# FINANCIAL STABILITY REPORT 2022

FINANCIAL STABILITY DEPARTMENT

The Financial Stability Report 2022 (JFSR 2022) is part of the Central Bank of Jordan's (CBJ) continuous endeavors to strengthen the stability of the financial and banking sector in the Kingdom, as well as to provide sufficient data on different aspects of Jordan's economy and financial sector. Under the CBJ's amended Law of 2016, the CBJ's objectives were broadened to explicitly include preserving financial stability as a main objective alongside achieving monetary stability. Financial stability is intended to enhance the capacity of banks and other financial institutions to withstand risks and to limit any structural imbalances.

The global economy remained resilient amid the ramifications of COVID-19 crisis as well as the Russian-Ukrainian crisis, thanks to the precautionary and exceptional measures taken by most countries worldwide in terms of their fiscal and monetary policies, which helped to mitigate the risks of these crises on the global economy and financial stability. However, after more than three years and a half since the onset of the COVID-19 pandemic, the uncertainty weighs again on the world economic outlook, amid the turmoil in the financial sector, especially the crisis related to some banks in the US, high inflation, as well as the consequences of the Russian-Ukrainian crisis and the war on the Gaza Strip.

As for Jordan's economy, the growth strengthened to 2.5% in 2022, compared to a growth of 2.2% in 2021, supported by the stability of the epidemiological situation in Jordan, as well as the precautionary and overarching measures conducted by the government and the CBJ to support various economic sectors in the Kingdom. As for Jordan's economy outlook, the growth is expected to reach 2.6% and 2.7% in 2023 and 2024, respectively.

Despite the headwinds in Jordan and countries worldwide shaped by the COVID-19 pandemic, and subsequent global geopolitical tensions, in particular the Russian-Ukrainian crisis and the resulting global, regional, and domestic increase in interest rates, Jordan showed high resilience and soundness in front of external shocks, as Jordan's prudent monetary and fiscal policies have maintained monetary, financial, and economic stability, and supported Jordan's access to international markets; these measures reflected positively on the adequacy of foreign currency reserves, the soundness of the banking system, and curbing inflation despite pressures of the global prices.

The Financial Sector Assessment Program (FSAP) conducted by the IMF and the World Bank in 2022 and the first quarter of 2023, concluded that the banking sector in Jordan is sound and robust, and is highly resilient to shocks and high risks, as banks enjoy high levels of capital and comfortable levels of liquidity and profitability, besides the CBJ's sound banking supervision, which is based on international standards thereof. Furthermore, the CBJ will keep improving this Report taking into consideration the developments of risks at the domestic, regional, and international levels, to enhance the pillars of the financial stability in the Kingdom. This report is published on the CBJ's website www.cbj.gov.jo.

The Governor Dr. Adel Al-Sharkas

#### **EXECUTIVE SUMMARY**

#### GLOBAL FINANCIAL STABILITY:

The global economy appeared resilient amid the blows of COVID-19 pandemic and the Russian-Ukrainian crisis, thanks to the proactive and exceptional measures taken by most countries worldwide in terms of the fiscal and monetary policies. This contributed to warding off the risks of the pandemic on global economic activity and the financial stability, as China is rebounding strongly following the reopening. In addition, the supply chain disruptions are unwinding, while the dislocations to energy and food markets caused by the Russian-Ukrainian war are receding as well.

However, after three years and a half since the outbreak of COVID-19 pandemic, the outlook is uncertain again amid financial sector turbulence especially the crisis of some US banks, as well as soaring inflation rates, and ongoing ramifications of the Russian-Ukrainian crisis, and the war on the Gaza Strip.

The global economy remained resilient amid the blows of COVID-19 pandemic and the Russian-Ukrainian crisis, thanks to the proactive and exceptional measures taken by most countries worldwide, in terms of the fiscal and monetary policies

The increasing geopolitical tensions set back the global recovery from the ramifications of COVID-19 pandemic

The global growth improved modestly at 3.4% in 2022, compared to a growth of 6.1% in 2021, however, the IMF's forecasts indicate that the global growth will slow down at 2.8% in 2023, and 3.0% in 2024.

#### **JORDAN ECONOMY:**

The growth improved at 2.5% in 2022, compared to a growth of 2.2% in 2021, supported by the stability of the epidemiological situation in Jordan, as well as the precautionary and overarching measures conducted by the government and the CBJ to support various economic sectors in the Kingdom. The growth is expected to reach 2.6% and 2.7% in 2023 and 2024, respectively.

The financial stability in Jordan remained steady, supported by sound economic policies, in particular the monetary and macro- and micro-prudential policies, which continued to support the attractiveness of the Jordanian dinar and to maintain a sound and robust financial sector amid significant headwinds.

The gradual recovery of Jordan's economy is on the right track

Despite adversities, the financial stability in Jordan remained steady supported by sound economic policies

#### THE BANKING SECTOR IN JORDAN:

Despite the unprecedented headwinds that hit Jordan, the region, and the world due to the COVID-19 pandemic as well as the ramifications of the Russian-Ukrainian crises, the banking sector in Jordan remained sound and resilient in terms of financial and administrative positions. The financial ratios and indicators for banks improved markedly in 2022 and

A remarkable improvement in most banks' financial ratios and indicators

the first half of 2023, compared to their levels in 2021, as indicated below:

#### • CAPITAL ADEQUACY:

The banking system in Jordan enjoys a high capital adequacy ratio (CAR) that ranged between 17% and 21% during the period (2007- June 2023), with a comfortable margin well above the CBJ's minimum requirement of 12%, and Basel Committee's minimum requirement of 10.5%. However, the CAR reached to 17.3% at the end of 2022, and increased slightly to 17.4% at the end of June 2023; sufficiently higher than the minimum requirement of 12%.

The CAR of the banking sector in Jordan recorded 17.3% at the end of 2022, and increased to 17.4% at the end of June 2023; sufficiently higher than the minimum requirement

#### • QUALITY OF ASSETS:

The non-performing loans (NPLs) to total loans of banks declined from 5.5% at the end of 2020, to 5% at the end of 2021, and declined further to 4.5% at the end of 2022, yet it increased slightly to 5.0% at the end of June 2023. However, this validates that banks' assets are of high quality. As for

The NPLs of banks declined, while the provisions coverage ratio increased

the provisions coverage ratio of NPLs, it increased to 81.5% at the end of 2022, compared to 79.9% at the end of 2021; this is a positive indicator which denotes that the provisions are sufficient to cover almost 81.5% of banks' NPLs.

#### • LIQUIDITY:

The liquidity level of the Jordanian banking sector is comfortable and adequate as evident by the liquidity ratios recorded at the end of 2022. Legal liquidity reached 138% at the end of 2022, and 135.4% at the end of June 2023; sufficiently higher than the minimum requirement of 100%.

The liquidity levels of the Jordanian banking sector are safe and higher than the minimum requirements stipulated in the regulations

#### • PROFITABILITY:

In 2022 and the first half of 2023, banks' profits improved, as net profits after tax of banks operating in Jordan reached JD 599 million in 2022, compared to JD 550 million in 2021, increasing by JD 49 million, or 8.9%, while net profits increased to JD 355 million at the end of June 2023, compared to JD 278 million at the end of June 2022. In

Banks' profits improved significantly in 2022, and in the first half of 2023 bouncing back to their pre-pandemic levels addition, in 2022, the Return on Assets (ROA) maintained the same level recorded in 2021 of 1.0%, yet it increased to 1.2% at the end of June 2023. The Return on Equity (ROE) reached to 8.8% at the end of 2022, compared to 8.3% at the end of 2021, and increased to 10.2% at the end of June 2023.

#### CONCENTRATION IN THE BANKING SECTOR:

The assets of the largest five banks out of 21 banks accounted for 57.9% of licensed banks' total assets at the end of 2022, compared to 59.6% at the end of 2006. This indicates the decline in the concentration levels in the banking sector, and the improvement in competition among banks.

The concentration in the banking sector in Jordan declined, while the competition improved

#### • CREDIT GROWTH:

Direct credit facilities grew by 8.6% at the end of 2022 to reach JD 32.2 billion, compared to a growth of 5% in 2021. It is noteworthy, that total credit facilities accounted for 94.7% of GDP at the end of 2022, compared to 91.2% in 2021. Jordan ranked second after Qatar in terms of credit

Credit continued to grow reflecting the gradual recovery of the national economy

to GDP ratio as compared to a number of countries in the region, which reflects the vital role of banks in the economic development in Jordan.

#### • STRESS TESTING:

Stress testing results, which are used to measure banks' ability to withstand shocks, revealed that the Jordanian banking system is capable to withstand shocks and high risks. A hypothetical scenario is suggested, assuming the adversities following the COVID-19 pandemic to linger as well as the ramifications of the Russian-Ukrainian crisis and War on Gaza, and the challenges they impose on the national economy. This is including increasing prices of energy and primary commodities due to the

Stress Testing Results revealed that the Jordanian banking sector is capable to withstand shocks and high risks as banks enjoy high levels of capital and sufficient levels of liquidity and profitability

supply chain disruptions, which will set back the growth to less than anticipated, and increase inflation rates. It was also assumed that interest rates will continue to increase to curb inflationary pressures and maintain the attractiveness of the JD as a saving currency. The results of these tests revealed that the CAR of the banking sector in Jordan is expected to reach 16.3%, 15.6% and 15.1% in 2023, 2024, and 2025, respectively. Accordingly, under the severe scenario, the CAR will remain higher than the minimum requirement of 12% applied in Jordan, and the Basel Committee minimum requirement of 10.5%.

#### THE FINANCIAL STABILITY INDEX IN JORDAN (JFSI):

The JFSI was developed in 2016, supported by countries best practices. The index increased from 0.44 in 2020 to 0.47 in 2021, and to 50% at the end of 2022, which indicates that the financial system in Jordan is adequately stable and constantly improving despite the

The JFSI indicates that the banking sector in Jordan is highly stable, despite the unprecedented adversities in Jordan and the world due to the COVID-19 pandemic and the Russian-Ukrainian crisis

unprecedented adversities that hit Jordan and the world due to the COVID-19 pandemic, as well as subsequent crises afterwards. The banking stability index in particular indicates that the banking sector in Jordan is highly sound, resilient, and stable; Jordan ranked first compared to 23 countries using the same methodology of the JFSI.

#### THE HOUSEHOLD SECTOR:

The household indebtedness increased to reach JD 13 billion at the end of 2022, compared to JD 11.8 billion at the end of 2021, increasing by 10%, compared to 8.6% in 2021. It is worth mentioning that a large part of the increase in households' indebtedness in 2021 and 2022 is explained by the postponements of debt

The NPLs of the households' loans portfolio continued to decline

installments due on stressed clients affected by the COVID-19 pandemic, or postponements during the occasions of Eid, thus it is not a real growth.

The NPLs of the households' loans portfolio declined from 4.9% at the end of 2020 to 4.1% as of end 2021, and declined further to 3.8% at the end of 2022, which is a positive indicator that strengthens the financial stability in the kingdom.

#### THE CORPORATE SECTOR:

The performance of non-financial corporates improved significantly in 2021 and 2022, as these companies continued to recover from the ramifications of COVID-19 pandemic, as well as the notable improvement in several economic indicators in the Kingdom.

The profits of non-financial corporates sector increased markedly to JD 1.6 billion in 2022, compared to JD 712.9 million in 2021, propelled primarily by the recovery of the national economy, as the implications of COVID-19 pandemic receded gradually. However, several challenges still weigh on the corporate sector and the national economy in general, especially those

The corporate sector performance improved significantly in 2021 and to 2020, as 2022 compared repercussions COVID-19 of the pandemic receded gradually, and most economic indicators in the kingdom improved. However, several challenges are looming large corporates especially those related to supply chain disruptions, the repercussions of the Russian-Ukrainian Crisis, and the war on Gaza.

related to the increase in energy and primary commodities prices due to the supply chain disruptions after the COVID-19 pandemic, and the implications of the Russian-Ukrainian crisis as well as the war on Gaza.

#### THE REAL ESTATE SECTOR:

In 2022, the real estate trading volume increased by 17% to reach JD 5,850 million, compared to JD 5,021 million in 2021, due to improved economic conditions, and the continuous recovery from the ramifications of COVID-19 pandemic, which had a toll on most sectors including the real estate sector.

The credit facilities extended to the real estate sector totaled JD 6.2 billion, accounting for 19.3% of total credit extended by banks

It is worth mentioning that credit facilities extended to the real estate sector for residential and commercial purposes reached to JD 6.22 billion at the end of 2022 (accounting for 19.3% of total credit facilities extended by banks), compared to JD 5.91 billion at the end of 2021, a growth of 5.2%.

#### THE FINANCIAL INCLUSION:

The CBJ assumed the leading role in promoting financial inclusion in the Kingdom, which is represented by launching the National Financial Inclusion Strategy (2018-2020) (NFIS). The CBJ collaborated with all relevant stakeholders from the public and private sectors to formulate and implement

The NFIS (2018-2020) achievements outperformed targeted levels in the strategy

the strategy, which is particularly important to promote a common understanding as well as coordinating and unifying the initiatives and efforts in the Kingdom, and bring them under one umbrella. This ensures that envisioned goals are achieved, and resources are allocated optimally to prioritized sectors and targeted groups, to enhance the financial inclusion in the kingdom. However, as the NFIS (2018-2020) comes to end, the CBJ in 2022 conducted a supply and demand survey of the financial inclusion to gauge and analyze the financial inclusion for households and the MSMEs sector in the Kingdom quantitatively and qualitatively, and to assess the impact of the NFIS (2018-2020) as well. The results of the survey will be a cornerstone to the new NFIS (2023-2027).

The results of the financial inclusion survey revealed that the NFIS (2018-2020) successfully achieved its main goals and outperformed the targets, as the financial inclusion in the Kingdom increased from 33.1% to 43.1%, and the gender gap in the financial sector was brought down from 53% to 22%, in addition to achieving a number of qualitative and quantitative sub-goals. The survey used several major indicators and sub-indicators to assess the status of financial inclusion for households and businesses in the Kingdom in terms of three aspects: access, use, and quality of main financial services, which will constitute the basic pillars of the new NFIS (2023-2027), namely; finance, saving, insurance, and payment and transfers.

The results of the abovementioned survey will inform the formulation of the new NFIS (2023-2027) national goals and the operational objectives of its main pillars. They also provide indicators about targeted groups in the NFIS (2023-2027), namely; women, youth, the bottom (40%) of adults in terms of income, and refugees, to ensure precise quantitative and qualitative goals that consider targeted groups' actual needs, and improve the financial inclusion for them in a manner that contributes to enhancing economic and social growth in the Kingdom.

Furthermore, to continue with promoting financial inclusion in the Kingdom, the CBJ initiated a new NFIS (2023-2027) to serve as a roadmap for enhancing financial inclusion in the Kingdom, which ensures the leverage of all possible means to achieve economic growth and sustainable development. Furthermore, an NFIS (2023-2027) vision document titled "Responsible and sustainable access to and use of financial services and products by various segments of society in a way that contributes to achieving economic and social development in the Kingdom" was drafted.

The CBJ finalizing the is formulation of a new **NFIS** will (2023-2027),which emphasize the responsible and sustainable access to and use of financial services and products by different segments of society in the Kingdom.

#### LEGISLATIVE FRAMEWORK:

In 2021 and 2022, the CBJ continued its comprehensive review of the legislative framework governing the banking and financial institutions under its supervision. Chapter Two of this Report illustrates main supervisory amendments conducted by the CBJ in 2021 and 2022, namely: Insurance Regulatory Law No. (12) of 2021, and the Anti Money Laundering and Counter

The CBJ officially brought the insurance sector under its supervision and oversight

Terrorist Financing Law No. (20) of 2021, in addition to a number of significant banking bylaws and regulations, which were issued to keep abreast with the latest developments and international best practices regarding the role of central banks in maintaining monetary and financial stability.

As for the new issuance of banknotes, the CBJ has put all denominations into circulation; they were issued according to the (Issuing Jordanian Banknotes Bylaw) No. (55) of 2022, which was issued pursuant to paragraph (a) of article (28) of the Central bank of Jordan Law No. (23) of 1971. The bylaw stipulates that the "dinar" is the Jordanian legal tender, and is issued in denominations of one dinar, five dinars, ten dinars, twenty dinars, and fifty dinars. This bylaw was issued as one of the legal requirements to issue new banknotes, which is

The new issuance of banknotes intends to keep pace with latest developments in this field, and to leverage technology in adding new security features that make notes more difficult to counterfeit

intended to keep pace with the latest developments in this field, and to leverage technology in adding new security features that make notes more difficult to counterfeit. The bylaw also includes the portraits that appear on various notes, as the portraits of their Majesties in Arabian folk costumes shall appear on the front of the notes. This is in addition to certain specifications such as the phrase (The Hashemite Kingdom of Jordan), which is written in Arabic on the front of the note and in English on its back, as well as other details including the serial number and others.

On another front, the Financial Action Task Force (FATF) announced the removal of Jordan from the list of countries under increased monitoring in combating money laundering and terrorist financing, what is known as the "Gray List", at its plenary meeting held during the period from 23-27 October, 2023 in the French capital, Paris, in the presence of the CBJ Governor, Dr. Adel Al-Sharkas, the Chairman of the National Committee for combating money laundering and terrorist financing, and the presence of the head of the Anti-Money Laundering and Counter-Terrorist Financing Unit. During this meeting, Al-Sharkas delivered a speech in which he stressed that this announcement comes as recognition of the Kingdom's success in strengthening the national system to combat money laundering, terrorist financing, and the proliferation of weapons of mass destruction, and aligning it with international standards, and completing the implementation of all items of the action plan adopted by the FATF in October 2021.

Member states welcomed and commended the efforts of the Kingdom to exit the gray list, and the implementation of all action plan's items by relevant authorities, which came to raise the level of compliance with international standards and the remarkable achievement and progress, achieved before the end of the deadlines set timeline for the plan. The Group also commended the high-level political commitment made by the Kingdom at all levels.

#### **DIGITAL BANKS:**

To keep abreast with global evolving developments in digital technology, communications, and innovation, and to cope with changes in customer behavior and needs, the banking sector has embraced digital banking. The concept of digital banking began to gain momentum in the early 2000s, yet digital banks did not materialize until 2010s. Digital banks provide their complete banking services without the need for physical branches, which contributes directly to enhancing and promoting financial inclusion, through opening bank accounts or e-wallets for individuals and SMEs, as well as accessing financial and banking services through mobile devices easily. This contributes to reducing costs, effort, and time, improving the operational efficiency and quality of financial and banking institutions, facilitating the procedures of customers service, and providing creative and innovative products.

Digital banks are essential to pave the way towards the digital economy, through using secure banking applications on mobile phones and tablets, which allows for removing traditional impediments to carry out banking transactions. They also contribute indirectly to the transition towards a cashless society, especially with existing digital payment solutions, such as (CliQ), which allows for instant transfers between individuals via mobile phones, or cashless payments in stores through the (QR Code) technology. In addition, digital banks have beneficial impact on updating and reviewing multiple legislations in light of rapid developments to reach the digital

Digital banks are defined operate "banks that without physical branches, with the exception of some requirements related to management: thev virtually establish banking relationships, provide services and products, and carry out banking transactions with their customers, through Internet platforms. mobile applications, and other electronic channels using cuttingedge technology solutions"

Despite the features and advantages of digital banks, they are exposed to risks that may affect their operations, including cybersecurity risks, operational risks, and other risks, which requires the effective management of these risks

economy. Digital banks also contribute to enhancing and accelerating innovation in financial services, which facilitates connection with other digital sectors, FinTech, and public services in a way that serves the needs of customers. It is noteworthy that one of the most prominent features of digital banks is digital identity, which is an essential component for secure verification of consumers' transactions that enhances confidence among customers. Despite the features and advantages of digital banks mentioned previously, these banks are exposed to risks that may affect their operations, including cybersecurity risks, operational risks, and other risks; chapter seven of this report elaborates on these risks.

The foundation of digital banks requires an integrated environment that encompasses: an advanced technological infrastructure as well as the use of cutting-edge technologies, including data protection, identity verification, and interconnection with a number of governmental and non-governmental institutions. This is in addition to put in place the legislative and regulatory foundations and controls in terms of electronic signatures, digital identity, and other matters that regulate the business of these banks and their services. On 29/7/2021, the CBJ in coordination with Association of Banks in

The CBJ issued a document titled "Regulating Digital Banks in the Hashemite Kingdom of Jordan," to lay the ground for licensing digital banks in the Kingdom, which is still in progress

Jordan issued a document titled "Regulating Digital Banks in the Hashemite Kingdom of Jordan," directed to all banks operating in the Kingdom, which came in light of rapid development in innovation in the Jordanian banking sector, and the change in financial consumer behavior, alongside the developments in cutting-edge technologies and related innovations, and the entry of new service providers competing in providing comprehensive new financial products convenient to customers and their needs, by offering

appealing and affordable offers and solutions. This complements the consulting approach of the CBJ with the institutions under its supervision. The document intends to support sustainable development and innovation in the Jordanian banking sector, which contributes to the shift towards a comprehensive and advanced digital economy. The document also aims to clarify the CBJ's disposition regarding regulating comprehensive digital banks in the Kingdom, and to lay the ground for licensing digital banks, which is still in progress.

Chapter Seven illustrates the types of digital banks and their development globally, the pros and risks of these banks, countries practices in regulating or establishing digital banks, and the role of the CBJ in regulating these banks.

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## CHAPTER ONE: GLOBAL AND DOMESTIC ECONOMIC AND FINANCIAL DEVELOPMENTS AND PROSPECTS

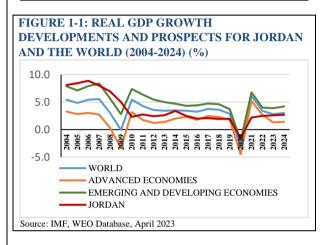
## GLOBAL ECONOMIC DEVELOPMENTS AND GROWTH

The global economy appeared resilient amid the blows of COVID-19 pandemic and the Russian-Ukrainian crisis, thanks to the proactive and exceptional measures taken by most countries worldwide in terms of the fiscal and monetary policies. This contributed to warding off the risks of the pandemic on global economic activity and the financial stability, as China is rebounding strongly following the reopening. In addition, the supply chain disruptions are unwinding, while the dislocations to energy and food markets caused by the Russian-Ukrainian war are receding as well.

However, after three years and a half since the outbreak of COVID-19 pandemic, the outlook is uncertain again amid financial sector turbulence especially the crisis of some US banks, as well as soaring inflation rates and ongoing ramifications of the Russian-Ukrainian crisis. The IMF's World Economic Outlook (WEO) report of April 2023, indicated that the global economy appears poised for recovery from the adversities of the pandemic and the Russian-Ukrainian crisis, as supply chain disruptions are receding, and food and energy prices have come down, due to the massive tightening of monetary policy by most central banks, which raised interest rates to bring down inflation and getting it back to targeted levels.

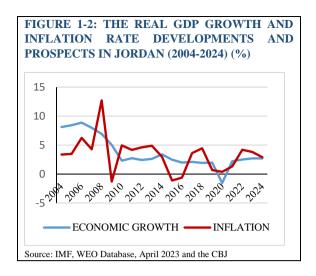
The global growth improved modestly at 3.4% in 2022, compared to a growth of 6.1% in 2021. However, the IMF's forecasts of April 2023 revised down the global growth to 2.8% in 2023 and 3.0% in 2024, down by 0.1% compared to January's forecasts for 2023 and 2024. This slowdown largely reflects the direct effects of the Russian-Ukrainian Crisis, the global spikes in prices of primary commodities, interest rate hikes by large central banks to beat inflation, and the recent mounting dislocations to global financial markets. (Table 1-1 and Figure 1-1).

TABLE 1-1: WORLD ECONOMIC OUTLOOK AT					
A GLANC	E 2023				
	Year	The	Advanced	Emerging	
		World	Economies	Economies	
Actual	2021	6.1	5.2	6.8	
Data	2022	3.4	2.7	4.0	
Latest	2023	2.8	1.3	3.9	
Estimates April 2023	2024	3.0	1.4	4.2	
Estimates	2023	2.9	1.2	4.0	
of January 2023	2024	3.1	1.4	4.2	
Source: IMF, V	VEO Datab	ase, January	2023 and April 20	23.	



As for Jordan's economy; growth strengthened to 2.5% in 2022, compared to 2.2% in 2021, supported by the stability of the epidemiological situation in Jordan, as well as the precautionary and overarching measures conducted by the government and the CBJ to support economic sectors in the Kingdom. However, the growth is expected at 2.6% and 2.7% in 2023 and 2024, respectively. (Figure 1-2).

Furthermore, the domestic financial stability remained steady, propelled by prudent economic policies, in particular the monetary and the macro- and micro-prudential policies, which continued to support the Jordanian dinar and maintain its attractiveness, and to maintain a robust and sound financial sector despite tremendous existing headwinds.



## 1.1.1 PUBLIC FINANCES DEVELOPMENTS

The Public finances have fluctuated with multiple shocks since the outbreak of the pandemic, characterized by atypical low growth rates and inflation dynamics. The recent financial turmoil aggravated an already uncertain and complex outlook, with tight financing conditions and increasing concerns for public debt vulnerabilities. The IMF's Fiscal Monitor Report of April 2023 indicated that three years since the outbreak of the pandemic, fiscal policy is returning to normal. However, after providing extraordinary support simultaneously in 2020, fiscal and monetary policies tightened in nearly three-quarters of countries in 2022, amid high inflation and the expiration of pandemic-related support measures.

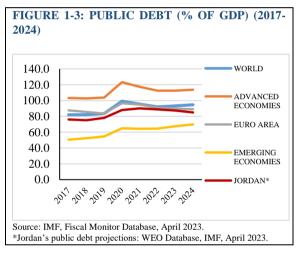
The report also illustrated that public finances have undergone major swings, reflecting the unprecedented shocks and government measures. Following a historic surge in global public debt to nearly 100% of the world's GDP in 2020 as a result of the economic contraction and substantial government support, the fiscal deficits have since declined, as pandemic-related exceptional financial measures come to an end.

However, the near-term fiscal outlook remains complex, and it is crucial that the fiscal and monetary policies are closely aligned to ensure monetary and financial stability while responding to an uncertain economic environment and rapidly changing financial conditions.

Furthermore, a tighter fiscal policy -while supporting the most vulnerable- is considered a tool that complements the efforts of the monetary authorities to bring inflation back to targeted levels, making it possible for central banks to raise interest rates by less than otherwise.

#### 1.1.2 PUBLIC DEBT

The IMF's Fiscal Monitor report of April 2023 revealed that the average global public debt improved in 2022 to record 92.1% of GDP, compared to 95.5% in 2021. However, it is set to increase in the coming years to stand at 93.3% and 94.6% in 2023 and 2024, respectively. (Figure 1-3).

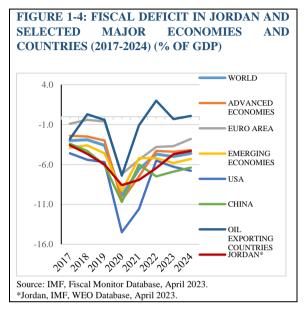


In advanced economies, the public debt to GDP ratio fell to 112.5% in 2022, down from 117.4% in 2021. However, the public debt to GDP ratio for emerging markets increased from 64.3% in 2021, to reach 64.6% in 2022, and is set to increase to 69.8% by the end of 2024. Furthermore, the report addressed that the consistency between fiscal and monetary policies shall be prioritized to restore the monetary and financial stability, supporting the most vulnerable. In addition, fiscal restraint is required to tackle fiscal vulnerabilities, amid the abrupt changes in financial conditions.

#### 1.1.3 FISCAL DEFICIT

According to the IMF's Fiscal Monitor report of April 2023, the fiscal deficits were divergent

across major countries and economies worldwide. The global fiscal deficit fell to 4.7% percent of GDP in 2022, compared to 6.6% in 2021. Furthermore, it is expected to increase to 5% in 2023, and to decline again to reach 4.6% in 2024. (Figure 1-4).



In advanced economies, the fiscal declined to 4.3% percent of GDP at the end of 2022, compared to 7.5% in 2021, and is set to decline to reach around 4.2% by the end of 2024. However, in emerging markets, the fiscal deficit was stable at 5.2% in 2021 as well as in 2022, yet it is projected to increase to 5.8% in 2023, and to drop again in 2024 to 5.3%. Furthermore, the fiscal deficit of oil exporting countries reached 1.1% percent of GDP in 2021, whereas it improved markedly in 2022 to record a surplus of 2%, yet it is projected to decline in 2023 to record a deficit of 0.3%. In US, the projections indicate a notable recovery in fiscal deficit which hit 11.6% percent of GDP in 2021, to record 5.5% in 2022, however; it is expected to increase again to reach 6.8% by the end of 2024. As for China, fiscal deficit to GDP is expected to drop to 6% by the end of 2028.

#### FINANCIAL SYSTEM STABILITY

#### 1.1.4 GLOBAL FINANCIAL STABILITY

The IMF's Global Financial Stability Report of April 2023 analyzed the recent global turmoil in the banking sector and the challenges posed by the interaction between tighter monetary and financial conditions and the buildup in vulnerabilities since the global financial crisis. The emergence of stress in financial markets complicates the task of central banks when combating inflation. Before the stress episode, interest rates in most countries had risen sharply, and were more aligned with central banks communications about the need to keep monetary policy tight for longer.

The impact of tighter monetary and financial conditions could be amplified because of financial leverage, mismatches in asset and liquidity, liability and high level interconnectedness within the non-banking financial institutions sector and with conventional banking institutions.

Sovereign debt sustainability metrics continue to worsen around the world, in particular in emerging economies and developing low-income countries, with many of the most vulnerable already facing severe strains. Households accumulated significant savings during the pandemic, thanks to fiscal support and monetary easing rolled out during the pandemic. However, they are facing heavier debt-servicing burdens, eroding their savings and leaving them more vulnerable to default.

With regard to the real estate sector, the steep increase of residential mortgages rates has cooled global housing demand. Average house prices fell in 60% of the emerging markets in the second half of 2022, while in advanced economies price increases have slowed. Concerns have been growing about conditions in the commercial real estate market, which has been under pressure from a worsening of economic fundamentals and higher funding costs.

As for corporates, default rates have remained low, as the sector's substantial cash buffers and liquidity built in the times of monetary and fiscal policies easing during the pandemic have provided financial cushioning. However, declining corporate earnings and tighter funding conditions have started to erode these buffers and could lead to repayment difficulties and expose corporates to default. Small firms and emerging market corporates would likely be more

adversely affected because they lack alternative sources of financing to the banking sector lending, the standards of which have already started to tighten.

## DOMESTIC ECONOMIC AND FINANCIAL DEVELOPMENTS AND PROSPECTS

#### 1.1.5 OVERVIEW

During the period 2012-2019, the Middle East was challenged by political and security instability. At that time, the deepening of political and security unrest, and subsequent economic ramifications set the national economy to slow down; economic growth was slowing down and recorded modest rates not exceeding 2%.

The COVID-19 and the Russian-Ukrainian crises added new economic and social burdens to the already existing challenges, yet the government actions and the CBJ's monetary and banking measures helped to subdue the crisis and to maintain the monetary and financial stability pillars in the Kingdom.

#### 1.1.6 ECONOMIC GROWTH

The GDP at constant prices grew by 2.5% in 2022, compared to a growth of 2.2% in 2021, as the proactive and overarching measures taken by the CBJ, the government, and the social security alleviated the impact of the pandemic on the national economy, which supported the gradual recovery in the Kingdom.

As for the GDP at current market prices, it grew by 5.2% in 2022, compared to a growth of 3.5% in 2021. (Table 1-2).

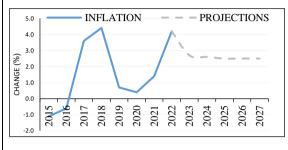
#### 1.1.7 UNEMPLOYMENT

Supported by the stability of epidemiological situation and the reopening, the unemployment rate declined by 1.3 percentage points to reach 22.8% at the end of 2022, compared to 24.1% in 2021. The unemployment rate peaked during the third quarter of 2022 to hit 23.1% (20.5% for males, and 33.1% for females). However, due to the labor market improvement and the increasing participation of labor force, the unemployment rate during the first quarter of 2023 declined to reach 21.9%, yet it is still high.

#### 1.1.8 INFLATION

The general prices level, measured by the consumer price index increased by 4.2% in 2022, compared to 1.4% in 2021. The inflation is set to decline in 2023 to reach 2.7%. (Figure 1-5).





Source: CBJ Statistical Database, March 2023. IMF's forecasts for inflation in Jordan, WEO database, April 2023.

## 1.1.9 PUBLIC DEVELOPMENTS

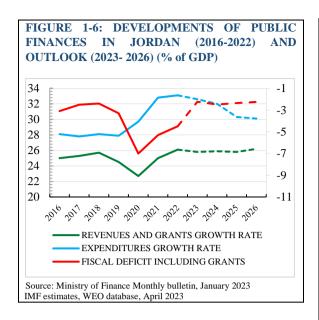
FINANCES

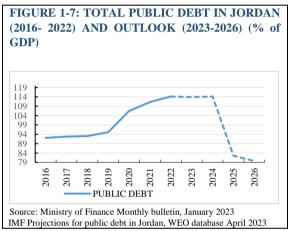
The overall fiscal deficit including grants declined by JD 178.1 million to reach JD 1,552.5 million in 2022 (4.5% of GDP) compared to a deficit of JD 1,730.6 million in 2021 (5.3% of GDP).

The domestic revenues which increased in 2022 by JD 797 million to reach JD 8,121.9 million, compared to JD 7,324.9 million in 2021, contributed to reduce the fiscal deficit.

With regard to public expenditures, they increased at a slower rate than revenues by JD 607.8 million in 2022 to reach JD 10,466.6 million, compared to JD 9,858.8 million in 2021. (Figure 1-6).

Total public debt reached to JD 38,490 million at the end of 2022, or 114.2% of GDP, compared to JD 35,767 million, or 111.3% of GDP at the end of 2021. (Figure 1-7).





#### 1.1.10 EXTERNAL SECTOR

In 2022, total exports increased by 32.3% to reach JD 8,789.9 million, while imports increased by 26.7% to reach JD 19,375.7 million. Accordingly, trade balance deficit in Jordan reached to JD (10,585.8) million, increasing by 22.4% compared to its level in 2021. (Figure 1-8) and (Figure 1-9).

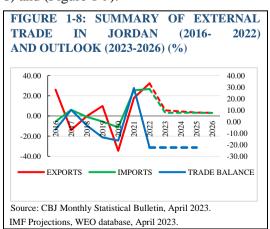
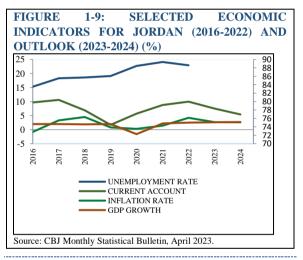


TABLE 1-2: SELECTED MAJOR ECONOMIC INDICATORS FOR JORDAN & THEIR PROSPECTS (2008-2024)

Year GDP Inflation Unemployment Population Total Current

1 Cttl	ODI	mination	Chempioyment	1 opulation	1 Otal	Current
	Growth	Rate (End of		(Growth	Public	Account
	Rate in	Period) (%)	Labor Force)	Rate)	Debt (% of	(%of GDP)
	constant	, , , ,		,	GDP at	
	market				constant	
	prices				market	
	(%)				prices)	
2008	7.2	14.0	12.7	3.0	59.6	-9.1
2009	2.0	-0.7	12.9	3.1	64.4	-5.1
2010	3.5	4.8	12.5	3.2	66.9	-6.9
2011	3.3	4.2	12.9	4.3	70.6	-10.0
2012	2.0	4.5	12.2	6.0	80.2	-14.9
2013	2.2	4.8	12.6	8.8	86.6	-10.2
2014	3.5	2.9	11.9	8.2	88.5	-7.1
2015	2.8	-0.9	13.0	7.9	92.4	-9.0
2016	2.0	-0.8	15.3	2.8	92.8	-9.7
2017	2.0	3.3	18.3	2.6	93.2	-10.6
2018	1.9	4.5	18.6	2.5	93.3	-6.9
2019	2.0	0.8	19.1	2.3	95.2	-1.7
2020	-1.6	0.3	23.2	2.4	106.5	-5.7
2021	2.2	1.4	24.1	2.3	111.3	-8.8
2022	2.5	4.2	22.8	2.2	114.2	-10
2023	2.6	2.7	-	0.1	113.9	-7.5
2024	2.7	2.6	-	0.08	114.2	-5.4
Cource.	CRI M	onthly Statio	ctical Bullatin 1	ME projectio	ne WEO I	Databaca

Source: CBJ, Monthly Statistical Bulletin. IMF projections, WEO Database, available forecasts of April 2023.



#### 1.1.11 MONETARY DEVELOPMENTS

During the period March 17, 2022 - May 7, 2023, the CBJ raised the interest rates on all monetary policy instruments for ten times by 475 basis points, except the overnight window rate which was increased by 500 basis points. Raising interest rates is intended to maintain the monetary stability in the kingdom, and to preserve the attractiveness of assets denominated in Jordanian dinar. These hikes came in light of the domestic, regional, and international economic developments, the increase in interest rates in international and regional financial markets, as well as the surge of global inflation rates and their implications on inflation rates in Jordan.

However, to support vital economic sectors and to provide concessional financing, the CBJ has kept the preferential interest rates charged on its JD 1.4 billion program to support vital economic sectors unchanged at 1.00% for projects inside Amman, and 0.50% for projects in other governorates, with maturities reaching up to ten years; the program was extended until the end of March 2024.

As for the CBJ's total foreign reserves, including gold and SDRs, they reached to JD 12,243.8 million, which is equivalent to USD 17,269.1 million by the end of June 2023. The CBJ's reserves level is comfortable and sufficient to cover 7.6 months of imports, which is safe and exceeds the acceptable limits set by international standards.

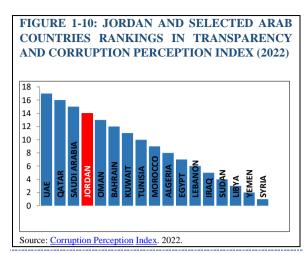
## JORDAN IN SELECTED INTERNATIONAL INDICATORS

## 1.1.12 TRANSPARENCY AND CORRUPTION PERCEPTION INDEX

The 2022 Corruption Perception Index addressed the civil rights, civil liberties, and democracy as part of anti-corruption efforts to ensure an approach that puts in place independent controls required to bring authority under accountability, and to build corruption-free society.

The 2022 annual report, indicates that most countries worldwide did not show any progress in terms of anti-corruption practices; two-thirds of countries score below 50.

In comparison with Arab countries, Jordan occupied a favorable ranking in the corruption perception index for the third year in a row, as Jordan ranked 4<sup>th</sup> compared to 17 Arab countries; UAE and Qatar were the highest scoring (67) and (58) points respectively, while Libya scored (17) points, Yemen (16) points, and Syria (13) points. (Figure 1-10).



#### 1.1.13 HUMAN DEVELOPMENT INDEX

The United Nations Development Program (UNDP) issues an annual report that summarizes the achievements and trends in three key dimensions of human development: healthy life and high life expectancy rate, being knowledgeable and educated, and having a decent standard of living.

In 2021/2022 Report, Jordan ranked (102) out of (191) countries in the HDI, which classifies Jordan among the highest countries in terms of human development. (Table 1-3).

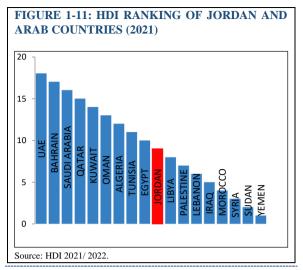
TABLE 1-3: JORDAN'S RANKING IN THE HDI DIMENSIONS 2021*						
Rank	HDI Ranking	(19u) IGH	Inequality Adjusted HDI (IHDI)	Gender Development Index** (GDI)	Gender Inequality Index*** (GII)	Multidimensi onal Poverty Index (2009- 2020)
				Value		
102	High Human Development	0.720	0.617	0.887	0.471	0.002

Source: UNDP, Human development Report 2021/2022.

\*Jordan is classified in group 5 in terms of the HDI gender equality index.

\*\* Jordan ranked 118 out of 191 countries in Gender Inequality Index.

Jordan ranked in the middle, compared to 18 Arab countries included in the Report outperforming a number of Arab countries including Libya, Palestine, Lebanon, Iraq, Morocco, Syria, Sudan, and Yemen. (Figure 1-11).



#### 1.1.14 THE COMPETITIVENESS INDEX

The World Competitiveness Ranking issued by the International Institute for Management Development (IMD) is a worldwide reference point on competitiveness of countries; it analyzes and ranks countries according to how they manage their competencies to achieve long-term value creation. The Yearbook of World Competitiveness ranking of 2022, which provides coverage of 63 countries, revealed that Jordan ranked fifth compared to Arab countries, following UAE, Qatar, Saudi Arabia and Bahrain. Furthermore, the Yearbook highlighted that high unemployment rates and energy costs, and their impact on the competitiveness of businesses, the instability in the region, and hosting of a large number of refugees in the Kingdom, are the most prominent economic challenges facing Jordan this year.

#### **CONCLUSION**

Despite the headwinds in Jordan and worldwide due to the COVID-19 pandemic, and the global geopolitical tensions afterwards, especially the Russian-Ukrainian crisis, and the resulting hikes of interest rates globally, regionally, and domestically, Jordan remained highly resilient and robust amid the external shocks, as the prudent fiscal and monetary policies preserved the monetary, financial, and macroeconomic stability, as well as Jordan's ability to access international markets. These measures reflected positively on the adequacy of foreign reserves, the soundness of the banking system, and beating

inflation despite pressures of global prices. The FSAP assessment, which was conducted by the IMF and the World Bank in 2022, and the first quarter of 2023, confirmed that the banking and financial sector in Jordan is resilient, sound, and highly capable to confront shocks and high risks, thanks to the high levels of capital of banks in Jordan, as well as the comfortable levels of liquidity and profitability, in addition to the CBJ's prudent banking supervision practices in compliance with international standards thereto.

# CHAPTER TWO: THE INFRASTRUCTURE AND LEGISLATIVE STRUCTURE OF THE FINANCIAL SYSTEM

#### INTRODUCTION

A proper infrastructure and regulatory structure are essential elements and factors to achieve financial stability. During the last period, the CBJ maintained its efforts to enhance the financial system's infrastructure and respective financial legislations. The CBJ endeavors emphasized two main dimensions: sound and well-structured promotion of financial inclusion, and strengthening the legislative framework of the financial system.

#### PROMOTING FINANCIAL INCLUSION

## 2.1.1 THE CONCEPT OF FINANCIAL INCLUSION

Financial inclusion in the Kingdom as defined in the NFIS (2018-2020) is "the provision of diversified financial products and services to be used by all segments of society; individuals and businesses, so that they have convenient and affordable access to these services and products and in a manner that meets their needs and helps them in improving their lives, this is including the delivery of payment services, savings, borrowing, money transfer, and insurance in a responsible and sustainable way".

In this context, as the financial inclusion is perceived as an essential pillar to achieve inclusive and sustainable growth in the Kingdom, the CBJ has led the promotion of financial inclusion in the Kingdom. This was formalized by launching the NFIS (2018-2020) in cooperation and consultation with all relevant stakeholders from the public and private sectors to formulate and implement the strategy, as this is essential to strengthen a common understanding for the process, as well as to coordinate, harmonize, and bring all initiatives and efforts in the Kingdom under one umbrella. This ensures the achievement of desired goals and the optimal allocation of resources towards the prioritized

sectors and targeted groups to strengthen financial inclusion in the Kingdom.

As the NFIS (2018-2020) was finalized, the CBJ conducted a financial inclusion demand and supply survey in 2022, which was intended to gauge and analyze the financial inclusion for households and MSMEs in the Kingdom quantitatively and qualitatively, as well as addressing the impact of the NFIS (2018-2020); the results of the survey will inform the formulation of the new NFIS (2023-2027).

The results of survey revealed that the NFIS (2018-2020) outperformed its targeted levels, as the financial inclusion increased from 33.1% to reach 43.1%, and the gender gap in the financial sector was reduced from 53% to 22% by 2020, this is in addition to achieving several qualitative and quantitative sub-goals.

The survey assesses the status of financial inclusion for households and businesses in the Kingdom in terms of its three aspects using several indicators and sub-indicators: access, use, and quality of key financial services, which will constitute the main pillars of the NFIS (2023-2027), namely; finance, savings, insurance, and payment and transfer services. The financial inclusion for households in the Kingdom is summarized in five indicators as listed below:

Accounts Ownership	Finance	Savings	Insurance	Payments and Transfers
43.1%	14.4%	4.3%	60.9%	39.8%
Have a bank account	Borrowed from an official financial institution in 2021	Saved money in an official financial institution in 2021	Have any kind of insurance policies	Made or received digital financial transfers in 2021

As for the MSMEs sector, the survey revealed the following:

Accou nts owner ship	Finance	Savings	Insurance	Payments and transfers
52.4%	28.3%	15%	32.5%	31.5%
Have a bank account	Borrowed from an official financial institution in 2021	Saved money in an official financial institutio n in 2021	Have any kind of insurance policies	Made or received digital financial transfers in 2021

The survey results above will inform the defining of the national goals of the NFIS (2023-2027), as well as the operational targets of its main pillars. These results also provide indicators classified according to the targeted groups in the NFIS (2023-2027) namely, women, youth, and the bottom 40% of total adults in terms of income, and refugees. This is to ensure that accurate quantitative and qualitative goals are in place, and reflect the actual needs of each targeted group, as well as improving the financial inclusion which contributes to achieving the economic and social growth in the Kingdom.

#### 2.1.2 THE NFIS (2023-2027)

To proceed with promoting financial inclusion in the Kingdom, the CBJ initiated a new NFIS (2023-2027) to serve as a roadmap for strengthening financial inclusion in the Kingdom, which ensures the leverage of all possible capacities to achieve economic growth and sustainable development.

Furthermore, an NFIS (2023-2027) vision document titled: "Responsible and sustainable access to and use of financial services and products by various segments of society in a way that contributes to achieving economic and social development in the Kingdom" was drafted. This document informs the formulation of the strategy that will be based on a set of pillars and priorities enablers; the four main pillars include:

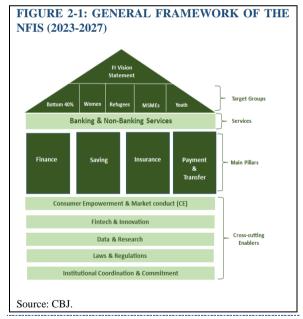
- 1. Inclusive and responsible financing services.
- 2. Savings.
- 3. Insurance.
- 4. Payments and transfers services.

These pillars are supported by priorities enablers which shall strengthen the effective and sustainable access to and use of financial services and products including:

- 1.The empowerment of financial consumers and market conduct.
- 2.FinTech and innovation.
- 3.Data and research.
- 4.Legal and legislative frameworks.
- 5. Coordination and institutional commitment.

The NFIS (2023-2027) is oriented towards all citizens in the Kingdom, and businesses in particular those excluded from the financial services and products, especially the following:

- 1.Women.
- 2. Youth.
- 3.Refugees.
- 4.Bottom 40% of adults in terms of income.
- 4.MSMEs.



## 2.1.3 PROMOTING FINANCIAL INCLUSION INITIAVES AND EVENTS

It is worth mentioning that the Hashemite Kingdom of Jordan represented by the CBJ hosted and organized the AFI's prominent annual event for financial inclusion, namely; the Global Policy Forum- GPF 2022, during the period 5-8 September, 2022. This was to appreciate and

commend the Kingdom's vital role in promoting financial inclusion, as it attained the global attention because of the intensive efforts excreted to achieve sustainable development goals.

The Forum highlighted the essential role of the Kingdom in promoting financial inclusion in the region and worldwide, and Jordan's continuous endeavors to support and achieve sustainable economic growth, as well as to strengthen macroeconomic and financial stability in the Kingdom.

Furthermore, the social media campaign launched in 2021 was finalized. However, in 2022, sponsored advertisements and awareness publications titled "the financial inclusion in Jordan" were delivered via pages dedicated for financial inclusion (YouTube channel, Facebook, and Instagram). This is in addition to creating and launching a financial inclusion website (https://financialinclusionjo.com).

Moreover, in 2022, the CBJ's saving initiative "Save to Prosper" which was launched on 1/11/2021 on the occasion of the World's Savings Day was finalized after six months.

#### 2.1.4 SMEs

The SMEs are essential cornerstones in most economies worldwide, and one of the most main job creators; they account for around 70% of total corporates, and create more than 50% of jobs worldwide. According to the World Bank data, these figures are higher if the SMEs operating in the unofficial sector were included. Therefore, providing a proper support for these enterprises is crucial to support sustainable and comprehensive recovery from the pandemic.

In the context of the CBJ's endeavors to support MSMEs and given their essential role in stimulating economic growth, reducing unemployment, and fighting poverty, and aiming at enabling these companies to access the financing needed to run their business with medium or long maturities and at preferential interest rates, the CBJ formulated an internal committee to manage projects intended to strengthen financial inclusion, including boosting

the SMEs access to finance. To this end, the CBJ during the past period cooperated with the Ministry of planning and international cooperation, as well as international and regional financing institutions to attract around USD 425 million funding for the SMEs sector, at competitive interest rates and suitable tenors. The funds transferred to Jordan amounted to USD 265 million, which were provided as loans to more than 17 thousand MSMEs, of which more than 64% are based outside Amman. The financing contributed to create around 7,000 new jobs; the CBJ intends to withdraw the remaining balance in 2023 and 2024. This is in addition to the credit line of USD 120 million provided directly to banks by the European Bank for Reconstruction and Development (EBRD) to support MSMEs; the CBJ supports and facilitates banks' access to the credit line. The EBRD has signed USD 90 million agreements with three banks.

Furthermore, in 2022, the CBJ proceeded with providing financing to economic sectors including SMEs at preferential interest rates and suitable maturities under its financing programs namely: the financing and supporting economic sectors program, supporting SMEs to withstand COVID-19 crisis program, and the national self-employment program (INHAD), in addition to financing specialized lending institutions and the Jordan Loan Guarantee Corporation (JLGC) as follows:

1. The CBJ's program of financing and supporting economic sectors (medium term advances program): in 2022, the total financing provided under this program reached to JD 255.2 million; 278 projects have benefited from these loans, and contributed to create 932 job opportunities. These loans were provided mainly to the manufacturing sector accounting for 54.7% of the total financing provided for projects in the program in 2022, followed by the energy sector which accounted for 18%, the tourism sector 9.3%, the agriculture sector 7.8%, and 10.2% for remaining eligible projects in the program. The total outstanding financing reached to JD 1,330 million by the end of 2022, and 1,950

projects have benefited from the financing provided, meanwhile, the outstanding balance of advances provided reached to JD 660.7 million, accounting for 51% of the program limit of JD 1.3 billion.

The major amendments conducted on the program in 2022 were: including the health sector providers in the health sector, and the green building in the renewable energy sector, as well as keeping the program's interest rates unchanged (0.5% for projects in governorates, and 1% for projects in Amman) despite the frequent hikes of interest rates on all CBJ's monetary policy instruments.

2. The CBJ's program to support SMEs to withstand the COVID-19 crisis: in 2022, the total financing reached to JD 142.6 million, provided to 485 projects, bringing the total number of projects benefiting from the program since its initiation to 6,278 projects, while the total financing provided reached to JD 620 million (88.1% of the program's financing limit of JD 700 million). Since the onset of the pandemic until the end of 2022, the program contributed to keep around 104 thousand employees in their jobs since the onset of the pandemic until the end of 2022.

The main amendments conducted on the program in 2022 were: the financing limit for the wholesale/ importers of primary commodities sector was topped up to JD 1 million instead of JD 600 thousand, and they were excluded from the SMEs definition; which aims to strengthen the food security in the Kingdom.

- 3. The National Self-Employment Program "INHAD": the financing provided under the program reached to JD 2.0 million in 2022, provided to 48 projects, and contributed to the creation of 192 job opportunities. The total financing provided since the initiation of the program in 2019 reached to JD 8.88 million by the end of 2022, provided to 266 projects, and contributed to create 852 job opportunities.
- **4. Financing provided for the Agricultural Credit Corporation**: in 2022, the CBJ topped up the advances limit dedicated for the

- corporation by JD 15 million to stand at JD 115 million instead of JD 100 million; this is intended to enhance the corporation's capability to implement its national action plan for sustainable agriculture. The financing provided to the corporation in 2022 reached to JD 27.7 million, while the total financing provided to the corporation reached to JD 112.6 million, accounting for 97.9% of the financing limit allocated for the corporation of JD 115 million.
- 5. Financing provided to the JLGC: in 2022, no financing was provided to the JLGC, however, it made a repayment of JD 100 million (the total advance provided to support bank guarantees for contractors outside Jordan) of outstanding financing, upon a request form the JLGC on 16/09/2022 to terminate agreement. Accordingly, the total outstanding balance of the financing provided to the JLGC reached to JD 550 million by the end of 2022 (JD 100 million for the export credit guarantee program, JD 50 million for small startups loans guarantee program, JD 100 million for the housing loans guarantee- facilitated housing program, and the SMEs loans guarantee program to withstand COVID-19 crisis of JD 300 million).
- **6. The financing provided to Jordan Co- operative Corporation:** the total advances provided to the corporation of JD 324 thousand were repaid at the end of 2022.

Accordingly, the outstanding balance of the CBJ's advances provided to all banks, specialized lending institutions, and the JLGC reached to JD 1,657.1 million at the end of 2022, compared to JD 1,767.5 million at the end of 2021, declining by JD 110.4 million (6.2%).

#### 2.1.5 THE FINANCING SECTOR

As part of the CBJ's endeavors to expand its supervisory umbrella- which started in 2015 by subjecting the Microfinance Institutions (MFIs) to its supervision and oversight- to include all finance companies, the Finance Companies Bylaw No. (107) of 2021 was enacted, and entered into force on 30/5/2022. This aims to integrate these companies in the financial sector,

ensure their compliance with international standards, strengthen the consumer protection scheme, and provide an institutional framework for these companies in a way that supports economic growth and financial stability. The bylaw constitutes a legal reference to license finance companies, whereby all companies carrying out any of the financing activities stipulated in the bylaw are subject to the CBJ's supervision. In addition, the CBJ put in place specific forms designated for licensing finance companies in the Kingdom, which are published on the CBJ's website. Furthermore, by the end of 2022, the CBJ started to receive the applications for fulfilling licensing requirements by finance companies.

With respect to the microfinance sector which joined the formal financial system in 2018, it comprises of (9) licensed MFIs, two of which are providing financing in accordance with the provisions of Islamic Sharia. The CBJ, during the past years, issued a set of instructions governing the microfinance business, which is intended to lay the ground for corporate governance, enhancing the supervisory role of the boards, strengthening the internal controls and risk management systems, and strengthening the financial consumer protection according to international best practices and guidelines.

The CBJ will manage to enact and amend required legislations to complete the oversight and supervision process on the finance companies sector.

## 2.1.6 FINANCIAL CAPABILITIES AND FINANCIAL EDUCATION

Promoting financial and banking education is an essential enabler to strengthen financial inclusion and enhance financial consumer protection. Several studies revealed that raising individuals' financial literacy is a key factor to increasing their savings, thus, supporting economic growth through providing the liquidity needed for investments, which will enhance countries capability to withstand financial and economic crises. In Jordan, the CBJ highly prioritizes the financial education, given its importance in

strengthening the financial, economic, and social stability in the Kingdom. The CBJ believes in the importance of financial education to the Kingdom; accordingly, it initiated a project to promote and strengthen financial education in the Kingdom intended to raise Jordanian's capabilities in terms of the following:

- Comprehend the financial and banking fundamental principles and concepts.
- The management and optimal investment of savings and personal properties.
- Increase the chances to access the financial services offered by banks and financial institutions.

The project deploys several programs that target key sectors in society. The main financial education program at schools was rolled out in cooperation with the Ministry of Education and INJAZ organization (a Jordanian non-profit organization). Financial education at schools started for the 7<sup>th</sup> grade curriculum in 2015/2016, for the 8<sup>th</sup> and 11<sup>th</sup> grades curricula in 2016/2017, for the 9<sup>th</sup> and 12<sup>th</sup> grades curricula in 2017/2018, and for the 10<sup>th</sup> grade curriculum in 2018/2019.

In addition to the financial education program at schools, the project will include several other programs in the future as follows:

- a- Financial education at higher education institutions.
- b- Promoting financial education through media.
- c- Financial education for startups.
- d- Financial education at workplaces.
- e- Financial education for women and rural areas.
- f- Digital financial education.

Furthermore, in February 2023, the financial education program at schools was extended until the end of June/2026, aiming at enhancing the financial education curricula to keep abreast with latest developments in digital financial services, FinTech, and green and sustainable finance.

## 2.1.7 FINANCIAL CONSUMER PROTECTION

As part of the CBJ's endeavors to strengthen the financial consumer protection scheme in Jordan, as well as to provide sufficient protection for the users of financial and banking services, a number of circulars were enacted, including the following:

- A circular was directed to MFIs, regarding the "Collection Guidelines for MFIs", which aim to regulate the collection process and communication with individual clients and their guarantors, protect their rights, and ensure the transparency and fairness in collection.
- A circular was directed to banks, regarding the results of the online survey conducted to assess the satisfaction of consumers with disabilities and the holders of basic bank accounts, regarding the services and products provided by banks.
- Banks and financial institutions under the CBJ's supervision and oversight were requested to add new classifications for complaints starting from the 3<sup>rd</sup> quarter of 2022, which aim to put in place comprehensive classifications for complaints submitted by banks and financial institutions.
- A circular was directed to banks and MFIs, whereby they are required to provide clients seeking to obtain credit with a copy of their credit reports in case of refusal because of the negative points included in their reports, without mentioning CRIF-Jordan as a reason to justify the refusal. Banks and MFIs are not allowed to ask clients to refer to CRIF-Jordan, unless wrong information is included in their credit reports.
- A warning was issued to citizens regarding investment scams and dealing with platforms and companies

pretending to realize high returns in a short period of time. This is to ensure that citizens will avoid being scammed and exposed to the risk of losing their money.

As for studies, the financial consumer protection department at the CBJ conducted the following studies:

- A market study was conducted to assess the satisfaction of consumers with disabilities and the holders of basic bank account, regarding the financial services and products provided to them. It was conducted through an online survey, and banks were instructed to take corrective actions regarding the findings of these two studies.
- A study titled "the protection of elderly financial consumers," which aims at enhancing the status of these consumers.
   Relevant parties were requested to engage in terms of the social responsibility.
- An evaluation for the prizes linked to saving accounts, and the active banks in this regard.
- Conduct a survey in 2022 to gauge financial health, and issue a report thereto. The financial resilience was included in the study.
- Drafting guidelines for establishing an Ombudsman for financial and banking disputes.
- Address and approve mechanisms to evaluate the implemented programs for financial literacy.

With regard to reports, the financial consumer protection department issued reports of clients' complaints against banks and non-banking financial institutions of 2021, and the first half of 2022; these reports were submitted to banks and non-banking financial institutions. In addition, the financial consumer protection report of 2022

was issued and published on the CBJ's website, and disseminated to the CBJ's departments.

**As for supervision**, the department conducted several inspection visits (on-site and off-site) on banks and non-banking financial institutions as follows:

- Full inspections on a number of banks and some exchange companies.
- Thematic inspection on all banks with respect to commissions and fees charged on the products and services provided to retail customers. Each bank was requested to take corrective actions, including refunds for mistaken commissions, which reached to JD 251 thousand paid to around 57,000 clients in 2022.
- Mystery shopping visits on (15) exchange companies, in addition to offsite supervision on (14) exchange companies.
- Thematic inspection on MFIs branches through questionnaires submitted to credit and collection officers, in addition to clients' surveys.
- Review the websites and advertisements of all e-payments and money transfer companies, all MFIs, and some exchange companies. They were followed up on to take corrective actions on findings.

## With regard to promoting financial awareness and literacy, the following was conducted:

- Roll out several campaigns dedicated for financial awareness and literacy including on-site campaigns for targeted audience namely; women, children, youth (students of colleges and schools), and persons with disabilities.
- Design a variety of educational materials oriented to different segments of society; most prominent of which is the game of financial sector monopoly, which was

- commended by internal and international parties. This is in addition to creating a financial education booklet in Braille language.
- Design and disseminate a number of educational publications regarding prioritized subjects financial consumers such as financial scams, to warn against unlicensed companies financial pretending to act as intermediaries, as well as scam pages on social media that use the CBJ's name or logo.

With regard to complaints handling, the CBJ handled all complaints, inquiries, suggestions submitted to the CBJ via available channels, and had taken the necessary actions through investigating and handling of these complaints. Furthermore, a new help line was introduced to answer phone calls, and another one was acquired to record complaints, inquiries, and suggestions; these two systems were launched for testing, and they are at the final phases of official production. In addition, the complaints handling division contacted banks regarding findings, which resulted in JD 14,464 refunds for clients.

# As for monitoring unsafe market practices, below are the practices that were monitored and detected; these practices were reported to the Public Security Directorate and the Anti-Cyber Crimes Unit, as well as the Companies Control department to take necessary actions. The department issued warnings for citizens against the following:

- Companies pretending to act as intermediaries between citizens and banks/ financial institutions.
- Companies practicing financing in contradiction with their main purposes registered in the ministry of Manufacturing.
- Scam trading platforms.

## 2.1.8 BUILDING AN ENABLING INFRASTRUCTURE TO PROMOTE FINANCIAL INCLUSION

#### 2.1.8.1 DIGITAL FINANCIAL SERVICES

- In 2022, the CBJ continued to provide digital banking services to its clients of ministries and governmental institutions and departments through the (E-Banking) system. In 2022, the system allowed the clients to use the inquiry service to check their accounts balances, and to obtain bank statements and notices. The CBJ also provided banking services to its clients including (transfers, cash checks, and checks through the Electronic Check Clearing (ECC)).
- In 2022, the CBJ operated the ECC system for clearing checks between licensed banks; (247) clearing sessions were conducted in 2022, as follows:

Number and Value of Checks Provided for Clearing through the ECC in 2021-2022							
(Number and Value) (in million)	2021	2022					
Cleared Checks:							
Total Number	6.89	6.90					
Total Value	37,660.85	40,829.18					
Checks disbursed:	Checks disbursed:						
Total Number	6.65	6.70					
Total Value	36,419.4	39,554.9					
Returned checks:							
Total Number	0.24	0.21					
Total Value	1,241.45	1,274.32					
Returned checks/ total	3.4%	3%					
checks (Number)							
Returned checks/ total	3.3%	3.1%					
checks (value)							

• The CBJ maintained the operation of Real Time Gross Settlement System (RTGS-JO) to carry out transfer transactions between the accounts of member banks in Jordanian Dinar, US Dollar, Euro, and Pound Sterling. These transactions were as follows:

	202	1	202	22
	Number (thousand)	Value (million	Number (thousand)	Value (million
JD	307	64,582	382	68,704
USD	33	40,960	36	52,019
Euro	4	2,139	4	2,880
GBP	0.5	228	0.8	196
Open Market Operations (Number)	8,192 trans	sactions	7,937 tran	sactions
Open Market Operations (Value)	JD 7,435	JD 7,435 million		million

• The CBJ also continued to operate the

Automated Clearing House system (ACH) which complies with the new ISO standard (ISO 20022). The ACH system provides a secure infrastructure to execute retail payments between member banks and their clients, including the CBJ. The system processes credit and debit money transfers, pre-mandated debit transfers, and payments of government, financial institutions, and other private sector institutions, as indicated below:

Item	2021	2022
Number of transfer orders	9.6 million	10 million
executed through the system	orders	orders
Value of transfer orders	JD 7.1	JD 7.9
executed through the system	billion	billion

• Furthermore, the CBJ in cooperation with the GIZ had finalized the project of promoting financial transfers and other financial services via digital solutions (**Digi#ances**), which aims to achieve the digital financial inclusion through expanding and improving access to digital financial services by unbanked refugees and Jordanian households; the project was extended until the end of 2023.

#### 2.1.8.2 CREDIT BUREAU

CRIF-Jordan is one of the milestones of the financial system infrastructure. It continued to expand and furnish its database in terms of numbers and diversified sectors of information providers included. As of 2022, CRIF signed agreements with (70) providers, whereby they can use the credit inquiry service. In terms of sectors, these agreements were signed with (21) banks, (12) financial leasing companies, (9) MFIs, and (28) from other sectors.

- On another front, CRIF pursued to provide new value-added services, including the credit scoring, the Portfolio Alert, and the Batch Enquiries. CRIF was requested to provide credit reports through digital channels which are available through banks applications.
- In addition, at the end of 2022, the CBJ enacted instructions governing the credit bureaus business, which entered into force on 1/4/2023. These instructions addressed a set of obligations required by data/ credit providers, as well as setting timelines for disclosing

information and data in clients' credit reports.

## THE FINANCIAL SYSTEM LEGISLATIVE INFRASTRUCTURE

The foundation of an appropriate legislative framework for the financial system would enhance the financial stability: definitely inappropriate practices evidenced that supervisory and regulatory legislations for the financial system would obviously deepen systemic financial crises when they occur. The CBJ verifies on an ongoing basis the soundness of and performance of the banking and financial institutions under its regulatory umbrella, and ensures the soundness of their financial positions according to effective laws, bylaws, regulations, and banking practices to achieve sound banking and monetary and financial stability. The CBJ in 2022 proceeded with a comprehensive review of the legislative framework governing the business of the banking and financial institutions under its supervision, in line with the CBJ's strategy for effective banking supervision that complies with international best standards and practices, extends the CBJ's efforts to lay the ground for robust banking and financial industry, as follows:

#### 2.1.9 LAWS AND BYLAWS

## 2.1.9.1 THE INSURANCE REGULATORY LAW

As mentioned in the JFSR 2021, a Royal Decree was issued to pass the Insurance Regulatory Law No. (12) of 2021, published in the Gazette on 16/5/2021, which entered into force thirty days after publication, whereby the insurance business was brought under the CBJ's supervision. The provisions of this Law shall apply to insurance companies, reinsurance companies, insurance services providers, and all relevant parties, to regulate and supervise the insurance sector, ensure the rights of the insured and beneficiaries, as well as ensure the soundness of the insurance and reinsurance companies' financial positions.

The Law reflects the CBJ's vision and its endeavors towards improving the regulatory and

supervisory frameworks of the insurance business in accordance with international standards and best practices. It also aligns with the CBJ's disposition to strengthen the stability and soundness of the insurance sector, and enabling it to perform its envisioned role in serving the national economy.

## 2.1.9.2 ANTI MONEY LAUNDERING AND COUNTER TERRORIST FINANCING LAW

As mentioned in JFSR 2021, a Royal Decree was issued to pass the Anti Money Laundering and Counter Terrorist Financing Law No. (20) of 2021, which was published in the Gazette on 16/9/2021. The law includes a set of articles that draw the general policy for combating money laundering, terrorist financing, and proliferation of weapons of mass destruction. The Law identifies the perpetrators of money laundering and terrorist financing offenses as any person commits, assists, abets, or conceals a money laundering and terrorist financing offense, or has the intention to commit, involve in, or try to commit that offense which is penalized according to legislations in force. This will help competent authorities to recover proceeds generated directly or indirectly from these offenses.

## 2.1.9.3 ISSUING JORDANIAN BANKNOTES BYLAW

This bylaw shall be called (Issuing Jordanian Banknotes Bylaw) No. (55) of 2022; it was issued pursuant to paragraph (a) of article (28) of the Central bank of Jordan Law No. (23) of 1971. The bylaw stipulates that the "dinar" is the Jordanian legal tender, and is issued in denominations of one dinar, five dinars, ten dinars, twenty dinars, and fifty dinars. This bylaw was issued as one of the legal requirements to issue new banknotes, which is intended to keep pace with latest developments in this field, and to leverage technology in adding new security features that make notes more difficult to counterfeit. The bylaw also includes the portraits that shall appear on various notes, as the portraits of their Majesties in Arabian folk costumes shall appear on the front of the notes. This is in addition to certain specifications such as the phrase (The Hashemite Kingdom of Jordan) which is written

in Arabic on the front of the note and in English on its back, as well as other details such as the serial number and others. The notes also include security features such as the 3D security thread and dotted security thread that appears differently according to each note.

## 2.1.10 INSTRUCTIONS 2.1.10.1 SERVICES FEES INSTRUCTIONS

The Fees for Services Instructions No. (6/2022) were enacted by the CBJ's Board in pursuant to the provisions of Paragraph (c) of Article (95) and Paragraph (b) of Article (109) of the Insurance Regulatory Law No. (12) of 2021; these instructions entered into force on 31/3/2022.

These instructions regulate the policy of charging fees on services provided by the CBJ. This includes the issuance of any certificate or document, and some other services, such as the applications of approvals for key employees, employees acting as legal persons, or employees who practice bancassurance business, applications for adding any insurance type to the existing license granted to the agent or broker, or applications for opening branches by the legal insurance service providers, with the exception of banks carrying out bancassurance business, and other services set forth in these instructions. These instructions repeal the Services Fees Instructions No. (10) of 2004 and amendments.

## 2.1.10.2 INSTRUCTIONS OF ANNUAL FEES FOR EXCHANGE COMPANIES

The Instructions of Annual Fees No. (8/ 2022) for exchange companies were issued on 4/7/2022 pursuant to the provisions of Article (14/ c) of Licensing Exchange Companies Bylaw No. (39) of 2021 and its amendments; these instructions shall be effective as of date of their issuance.

These instructions set forth the general frameworks of annual fees for exchange companies, including due dates and means of payment.

## 2.1.10.3 INSTRUCTIONS FOR REGULATING OPEN FINANCE

The Instructions for Regulating Open Finance No. (12/2022) were enacted on 28/11/2022 pursuant to the provisions of Article (65/ b) of the CBJ Law No. (23) of 1971 and its amendments, Article (99/ b) of the Banking Law No. (28) of 2000 and its amendments, and the provisions of Article (55) of the Electronic Payment and Money Transfer Bylaw No. (111) of 2017; these instructions shall come into force as of the date of issuance.

Each company providing open finance services must fulfill the requirements stipulated in these instructions in one year as of their entry into force; the CBJ is entitled to extend this period. The provisions set forth in these instructions are additional requirements to what stated in the Anti-Money Laundering and Counter Terrorist Financing instructions, as well as the instructions of know-your-customer procedures and shall be read in conjunction with them. The company is also committed to put in place a documented and approved policy for open finance, and must publish key unclassified provisions on its official and approved channels.

## 2.1.10.4 INSTRUCTIONS FOR GOVERNING CREDIT BUREAUS

The Instructions for Governing Credit Bureaus **No.** (13/2022) were issued on 21/12/2022, in accordance with the provisions of Article (32/b) of the Credit Information Temporary Law No. (15) of 2010.

These instructions shall apply to credit bureaus, as well as data and credit providers, and shall enter into force as of 1/4/2023. According to these instructions, credit bureaus must keep credit information and any information related to customers' credit status in the company's database and credit reports. These instructions stress out the need to keep the database secured and protected by regulating the access of credit providers to the database, and conducting due diligence to ensure the eligibility of the credit provider to obtain any of the services offered by the company. The instructions set forth the rights

and obligations of customers, credit providers, and data providers.

## 2.1.10.5 THE INSTRUCTIONS OF COMISSIONS FOR MFIS

The Instructions of Commissions for MFIs No. (1/2023) were issued on 2/1/2023 pursuant to the provisions of Articles (4/b/13), (43/e) and (65/b) of the Central Bank of Jordan Law No. (23) of 1971 and its amendments, and the provisions of Article (17/b) of the Finance Companies Bylaw No. (107) of 2021. These instructions shall apply to all MFIs operating in the Kingdom and to microfinance activities and microfinance services provided in accordance with the provisions of Islamic Sharia to the extent that do not contradicts with their mandate. These instructions shall enter into force (90) days after being published in the Gazette.

These instructions stipulate the maximum limits for commissions charged on the companies' activities and services, the procedures for early payments whether paid by the customer or by another financing institution, and the procedures for top-ups of loans, and clarify the calculation of commissions on late payments. The instructions require the disclosure of all commissions charged on activities and services provided to customers transparently, using all available channels that ensure the information is being delivered to customers (including companies' websites), as well as any amendments on these commissions; these commissions shall be updated regularly. However, in case the company breaches any of the provisions of these instructions, the CBJ is entitled to impose any penalty as stipulated in the Banking Law No. (28) of 2000 and its amendments.

## 2.1.10.6 THE INSTRUCTIONS OF CORPORATE GOVENANCE FOR BANKS

The Instructions of Corporate Governance for Banks No. (2/2023) were enacted on 14/2/2023, pursuant to articles (4/b/3) and (65/b) of the CBJ law of 1971 and its amendments, as well as articles (2), (21), (22), (25), (33), (58), (59), (69/a), and (99/b) of the Banking Law No. (28) of 2000 and its amendments. These instructions are effective as of the date of their issuance.

Furthermore, the CBJ enacted these updated instructions to bring the requirements for conventional and Islamic banks in one directive. The instructions implement main recommendations such as; the board members are now explicitly required to conduct due care. members of the risk management committee shall not include executive members (no voting power), requirements for formulating compliance committee for the board members of all non-systemically important Jordanian banks are included, as well as the requirement to in place a function for compliance with Islamic Sharia under the oversight of the Sharia Advisory Council.

## 2.1.10.7 THE INSTRUCTIONS OF FINANCIAL SOLVENCY REQUIREMNTS

The Instructions of Financial Solvency Requirements for insurance business No. (131/2023) were enacted on 5/6/2023, according to the CBJ's board decision, pursuant to paragraph (a) of article (24) of the Insurance Regulatory Law No. (12) of 2021; these instructions entered into force as of the date of issuance in the Gazette.

Article (25) of the Law, requires that each insurance company shall isolate the assets and liabilities of general insurance business and the life insurance business, as each company is required to furnish the CBJ with the financial solvency data according to these instructions. The insurance companies are also required to furnish the CBJ with the information stipulated in paragraph (a) on quarterly basis, in a period not exceeding one month from the end of each quarter, with the exception of the last quarter as the data shall be submitted with the final statements. Furthermore, insurance companies shall maintain available capital not below (150%) of required capital. These instructions once enter into force, repeal the Solvency Margin Instructions No. (3) of 2002, as well as the decisions issued pursuant thereof.

#### 2.1.11 SUPERVISORY CIRCULARS

In 2022, and the first half of 2023, the CBJ has enacted several supervisory circulars; namely:

- Circular No. (17/2/12857) on 16/8/2022, directed to insurance companies, agents, and brokers, regarding the commissions paid to insurance agents and brokers, whereby companies are not permitted in any case to pay a commission that exceeds (5%) of the premium of compulsory auto insurance contract collected through that agent or broker. This decision shall apply to all compulsory insurance contracts, including the mandatory part of the comprehensive auto insurance contracts.
- Circular No. (9/13496) dated 25/8/2022, directed to licensed exchange companies, whereby they are required to adhere to the guidelines of recording and classifying outbound and inbound transfers. The CBJ seeks to ensure the accuracy and reliability of data submitted by exchange companies, as well as to regulate and unify the methodology of filling out data about outbound and inbound transfers using the form "transactions of outbound and inbound transfers (including SWIFT transfers) according to destination and the purpose of the transfer". These data shall be provided periodically to the CBJ; no later than 10 days after the end of each month.
- Circular No. (9/2/13692) dated 28/8/2022, directed to licensed exchange companies, whereby they are required to report to competent security authorities and the CBJ about any detected cases of (embezzlement, forgery, theft or fraud and other similar cases), and reporting these cases to the Anti Money Laundering and Counter Terrorist Financing Unit as well. These companies are also required to provide the necessary equipment and procedures to detect cases of forgery.
- Circular No. (17/3/14431) dated 11/9/2022, directed to all banks operating in the Kingdom, regarding the deposits of insurance companies, whereby banks are

- not permitted to seize or conduct any transactions on these deposits to any entity or any purpose. Banks are required to inform the CBJ and related insurance companies regarding any seize or decline in the balance of the deposit.
- Circular No. (10/2/15534) dated 29/9/2022, directed to all banks operating in the Kingdom, whereby the license provided to Société Générale bank (Jordan) was revoked, as it was acquired by Capital bank as of the end of 29/9/2022; its assets and liabilities were transferred to Capital bank.
- Circular No. (10/3/16234) dated 10/10/2022, directed to banks operating in the Kingdom, whereby the item (second) of Circular No. (10/1/4076) related to holding provisions against owned real estates that breach the banking law No. (28) of 2000 was repealed.
- Circular No. (27/4/18474)dated 17/11/2022, directed to banks and MFIs operating in the Kingdom, whereby they are obliged to provide clients seeking to obtain credit with a copy of their credit reports in case of refusal because of the negative points included in their reports, without mentioning CRIF-Jordan as a reason to justify the refusal. Banks and MFIs are not allowed to ask clients to refer CRIF-Jordan, unless wrong information is included in their credit reports.
- Circular No. (27/3/20323) dated 20/12/2022, directed to all licensed banks, regarding the CBJ's survey to assess the satisfaction of the holders of basic bank account, which was conducted through a questionnaire using AI, and sent directly to clients. The CBJ stressed out that banks must address the findings, and not to charge any fees or commissions on basic bank accounts other than stipulated in

relevant instructions.

- (27/4/20720)Circular No. dated 26/12/2022, directed to MFIs operating in the Kingdom, regarding the guidelines for collection processes, aiming at regulating the collection process and communication with clients, ensuring their rights, and ensuring the transparency and fairness in collection processes. MFIs are also required to put in place a binding policy complies with the minimum requirements of these instructions: MFIs shall provide the CBJ with a copy of this policy after being approved by the MFI's board, and shall enter into force as of 1/4/2023.
- Circular No. (9/3/14/45) dated 2/1/2023, directed to licensed exchange companies, whereby they are required to duly furnish the CBJ with their FY 2022 final financial statements, including all notes. These statements must be approved by an external auditor certified by the Jordanian association of certified public accountants, no later than the end of March 2023.
- Circular No. (27/3/2556) dated 2/2/2023, directed to banks operating in the Kingdom, whereby banks are required to obtain a CBJ's prior approval before advertising for and promoting any banking products. The ads and phrases used shall be concise, clear, and unambiguous. Afterwards, banks are required to put in place the terms and conditions for these products in a link; ads must be removed after being expired.
- Circular No. (23/2/2954) dated 8/2/2023, directed to banks operating in the Kingdom, regarding stress testing they must conduct for 31/12/2022 data, including testing for the impact of geopolitical tensions in the World, and the risks associated with climate change.

- Circular No. (10/2/5013) dated 13/3/2023, directed to banks operating in the Kingdom, whereby they are not permitted to hire non-Jordanians unless an approval from H.E. the Minister of Labor or acting person is obtained, provided that the position requires expertise and qualifications not available in Jordanian workers, or the number is not sufficient.
- Circular No. (27/1/5780) dated 22/3/2023, directed to all banks operating in the Kingdom, regarding the following:
  - 1. The item (9/b) of the Instructions on Dealing with Customers with Fairly and Transparently No. (56/2012) dated 31/10/2012 was restored; it stipulates that the maximum maturity of the credit provided in a retail portfolio (with the exception of mortgages and lease-purchase contracts) shall not exceed eight years.
  - 2. Banks are allowed to maintain maturities of outstanding and provided loans in retail portfolio for more than eight years, as per contracts signed with the clients.
  - The repayment period shall not exceed eight years for structured or rescheduled loans in retail portfolio, as of the date of restructuring or rescheduling.
  - 4. To adhere to debt burden ratios specified in banks' approved credit policies.

### CHAPTER THREE: DEVELOPMENTS AND RISKS OF THE FINANCIAL SECTOR

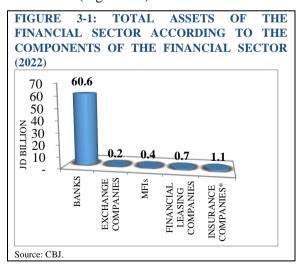
#### INTRODUCTION

The financial sector in Jordan consists of banks, insurance companies, exchange companies, financial intermediation, financial services companies, and financing companies including MFIs, financial leasing, factoring, mortgage financing, mortgage refinancing, in addition to lending-based crowdfunding.

The CBJ assumes the oversight and supervision on the banking sector, the exchange companies, and the MFIs, which were brought under the CBJ's supervision since 1/6/2015. Furthermore, the Finance Companies Bylaw No. (107) of 2021 was enacted and entered into force on 30/5/2022, whereby all companies practicing financing activities are subject to the licensing and supervision of the CBJ.

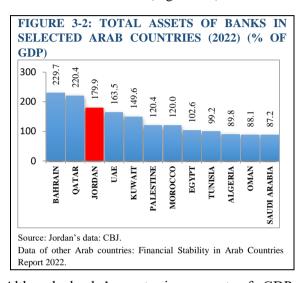
In addition, a Royal Decree was issued to pass the Insurance Regulatory Law No. (12) of 2021, published in the Gazette on 16/5/2021, whereby the CBJ is in charge of overseeing and supervising the insurance sector.

Banks dominate the financial sector in Jordan, with total assets of JD 62.9 billion, accounting for 96.3% of the financial sector's total assets as of end 2022. (Figure 3-1).

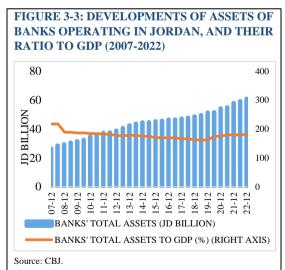


### MAJOR DEVELOPMENTS OF THE BANKING SECTOR IN JORDAN (ASSETS AND LIABILITIES OF BRANCHES OPERATING IN JORDAN)

Licensed banks' assets stood at JD 60.6 billion at the end of 2022, accounting for 179.9% of GDP, compared to 179.8% in 2021. Jordan ranked third in terms of this ratio as compared to selected Arab countries. (Figure 3-2).

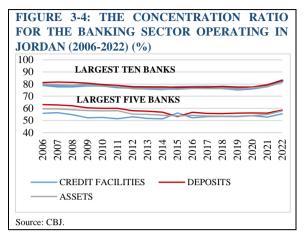


Although banks' assets in percent of GDP increased in Jordan, they were on the decline during the period (2007-2022). They decreased from 217.2% at the end of 2007, to reach 179.9% at the end of 2022. (Figure 3-3).

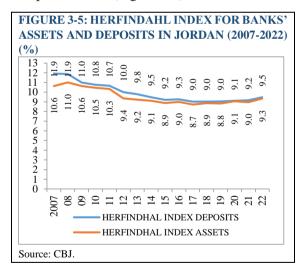


As for the market share of banks (concentration), the assets of the largest five banks (out of 21 banks) accounted for 57.9% of licensed banks' total assets at the end of 2022, compared to 59.6% at the end of 2006. However, the assets of the

largest ten banks approximated 81.4% at the end of 2022, compared to 79.9% as of end 2006. (Figure 3-4).



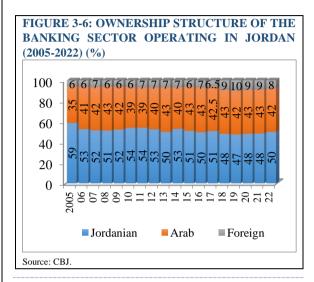
As for the competitiveness of the banking sector in Jordan; according to the Herfindahl Index (HI) of the banking sector's assets, the competitiveness was improved, as the HI declined from 10.6% at the end of 2007 to reach 9.3% by the end of 2022. These figures suggest that competitiveness of the banking sector in Jordan is improving steadily, as banks enhanced their businesses and products to boost their competitiveness. (Figure 3-5).



### 3.1.1 BANKS' OWNERSHIP STRUCTURE

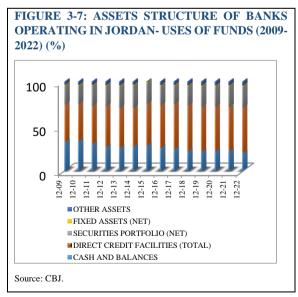
The share of foreigners (Arabs and Non-Arabs) in licensed banks' capital in Jordan reached to 50% as of end 2022, compared to 52% in 2020 and 2021, which is considered amongst the highest in the region, as no restrictions are imposed thereto, which reflects the investors'

increasing confidence in the banking system in Jordan; most of these ownerships are stable strategic contributions. It is worth mentioning that this share declined in 2010 and 2011, and increased steadily afterwards until the end of 2021, however, it declined slightly at the end of 2022. (Figure 3-6).



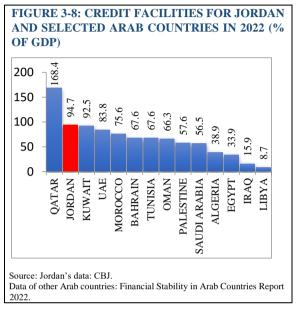
### 3.1.2 USES OF FUNDS (ASSETS)

As for the assets structure of banks operating in the Kingdom (uses of funds), credit facilities portfolio is still the largest component; accounting for around 51% of banks' total assets at the end of 2022, compared to 49% in 2021. This increase is due to the growth of credit facilities at higher rates than assets. (Figure 3-7).

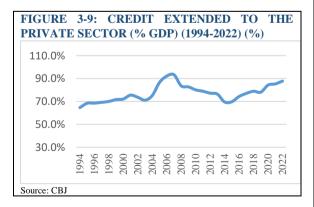


Direct credit facilities grew by 8.6% at the end of 2022 to reach around JD 32.2 billion, compared to a growth of 5% in 2021. It is worth mentioning

that total credit facilities accounted for 94.7% of GDP at the end of 2022, compared to 91.2% in 2021. In terms of this ratio, Jordan ranked second compared to a number of countries in the region following Qatar, which validates the significant contribution of banks to the economic development in Jordan (Figure 3-8).

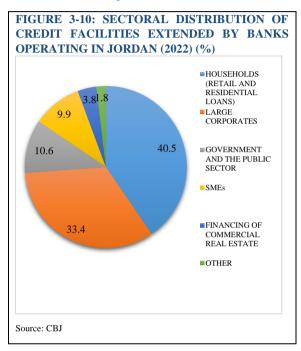


Credit gap analysis in Jordan revealed that, despite the increase of this ratio by 5.6% as compared to its historical trend, no additional capital buffers are required to be imposed on banks. According to Basel III Accord, a capital buffer shall be imposed on banks if credit growth is not proportionate with economic activity, as it signals to the accumulation of systemic risks, and price bubbles are very likely, however, this cannot be validated currently. (Figure 3-9).

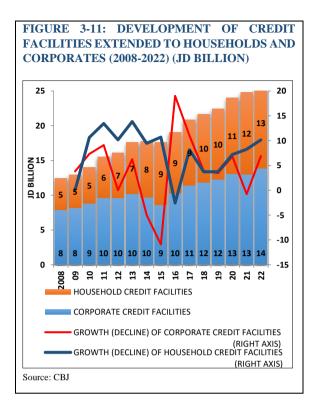


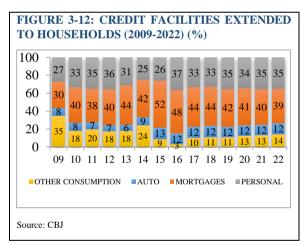
With regard to the sectoral distribution of direct credit facilities as of end 2022, credit extended to households accounted for the largest share of 40.5%, followed by credit extended to corporates

which formed 33.4%. Credit extended to the government and public sector accounted for 10.6% as of end 2022, compared to 10.3% at the end of 2021. Moreover, credit provided to SMEs increased to 9.9%, as of end 2022, compared to 9.2% at the end of 2021, which is a positive sign. However, the lowest share is for credit extended to financing commercial real estates which accounted for 3.8% at the end of 2022, compared to 4% in 2021. (Figure 3-10).



As for credit extended to households, which approximated JD 13 billion at the end of 2022; mortgages accounted for the largest share of around 38.5% of households' loans at the end of 2022, compared to 39.9% at the end of 2021, followed by personal loans, which formed 34.7% at the end of 2022, compared to 35.1% at the end of 2021. Furthermore, consumption loans accounted for 14.5% at the end of 2022, against 13.1% at the end of 2021. However, auto loans share of household loans increased from 11.9% at the end of 2021 to 12.3% at the end of 2022. In addition, credit facilities provided to corporates increased by 6.9% at the end of 2022, to reach JD 14 billion, compared to declining by 0.8% at the end of 2021. (Figures 3-11, 3-12).

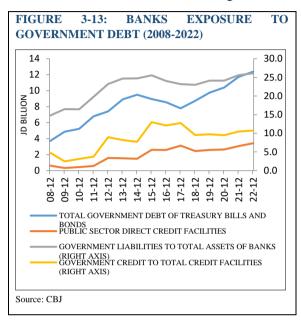




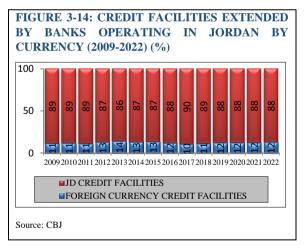
With regard to banks' exposure to government debt, in terms of investments in government bonds or providing government-guaranteed loans to certain public institutions, the government debt held by banks reached around JD 15.8 billion (accounting for 26.1% of banks' total assets) at the end of 2022, compared to JD 14.8 billion (accounting for 25.6% of banks' total assets) at the end of 2021. The increase in government debt was mainly due to the increase in government bonds from JD 11.7 billion at the end of 2021, to reach JD 12.4 billion at the end of 2022. It is worth mentioning that, government debt owed to banks as of end 2022 consists of JD 12.4 billion

of government bonds, and JD 3.4 billion of credit facilities.

Banks' exposure to the government or government-guaranteed debt relative to banks' assets increased from 14.8% at the end of 2008, to reach 26.1% at the end of 2022 (Figure 3-13).

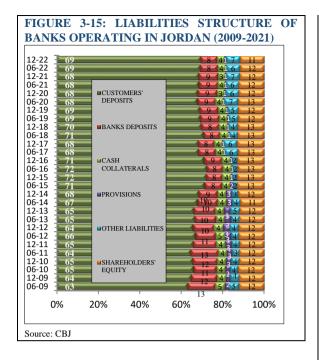


As for credit facilities according to currency, they are primarily denominated in JDs constituting 88% of total credit facilities during the period (2020-2022). (Figure 3-14).



### 3.1.3 SOURCES OF FUNDS (LIABILITIES)

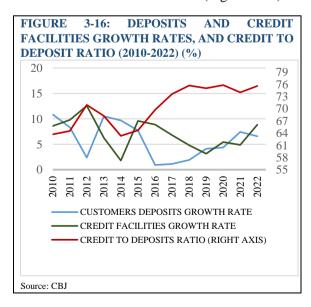
Analyzing the sources of funds in the banking system reveals that customers' deposits represent the major source of funding, accounting for 69.5% as of end 2022, compared to 68.4% at the end of 2021. (Figure 3-15).



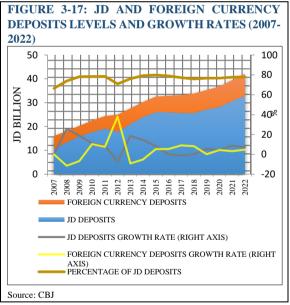
The second main source of funding is the shareholders' equity, which increased from JD 6.8 billion at the end of 2021, to reach JD 7 billion at the end of 2022, accounting for 11.5% of total sources of funds.

Deposits of banks are the third source; they declined from 9.3% of total deposits at the end of 2021, to reach 7.9% at the end of 2022.

With regard to developments of clients' deposits in the banking sector, they increased by 6.6% in 2022, compared to a growth of 7.4% in 2021, to reach around JD 42.1 billion. The ratio of credit facilities to deposits at the banking system in Jordan increased from 74% at the end of 2021, to reach 75.6% at the end of 2022. (Figure 3-16).



As for the composition of deposits in terms of currency, the JD-denominated deposits account for the largest share of deposits. Analyzing the changes in the ratio of JD-denominated deposits to total deposits indicates that they increased markedly from 66.4% at the end of 2007 to reach 78.4% at the end of 2011. However, it started to decline to its record low of 71% by the end of 2012, due to the economic headwinds that hit Jordan in 2012. Nevertheless, in 2013, 2014, and 2015, and due to the improving economic conditions, as most economic and monetary fundamentals have JDimproved, the denominated deposits bounced back to reach its peak of 79.8% of total deposits at the end of 2015. During the period (2016-2018) they decreased to reach 75.8% at the end of 2018, and increased afterwards during the period (2019-2022) to record 78% as of end 2022. This level is comfortable, and reflects the confidence in the Jordanian dinar as a saving currency, in addition to strengthening the monetary and financial stability in the Kingdom (Figure 3-17).



## 3.1.4 RISKS OF THE BANKING SECTOR IN JORDAN- FINANCIAL SOUNDNESS INDICATORS

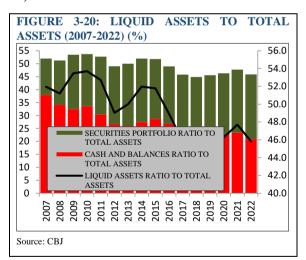
Despite the unprecedented adversities that hit Jordan and the world due to the ramifications of COVID-19 pandemic and the Russian-Ukrainian crisis; the financial and administrative positions

of the banking sector in Jordan were broadly sound and resilient. In 2022, most financial indicators and ratios of the banking sector showed a remarkable improvement, supported by the gradual recovery form the implications of COVID-19 pandemic. The next sections elaborate on the main developments of banks' financial ratios and indicators.

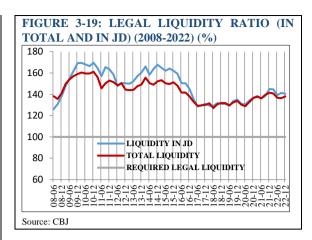
#### **3.1.4.1 LIQUIDITY**

The banking sector in Jordan enjoys a safe liquidity position; the liquidity indicators at the end of 2022 evidenced that the liquidity position of banks is adequate and safe. The cash and balances accounted for 21% of total assets at the end of 2022, compared to 23.4% at the end of 2021, while the share of securities portfolio (highly liquid) to total assets reached to 24.8% at the end of 2022, compared to 24.3% at the end of 2021.

Accordingly, high-liquid assets accounted for around 45.8% of total assets at the end of 2022, compared to 47.7% at the end of 2021 (Figure 3-18).



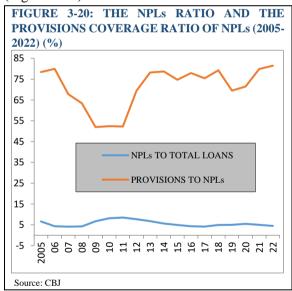
The legal liquidity ratio imposed by the CBJ on banks declined slightly from 141.5% at the end of 2021, to reach 138% at the end of 2022, yet it is still adequately higher than the CBJ's minimum requirement of 100%. This slight decline is attributed to the credit facilities being growing at higher rates than deposits in 2022. (Figure 3-19).



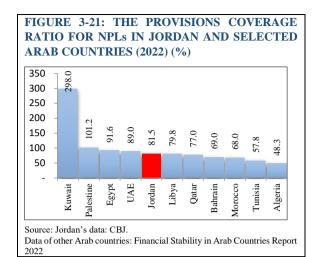
### 3.1.4.2 QUALITY OF ASSETS

The ratio of NPLs to total loans declined at the end of 2022 to reach 4.5%, compared to 5% at the end of 2021. This implies that banks in Jordan maintain high quality assets.

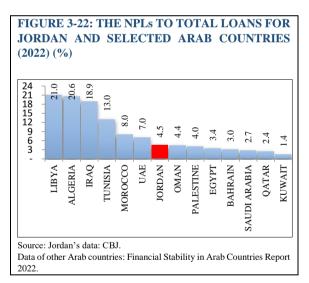
As for the provisions coverage ratio to NPLs, it increased to 81.5% at the end of 2022, compared to 79.9% at the end of 2021, which indicates that approximately 81.5% of NPLs are covered. (Figure 3-20).



The banking system in Jordan occupied a relatively high ranking compared to 11 Arab countries in terms of the NPLs coverage ratio. (Figure 3-21).



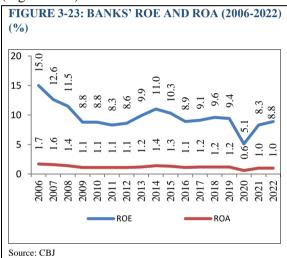
The outstanding balance of NPLs (excluding interest in suspense) at the banking system stood at JD 1,410.2 million at the end of 2022; declining slightly by JD 11.3 million, compared to its level in 2021 of JD 1,421.5 million. This is a good indicator of improving quality of banks' assets. As compared to selected Arab countries, Jordan ranked in the middle in terms of NPLs ratio to total loans. (Figure 3-22).



#### 3.1.4.3 PROFITABILITY

In 2022, banks' profits improved as banks' net profits after tax reached to JD 598.6 million in 2022, compared to JD 550.1 million in 2021, increasing by JD 48.5 million, or 8.8%. Furthermore, the ROA stood at 1% in 2022, which is the same level recorded in 2021. Historically, the ROA of the banking system recorded 1.7% at the end of 2006, and declined gradually to 1.1% at the end of 2009, affected by the implications of the global financial crisis on

profits of banks. The ROA maintained that low level until the end of 2012, to increase to 1.2% and 1.4% in 2013 and 2014, respectively, due to the remarkable growth of banks' profits. In 2015 and 2016, banks' ROA declined slightly to 1.3% and 1.1%, respectively, which was attributed mainly to the increase of income tax rate on banks from 30% in 2014 to 35% in 2015. However, banks' ROA increased again at the end of 2019 to reach 1.2%. The ROA declined afterwards to 0.6% in 2020 due to the repercussions of COVID-19 pandemic, yet it increased again to 1% in 2021 and 2022, supported by the gradual recovery from the ramifications of COVID-19 pandemic. (Figure 3-23).



The comparison of Jordan to selected Arab countries in terms of banks' ROA, indicates that Jordan occupied a relatively low ranking; Libya had the lowest ROA of 0.6%, while Saudi Arabia ranked the highest with 2.8% ROA. (Figure 3-24).



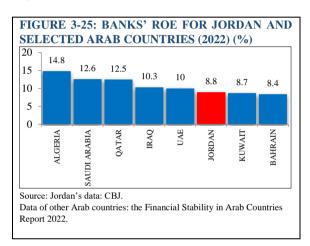
Source: Jordan's data: CBJ.

Data of other Arab countries: the Financial Stability in

Arab Countries Report 2022.

As for ROE, it increased at the end of 2022 to reach 8.8%, compared to 8.3% in 2021, due to the increase in banks' profits supported by the gradual recovery from the ramifications of COVID-19 pandemic. (Figure 3-23).

In comparison with selected Arab countries, Jordan occupied a relatively low ranking among 8 Arab countries in terms of the ROE. Bahrain had the lowest ROE of 8.4%, while Algeria had the highest ratio of 14.8%. It is noteworthy that the modest ROE of banks in Jordan is attributed to low risk appetite of banks, high levels of capital, and relatively high income tax. (Figure 3-25).

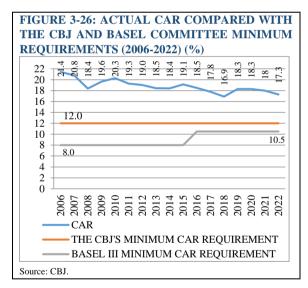


### 3.1.4.4 CAPITAL ADEQUACY

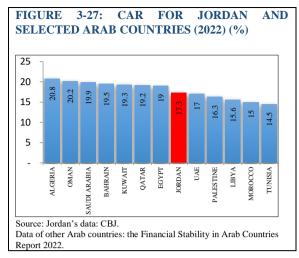
The CAR of the banking sector in Jordan is high; it ranged from 18% to 21% during the period (2007-2016). It is sufficiently well above the 12% minimum requirement of the CBJ, and the 10.5% minimum requirement of Basel Committee. However, the CAR decreased in 2017 and 2018 to 17.8% and 16.9%, respectively. The CAR's notable decline in 2018 is partially due to the implementation of IFRS (9), which required holding additional provisions against credit losses; these provisions were transferred from shareholders' equity, in particular retained earnings. At the end of 2019, the CAR increased significantly to reach 18.3%, as the CBJ requested banks not to distribute dividends, which intended to support banks' capital base and enable them to ward off the ramifications of COVID-19 pandemic, and support the national economy. In 2020, the CBJ allowed banks to distribute dividends which shall not exceed 12%

of the paid-in capital, provided that banks must achieve profits in 2020. Furthermore, these distributions shall not breach the CAR and legal liquidity ratio requirements stipulated in the law and the instructions. Limiting the distribution of dividends contributed to enhance the capital base of banks and to stable the CAR in 2020, which remained at its 2019 level of 18.3%. The CAR declined slightly to reach 18% and 17.3%, at the end of 2021 and 2022, respectively, which is attributed to the notable growth of credit during this period. Nevertheless, the CAR is still well above the minimum requirement of 12%.

Furthermore, Tier 1 core capital ratio declined slightly to 16.5% at the end of 2022, compared to 17.5% at the end of 2021. It is noteworthy, that the capital of banks in Jordan is mostly composed of tier 1 core capital; the highest quality component and the most capable to absorb losses. (Figure 3-26).



In comparison with selected Arab countries, the CAR in Jordan ranked in the middle among 13 Arab countries with available data. (Figure 3-27).



With regard to banks' exposures, credit risk is the most significant risk forming 87% of total risks as of end 2022, followed by operational risks around 11.3%, and market risks 1.7%. These figures are close to their levels in 2021, which validates that the risk structure at banks is stable, and no substantial changes occurred. (Figure 3-28).



### 3.1.5 OPERATIONAL EFFICIENCY OF BANKS

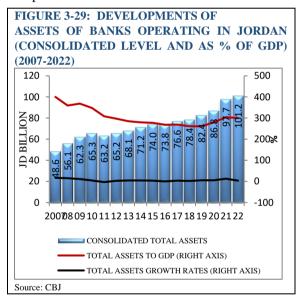
The operational efficiency for banks is measured primarily by the Cost (excluding interests) to Income Ratio (CIR). The CIR of banks declined to around 59.9% at the end of 2022, compared to 62.2% at the end of 2021. However, this decline is due to the increase in banks' income, as the decline in this ratio indicates improvement in the operational efficiency of banks.

ASSETS AND LIABILITIES OF CONSOLIDATED BANKING SECTOR IN JORDAN (BRANCHES OPERATING IN JORDAN AND ABROAD AND SUBSIDIARIES)

#### **3.1.6 ASSETS**

The number of Jordanian banks operating abroad reached to (8) banks. The Arab Bank's assets abroad constituted around 82.7% of total assets of Jordanian banks operating abroad, and 73.4% of the Arab Bank's consolidated total assets as of end 2022. The consolidated total assets of banks approximated JD 101.2 billion at the end of 2022, compared to JD 97.7 billion at the end of 2021, increasing by JD 3.5 billion or 3.6%.

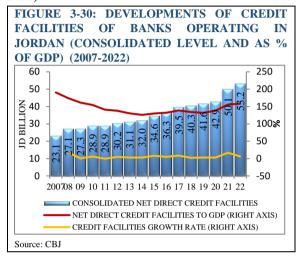
Assets of branches in Jordan accounted for 59.9% of consolidated total assets at the end of 2022, compared to 59.1% at the end of 2021.



The consolidated assets of the banking sector relative to GDP ratio were on a continuous decline during the period (2007-2019), it declined from 400% in 2007 to around 260.7% at the end of 2019. Afterwards, it increased to reach 279.7% and 304% in 2020 and 2021, respectively, as assets grew significantly higher than the GDP which was influenced by the repercussions of COVID-19 pandemic. However, it declined slightly at the end of 2022 to reach 300.3% of GDP amid the gradual recovery from the repercussions of COVID-19 pandemic as well as the GDP growth in 2022.

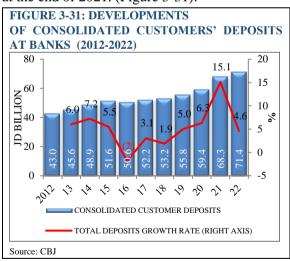
### 3.1.7 CREDIT FACILITIES

The net balance of consolidated credit facilities of the banking sector grew by 6.3% to reach JD 53.2 billion at the end of 2022, compared to JD 50.1 billion at the end of 2021 (a growth of 16.7%). The consolidated credit facilities as percent of GDP reached to 158% at the end of 2022, compared to 155.8% at the end of 2021. (Figure 3-30).



#### 3.1.8 DEPOSITS

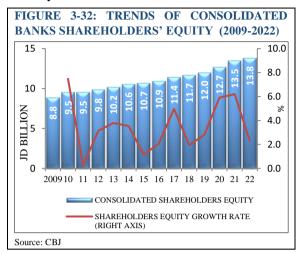
Consolidated customers' deposits increased to JD 71.4 billion at the end of 2022, growing by 4.6% compared to JD 68.3 billion (a growth of 15.1%) at the end of 2021. (Figure 3-31).



### 3.1.9 SHAREHOLDERS' EQUITY

The consolidated balance of shareholders' equity for banks totaled JD 13.8 billion at the end of 2022, compared to JD 13.5 billion at the end of 2021. It is worth mentioning that shareholders' equity was trending upward since 2009 (Figure 3-

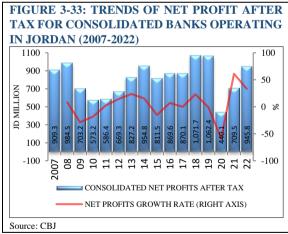
32), which enhances banks' solvency and resilience to withstand risks, and strengthens the stability of the financial sector.



### 3.1.10 NET PROFIT AFTER TAX, ROA, AND ROE

#### 3.1.10.1 NET PROFIT AFTER TAX

Consolidated banks' net profit after tax recorded a substantial increase at the end of 2022, to reach JD 945.8 million, compared to JD 709.5 million at the end of 2021, a growth of 33.3%. This is due to the gradual recovery from the repercussions of COVID-19 pandemic. (Figure 3-33).

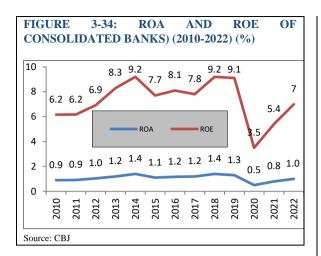


#### 3.1.10.2 ROA

The ROA of consolidated banks increased to stand at 1% as of end 2022, compared to 0.8% at the end of 2021. (Figure 3-34).

#### 3.1.10.3 ROE

The ROE of consolidated banks increased at the end of 2022 to reach 7%, compared to 5.4% at the end of 2021. (Figure 3-34).



#### FINANCIAL STABILITY INDEX

#### 3.1.11 INTRODUCTION

As mentioned in previous financial stability reports, the CBJ in 2017 introduced Jordan Financial Stability Index (JFSI) according to countries practices in designing similar indices; countries use different approaches in terms of variables, statistical methods, weights, and other factors. Therefore, the JFSI was developed according to international best practices thereon, yet it was tailored to fit the features of the Jordanian economic and financial system.

The JFSI is a composite of three sub-indices; each index represents a key element of the Jordanian financial system, namely: the banking sector index which constitutes of ten variables, the macroeconomics index which includes seven variables, and the capital market index which consists of two variables. These 19 sub-indices were calculated and analyzed by using historical data for the period (2007-2022).

#### 3.1.12 THE METHODOLOGY

The methodology used to develop the JFSI is one of the most widely used by countries<sup>1</sup> calculating the same index. The JFSI was developed based on international best practices thereupon, and tailored to the features of the financial sector in Jordan, which is dominated by the banking sector. Accordingly, more than half of the indices used to calculate the composite JFSI refer to the banking sector indicators. A synopsis of the

methodology used to calculate the JFSI is set out below.

#### Data Normalization:

The re-scaling was used for sub-indices, by subtracting the minimum value of the sub-index from the value of the index and then divide the output by the range of the subindex according to the formula (1) below.

ording to the formula (1) below.
$$di = \frac{Ai - min}{Max - min}....(1)$$

Where min<sup>2</sup> and Max represent the minimum and maximum values of the di sub-index.

#### Calculation of sub-indices:

The sub-index is calculated by using the weighted average of normalized indices, and determining the weights based on the relative importance of indices. Several methods are available for selecting the weights of indices; however, the best-used one is to rely on the professionals and experts' opinions, as weights are estimated according to the significance of the sub-index and its impact on the financial stability in the Kingdom. Therefore, the following weights were allocated to the banking sector indices:

Variable	Weight
CAR	28.3%
Quality of Assets	28.3%
Liquidity	28.3%
Profitability	15%
Total	100%

The sub-indices of the banking sector, macroeconomics, and the capital market were calculated using the following formulas:

Banking Sector Index (weighted average of subindices):

$$Bsi = \frac{\sum_{1}^{10} W_b d_b}{10}....(2)$$

**Macroeconomics Index:** 

$$Esi = \frac{\sum_{1}^{7} d_E}{7}....(3)$$

Capital Market Index:

$$Msi = \frac{\sum_{1}^{2} d_{M}}{2}....(4)$$

Calculating the Composite Financial Stability Index: Using the weighted average of the three sub-indices, the JFSI is calculated using the following formula: JFSI = ((10/19) \*Bsi) + ((7/19) \*Esi) + ((2/19) \*Msi)). (5)

The JFSI's value ranges from zero to 1.

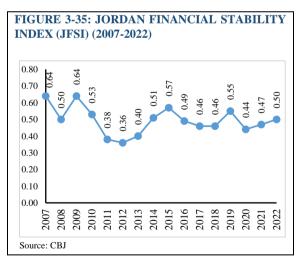
#### 3.1.13 THE JFSI RESULTS

The JFSI value ranges from zero to one, the closer the value to one, the greater the stability of the financial system. The JFSI value was 0.64 at the end of 2007, and dropped to 0.5 by the end of 2008 due to the global financial crisis. It increased to 0.64 at the end of 2009 to fall again during the period (2010-2012) with the lowest value recorded at the end of 2012 of 0.36,

<sup>&</sup>lt;sup>1</sup> Banking Stability Index: A Cross-Country Study.

<sup>&</sup>lt;sup>2</sup> The minimum value is determined according to the minimum values stipulated in respective regulations in force rather than the minimum values in the study.

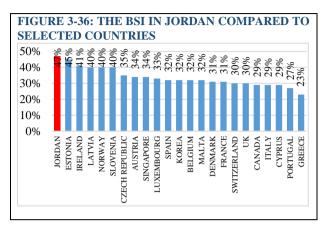
influenced by the Arab Spring and the refugees' crisis, as well as the challenging economic conditions that hit the Kingdom, especially in 2012. The JFSI started to recover and reached 0.57 by the end of 2015, and declined during the years (2016-2018) to reach 0.46 in 2018. However, in 2019, the JFSI improved compared to the period  $(2016-2018^3)$  to record 0.55, supported by improved liquidity ratios, CARs, and the financial leverage ratio of banks operating in Jordan, as well as the increase in the CBJ's foreign reserves and gold. In 2020, the COVID-19 pandemic substantially affected the economic and financial conditions in the Kingdom; the JFSI declined to reach 0.44. However, in 2021, it increased to 0.47, and increased further to reach 0.5 in 2022, reflecting the financial system stability; this is due to the increase of the Msi from (0.02) in 2021 to (0.47) 2022, supported by the remarkable improvement in the performance of corporates listed in ASE, which bounced back after the sharp deterioration of their businesses due to the ramifications of COVID-19 pandemic, (Figure 3-35).



As compared to 23 countries using similar index, Jordan ranked first in terms of the BSI, as indicated in (Figure 3-36). This ensures that the banking sector in Jordan is highly stable, owing

<sup>3</sup> One of the main drawbacks of the FSI, which was acknowledged by most countries using such index, is its high sensitivity to any changes in the values of the sub-indices included in the calculation, regardless how small these changes are.

to the sound and robust financial indicators, as well as banks implementation of best corporate governance rules and international financial standards.



## DEVELOPMENTS OF NON-BANKING FINANCIAL SECTOR (NON-BANKING FINANCIAL INSTITUTIONS)

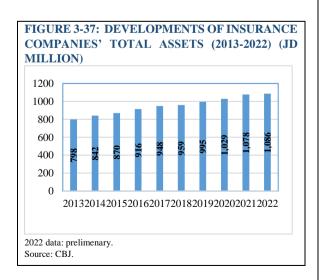
#### 3.1.14 THE INSURANCE SECTOR

The insurance sector is a vital component of the financial sector. It protects individuals and properties against risks, in addition to attracting and investing national savings to support economic development. The contribution of insurance premiums to GDP reached around 2.08% in 2022. Given the importance of this sector in strengthening financial stability, the Cabinet on 24/02/2016 entrusted the insurance sector supervision to the CBJ, in consistency with international practices of supervisory authorities. To this end, the CBJ in cooperation with the Ministry of Industry, Trade, and Supply drafted the insurance regulatory law of 2019, which was passed by the Parliament in March 2020. The Insurance Regulatory Law No. (12) of 2021 was enacted by a Royal decree, and published in the Gazette on 16/05/2021. The provisions of this Law apply to insurance companies, reinsurance companies, insurance services providers, and all relevant parties involved in regulating and supervising the insurance sector. This is to protect the rights of the insured and beneficiaries, as well

as to ensure the soundness of the financial positions of insurance and reinsurance companies. The Law reflects the CBJ's vision and endeavor to strengthen the regulatory and supervisory frameworks of the insurance business, in accordance with international standards and best practices, which are in the context of the CBJ's dedication to enhance the stability and the soundness of the insurance sector to enable achieving its envisioned role in the economy.

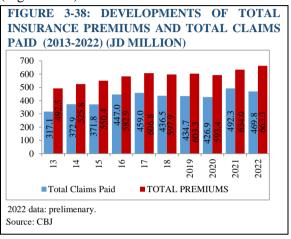
The Insurance sector consists of (22) licensed insurance companies operating in Jordan; one company is licensed to provide life insurance; (6) companies are licensed to practice general insurance business; while (15) companies are licensed to carry out both types of insurance (general insurance and life insurance), two of which are providing Takaful insurance, and are licensed to practice life and general insurance. The insurance sector consists of (792) insurance services providers, including insurance agents and brokers, reinsurance brokers, loss settlement specialists, inspectors, authorized delegates to subscribe, actuarists, insurance consultants, insurance business management companies, banks licensed to practice insurance business, and reinsurance brokers residing abroad.

Total assets of insurance companies in the Kingdom totaled JD 1,085.7 million at the end of 2022, compared to JD 1,096.4 million at the end of 2021; growing by 1% (Figure 3-37).

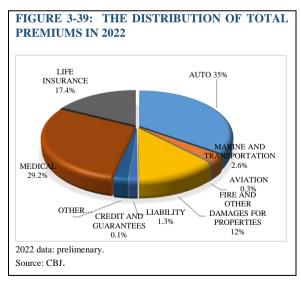


### 3.1.14.1 THE INSURANCE SECTOR MAIN INDICATORS

Total insurance premiums increased by 3.6% in 2022, to reach JD 663.3 million, compared to JD 639.9 million in 2021. In addition, total claims paid increased by 6.1% to reach JD 469.8 million in 2022, compared to JD 498.3 million in 2021 (Figure 3-38).



The insurance premiums subscriptions in 2022, were mainly in auto insurance, which reached to around JD 245 million, accounting for 35% of total premiums, followed by medical insurance premiums which totaled JD 204.2 million, accounting for 29.2%. Figure (3-39) displays the distribution of total premiums subscribed in 2022.



The financial results of the insurance companies revealed that total investments increased to JD 642 million in 2022 from JD 629.7 million in 2021. Meanwhile, paid in capital declined from

JD 260.7 million in 2021, to JD 241.4 million as of end 2022. The net profit after tax of insurance companies stood at JD 21 million in 2022, compared to JD 11.8 million in 2021.

TABLE 3-1: FINANCIAL RESULTS OF INSURANCE COMPANIES (2015-2022) (JD MILLION) 2015 2016 2017 2018 2019 2020 2021 2022\* Total 533 6 543 5 563 3 569 577 590.4 629.7 642 Investments 1.029 Total assets 869.7 915.6 948 958 996.2 1,096.4 1,085.7 Shareholders 330.7 343.7 335 319 327.3 335.5 353 343.3 equity Total written premiums in 582.9 605.8 615.3 593.4 Jordan Total claims paid 371.8 447 459 478.8 490.3 426.9 498.3 469.8 in Jordan Paid in capital 269 267 265 266.5 271.3 272.8 260.7 241.4 2022\* preliminary data; Arab Assurers insurance and Philadelphia insurance and

are not included

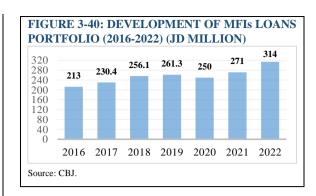
### 3.1.15 NON-BANKING FINANCIAL INSTITUTIONS

Non-banking financial institutions are essential to the economy, as they provide credit to unbanked vulnerable segments. The following section elaborates on these institutions.

### 3.1.15.1 MICROFINANCE SECTOR

The microfinance sector in Jordan started its business in 1994, and expanded rapidly during the last years. Microfinance loans portfolio recorded a steady growth rate during the period (2017-2019) that averaged 7.1%. In 2020, it declined by 4.3%, due to the ramifications of COVID-19 pandemic, yet it increased again by 8.4% in 2021, and 15.9% in 2022. (Figure 3-40).

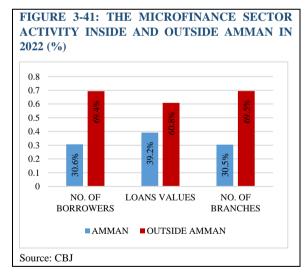
Total MFIs loans portfolio reached to JD 314 million at the end of 2022, compared to around JD 271 million at the end of 2021. The number of borrowers increased by 7.3% to reach 441 thousand borrowers at the end of 2022, compared to 411 thousand borrowers at the end of 2021. In addition, the average value of loans increased from JD 847 at the end of 2021, to JD 913 at the end of 2022, an increase of 7.8%.



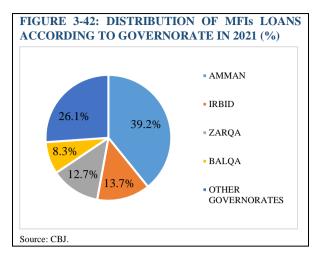
The MFIs typically target women; to empower them and enhance their contribution to the economy and society. However, the MFIs services also focus on borrowers outside Amman to achieve economic and social development throughout the Kingdom as follows:

### 3.1.15.1.1 THE MICROFINANCE SECTOR ACTIVITIES OUTSIDE AMMAN

The microfinance sector activities are concentrated outside Amman, as 69.4% of borrowers, 60.8% of total loans value, and 69.5% of MFIs branches are located outside Amman (figure 3-41).



The distribution of MFIs Loans according to governorates in 2022 (figure 3-42), revealed that Amman received 39.2% of these loans, followed by Irbid 13.7%, Zarqa 12.7%, Balqa 8.3%, while other governorates received 26.1% of total loans.



3.1.15.1.2 THE MICROFINANCE SECTOR MAIN INDICATORS (2020-2022)

TABLE 3-2: FINANCIAL		ATORS	OF
MICROFINANCE SECTOR (2020)	- 2022)		
Item	2020	2021	2022
Total assets	300	335	375
Equity	146	164	186
Net profit (loss) after tax	14	17	20
Return (after tax) on average assets	4.6%	5.4%	5.5%
Return (after tax) on average equity	10.2%	11%	11.2%
Bad debt ratio to total portfolio	2.4%	3.3%	2.8%
Portfolio At Risk (PAR)/ over 30	5.7%	5.3%	5.1%
days			
Liquidity ratio	2.3	2.3	2.3
Source: CBJ			

Table 3-2 indicates that most financial indicators of the microfinance sector in Jordan grew and improved during the years (2020-2022) due to the gradual recovery of the sector as well as the Jordanian economy from the repercussions of the COVID-19 pandemic. The sector's assets and equity increased to reach JD 375 million and JD 186 million, respectively, at the end of 2022. The sector's profits increased from JD 14 million in 2020 to reach JD 17 million in 2021, and JD 20 million in 2022, which led the sector's returns to increase. In addition, the percentage of bad debts decreased to 2.8% at the end of 2022, compared to 3.3% at the end of 2021, and the percentage of the portfolio at risk (PAR) decreased from 5.7% at the end of 2020 to 5.1% at the end of 2022.

However, the liquidity ratio remained stable during the period.

### 3.1.15.2 FINANCIAL LEASING COMPANIES<sup>4</sup>

Total assets of financial leasing companies which are subsidiaries of banks in Jordan reached to JD 682.1 million at the end of 2022, compared to JD 620.6 million at the end of 2021; an increase of 10%. Furthermore, shareholders' equity increased from JD 322.3 million in 2021, to JD 340.9 million in 2022. The financial results of financial leasing companies, indicated that net profits after tax increased by 6.9% to reach JD 20.2 million in 2022, compared to JD 18.9 million in 2021. Subsequently, the ROE increased from 5.86% in 2021, to 5.93% in 2022, however, the ROA declined from 3.04% in 2021, to 2.97% in 2022. (Table 3-3).

TABLE 3-3: DEVELOPMENTS OF FINANCIAL LEASING COMPANIES (2016- 2022) (JD MILLION)

Item	2016	2017	2018	2019	2020	2021	2022
Revenues	32.3	37.7	43.3	53.2	51.5	47.2	50.4
Paid-In Capital	121	142.5	175	210	212.5	195	197
Total Assets	401.6	499.7	582	604.6	649.4	620.6	682.1
Shareholders' Equity	227.8	251.8	309	323	333	322.3	340.9
Profit After tax	17.3	17.6	17.7	21.8	13.5	18.9	20.2
ROE (%)	8%	7.3%	6.8%	6.9%	4.1%	5.90%	5.93%
ROA (%)	4.8%	3.9%	3.5%	3.7%	2.1%	3.04%	2.97%

Source: annual statements of financial position for financial leasing companies (subsidiaries of banks).

### 3.1.15.3 THE EXCHANGE SECTOR

The number of licensed exchange companies in the Kingdom stood at 306; 114 headquarters and 192 branches located in governorates all over Jordan (Table 3-4).

<sup>&</sup>lt;sup>4</sup> The data covers (8) financial leasing companies, which are subsidiaries of banks, and dominate the financial leasing activity in Jordan. However, the financial leasing transactions provided by Islamic banks are not included in calculations.

ľ	TABLE 3-4: NO. OF EXCHANGE COMPANIES A	AND
h	BRANCHES IN JORDAN	

No. of Companies	No. of Branches	Total	
67	122	189	
11	18	29	
6	23	29	
4	6	10	
26	23	49	
114	192	306	
	67 11 6 4 26	Companies         Branches           67         122           11         18           6         23           4         6           26         23	

In light of the developments in the exchange sector and the notable growth in its business during the last two decades, which made it one of the most vital sectors in the Kingdom, and to respond to economic updates and developments, the Money Exchange Business Law No. 44 of 2015 was enacted on 18/10/2015, which superseded the law No. 26 of 1992.

The Law constitutes the legislative framework that governs the exchange business in the Kingdom, through setting the conditions and requirements for licensing, merging, liquidation, and management of exchange companies, and the records and documents that must be retained by these companies, as well as validating the role of the chartered accountant in auditing the exchange companies' business, in terms of expanding the scope of the auditor according to best practices. The Law also contributed to establishing the legal basis for informing exchange companies about any decisions or instructions issued by the CBJ, and strengthened the CBJ's authority to enact the instructions of the acceptable ratios and limits for sound financial positions of the exchange companies, and the size of non-Jordanian workforce. The Law lays the legal basis for the formulation of an ad hoc committee dedicated to handle complaints submitted to the CBJ against the exchange companies' services.

The CBJ conducts on-site and off-site supervision on the exchange sector. The off-site supervision mainly involves examining and analyzing periodic statistical data and audited financial

statements of exchange companies, and provides appropriate recommendations thereon. However, the on-site supervision, which is carried out through on-site inspection visits, verifies the compliance of exchange companies with all relevant laws and regulations in force, which adds to the work of the external auditors of the exchange companies as stipulated in provisions of the Law.

As for the financial results of the exchange sector, total assets (business size) reached to JD 191 million in 2022, compared to JD 161.9 million in 2021. The ROA and return on capital increased in 2022 to reach 1.58% and 2.77% respectively, compared to 0.47%, and 0.85% in 2021. This remarkable increase in profits ratios of exchange companies is attributed to the increase in their profits after recovery from the implications of the COVID-19 pandemic on this sector and other economic sectors. (Table 3-5).

TABLE 3-4: LEADING INDICATORS OF THE **EXCHANGE SECTOR IN 2022** 

Encini (GE SECTOR II ( 2022						
Indicator	JD Million					
Total Business size	191					
Total Capital	108.7					
Total Financial guarantees offered by exchange companies	34.9					
Total Purchases of foreign currency	7,239.1					
Total Sales of foreign currency	7,249.4					
Return on capital	2.77%					
ROA	1.58%					

#### **SECURITY** 3.1.15.4 **SOCIAL** CORPORATION<sup>5</sup> (SSC)

The Social Security Corporation (SSC) plays a pivotal role in society; the social security umbrella covers 68,410 active firms, of which 59.4% are based inside Amman as indicated in the SSC annual report of 2022. The SSC umbrella is extended to cover 1.5 million insured persons working in more than 67 thousand active enterprises in the public and private sectors. The umbrella also expanded to cover the voluntary participation of Jordanians, which reached to 116

<sup>&</sup>lt;sup>5</sup> Despite the SSC not being considered as a nonbanking financial institution; financial stability reports in most countries include it with non-banking financial institutions, as they are essential to achieve financial stability through their diversified investments in financial and non-financial assets.

thousand subscribers, thanks to the SSC's efforts represented by issuing the regulations intended to cover freelancers on 29/8/2019, which entered into force on 1/1/2020.

In addition to its fundamental role in society, the SSC significantly contributes to achieving the financial stability through its massive investments portfolio diversified in financial and non-financial assets, as well as its effective lending to the government through treasury bills and bonds. The main features of the SSC are listed below:

- The SSC has a massive investment capacity with a long-term investment horizon, as it invests to raise funds for retirement claims of individuals at different ages, which enables the SSC to undertake investments at different maturities, and helps to diversify the risk premiums for various maturities. This policy is particularly important during financial crises when market suffers shortages of liquidity. The SSC's investments accounted for 41.6% of GDP at the end of 2022, compared to 38.4% at the end of 2021.
- The SSC carries out self-financing investments, as the subscribers' deductions constitute the source of funds rather than borrowings or deposits (such as banks). Therefore, the SSC is not exposed to high leverage ratio, nor risks of maturity mismatch between sources and uses of funds. These two factors led several international banks to fail during the last global financial crisis in 2008, which validates that the SCC is not a possible source of systemic risk in the financial system.
- Unlike deposits at banks, the deductions of workers and employers are retained for a long period, and cannot be withdrawn, thus, they are not exposed to liquidity runs.

The SSC's role during the COVID-19 crisis was crucial; the SSC assumed a clear and determined approach to respond to the crisis, which consisted of two pillars: the first represents the corporation's commitment towards its responsibilities as a cornerstone to provide the social protection for workers in the Kingdom,

while the second is the provision of liquidity to the private sector enterprises and assisting them to ward off the ramifications of the pandemic. The SSC also embarked several intervention programs enacted through defense orders and announcements thereof. These programs resulted in additional liquidity provided to the private sector amounted to JD 232 million as of today.

Building on the SSC's importance in stimulating investments, and in order to boost its funds, the Social Security Investment Fund (SSIF) was founded and started its business at the beginning of 2003. The SSIF assumes investing the SSC's funds, aiming to realize high and constant returns, preserving the real value of the SSC assets, as well as providing the sufficient liquidity to meet the SSC's obligations. The SSIF's assets reached to JD 13.8 billion at the end of 2022, compared to JD 12.3 billion at the end of 2021, increasing by 12%. In addition, the SSIF's income increased by JD 91.5 million, or 15.4% to reach JD 685 million at the end of 2022, compared to JD 593.5 million at the end of 2021. The SSIF's investment portfolios consist of seven major portfolios. (Table 3-6).

TABLE 3-6: DISTRIBUTION	OF T	THE SSIF
PORTFOLIOS (2021-2022) (JD MI	LLION)	
Investment Portfolios	2021	2022
Money Market Instruments Portfolio	1,558.4	1,807.5
Bonds portfolio	6,893.6	7,587.7
Loans portfolio	412.1	458.9
Equity portfolio	2,040.8	2,470.9
Real estate portfolio	748.2	792.3
Tourism portfolio	314.3	317.5
Other assets	373.8	342.1
Total	12,341.2	13,777
Source: SSIF		

The SSIF's investments are diversified in different economic aspects. The SSIF is the second largest buyer (after banks) of government treasury bills and bonds, and government-guaranteed bonds which are allocated to the money market instruments portfolio (mature in less than one year), and the bonds portfolio (mature in more than one year). Moreover, the SSIF loans portfolio consists of medium- and long-term loans including direct loans and syndicated loans. The equity portfolio consists of stocks of public companies listed in ASE, as well as the stocks of the strategic private placements

companies, according to the SSIF's investment policy. The real estate portfolio includes all real estate investments in lands, commercial buildings, and real estate development, while the tourism portfolio constitutes of all investments in the tourism sector. The allocation of the SSIF's investments among these portfolios aims to diversify the investments, and to reduce risks, according to specified investment considerations.

It is worth mentioning that the SSC is a strategic shareholder in the capital of several banks in Jordan. The total contribution of the SSC in Jordanian banks' capital approached JD 986.7 million at the end of 2022, accounting for 12.5% of the market value of banks' shares in Jordan of JD 7.9 billion (Table 3-7).

<b>TABLE</b>	<b>3-7:</b>	THE	SSC	CONTR	RIBUTIO	NS I	V
<b>JORDAN</b>	IIAN E	BANKS	<b>CAPIT</b>	TAL AS (	OF END 2	022 (JI	)
MILLIO	N) (%)	)					

NILLION) (70)	Ct:1t:	C1 (0/)
Bank	Contribution	Share (%)
	(JD Million)	
Jordan Kuwait Bank	52.1	21.04%
Jordan Commercial Bank	23.8	19.84%
Arab Bank PLC.	573.3	17.18%
Housing Bank for Trade &	177.3	15.42%
Finance		
Bank al Etihad	34.4	11.03%
Jordan Ahli Bank PLC	22	10.25%
Safwa Bank	18	9.38%
Cairo Amman Bank	20.8	8.17%
Capital Bank	46.2	7.19%
Jordan Islamic Bank	45.2	5.82%
Arab Jordan Investment Bank	7.8	4.08%
ABC Bank	1.8	2.05%
Bank of Jordan	0.1	0.01%
Total	986.7	12.5%
Source: SSIF	•	

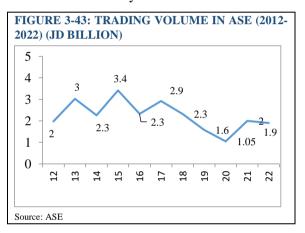
### 3.1.15.5 AMMAN STOCK EXCHANGE (ASE)

The ASE performance and market capitalization improved markedly in 2022. ASE was amongst the best three Arab stock exchanges in terms of the general index in 2022; the free float share price index ASE100 increased by 18.1% to reach 2,501.6 points as of end 2022, compared to 2,118.6 points at the end of 2021; which is the highest since 2009. In addition, the free float share price index ASE20 reached to 1,345.3 points at the end of 2022, compared to 1,074.4 points at the end of 2021, increasing by 25.2%.

The total return index ASETR increased by 33.1%. Meanwhile, market capitalization of listed shares increased by 16.2% in 2022, to reach JD 18 billion, accounting for 56% of GDP, thus the market capitalization peaked to its highest level since 2014.

The trading volume declined slightly by JD 59.9 million to reach JD 1,903.7 million in 2022 (figure 3-43), which is attributed to the following:

- 1. The decrease of the trading volume in the industrial sector by JD 48.5 million.
- 2. The decrease of the trading volume in the financial sector by JD 152.2 million.
- 3. The increase of the trading volume in the services sector by JD 140.8 million.



The number of shares traded declined by 382.6 million shares to reach 1,155.7 million shares, against 1,538.2 million shares traded in 2021. As for shares traded by sector, the financial sector accounted for 43.7% of the trading volume in 2022, followed by the industrial sector 23.4%, and the services sector 32.8%. (Table 3-8).

TAB	LE	3-8:	R	ELA'	<b>FIVE</b>	IN	<b>IPOF</b>	RTAN	ICE	OF
TRA	DIN	G VO	LUM	E BY	SEC	TOR	(201	3-202	2) (%	)

Sector	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Industrial	13.1	16.7	10.1	30.2	22.4	42.2	18.2	17.4	25.1	23.4	
Services	13.5	16.5	21.2	18.2	12.8	9.8	16.2	20	24.7	32.8	
Financial	73.4	66.8	68.7	51.6	64.8	48	65.6	62.6	50.2	43.7	
Source: A	Source: ASE										

With regard to the transactions of non-Jordanian investors in ASE, they purchased around JD 274.2 million shares in 2022, and sold JD 342.2 million shares (Table 3-9).

TABLE 3-8: PURCHASES AND SALES OF SHARES BY NON-JORDANIAN INVESTORS IN ASE (2015-2022) (JD MILLION)

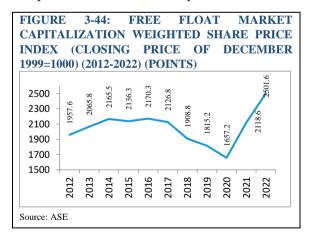
	2015	2016	2017	2018	2019	2020	2021	2022
Total Purchases	981.7	666.5	994.9	1231.8	528.7	96.8	220.2	274.2
Arabs	894.3	520.3	638.7	214.4	147.5	75.7	194.5	234.4
Foreigners	87.4	146.2	356.3	1,017.4	381.2	21.1	25.8	39.7
Total Selling	971.1	429.4	1329.2	747.3	414.6	164.4	281.1	342.2
Arabs	873.5	304.1	1177.6	177.1	374.8	94.1	186	263.2
Foreigners	97.6	125.3	151.6	570.2	39.8	70.3	95.1	79
Net Investment	10.6	237.1	-334.3	484.5	114.1	-67.5	-60.9	-68
Arabs	20.7	216.2	-538.9	37.3	227.3-	-18.4	8.5	-28.8
Foreigners	-10.1	20.9	204.7	447.2	341.4	-49.1	-69.3	-39.3
Source: ASE								

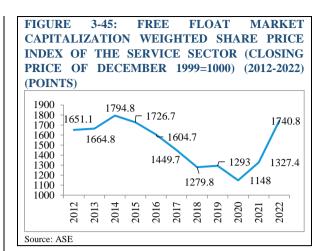
### 3.1.15.5.1 THE FREE FLOAT WEIGHTED SHARE PRICE INDEX

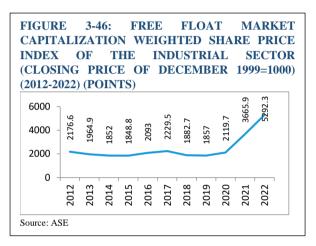
The free float weighted share price index (ASE100) increased to reach 2,501.6 points at the end of 2022, compared to 2,118.6 points at the end of 2021; increasing by 18.1%. The ASE20 increased to reach 1,345.3 points at the end of 2022, compared to 1,074.4 points at the end of 2021, increasing by 25.2%.

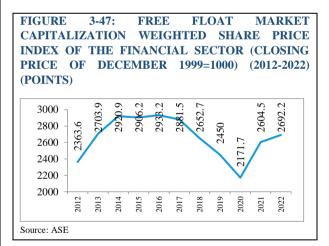
### 3.1.15.5.2 THE MARKET CAPITALIZATION WEIGHTED SHARE PRICE INDEX

The market capitalization weighted share price index increased by 725.1 points in 2022, compared to its level recorded in the previous year to reach 4,730.4 points, increasing by 18.1%. This increase is due to the increase in the indices of industrial companies, banks, services companies, and financial companies.









### 3.1.15.5.3 BANKS' EXPOSURE TO STOCK MARKETS RISKS

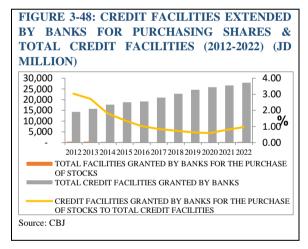
Capital markets are essential to stimulate the economy's impetus, as they attract foreign investments, promote national savings, and provide financing sources for economic projects, which ultimately serve the national economy. As capital markets are crucial, risks facing these markets captured an increasing attention,

especially after the global financial crisis of 2007, through monitoring stock prices bubbles and assessing risks in stock markets, as well as the exposure of banks to these risks.

Regarding the exposure of banks to stock market risks in Jordan, it could evolve from credit facilities extended by banks to finance the purchase of shares or through investments of banks in shares. Banks' exposure to these risks is analyzed below:

### 3.1.15.5.4 CREDIT FACILITIES EXTENDED BY BANKS FOR PURCHASING SHARES

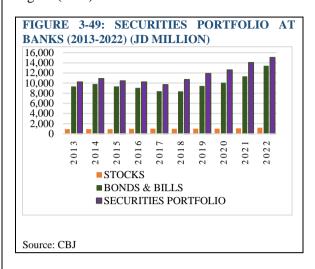
Credit facilities extended to finance the purchase of shares constitute a minimal percentage of total credit facilities extended by licensed banks. They reached to JD 466.2 million at the end of 2022, accounting for 1.4% of total credit facilities, compared to JD 346.8 million at the end of 2021, an increase of 34.4%. (Figure 3-48).



### 3.1.15.5.5 BANKS' INVESTMENTS IN SHARES

The securities portfolio of banks in Jordan reached around JD 15,071.8 million at the end of 2022, compared to JD 14,039.4 million at the end of 2021, increasing by 7.4%. Banks' investments in shares accounted for 8% of total investments in securities at the end of 2022, which is the same level recorded in 2021; they are much lower than investments in bonds (mostly government bonds) which capture the largest share of banks' investments in securities. Banks' investments in shares are relatively low due to the restrictions imposed by the Banking Law and the CBJ's

instructions on these investments, which are intended to lower market risk for banks and maintain the financial stability in the kingdom. Figure (3-49)



## CHAPTER FOUR: DEVELOPMENTS AND RISKS OF THE NON-FINANCIAL SECTOR

#### HOUSEHOLD SECTOR

### 4.1.1 EXPOSURE OF BANKS TO THE HOUSEHOLD SECTOR

In the context of the CBJ's monitoring of the household indebtedness to banks, the next section illustrates the major developments of household debt and related ratios thereto.

### 4.1.2 THE HOUSEHOLD INDEBTEDNESS TO BANKS

Table (4-1) illustrates the household indebtedness to banks during the period (2017-2022); it reached to JD 13 billion at the end of 2022, up from JD 11.8 billion at the end of 2021, increasing by 10%, which is higher than the growth registered in 2021 of 8.6%. A large part of the increase in 2021 and 2022 does not reflect an actual growth, rather, it resulted from banks postponement of loans repayments due on stressed clients impacted by the COVID-19 pandemic, or postponements on the occasions of Eid al-Fitr and Eid al-Adha.

TABLE 4-1: HOUSEHOLD INDEBTEDNESS TO BANKS (2017-2022) (JD MILLION)

Indebtedne ss	2017	2018	2019	2020	2021	2022
The Banking Sector (JD Million)	9,452	9,800	10,169	10,903	11,840	13,027
Growth (YOY) (%)	8.2	3.7	3.7	7.2	8.6	10

Table (4-2) illustrates the household indebtedness according to loan type during the period (2017-2022):

TABLE 4-2: HOUSEHOLD INDEBTEDNESS TO BANKS (2017-2022) (JD MILLION)

E111 (112 (2011 2012) (02 1/1122101()							
Loan Type	2017	2018	2019	2020	2021	2022	
Residential Loans	4170	4288	4277	4479	4722	5012	
Personal Loans	3129	3199	3523	3476	4163	4517	
Auto Loans	1178	1221	1232	1311	1408	1618	
Credit Cards	198	225	242	256	304	417	
Consumptio n Loans	550	648	671	885	1019	1223	

Loans	for	8	7	9	10	10	13
other Total		9,452	9,800	215 10,169	216 10,903	214 11,840	227 13,027

The number of household loans provided by banks, reached to 854 thousand loans at the end of 2022, compared to 884 thousand loans at the end of 2021, declining by 30 thousand loans, (3.4%).

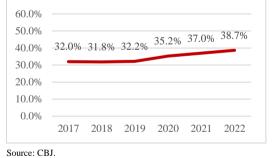
The credit cards provided from banks to households reached to 396 thousand at the end of 2022, compared to 336 thousand at the end of 2021, increasing by 60 thousand credit cards (17.8%).

It is noteworthy, that male borrowers accounted for 79.4% of total loans extended to households, while the female borrowers accounted for 20.6% of total household loans.

### 4.1.3 THE RATIO OF CREDIT FACILITIES EXTENDED TO HOUSEHOLDS TO GDP

The figure below indicates that the ratio of credit facilities extended to households relative to GDP started to increase since 2019, to reach 38.7% at the end of 2022. This is due to the growth of credit facilities extended to households at higher rates than the GDP.





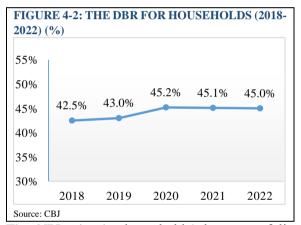
### 4.1.4 HOUSEHOLD DEBT BURDEN RATIO

The Debt Burden Ratio (DBR) for households, which is measured by the monthly installments and interest payments paid by borrowers relative to their regular monthly income, is one of the key ratios to measure the risks of household indebtedness for banks and for the individuals themselves. High DBR imposes negative effects on the financial and economic stability, as it

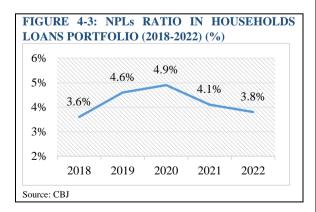
dampens individuals' capability to repay their loans, which increases default rates, as well as individuals' ability to spend and consume, which adversely affects economic growth.

Figure (4-2) illustrates the DBR for households in Jordan during the period (2018-2022). The DBR declined slightly to reach 45% at the end of 2022, compared to 45.1% at the end of 2021, and 45.2% as of end 2020. Despite it is slightly higher than the 42.5% and 43%, recorded in 2018 and 2019, respectively, it is still acceptable according to international standards, as the average DBR in most countries ranges between (40%-50%).

The actual average DBR for households is less than 50% for 13 banks, while it exceeds 50% in three banks.

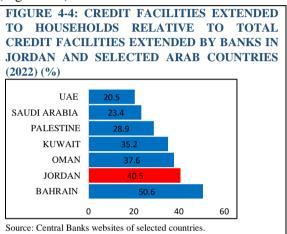


The NPLs in the households' loans portfolio declined from 4.9% at the end of 2020, to record 4.1% as of end 2021, and 3.8% at the end of 2022, which is a positive sign strengthening the financial stability in the Kingdom (Figure 4-3).



### 4.1.5 HOUSEHOLD INDEBTEDNESS TO BANKS IN SELECTED ARAB COUNTRIES

As the data are limited, the household indebtedness to banks in selected Arab countries were estimated by using the ratio of facilities extended to households relative to the total facilities extended by banks. In 2022, Jordan recorded 40.5% ranking second among selected Arab countries in terms of this ratio following Bahrain; the ratio in Jordan is higher than Oman, Kuwait, Palestine, Saudi Arabia, and UAE, (Figure 4-4).



### 4.1.6 SUMMARY

The DBR figures of the households borrowing from banks during the last five years (2018-2022), indicate that this ratio declined slightly at the end of 2022 to reach 45%, compared to 45.1% at the end of 2021, yet it is slightly higher than its level in 2018 and 2019. The average DBR ratio in Jordan falls within the international acceptable limits, which range between (40% -50%), which implies that the risks of household indebtedness for banks and the individuals themselves are normal and acceptable compared to other countries. Nevertheless, banks with household DBR exceeding 50% should reconsider bringing this ratio down to mitigate the risks arising from the continuous increase in households' indebtedness. However, the NPLs in households' loans portfolio continued to decline, which reflects positively on the soundness of the banking sector in the Kingdom.

#### NON-FINANCIAL COMPANIES SECTOR

#### 4.1.7 INTRODUCTION

The corporate sector in Jordan consists of nonbanking financial companies and non-financial companies<sup>1</sup>. The non-banking financial companies sector consists of the insurance companies, securities companies, MFIs, financial leasing companies, and other companies providing diversified financial services. However, the non-financial companies listed in ASE sector includes the industrial, services, and real estate sectors, which are overseen by the Ministry of Industry, Trade, and Supply. In 2022, total assets of non-financial companies amounted to JD 12,175.4 million, compared to JD 10,495.4 million at the end of 2021, increasing by 16%.

The following section elaborates on the developments of the non-financial companies (industrial, services, and real estate). According to the ASE's annual report, the listed companies in ASE reached to 170 at the end of 2022, compared to 172 companies at the end of 2021. With regard to the evolution and risks of the financial companies, they were detailed in chapter three.

### 4.1.8 THE OWNERSHIP STRUCTURE OF NON-FINANCIAL COMPANIES

According to the Securities Depository Center data, the non-Jordanian ownership (Arabs and foreigners) in non-financial industrial and service companies reached to 33.8% and 15.7%, respectively, at the end of 2022 (in the form of shares, bonds, and subscription rights), compared to 34% and 17.1%, respectively, at the end of 2021. The non-Jordanian ownership in these companies broadly reflects investors' confidence in the Jordanian economy; these ownerships are stable contributions (Figure 4-1).

FIGURE 4-1: NON-JORDANIAN OWNERSHIP

With regard to sectoral non-Jordanian ownership in listed shareholding companies according to market capitalization, it reached to 53.8% for the industrial sector, and 20.6% for the service sector. (Figure 4-2).



### 4.1.9 ASSETS OF NON-FINANCIAL COMPANIES

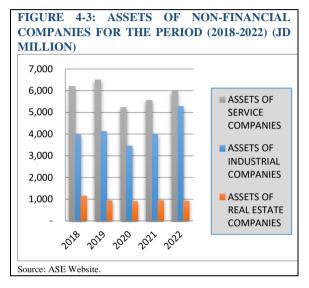
Assets of non-financial companies listed in ASE approximated JD 12,175.4 million at the end of 2022, compared to JD 10,495.4 million at the end of 2021, increasing by 16%, as the conditions of these companies were improved for the second year in a row after deteriorating in 2020 due to the adversities brought by the COVID-19 pandemic. The industrial companies' assets increased to

43

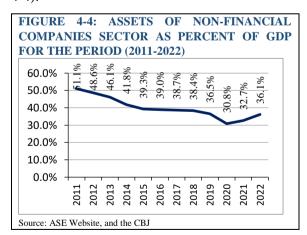
<sup>(</sup>ARABS **FOREIGNERS**) IN AND FINANCIAL COMPANIES ACCORDING TO NO. OF SECURITIES FOR THE PERIOD (2004-2022) 60% 50% 40% 30% 20% 10% ∩% 2008 2010 2010 2011 2013 2015 2016 2018 2018 2020 SERVICE COMPANIES INDUSTRIAL COMPANIES Source: Website of Securities Depository Center.

<sup>&</sup>lt;sup>1</sup> Based on the data of non-financial companies listed in ASE for 2022, as data of non-financial companies not listed in ASE are not available (noting that some data for previous years were changed from the source).

reach JD 5,285.2 million at the end of 2022, compared with JD 3,998.9 million at the end of 2021, increasing by 32.2%. Furthermore, the assets of service companies increased by 7.6% from JD 5,551.2 million at the end of 2021, to JD 5,971.2 million at the end of 2022, while assets of the real estate companies declined by 2.8% to reach JD 918.9 million at the end of 2022, compared to JD 945.2 million at the end of 2021. (Figure 4-3).



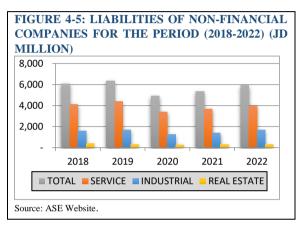
The assets of non-financial companies relative to GDP reached to 36.1% at the end of 2022, compared to 32.7% at the end of 2021; however, they recorded 51.1% at the end of 2011. (Figure 4-4).



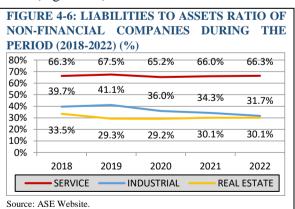
### 4.1.10 LIABILITIES OF NON- FINANCIAL COMPANIES

Liabilities of non-financial companies reached to JD 5,914.9 million at the end of 2022, compared to JD 5,319.5 million at the end of 2021, an

increase of 11.2%. Liabilities of the service companies reached approximately JD 3,961.5 million at the end of 2022, compared to JD 3,664.8 million at the end of 2021. However, liabilities of the industrial companies reached to JD 1,676.6 million at the end of 2022, compared to JD 1,370.2 million at the end of 2021. As for the liabilities of real estate companies, they reached to JD 276.9 million at the end of 2022, compared to JD 284.4 million at the end of 2021 (Figure 4-5).



Furthermore, the liabilities to assets ratio increased slightly for the service companies at the end of 2022, to reach 66.3%, compared to 66% at the end of 2021. However, the ratio for industrial companies declined from 34.3% at the end of 2021, to 31.7% at the end of 2022, while it remained steady for the real estate companies at 30.1% at the end of 2021 as well as the end of 2022. (Figure 4-6).

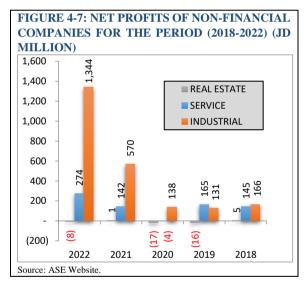


4.1.11 PROFITABILITY OF NON-FINANCIAL COMPANIES

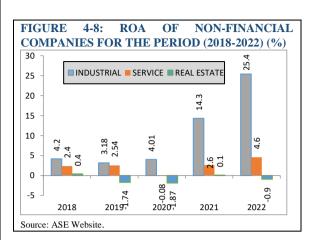
Net profits of non-financial companies increased substantially to reach JD 1,609.7 million at the end of 2022, compared to JD 712.9 million at the

end of 2021, due to improving conditions of these companies, as they bounced back after deteriorating sharply due to the repercussions of the COVID-19 pandemic. This is mainly attributed to the increase of industrial companies (the industrial sector) profits by 135.7% to reach JD 1,344.2 million at the end of 2022, compared to JD 570.2 million in 2021, owing to the increase in the profits of the extractive industries companies, in especially the phosphate and potash companies which profits were increased in 2022 by 113% and 177%, respectively, compared to their levels in 2021.

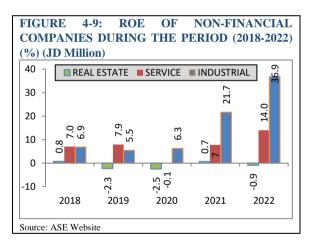
In addition, the profits of the service companies (the service sector) increased to reach JD 273.9 million in 2022, compared to JD 142 million at the end of 2021. However, the listed real estate companies recorded losses of JD 8.4 million at the end of 2022, compared to a small profit of JD 0.7 million at the end of 2021. (Figure 4-7).



The ROA of the industrial companies increased to 25.4% at the end of 2022, compared to 14.3% at the end of 2021, while it increased for the services companies form 2.6% at the end of 2021, to 4.6% at the end of 2022. However, the ROA of the real estate companies declined from 0.1% at the end of 2021, to reach -0.9% at the end of 2022. (Figure 4-8).

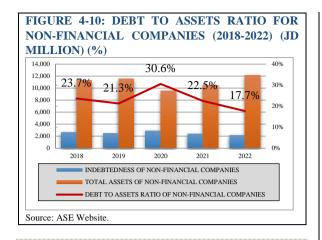


Likewise, the ROE of the industrial companies increased from 21.7% at the end of 2021, to 36.9% at the end of 2022, while it increased for the service companies from 7.8% at the end of 2021, to reach 14.0% at the end of 2022. Meanwhile, it declined for the real estate companies from 0.7% at the end of 2021, to reach -0.9% at the end of 2022. (Figure 4-9).



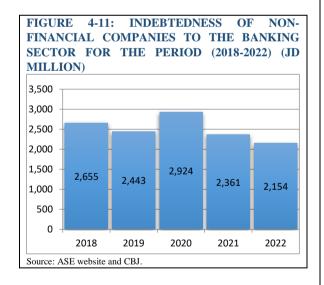
### 4.1.12 FINANCIAL LEVERAGE OF NON-FINANCIAL COMPANIES

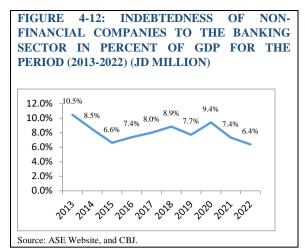
Most non-financial companies listed in ASE are still less dependent on borrowing. The debt to assets ratio of non-financial companies declined to around 17.7% at the end of 2022, compared to 22.5% at the end of 2021, due to the increase in the assets of these companies and the decline in their debt in 2022 as compared to 2021. (Figure 4-10).



### 4.1.13 INDEBTEDNESS OF NON-FINANCIAL COMPANIES TO THE BANKING SECTOR

The facilities extended by banks to non-financial companies listed in ASE reached to JD 2,153.8 million at the end of 2022, compared to JD 2,361.5 million at the end of 2021, a decrease of 9%, (Figure 4-11). The indebtedness of non-financial companies in percent of GDP increased consecutively during the period (2015-2020), yet it declined at the end of 2021 and 2022 to record 7.4%, and 6.4%, respectively. (Figure 4-12).





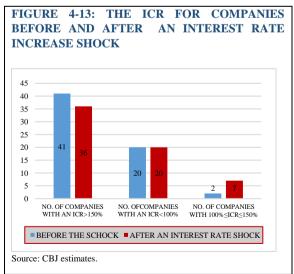
### 4.1.14 STRESS TESTING FOR NON-FINANCIAL COMPANIES

Stress testing was conducted for a number of nonfinancial public shareholding companies to assess the soundness of the corporate sector and its ability to withstand shocks, thus evaluating the companies' capability to repay their debts to banks and the financial sector in general. The Financial Stability Department in the CBJ built a model for the corporate sector stress testing, using the Interest Coverage Ratio (ICR) for the borrowing companies, which is a widely used and a significant gauge to assess the companies' ability to repay their debts. The ICR is the ratio of earnings before interest and tax (EBIT) to interest expenses paid on loans; it assesses the ability of borrowing companies to cover the interest expenses for loans using current period revenues. The debt is totally covered if the ICR exceeds (150%), however, if it falls within (100%-150%), the debt is at risk, whereas, the debt is uncovered if the ICR declines below 100%. The tests assume certain shocks in terms of increasing interest rates or declines in companies' profits due to the potential economic implications of the global geopolitical tensions in particular the Russian-Ukrainian crisis. The tests estimate the impact of each shock on the ICR; the after-shock ICR is used to assess the companies' ability to repay their debts to banks.

### 4.1.14.1 A SHOCK OF INCREASING INTEREST RATES

An interest rate hike will raise the interest expenses paid by borrowing companies to banks; provided that their revenues remain constant. This will negatively affect the companies' ability to pay their interest expenses to banks, thus the ICR for borrowing companies will decline as interest expenses will increase. If interest rates on loans provided to these companies increased by 200 basis points, the ICR will decline from 969% to 743%, which is adequately higher than the minimum acceptable limit of 150%. This validates that in general the effect of this shock will be relatively limited. It is worth mentioning that in 2022, the ICR before and after the shock improved significantly, which indicates that the companies' ability to repay their debt to banks was improved, due to high profits recorded by these companies in 2022.

On the individual level, (5) companies will have their ICRs below 150%, which will bring down the number of companies with a covered ICR from (41) to (36) companies. However, the number of companies with an ICR between (100%-150%) will increase from (2) to (7) companies, and the number of companies with an ICR below 100% will remain constant at (20) companies. (Figure 4-13).



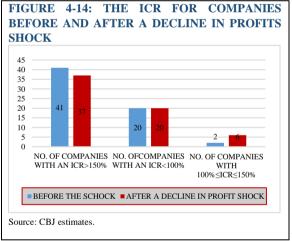
On the sectoral level, the average ICR will decrease from 158% to 132% for service companies, and from 1535% to 1124% for industrial companies. However, for real estate

companies, the already low ICR before the shock (below 100%) will decline from 17% to 14% after the shock.

### 4.1.14.2 A SHOCK OF A DECLINE IN PROFITS OF BORROWING COMPANIES

If the profits of borrowing companies declined by 25% due to probable economic implications of the global geopolitical tensions, especially the Russian-Ukrainian crisis, the ICR will decline from 969% to 702%; the effect of this shock will be higher than the interest rates hike shock, yet the impact in general will remain relatively limited, and the companies' debt is covered.

On the individual level, 4 companies will have their ICR below 150% thus the number of companies with an ICR below 100% will decline from (41) to (37) companies. The number of companies with an ICR between (100%-150%) will increase from (2) to (6) companies, while the number of companies with an ICR below 100% will remain at (20) companies. (Figure 4-14).



On the sectoral level, the average ICR will decrease from 158% to 60% for service companies, and from 1535% to 1147% for industrial companies. However, for real estate companies, the already low ICR before the shock (less than 100%) will decline from 17% to -31% after the shock.

#### **4.1.15 SUMMARY**

In 2021 and 2022, the performance of nonfinancial companies improved markedly propelled by the continued recovery of these companies from the implications of COVID-19 pandemic, and the noticeable improvement in several economic indicators in the Kingdom. The profits of non-financial companies increased significantly in 2022 to reach JD 1.6 billion, compared to JD 712.9 million in 2021.

In a recent ASE report on the profits of listed public shareholding companies (financial and non-financial) for 2022 listed, they recorded unprecedented profits in estimated at JD 2,421.9 million, compared to JD 1,305.9 million in 2021, increasing by 85.5%. This is primarily due to the increase in net profits of the industrial companies' sector as a result of the increase in the prices of materials produced by the extractive industries sector globally, such as phosphate and potash. However, several challenges remain for the corporate sector and the national economy in general, especially those related to the increase in energy and basic commodities prices, due to the supply chains disruptions after the COVID-19 pandemic as well as the ramifications of the Russian-Ukrainian crisis.

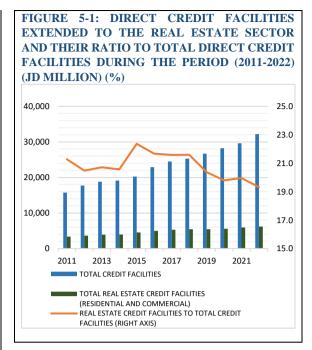
CHAPTER FIVE: THE EXPOSURE OF BANKS IN JORDAN TO RISKS OF THE REAL ESTATE MARKET AND THE REAL ESTATE PRICE INDEX

#### INTRODUCTION

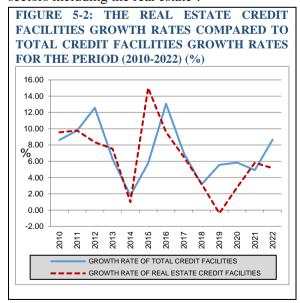
The risks of the real estate sector and the financing provided to it captured an increasing attention after the global financial crisis, which was triggered by a real estate bubble in US in 2007; it affected most economies worldwide, including Jordan.

During the last two decades, the real estate market in Jordan experienced successive spikes driven mainly by the political and economic conditions in the region, and the resulting abnormal population growth in Jordan, due to the influx of large numbers of Arabs from neighboring countries, especially Iraq and Syria. This chapter highlights the real estate sector in Jordan and the exposure of banks operating in Jordan to the risks thereto. Furthermore, this chapter also elaborates on the development of real estate prices in the Kingdom through analyzing the Real Estate Price Index (REPI); an indicator developed jointly by the CBJ and the Department of Lands and Survey.

Credit facilities extended to the real estate sector for residential and commercial purposes grew by 5.2% to reach JD 6.22 billion at the end of 2022, accounting for 19.3% of total credit facilities provided by banks, compared to JD 5.91 billion, which increased by 5.8% in 2021. It is noteworthy, that the average annual growth rate during the years 2011-2022 stood at 6.2% (Figure 5-1).

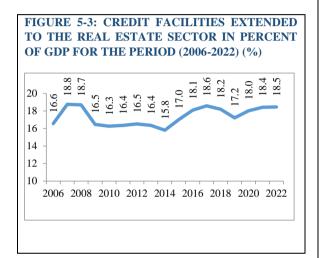


The average annual growth rate of facilities extended to the real estate sector during the period 2011-2022 was slightly lower than the average annual growth rate of total facilities; it recorded 6.2% compared to 7% growth in total credit facilities (Figure 5-2). In addition, the trading volume at the real estate market in Jordan increased by 17% in 2022 compared to its level in 2021, to reach approximately JD 5,850 million, due to improving economic conditions and ongoing gradual recovery from the repercussions of COVID-19 pandemic which affected most sectors including the real estate<sup>1</sup>.



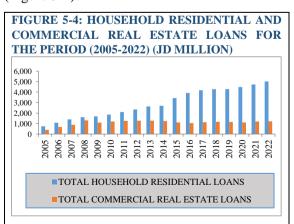
<sup>&</sup>lt;sup>1</sup> The real estate bulletin Jan/ 2023, the Department of Lands and Survey

The ratio of credit facilities extended to the real estate sector in percent of GDP reached 18.5% in 2022, compared to 18.4% in 2021. Figure (5-3) illustrates the evolution of this ratio during the period 2006-2022. The figure indicates that during the period 2006-2008, the ratio increased markedly to 18.7% at the end of 2008, and dropped to 15.8% at the end of 2014 due to the repercussions of the global financial crisis and the headwinds in the region then. Afterwards, this ratio kept fluctuating up and down to reach 18.5% at the end of 2022.



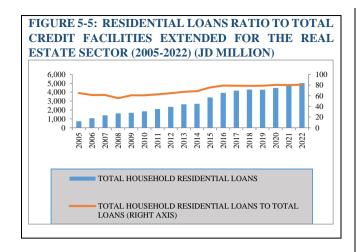
## COMPONENTS OF CREDIT FACILITIES EXTENDED TO THE REAL ESTATE SECTOR

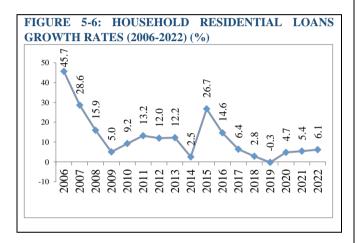
With regard to the components of credit facilities extended to the real estate sector, the household residential real estate loans accounted for 80.6% of these facilities at the end of 2022, while the commercial real estate loans accounted for 19.4% (Figure 5-4).



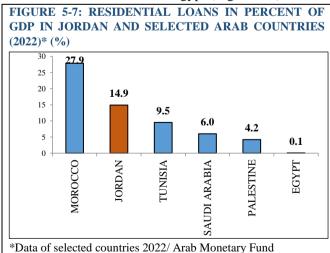
#### 5.1.1 HOUSEHOLD RESIDENTIAL LOANS

Total household real estate residential loans extended by banks grew by 6.1% to reach JD 5,011.7 million at the end of 2022, compared to JD 4,721.6 million at the end of 2021, this growth is partially explained by the postponement of loans repayments due on the occasions of Eid al-Fitr and Eid al-Adha. Historically, these loans grew significantly during the pre-global financial crisis period of (2006-2008), due to the high demand for real estates, especially by non-Jordanians; the average growth rate of residential loans reached to 30%. Thereafter, during the period (2009-2010), the growth pace started to slow down due to the ramifications of the global financial crisis, in tandem with uncertainty conditions, as well as banks reluctance to provide real estate loans. The growth of residential loans bounced back during the period (2011-2015) as the impacts of the global financial crisis have abated, market conditions improved, and the demand for real estate increased due to the influx of Arab refugees, especially from Syria. However, during the period (2016-2019) the growth of residential loans was gradually slowing down due to the geopolitical developments in the region, and the increase of uncertainty and its implications on the economic sectors in the Kingdom, in particular the real estate sector. However, the growth of residential loans improved during the period (2020-2022), which is partially explained by the postponement of installments of loans due on stressed individuals impacted bv COVID-19 pandemic, postponements on Ramadan and the Occasions of Eid. (Figure 5-5) and (Figure 5-6).





The household residential loans in percent of GDP stood at 14.9% at the end of 2022, compared to 14.7% at the end of 2021. Jordan ranked second among selected Arab countries in terms of this ratio; Jordan is much lower than Morocco, yet it is higher than Tunisia, Saudi Arabia, Palestine, and Egypt (Figure 5-7).

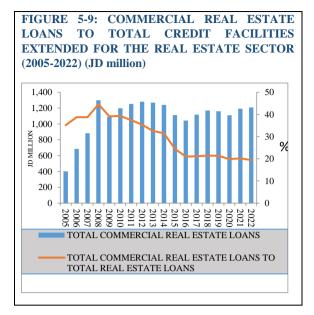


It is noteworthy that the number of apartments sold in 2022 approached 38,279, compared to 41,030 apartments in 2021, declining by 6.7%.

### 5.1.2 COMMERCIAL REAL ESTATE LOANS

Total commercial real estate loans extended by banks increased by 1.2%, to reach JD 1,208 million at the end of 2022 (19.4% of total credit facilities for the real estate sector), compared to JD 1,193.1 million at the end of 2021. The commercial real estate loans were growing rapidly during the pre-crisis period (2005-2008); they increased from JD 400 million to JD 1,300 million, with an annual average growth rate of 49%. Afterwards, they declined significantly in 2009 to reach around JD 1,089 million, due to the tremendous adverse effect of the global financial crisis on the commercial real estates. These loans were slowing down during the period (2010-2012), and declined further during the period (2013-2016), however, these loans increased again in 2017, and 2018, yet they decreased in 2019 and 2020 due to the implications of COVID-19 pandemic, and they bounced back in 2021 and 2022 as illustrated in figures (5-8) and (5-9).

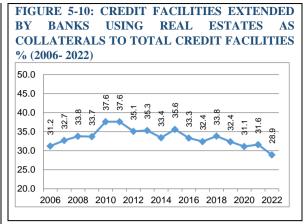




## DIRECT CREDIT FACILITIES EXTENDED USING REAL EASTATES AS COLLATERALS

Banks are directly exposed to the risks of the real estate market, as they provide credit facilities to finance the purchase or construction of residential or commercial real estates; which are generally used as collaterals for these loans. Another channel for banks' exposure to the real estate market risks is when real estates are used as collaterals to secure different credit facilities extended by banks. Accordingly, any decline in the prices of real estates will affect the value of collaterals, and dampen banks' ability to recover their funds if the borrower defaults and cannot repay. Total direct credit facilities extended by banks for purposes other than mortgages using real estate as collaterals amounted to JD 3,154.9 million at the end of 2022, compared to JD 3.336.6 million in 2021.

Furthermore, total direct credit facilities extended using real estates as collaterals for residential, commercial, and other purposes reached around JD 9,295.1 million, accounting for 28.9% of total facilities at the end of 2022, compared to 31.6% in 2021. (Figure 5-10).



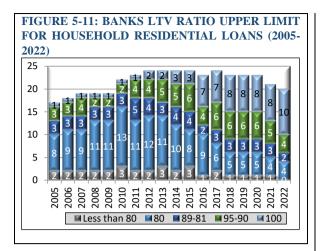
# THE LTV RATIO UPPER LIMIT FOR HOUSEHOLD RESIDENTIAL AND COMMERCIAL REAL ESTATE LOANS IN JORDAN

The loan to value of the mortgage (LTV) ratio is one of the most essential ratios and indicators that need to be monitored, to assess banks' exposure to the real estate market risks. The immense increase in this ratio may expose banks to high risks in case of real estate prices fall, thus deterring banks' ability to recover their funds in case of clients' default, as the value of real estates used as collaterals for these loans will drop.

In addition, if the real estate market signals for a price bubble, countries usually set limits on the LTV ratio to curb the real estate prices bubble, to reduce the probability of bankruptcy when house prices fall down, and to reduce losses by raising the value of collaterals, which enhances banks' ability to ward off these risks.

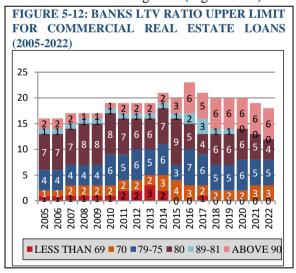
To analyze the LTV ratio in Jordan, the CBJ has compiled certain LTV data from banks in terms of the upper limits and the actual average.

Figure (5-11) illustrates the upper limit of the LTV ratio for household residential loans. The figure illustrates that the LTV ratio for (4) banks (accounting for 20% of banks providing household residential loans) does not exceed 80%, (2) banks have an LTV ratio between 81% and 89%, whereas, (4) banks have an LTV ratio between 90% and 95%, and the remaining (10) banks have a 100% LTV ratio.

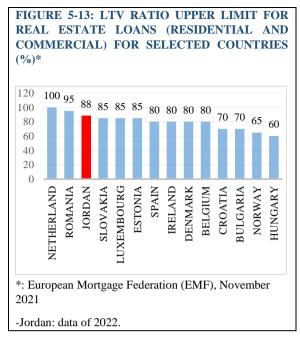


The figure above indicates that the number of banks with an LTV upper limit of 100% increased from (3) banks in 2015 to (10) banks in 2022, which implies that some banks in Jordan are providing loans that exceed the values of residential real estates in the Kingdom.

The majority of banks set their LTV upper limit for commercial real estate loans lower than the ratio for residential loans, as 66.7% of banks providing commercial real estate loans with an LTV ratio not exceeding 80% (Figure 5-12).

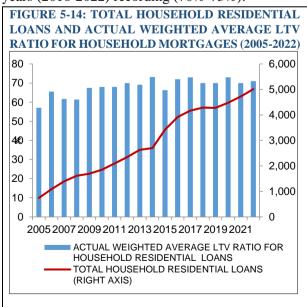


The average LTV ratio upper limit varies across countries, ranging between 60% and 100%. Banks in Jordan had an average LTV upper limit of around 88%, ranking third amongst 14 countries with available LTV data (Figure 5-13).

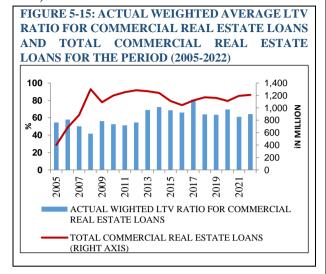


## ACTUAL AVERAGE LTV RATIO FOR HOUSEHOLD RESIDENTIAL AND COMMERCIAL REAL ESTATE LOANS

Despite the increase of the LTV ratio upper limit for household mortgages in some banks, the actual average is below the upper bound banks can provide (i.e. the ratio specified in banks' credit policies). The actual weighted average of the LTV ratio stood at 73.2% in 2014, dropped to 66.3% in 2015, and fluctuated to reach 71% at the end of 2022 (figure 5-14). It is noteworthy, that the ratio is relatively stable during the last seven years (2016-2022) recording (70%-73%).



With regard to the actual average of the LTV ratio for commercial real estate loans, it increased to 64.3% in 2022, against 61.1% in 2021. (Figure 5-15).



THE CBJ MEASURES TO MITIGATE BANKS' EXPOSURE TO THE RISKS OF THE REAL ESTATE MARKET AND ENHANCE BANKS' ABILITY TO WITHSTAND THESE RISKS

As mentioned in previous JFSRs, the CBJ has put in place certain controls, aiming at reducing banks' exposure to the real estate market risks and enhancing their ability to ward off these risks as follows:

- 1. The CBJ's Instructions of Capital Adequacy in force, weighted the risks of residential loans with an LTV ratio not exceeding 80% at 35%; however, the weight increases to 100% if the LTV ratio exceeds 80%. To put it differently, if the LTV ratio is above 80%, residential loans are subject to higher capital requirements, which improves banks' ability to withstand these risks, and strengthens the financial stability in the Kingdom.
- 2. Enacting the Instructions for Large Exposure Limits and Credit Controls No. (2/2019) dated 4/3/2019, which repealed the Instructions of Credit Concentrations No. (9/2001). These Instructions set the maximum limit of credit provided by banks for the construction of or purchasing real estates at 20% of total JD

customer deposits. These Instructions came into effect on 30/6/2019.

### THE REAL ESTATE ASSETS PRICE INDEX IN JORDAN

The total value of real estate assets is a backstop for investment activities in the economy, as they are highly interlinked with other investment sectors, and the real estate prices reflect on inflation, the monetary policy, and the financial stability. Drawing on the high importance of calculating a price index for real estate assets (Real Estate Price Index "REPI"), and as already mentioned in previous JFSRs, an REPI for Jordan was jointly developed by the CBJ and the Department of Lands and Survey at the beginning of 2014, according to international best practices taking into consideration the data available at the Department of Lands and Survey. Currently, in order to keep pace with international best practices and methodologies for calculating REPI and to deal with limited data, the previous methodology used to calculate the index is no longer used as of end 2021, however, a new methodology that considers international best practices is underway.

The REPI is significant to interpret several developments such as detecting price bubbles of the real estate assets, thus estimating the real estate market risks, in addition to forecasting economic growth, estimating the value of houses, which is used to estimate wealth, and it can be used as a benchmark for international comparisons.

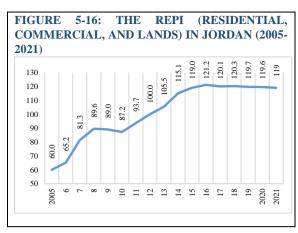
Figures (5-16 to 5-21) illustrate the REPI in Jordan and the changes in this index during the period (2005-2021). As the new methodology to calculate REPI is not being adopted yet, changes in real estate prices cannot be figured in 2022, however, these figures indicate that the REPI in Jordan dropped from 119.6 points in 2020 to

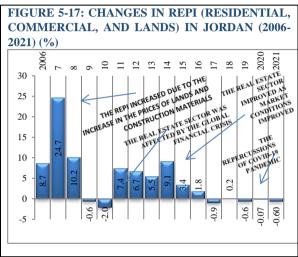
119.0 points in 2021, a small decline of 0.5%, compared to a decline of 0.1% in 2019, and 0.5% in 2020.

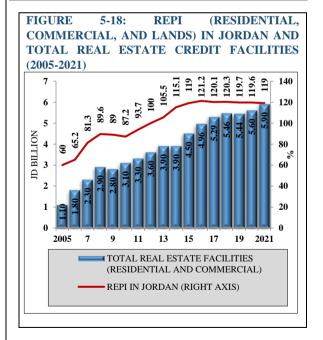
In 2021, that slight decline in REPI is attributed mainly to the increase in the lands price index by 0.08%, and the decline in the residential and non-residential indices by 2.3% and 1.1%, respectively. In this regard, and as mentioned in previous reports, the REPI went through several stages, which are summarized in four phases as follows:

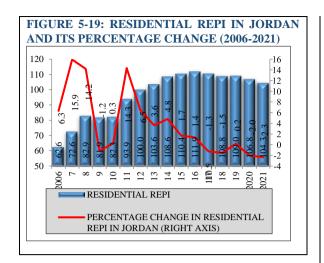
The first phase, pre-global financial crisis (2005-2008): the demand for real estate especially by non-Jordanians was considerably high, and the prices of residential and non-residential real estates increased substantially. While the second phase (2009-2010) was prevailed by the repercussions of the global financial crisis and uncertainty, and loans extended by banks were declining; these factors apparently contributed to weaken the demand for real estate assets, which brought their prices down. Accordingly, the government in mid-2009 expanded the scope of the exemptions for apartments, and lands were also included to boost the real estate market. During the third phase (2011-2016), the real estate investments bounced back, yet at a slower pace than pre-global financial crisis era.

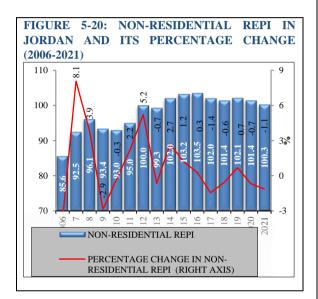
During the period (2017-2021), the real estate assets prices dropped again due to the slowdown of economic activity in the Kingdom and its impacts on the real estate sector, the worsening conditions of Jordanian workers in the Gulf countries, who are the most willing to purchase real estates, as well as the implications of COVID-19 pandemic which had a toll on most sectors including the real estate.

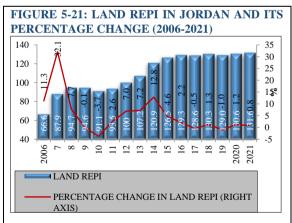






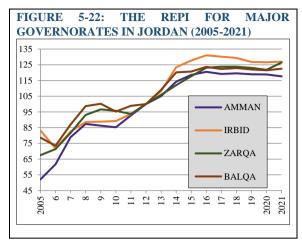




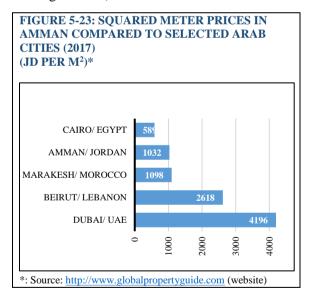


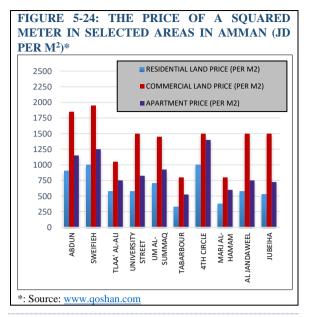
As for the REPI in main governorates in Jordan, it dropped slightly by 1% in Amman in 2021 to reach 117.6 points, down from 118.8 points in 2020. In addition, it increased in Irbid from 126.6 points in 2020 to reach 127 points in 2021, increasing by 0.3%. The REPI highest increase was in Zarqa where it increased from 121.8 points

in 2020, to 126.5 points in 2021, an increase of 3.9%. (Figure 5-22).



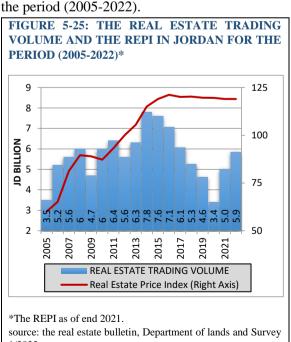
As for the average residential price per square meter in Amman, and according to the information available (for the most attractive places for investment), the average residential price per square meter reached to JD 1,032. It is noteworthy that the prices per square meter in several Arab cities such as Marrakech, Beirut and Dubai are higher than in Amman, (Figure 5-23 and Figure 5-24).





# TRADING VOLUME IN THE REAL ESTATE MARKET IN JORDAN

The real estate publication of the Department of Lands and Survey 2022, revealed that the trading volume in the real estate market in Jordan increased by 17% in 2022, to reach JD 5,850 million compared to JD 5,021 million in 2021. This is due to improving economic conditions and the ongoing recovery from the repercussions of COVID-19 pandemic, which affected most sectors including the real estate. Figure (5-25) indicates the developments of the real estate trading volume, and the REPI for Jordan during the period (2005-2022).

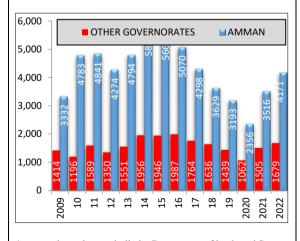


Sales to non-Jordanians reached to JD 303 million at the end of 2022, accounting for only 5.2% of total real estate trading volume, compared to JD 257 million (5.1% of the total real estate trading) in 2021. Sales to Iraqis accounted for the largest share in 2022 with an investment of JD 119 million, or 39% of total estimated sales to non-Jordanians in 2022 (Table 5-1).

TABLE 5-1: SALES TO NON-JORDANIANS (2015-2022)						-2022)		
(JD MILLI	(JD MILLION)							
Nationality	2015	2016	2017	2018	2019	2020	2021	2022
Iraqi	215.1	168.4	157.2	111.5	86.1	76.7	107.6	118.9
Saudi	66.4	50.2	63.4	44.0	30.9	34.9	46.4	62
Syrian	17.5	19.4	18.1	17.5	N.A.	11	20.3	22.7
American	N.A.	21.5	N.A.	N.A.	N.A.	N.A.	12.7	N.A.
Gaza	N.A.	N.A.	N.A.	N.A.	30.2	16	9.6	N.A.
Other	133.2	115.6	83.1	111.4	89	40.4	60.4	99.4
Total	432.2	375.1	321.8	284.4	236.2	179	257	303
Source: Real Estate Bulletin-Department of Lands and Survey 1/2023.								

As for the trading volume according to governorates, Amman is the largest with a trading volume of JD 4,171 million in 2022, accounting for 71% of total trading volume in the real estate market. Other governorates' trading volume reached to JD 1,679 million, or 29% of total trading volume (Figure 5-26).

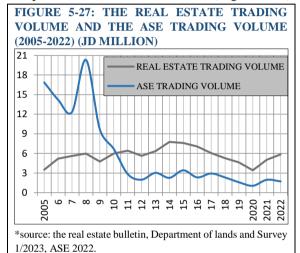




\*source: the real estate bulletin, Department of lands and Survey 1/2023

Comparing the real estate trading volume to the trading volume in ASE, indicates that the trading volume in the financial market was much higher than the real estate market during the period 2005-2009, due to the boom of the ASE during

that period, accompanied by a large inflow of liquidity to the financial market by Arabs, especially Iraqis. This led prices to increase immensely in the financial market, which also attracted many Jordanian investors to join. However, after the deepening of the global financial crisis and the significant decline of prices in the financial market, the trading volume dropped sharply in the financial market, much below the trading volume in the real estate market; the real estate investments are safe haven compared to financial investments. (Figure 5-27).



To complement the government measures taken in 2020 and 2021 to stimulate the real estate and housing sector, the Cabinet in 2022 decided on the following:

- Enacting a law amending the Land Registration Fees Law No. (26) of 1958 and the annex attached to the law. Under this law, fees on 17 types of transactions were brought down, the most important of which are:
- 1. Reducing sales fees between ancestors and descendants, as well as sales between partners from 1% to 0.5%.
- 2. Reducing sales fees among citizens from 5% to 3%.
- 3. Reducing delegation fees from 5% to 4%, and transfer fees from 1% to 0.5%.
- 4. Reducing inheritance fees from 0.5% to 0.2%.
- 5. Reducing alienation fees from 1% to 0.5%.
- 6. Reducing fees for allotment between partners and combined separation from 0.5% to 0.3%.

- 7. Reducing new registration fees from 5% to 4%.
- 8. Reducing insurance fees from 1% to 0.08%
- The single houses and apartments (regardless of the seller) not exceeding 150 m<sup>2</sup> are exempted from registration fees, and the remaining area exceeding 150 m<sup>2</sup> are subject to 3% lower fees.
- A draft law amending the Tax on Real Estate Sales Law of 2022 was approved, aiming to stimulate investment in the real estate and housing sector as well as increasing the volume of real estate trading. Under the draft law, the property sales tax was reduced from 4% to 3%. This is in addition to enabling the Department of Lands and Survey to refund the property sale tax collected for incomplete transactions to avoid judicial claims. Under the draft law, subsequent sales transactions conducted through Murabaha contracts carried out by Islamic banks and financial institutions practicing Murabaha for real estates will also be exempted from the property sales tax.

### CONCLUSION

The trading volume in the real estate market and the REPI in Jordan indicate that the real estate market was affected by the slowdown of the economic activity in the Kingdom and the economic and political developments in the region more apparently in 2017. In 2020, the ramifications of the COVID-19 deepened the slowdown of the real estate sector; the real estate trading volume decreased by 26% in 2020. However, in 2021 the real estate sector improved significantly, as the trading volume increased by 46.9%, and improved further in 2022 by 17%, as discussed earlier. The REPI declined slightly in 2021 by 0.5% compared to 2020; this index is relatively stable (with a small tendency to decline) during the past five years which indicates that a price bubble in the real estate market in Jordan is unlikely, in the short and medium terms. This is a positive sign that reduces the risks of the real estate sector, and strengthen the financial stability in the Kingdom, REPI is no longer calculated since the end of 2021, however a new methodology that considers international best practices and reflects precisely the actual developments in the real estate sector is underway.

Nevertheless, the slowdown in the real estate sector albeit minimal, requires some banks to reconsider the upper limit of the LTV ratio, especially banks with an LTV ratio exceeding 80%, to avoid any risks arising from falling real estate prices.

## **CHAPTER SIX: STRESS TESTING**

## **INTRODUCTION**

Stress testing is an important tool used by regulatory authorities and banks to assess banks' ability to withstand shocks and high risks they may confront. The objective of these tests is to evaluate the financial position of a bank under severe yet plausible scenarios, accordingly the tests results are used to determine the levels of capital and liquidity that banks must hold to withstand financial shocks and high risks.

These tests are forward-looking risk assessments that use sophisticated tools rather than statistical methods that use historical information, and help top management to understand a bank's conditions in times of crises. Stress testing is crucial for risk management and the planning for capital and liquidity, nonetheless, it cannot cover all aspects of a bank's vulnerabilities; it is useful within an integrated risk management policy intended to enhance the soundness and robustness of banks, and strengthen the entire financial system.

## STRESS TESTING FOR THE BANKING SECTOR

### FIRST: SENSITIVITY ANALYSIS

The sensitivity analysis tests are broadly used to measure the impact of changes in single risk factors on a bank's financial position, such as the increase of NPLs ratio, changes in interest rates, fluctuations of exchange rates, and changes in stock prices. Generally, the source of the shock (i.e., the source of the risk) is not identified in these tests. The sensitivity analysis conducted by banks operating in the Kingdom for several risk factors are illustrated next.

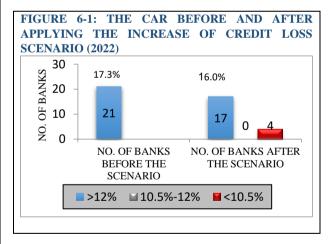
## 6.1.1 SENSITIVITY ANALYSIS FOR CREDIT RISK

The sensitivity analysis for credit risk assumed an increase in probability of default (PD) by 100%, and a decline in banks' profits by 50% in 2023

compared to their levels in 2022. The loss Given Default (LGD) ratio is also supposed to reach 65% of NPLs. In this case, the CAR of the banking sector in Jordan will drop from 17.3% to 16%, which implies that the banking sector is broadly capable to withstand this shock; the aftershock CAR remains higher than the 12% minimum requirement applied in Jordan. The limited impact of this shock can be explained as follows:

- 1- High CARs at banks in Jordan, which are considered among the highest in the region.
- 2- Banks have high profits, which enable them to handle additional provisions and losses resulting from the shock when it occurs, without significantly affecting the capital, which in turn protects banks' capital.

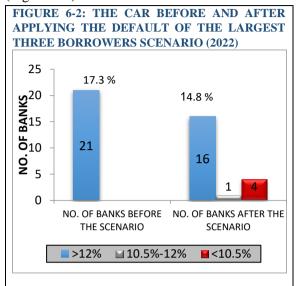
At the individual bank level, the CAR will remain higher than 12% for (17) banks, while it will decline below 12% for (4) banks, which validates the ability of most banks in Jordan to withstand this shock (Figure 6-1).



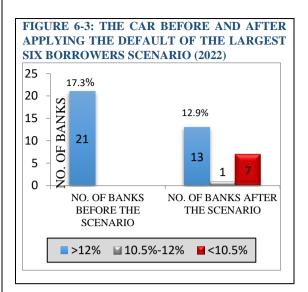
# 6.1.2 SENSITIVITY ANALYSIS FOR CREDIT CONCENTRATION RISKS

As for credit concentrations risks, and in case of the default of the largest three borrowers (excluding credit facilities provided to the government of Jordan and the government-guaranteed facilities) at the individual bank level, the CAR will decline from 17.3% to 14.8%, which is higher than the minimum requirement. The CAR will remain higher than the minimum

requirement of 12% for (16) banks, while it will fall below 12% for (5) banks, one of which will maintain a CAR above the international minimum requirement of 10.5%. (Figure 6-2).



However, under the assumption of the default of the largest six borrowers (excluding credit facilities provided to the government of Jordan and the government-guaranteed facilities) for each individual bank, the CAR of the banking sector will decline from 17.3% to 12.9%, yet remains above the minimum requirement. At the individual bank level, the CAR will remain above 12% for (13) banks, while it will fall below 12% for (8) banks, which validates that certain banks need to reduce their concentration risks. It is worth mentioning that the CBJ monitors banks' concentration risks on ongoing basis through credit concentration instructions (Figure 6-3).

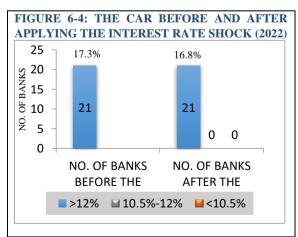


# 6.1.3 SENSITIVITY ANALYSIS OF MARKET RISKS

A number of tests were conducted to assess banks' sensitivity to market risks and their impact on capital adequacy. The analysis used three types of shocks only: interest rates, exchange rates, and stock prices, which are the most commonly used variables thereupon.

## 6.1.3.1 INTEREST RATE SHOCK

Assuming that the interest rates will hike by 200 basis points, the CAR of the banking sector will decline slightly from 17.3% to 16.8%<sup>1</sup>. However, at the individual bank level, the CAR will remain above 12% for all banks exactly as before the shock, which indicates the ability of banks in Jordan to withstand this shock (Figure 6-4).



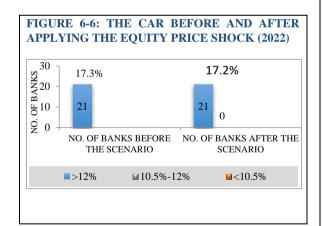
<sup>&</sup>lt;sup>1</sup> The impact of the shock was calculated using the gap analysis test that examines the status quo at banks in terms of the balance of assets and liabilities sensitive to interest rate risk.

## 6.1.3.2 FOREIGN EXCHANGE RATE **SHOCK**

Assuming a 25% decline in the exchange rate of the Jordanian dinar<sup>2</sup> against all foreign currencies, the banking sector's CAR will remain unchanged at 17.3%. This indicates that the banking sector is highly capable to withstand this shock, thanks to the comfortable coverage of foreign currency assets to banks' foreign liabilities; long foreign currency positions for most banks.

### 6.1.3.3 EQUITY PRICE SHOCK

The test assumes a decline in the stock prices in the financial market by 30%, in this scenario the CAR of the banking sector in Jordan will decline slightly from 17.3% to 17.2%, which implies that the effect of this shock on the banking sector is immaterial in general. At the individual bank level, the ratio will remain above 12% for all banks, exactly as before the shock. This indicates that banks in Jordan are able to withstand the shock of equity price risks due to the low exposure of banks to the financial market in Jordan. (Figure 6-5).



## SECOND: MACRO-STRESS TESTING

Credit risk is one of the main significant risks facing banks which has the most influence on their solvency. Therefore, a Satellite Model was

used to predict the PDs of banks borrowers for the period 2023-2025. In this context, a series of scenarios were assumed; medium and severe macro-stress scenarios. which represent hypothetical scenarios designed to assess banks' ability to withstand shocks. Assuming lingering ramifications of the geopolitical challenges and tensions due to the Russian-Ukrainian crisis, and the adversities they bring to Jordan's economy, in terms of the increase in the prices of energy and primary commodities, which will set economic growth to significantly slow down compared to projections, and fueling the inflation rates. Moreover, the interest rates are also assumed to increase to curb inflationary pressures and to preserve the attractiveness of the Jordanian dinar as a saving currency. To measure the impact of these assumptions on banks, the GDP GAP was calculated through estimating the Gap between the growth rate and the GDP growth trend using HP filter; this gap was used as one of the macroeconomic variables that affect the PDs. and measuring the impact on the regulatory CAR and Tier1 capital3 for a bank. Economic researches suggest that the decline in economic growth rate will increase the PDs, as it affects the customers' ability to repay their debts. Other variables such as the average interest rates, and inflation rates, were also used to predict the PDs. To estimate the PDs, the stress testing methodology using the Satellite Model suggested (3) scenarios to predict the value of the dependent variable (PD), and to examine their effect on the NPLs and CAR of banks for the coming three years. These scenarios, in terms of severity, are classified as follows:

- Baseline Macro Stress Scenario.
- Medium Macro Stress Scenario.
- Severe Macro Stress Scenario.

To forecast the PD, the following model was used<sup>4</sup>:

<sup>&</sup>lt;sup>2</sup> This is a hypothetical scenario that aims primarily to examine banks' exposure to exchange rate risk, noting that the CBJ's foreign currency reserves at the end of July 2023 approached USD 17.4 billion, sufficient to cover around 7.6 months of the Kingdom's imports, which is a very comfortable level and significantly strengthens the stability of the dinar exchange rate.

<sup>&</sup>lt;sup>3</sup> According to Basel III definition

<sup>&</sup>lt;sup>4</sup> This model was estimated using the Panel Least Squares (PLS) method, which provides optimal estimates for cross-sectional data regressions by modifying the least squares to calculate the effects of autocorrelation and homoscedasticity in the dependent variables, which result from an autocorrelated relationship between the dependent variable and the independent variables.

## PD<sub>t</sub>= C+B<sub>1</sub> GDP GAP<sub>(t)</sub> + B<sub>2</sub> LENDING RATE<sub>(t-1)</sub> + B<sub>3</sub> INFL<sub>(t)</sub>

Where:

PD<sub>t</sub>= projected probability of default at banks.

C= Constant

GDP GAP<sub>t</sub>= GDP growth rate gap

INFL<sub>t</sub>= inflation rate

ASE<sub>t=</sub> ASE general price index

The statistical tests revealed a significant inverse relationship between the growth rate gap and the PDs, a significant positive relationship between the average lending rate and inflation rate and the PDs at banks, according to the following equation:

$$PD_{t} = \text{-0.03 - 0. 21 GDP GAP}_{(t)} + \text{0.55 LENDING}$$
 
$$RATE_{(t\text{-}1)} \\ + \text{0.15 INFL}_{(t)}$$

The following table shows the results of the econometric analysis of the above-mentioned model:

TABLE 6-1: RESULTS OF THE ECONOMETRICS ANALYSIS				
Variable	Coefficient	T-Statistic		
C	-0.03	-2.01		
GDP GAP <sub>t</sub>	-0.21*	-2.56		
LENDING RATE (t-1)	0.55*	2.85		
INFL <sub>(t)</sub>	0.15*	3.46		
Coefficient of Determination (R <sup>2</sup> ) 44.37%				
Adjusted R <sup>2</sup> Coefficient	40.51%			
(*): Statistically significant at 95% confidence level				

## 6.1.4 ASSUMPTIONS OF THE MODEL

The CBJ has developed stress tests so that the PDs and its effect on banks' CAR are predicted for several coming years (Multiple-Period Stress Testing), instead of a single year. Consequently, the PDs ratios for the period 2023-2025 were projected based on growth rate gap, the average lending rate, and inflation rate. The following scenarios have been assumed, noting that the model used is based on the assumption that banks' profits in 2023 will drop by 50% compared to their levels in 2022, and that the LGD will hit 65% of NPLs:

<b>TABLE</b>	6-2:	MACRO	<b>STRESS</b>	<b>TESTING</b>
<b>SCENAR</b>	IOS F	OR THE YE	ARS 2023-	2025

Year	Variable	GDP Gap	Lending rate	Inflation rate
Scenarios of 2023	Baseline Scenario	0.1	9.1	2.7
	Medium Macro Stress Scenario	-1.4	10.1	5.9
	Severe Macro Stress Scenario	-2.9	11.1	9.2
	Baseline Scenario	-0.1	8.6	2.6
Scenarios of 2024	Medium Macro Stress Scenario	-1.6	9.1	5.8
	Severe Macro Stress Scenario	-3.1	9.6	9.1
Scenarios of 2025	Baseline Scenario	0.0	8.1	2.5
	Medium Macro Stress Scenario	-1.4	8.6	5.7
	Severe Macro Stress Scenario	-2.9	9.1	9.0

The shock scenarios were assumed according to the following methodology:

**Medium Macro Stress Scenario**: The projected GDP growth rate gap for the period 2023-2025 minus one standard deviation of economic growth rate gap for the period (2002-2022). The projected inflation rate for the period 2023-2025 plus one standard deviation of the inflation rate data for the period (2002-2022).

Severe Macro Stress Scenario: The projected GDP growth rate gap for the period 2023-2025 minus two standard deviations of economic growth rate gap for the period (2002-2022). The projected inflation rate for the period 2023-2025 plus two standard deviations of the inflation rate data for the period (2002-2022).

For average lending rate, the interest rates were assumed to increase by 100 basis points for medium scenario, and by 200 basis points for severe scenario in 2023, and to increase by 50 and 100 basis points in 2024 and 2025, for both the medium and severe scenarios, respectively, compared to the projected baseline lending rate which is projected for each year and was calculated assuming the decline of interest rates by 50 and 100 basis points as compared to the baseline projected for 2023.

\*Represents the weighted average interest rates on credit facilities/ loans and advances of July 2023.

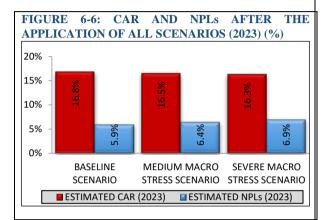
## **6.1.5 RESULTS**

Table (6-3) and Figure (6-7) illustrate projected NPLs ratio and CARs for 2022 assuming the scenarios above; under the severe scenario, the NPLs ratio will increase from 4.5% in 2022 to 6.9% in 2023, thus the CAR will drop from 17.3% to 16.3% in 2023.

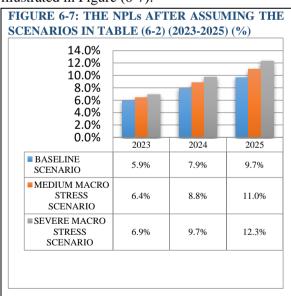
TABLE 6-3: MACRO STRESS TESTING RESULTS FOR 2023				
Scenarios	Projected NPLs (2023)	Projected CAR (2023)		
Baseline Scenario	5.9%	16.8%		
Medium Macro Stress Scenario	6.4%	16.5%		
Severe Macro Stress Scenario	6.9%	16.3%		

<sup>\*</sup> The NPLs ratio at the end of 2022 stood at about 4.5%.

<sup>\*\*</sup> The CAR at the end of 2022 reached to 17.3%

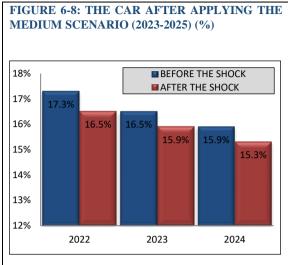


If these scenarios occur (Table 6-2: scenarios), the projected NPLs ratios for 2023-2025 assuming the (three) scenarios will be as illustrated in Figure (6-7).

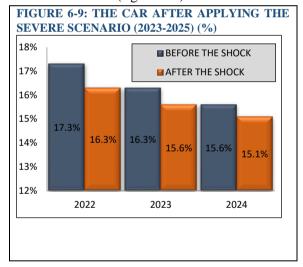


Accordingly, after applying the medium scenario, the CAR for the years 2023-2025 (figure 6-8) will decline to 15.3% in 2025, which remain sufficiently higher than 12% for the three years (2023-2025). This implies that the banking sector

in Jordan is capable to withstand this shock (figure 6-9).



In addition, implementing the severe scenario indicates that the CAR will drop to 15.1% in 2025, and remain higher than 12% for the years (2023-2025), which means that the banking sector's CAR is high and capable to withstand this shock as well (figure 6-9).



## **CONCLUSION**

According to the results for the years (2023-2025), the banking sector is broadly capable to withstand the shocks and high risks resulting from lingering ramifications of the geopolitical tensions arising from the Russian-Ukrainian crisis. Assuming the most severe scenario, the CAR of the banking sector for the years 2023, 2024, and 2025 will reach to 16.3%, 15.6% and 15.1%, respectively. These positive results are attributed to the high levels of banks' capital and the comfortable level of profits, which enable banks to handle the additional provisions and losses resulting from the assumed shocks without a significant impact on the capital, thus providing a sufficient protection for banks' capital. Furthermore, the sensitivity analysis revealed that the credit concentration risk has a greater impact on some banks compared to other risks, which requires these banks to reduce their concentration risk. The CBJ will continue to conduct and enhance these tests taking into consideration developments of risks at the international, regional, and national levels to ensure the soundness and robustness of the banking sector in Jordan.

## **CHAPTER SEVEN: DIGITAL BANKS**

### **OVERVIEW**

To keep up-to-date with evolving developments in the digital technology, communications, and innovation worldwide, and to cope with changes in customer behavior and needs, the banking sector has embraced digital banking. The concept of digital banking began to gain momentum in the early 2000s, even though digital banks did not materialize until 2010.

The COVID-19 pandemic is one of the main factors that contributed to accelerate the shift towards digital banking, as lockdowns and social distancing made it difficult or impossible for people to access branches of traditional banks, which triggered the use of digital financial services and accentuated the significance of having digital banks in place.

Digital banks are essential to pave the way towards the digital economy, through using secure banking applications on mobile phones and tablets, which allows for removing traditional impediments to carrying out banking transactions. They also contribute indirectly to the transition towards a cashless society, especially with existing digital payment solutions such as (CliQ), which allows for instant transfers between individuals via mobile phones, or cashless payments in stores through the (QR Code) technology.

In addition, digital banks have beneficial impact on updating and reviewing multiple legislations in light of rapid developments to reach the digital economy. Digital banks also contribute to enhancing and accelerating innovation in financial services, which facilitates connection with other digital sectors, FinTech, and public services in a way that serves the needs of customers. It is noteworthy to point out that one of the most prominent features of digital banks is digital identity, which is an essential component for secure verification of consumers transactions that enhances confidence among customers.

The foundation of digital banks requires an integrated environment that encompasses: an

advanced technological infrastructure as well as the use of cutting-edge technologies, including data protection, identity verification, and interconnection with a number of governmental and non-governmental institutions. This is in addition to placing the legislative and regulatory foundations and controls in terms of electronic signatures, digital identity, and other matters that regulate the business of these banks and their services.

It is worth mentioning that digital banks provide their complete banking services without the need for physical branches, which directly contributes to enhancing and promoting financial inclusion through opening bank accounts or e-wallets for individuals and SMEs, as well as accessing financial and banking services through mobile devices easily. This is in addition to reducing costs, effort, and time, improving the operational efficiency and quality for financial and banking institutions, facilitating the procedures of customers service, and providing creative and innovative products.

Despite the features and advantages of digital banks mentioned previously, these banks are exposed to risks that may affect their operations, including cybersecurity risks, operational risks, and other risks.

### THE CONCEPT OF DIGITAL BANKS

Digital banks are defined as "banks that operate without physical branches, with the exception of some requirements related to management; they virtually establish banking relationships, provide services and products, and carry out banking transactions with their customers, through Internet platforms, mobile applications, and other electronic channels using cutting-edge technology solutions". It is worth mentioning that these banks provide services similar to those provided by conventional banks, namely; bank accounts, transfers, deposits, loans, insurance, and other banking services, despite being provided online without the need for customers visits to any branches of the bank.

Digital banks are also perceived as a full digitization of banks including all of their

activities. programs, and functions. The digitization process goes beyond the services and products provided by banks to customers. It includes the supporting operations since digital banking implies that every aspect of the banking relationship is automated through the use of technology to ensure the flexibility in processing virtual customer transactions and providing online services without visiting the bank in person. This is highly beneficial for customers as services are available at lower cost, and for banks at operational costs are lower in addition to reduced errors, and improved services.

Digital banks differ from electronic channels, such as (Mobile Banking) and (Online Banking), primarily in terms of the nature of customer-bank relationship. For digital banks, the relationship between the customer and the bank is initiated virtually through (the Internet) and remains virtual; no need for customers to visit the bank to obtain banking services. However, both (Mobile and Online Banking) are electronic channels through which the customer can obtain certain electronic services, however, in most banks it is necessary initially to visit the bank, open an account, and to subscribe in these channels. It is worth mentioning, that the front-end interface of these services is digitized, however, the backend services (supporting systems) are conducted using conventional and manual systems.

### TYPES OF DIGITAL BANKS

As digital banks are becoming more widespread in various countries worldwide, several models are in place, each of which has its own unique characteristics and features, as follows:

- 1. **New banks** (**Challenger**), which are standalone banks, licensed to provide services similar to those provided by conventional banks, yet they do not have headquarters or branches for customers to visit, rather they provide their services virtually. Examples include: (Monzo) and (Starling bank) in UK.
- 2. (Neo banks), which are digital banks with no branches, and are available online only; these banks are not licensed by regulatory authorities,

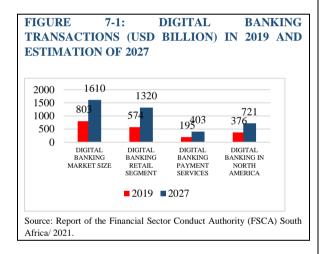
rather they provide their banking services in partnership with licensed banks via mobile applications and digital platforms (Digital Brand) free of charge. These banks approach account holders in conventional banks. Examples include Yolt Bank, which is a partnership project with ING Bank in UK, and Webank, which is the first digital bank in China, launched by Tencent company in 2014.

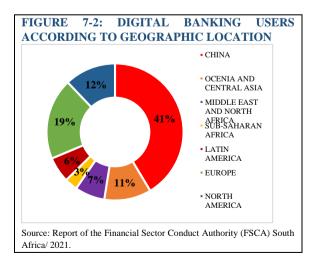
- 3. (Beta Banks) which are the least common types of digital banks; they are subsidiaries to licensed banks with independent management for their decisions and products. These banks are established to access new or foreign markets and target certain customers, such as SMEs, to enable them accessing the necessary financing and benefit from financial services and products; these banks constantly seek to improve their digital financial services to meet customer needs. Examples include: AiBank, which is an alliance between the most powerful search engine in China (Baidu) and Citi Bank, and Simple Bank, which is a partnership between (BBVA) and (Bancorp) company.
- 4. (Non-Banks); they are called non-banking digital banks, as they are not licensed to offer conventional banking services, rather they through provide their services other unconventional means. Examples include (Monese) Bank, which provides its services as a licensed e-money issuer. This bank allows customers to open bank accounts without the need to provide residential addresses, nor their credit history for verification.

# GLOBAL DEVELOPMENTS IN DIGITAL BANKING

The foundation of digital banks gained increasing international interest, as several countries worldwide have built digital banks recently, which has apparently reflected in increasing the volume of digital transactions markedly. The transactions conducted through digital banks in the global market reached around USD 803 billion in 2019, and is expected to reach approximately USD 1,610 billion in 2027. In addition, transactions from

the retail banking sector constitute the largest share of these transactions; reaching around USD 574 billion in 2019, and are expected to reach about USD 1,320 billion. On another front, digital payments are the largest share of digital banks transactions; they totaled around USD 195 billion in 2019, and are expected to reach around USD 403 billion by 2027. The largest share of digital banks transactions is conducted in North America, estimated at around USD 376 billion, and is expected to reach around USD 721 billion by 2027, despite that customers of digital banks in North America constitute 12% of total customers of digital banks worldwide. (Figure 7-1 and Figure 7-2).





## PROS OF DIGITAL BANKS

Despite the divergence and diversity of digital banks, they all have similar advantages,

including:

- 1. Reducing costs and increasing revenues; digital banks contribute to reducing operational costs of providing financial services, which improves competitiveness and attracts more customers. According to experts, digital banks can contribute to reducing operational costs by (20-40%); (Lease Plan Bank) for example, managed to reduce its operational costs by 60%. In addition, digital banks intend to increase their revenues by improving the services provided to customers, as they deploy smart systems and use data analysis effectively, which allows for a flexible relationship between the customer and the digital bank, and eventually increases the bank's market share.
- 2. **Flexibility**; digital banks can promptly interact and adapt to changes in the market, cutting-edge technology, and new legislations due to their high flexibility, and great capability to control their transactions immediately and simply, as well as launching products faster than conventional banks.
- 3. **Keeping up-to-date with cutting-edge technology and trends**; new technology products and trends in digital banking such as the Blockchain technology, tremendously affect banking business models.
- 4. **Speed and punctuality**; digital banks allow for instant and accurate banking transactions, which reduces errors related to human intervention in conventional banking transactions, which would enhance the quality of financial services.
- 5. Contributing to the shift towards digital economy; digital banks contribute to the gradual shift towards a cashless society, especially by providing new solutions for new digital payments, such as (CliQ) service, which allows for immediate local transfers between individuals using mobile phones, as well as free of charge cashless payments in stores by using the (QR Code).
- 6. Contributing to promoting financial inclusion; digital banks are vital to promote financial inclusion, by enabling vulnerable groups to access banking services and various financial products at affordable costs, anytime

and anywhere. They are also essential in enhancing the financial capability of these groups, increasing their ability to optimally manage their financial resources, and increasing savings, which would reflect positively on individuals' financial health.

### RISKS OF DIGITAL BANKS

Similar to conventional banks, digital banks are exposed to risks that may affect their transactions and financial stability, which requires supervisory and regulatory policy makers in countries worldwide to take adequate actions in warding-off these risks, and they include:

- 1- Cybersecurity risks; as digital banks deploy cutting-edge technology and process large volumes of personal data, they could be targeted by cyber-attacks, which requires improving the mechanisms of data protection and conducting strict security measures, as hackers are improving their techniques and skills, which is a major challenge currently.
- 2- **Reputational risks**; one of the biggest challenges that confront digital banks is how to build a sound relationship with customers, especially amid the rapid developments in technology, the emergence of new financial products, and increased competitiveness, which requires these banks to keep up with all new developments to meet the needs of their customers, and retain them.
- 3- **Operational risks**; as mentioned earlier, digital banks rely heavily on cutting-edge technology while providing their services, which may sometimes cause operating systems failures that result in delays; this requires periodic upgrading and maintenance of operating systems and software to avoid any interruption.
- 4- Credit and liquidity risks; similar to conventional banks, digital banks may face credit and liquidity risks as their customers may find difficulties in repaying their due debts and obligations. In addition, customers may suddenly withdraw their deposits as a result of unexpected market conditions which may occur anytime. The increasing use of cutting-edge applications, such as digital mobile banking and online banking, may result in turmoil and

liquidity run. However, this requires adopting risk management strategies that consider the new reality, as well as tighter credit policies, and maintaining sufficient liquid assets to meet sudden demand for liquidity.

## COUNTRIES PRACTICES IN DIGITAL BANKING

Countries practices in building digital banks are varied and numerous, a summary of some countries practices are listed below:

### Malaysia

On 27/12/2019, Bank Negara Malaysia (BNM) issued licensing procedures and conditions for digital banks that set the basic requirements for licensing digital banks in the Malaysian market; a maximum of five licenses may be issued. This aims to keep up with FinTech developments, promote innovation, and introduce new financial products and services that contribute to meet customer needs.

The conditions require that person(s) who obtain a digital bank license must hold an interest in shares of more than 50%, or exercise control over the licensed person, and should be an existing licensed person from the financial supervision authority, a financial holding company approved by the financial supervision authority, or a foreign financial institution regulated by a supervisory authority outside Malaysia which exercises functions corresponding to those of the bank under the financial supervision authority. These conditions also require the need to furnish the supervisory authorities with an overarching five-year action plan that stipulates the organizational structure, policies, accounting systems, and recovery plan, emphasizing alongside capital adequacy requirements, liquidity, consumer and protection.

In addition, a minimum paid-up capital of RM 100 million (USD 23 million) during the foundational phase, provided that it shall achieve a minimum capital fund of RM 300 million (USD 69 million) at the end of the fifth year. Furthermore, total size of assets shall not exceed the RM 2 billion (USD 640 million) during the

foundational phase, however, no asset size limitation thereafter. This is to strengthen the soundness of these banks to withstand risks and to protect the depositors and customers.

### **Taiwan**

In June 2019, the financial authorities in Taiwan announced the issuance of digital banks licenses to three consortiums led by Taiwan and Japanese investors. The licenses were granted to Line company, and Taipei Fubon Commercial Bank and Standard Chartered, and to Next Commercial Bank, led by Taiwan telecom operator Chunghwa Telecom. Another license was provided to Rakuten International Commercial Bank which is operated by ecommerce firm Rakuten Inc and the Taiwan's IBF Financial Holdings.

Approving digital banks in Taiwan require that the minimum paid-up capital is similar to other commercial banks of TWD 10 billion, and at least one of the founders must be a commercial bank or a financial holding company and need to hold 25% of the equity. It is also required to regulatory authorities provide with comprehensive action plan that includes, inter alia, a mechanism for identity verification of customers, IT systems, security controls, contingency plans in exceptional circumstances, and liquidity contingency plans to support business continuity of these banks.

On another front, foreign companies are allowed to be shareholders in digital banks, provided they have approval of home regulatory authorities to establish digital banks, and fulfill the conditions for subscription.

## **Singapore**

In 2019, the Monetary Authority of Singapore announced the requirements for licensing digital banks in Singapore market. In this regard, five licenses were issued and the number of licenses is set to increase later; two Full Digital Banks Licenses and three Digital Wholesale Licenses were issued. With respect to local commercial banks, no additional licensing requirements are required to establish digital banks, as they are

already licensed. This is regulated by Banking Regulation for online banking issued in 2000.

As for Digital Wholesale Banks, they are not allowed to accept deposits from individuals, rather they are allowed to accept deposits from SMEs and other business, and their paid-up capital must be no less than SGD 100 million. These banks are subject to the same regulatory rules applied to conventional banks.

With regard to Full Digital Banks, licenses are granted progressively, as limits are imposed in the initial stage, and the bank can only offer simple insurance and investment products during this period; the paid-up capital must be no less than SGD 15 million. Limits are lifted progressively until the bank is able to manage the risks of the digital bank. The second stage starts when limits are fully lifted, and the paid-up capital must be raised to no less than SGD 1.5 billion. However, applicants must headquartered in Singapore and controlled by Singaporeans; foreign companies can partner local companies to obtain the license, yet they must be controlled by local companies.

## **United Arab Emirates**

The Financial Services Regulatory Authority of the Abu Dhabi Global Market issued a guide under the Market and Financial Services Instructions of 2015, aiming at defining the entry points for digital banks and the provision of banking services including accepting deposits, providing credit, opening accounts, transferring money, and payment services. A digital bank can be established in three ways:

- Conventional banks that want to establish a digital bank or a branch of a digital bank.
- Companies with valuable innovations.
- Partnerships between technology companies and financial services companies.

The entity wishing to submit an application for a digital bank license must submit a comprehensive action plan linking the target audience and customers, in addition to specifying all activities it intends to practice. In addition to disclosing information related to all

natural and legal shareholders whose interest exceeds %10.

In addition, according to the terms and requirements issued by the Financial Services Regulatory Authority, the majority of the digital bank must be owned by an institution that accepts deposits and has a physical presence. The Authority also specified some requirements for qualified personnel, governance, and risk management, especially IT risks, systems, controls, Cybersecurity, and financial crimes, in addition to setting the minimum paid-up capital at USD 10 million.

# DIGITAL BANKS IN JORDAN AND THE ROLE OF THE

In light of the rapid development in innovation in the Jordanian banking sector, and the change in financial consumer behavior, in parallel with the developments in cutting-edge technologies and related innovations, and the entry of new service providers competing in providing comprehensive new financial products convenient to customers and meet their needs through appealing and affordable offers and solutions, the CBJ in coordination with Jordanian Banks Association 29/7/2021 a document "Regulating Digital Banks in the Hashemite Kingdom of Jordan," directed to all banks operating in the Kingdom. This is to support sustainable development and innovation in the Jordanian banking sector, which contributes to the transition to a comprehensive and advanced digital economy. This is in addition to enhance the partnership and consultation approach of the CBJ with the institutions subject to its supervision; this document aims to clarify the CBJ's disposition regarding regulating comprehensive digital banks in the Kingdom, and to set the main foundations for licensing digital banks; namely:

- 1- Nature of shareholders/owners
- 2- Capital requirements
- 3-The nature and type of services and products that digital banks can provide in light of the developments and advancements in FinTech

solutions in the banking sector, in a manner that fully considers the interests of all parties and the Jordanian economy.

It is worth mentioning that a committee was formed in the CBJ in April 2020 to examine the possibility of digitizing all services provided by banks operating in the Kingdom, including virtual customer onboarding. The committee was entitled to issue virtual KYC instructions. As the committee concluded its work in September 2021, another committee was formed in October 2021, including members from relevant departments in the CBJ, and is responsible for issuing necessary requirements for licensing digital banks in the Kingdom, which is still in the examination phase.

## THE IMPACT OF DIGITAL BANKS ON FINANCIAL STABILITY

The foundation of digital banks and regulating their business in a robust and sound manner could have several positive implications on financial stability:

- 1. **Playing level field**: digital banks can increase the competition in the banking sector, which would contribute to providing better services to customers, and could also help reduce the risks of future banking crises through the commitment of banks to the principles of governance and transparency.
- 2. **Promoting financial inclusion**: digital banks can help improve the efficiency of access to finance, financial and banking services to all segments of society, including those unserved segments.
- 3. **Enhanced flexibility:** digital banks may strengthen the flexibility of the financial system through the diversification of the financial sector and reducing concentration risks.
- 4. **Improving efficiency:** digital banks can contribute to improving the efficiency of the financial system by the optimal utilization of cutting-edge technology to automate all transactions and reducing costs.

5. **Providing better services**: digital banks can use cutting-edge technology and analyze their customer data to provide better services that fulfill their needs.

However, these banks may have negative impacts on the financial stability if risks associated with these banks mentioned in this chapter are not identified and managed properly, especially those related to cybersecurity risks and operational risks.

### **CONCLUSION**

Digital banks nowadays have become indispensable, especially in light of the rapid technological developments in various fields, especially in the financial and banking sector, and the increase in competition. Despite the various advantages and features of digital banks, the risks and threats that would undermine the pillars of the financial stability cannot be overlooked, including cybersecurity risks and operational risks.

As the CBJ believes in the importance of keeping up with developments in FinTech solutions in the banking sector, the CBJ issued a document in 2021, titled "Regulating Digital Banks in the Hashemite Kingdom of Jordan" as a step towards laying the ground for licensing digital banks in the Kingdom. In a way that ensures supporting the pace and development of the Jordanian banking sector; while keeping up-to-date with recent developments together with meeting the needs of various segments and enhancing the financial inclusion in the Kingdom.