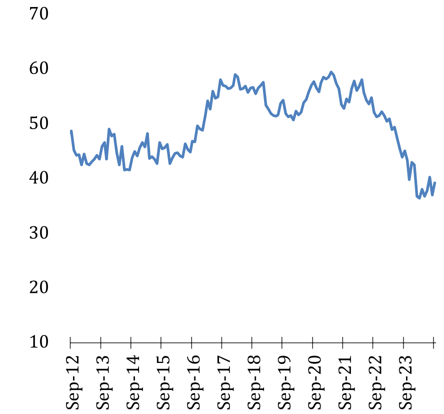


Chart 31: Banks Investments in Government Bonds (K' billion)

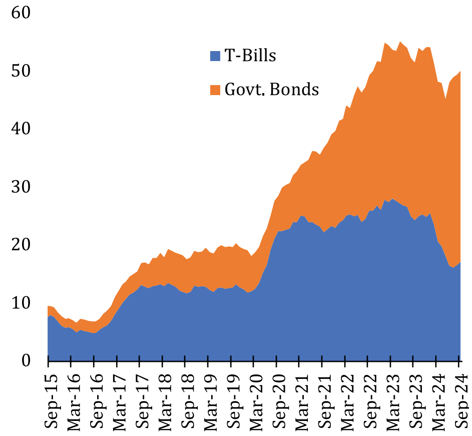


Chart 32: Banks' CET 1 (K'Billion)

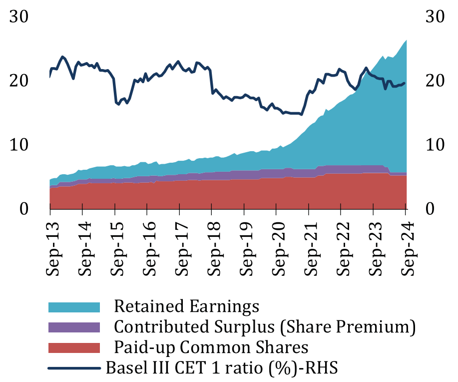


Chart 33: Banks' NPL Ratio (%)

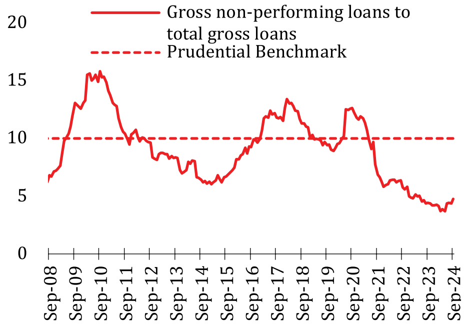


Chart 34: Twenty largest loans to total loans(%)

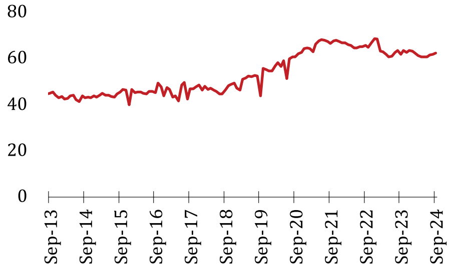


Chart 35: Foreign currency denominated loans to total loans (%)

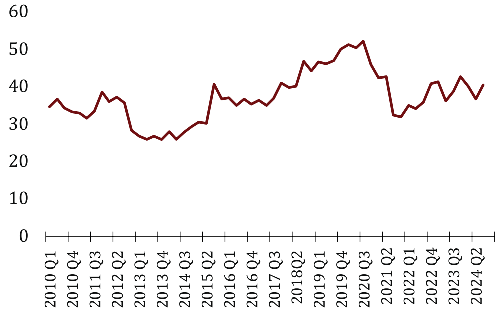
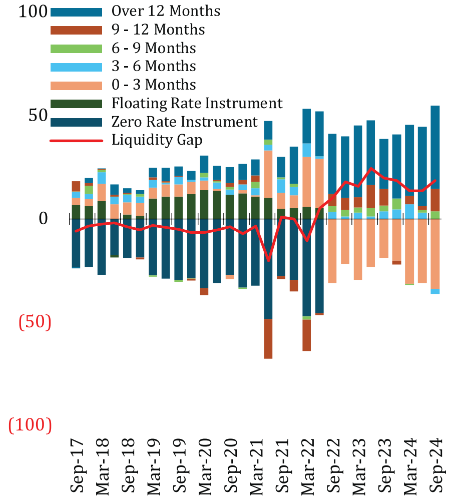


Chart 36: Maturity Mismatches (K'Bn)



Note: Pre-July 2022, commercial ban banks were required to report floating and zero rate instruments.

channel. While a sizeable share of banks' foreign currency exposures are hedged, as most counterparties invoice their goods and services in foreign currency, there is a concern about the unhedged portion that has been rising over the last few months. A weaker kwacha could make it difficult for unhedged borrowers to service their debt, and if sustained, could lead to increased loan delinquencies and impairments. Besides raising credit and liquidity risks, the partial dollarization of credit negatively impacts the monetary policy transmission as market dynamics of dollar denominated credit hardly respond to the central bank's policy rate adjustments.

Banking Sector Liquidity Gap Widens

The banking sector liquidity gap increased since March 2024 (Chart 36) an indication of widening maturity mismatch. Commercial banks' positive gap[4] has widened following an increase in net assets in the 9 – 12 months bracket. Overall, banks continue to hold much of their net assets in the longer tenure bracket of over 12 months. This is primarily due to the expansion in their government securities investments.

In a high interest rate environment, a positive gap boost interest income, profitability and solvency. However, an excessive positive gap could make lenders vulnerable to interest rate risk should there be a shift in the direction of interest rates in the near or medium term. This could pile pressure on their interest income and profitability. Moreover, the widening maturity-mismatch raises liquidity risk, especially when viewed within the context of deposit concentration (Chart 37) and the dominance of demand deposits in banks' liability's structure (Chart 38).

Non-Bank Financial Institutions (NBFIs)

Insurance Firms Experience Growth Amid Challenges

Key financial indicators suggest that insurance businesses experienced growth amid a challenging environment. The industry's gross written premium (revenue) soared 97.8 percent to K4.9 billion, net earned premium by 84.6 percent to K2.9 billion and investment income by 111.6 percent to K0.3 billion between March and June (Chart 39).

Their total assets also recorded growth of 9.4 percent to K10.4 billion while net assets shrunk by 17.8 percent to

[4] A positive gap occurs when banks have a surplus of interest-sensitive assets over their interest-sensitive liabilities, whereas a negative gap occurs when interest-sensitive liabilities exceed interest-rate sensitive assets.

K1.7 billion (Chart 40). It is also worth noting that claims incurred by non-life insurance companies and benefits paid by life insurance businesses each soared by 116 percent (Chart 41).

Stagflation, an economic condition where low growth and heightened inflation exist simultaneously, poses risks to insurance businesses in the near-term. A higher cost of living may cap uptake of insurance products and services as businesses and households tend to prioritise spending on 'necessities' at the expense of taking up insurance cover when faced with low-income levels. This could pile pressure on their gross written premiums (revenues), profitability and liquidity. Secondly, subdued general income growth could lead businesses to fail to discharge contractual obligations guaranteed by insurers. This would in turn lead to an increase in the materialization of performance bonds and guarantees, and ultimately pressure on their profitability and liquidity, which they consider to be the most difficult risk to manage (see *Box A*). Thirdly, the new capital adequacy requirements stipulated in the Insurance Act, 2021 and the Insurance (General) Regulations, 2022, could see the resilience of the industry weaken as several insurance companies could fall short of meeting the required capital adequacy by the end of the transition period in 2025. The new legislation requires insurers to hold a minimum available capital of 150 percent of their minimum capital requirement[5] which only a handful of insurance firms have achieved thus far.

Overall, performance of Private Pension Industry Remains favourable

The private pension industry's health remained steady amidst growing headwinds, with their net assets and profitability recording growth. Their net assets grew steadily, increasing by 4 percent to reach K18.4 billion in the three months to June (Chart 42). However, their profitability declined, with their total investment income shrinking by 27.9 percent and net return on average net assets falling to 16.5 percent (Chart 43). With inflation having risen during the quarter, this dramatically compressed the real return margin to 1.1 percent from 12 percent previously.

[5]The capital adequacy requirement (CAR) for insurance companies is the ratio of available capital to the minimum capital requirement. Available capital includes paid-up capital, share premium, retained profits, cash and cash equivalent, general reserves, subordinated debt and revaluation reserves for properties. The minimum capital requirement for non-life and reinsurance companies includes risk-factored total balance sheet assets, investments in allowable investment, reserves, preceding year gross claims and net earned premiums, reinsurance value ceded to reinsurers and total guarantee policies.

Chart 37: Twenty largest Depositors to Total Deposits (%)

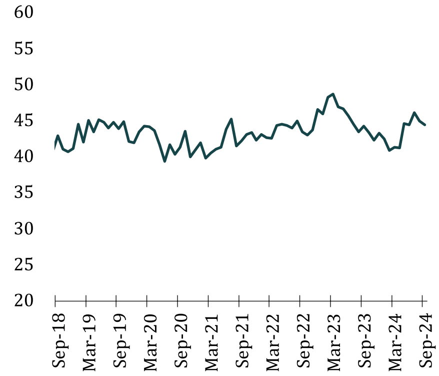


Chart 38: Decomposition of Banks' Deposits

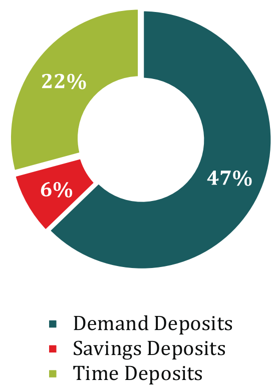
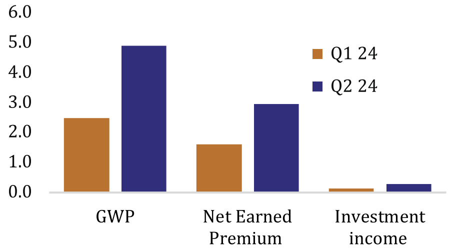
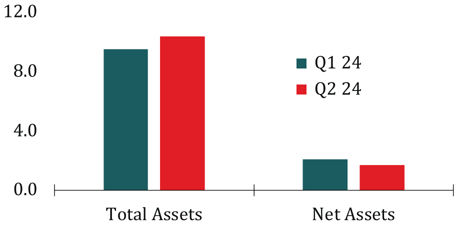


Chart 39: Insurance Industry Revenue and Earnings (K'billion)



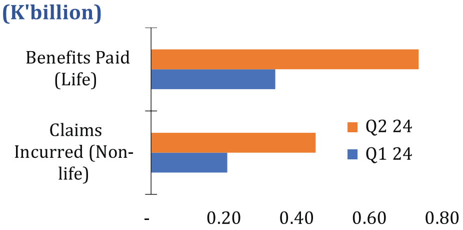
Source: Pensions and Insurance Authority (PIA), BoZ Staff Calculations

Chart 40: Insurance Industry Asset Growth (K'billion)



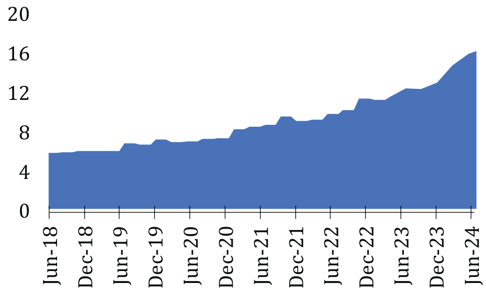
Source: Pensions and Insurance Authority (PIA), BoZ Staff Calculations

Chart 41: Claims incurred and Benefits Paid (K'billion)



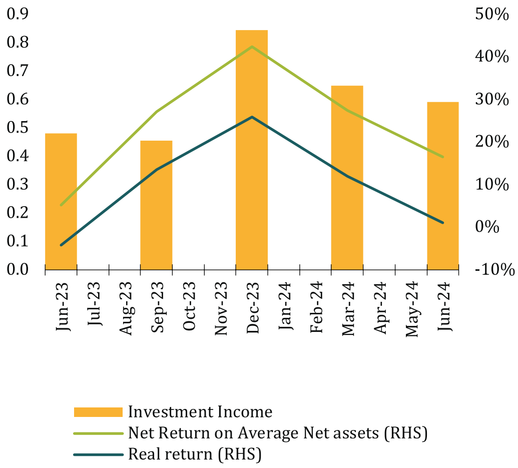
Source: Pensions and Insurance Authority (PIA), BoZ Staff Calculations

Chart 42:Private Pension Industry Net Assets (K'billion)



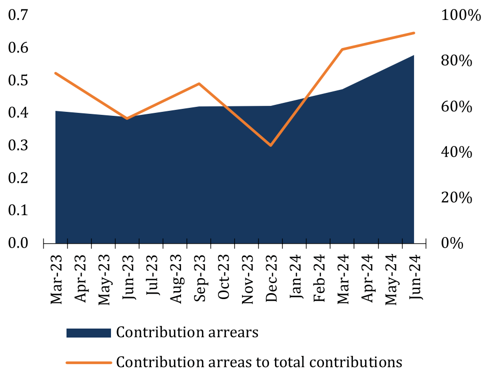
Source: Pensions and Insurance Authority (PIA), BoZ Staff Calculations

Chart 43: Private Pension Industry investment income and return (K'billion)



Source: Pensions and Insurance Authority (PIA), BoZ Staff Calculations

Chart 44: Contribution Arrears (K' billion)



Source: Pensions and Insurance Authority (PIA), BoZ Staff Calculations

According to the results of the SRS, pension companies perceive higher inflation and lower growth as risks that would have the highest impact in the near-term, with inflation risk being the most difficult to manage (*Box A*). The accumulation of contribution arrears over the first half of the year – from 43.0 percent of total contributions in December 2023 to 92.5 percent in June (Chart 44) – is possibly the result of liquidity challenges and subdued income levels faced by sponsors (companies). Therefore, lower economic activity and income growth is increasing the risk of contribution arrears in the near term. Companies may find it increasingly difficult to keep up with theirs and members' monthly contributions in a low growth environment, which could raise liquidity risk. The accumulation of contribution arrears also raises pension firms' opportunity cost in terms of the forgone return on average net assets. While higher inflation could further squeeze pensions real return and possibly push them in the negative territory and losses, higher interest rates could raise concentration risk as pension funds expand their placements in high yielding government securities. This stifles their ability to diversify their portfolio and risk. And while high interest rates could help them improve their profitability, the reverse would occur should interest rates fall.

Box A: Systemic Risk Survey (SRS): Systemic Risk Expected to Rise in the Near-term

The Systemic Risk Survey (SRS) was rolled out in October 2024 to enable the Financial Stability Committee (FSC) gain insights into market participants' perceptions of systemic risk in the near term. The SRS will be conducted biannually in March and September, and its results will supplement the systemic risk assessment process.

Respondents comprise senior management executives responsible for risk or treasury management at commercial banks, microfinancial institutions, building societies, insurance companies, pension funds, asset managers and non-financial corporates. A total of 30 firms participated in the September 2024 survey, representing a 64 percent response rate.

Results

Respondents are of the view that the overall systemic risk will increase over the next 12 months, but later taper over the medium-term. About 63 percent of respondents anticipate an increase in risks to financial stability in the near-term, while 43 percent believe it will decrease. About 40 percent see it increasing, over the 2-5 year horizon (Figure 1 and Figure 2).

Risk managers polled cited heavy reliance on hydro power, undiversified economic system, high concentration of credit, and funding and liquidity mismatches to be the key vulnerabilities in the domestic financial system and the economy.

They also view climate risk relating to drought and floods to be the greatest threat to financial stability in terms of potential impact. This is followed by higher inflation, liquidity risk, threat of cyber-attacks, increased load shedding, lower domestic growth and default risk on loans to households and firms. A sector-by-sector analysis shows that non-financial corporations assess higher inflation and climate risk to be high-impact risks whilst pension firms believe its inflation as well as lower domestic growth.

Respondents have cited climate risk, relating to drought and floods, and liquidity risk as the most difficult to manage. This possibly speaks to the devastating impact the drought-induced electricity supply deficit has had on business operations and economic activity, and the resultant liquidity strains. For example, banks consider climate risk to be the most difficult to manage whereas insurance companies regard liquidity risk as the most challenging to handle, reflecting the pressure the slowdown in growth would have on their revenues and ability to claims.

Figure 1: Expected near-term changes in systemic risk

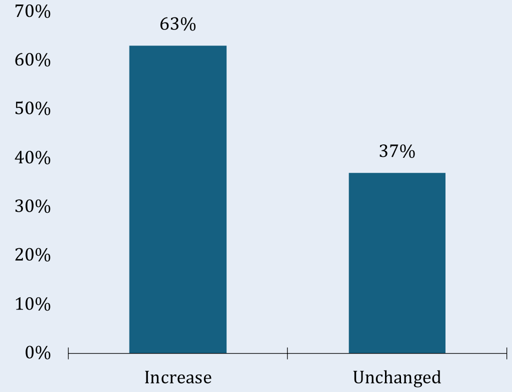
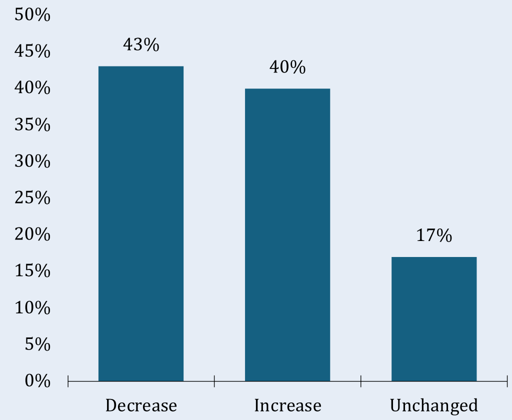


Figure 2: Expected medium-term changes in systemic risk



3. Policy

The Committee maintained the Countercyclical Capital Buffer (CCyB) at 0.0 percent considering that the banking system has remained resilient on the back of high capital buffers, GDP growth has significantly slowed, weighed down by the impact of the drought production and electricity generation, and the credit-to-GDP gap has remained below the Basel III threshold of 2 percentage points.

Since the *May 2024 Financial Stability Report*, risks to financial stability have edged up in the wake of lingering vulnerabilities and growing risks. The drought-induced electricity supply deficit has drastically dragged economic activity, compounded price pressures and raised risks to financial stability. Annual growth in output significantly fell to 1.7 percent in June compared with 2.2 percent in March. On balance, near-term risks to economic growth and financial stability have significantly tilted to the downside due to the deepening vulnerability associated with the electricity supply deficit.

The flow of credit to the private sector grew between March and September 2024. However, it is noteworthy that this growth in credit is assessed to be moderate, and poses minimal risk to financial stability, as the private credit to GDP gap was posted at 1.4 percentage points in September, well below the Basel III threshold of 2.0 percentage points.

Commercial banks' capital buffers have also continued to reinforce the resilience of the financial system. The banking sector's capital adequacy has remained strong at 23.7 percent, a demonstration of their ability to absorb shocks including unexpected losses.

Considering the foregoing, therefore, the Committee decided to maintain the Countercyclical Capital Buffer (CCyB) at 0.0 percent.

Appendix

Heatmap at a Glance

A heatmap is a two-dimensional representation of data in which values are represented by colours. It shows a visual summary of various vulnerabilities and risk indicators whilst providing an easy interpretation of the historical evolution and movement of systemic risk metrics. Ideally, a Heatmap displays the evolution of distress in the financial system based on prescribed risk categories. It is not designed to predict the timing or severity of a financial crisis but to identify underlying vulnerabilities that could potentially lead to a crisis. It helps signal the potential threats to financial stability. In terms of interpretation, the 'blue' colour indicates low risk or vulnerability, 'red' is representative of high risk or vulnerability and 'white' represents medium risk or vulnerability.

While the colours are assigned to fixed scales in the case of those indicators with pre-determined trigger points, they are assigned to relative values where the percentile system is used. This means that the evolution of colours is dynamic, and can therefore, change with the addition of more observations to the distribution.

Table 9: Full Heatmap