# Financial Stability Report





December 2022

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The Bank of Mauritius (hereafter referred to as the "Bank") is issuing the second edition of its Financial Stability Report for 2022, covering the first half of 2022, unless otherwise stated.

This Report is published pursuant to section 33(2)(b) of the Bank of Mauritius Act which stipulates the Bank shall publish at least twice a year a report on financial stability. The Report includes a review of financial stability and an assessment of policies of the Bank in relation thereto.

In line with its mandate to ensure the stability and soundness of the financial system of Mauritius in terms of section 4(2)(b) of the Bank of Mauritius Act, the Bank makes an overall assessment in this report of the risks that can threaten the stability of the financial system and the measures taken to mitigate these risks. It evaluates the resilience of the system to the risks, as a stable and sound financial system is a prerequisite for financial intermediation in the economy and for creating conducive conditions for economic and financial development.

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## **Contents**

EXECUTIVE SUMMARY	1
1. MACROFINANCIAL ENVIRONMENT	1
Global economic and financial conditions deteriorated	1
Global financial markets more volatile	2
Domestic macro conditions improved further but remained vulnerable	4
Domestic markets more volatile	5
Foreign exchange market recovered further	7
Monetary policy normalisation	8
Adequate international reserves	10
Systemic risk eased with economic recovery	11
2. FINANCIAL SOUNDNESS OF HOUSEHOLDS AND CORPORATES	13
Bank credit to private sector accelerated	13
Household credit expanded rapidly with balanced risk	14
Housing credit accelerated	15
Quality of bank credit to households improved	17
Household indebtedness ratios declined as economy expanded	17
Decline in household credit-to-GDP gap alleviated concerns of excessive leverage	18
Resilient household debt servicing capacity  Corporate credit contracted amid deleveraging	<i>19</i> 21
Corporate credit quality improved	22
Credit to commercial real estate sector slowed	23
Corporate credit-to-GDP gap in negative territory	24
Box 1: Update on COVID-19 support measures	26
Box 2: The Mauritius Investment Corporation Ltd and financial stability	27
3. FINANCIAL SOUNDNESS OF DEPOSIT-TAKING INSTITUTIONS	28
Structure of the deposit-taking financial sector remained unchanged	28
Banking sector assets expanded further	29
Resilient capital buffers	31
Asset quality improved	32
Profitability on the rise	33
Ample liquidity buffers	34
Credit concentration and FX exposures within prudential limits	35
Growing cross-border exposures amid heightened risk	35
Banking Sector Stability indicator deteriorated marginally	37
Non-Bank Deposit-Taking sector's improved performance	38
FSIs of deposit-taking institutions remained sound	40
Financial stability co-ordination and regulatory reforms	43
Regulatory updates	44

Box 3: Insights into liquidity risk and mitigants in the banking system	46
Box 4: Survey on Economic Perspectives and Financial Stability Implications	49
4. NON-BANK FINANCIAL SERVICES SECTOR Life insurance industry performance dropped	<b>54</b> 54
Gross premiums sustained	56
General insurance industry grew steadily	57
Insurance sector regulatory developments	59
Pension scheme industry adversely impacted by market volatility	60
5. GLOBAL BUSINESS SECTOR	63
Global Business activities buoyant despite emerging risks	64
Rise in live GBCs	65
Investment flows impacted by geopolitical tensions	68
Close linkages between the global business and banking sectors	69
GBC deposits with banks tumbled marginally	70
6. STRESS TESTING THE MAURITIAN BANKING SECTOR  Macroeconomic scenario analysis	<b>74</b> 75
Interest rate and exchange rate shocks	77
Sensitivity analysis	78
Sectoral credit risk	78
Credit concentration risk	79
Liquidity risk	81
Reverse stress test	82
ANNEX A: FINANCIAL SOUNDNESS INDICATORS	84
LIST OF CHARTS	86
LIST OF TABLES AND BOXES	89
LIST OF ACRONYMS	90
GLOSSARY	92

## **Executive summary**

## **Global developments**

Initial promising signs of sustained global economic recovery towards the end of 2021 were short-lived. Growing uncertainty to the global economic outlook on account of the ripple effects of the Russia-Ukraine war, high inflation eroding consumer and investor sentiment, rapidly rising interest rates in many economies and high financial markets volatility were some of the key developments in the first half of 2022.

Several risks discussed in the Bank's Financial Stability Report of December 2021 and June 2022 have gradually materialised. The Russia-Ukraine war escalated into a severe energy crisis in Europe. Gas prices soared by more than four-fold since 2021, with deliveries dropping to less than 20 per cent of their 2021 level. Higher food prices on world markets, caused primarily by the significant drop in supply from Ukraine, led to serious hardship for low-income households worldwide. The Black Sea grain export deal – signed in July 2022 between Ukraine and Russia for Ukraine to export grain safely – is expected to alleviate the food crisis on the world market. Yet, the combination of energy and food price shocks might cause high inflation to persist for longer.

In addition, renewed lockdowns in China under its zero-COVID 19 policy significantly disrupted production and distribution, destabilising economic activity in China. Importantly, given the size of China's economy and its importance in the global supply chains, global trade and economic activity were adversely impacted.

Financial markets registered major turbulences. Equity prices fell globally as investors' risk appetite dwindled, reflecting the prevailing uncertainty in the global economic outlook. The Morgan Stanley Capital International (MSCI) World Index, the MSCI Emerging Market Index and the MSCI Frontier Index plummeted. International currency movements magnified with an appreciating US dollar.

Risks to global financial stability amplified in the first half of 2022 and were expected to persist for the remaining part of 2022. Central banks in advanced economies and many emerging markets had to resort to accelerated monetary policy normalisation to prevent inflation from becoming entrenched. Consequently, global financial conditions tightened considerably, disturbing growth prospects in many economies during 2022 and even in 2023. Moreover, tighter financial conditions undermined the household and corporate sectors.

In its October 2022 World Economic Outlook (WEO), the International Monetary Fund (IMF) projected global growth to decline to 3.2 per cent in 2022 and further to 2.7 per cent in 2023, from 6.0 per cent in 2021. The IMF estimated that about a third of the world economies would face two consecutive quarters of negative growth. It also expected inflation to peak at 8.8 per cent in 2022, from 4.7 per cent in 2021, and hover around 6.5 per cent in 2023. Risks to the growth outlook remained tilted to the downside. Rising debt servicing costs and market volatility would exert pressure on the financial position of households and corporates, culminating towards heightened risks to global financial stability.

## **Domestic developments**

Domestic economic recovery, building on the momentum gathered during the last quarter of 2021, gained further pace in the first half of 2022 with most key sectors registering notable growth. The annual real growth of quarterly Gross Domestic Product (GDP) reached 8.9 per cent and 15.9 per cent in the first and second quarters of 2022, respectively. The revival of the tourism and related industries as well as buoyant export sector activities instilled greater dynamism to the economy. Concurrently, labour market conditions improved, followed by a drop in the unemployment rate to 8.1 per cent in the second quarter of 2022, from 10.5 per cent in the last quarter of 2021.

The onset of the Russia-Ukraine war in February 2022, rising domestic inflation and a weakening of the exchange rate of the Rupee (Rs) – as the US dollar (US\$) appreciated against major currencies – did not materially impact consumer and business confidence. It is noteworthy that, in a survey conducted by the Bank in October/November 2022, a majority of banks indicated strong optimism on the stability of the domestic economy. Proactive measures initiated by the authorities helped sustain the positive sentiment and economic momentum – such as increasing airline passenger capacity to bolster the tourism sector, the freight rebate scheme for exporters that was extended till June 2023 and fiscal support to eligible individuals.

Against this backdrop, the Bank projected an economic growth rate of over 7 per cent in 2022, from 3.7 per cent in 2021. The projected economic expansion was underpinned by strong buoyancy in the tourism and export sectors, which were expected to generate positive spillover effects on other segments of the economy and contain the transmission of macrofinancial risks.

Inflationary pressures intensified during the period under review. Inflation rose steadily to 8.0 per cent in June 2022. To prevent inflationary pressures from becoming entrenched and disrupting medium-term growth prospects, the Monetary Policy Committee (MPC) of the Bank

increased the Key Repo Rate (KRR) cumulatively by 40 basis points at its two meetings held in March and June 2022, which were accompanied by further hikes subsequently. The Bank conducted money market operations to enhance the transmission of the policy rate hikes to market interest rates. The resulting rise in debt servicing costs contributed to elevate risks to financial stability – principally due to the implications of high interest rates on debt servicing capacity of borrowers, asset prices and the growth outlook. But targeted timely measures – such as those enunciated in the Budget 2022-2023 to support households – were expected to ease these risks.

The foreign exchange (FX) market continued to recover in the first semester of 2022, underpinned by growing FX inflows but also by rising FX outflows given high import prices and soaring consumption. The conjunctural FX demand-supply gap was not considered large enough to destabilise FX market conditions. The Bank also timed and sized its FX interventions to relieve any undue pressures on the FX market, that could have heightened financial vulnerabilities. The exchange rate of the Rupee weakened following the appreciation of the US dollar on international markets and reflecting domestic macroeconomic developments, though it appreciated against the euro.

The country continued to hold adequate FX reserves buffer to face external shocks. The Gross Official International Reserves (GOIR) hovered around levels that met various reserves adequacy metrics. The GOIR was US\$7.6 billion as at end-June 2022, representing 16.3 months of import cover and was within the stringent assessing reserve adequacy metric.

Bank credit to the private sector expanded further, though credit dynamics displayed mixed readings. Household credit growth maintained its upward trajectory, reaching an 8-year high in June 2022. Favourable economic and labour market conditions propelled growth in household credit, particularly housing credit. Credit dynamics in the household sector did not represent a source of systemic risk to the financial system. Household indebtedness – combining household credit from banks, non-bank deposit-taking institutions (NBDTIs), insurance and leasing companies – dropped to 36.9 per cent of GDP in June 2022. In addition, the household credit-to-GDP gap moved closer to zero, dispelling concerns over possible excessive household leverage. The debt servicing capacity of the household sector was better than before the pandemic, though rising interest rates could exacerbate pressures on household – in particular, those households having high debt service-to-income ratios.

Credit to the corporate sector contracted steadily in the first semester of 2022, as some economic sectors reduced their indebtedness amid improving economic conditions and rising corporate earnings. Loan moratoria availed by the corporate sector plummeted by around 50

per cent to Rs14.1 billion as at end-June 2022 compared to end-December 2021, confirming improving conditions in the sector. The phasing out of moratoria on loans – deployed during the pandemic to economic operators as well as households to preserve financial stability – was completed on 30 June 2022. Lower leverage of the corporate sector is expected to limit vulnerabilities as interest rate increases and economic activity strengthens. Moreover, debt service indicators showed better financial soundness of the corporate sector, but the impact of rising interest rates will have to be reassessed going forward.

The asset quality of banks, in terms of exposures to both households and corporates, improved. In particular, the non-performing loan (NPL) ratio for the household sector dropped to 2.4 per cent while it fell to 5.8 per cent for the corporate sector as at end-June 2022. Lower level of impairments in key economic sectors contributed to the decline in corporate sector NPLs.

The Global Business (GB) sector expanded further, in particular following the delisting of Mauritius from the Financial Action Task Force (FATF) *List of Jurisdictions under Increased Monitoring* and the United Kingdom (UK) *List of High-Risk Third Countries* in the last quarter of 2021 and from the European Union (EU) *List of High-Risk Third Countries* in the first quarter of 2022. Better business sentiment and economic dynamism in regional economies also instilled renewed confidence in the GB sector. Compliance with 39 out of the 40 FATF Recommendations as at end-June 2022 and with the 40 FATF Recommendations as from September 2022 consolidated the fundamentals for a resilient and thriving GB sector, despite intensifying competition. These developments spurred growth in both the number of new Global Business Corporations (GBCs) licences issued and investment flows which were higher post-delisting relative to the grey-listed period.

Risks from the GB sector that could impact the stability of the financial system remained contained in the first half of 2022. The linkages between the banking system and the GB sector were principally in the form of deposits and, to a lesser extent, credit exposures. A drop in GBC deposits held with banks in the first semester of 2022, likely resulting from rising interest rates on major currencies, did not trigger liquidity concerns, as banks prudently deployed GBC deposits into liquid FX assets to ensure adequate buffers against the risk of sudden withdrawal of funds.

The stress test results showed the banking system remained resilient to a series of plausible macroeconomic and idiosyncratic shocks. The capital and liquidity buffers held by banks were broadly adequate to sustain the stability and resilience of the banking system. The scenarios consisted of hypothetical adverse shocks to the credit portfolios, interest rate, exchange rate

and liquidity position. Some banks displayed weaknesses to specific shocks, particularly under the harshest and less plausible scenarios, partly because of the complete phase-in of the Capital Conservation Buffer (CCB). The Bank is tackling these vulnerabilities through appropriate measures.

The evolving economic and financial landscape as well as medium to long-term challenges warrant regular alignment of existing regulatory frameworks to international norms. The Bank pursued the upgrading of the regulatory and supervisory framework to reinforce the soundness and stability of the banking system. It completed the phasing-in of the last tranche of the CCB to 2.5 percentage points effective 1 April 2022, from 1.875 per cent previously. The CCB is set to enhance capital buffer of the banking system. The Bank also issued several new guidelines, including on climate change, stress testing by banks and use of cloud services. The Financial Services Commission (FSC) has effected a series of amendments to upgrade the insurance regulatory frameworks.

The performance of the non-bank financial services sector was mixed, but the sector did not pose major risks to the stability of the broader financial system. Aggregate profitability metrics for the NBDTIs improved further in the first half of 2022. The sector was resilient to vulnerabilities associated with the lingering pandemic and the war, given capital levels were considerably above the minimum regulatory requirement at around 49.4 per cent as at end-June 2022. Moreover, NPLs for NBDTIs dropped to 5.1 per cent as at end-June 2022.

The non-bank financial services sector – comprising the insurance and private pension schemes industries – faced challenges with rising interest rates and high global financial markets volatility. The assets value of life insurance and private pensions fund industries contracted in the first semester of 2022, as global stock markets plummeted. On the positive side, gross premium collected by the insurance industry expanded steadily.

The key findings of the Bank's annual *Survey on Economic Perspectives and Financial Stability Implications* showed that, generally, banks continued to be strongly confident about the stability of the domestic economy and the financial sector, despite notable level of risks over the next 12 months. Global and domestic evolving strains were expected to impact banking business within manageable levels, on account of the robust risk management strategies in place. Banks expected asset quality and profitability levels to be sustained, with even a slight improvement in the coming year. Most banks indicated that they were in a position to reinforce their capital buffers primarily through their retained earnings. Other risks such as operational risk, digitalisation and climate change were anticipated to be well managed through various risk mitigating strategies.

Risks to financial stability escalated in the first half of 2022 and are expected to remain elevated in coming quarters. The Bank maintains its prudent approach by proactively assessing and monitoring risks, both from within and outside Mauritius. Risks arising from further deterioration in the global economic outlook and financial conditions are also closely monitored given their potential ripple effects on the domestic economy. The Bank stands ready to take pre-emptive measures and apply macroprudential tools to respond to risks to financial stability.

## 1. Macrofinancial environment

Global economic recovery was hampered in the first half of 2022, partly on account of the ripple effects of the Russia-Ukraine war. Rising commodity and energy prices propelled inflation to multi-decades high, prompting rapid interest rates hikes in many economies. Despite these adverse developments, the domestic economy grew strongly in the first two quarters of 2022. The revival of the tourism and related industries as well as recovery in most key economic sectors propped up economic activity. Labour market conditions improved. FX inflows started rising. The level of the GOIR was assessed to be adequate. However, inflation surged and the MPC began normalising monetary policy as from March 2022 to manage inflationary pressures and expectations. High inflation and rising interest rates started impacting real income of households and balance sheets of the corporate sector. Risks to financial stability edged up. Still, the Systemic Risk Indicator suggested subsiding systemic risk in the financial system, mainly due to broad-based economic recovery that eased macrofinancial risks. The macrofinancial environment will continue to be influenced by tighter financial conditions, high inflation and risk to the growth outlook in coming quarters.

## Global economic and financial conditions deteriorated

Global economic recovery was mired in unrelenting challenges in the first semester of 2022. The combined effects of the lingering pandemic, Russia-Ukraine war, pervasive inflationary pressures leading to aggressive interest rate hikes in many countries, and economic slowdown in several major economies have frustrated the global economic outlook. The IMF revised down its global growth forecast to 3.2 per cent for 2022 and to 2.7 per cent for 2023 in its October 2022 WEO, compared to 6.0 per cent for 2021.

The energy crisis resulting from the war led to a surge in energy as well as commodity prices globally. Moreover, the war amplified prevailing demand-supply imbalances, driving inflation to multi-decades high around the world. The abrupt pick-up in inflation impacted cost of living severely, weakening the financial position of households as well as that of the corporate sector.

Central banks raised interest rates rapidly to curb inflationary pressures and prevent deanchoring of inflation expectations. Rising interest rates tightened global financial market conditions, prompting higher financial market volatility after a prolonged period of loose financial conditions to prop up economic recovery from the pandemic-led downturn.



Policymakers faced challenges in consolidating public debt levels on the fiscal front. The backdrop of rising interest rates and slowing economic growth heightened the difficulty for fiscal authorities to protect vulnerable households and businesses from the impact of elevated food and commodity prices. Moreover, fiscal support packages provided during the pandemic have strained governments' budgets, leaving limited fiscal space. Of importance, it is argued that in an environment of high inflation, tighter fiscal policy stance is required to show policymakers' determination to bring down inflation.

Risks to global financial stability worsened during the first half of 2022 and maintained this trend subsequently, as discussed in the IMF's October 2022 Global Financial Stability Report. The rapid switch from loose to tight financial conditions amplified vulnerabilities in the global financial system. High inflation coupled with rising debt servicing costs exerted strains on household and corporate balance sheets, leading to a bleaker macroeconomic outlook and heightened risks to global financial stability. In a number of countries, the macroprudential authorities adjusted policy tools to pre-emptively address financial vulnerabilities.<sup>1</sup>

Macrofinancial risks from these adverse developments are testing the resilience of banks globally. The IMF's Global Bank Stress Test indicates that nearly a third of banks in emerging markets would fail to meet the minimum capital requirements. The stressed scenario is characterised by a sharp tightening of financial conditions that would trigger a global economic recession in 2023.<sup>2</sup> Banks in advanced economies showed greater resilience.

## Global financial markets more volatile

Financial markets volatility intensified considerably in the first half of 2022. Equity prices slumped globally due to heightened uncertainty on the economic outlook while investor risk appetite plunged. The MSCI World Index, the MSCI Emerging Market Index and the MSCI Frontier Index declined by 21 per cent, 19 per cent and 20 per cent, respectively, between end-December 2021 and end-June 2022 (Chart 1.1).

Global long-term yields increased steadily, reflecting policy rate hikes by central banks. The US 10-year yield averaged 2.4 per cent during the first semester of 2022, a considerable increase

<sup>&</sup>lt;sup>2</sup> Global Financial Stability Report: Navigating the High-Inflation Environment, pg xiv, IMF, October 2022.



<sup>&</sup>lt;sup>1</sup> For instance, several countries – such as Denmark, Estonia, Norway and Romania – are set to tighten the Countercyclical Capital Buffer during 2022 and 2023 as risks to financial stability intensify. Also, New Zealand's buffer for domestic systemically important banks is set to increase from 1 percentage point to 2 percentage points as from July 2023. In terms of borrower-based measures, the Czech National Bank has already reintroduced debt-to-income and debt service-to-income limits effective since 1 April 2022 and also lowered its loan-to-value limit to 80 per cent for borrowers above 36 years. Likewise, Austria's Financial Market Authority recommended borrower-based measures for private residential real estate in December 2021 and these came into force in August 2022.

from 1.5 per cent during the corresponding period in 2021. The EU 10-year yield moved into positive territory with an average yield of 0.6 per cent during the first half of 2022. As central banks pursued monetary policy tightening, long-term yields are expected to maintain an upward trajectory in coming quarters (Chart 1.2).

Chart 1.1: MSCI indices



Chart 1.2: Selected government bond yields



Source: Bloomberg

Source: Bloomberg

The hawkish approach adopted by the US Federal Reserve in the first half of 2022, compounded by the flight to the US dollar as safe haven, contributed to an appreciation of the US dollar, as evidenced by the general upward trend in the US dollar index. The index averaged 99.7 during the first semester of 2022, compared to an average of 91.0 recorded during the corresponding period of 2021 (Chart 1.3). A considerable depreciation of a country's currency against the US dollar complicates the fight against inflation given the exchange rate pass-through to prices, which can elevate risks to financial stability.

Chart 1.3: US dollar index



Source: Bloomberg



## Domestic macro conditions improved further but remained vulnerable

Domestic economic recovery gathered further momentum in the first half of 2022, in spite of the outbreak of the Russia-Ukraine war. The annual real growth of quarterly GDP reached 8.9 per cent and 15.9 per cent in the first and second quarters of 2022, respectively. The stimulus to economic activity was broad-based, with most key sectors registering significant growth. On the expenditure side, consumption and investment were also buoyant.

The Bank projected the economy to grow by over 7 per cent in 2022, compared to 3.7 per cent in 2021, underpinned primarily by tourist arrivals projected at one million for 2022. Labour market conditions also improved. The unemployment rate fell to 8.1 per cent in the second quarter of 2022, from 10.5 per cent in the last quarter of 2021.

The macrofinancial environment was influenced by both domestic and global developments. Intensifying inflationary pressures accompanied by rapidly rising interest rates, heightened financial markets volatility, as well as a weaker global economic outlook are some of the key elements that impacted the domestic economy. High and rising domestic inflation was induced by supply shocks related to the pandemic and the Russia-Ukraine war. Consequently, headline inflation rose to 8.0 per cent in June 2022.

In the light of these developments, the MPC of the Bank decided to start the normalisation and tightening of monetary policy to curb inflationary pressures and anchor inflation expectations. The MPC increased the KRR by a cumulative 40 basis points during the first semester of 2022 to 2.25 per cent as at end-June 2022. The MPC would further tighten monetary policy, depending on the evolution of the inflation and growth outlook.

The combination of high inflation and rising interest rates accompanied by tighter domestic financial conditions contributed to raising risks to financial stability, but targeted and timely measures curbed these risks to some extent. Several fiscal measures were announced in the Budget for 2022-2023 to support vulnerable households. Concurrently, ongoing efforts by the authorities – such as the State Trading Corporation (STC) supplying key commodities at affordable prices – have partly alleviated the burden of high inflation on households. Moreover, the Bank completed the phasing in of the last tranche of the CCB. Effective 1 April 2022, all banks were required to raise the CCB to 2.5 per cent, from 1.875 per cent. The CCB has improved the capital buffers of banks, enhancing their ability to withstand existing and emerging risks.

Contents

The successful vaccination campaign enabled the authorities to ease entry requirements for incoming visitors as from March 2022. Tourist arrivals and earnings went up as a result (Chart 1.4). The surge in tourism earnings translated into an improvement in the financial soundness of the hospitality and related sectors.

Chart 1.4: Tourist arrivals and tourism earnings

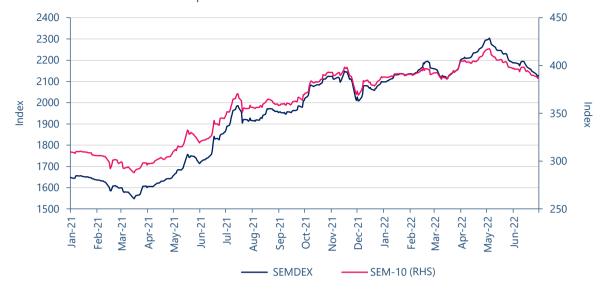


Source: Bank of Mauritius and Statistics Mauritius

## Domestic markets more volatile

The stock market was volatile but ended the semester broadly at par. The onset of the Russia-Ukraine war in February 2022 marred investors' confidence and risk appetite momentarily. The SEMDEX dipped between end-February 2022 and mid-March 2022, but rebounded strongly at the start of the second quarter of 2022, consolidating gains of the first quarter of 2022 to peak at 2,304 points in early May 2022 – a level not observed since March 2018. Thereafter, stock market indices fell due to elevated global markets volatility, appreciation of the US\$ against major currencies and rising domestic inflation. The SEMDEX closed the second quarter of 2022 at 2,127 points (Chart 1.5).

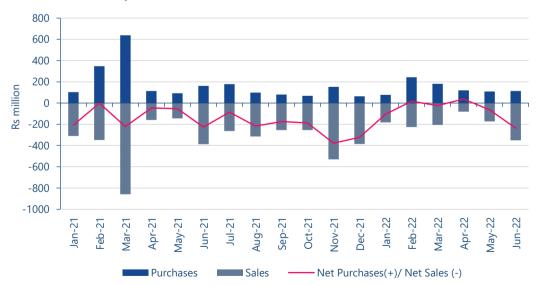
Chart 1.5: Domestic stock market performance



Source: Stock Exchange of Mauritius

The sell-off in the global equity markets also weighed on the domestic stock market, as foreigners divested nearly Rs376 million from the stock market during the semester on a net basis, though lower compared to the two semesters of 2021 (Chart 1.6). The trend suggests receding risk aversion by foreign investors compared to 2021 as domestic economic activity regained vigour, but rising interest rates globally and depressed world economic outlook may potentially dent foreign investors' risk appetite going forward.

Chart 1.6: Investment by non-residents on the SEM and DEM



Source: Stock Exchange of Mauritius

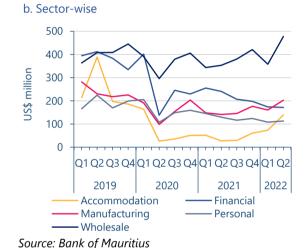


## Foreign exchange market recovered further

Conditions on the FX market continued to improve in the first semester of 2022, contributing towards allaying risks to the stability of financial markets. FX turnover, an aggregation of inflows and outflows, expanded by 12.3 per cent during the semester compared to the last semester of 2021 to reach US\$4.5 billion. The good performance of the tourism sector contributed to the rise in FX turnover (Chart 1.7). Demand for FX was highest from the 'Wholesale and retail trade', denoting higher import prices as well as growing consumption.

Chart 1.7: FX turnover





Source: Bank of Mauritius

The Bank continued to intervene on the FX market to curtail excessive exchange rate volatility – that could have heightened financial vulnerabilities in the economy – and to maintain broadly sustainable demand-supply conditions. It scaled back its interventions as FX inflows strengthened. Any conjunctural temporary gap between the supply of FX on the market and the demand for FX by customers during the semester under review was not considered large enough to destabilise FX market conditions. The Bank also ensured the timing and size of its FX interventions alleviated any undue pressure on the market. Moreover, the interest rate hikes by the Bank were expected to gradually deter exchange rate speculation and reduce exchange rate pressures.

The Bank sold a total amount of US\$513.3 million to the market, out of which US\$315 million to banks, during the first half of 2022. This amount was lower relative to that of the last semester of 2021. In April 2022, the Bank conducted the largest single FX intervention of US\$200 million (including to the STC) in order to satisfy growing FX demand as the economy recovered. With the easing of FX liquidity conditions, the STC was able to source its FX requirements directly from the market.

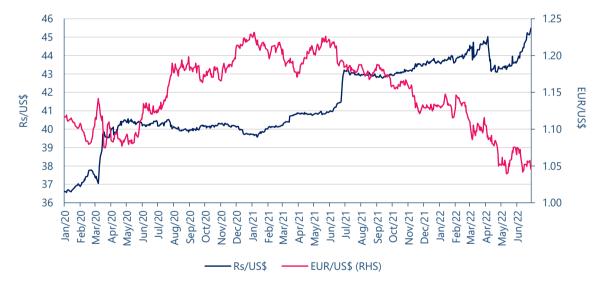


Contents

Tighter globally financial conditions have impacted the financial markets in several ways, including the FX market. While exchange rate movements reflected both domestic economic fundamentals as well as international currency movements, exchange rate volatility was primarily prompted by the appreciation of the US dollar on international markets. The weighted average selling dealt rate of the Rupee depreciated by 4.2 per cent against the US dollar but appreciated by 3.7 per cent against the euro between 4 January to 30 June 2022 (Chart 1.8).

The Bank closely monitored the implications of rising interest rates and exchange rate movements on financial stability. In particular, the depreciation against the US dollar coupled with the rise in US interest rates have the potential to add pressure on borrowers with US dollar debts, increase financing costs and constrain the flow of capital. The depreciation can also impact the inflation path, via exchange rate pass-through effects as the US dollar is the main trading currency.

Chart 1.8: Evolution of RS/US\$ selling dealt rate and EUR/US\$



Source: Bank of Mauritius

## Monetary policy normalisation

The MPC started the normalisation of monetary policy in March 2022 to respond to growing inflationary pressures and prevent an un-anchoring of inflation expectations, similar to the policy stance adopted by many central banks worldwide. The MPC raised the policy rate by 15 basis points and 25 basis points at its meetings held on 9 March and 3 June 2022, respectively. The MPC also signalled more policy rate hikes to come.



Interest rate hikes began impacting the balance sheets and debt servicing capacity of households and corporates. Against these balance sheets pressures, credit risk in the financial system tended to rise with implications on the quality of credit portfolios of banks. The resilience of the banking sector to a rise in credit risk is analysed in the sections on households and corporate sectors and on stress testing of this Report.

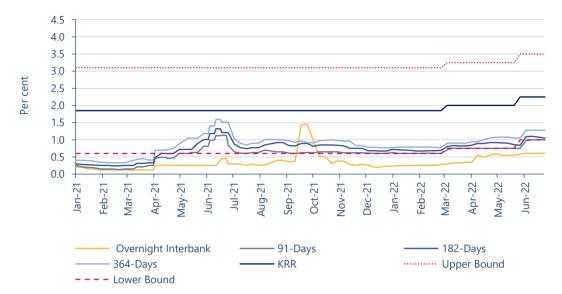
The Bank conducted monetary operations to ensure effective transmission of monetary policy signals to the economy. As a result, excess Rupee liquidity fell to an average of Rs28 billion in the first half of 2022, compared to Rs31 billion for the corresponding period of 2021. The tightening of monetary policy required further absorption of excess liquidity on the money market and appropriate open market operations were conducted thereafter to bring it down.

The Bank issued securities for a total amount of Rs67.9 billion, against maturing securities of Rs86.8 billion, from January to June 2022, resulting in net maturing securities of Rs18.9 billion. The Bank also mopped up an additional amount of Rs25.1 billion of excess liquidity through FX operations conducted with banks and other market participants. Net issuance of government securities amounted to Rs18.6 billion during that period.

Since the beginning of 2022, the credit facilities put at the disposal of the Development Bank of Mauritius Ltd (DBM) were mainly utilised to finance schemes with a view to supporting specific sectors and Small and Medium Enterprises (SMEs). To that end, an amount of Rs600 million was disbursed to the DBM through the special line of credit for Budgetary Loan Schemes.

Short-term yields picked up in line with the increases in the KRR and remained within the interest rate corridor set for monetary policy, though hovering closer to the lower bound. Yields on 91-Day Bills increased to 0.75 per cent in March 2022, from 0.60 per cent, and further to 1.00 per cent as from mid-June 2022. Yields on the 182-Day tenor ranged between 0.67 per cent and 1.10 per cent and that of the 364-Day tenor ranged from 0.77 per cent to 1.28 per cent during the first half of 2022. The overnight interbank rate hovered between 0.25 per cent and 0.60 per cent (Chart 1.9).





## Adequate international reserves

The reserve adequacy assessment, based on various methodologies, showed that the level of the GOIR as at end-June 2022 provided adequate buffer to protect the economy against potential external vulnerabilities. The GOIR stood at US\$7.6 billion as at end-June 2022, compared to USD\$8.6 billion as at end-December 2021.

The level of the GOIR met the conventional reserve adequacy metrics. The import cover was 16.3 months as at end-June 2022, firmly above the standard range. The reserves-to-broad money ratio was 44 per cent – well above the 5-20 per cent range recommended by the IMF. The ratio of reserves-to-short-term external debt was at 102 per cent, above the 100 per cent minimum threshold (Greenspan-Guidotti rule).

The Bank keeps close track of reserves adequacy using the more stringent IMF Assessing Reserve Adequacy (ARA) methodology.<sup>3</sup> The ARA takes into account exports of goods and services, short-term external debt, broad money liabilities, non-GBC portfolio and other investment liabilities position, as well as deposits of non-DSIB GBCs when assessing the capacity of the reserves to withstand potential adverse external shocks to the balance of payments.<sup>4</sup> The ratio of the GOIR to the ARA metric was estimated at 112 per cent as at end-

<sup>&</sup>lt;sup>4</sup> IMF Policy Paper, Assessing Reserve Adequacy--Specific Proposals (<a href="https://www.imf.org/-/media/Files/Publications/CR/2019/1MUSEA2019001.ashx">https://www.imf.org/-/media/Files/Publications/CR/2019/1MUSEA2019001.ashx</a>).



<sup>&</sup>lt;sup>3</sup> Mauritius: Staff Report for the 2021 Article IV Consultation (https://www.imf.org/en/Publications/CR/Issues/2021/06/28/Mauritius-2021-Article-IV-Consultation-Press-Release-Staff-Report-and-Statement-by-the-461296)

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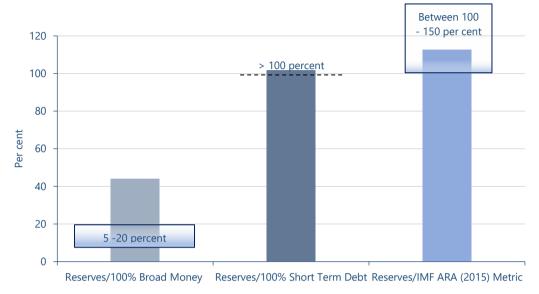
Non-bank financial services sector

business sector

Stress testing the Mauritian

June 2022 – that is, within the desired 100 to 150 per cent range recommended by the IMF (Chart 1.10).

Chart 1.10: Reserves adequacy metrics



Source: Bank of Mauritius

## Systemic risk eased with economic recovery

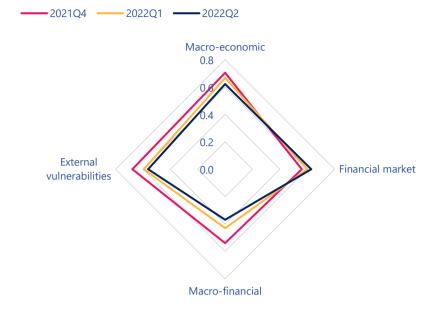
The Systemic Risk Indicator signalled subsiding systemic risk during the first semester of 2022 (Chart 1.11).<sup>5</sup> A notable improvement in macroeconomic, macrofinancial and external vulnerability factors alleviated concerns of possible build-up of systemic risk in the financial system. The good performance of some major economic sectors contributed to improved economic conditions, lessening fears of risks arising from macroeconomic factors.

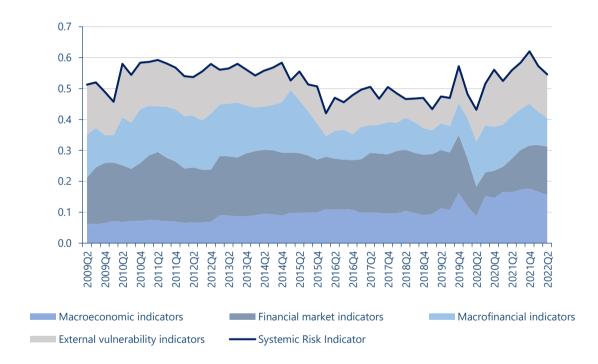
Strong economic recovery countered any build-up of vulnerabilities from macrofinancial conditions. Likewise, lower exchange rate volatility during the first half of 2022 reduced external vulnerabilities considerably, lessening possible risks arising from external shocks. However, systemic risks arising from financial market dynamics have gone up due to higher stock market volatility, rising interest rates and conditions on the stock market inducing investors to take on more risks.

<sup>&</sup>lt;sup>5</sup> The SRI gives an indication of an overall assessment of changes in the underlying systemic risk indicators relevant to the macro stability of the banking sector. It covers the period from the second quarter of 2009 to June 2022. As the indicators move further from the centre (i.e., approach a score of 1), the level of risk increases.



Chart 1.11: Systemic Risk Indicator







## 2. Financial soundness of households and corporates

The performance of the corporate and household sectors was commendable, underpinned by strong economic activity, though increasing inflation and interest rate caused risks to financial stability to rise in the first half of 2022. Household credit growth maintained its upward trajectory, reaching an 8-year high in June 2022. The corporate sector further reduced its leverage to the banking sector, as liquidity and corporate earnings expanded with strong performance of some key sectors of the economy. Risks to financial stability from the household and corporate sectors increased but were largely mitigated by leverage and debt servicing capacity comparable to the pre-pandemic period as well as fiscal support measures targeting the household sector specifically.

Favourable economic conditions have improved the financial soundness of the household and corporate sectors during the first semester of 2022. The support measures of the Bank – such as moratoria on loans – also safeguarded the financial health of households and corporates. Interest rate increases pushed up debt servicing costs, but the repayment capacity of households and corporates remained broadly resilient. The unwinding of the support measures by the Bank as from 1 July 2022, high inflation and further hikes in the interest rates may weigh on the resilience of the household and corporate sectors going forward.

## Bank credit to private sector accelerated

The growth of bank credit to the private sector accelerated in the first semester of 2022, after a downtrend in the last quarter of 2021. Bank credit expanded at an annual rate of 4.6 per cent as at end-June 2022, from 1.8 per cent as at end-December 2021. However, credit dynamics displayed mixed readings. While the rise in households credit picked up to reach pre-pandemic growth rates, credit to the corporate sector contracted steadily as some economic sectors reduced their indebtedness amid improving economic conditions (Chart 2.1). Concurrently, households and corporates have continued to benefit from the COVID-19 support measures – such as moratoria on loan repayment and loans restructuring – until end-June 2022. The asset quality of both households and corporates improved during the first semester of 2022.





## Household credit expanded rapidly with balanced risk

Household credit rose steadily during the first semester of 2022, largely driven by housing credit (Chart 2.2). The annual growth rate of household credit attained an 8-year high of 13.3 per cent in June 2022. Favourable economic and labour market conditions contributed to the strong household credit growth, in particular housing credit. The cumulative 40 basis points increase in the KRR during the first six months of 2022 had pushed up borrowing costs, but did not impede housing credit growth as market interest rates remained conducive to prospective borrowers.

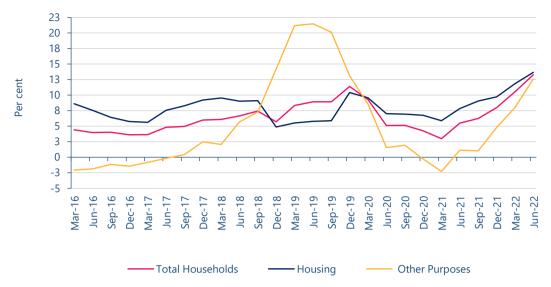
Household credit extended for 'other purposes', representing around one-third of total credit to households, registered a similar expansion, rising at an annual rate of 12.6 per cent as at end-June 2022 (Chart 2.2). Growing consumption demand was a key driver in the expansion of credit for 'other purposes'. Final consumption expenditure of households rose at an annual growth rate of 13.1 per cent in the second quarter of 2022.<sup>6, 7</sup>

<sup>&</sup>lt;sup>7</sup> Data on financial consumption expenditure of households are obtained from the Quarterly National Accounts, disseminated by Statistics Mauritius.



<sup>&</sup>lt;sup>6</sup> Credit extended to households for 'other purposes' includes purchase of other consumer durable goods, purchase of land, purchase of motor vehicles, education purposes, medical purposes, investment purposes, and other unspecified purposes.





## Housing credit accelerated

The economic environment encouraged further expansion of housing credit, in particular with low interest rates prevailing during the first half of 2022. Fiscal support measures introduced in 2021-2022 also bolstered households' demand for housing loans. Banks' risk appetite for housing credit was supported by the relatively low applicable risk weights for collateralised loans, while the impairment ratio for the housing portfolio remained small. As discussed in subsequent sections, corporate credit dynamics characterised by deleveraging also led banks to expand their housing credit portfolio.

Housing credit expanded at an annual rate of 13.7 per cent as at end-June 2022, from 9.7 per cent as at end-December 2021. As a consequence, the share of housing loans as a proportion of total credit disbursed by banks to the private sector increased to 26.5 per cent as at end-June 2022, from 26.1 per cent as at end-December 2021 (Chart 2.3).



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Financial soundness of households

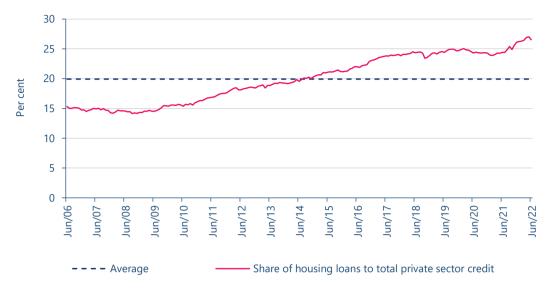
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Stress testing the Mauritian banking sector

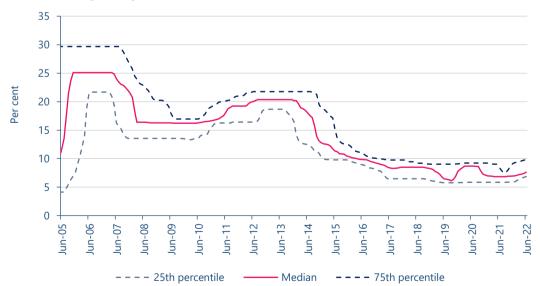
Chart 2.3: Share of housing loans in total bank credit



Source: Bank of Mauritius

The relatively high growth rate of housing credit since March 2021 was not considered a major source of systemic risk in the financial system and did not lead to excessive leverage of the household sector. The median annual growth ranged between 6.1 and 8.7 per cent for the period June 2019 to June 2022 (Chart 2.4). This compares favourably to the 12-15 per cent median annual growth for housing loans in three consecutive years considered a precursor of banking crisis, according to the IMF (2014).<sup>8</sup>

Chart 2.4: Housing loan growth



Source: Bank of Mauritius

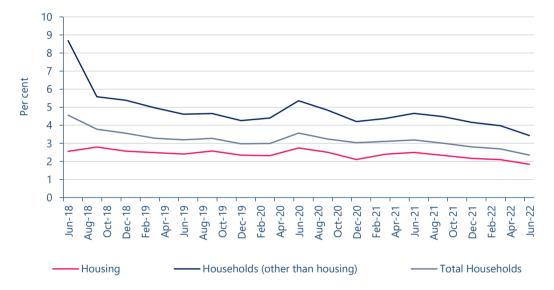
<sup>&</sup>lt;sup>8</sup> IMF Staff Guidance Note on Macroprudential Policy, 2014, pg 35.



## Quality of bank credit to households improved

The quality of the household credit portfolio of banks improved, with economic activity gaining further momentum whilst households continued to benefit from the pandemic-related support measures until end-June 2022. The NPL ratio for the household sector dropped to 2.4 per cent as at end-June 2022, from 2.8 per cent recorded as at end-December 2021. The quality of housing credit exhibited a similar trend, with the NPL ratio falling to 1.8 per cent from 2.2 per cent over the same period. The NPL ratio for household credit granted for 'other purposes' declined to 3.4 per cent, from 4.2 per cent (Chart 2.5).

Chart 2.5: NPL ratio for households



Source: Bank of Mauritius

#### Household indebtedness ratios declined as economy expanded

Household indebtedness, measured by the proportion of household debt to GDP, improved during the first semester of 2022 (Chart 2.6). The ratio of indebtedness of households to banks dropped to 25.7 per cent in June 2022, from 26.3 per cent in December 2021. Similarly, the ratio of indebtedness to NBDTIs moderated to 9.4 per cent in June 2022, from 10.1 per cent in December 2021.

The broader measure of household indebtedness – combining household credit facilities from banks, non-bank deposit taking institutions, insurance and leasing companies – declined to 36.9 per cent of GDP in June 2022, from 38.4 per cent in December 2021 (Chart 2.6b). By way of comparison, in the five years preceding the pandemic, this ratio averaged 33.7 per cent. Currently the ratio does not significantly deviate from the recent historical average and is

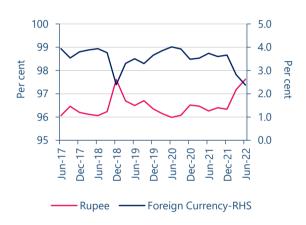


expected to drop further in coming quarters as the economy expands and rising interest rates constrain growth in household indebtedness.

Households continued to borrow mostly in domestic currency and, thus, had limited exposure to FX risks. The share of household credit denominated in Rupees in total bank credit to households rose to 97.6 per cent in June 2022, from 96.3 per cent in December 2021, implying a drop in the share of household credit denominated in FX and, consequently, lower vulnerability to FX risks.

Chart 2.6: Indicators of household indebtedness





b. Household credit as percentage of GDP



Source: Bank of Mauritius

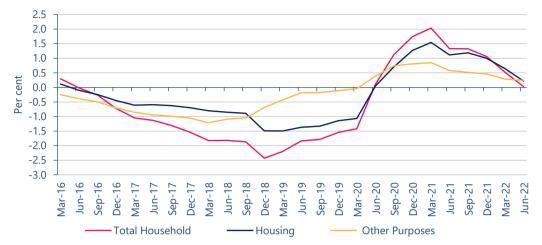
## Decline in household credit-to-GDP gap alleviated concerns of excessive leverage

The household credit-to-GDP gap trended towards zero by the end of the first semester of 2022, alleviating concern about excessive leverage of the household sector. With continued economic expansion, the household credit-to-GDP gap dropped to 0.03 per cent in June 2022, from 1.1 per cent in December 2021 (Chart 2.7).<sup>9</sup>

<sup>&</sup>lt;sup>9</sup> Credit-to-GDP gap is the percentage deviation between the credit-to-GDP ratio and an estimate of its trend. The trend in the credit-to-GDP ratio is estimated by using the Hodrick Prescott filter.







## Resilient household debt servicing capacity

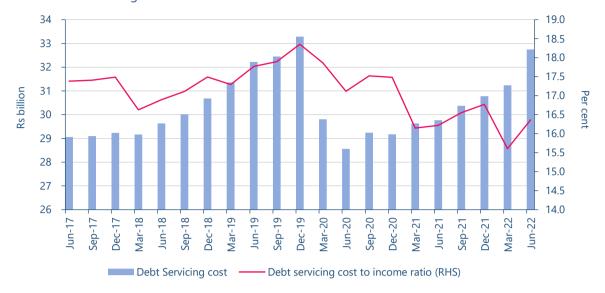
The debt servicing capacity of the household sector measures the adequacy of its cash flow and liquid financial assets to cover costs related to the servicing of loans and other credit facilities after accounting for normal household expenses. Under stable conditions, the credit worthiness of borrowers would be at satisfactory levels as assessed by banks in line with prudential requirements. However, changes in households' social situations and economic conditions – such as a rise in interest rates – can impact their debt servicing capacity.

Key indicators used to assess the capacity of the household sector to service its debt improved in the first semester of 2022. The household debt service cost-to-income and household debt service cost-to-GDP ratios depicted broadly adequate capacity of the sector to service its debt. The increase in interest rates aggregating 40 basis points, translating into rising debt servicing costs, did not materially impact the debt repayment capacity of households. As a comparison, during the five years preceding the pandemic the household debt service cost-to-income ratio averaged 17.6 per cent while the household debt service cost to GDP ratio averaged 6.3 per cent. These were higher than the average levels in the first semester of 2022.

The share of household debt service cost to income fell to 16.4 per cent in June 2022, from 16.8 per cent in December 2021, in spite of the steady rise in debt servicing cost (Chart 2.8). The ratio is still below pre-pandemic levels, though an increase could be noted in the second quarter of 2022. This rise might suggest that further increases in interest rates could drive the ratio upwards, but would decisively depend on the evolution of household income.

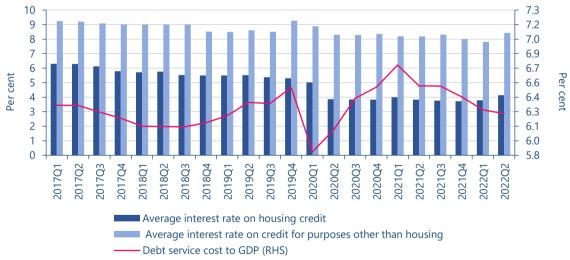






The household debt service ratio – computed as a ratio of household debt service cost to GDP – confirmed the capacity of households to service their debts. The ratio declined to 6.2 per cent in June 2022, from 6.4 per cent in December 2021 (Chart 2.9). The trend in the ratio showed that the debt servicing capacity of households has continuously strengthened since the first quarter of 2021 with the rise in GDP, despite the increase in debt servicing cost in the first semester of 2022 following the successive increases in the KRR.

Chart 2.9: Household debt servicing cost and interest rates



Source: Bank of Mauritius

Risks to financial stability arising from the household sector have so far been well contained. Risks to the outlook have increased, though. Monetary policy tightening, high inflation and the phasing-out of several pandemic-related support measures as from 1 July 2022 may exert



financial strains on households going forward. Further interest rate hikes would escalate debt servicing costs, though monetary policy has to remain unwaveringly geared towards fighting inflation while macroprudential tools should be used to respond to potential risks to financial stability stemming from interest rate increases. With high inflation, the drop in real income of households would reduce available income to service debt. The end of moratorium on loans to households may lead to an increase in monthly debt servicing costs for the beneficiaries.

These downside risks will be partly offset by fiscal relief measures targeting the household sector in particular. Several fiscal measures were announced in 2022-2023 to alleviate financial strains on households, especially the most vulnerable ones. Individuals earning up to a predefined income threshold became eligible for a monthly income allowance of Rs1,000 from the fiscal authority. In addition, the income threshold for individuals to benefit from a lower tax rate was raised. These measures are expected to partly shield vulnerable households from the impact of high inflation and rising interest rates.

Macroprudential policy tools are already in place to mitigate risks arising from the household sector – such as the debt service-to-income and loan-to-value ratios. Regulatory requirements in terms of additional macroprudential provisions also provide additional buffer against credit risk. In addition, banks have established prudential norms as part of their internal risk management policy. For instance, the limits set by banks on loan-to-value for housing ranged from 70 per cent to 100 per cent and for commercial real estate from 50 per cent to 80 per cent.

## Corporate credit contracted amid deleveraging

Risks to financial stability arising from credit dynamics in the corporate sector were well contained. The corporate sector reduced its indebtedness to the banking sector in the first half of 2022, which is expected to limit vulnerabilities as interest rate increases and economic activity strengthens. Moreover, the strong performance displayed by key sectors of the economy – such as in the 'Accommodation and food service activities', 'Construction' and 'Manufacturing' – suggests that earnings and profitability have improved in these sectors.

Total corporate sector credit contracted at an annual rate of 0.4 per cent as at end-June 2022 (Chart 2.10). A noticeable annual fall in bank loans was observed from non-financial sectors, in particular 'Agriculture, Forestry and Shipping', 'Manufacturing', 'Construction', 'Wholesale and retail trade', and 'Administrative and support service'. The financial resources extended by the Mauritius Investment Corporation Limited (MIC) to several sectors of the economy partly made up for the contraction of corporate credit. The resources granted by the MIC to the corporate



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sector during the first semester of 2022, mainly in the form of equity and quasi-equity investments, grew by 10.5 per cent to reach Rs46.2 billion.

The stock of debt securities issued by the corporate sector and held by banks expanded at an annual rate of 1.5 per cent in June 2022. The corporate sector remained the dominant beneficiary of funds from the banking sector, with a share of around 60 per cent of total bank credit to the private sector. The 'Accommodation and food service activities sector', 'Wholesale and retail trade' and 'Real estate activities' sectors were the top three beneficiaries of bank credit as at end-June 2022.

Chart 2.10: Growth of credit to the corporate sector



Source: Bank of Mauritius

## Corporate credit quality improved

The financial soundness of the corporate sector improved in congruence with dynamism in major sectors of the economy, which recorded commendable growth in the first semester of 2022. The phasing out of the pandemic-related support measures – such as moratorium on capital repayments for economic operators impacted by the pandemic – as from 1 July 2022 is not expected to have significant implications on the financial conditions of the corporate sector as the economy continues to expand. Loan moratoria availed of by the corporate sector kept declining and fell by around 50 per cent to Rs14.1 billion as at end-June 2022.

The quality of corporate credit remained broadly sound. The NPL ratio of the corporate sector dropped to 5.8 per cent as at end-June 2022, from 6.4 per cent as at end-December 2021. The credit quality of major economic sectors improved – such as in 'Agriculture and Fishing', 'Manufacturing', 'Traders', 'Accommodation and food service' and 'Real estate activities' (Chart 2.11). However, the asset quality of the 'Construction' sector worsened with its NPL ratio rising to 15.1 per cent as at end-June 2022, from 14.2 per cent as at end-December 2021. This was



mainly driven by additional impairment at a few banks only and was, therefore, not of systemic importance.

16 14 Per cent 12 10 8 6 4 Agriculture & Fishing Manufacturing Construction **Traders** Accomodation and Real estate activities Financial Services (Excluding GBCs) food service ■ Dec-19 ■ Jun-20 ■ Dec-20 ■ Jun-21 ■ Dec-21

Chart 2.11: Sector-wise NPL ratio for selected key sectors

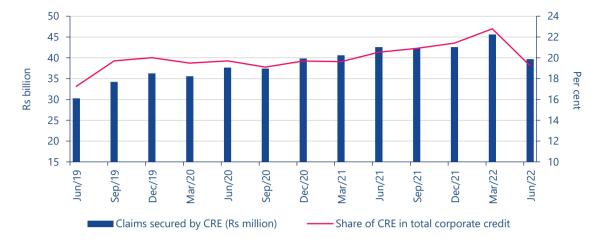
Source: Bank of Mauritius

#### Credit to commercial real estate sector slowed

Loans to the commercial real estate sector slowed sharply during the first semester of 2022. The share of loans secured by the commercial real estate sector relative to total corporate credit declined to 19.2 per cent as at end-June 2022, from 21.4 per cent as at end-December 2021 (Chart 2.12). It reflected subdued demand for real estate activities, with sectoral growth averaging 1.5 per cent during the first two quarters of 2022 in terms of Gross Value Added, as compared to 2.1 per cent in the preceding semester.

The contraction in loans secured by commercial real estate reduced the likelihood of any build-up of vulnerabilities in the real estate market. A period of consistently high commercial real estate credit growth can lead to soaring commercial property prices and pose systemic risk to the financial system. Macroprudential policy tools – such as higher risk weights and additional provisioning introduced by the Bank since 2013 – are in place to counter any build-up of vulnerabilities arising from the commercial real estate market.

Chart 2.12: Share of CRE loans to total bank credit to the corporate sector



## Corporate credit-to-GDP gap in negative territory

The evolution of the corporate credit-to-GDP gap – a measure of excessive or deficient credit growth relative to economic activity – confirmed there was no build-up of broad-based macrofinancial risks from corporate credit developments in the first semester of 2022. Empirical analyses have shown that high credit growth and leverage in the corporate sector have been key drivers of past financial crises in many countries. As such, developments in corporate credit are closely monitored to identify any build-up of macrofinancial systemic risks.

The corporate credit-to-GDP gap suggests that risks to financial stability emanating from corporate credit growth have declined. The corporate credit-to-GDP ratio fell to 39.3 per cent in June 2022, from 41.4 per cent in December 2021, reflecting the contraction in corporate credit together with an expansion in aggregate output. As a result, the corporate credit-to-GDP gap dropped to -0.79 per cent, from 1.42 per cent in December 2021 (Chart 2.13).

Chart 2.13: Corporate credit-to-GDP gap

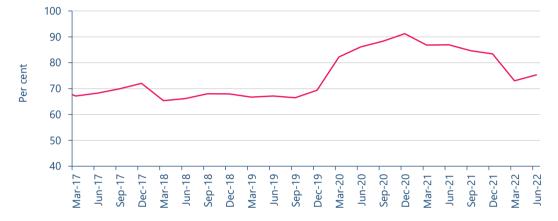


Source: Bank of Mauritius



The share of corporate credit to operating surplus provided further evidence of improving financial soundness of corporates. This indicator suggested subsiding risk to financial stability arising along with improved capacity of corporates to service their debts (Chart 2.14). The increase in corporate earnings has driven down the ratio, which fell to 75.3 per cent in June 2022, from 83.4 per cent in December 2021. The uptick observed during the second quarter of 2022 is mainly due to an increase in corporate credit.

Chart 2.14: Share of corporate credit to operating surplus



Source: Bank of Mauritius

## Box 1 – Update on COVID-19 support measures

#### Unwinding of support measures

Moratoria on loans as part of the COVID-19 relief package – granted to economic operators, SMEs, households and individuals as from April 2020 – have contributed to ease the financial strains on borrowers during the pandemic. With economic recovery well entrenched and a steep decline in demand for such support measures, the moratoria were phased out effective 1 July 2022. Total restructured loans declined by 11.4 per cent to Rs70.2 billion in June 2022, relative to December 2021. Loans of the banking sector under moratoria also followed a downward trend as well, dropping by 33.0 per cent in the six months to June 2022 to reach its lowest point of Rs33.7 billion. Similarly, moratoria forming part of the Bank's support measures fell to Rs16.2 billion in June 2022 (Chart I).

The 'Accommodation and food services' sector registered the highest proportion of restructured loans, accounting for around 43 per cent of total restructured loans. This is closely followed by the 'GB' and 'Real estate' sectors representing around 11 per cent and 7 per cent of total restructured loans, respectively. Restructured loans for the 'Housing' and 'Accommodation and food services' sectors sustained a declining trend (Chart II).

Chart I: Restructured loans and moratoria Chart II: Sector-wise restructured loans 100 10 35 80 8 30 25 60 6 Rs billion Rs billion 20 40 4 20 Apr-22 Jan-22 Feb-22 Mar-22 Apr-22 Jan-22 Feb-22 Mar-22 Manufacturing Construction Loans on moratoria given directly by banks Real estate activities Loans on moratoria as part of the Bank's relief package ■ Non-COVID related Restructured loans Housing (in Mauritius) Accommodation (RHS) ■ COVID related Restructured loans Source: Bank of Mauritius Source: Bank of Mauritius

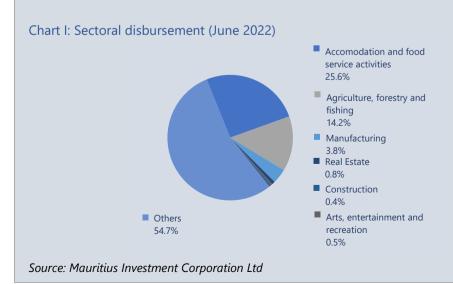


## Box 2 - The Mauritius Investment Corporation Ltd and financial stability

The Mauritius Investment Corporation Ltd (MIC) – a fully-owned subsidiary of the Bank established in June 2020 – has effectively contributed towards maintaining financial stability as well as promoting the orderly and balanced economic development of Mauritius since the onset of the pandemic in early 2020. Investments by the MIC in eligible companies took various forms, such as equity and quasi-equity instruments. These investments successfully limited the transmission and amplification of risks from the real sector to the financial sector – which, if they had materialised, could have undermined the soundness of the banking sector given banks' exposures to many systemically important companies.

The strong economic recovery momentum in the first half of 2022 was buoyed by the significant contribution of the key industries that had obtained financial assistance from the MIC – such as tourism and tourism-related, agricultural and manufacturing sectors. This financial support had kept the systemic corporate entities financially and operationally afloat, enabling them to rapidly resume normal operations as economic prospects improved. The financial support of the MIC largely contributed to safeguarding employment in these companies. As a result, the debt servicing capacity of the household sector was to a certain degree also preserved, with favourable implications on banks' asset quality.

The MIC continued to extend financial support to systemically important domestic companies in the first half of 2022. The MIC had disbursed Rs46 billion as at end-June 2022 to 40 entities in the 'Accommodation and food service activities', 'Agriculture, forestry and fishing', and 'Manufacturing' sectors amongst others (Chart I). Since its inception, the MIC had approved financing of Rs52.1 billion to 51 investee companies.





# 3. Financial soundness of deposit-taking institutions

The capital and liquidity buffers of deposit-taking institutions helped to preserve the stability and soundness of financial institutions, despite emerging risks. Deposit-taking institutions weathered strains posed by the lingering pandemic and the ripple effects of the war. Asset quality improved as the performance of the corporate sector and labour market regained dynamism. Profitability levels of deposit-taking institutions picked up. Growth in banking sector assets was primarily from cross-border banking activities, with risks prudently managed. Aggregate exposure in trading books fell to around 12 per cent of Tier 1 capital, limiting risks to banks' balance sheet. Non-bank deposits taking institutions remained resilient, with both assets and earnings growing. The Banking Stability Indicator deteriorated marginally, mainly on account of a drop in liquidity indicators. The current macrofinancial environment nevertheless denote heightened risks to financial stability, balanced with commendable capital and liquidity buffers as well as prudent risk management by banks.

## Structure of the deposit-taking financial sector remained unchanged

The structure of the financial industry was unchanged in June 2022 relative to December 2021, with banks representing the main operators in the sector. The banking sector comprised 19 banks — of which 6 are domestic-owned, 10 are foreign-owned and 3 are foreign bank branches — that were authorised to do banking business. The NBDTIs were mainly in the leasing and finance business, with 6 NBDTIs in operations in June 2022.

The aggregate assets of the banking sector stood at 374.0 per cent of GDP in June 2022, from 420.7 per cent in December 2021. The two largest banks – which are domestic-owned – accounted for around 46.1 per cent of the banking sector's deposits, 52.7 per cent of loans, and 47.0 per cent of assets. The Herfindahl-Hirschman Index (HHI) was 1,624 indicating that the banking industry remained moderately concentrated.<sup>10</sup>

The Bank conducted its periodic evaluation of systemically important banks in June 2022, as part of its systemic risk monitoring, and established the capital surcharge they have to maintain. The exercise identified the same five banks to be systemically important – namely, The Mauritius Commercial Bank Limited, SBM Bank (Mauritius) Ltd, Absa Bank (Mauritius) Limited, The Hongkong and Shanghai Banking Corporation Limited (Branch) and AfrAsia Bank

<sup>&</sup>lt;sup>10</sup> The Herfindahl-Hirschman Index (HHI) is used to assess market competitiveness. A market with an HHI of less than 1,500 is considered a competitive marketplace, an HHI of 1,500 to 2,500 is moderately concentrated, and an HHI of 2,500 or greater is highly concentrated.



Limited. The respective capital surcharges that these Domestic-Systemically Important Banks (D-SIBs) have to maintain were kept unchanged.

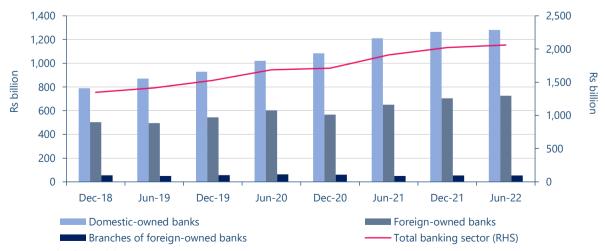
The D-SIBs held adequate capital buffers, inclusive of their respective capital surcharges that ranged from 1.0 to 2.5 per cent. They remained profitable despite the pandemic and the Russia-Ukraine war. Their Liquidity Coverage Ratio (LCR) were also significantly above the regulatory threshold of 100 per cent in both the domestic and main foreign currencies, demonstrating that they had sufficient high-quality liquid assets to meet short-term obligations. On average, D-SIBs registered improving NPL ratios, with adequate provisions set aside.

The NBDTIs – which mobilised deposits to grant leasing and loan facilities to both individuals and corporate entities – have also shown resilience since the onset of the pandemic. The six NBDTIs held adequate capital and liquidity buffers and were profitable. Their total assets made up for a smaller portion of the financial ecosystem, representing about 12.2 per cent of GDP in June 2022.

## Banking sector assets expanded further

The banking sector maintained its robust expansion. The total assets of the sector grew at an annual rate of 7.9 per cent to Rs2.1 trillion as at end-June 2022. Domestic-owned banks and foreign-owned banks registered annual growth rates of 5.8 per cent and 11.6 per cent, respectively, over the same time period. Concurrently, assets of foreign-owned bank branches remained stable (Chart 3.1). The growth in assets came mainly from the FX segment of the balance sheet of the banking sector, which grew at an annual rate of 8.7 per cent to Rs1.4 trillion as at end-June 2022.

Chart 3.1: Banking sector assets



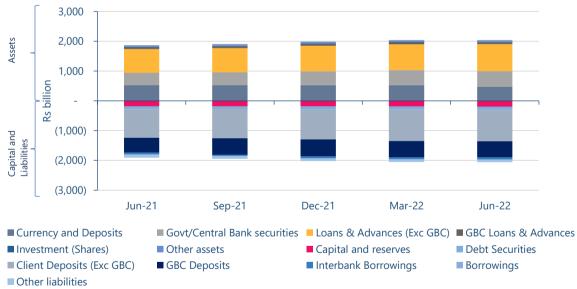
Source: Bank of Mauritius



The banking sector was undeterred by the onset of the Russia-Ukraine war, the aggressive interest rate hikes by many central banks and a dimmer global economic outlook. The expansion of banking assets was essentially due to the continuous flow of bank credit to both resident and non-resident segments. In particular, credit to residents and non-resident sectors grew at an estimated annual rate of 2.6 per cent and 10.1 per cent, respectively, as at end-June 2022. Banks also deployed funds in higher income-generating assets as interest rates increased.

Whilst banks took on more risk by expanding credit portfolios, they managed the risk through higher investments in government and Bank of Mauritius securities. These investments rose by 13.2 per cent to reach Rs523 billion as at end-June 2022. Furthermore, placement of funds by the banking sector with banks and financial institutions – both those operating in Mauritius and abroad – declined in the first semester of 2022. These placements fell to 14.8 per cent of total assets as at end-June 2022, from 17.2 per cent as at end-December 2021. On the liabilities side, deposits (inclusive of GBC deposits) remained the main source of funding of banks. These deposits grew at an annual rate of 8.4 per cent as at end-June 2022 (Chart 3.2). FX deposits held mostly by non-residents and GBCs drove the growth in the deposit base of the banking sector, similar to the last semester of 2021.

Chart 3.2: Distribution of banking sector assets and liabilities



Source: Bank of Mauritius



The reliance of the banking sector on wholesale funding remained significant, representing nearly 50 per cent of total banking sector assets as at end-June 2022. Wholesale funds declined by 1.0 per cent to reach Rs1.01 trillion as at end-June 2022. Retail funds continued its long-term upward trend. It expanded by 2.7 per cent to reach Rs449.7 billion as at end-June 2022, with a share of 21.8 per cent in banking sector assets.

In a period of high market volatility and rising interest rates, banks reallocated funds away from interest-sensitive financial assets to limit risks to their balance sheets. As a result, the share of assets held for trading relative to the aggregate Tier 1 capital declined to 12.1 per cent as at end-June 2022, from 18.4 per cent as at end-December 2021.

## Resilient capital buffers

The capital position of the banking sector remained robust, providing banks with strong buffers against plausible shocks. The aggregate capital adequacy ratio (CAR) of the banking sector was well above the regulatory limit, standing at 19.3 per cent as at end-June 2022 denoting a drop of 0.5 percentage point relative to end-December 2021. The decline in the CAR was primarily due to an increase of 3.8 per cent in risk weighted assets (RWAs) of banks compared to a growth of 1.3 per cent in banks' aggregate capital base during the period under review. This growth in the RWAs indicated that banks were on-boarding more risk on their balance sheets as they were confident in the medium- to long-term term strength of the economy and also as business and consumer confidence remained relatively well sustained.

As part of the unwinding of the COVID-19 support measures, the Bank phased in the last tranche of 0.625 percentage point of the CCB effective 1 April 2022. The last tranche of the CCB was put on hold since March 2020 following the onset of the pandemic. Inclusive of the CCB of 2.5 per cent, the actual CAR of banks remained comfortably above their respective minimum regulatory limit.

The Common Equity Tier 1 (CET1) ratio – representing 91.3 per cent of the banks' total regulatory capital – stood at 17.6 per cent as at end-June 2022 (Chart 3.3). Tier 1 capital ratio fell to 18.0 per cent as at end-June 2022, from 18.4 per cent as at end-December 2021. This movement was due to the increase in RWAs, offsetting the growth of 1.5 per cent in Tier 1 capital in the first semester of 2022.

<sup>&</sup>lt;sup>12</sup> As per the Bank's Guideline on Liquidity Risk Management, retail funding is referred to as deposits placed with a bank by a natural personal. Retail funding include demand deposits and term deposits.



<sup>&</sup>lt;sup>11</sup> As per the Bank`s Guideline on Liquidity Risk Management, wholesale funding is referred to as liabilities and general obligations which emanate from non-natural persons (i.e. legal entities, including sole proprietorships and partnerships).

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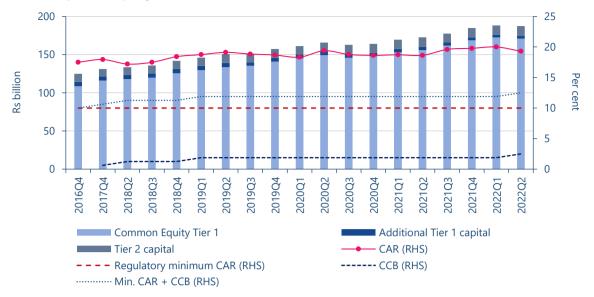
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Source: Bank of Mauritius

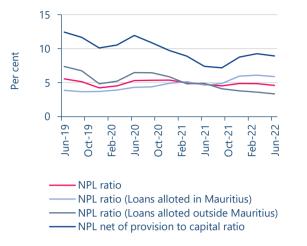
D-SIBs strengthened their capital base by 1.5 per cent to Rs115 billion as at end-June 2022 relative to December 2021, in order to support growth in assets. Higher credit exposures led to a rise of 3.1 per cent in RWAs to Rs664 billion. Consequently, the average CAR of D-SIBs was 17.4 per cent as at end-June 2022, compared to 17.7 per cent as at end-December 2021.

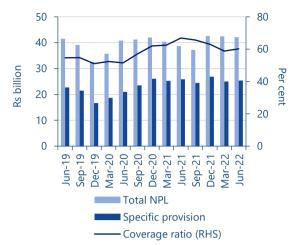
## Asset quality improved

The asset quality of banks improved in the first semester of 2022. The ratio of NPL to total loans extended by banks improved to 4.6 per cent as at end-June 2022, from 4.9 per cent as at end-December 2021. This drop was mainly due to a fall of 1.0 per cent in the level of NPLs coupled with a rise of 5.0 per cent in total outstanding credit facilities. The amount of NPL in the banking sector hovered around Rs42 billion as at end-June 2022 (Chart 3.4). The five main economic sectors with the highest share of impaired credit were the 'GBC', 'Wholesale and retail trade', 'Accommodation and food service activities', 'Households', and 'Construction' sectors.



Chart 3.4: Non-performing loans and specific provisions





Source: Bank of Mauritius

The NPL ratios for credit extended both in and outside Mauritius improved. For credit granted in Mauritius, the NPL ratio fell to 5.9 per cent from 6.0 per cent. The support measures deployed during the pandemic have had a positive impact on borrowers and contributed to contain credit risk.

For credit facilities extended outside Mauritius, the NPL ratio dropped to 3.2 per cent as at end-June 2022, from 3.8 per cent as at end-December 2021. NPL write-offs and expansion in credit facilities to non-residents explained the decline in the ratio.

Total specific provisions set aside by banks declined by 5.4 per cent to stand at Rs25 billion as at end-June 2022, predominantly as a result of the write-offs of NPLs of non-residents. Consequently, the coverage ratio – that is, total specific provisions as a proportion of NPLs – declined to 60.3 per cent as at end-June 2022, from 63.1 per cent as at end-December 2021. In line with prudential norms, banks generally maintain adequate collateral against credit facilities and also conduct thorough credit worthiness assessment to mitigate credit risk in their balance sheet. Provisions set aside under stages 1 and 2 for anticipated future losses, as per the IFRS 9 reporting standard, increased by 10.8 per cent between December 2021 and June 2022.

#### Profitability on the rise

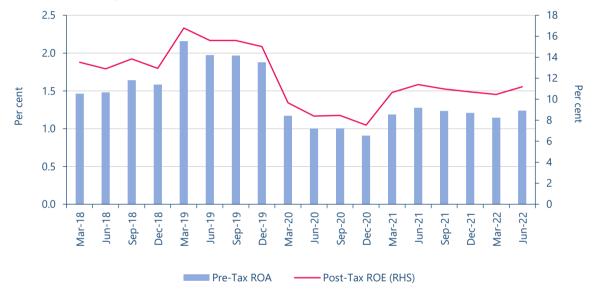
Profitability in the banking sector continued to improve, though various profitability metrics were still below pre-pandemic levels. The annualised net interest income and non-interest income, particularly from fees and commission, rose further with the strengthening of economic activity. On the other hand, annualised non-interest expenses were higher during the period ended June 2022, compared to the period ended December 2021. A larger



contraction in net impairment loss charges partly offset the increase in annualised non-interest expenses. Improving asset quality as economic activity gathered further momentum is a key element that supported a reduction in impairment charges that banks had set aside.

Annualised pre-tax profit as a share of average assets remained stable, averaging 1.2 per cent during the period under review. An increase was noted for post-tax Return on Equity (ROE), which went up to 11.2 per cent during the period ended June 2022, from 10.7 per cent for the period ended December 2021 (Chart 3.5). As profitability strengthens, the capital and solvency buffers of banks will likely rise further.

Chart 3.5: Profitability ratios



Source: Bank of Mauritius

The cost-to-income ratio for the banking sector deteriorated to 45.8 per cent in the second quarter of 2022, compared to 44.7 per cent in the last quarter of 2021. A higher rise in noninterest expenses relative to the operating income was the prime cause of this deterioration. The increase in non-interest expenses was driven by staff and operating expenses. The costto-income ratio remained above the pre-pandemic average level.

#### Ample liquidity buffers

Banks have contained liquidity risk by maintaining robust liquidity buffers, both in Rupees and FX. The aggregate LCR of banks stayed well above the regulatory threshold of 100 per cent, indicating the resilience of banks to potential short-term outflows of funds. The consolidated LCR stood at 235.8 per cent as at end-June 2022, from 237.2 per cent as at end-December 2021. In terms of major foreign currencies, the LCR went up to 183.8 per cent as at end-June 2022, from 177.1 per cent as at end-December 2021. As per their banking business models,



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banks pursued prudent liquidity risk management and maintained liquidity buffers beyond the regulatory minimum.

## Credit concentration and FX exposures within prudential limits

Banks maintained their credit concentration risks below the prescribed regulatory limits. Sound Tier 1 capital levels supported the resilience of the system against credit concentration risks. Robust risk management by banks, in line with the prudential norms in force, also maintained foreign currencies exposures at manageable level below regulatory limits.

## Growing cross-border exposures amid heightened risk

Cross-border exposures of banks have continued to expand in the first semester of 2022, both in terms of funding as well as deployment into assets. Cross-border funding – comprising mainly deposits and borrowings – represented around a third of total banking sector funding as at end-June 2022 (excluding GBC deposits). This source of funds rose sharply by 13.6 per cent to reach US\$17 billion as at end-June 2022, owing mainly to an increase in the level of non-resident deposits mobilised by banks. One-third of the funds originated from the UK and South Africa combined. The removal of Mauritius from the FATF, the EU and the UK grey lists have rekindled the sector's attractiveness for channelling funds to countries in the region.

The banking sector redeployed around 50 per cent of funds outside Mauritius, mainly in the form of credit facilities with a share of 39.9 per cent of total cross-border deployment in June 2022 against 40.2 per cent in December 2021. Investment in foreign securities garnered traction, representing 31.7 per cent in June 2022 relative to 24.6 per cent in December 2021. In contrast, the portion of cross-border funds placed with banks declined to 27.9 per cent in June 2022 from 35.1 per cent in December 2021. Moreover, GBCs act as another link between the banking sector and the rest of the world mainly through a 34.1 per cent share of total banking deposits. Additionally, with significant investments by banks in foreign securities, risks emanating from heightened market volatility, exchange rate movements, and geopolitical strains are particularly at the forefront given prevailing global economic uncertainties.

The geographical distribution of cross-border funding and assets remained more or less unchanged. Banks' cross-border exposures were mostly towards advanced economies and Sub-Saharan Africa. The Middle East and Asia followed these economies closely (Chart 3.6). The top 5 sources of funding were the UK, South Africa, United Arab Emirates, Republic of Congo and Cayman Islands. On the other hand, the top 5 economies to which banks deployed

<sup>&</sup>lt;sup>13</sup> Refer to Chapter 5 for more details on the interlinkage between banks and the GB sector.



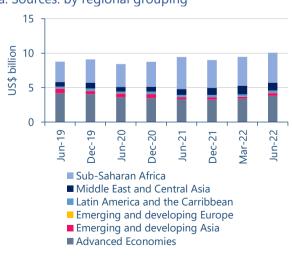
funds were the United States, UK, Nigeria, India and United Arab Emirates. The outbreak of the conflict between Russia and Ukraine on 24 February 2022 has had minimal direct impact on the Mauritian jurisdiction so far given the insignificant direct exposure with the two concerned countries.

Credit and liquidity risks in the non-resident sector were prudently managed. Credit risk remained at manageable levels, as evidenced by the low NPL ratio to the non-resident sector. In terms of liquidity, banks maintained sound High-Quality Liquid Assets (HQLA) against expected net cash outflows. FX deposits in the banking sector had maintained an upward trend, with total FX deposits representing around 66 per cent of total banking sector deposits in June 2022. FX deposits held by non-residents and GBCs represented around 85 per cent of total FX deposits, with the remaining held by residents.

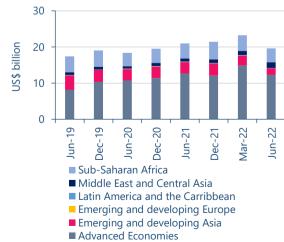
Higher risk from adverse economic developments in most of these countries could eventually impact the banking sector, including through indirect channels. The dim outlook for the global economy signifies elevated risk for cross-border flows, the more so as cross-border shock waves spread more easily and faster across the globe.

The capital buffers of banks have been assessed to be sufficiently sound to cushion most of these shocks. In addition, given the position of Mauritius as an International Financial Centre and a gateway for channelling funds and investments outside Mauritius, the regulatory standards are well adapted to ensure banks manage cross-border banking risks effectively. To supplement the prudential standards, banks have their own internal risk management systems that govern their risk appetite and buffers to absorb such risks. The Bank continues to deploy its toolkits to closely monitor cross-border risk to financial stability.

Chart 3.6: Evolution of cross-country exposure a. Sources: by regional grouping



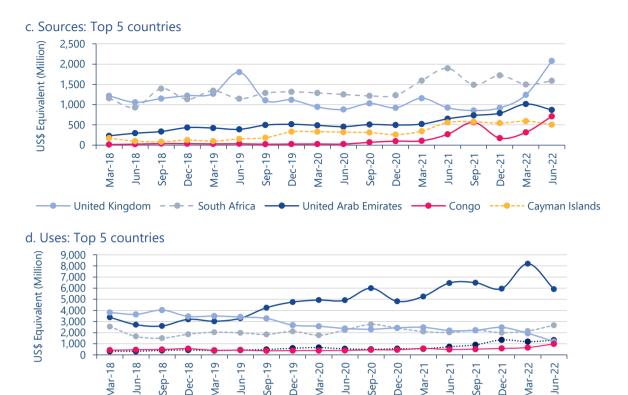
b. Uses: by regional grouping





- India

**United Arab Emirates** 



Source: Bank of Mauritius

## Banking Sector Stability indicator deteriorated marginally

- United States of America ---●--- United Kingdom ·····• Nigeria ---

The Banking Stability Indicator – a composite indicator based on the soundness, asset quality, profitability, liquidity and efficiency of banks – suggested that banks on-boarded more risks during the quarter ended June 2022. The Banking Stability Indicator was at 0.38 as at end-June 2022, up from 0.34 as at end-March 2022 and 0.36 as at end-December 2021 (Chart 3.7). In aggregate, the Banking Stability Indicator remained on trend and well below the 'high risk' mark of 1, indicating that risk level remained manageable.<sup>14</sup>

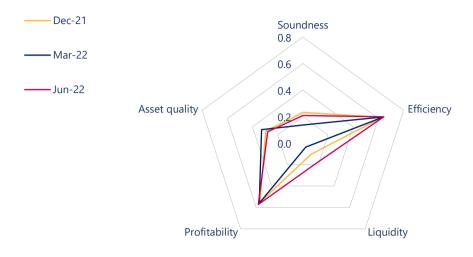
The rise in the Banking Stability indicator was driven by a deterioration in the liquidity indicators – through deposit drawdowns during the quarter ended June 2022. Part of the rise is explained by the upgrade in the liquidity indicator to reflect a broader definition of liquid assets in line with the IMF Financial Soundness Indicators Guide (2019). On the other hand, the asset quality and soundness indicators of banks improved during the period under review. The indicators on profitability and efficiency of banks were stable.

<sup>&</sup>lt;sup>14</sup> As the five risk indicators move further away from the centre (approach a score of 1), the composite measure of riskiness increases.

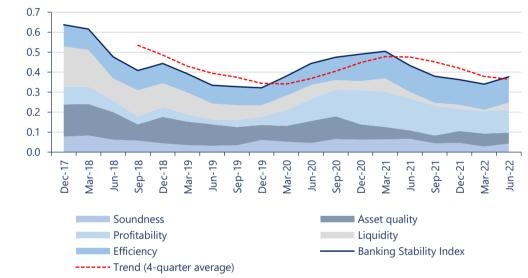


14 As the five risk indicators move further away from the centre (approach a score of 1), the composite measure of

Chart 3.7: Banking stability indicator a. Banking Stability Map



## b. Banking Stability Index



Source: Bank of Mauritius

# Non-Bank Deposit-Taking sector's improved performance

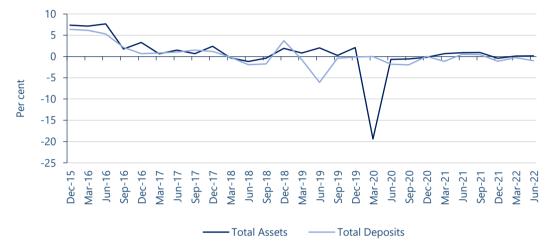
The performance of the NBDTIs improved in the first semester of 2022, along with indicators of the resilience of the sector. The aggregate CAR of NBDTIs was well above the regulatory minimum requirement of 10 per cent, hovering around 49.4 per cent during the period under review.

Total assets of NBDTIs expanded by 0.3 per cent to Rs67.2 billion as at end-June 2022. NBDTIs continued to extend loans to the economy, which rose by 1.6 per cent to Rs54 billion as at end-June 2022. Of these loans, 5.1 per cent were NPL as at end-June 2022, an improvement



from 6.4 per cent as at end-December 2021. NBDTIs raised their investments in government/Bank of Mauritius securities by 16.3 per cent, as interest rates began rising. On the liabilities side, customer deposits declined by 1.2 per cent to Rs41.6 billion. To fund these investments and run down of customer deposits, NBDTIs withdrew part of their deposits from banks, which fell by 24.8 per cent to Rs3.9 billion as at end-June 2022 relative to end-December 2021 (Chart 3.8). The liquidity flows at NBDTIs were, thus, prudently managed.

Chart 3.8: Quarterly growth in assets and deposits



Source: Bank of Mauritius

The profitability level of NBDTIs continued to rise in the first half of 2022, resulting in an improvement in profitability ratios. Annualised post-tax profits increased to Rs2.2 billion for the period ended-June 2022, from Rs1.6 billion during the period ended-December 2021. Pretax Return on Assets (ROA) stood at 3.6 per cent in June 2022, from 3.0 per cent in December 2021. The pre-tax ROA in June 2022 was beyond pre-pandemic levels. Post-tax ROE of NBDTIs improved to 10.9 per cent for the period ended-June 2022, from 8.8 per cent during the period ended-December 2021 remaining below pre-pandemic levels (Chart 3.9).

NBDTIs maintained liquidity ratios well above the statutory minimum of 10 per cent as at end-June 2022. The liquid assets of NBDTIs dropped by 5.7 per cent to Rs8.8 billion as at end-June 2022, from end-December 2021. This led to a decrease in the ratio of liquid assets to total deposits to 21.2 per cent as at end-June 2022, from 22.2 per cent as at end-December 2021, but still represented a robust buffer against liquidity risk.



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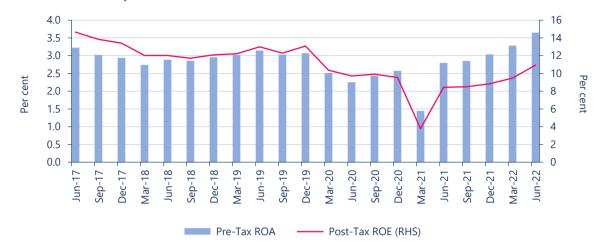
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Source: Bank of Mauritius

## FSIs of deposit-taking institutions remained sound

The Financial Soundness Indicators (FSIs) of the deposit-taking institutions were assessed to be sound during the first half of 2022, based on the IMF Guide (2019). The indicators have been grouped into six distinct categories for the period under review (Chart 3.10).

Deposit-taking institutions held adequate capital buffers in the first semester of 2022, with the CAR standing at 20.3 per cent as at end-June 2022. Regulatory Tier 1 capital of deposit-taking institutions strengthened to Rs191.6 billion as at end-June 2022, representing an increase of 2.1 per cent from end-December 2021. The RWA went up by 4.0 per cent to Rs1 trillion as at end-June 2022.

The asset quality of deposit-taking institutions remained sound, with adequate provisions set aside for NPLs. The NPL ratio dropped to 5.6 per cent as at end-June 2022, from 5.8 per cent as at end-December 2021. The coverage ratio was at 60.0 per cent as at end-June 2022. NPLs net of provision to capital stood at 8.8 per cent in June 2022, denoting sound balance sheet position of deposit-taking institutions. In terms of loan concentration to economic sectors, 'Accommodation and food service activities,' 'Real estate activities,' and 'Wholesale and retail trade' held the top three positions, aggregating around 45 per cent of total loans to non-financial corporations as at end-June 2022.

Profitability level of deposit-taking institutions improved during the first half of 2022, propelled by a rise in net interest income. The pre-tax ROA stood at 1.3 per cent in June 2022, unchanged from December 2021. Post-tax ROE increased to 11.2 per cent, from 10.5 per cent, over the same period. Nevertheless, profitability ratios remained below pre-pandemic level.



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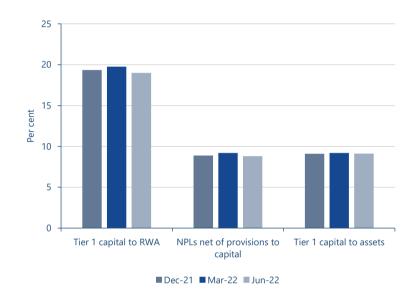
The liquidity ratios of deposit-taking institutions demonstrated healthy buffers. Liquid assets stood at Rs1 trillion as at end-June 2022, nearly unchanged from end-December 2021. The ratio of liquid assets to total assets declined to 47.8 per cent as at end-June 2022, from 48.6 per cent as at end-December 2021. Likewise, the ratio of liquid assets to short-term liabilities stood at 53.6 per cent, down by 0.7 percentage points.

Chart 3.10: Financial Soundness Indicators

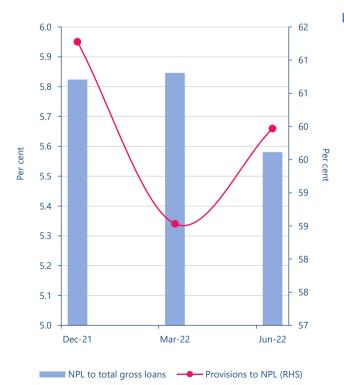
a. Solvency







#### b. Asset quality



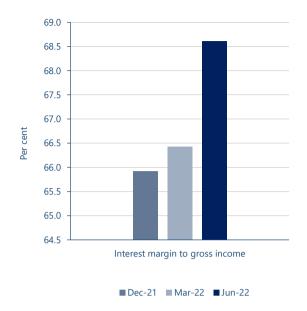
## Loan concentration by top 3 economic activity





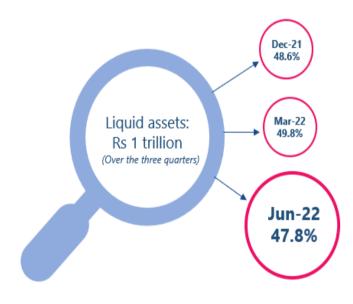
## c. Profitability

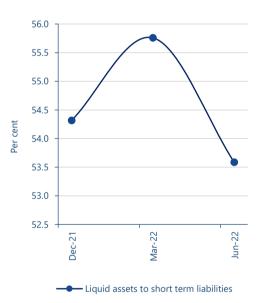




## d. Liquidity

## Liquid assets to total assets







# e. Sensitivity to market risk Net open position in FX to capital



Source: Bank of Mauritius

# Financial stability co-ordination and regulatory reforms

The Bank coordinated financial stability assessments with other financial sector regulators. The Financial Stability Committee stands at the apex to "regularly review and ensure the soundness and stability of the financial system". The Minister of Finance, Economic Planning and Development chairs the Financial Stability Committee. The remaining members comprise: the Minister of Financial Services and Good Governance, the Governor of the Bank, the Financial



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Secretary, the Chief Executive of the FSC, and the Director of the Financial Intelligence Unit. In May 2022, the Financial Stability Committee held a meeting to discuss and review financial stability issues and risks in the financial system. The members resolved to coordinate policy efforts to mitigate risks emanating from the prolonged pandemic and the Russia-Ukraine war.

The Bank and the FSC coordinated work on specific financial sector issues of overlapping interest through the Joint Coordination Committee (JCC). Currently, the Second Deputy Governor of the Bank and the Chief Executive of the FSC chair the JCC alternately. Other members of the JCC comprise senior staff from both institutions. For better focus, various working groups have been put in place to review and discuss matters of mutual responsibility, one of which is on financial stability. The latter met during the first half of 2022 to discuss issues related to financial stability and formulate a coordinated framework.

## Regulatory updates

To reinforce the foundation for a stable banking and financial system and adapt it with evolving economic and financial landscape, the Bank regularly upgrades the regulatory and supervisory framework. These upgrades were undertaken through the issue of new and amended set of prudential guidelines. The main regulatory changes are outlined.

The CCB was fully phased in effective 1 April 2022 and the minimum capital requirement, inclusive of the CCB of 2.5 percentage points, was brought to 12.5 per cent.

The Climate Change Centre is progressing on its objective to integrate climate-related and environmental financial risks in its regulatory framework through its task forces. The Guideline on Climate-related and Environmental Financial Risk Management – that came into effect on 1 April 2022 and is benchmarked on guidelines issued by foreign regulators and standard setters – sets out the Bank's expectations of a prudent approach to climate related and environmental financial risks with a view to enhancing the resilience of the banking sector against these risks.

Considerations are given to key challenges faced by the banking sector notably data gaps, scenario analysis and capacity building. In this respect, the Bank has engaged with the Ministry of Environment, Climate Change and Solid Waste Management to capture non-financial climate data and establish an information sharing arrangement. The Bank is also working with the University of Mauritius. The Bank is concurrently collaborating with the FSC to ensure that its regulatees can benefit from climate-related data collected from the non-bank financial sector, and from the insurance sector, in particular.



Stress testing by banks complements the oversight of the Bank by providing a bottom-up perspective of sources and extent of risks. On 23 June 2022, the Bank issued its Guideline on Stress Testing that sets out the high-level principles to be followed by banks for the implementation of a sound stress testing framework. A transitional period was given to banks to ensure full compliance by 30 November 2022.

The Bank benchmarks its regulatory and supervisory framework with the standards and recommendations of the Basel Committee on Banking Supervision (BCBS) as well as other relevant international best practices. Accordingly, amendments were brought to the Guideline on Standardised Approach to Credit Risk on 1 April 2022 to *inter alia* align the list of Multilateral Development Banks eligible for a risk weight of 0 per cent with the BCBS standards. The Bank has, on 1 July 2022, also aligned its disclosure requirements for eligible External Credit Assessment Institutions recognised under direct recognition method with the latest BCBS standards.

Digitalisation of the financial system is intensifying rapidly and cyber risks have to be carefully managed. The Bank has issued a new Guideline on the use of cloud services in this respect in September 2022. The latter enables financial institutions to derive greater benefits of economies of scale, flexibility as well as operational and cost efficiencies associated with the use cloud services as well as to ensure that inherent risks are duly identified and addressed.

Recognising that the ongoing digital transformation may result into heightened levels of cyber threats, the Bank is developing a comprehensive cybersecurity framework for the banking industry with the assistance of the IMF and in consultation with banks. A draft Guideline on cybersecurity has been issued for consultation and the final version will be released in the near future.

Pursuant to the enactment of The Virtual Asset and Initial Token Offering Services Act 2021 ("VAITOS Act") on 7 February 2022, the Bank issued a Draft Guideline for Virtual Asset related Activities to banks for consultation.

## Box 3 – Insights into liquidity risk and mitigants in the banking system

The primary function of banks is financial intermediation – that is, taking deposits and creating assets in the form of loans and investments. Maturity transformation of deposits – where deposits can be for short as well as longer periods – into longer term loans implies that banks are exposed to liquidity risk. As defined in the Bank's Guideline on Liquidity Risk Management, liquidity risk in the banking sector represents the risk arising from the inability of banks to deploy cash, convert assets into cash, or secure funds in a timely manner to meet obligations as they become due without incurring undue losses. Effective liquidity risk management is, therefore, important to ensure that a bank has the capacity to fulfil its cash flow obligations at all times, as a liquidity shortfall at one bank can have system-wide implications.

The Bank uses a set of macroprudential indicators (MPIs) to identify and assess any build-up of systemic liquidity risk in the banking system. One of the core MPIs of liquidity risk is the loan-to-deposit (LTD) ratio.<sup>15</sup> The LTD compares loans extended by banks relative to the deposit base, where the latter is typically assumed to be a stable source of funding as long as the proportion of wholesale deposits remain low since the latter are volatile.

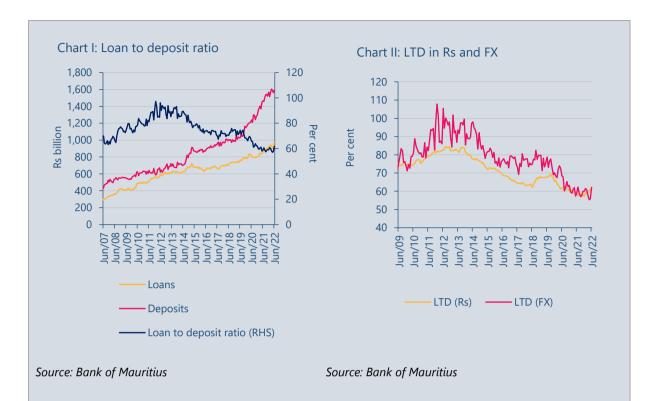
The LTD ratio increased slightly during the first semester of 2022 although it remained well below the average for middle-income countries. The LTD ratio showed the amount of deposits relative to banks' maturing assets increased during the first semester of 2022. After rising from mid-2017 to mid-2019, the LTD ratio assumed a downward trajectory (Chart I). The recent surge in the ratio, to 61.6 per cent in June 2022 from 59.1 in December 2021, is explained by a higher increase in loans while deposits contracted slightly during the corresponding period.

The LTD levels, both in Rupees and FX, remained at manageable levels. The LTD (FX) increased to 62.1 per cent in June 2022, from 60.1 per cent during the first quarter of 2022. The LTD (Rs) rose to 60.7 per cent in June 2022, from 57.2 per cent in December 2021 (Chart II). The ratios do not indicate funding constraints by banks, in both Rs and FX.

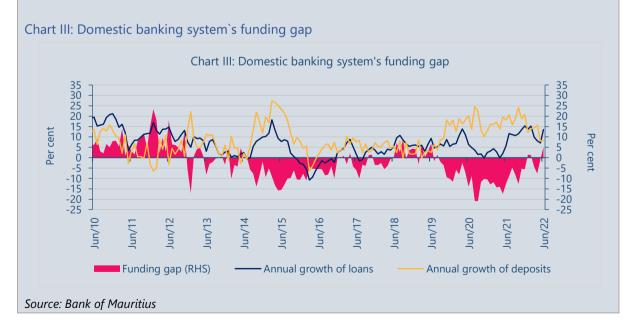
<sup>&</sup>lt;sup>16</sup>A cross-country comparison showed that middle-income countries have on average a LTD ratio of 80 per cent. IMF Staff Guidance Note on Macroprudential Policy, 2014.



<sup>&</sup>lt;sup>15</sup> The LTD ratio shows to what extent banks rely on deposits to fund their loans. An LTD ratio in excess of 100 per cent generally signals high liquidity risk for banks as they would require other sources of funds such as borrowings to fund their assets.



The funding gap – computed as the difference between annual growth of banks' loans and deposits – measures the degree to which banks require funding from other sources such as borrowings and wholesale markets.<sup>17</sup> It went into positive territory in June 2022 on account of a higher annual growth in loans as compared to deposits (Chart III). The funding gap is expected to be impacted as the growth of credit and deposits adjust to higher market interest rates.

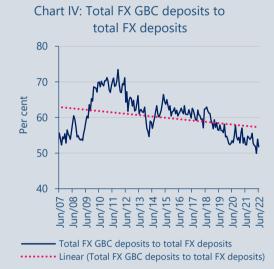


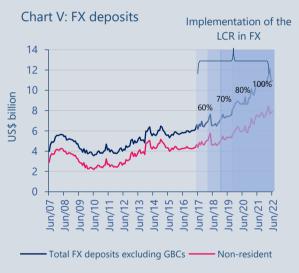
<sup>&</sup>lt;sup>17</sup> A positive funding gap means banks' loans (maturing assets) are growing faster than banks' deposits (liabilities). A persistent expansion of the funding gap would indicate banks would necessitate other sources of funds, such as borrowings, to fund growth in its maturing assets.



The share of GBC deposits to total FX deposits averaged around 60 per cent from March 2009 to June 2022 (Chart IV). GBC deposits are typically volatile wholesale funds. They are in transit in the banking system and are, therefore, not stable funding sources. Such deposits can be a source of liquidity risk and require suitable prudential regulation and monitoring.

Total FX deposits excluding GBCs have maintained an upward trend since June 2018, suggesting banks' appetite to mobilise non-GBC FX deposits to balance risk and volatility (Chart V). From a longer-term perspective, non-resident FX deposits grew strongly since the implementation of the LCR in November 2017. Prior to November 2017, the average annual growth of non-resident FX deposits was 5.1 per cent whilst an average of 12.8 per cent could be noted from November 2017 to June 2022. Therefore, the implementation of the LCR induced banks to manage FX liquidity risk prudently. In addition, they concurrently increased FX funding from non-residents to grow their FX assets.





Source: Bank of Mauritius

Source: Bank of Mauritius

The likelihood of a systemic liquidity crisis is assessed to be low. The implementation of the LCR in November 2017, requiring banks to maintain a minimum of 100 per cent HQLA to cover potential net cash outflow of funds over a 30-day stressed period, has substantially mitigated liquidity risk, including risks arising from volatile GBC deposits. The aggregate consolidated LCR averaged 253.9 per cent for the period January 2020 to June 2022, exhibiting prudent liquidity risk management by banks and their capacity to withstand any abrupt liquidity withdrawal within a 30-day period.

In addition to the LCR prudential norm, banks are also subjected to other prudential requirements as per the Bank's Guideline on Liquidity Risk Management. One of the requirements of the guideline is for banks to maintain contingency funding plans to meet funding mismatches and stressed liquidity situations. Furthermore, liquidity developments and indicators are assessed regularly to identify any build-up of vulnerabilities in the banking system and these assessments guide policy decisions.



## Box 4 – Survey on Economic Perspectives and Financial Stability Implications

The Bank conducted the "Survey on Economic Perspectives and Financial Stability Implications" in October/November 2022 with the banking industry. The main findings of the survey are summarised below.

## Stability, macrofinancial environment and banking sector interconnectedness

Banks were, in general, strongly confident about the stability of the domestic economy and the financial sector, despite notable of level of risk assessed over the next 12 months. Respondents expected significant but manageable adverse impact from repercussions of geopolitical strains triggered by the Russia-Ukraine war, macroeconomic uncertainty from high inflation and global monetary policy tightening over the following year. Impending global recession impacting the tourism and manufacturing sectors, the food crisis in Africa and climate change altogether pose additional threats on a global scale. The challenges at domestic level would be borne mostly at a reasonable level. In addition, risk transmission between banks and other financial institutions were expected to be maintained at low levels. Many respondents deemed the level of interconnectedness with other financial institutions to be low, representing subdued level of risk.

#### Financial market infrastructure

The financial market infrastructure (FMI) in Mauritius is deemed to be fairly good, with potential to improve further in the face of certain vulnerabilities. According to respondents, the major risk to the FMI emanates from the small domestic reach, limited sophisticated products and cybersecurity threats, which may undermine confidence in the system. Bridging these gaps would further improve the FMI and would represent major opportunities – such as in terms of enhanced competitiveness through scaling up the digitalisation of the local payment system, development of more products, and regional and international reach of market players.

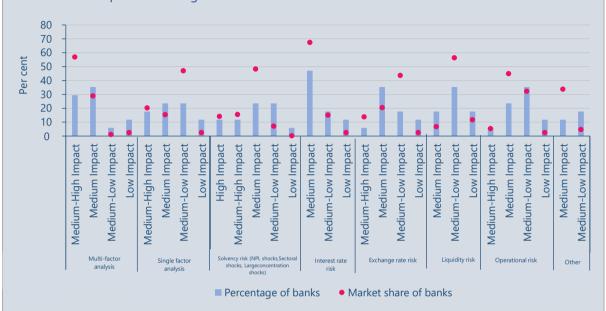
## Stress testing

Many banks have stress tested their resilience to a range of scenarios, including: multi- and single-factor scenarios (Chart I). These scenarios covered solvency risk, interest rate risk, exchange rate risk, liquidity risk, operational risk amongst others. The impact of both scenarios and each risk element diverged amongst banks. Multi-factor scenarios seemed to impact the solvency of banks mostly in the range of medium to medium-high levels. As for single-factor scenarios, the impact level was much more distributed with around 50 per cent



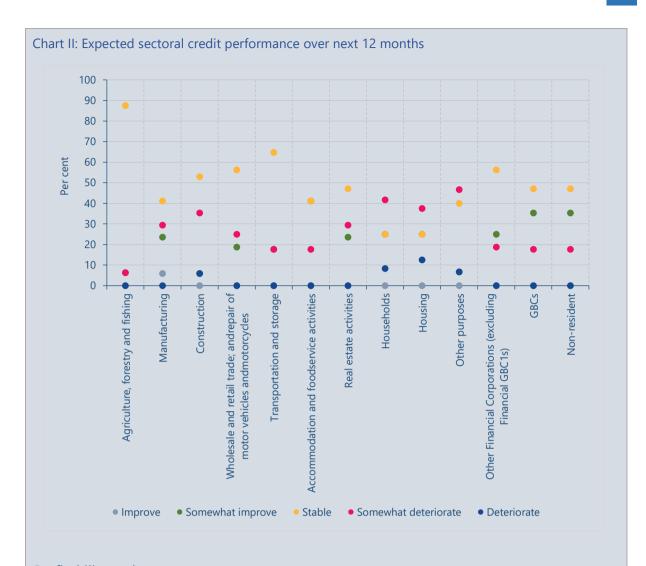
of respondents indicating medium-low to medium level impact. Similarly, most banks highlighted that the impact from solvency risk, exchange rate risk, liquidity risk, operational risk would be on the medium-low and/or medium level. Many banks pointed out that interest rate risk impact level was at the medium level.

Chart I: Bottom up stress testing



The general consensus among banks tended towards stable performance for most economic sectors over the next 12 months (Chart II). Nevertheless, some banks also indicated the possibility of a slight deterioration in the 'Manufacturing', 'Construction', 'Wholesale and retail trade', 'Real estate' and 'Household' sectors. Risk to the 'Construction' and 'Household' sectors seemed to be on the high-side, likely due to broadening inflationary pressures and monetary policy tightening, which altogether are pushing up cost of living and debt servicing cost. However, continued flow of Foreign Direct Investment (FDI) could sustain property prices and boost these sectors.





#### Profitability and strategy

Banks remained optimistic of profitability levels, with many of them estimating ROE above 8 per cent over the next 12 months. Strategies adopted to attain such results would focus on improving income from interest bearing, non-interest bearing and trading assets. These would mostly be in the form of increased lending activities and greater use of digital channels. Nevertheless, the outcome remained at risk given macroeconomic uncertainties over the next year.

## Liquidity and Funding

Most banks revealed having enough liquidity buffers to meet their commitments over the coming year. Banks were ready to strengthen their HQLA to meet potential increases in net cash outflows. Secured funding, wholesale deposits and retail deposits would be prioritised as the main funding instruments over the next 12 months. Banks expected deposit level, in both the domestic and foreign currencies, to be stable and could even increase moderately. This view emerged from the strong customer base, which was confident on the resilience of



the Mauritius financial system. Nevertheless, the deposit growth rate could be subdued by slow economic recovery and looming threat of a recession in a number of jurisdictions over 2023.

#### Asset Quality and Solvency

The asset quality of most banks was expected to remain stable, with even the possibility of improving over the coming year. Economic uncertainties were estimated to have low bearing on the asset quality of many banks, based on their ability to resolve potential defaults by relying on adequate provisioning and collaterals. Furthermore, many banks suggested that borrowers who were granted large credit facilities were able to service their debt. Many banks would also be able to reinforce their capital buffers from retained earnings and even capital injection, if needed, to support any possible defaults.

#### Operational risk

Operational risk is deemed to be well managed, with no foreseeable increase by many banks. Adverse developments emanating from the geopolitical, AML/CFT and cybersecurity arenas could however push such risk upwards. Banks have designed various strategies to mitigate such increase in risk, predominantly through investment in IT infrastructure and systems as well as through changing and/or adapting their business lines and products offered.

#### Digitalisation

The majority of banks were investing in digital technologies. The main reason was to drive down costs, boost growth opportunities, align to consumer demands and respond to growing competition in the banking sector.

Most banks reported that a non-interest-bearing retail Central Bank Digital Currency (CBDC) issued by the Bank will not impact their business. Nevertheless, a few respondents – which considered a non-interest-bearing retail CBDC as a threat – foresee a drop in overall deposits, levels of profitability and liquidity. Banks also highlighted the possible internal policies that could be implemented to mitigate such risks stemming from the issuance of a non-interest-bearing retail CBDC. Specifically, enhanced product offerings to attract more deposits, adapting existing policies to evolving consumer demands and a well-established robust framework for cyber security are significant measures to be deployed in view of mitigating risks from a retail CBDC.



#### Climate-related risk

Most banks are incentivised to monitor and mitigate climate-related financial risks. Sustainable credit facilities are currently offered to economic sectors by many banks. Almost all banks were engaged in establishing ESG strategies within their organization. Credit, operational and reputational risks were reported as high priority by many banks which were quantifying or intended to quantify the amount of their investment portfolio prone to climate-related risks. Banks had identified sea level rise, droughts, floods and rise in temperature as potential climate risks to impact the 'Mining and quarrying', 'Agriculture', 'Real estate activities', 'Accommodation and food service activities' and 'Electricity, gas, steam and air conditioning supply' sectors. Stress testing exercise for climate-related financial risks has not yet been adopted by many banks while some are still in the planning phase. Most banks expect climate change to have medium to low impact on the stability of the financial sector in Mauritius.

## Others and mitigating measures

Many banks responded having identified no emerging Money Laundering/Terrorist Financing risks associated with the pandemic.

In addition, many banks reported that the Moody's sovereign rating downgrade of Mauritius had low or even no impact on their businesses. The remaining banks explained that any impact was mostly at medium and medium-low levels due to risk-weighted calculations and cost of funding considerations.

Banks confirmed having applied macroprudential limits as per the relevant guidelines of the Bank, while some banks had more conservative internal limits.

Banks have implemented various contingency plans to help weather potential macroeconomic shocks. Altogether, the strategies pertained to funding and liquidity plans, capital buffer increase, dynamic risk management, good governance processes, and financial support from group or parent entity.



## 4. Non-bank financial services sector

The non-bank financial services sector continued to expand but faced challenges from high market volatility and emerging risks. The asset value of the life insurance industry contracted, driven by a decline in equity investments, while that of the general insurance industry expanded. The assets of the private pension schemes industry also declined, following the impact of the war on the global stock market volatility. Rising interest rates presented new investment opportunities and insurers and pension funds shifted investment strategies accordingly. This shift is expected to protect the non-bank financial services sector from risks that could undermine its balance sheet position.

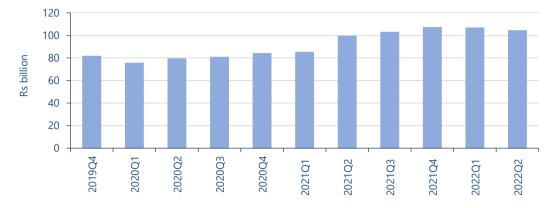
The non-bank financial services sector – consisting of life insurances, general insurances and pension funds – remained buoyant in the first half of 2022, though market volatility impacted the value of their assets. The insurance sector comprised 7 life insurers and 15 general insurers. The long-term insurances accounted for around 81 per cent of total insurance assets. The level of penetration of the insurance sector in the domestic economy – as measured by the ratio of annualised insurance premium to GDP – stood at 4.6 per cent of GDP in June 2022, broadly unchanged from December 2021. The 72 pension scheme businesses held aggregate assets of around 12.3 per cent of GDP as at end-June 2022.

The outlook for the insurance and pension scheme businesses was hampered by the lingering impact of the pandemic coupled with the macroeconomic and geopolitical ripple effects of the Russia-Ukraine war. The FSC is closely monitoring the performance and risk management frameworks of these businesses. The regulatory framework was strengthened to support the vision for the insurance sector.

# Life insurance industry performance dropped

The aggregate assets of the life insurance industry dropped during the first half of 2022, after a rapid growth during 2021. The value of the assets fell by 2.6 per cent over the semester ended June 2022 (Chart 4.1).

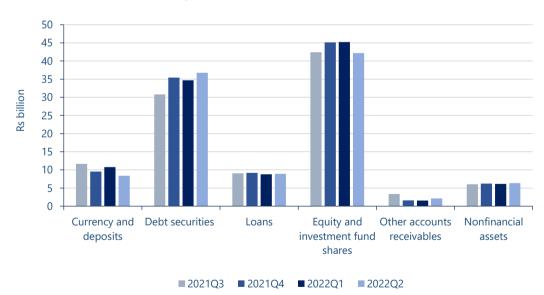
Chart 4.1: Long term insurance asset's value



Source: Financial Services Commission

The contraction in life insurers' assets value was mainly driven by a drop of 6.5 per cent in equity investment in the second quarter of 2022, reflecting the decline in the SEMDEX over the same period. Simultaneously, the investment preference of life insurers shifted towards debt securities, which expanded by 3.7 per cent in the first semester of 2022. The shift from equity to fixed-income securities, contrasting with the trend observed during 2021, displayed financial opportunities fuelled by rising interest rates (Chart 4.2).

Chart 4.2: Distribution of assets by class



Source: Financial Services Commission

The interconnectedness of long-term insurance business with other segments of the 'Financial Services' sector as well as other institutional sectors of the economy strengthened. The largest exposure of life insurers was in favour of securities issued by the Government of Mauritius and the Bank, representing 29 per cent of total financial assets held by life insurers as at end-June



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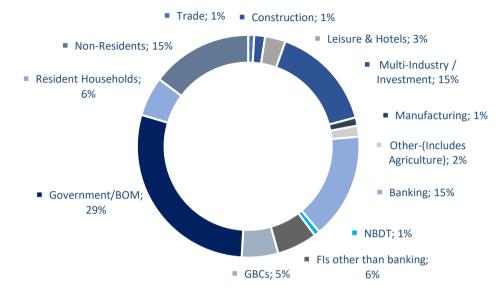
Non-bank financial services sector

Global business sector

Stress testing the Mauritian

2022. These investments are relatively risk-free and liquid, meeting the preferences of the life insurance industry. Investments in the banking sector, multi-industry/investment sectors and non-resident sector followed with equal shares of 15 per cent each (Chart 4.3), showing prudent risk diversification.

Chart 4.3: Financial asset by industry

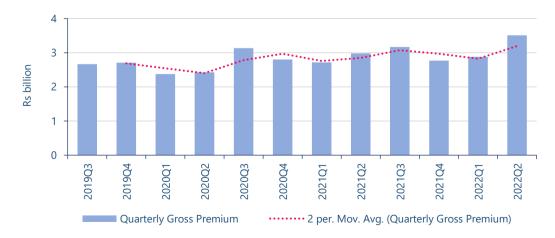


Source: Financial Services Commission

## Gross premiums sustained

Gross premium collected by life insurers continued to rise, surging by 21.8 per cent in the quarter ended June 2022. Life insurers mobilised total premium of Rs6.4 billion during the first semester of 2022, compared to Rs5.9 billion in the second semester 2022 (Chart 4.4).

Chart 4.4: Gross premiums



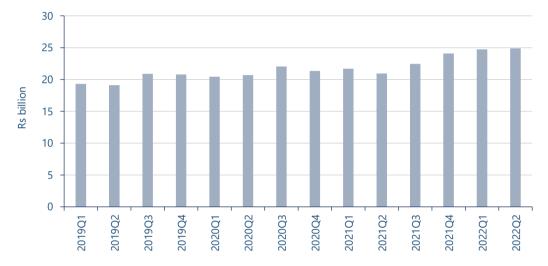
Source: Financial Services Commission



## **General insurance industry grew steadily**

The financial performance of general insurers exhibited optimism since the second half of 2021, reflected in the upward trajectory of their total assets. Following the gradual easing of sanitary restrictions in 2021 and sustained economic recovery, the value of total assets of the of the 15 general insurers followed a steady upward course to reach Rs24.9 billion as at end of June 2022 (Chart 4.5). The value of total assets of the general insurance industry is well above the pre-pandemic level.

Chart 4.5: General insurance assets value

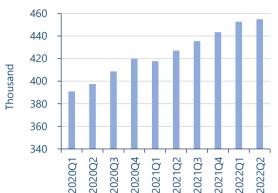


Source: Financial Services Commission

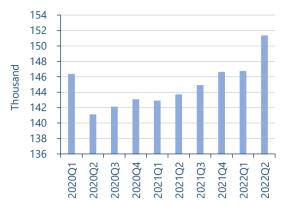
The general insurance industry has demonstrated resilience, despite a prolonged period of uncertainty. The number of policies in force for the motor and non-motor segments maintained a rising trend in the first semester of 2022 (Chart 4.6).

Chart 4.6: General insurance- number of policies in force





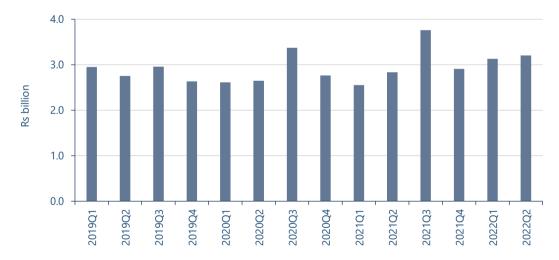
## b. Non-motor segment



Source: Financial Services Commission

The quarterly gross premium collected by non-life insurers, whilst volatile, followed an upward trend during the first half of 2022. After smoothing out the short-term fluctuations, the value of gross premium maintained its growth momentum. The total gross premium increase by 12.8 per cent to Rs13.0 billion for the year ended-June 2022 (Chart 4.7).

Chart 4.7: Total quarterly gross premium



Source: Financial Services Commission

# **Insurance sector regulatory developments**

Several amendments were made to the legislation for the insurance sector as outlined in Table 4.1.

Table 4.1: Regulatory developments

Amendments	Description
National Insurance Claims Database (NICD)	In its 2020-2024 programme, the Government announced the introduction of the Bonus Malus system in order to reform the vehicle-driver insurance system.  To implement this system, the FSC in collaboration with the Ministry of financial Services and Good Governance took the initiative to set up the
	NICD. The setting up and hosting of the NICD by the FSC was announced in the National Budget 2021-2022. The Insurance Act was amended accordingly.
	<ul> <li>The objectives of the NICD are to:</li> <li>establish a centralised record of claims history for the implementation of the Bonus Malus system;</li> <li>enhance the efficiency of the claims management process through digitalisation of records, automation and electronic communication;</li> <li>improve the transparency in the claims recovery process and facilitate the clearing and settlement of inter-insurers' outstanding claims through multilateral netting;</li> <li>provide users with dashboard and analytics to gauge performance in claims management and claims recovery; and</li> <li>ensure that vehicles declared as total loss are reported, identified and flagged on the NICD.</li> </ul>
Structured Investment- Linked Insurance Business (SILIB)	In line with the budgetary measures 2020-2021, the Insurance Act was amended on 2 August 2022 to introduce a new class of policy, namely Structured Investment-Linked Insurance Business (SILIB) under the long-term insurance business category.
	Following consultation with the industry, the FSC has issued, under the Insurance Act, the Insurance (Structured Investment Linked Insurance Business) Rules 2022 effective as from 3 September 2022 for this new class of long-term insurance business.

The introduction of SILIB is aligned with the strategy of the FSC and the Government's Vision 2030 to further enhance the development and competitiveness of the financial services sector by consolidating wealth management, one of the pillars mentioned in the Blueprint Report entitled "Innovation and transforming the Mauritius IFC of 2030: a blueprint for success".

In conjunction with the new SILIB framework consequential amendments were made to the following Act, Regulation, FSC Rules and Guidelines:

- Insurance Act
- Insurance Regulations
- Insurance (Long-Term Insurance Business Solvency) Rules 2007
- Insurance (Returns) Rules 2007
- Financial Services (Consolidated Licensing and Fees) Rules 2008
- Guidelines on stress test requirement for long term insurers

# International Financial Reporting Standard 17 (IFRS 17)

The International Accounting Standards Board has issued International Financial Reporting Standard (IFRS) 17 on Insurance Contracts, which is the first comprehensive global accounting standard for insurance contracts. This influences the financial reporting and all business aspects of insurers and reinsurers. Furthermore, it aims to make the financial statements of insurers more relevant, comparable and transparent. On 10 June 2022, the FSC issued a request for proposal through open advertised bidding for the provision of consultancy services with respect to the implementation of IFRS 17. The project is estimated to run over 18 months from the date of award of the contract.

The objectives of the consultancy services are:

- implementing the new IFRS standards;
- enhancing capacity and transferring knowledge; and
- assisting the FSC in reviewing and computing what is required by the newly applicable standards once licensees submit their report.

Source: Financial Services Commission

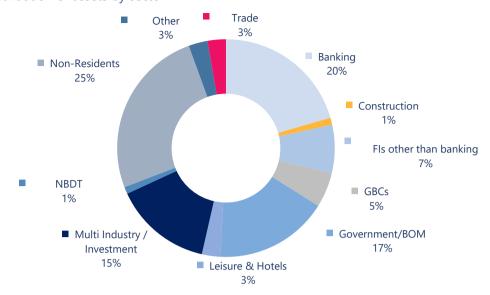
# Pension scheme industry adversely impacted by market volatility

The performance of the pension scheme industry was adversely impacted by financial markets volatility in the first semester of 2022, after picking up consistently in 2021. The private pension schemes industry was exposed up to 25 per cent to non-residents and, thus, was more sensitive to external shocks than the life insurance industry (Chart 4.8).



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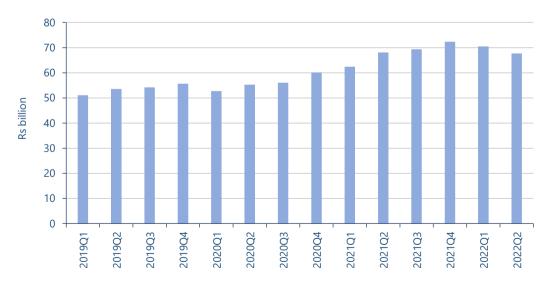




Source: Financial Services Commission

The asset value of pension schemes declined in the first half of 2022. The value fell by 6.4 per cent to Rs67.7 billion as at end-June 2022, compared to December 2021 (Chart 4.9). The decline in assets was mainly attributed to a drop of 19.5 per cent in the value of investment in foreign equity since end-December 2021 (Chart 4.10). This is concurrent to a fall of 21.0 per cent observed in the MSCI World Index reflecting the adverse impact of the Russia-Ukraine war in stock markets worldwide. Nevertheless, the assets value remained above to pre-pandemic levels.

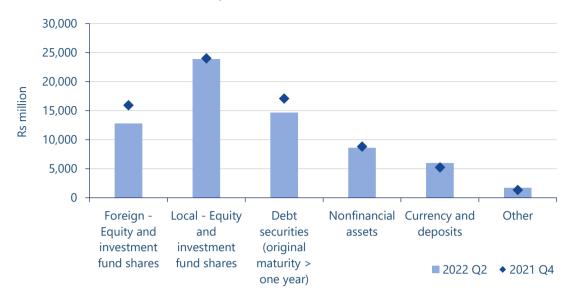
Chart 4.9: Pension scheme asset value



Source: Financial Services Commission



Chart 4.10: Distribution of assets by class



Source: Financial Services Commission



# 5. Global business sector

The performance of the GB sector improved further in the first semester of 2022, in particular following the delisting of Mauritius from the FATF, UK and EU lists. The number of new GBC licences issued went up. Quarterly investment flows were higher compared to the period during which Mauritius was grey listed. Uncertainties triggered by the war increased volatility in investment flows through the Mauritian International Financial Centre, as investors' risk appetite was adversely impacted. GBC deposits fell during the first semester of 2022, as rising interest rates and market volatility led to capital flows towards safe haven assets. Credit facilities to GBCs remained relatively low. Key risks to financial stability from developments in the GB sector were well contained, given banks' well-established risk management practices.

The GB sector showed resilience in spite of being confronted with unprecedented uncertainties and challenges since the beginning of 2020. Overall, risks from the GB sector that could impact the stability of the financial system remained contained in the first half of 2022. Improved domestic business sentiment, economic dynamism in regional economies, initiatives to bolster the GB sector and the delisting of Mauritius have supported the sector. The exit of Mauritius from the EU list of High-Risk Third Countries in February 2022 followed its removal from the FATF list of jurisdictions under increased monitoring and the UK list of High-Risk Third Countries in the last quarter of 2021.

The GB sector is well integrated in the economy, even though most of its assets are invested abroad. The sector is estimated to contribute 8.5 per cent to the Gross Value Added at basic prices and grow by 3.3 per cent in real terms in 2022. This contribution emanates primarily from activities of GBCs and services purchased from domestic firms. Furthermore, direct employment generated by the GB sector increased to 5,028 as at end-June 2022, from 4,748 as at end-December 2021 – consisting primarily of employment in Management Companies (MCs). The indirect contribution of the GB sector to employment must be extended to related economic sectors – such as the banking sector, professional service activities (e.g., legal and audit services) and insurance sector.

The GB sector is an important source of funds for the banking system, representing an average of 37 per cent of total banking sector deposits over the past ten years. The sensitivity of the GB sector to adverse developments abroad can, therefore, have serious ramifications on the stability of the banking and financial system in Mauritius.



## Global Business activities buoyant despite emerging risks

The delisting of the Mauritian jurisdiction and the Russia-Ukraine war have largely influenced the performance of the GB sector in the first semester of 2022. The delisting led to an increase in the number of new GBC licences issued (Chart 5.3) and investment flows (Chart 5.7). The pick-up in global economic activities also coincided with the exit of Mauritius from the FATF list. These combined events contributed positively to the number of licences and volume of investments going through the Mauritian International Financial Centre (MIFC). Moreover, compliance with 39 out of the 40 FATF Recommendations by June 2022 and with the 40 Recommendations as from September 2022 consolidated the fundamentals for a resilient and thriving GB sector, despite intensifying competition.

The aggregate assets of the GB sector were resilient during the first semester of 2022, rising by 0.7 per cent to reach US\$687 billion as at end-June 2022 relative to end-December 2021. The majority of these assets were held by Special Purpose Entities (SPEs) registered in Mauritius – in particular, GBCs – in the form of investments in non-resident entities outside the jurisdiction.

On the downside, the Russia-Ukraine conflict and its dampening effect on global growth exacerbated the degree of uncertainty in respect of global investments flows. While Mauritius has limited investment exposure with these two countries, the disruptions caused by the war is likely to have a bearing on the GB sector going forward, given its sensitivity to external developments. In particular, high inflation, reduced global consumption and trade, and possible worsening of sanctions between industrialised countries and Russia may impact investment flows through the MIFC.

The GB sector is subjected to growing competition from other international financial centres. The choice to channel investment through the MIFC stems from the competitive advantages that the jurisdiction offers – notably fiscal, ease of doing business and strong eco-system of service providers for cross-border investments. The implementation of the *Future of Banking in Mauritius* initiative will also contribute towards enhancing the attractiveness and competitiveness of the MIFC. To consolidate its position, the MIFC has successfully diversified its target investment markets with growing focus on Africa, in particular following changes brought to the Double Taxation Avoidance Agreement (DTAA) between Mauritius and India.

The African region became the most targeted destination of investment in terms of number of GBCs. Investments in the African continent was principally in the form of direct investment through private equity. India remained the predominant target country for portfolio investment, which had a larger volume of transactions through the banking system in



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Mauritius. To that effect, monitoring and upholding India-focused business remained important while continuously exploring new avenues in terms of markets and products.

The dynamics in the GB sector did not pose major risks to the financial system during the first semester of 2022. As GBC deposits are an important source of funding in the banking system, accounting for around 52 per cent of total FX deposits, the exposure to FX liquidity risk has to be well managed. The level of GBC deposits was relatively lower during the period under review relative to the last semester of 2021, likely due to the rapid increase in interest rates on main international currencies. Banks were able to sustain the outflow of GBC deposits and avoid liquidity strains. Banks generally hedged liquidity risk by maintaining adequate FX liquidity buffers, as per the LCR requirements, to meet higher volatility in GBC deposits.

Credit risk from GB exposures improved in the second quarter of 2022, although it remained elevated relative to pre-pandemic levels. A recession in 2023 may adversely impact the asset quality of the GB sector but the low share of GB loans in banks' credit portfolios provides a safeguard against credit risk intensification. Banks also hold adequate capital buffers to respond to any rise in credit risk.

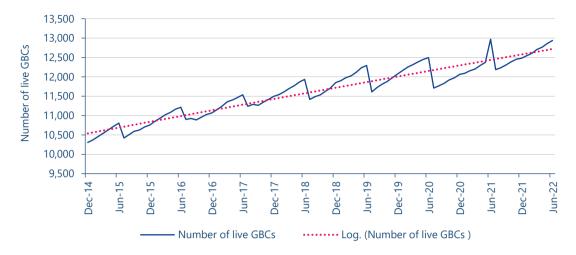
Risks to the stability of the global financial system have gone up, as highlighted in the IMF's October 2022 Global Financial Stability Report. Heightened global vulnerabilities may impact activities in the GB sector and amplify risks – in particular, liquidity and credit. However, the regular assessment as well as the stress test exercises conducted by the Bank showed that the banking system maintained adequate buffers. The Bank and the FSC closely monitor global developments and the likely implications on the GB sector.

#### Rise in live GBCs

The GB sector comprised 12,938 live GBCs as at end-June 2022, compared to 12,480 as at end-December 2021. The peak of 12,970 observed during June 2021 reflected cases of conversion of GBC2s to GBCs, with the phasing out of the previous licensing regime. In contrast, the drop observed in July of each year is attributed to the non-renewal of the GB license of a number of companies, which occurs annually during the same period (Chart 5.1).







Source: Financial Services Commission

A total of 1,049 new GBCs licenses (exclusive of conversion cases) were issued during the twelve months ended June 2022, representing an annual growth of 9.7 per cent. Non-live GBCs increased by 3.9 per cent over the same timeframe. Overall, for the last two years ended June 2022, the growth in non-live GBCs resulted in a slight net decrease in terms of the net cumulative number of GBCs (Chart 5.2).

Chart 5.2: Evolution of applications, newly licensed and non-live GBCs

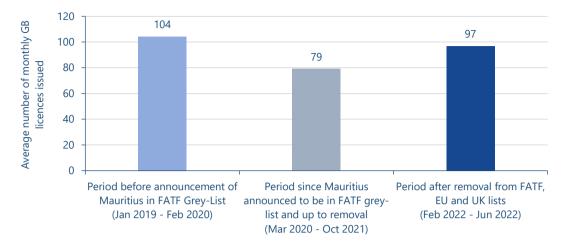


Source: Financial Services Commission

The average monthly GB licences issued registered a growth of 22.5 per cent to reach 97, compared to the period during which Mauritius was included in the FATF, UK and EU lists. This demonstrates a positive impact on the average monthly GB licences issued following the withdrawal of Mauritius from the FATF, UK and EU lists (Chart 5.3).



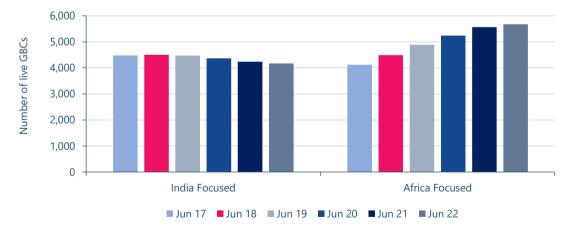
Chart 5.3: Average monthly GB licences issued



Source: Financial Services Commission

Africa maintained an upward momentum in terms of the primary target investment region. The number of live GBCs targeting Africa expanded at an annual rate of 2 per cent in June 2022 and represented 44 per cent of total live GBCs. In contrast, live GBCs investing in India displayed a downward trend since July 2019, marked by the end of the transition period provisioned in the changes brought in the DTAA between Mauritius and India. In particular, since 1 July 2019, the Indian revenue authority taxes GBCs earning capital gains arising from the sale of equity in India. The number of live GBCs targeting India contracted at an annual rate of 1.6 per cent for the period ended June 2022 and represented 32 per cent of live GBCs (Chart 5.4).

Chart 5.4: Live GBCs targeting India vs Africa



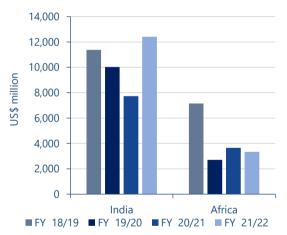
Source: Financial Services Commission

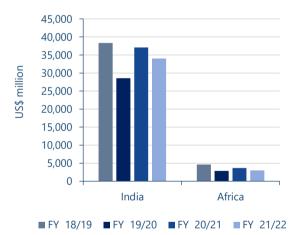


#### Investment flows impacted by geopolitical tensions

While the number of Africa-focused GBCs is growing, they still represent a low share of investment flows through the MIFC compared to India-focused GBCs. Total FDI into India rose at an annual rate of 60.4 per cent whilst an annual contraction of 8.6 per cent could be observed for FDI towards the African continent for the period ended June 2022 (Chart 5.5). The growth of FDI into India is primarily explained by the delisting of Mauritius by the FATF as resident companies are no more subject to enhanced due diligence from the target country of investment.

Foreign portfolio investment (FPI) flows, principally in the form of investment on stock markets, to both India and Africa contracted (Chart 5.6). Geopolitical tensions with the onset of the Russia-Ukraine war in February 2022 and the resulting drop in stock markets were key factors leading to this contraction. The decline observed in the financial year to June 2022 is broadly consistent with MSCI world index showing an annual decline of 16 per cent. FPI flows to India contracted at an annual rate of 8.2 per cent and by 18.7 per cent to Africa in June 2022.



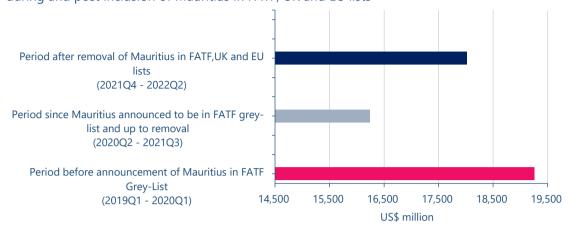


Source: Financial Services Commission

Source: Financial Services Commission

The positive effects of the delisting of Mauritius is further demonstrated in the average quarterly gross investment outflows (Chart 5.7). As compared to the period during which Mauritius on the list of the FATF, UK and EU up to its removal, the aforementioned quarterly flows improved by 11.0 per cent.

Chart 5.7: Analysis of average quarterly outward investment flows (USD million) for periods before, during and post inclusion of Mauritius in FATF, UK and EU lists

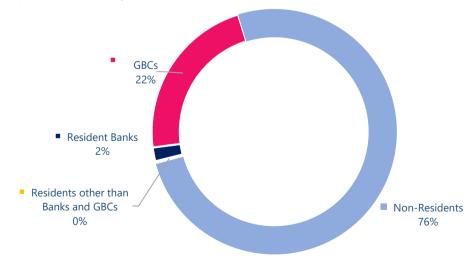


Source: Financial Services Commission

# Close linkages between the global business and banking sectors

The interconnectedness between the banking system and the GB sector remained strong. Non-residents channelled funds through the MIFC, using SPEs primarily, for investments in Asian and African economies. The linkage between GBCs and domestic institutional sectors was principally in the form of deposits held with banks operating in Mauritius and amounted to US\$11.8 billion as at end-June 2022 denoting a fall of 9.6 per cent from end-December 2021. The highest asset exposure of GBCs was with non-residents at 75.7 per cent, followed by cross-shareholding between GBCs at 22.3 per cent as at end-June 2022 (Chart 5.8).

Chart 5.8: Exposure of GBCs by institutional sector as at end-June 2022



Source: Financial Services Commission

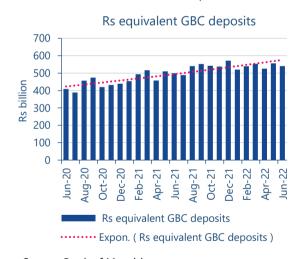


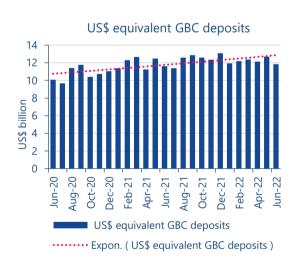
#### GBC deposits with banks tumbled marginally

The short-term nature of GBC deposits is a source of risk requiring prudent management. Moreover, GBCs are highly sensitive to adverse developments abroad, which potentially infuse some degree of external vulnerability in the banking system. To evaluate the resilience of the banking system to shocks arising from withdrawal of GBC deposits, the Bank conducts regular liquidity stress tests based on various plausible scenarios. The LCR, requiring banks to hold HQLAs, is a buffer catering for the risk of sudden large outflows of GBC deposits.

The share of GBC deposits represented 34.1 per cent of total banking sector deposits, as at end-June 2022, more or less around the same level prior to the pandemic. As a share of total FX deposits in the banking system, FX GBC deposits hovered around 52 per cent compared to 55.5 per cent in December 2021. Although the Russia-Ukraine war has led to heightened risk in the global financial system, the volume of GBC deposits remained broadly resilient (Chart 5.9). Monthly GBC deposits averaged US\$12.2 billion during the first semester of 2022, compared to a monthly average of US\$12.5 billion during the last semester of 2021. Higher interest rates abroad may partly explain the drop in average GBC deposits.

Chart 5.9: Evolution of GBC deposits





Source: Bank of Mauritius

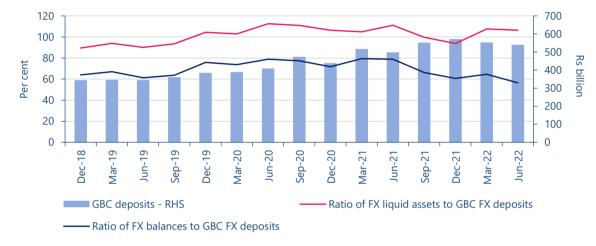
The volatile nature of GBC deposits restricts banks from deploying these funds into long-term or illiquid assets. Therefore, banks generally deploy GBC deposits in liquid assets to ensure adequate buffers against the risk of sudden withdrawal of funds that could destabilise their liquidity position. The liquid assets are typically deposits or balances held with banks and investment in liquid sovereign FX securities. <sup>18</sup>

<sup>&</sup>lt;sup>18</sup> Balances with banks include balances held by banks with their respective correspondent banks.



The average share of FX liquid assets held by banks to GBC deposits improved to 101.9 per cent during the first semester of 2022, reflecting the capacity of banks to cover any abrupt withdrawal of funds (Chart 5.10). Banks shifted part of deposits or balances held with banks into liquid sovereign FX securities, as returns were higher. Consequently, the ratio of FX balances to FX GBC deposits declined to 56.5 per cent as at end-June 2022, from 60.7 per cent as at end-December 2021. In particular, liquid sovereign FX securities to FX GBC deposits increased to 39.2 per cent as at end-June 2022, from 32.6 per cent as at end-December 2021. An analysis of the stickiness of GBC deposits for the period October 2018 to June 2022 showed that 78 per cent of these deposits tend to be stable, slightly lower than what was estimated in 2021 when interest rates abroad were still low.

Chart 5.10: Deployment of GBC deposits



Source: Bank of Mauritius

A risk map was developed by the FSC to assess the level of risk associated with exposure of the banking system to GBC deposits. GBCs have been risk-rated with respect to the likelihood of leaving the MIFC and the impact on the banking sector deposits. Based on data as at 30 June 2022, between 1 per cent to 9 per cent of the GBC deposits have been classified under the higher risks and impact buckets, particularly medium-high to high categories.

The risk map indicated that 13.4 per cent of GBCs were assessed to be at high risk of leaving the jurisdiction. Further, 24.5 per cent of GBC deposits would have a high impact on the banking system in the event of deposits withdrawals. Overall, it is estimated that 6.8 per cent of total GBC deposits were both at high risk of leaving the jurisdiction and having a high impact in terms of deposits outflow.

Table 5.1: Risk map – per cent of total GBC deposits



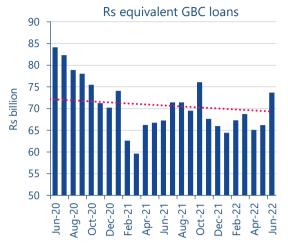
Risk Score – GBCs leaving the Mauritian jurisdiction	Medium- Low Risk Low Risk	14.8 61.0	0.1	23.7	3.2 17.2	5.4	14.4
ore – (		Sub-Total	0.5	37.3	26.8	10.9	24.5
Ö		Sub-Total	0.5	37.3	26.8	10.9	24.5
Sisk Score -		Sub-Total	0.5	37.3	26.8	10.9	24.5
e – GBCs le	Low Risk	61.0	0.3	23.7	17.2	5.4	14.4
aving the N		14.8	0.1	4.8	3.2	3.4	3.3
Mauritian ju	Medium- High Risk	10.8	0.1	5.5	4.1	1.1	0.0
ırisdiction	High Risk	13.4	0.0	3.3	2.3	1.0	6.8
_		Sub-Total Risk scores					

Source: Financial Services Commission

The exposure of the banking sector to the high-risk components of the GB sector remained low and, therefore, underscored the limited credit and market risks to the GB sector. The share of loans extended to GBCs to total loans granted by the banking sector stood at 7.5 per cent as at end-June 2022, which is deemed not substantial. Bank loans granted to the GB sector increased at an annual rate of 2.9 per cent to US\$1.6 billion as at end-June 2022 (Chart 5.11).

Reflective of the pandemic and risks associated with the Russia-Ukraine war, the NPL ratio for the portfolio of loans allotted to GBCs remained elevated, albeit with a slight improvement during the second quarter of 2022. The NPL ratio of GBCs improved to reach 17.3 per cent in June 2022, from 19.3 per cent in March 2022. Specific provisions to NPLs in the GB sector stood at 56.1 per cent as at end-June 2022 (Chart 5.12).

Chart 5.11: Evolution of GBC loans



US\$ equivalent GBC loans 2.5 2.0 US\$ billion 1.5 1.0 0.5 0.0 Dec-20 Aug-20 Apr-22 Feb-21 Apr-21 Oct-21 Feb-22 Jun-21 Aug-21 Dec-21

Source: Bank of Mauritius

Chart 5.12: Evolution of GBC NPLs



Source: Bank of Mauritius

# 6. Stress testing the Mauritian banking sector

The Bank stress test results showed that the banking sector continued to be resilient. This resilience was assessed using a range of macroeconomic and other idiosyncratic shocks. Plausible scenarios included hypothetical adverse conditions in the economy and shocks to credit portfolios, interest rate, exchange rate and liquidity positions. Some banks fell within the vulnerability zone with the hike in the regulatory minimum capital inclusive of the CCB, but the majority of banks continued to hold robust solvency and liquidity positions. Some banks planned to bring in additional capital to support assets growth and improve their resilience. Moreover, as economic recovery gathered momentum, the banking sector continued to consolidate its financial buffers to cushion risks to financial stability. Threats to global economic prospects and tightening global financial conditions were, however, increasing risks to financial stability. The Bank maintains its prudent approach by deploying its assessment toolkits to monitor financial stability and adopt proactive measures.

Risks to financial stability have heightened globally in 2022 and are expected to remain elevated as macroeconomic conditions deteriorate in 2023. The upshots of the pandemic, the prolonged Russia-Ukraine war, persisting disruptions to supply chains, broadening inflationary pressures and potentially slower global economic activity in 2023 are some of the key factors likely to affect the global financial system. In addition, the tightening of monetary policy by many central banks around the world in an effort to curb inflation is exercising additional stress on financial stability, as households and corporates face more balance sheet strains with higher debt servicing costs and higher market volatility.

The Bank carried out its regular top-down stress test exercise to assess the resilience of the banking sector when it is subjected to credit and liquidity shocks. The objective is to evaluate the capacity of the sector to sustain its operations under various stressed scenarios. Specifically, these tests assessed the adequacy of the capital and liquidity buffers held by the banking sector to hypothetical but plausible macroeconomic shocks as well as shocks to credit portfolios, interest rate, exchange rate and liquidity.

The stress test results confirmed the sound position of the banking sector to continue supporting the economy and its cross-border activities. The capital and liquidity buffers held by banks were broadly adequate to uphold the stability and resilience of the banking system. Some banks displayed weaknesses to specific shocks, particularly under the harshest but lower probability scenarios. The Bank is addressing the main vulnerabilities through appropriate preemptive measures. One of the key measures initiated by the Bank is the increase in the CCB to



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Stress testing the Mauritian banking sector

2.5 per cent, from 1.875 per cent, as from 1 April 2022 to ensure more robust capital buffers in the banking sector. The detailed results of the stress tests are discussed in the next sections.

# Macroeconomic scenario analysis

The Bank used three hypothetical scenarios to measure solvency in the banking sector – namely, the baseline, moderate, and severe scenarios. Each scenario augmented the degree of severity to characterise growing risks to financial stability.

The baseline scenario assumed an economic growth of 7.4 per cent in 2022 followed by buoyant economic activity in 2023, reflecting the measures taken in 2021 and 2022 to boost the economy. The tourism industry is expected to be highly buoyant in 2022, creating positive spill-over effect on other sectors. The 'Manufacturing' sector is expected to maintain its momentum. The 'Construction' sector is also anticipated to contribute to economic activity in 2022, through the implementation of major public and private sector projects. The effects of the ongoing Russia-Ukraine war are not projected to have a significant impact on domestic economic activity. The real income shock caused by high inflation is not anticipated to dent consumer and business sentiments significantly.

The moderate scenario assumed a stagnant economy in the last two quarters of 2022 and the first half of 2023 with zero growth, followed by recovery in the second half of 2023. A further prolongation of the Russia-Ukraine war, the energy crisis in Europe and high inflation could create substantial disruption for exports from Mauritius and hamper activity in the 'Manufacturing' sector. Tourist arrivals could also stall, slowing recovery in the tourism and tourism-related industries. Economic growth is projected to pick up in late 2023. The shock to real income caused by high inflation is expected to adversely impact consumer and business sentiments.

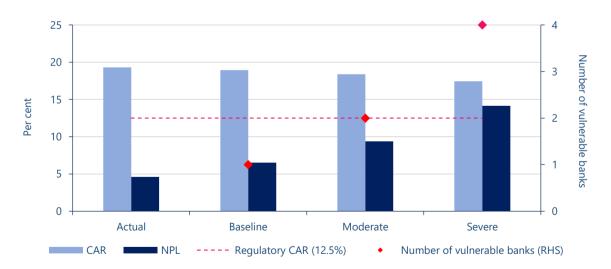
The severe scenario assumed the domestic economy would contract from the last quarter of 2022 till the end of the first half of 2023, and recover as from the second semester of 2023. With recent indicators taking a turn for the worse, the global economic outlook could worsen. The effects of the Russia-Ukraine war are presumed to intensify further in 2022, significantly disrupting supply chains as well as international travel and trade. Moreover, aggressive monetary policy tightening takes a toll on economic activity worldwide. The tourism industry is assumed to be severely impacted by the significant economic slowdown in advanced economies. Growth in other key domestic sectors is hindered as Mauritius' main export markets slump in the first half of 2023.



The transmission channel of the macroeconomic shocks to the banking sector is predominantly through the credit portfolio. The correlation between credit portfolio to economic growth is estimated using satellite models. The NPL ratios are forecast for each scenario based on the effect of the GDP shock on the credit portfolio. The impact on banks' capital is projected using specific assumptions made on the amount of provision that banks have to set aside for the additional NPL, which affect the capital level of banks and, therefore, the resilience of the banking sector to macrofinancial risks.

The stress test results confirmed that the banking sector as a whole can withstand these three macroeconomic shock scenarios, based on June 2022 data. From a bank-level perspective, most banks held adequate capital buffers to absorb these shocks. Four banks demonstrated vulnerabilities to the shocks, as their CAR fell below the regulatory minimum. The CAR of one bank dropped below the regulatory minimum of 12.5 per cent in the baseline scenario. <sup>19</sup> Under the moderate scenario, the CAR of two banks declined below the regulatory limit. In the severe scenario, the CAR of four banks breached the prescribed threshold (Chart 6.1a). On a positive note, the CCB of all banks was able to absorb these shocks, maintaining the post-shock CARs above the 10 per cent minimum regulatory limit. Most banks held post-shock CARs above 20 per cent in the baseline and moderate scenario while under the severe scenario the majority of banks held CARs above 15 per cent after the shock hit their capital (Chart 6.1b). <sup>20</sup>

Chart 6.1: Macroeconomic shock results a. Sector level results



Source: Bank of Mauritius

<sup>&</sup>lt;sup>20</sup> Under Basel III, the minimum CAR that banks must maintain is 8 per cent. According to the Bank's guideline, banks in Mauritius have to maintain a 10 per cent minimum CAR ratio, thus providing higher insurance against risks.



<sup>&</sup>lt;sup>19</sup> The CAR includes the CCB of 2.5 per cent.



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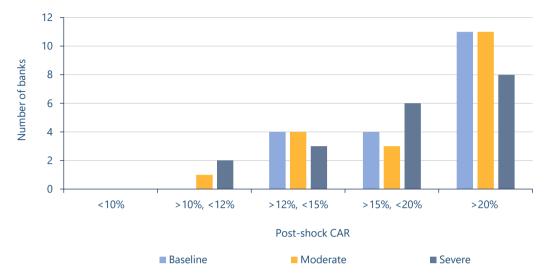
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#### b. Bank-wise distribution of post-shock CAR



Source: Bank of Mauritius

### Interest rate and exchange rate shocks

Building on the above macroeconomic scenarios, interest rate and exchange rate shocks were further applied to evaluate the robustness of capital buffers of the banking sector. Only two plausible scenarios – baseline and moderate – were considered as the policy rate would likely not be hiked under the severe scenario characterising an economic contraction (Table 6.1).

These scenarios are essentially designed to test the resilience of the banking sector to interest rate and exchange rate shocks. The MPC independently decides on the monetary policy stance and, therefore, the stress test scenarios should not be construed as representing the future stance of the MPC in any manner whatsoever. Likewise, the evolution of the actual exchange rate primarily reflects domestic market conditions and international currency movements. Thus, the assumptions on exchange rate depreciation should not be seen as expected exchange rate movements.

Table 6.1: Interest rate and exchange rate scenarios

Table of the trace and often and oft		
	Baseline Scenario	Moderate Scenario
GDP growth	7.4 per cent	Zero growth
Interest rate hike	75 basis points	75 basis points
Exchange rate depreciation	2 per cent	5 per cent

Source: Bank of Mauritius

The resilience of the banking sector under both scenarios was upheld. The results suggest most banks were able to maintain their CAR above the regulatory limit under the baseline and



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the moderate scenarios. One bank in the baseline scenario and two banks in the moderate scenario saw their CARs breaching the limit of 12.5 per cent slightly, while remaining above the 10 per cent minimum CAR. These banks already breached the CAR limit under the macroeconomic scenarios.

## **Sensitivity analysis**

Several single-factor sensitivity analyses were conducted to evaluate the capacity of the banking sector to withstand idiosyncratic shocks, based on June 2022 data. The buoyancy of banks with respect to sectoral credit risk, credit concentration risk and liquidity risk was assessed based on a top-down approach using micro models. A reverse stress test exercise was also performed as part of the rigorous evaluation of the adequacy of the capital buffers.

#### Sectoral credit risk

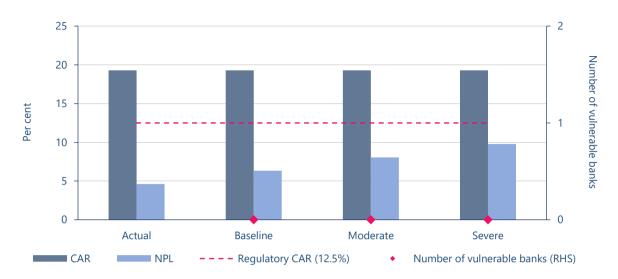
A sensitivity analysis was carried out on the sectoral gross NPLs to investigate the resilience of banks' CAR against sectoral credit shocks. The shocks were directed to five major sectors – 'Agriculture', 'Manufacturing', 'Construction', 'Trade', 'Accommodation and food services', and 'Housing' sectors – which represent the largest credit portfolios of the banking sector.

The sensitivity analysis assumes rising impaired credit, based on three degrees of severity, in the credit portfolios of the selected sectors. The baseline scenario conjectures that 4 per cent of the performing portfolio becomes impaired, followed by 8 per cent and 12 per cent in the moderate and severe scenarios, respectively.

The results confirmed the resilience of all banks under all three scenarios, as their capital buffers are able to absorb these sectoral shocks (Chart 6.2a). The 'Agriculture' sector would have the highest post-shock NPL ratio, given on its already high NPL ratio. The 'Housing' sector recorded the highest increase in its NPL ratio, followed by the 'Manufacturing' and 'Trade' sectors (Chart 6.2b).

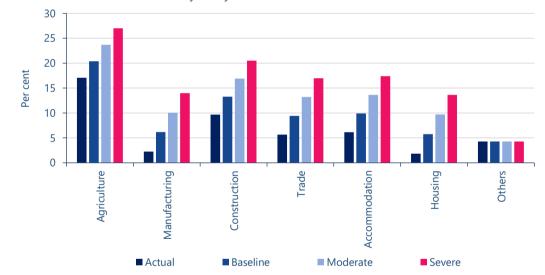
Chart 6.2: Sectoral credit sensitivity analysis

#### a. Sector level results



Source: Bank of Mauritius

#### b. Sector-wise NPL ratio sensitivity analysis



Source: Bank of Mauritius

#### Credit concentration risk

To stress test credit concentration risk, three scenarios were designed with the assumption that the performing credit of top single borrowers becomes impaired. The selected borrowers were non-governmental entities not listed on the stock exchange and were mainly from the 'Agriculture', 'Manufacturing', 'Construction', 'Trade, Transportation and storage', and 'Accommodation and food services' sectors. Using end-June 2022 data, the baseline scenario postulates that the single top-most borrower of each bank defaults while in the moderate and severe scenarios the top five and top ten borrowers of each bank default, respectively.



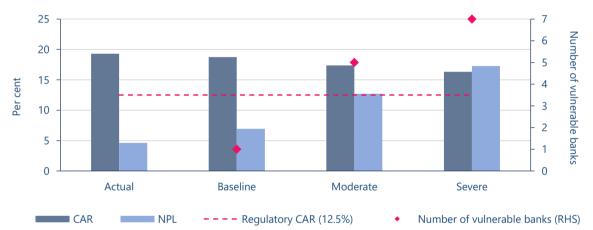
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The results suggested that most banks were able withstand the three credit concentration shocks. Banks' aggregated post-shock CAR would decline from 19.3 per cent (actual) to: (a) 18.7 per cent in the baseline scenario; (b) 17.4 per cent in the moderate scenario; and, (c) 16.3 per cent in the severe scenario (Chart 6.3a).

Some banks were vulnerable to some of the credit concentration scenarios. In the baseline scenario, one bank was unable to meet the regulatory minimum CAR of 12.5 per cent. For the moderate scenario, five banks displayed signs of vulnerability. In the severe scenario, seven banks breached the regulatory threshold of 12.5 per cent. Nonetheless, only one bank registered post-shock CAR below 10 per cent in the moderate and severe scenarios, whilst most banks were in the '>20%' bucket for all three scenarios (Chart 6.3b).

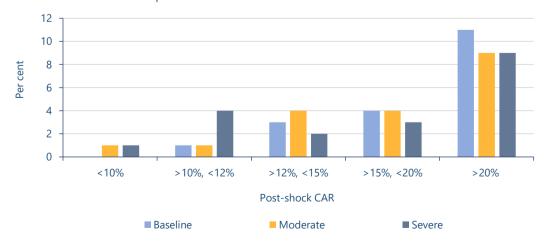
Chart 6.3: Credit concentration risk

#### a. Sector level results



Source: Bank of Mauritius

#### b. Bank-wise distribution of post-shock CAR



Source: Bank of Mauritius



### Liquidity risk

The liquidity stress test measures the ability of banks to sustain liquidity outflows under five shocks relating mainly to the GB sector deposits, which are inherently volatile and pose liquidity risk to the banking sector (Table 6.2). Most banks have a high proportion of GBC deposits on their balance sheet, especially the foreign banks. It is therefore necessary to measure the resilience of banks to a sudden outflow of these deposits.

The five scenarios investigate the ability of banks to sustain growing withdrawals of FX deposits against their Adjusted Foreign Exchange HQLA (Adjusted FX HQLA). The Adjusted FX HQLA is determined by combining: (1) the FX HQLA (as per LCR definition) and (2) FX interbank balances. A bank is considered 'vulnerable' if its Adjusted FX HQLA becomes negative under stressed conditions.

Table 6.2: Liquidity risk – FX deposit withdrawals by GBCs

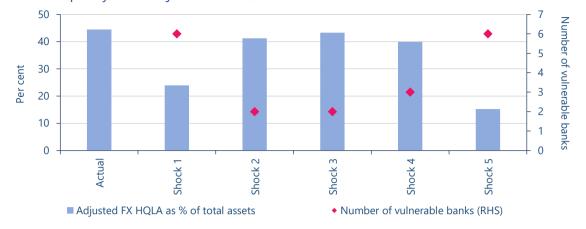
Shocks	Description
1	Assume 35 per cent one-off FX deposit withdrawal
2	Assume largest GBC depositor withdrawal
3	Assume riskiest GBC depositor withdrawal
4	Aggregate of Shocks 2 and 3 (provided largest GBC depositor is not the riskiest one as well)
5	Aggregate of Shocks 1, 2 and 3

Source: Bank of Mauritius

The liquidity stress test demonstrated that most banks have sufficient resources to withstand the shocks, except a few banks under certain shocks. Under Shock 1, six banks would show signs of vulnerability. For Shocks 2 and 3, two banks have a negative post-shock Adjusted FX HQLA. Under Shock 4, three banks would show signs of vulnerability while under Shock 5 six banks had their respective Adjusted FX HQLA in negative territory (Chart 6.4).







Source: Bank of Mauritius

The post-shock Adjusted FX HQLA at the banking sector level showed notable resilience under the five liquidity shocks. The post-shock Adjusted FX HQLA of the banking sector remained in the positive territory, with notable high dispersion above median. Additionally, 2 upper outliers were noted in Shock 1, followed by 1 upper outlier in Shock 4 and 3 upper outliers in Shock 5. No lower outliers were registered in the different shock scenarios. This further supported that the sector in general hold adequate buffers to sustain FX liquidity shocks.

While the number of banks recording negative Adjusted FX HQLA when the liquidity shocks are applied is relatively higher than the results of the last liquidity stress testing exercise, the banks impacted generally represent a smaller share of the banking sector. Of importance, when considered together with the estimated degree of the stickiness of GBC deposits, the liquidity risk is well managed through robust risk management framework. The results confirmed that the D-SIBs and the foreign banks, which account for 98 per cent of GBC deposits, have sufficient funds to sustain plausible sudden outflow of GBC deposits.

#### **Reverse stress test**

The reverse stress test measures the maximum percentage increase in NPL that would cause the CAR of a bank to drop to the regulatory minimum, after it has set aside adequate specific provision. The surge in NPL is assumed to arise from each bank's performing credit portfolio.

The results revealed that banks' capital buffers would be able to absorb shocks to their performing loans portfolio ranging from 1.5 per cent (2.6 per cent as at end-December 2021) to 137.8 per cent (176.4 per cent as at end-December 2021). The lower percentage is partly explained by the higher CAR level of 12.5 per cent as compared to 11.875 per cent, inclusive of the CCB, in December 2021. It should also be noted that 13 out of the 19 banks would have



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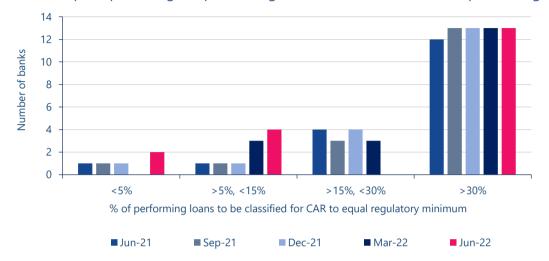
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Stress testing the Mauritian banking sector

to experience more than 30 per cent of their performing loans turning into NPLs for their CAR to drop to the regulatory minimum (Chart 6.5). The 2 banks in the 'less than 5 per cent' bucket hold, in aggregate, less than 3 per cent of the market share.

Chart 6.5: Implied percentage of performing loans to be classified as non-performing



Source: Bank of Mauritius

# **Annex A: Financial Soundness Indicators**

FSIs of other depository corporations  $^{\mathrm{a,\,b,\,c}}$ 

Per cent

Core set of FSI	Dec-20	Jun-21	Dec-21 <sup>c</sup>	Jun-22 <sup>c</sup>
Capital-based				
Regulatory capital to risk-weighted assets	19.7	19.7	20.7	20.3
Regulatory Tier 1 capital to risk-weighted assets	18.3	18.3	19.4	19.1
Non-performing loans net of provisions to capital	10.2	8.2	8.9	8.8
Common Equity Tier 1 capital to risk-weighted assets <sup>1</sup>	•••	•••	19.0	18.7
Tier 1 capital to assets <sup>1</sup>			9.1	9.1
Asset quality			_	T
Non-performing loans to total loans <sup>2</sup>	6.2	5.6	5.8	5.6
Loan concentration by economic activity <sup>1</sup>	•••	•••	49.6	44.8
Provisions to nonperforming loans <sup>1</sup>	•••	•••	61.3	60.0
Sectoral distribution of loans to total loans <sup>3</sup>				
Interbank loans	4.3	5.0	•••	
Other financial corporations	9.6	9.8	•••	
Non-financial corporations	27.8	26.4	•••	
Other domestic sectors	22.0	21.7		
Non-residents	36.3	37.0	•••	
Earnings and profitability				
Return on assets	1.0	1.3	1.3	1.3
Return on equity <sup>4</sup>	8.9	12.7	10.5	11.2
Interest margin to gross income <sup>4</sup>	69.0	69.3	65.9	68.6
Non-interest expenses to gross income <sup>4</sup>	44.1	43.2	44.6	45.1
Liquidity				
Liquid assets to total assets <sup>4</sup>	26.0	27.3	48.6	47.8
Liquid assets to short-term liabilities <sup>4</sup>	29.3	30.5	54.3	53.6
Liquidity Coverage Ratio <sup>1</sup>	•••	•••	237.2	235.8
Sensitivity to market risk				
Net open position in FX to capital	1.6	2.2	1.5	1.8



#### Per cent

Encouraged set of FSI	Dec-20	Jun-21	Dec-21 <sup>1</sup>	Jun-22 <sup>1</sup>
Capital to assets <sup>3</sup>	10.8	10.3	•••	
Credit growth to private sector <sup>1</sup>			2.2	4.4
Value of large exposures <sup>5</sup> to capital	242.3	253.1	284.0	308.2
Customer deposits to total (non-interbank) loans	197.4	219.2	234.3	228.1
Residential real estate loans to total loans <sup>2</sup>	11.5	11.3	11.6	12.5
Commercial real estate loans to total loans <sup>2</sup>	5.4	5.5	5.4	4.9
Trading income to total income <sup>4</sup>	11.0	7.6	12.4	10.0
Personnel expenses to non-interest expenses <sup>4</sup>	51.1	47.6	47.6	49.1

<sup>&</sup>lt;sup>a</sup> FSIs prior to December 2021 were calculated on a domestic consolidation basis using the Financial Soundness Indicators Compilation Guide (2006) of the IMF.

... not available. Also, refer to footnote 5.



<sup>&</sup>lt;sup>b</sup> Other Depository Corporations refer to banks and NBDTIs that are all licensed by the Bank.

<sup>&</sup>lt;sup>c</sup> Effective December 2021, FSIs are computed based on the Financial Soundness Indicators Compilation Guide (2019) of the IMF. Some FSIs may, therefore, not be strictly comparable with those prior to December 2021

<sup>&</sup>lt;sup>1</sup>New indicators introduced following the adoption of the Financial Soundness Indicators Compilation Guide (2019) of the IMF as from December 2021.

<sup>&</sup>lt;sup>2</sup>Total loans include commercial loans, instalment loans, hire-purchase credit, loans to finance trade credit and advances, finance leases, repurchase agreements not classified as a deposit, and overdrafts.

<sup>&</sup>lt;sup>3</sup>Indicators discontinued following adoption of the new Financial Soundness Indicators Compilation Guide (2019) of the IMF as from December 2021.

<sup>&</sup>lt;sup>4</sup>Indicators amended following adoption of the new Financial Soundness Indicators Compilation Guide (2019) of the IMF as from December 2021. Hence, data may not be strictly comparable to quarters prior to December 2021.

<sup>&</sup>lt;sup>5</sup>As from December 2017, the measurement of credit concentration ratio has been revised to aggregate large credit exposure (above 10 per cent of Tier 1 capital) as a percentage of aggregate Tier 1 capital. Hence, data are not strictly comparable with those prior to December 2017.

# **List of charts**

## Macrofinancial environment

Chart 1.1	MSCI indices
Criart 1.1	MSCI maices
Chart 1.2	Selected government bond yields
Chart 1.3	US dollar index
Chart 1.4	Tourist arrivals and tourism earnings
Chart 1.5	Domestic stock market performance
Chart 1.6	Investment by non-residents on the SEM and DEM
Chart 1.7	FX turnover:
	a. Aggregate
	b. Sector-wise
Chart 1.8	Evolution of Rs/US\$ selling dealt rate and EUR/US\$
Chart 1.9	Evolution of market interest rates
Chart 1.10	Reserves adequacy metrics
Chart 1.11	Systemic Risk Indicator

## Financial soundness of households and corporates

Chart 2.1	Annual growth of private sector credit
Chart 2.2	Growth of credit to households
Chart 2.3	Share of housing loans in total bank credit
Chart 2.4	Housing loan growth
Chart 2.5	NPL ratio for households
Chart 2.6	Indicators of household indebtedness:
	a. Share of household credit- Rs and FX
	b. Household credit as a percentage of GDP
Chart 2.7	Household credit-to-GDP gap
Chart 2.8	Debt servicing cost to income
Chart 2.9	Household debt servicing cost and interest rates
Chart 2.10	Growth of credit to the corporate sector
Chart 2.11	Sector-wise NPL ratio for selected key sectors
Chart 2.12	Share of CRE loans to total bank credit to the corporate sector
Chart 2.13	Corporate credit-to-GDP gap
Chart 2.14	Share of corporate credit to operating surplus

# Financial soundness of deposit-taking institutions

Chart 3.1	Banking sector assets
Chart 3.2	Distribution of banking sector assets and liabilities
Chart 3.3	Capital adequacy ratio
Chart 3.4	Non-performing loans and specific provisions
Chart 3.5	Profitability ratios



Chart 3.6	Evolution of cross-country exposure:
	a. Sources: by regional grouping
	b. Uses: by regional grouping
	c. Sources: Top 5 countries
	d. Uses: Top 5 countries
Chart 3.7	Banking stability indicator:
	a. Banking Stability Map
	b. Banking Stability Index
Chart 3.8	Quarterly growth in assets and deposits
Chart 3.9	Profitability of NBDTIs
Chart 3.10	Financial soundness indicators:
	a. Solvency
	b. Asset quality
	c. Profitability
	d. Liquidity
	e. Sensitivity to market risk
	f. Encouraged FSIs
Non-bank financia	I services sector
Chart 4.1	Long term insurance asset's value
Chart 4.2	Distribution of assets by class
Chart 4.3	Financial asset by industry
Chart 4.4	Gross premiums
Chart 4.5	General insurance assets value
Chart 4.6	General insurance – number of policies in force:
	a. Motor segment
	b. Non-motor segment
Chart 4.7	Total quarterly gross premium
Chart 4.8	Distribution of assets by sector
Chart 4.9	Pension scheme asset value
Chart 4.10	Distribution of assets by class

Global business sector		
Chart 5.1	Evolution of live GBCs	
Chart 5.2	Evolution of applications, newly licensed and non-live GBCs	
Chart 5.3	Average monthly GB licenses issued	
Chart 5.4	Live GBCs targeting India vs Africa	
Chart 5.5	Gross flows of foreign direct investment	
Chart 5.6	Gross flows of portfolio investment	



Chart 5.7	Analysis of average quarterly outward investment flows (USD million) for periods before, during and post inclusion of Mauritius in FATF, UK and EU lists
Chart 5.8	Exposure of GBCs by institutional sectors as at end-June 2022
Chart 5.9	Evolution of GBC deposits
Chart 5.10	Deployment of GBC deposits
Chart 5.11	Evolution of GBC loans
Chart 5.12	Evolution of GBC NPLs
Stress testing the	Mauritian banking sector
Chart 6.1	Macroeconomic shock results
	a. Sector level results
	b. Bank-wise distribution of post-shock CAR
Chart 6.2	Sectoral credit sensitivity analysis
	a. Sector level results
	b. Sector-wise NPL ratio sensitivity analysis
Chart 6.3	Credit concentration risk
	a. Sector level results
	b. Bank-wise distribution of post-shock CAR
Chart 6.4	Liquidity risk – adjusted FX HQLA
Chart 6.5	Implied percentage of performing loans to be classified as non-performing



# List of tables and boxes

#### **Tables**

Non-bank financial services sector

Table 4.1 Regulatory developments

Global business sector

Table 5.1 Risk map – per cent of total GBC deposits

Stress testing the Mauritian banking sector

Table 6.1 Interest rate and exchange rate scenarios

Table 6.2 Liquidity risk – FX deposit withdrawals by GBCs

#### **Boxes**

#### Financial soundness of households and corporates

Box 1 Update on COVID-19 support measures

Box 2 The Mauritius Investment Corporation Ltd and financial stability

#### Financial soundness of households and corporates

Box 3 Insights into liquidity risk and mitigants in the banking system

Box 4 Survey on Economic Perspectives and Financial Stability Implications



# List of acronyms

ARA Assessing Reserve Adequacy

Bank Bank of Mauritius
CAR Capital Adequacy Ratio
CCB Capital Conservation Buffer

CET1 Common Equity Tier 1

DBM Development Bank of Mauritius

D-SIBs Domestic Systemically Important Banks

DSTI Debt-service-to-income

DTAA(s) Double Taxation Avoidance Agreement(s)

EU European Union

FATF Financial Action Task Force

FCY Foreign Currency

FDI Foreign Direct Investment
FMI Financial Market Infrastructure
FPI Foreign Portfolio Investment
FSC Financial Services Commission
FSIs Financial Soundness Indicators

FX Foreign Exchange GB Global Business

GBCs Global business corporations
GDP Gross Domestic Product

GOIR Gross Official International Reserves

HHI Herfindahl-Hirschman Index
HQLA High-Quality Liquid Assets
IFC(s) International Financial Centre(s)
IMF International Monetary Fund
JCC Joint coordination Committee

KRR Key Repo Rate

LCR Liquidity Coverage Ratio

LTD Loan-to-deposit

MCs Management companies

MIC Mauritius Investment Corporation Limited
MIFC Mauritius International Financial Centre

MPC Monetary Policy Committee
MPIs Macroprudential Indicators

MSCI Morgan Stanley Capital International NBDTIs Non-Bank Deposit-Taking institutions

NPLs Non-performing Loan(s)

ROA Return on Assets
ROE Return on Equity
Rs Mauritian Rupee
RWAs Risk Weighted Assets

SMEs Small and Medium Enterprises

SPEs Special Purpose Entities SRI Systemic Risk Indicator



STC State Trading Corporation

UK United Kingdom
US United States
US\$ US dollar

WEO World Economic Outlook



# **Glossary**

**Annual change or growth** compares the value of a variable at one period in time with the same period of the previous year.

**Credit to private sector** has been aligned with the IMF FSI Compilation Guide (2019). Credit comprises loans and debt securities issued by private nonfinancial corporations and private sector encompasses private non-financial corporation, households and non-profit institutions serving households.

**Credit extended to households for other purposes** include purchase of other consumer durable goods, purchase of land, purchase of motor vehicles, education purposes, medical purposes, investment purposes, and other unspecified purposes.

**Credit-to-GDP gap** is the percentage deviation between the credit-to-GDP ratio and an estimate of its trend. The trend in the credit-to-GDP ratio is estimated by using the HP filter.

**Corporate sector** comprises only Other Nonfinancial Corporations in Mauritius.

**Household indebtedness** considers a broader measure that adds up household credit from banks, NBDTIs, insurance and leasing companies.

**Non-performing loans ratio** is measured by the share of non-performing loans to gross loans.

**Percentage point** is the arithmetic difference of two percentages.

**Return on Assets** is the annualised pre-tax return on assets and is measured by the ratio of pre-tax profit to average assets.

**Return on Equity** is the annualised pre-tax return on equity and is measured by the ratio of pre-tax profit to average equity.

**SEMDEX** is an index of prices of all listed shares on the Stock Exchange of Mauritius wherein each stock is weighted according to its share in the total market capitalisation.

**Tier 1 capital** is a term used to qualify eligible capital of a bank and is constituted of the components having the highest loss absorbing capacity.