



# **FINANCIAL STABILITY REPORT**

**2019**

**FINANCIAL STABILITY DEPARTMENT**



## PREFACE

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The Financial Stability Report 2019 (JFSR 2019) is issued as a part of the Central Bank of Jordan's (CBJ) enduring efforts to enhance the stability of the financial and banking sector in Jordan, as well as to provide a sufficient database for various aspects of the economy and the financial sector in Jordan. According to the CBJ's amended Law of 2016, the CBJ's objectives were broadened, so that maintaining financial stability was embedded explicitly in tandem with the 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 as well.

In 2019, tremendous challenges and risks continued to cast a shadow on the Jordanian economy, imposed by the unsettled political situations in neighboring countries; leading the real GDP to grow modestly by only 2% in 2019. Drawing on preliminary data, the Jordanian economy has contracted by -3.6% in the second quarter of 2020, affected by the challenges and repercussions of COVID-19 pandemic which impacted the vast majority of economic sectors in the Kingdom.

The unprecedented threats of the global COVID-19 pandemic outbreak since the beginning of 2020 have implied serious socio-economic consequences and costs. In an attempt to curb the effects of these accelerating developments. The CBJ, since the onset of COVID-19 pandemic, has endorsed a set of proactive and overarching measures aimed at containing the negative repercussions of this pandemic on the domestic economy. The total value of these measures reached approximately JD 2.5 billion, accounting for 8.1% of GDP. This report elaborates on these measures in details.

The financial sector in 2019 was stable despite the challenges and risks arising from the political and economic conditions in neighboring countries, and their ramifications on the economic and financial conditions in Jordan. As this is due to the policies of the government and the CBJ, which helped to alleviate the effects of these risks and dealing with the related challenges. Jordan has a sound and resilient banking system, which in general is resilient to shocks and high risks due to banks' high levels of capital, and comfortable levels of liquidity and profitability.

The CBJ will keep developing its Financial Stability Report taking into consideration the development of risks at the local, regional, and international levels to enhance the pillars of the financial stability in the Kingdom. This report is published online on the CBJ's website <http://www.cbj.gov.jo>.

**The CBJ Governor  
Dr. Ziad Fariz**

## EXECUTIVE SUMMARY

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### GLOBAL FINANCIAL STABILITY

The global economic growth decreased slightly in 2019 compared to its growth in 2018; the global real GDP growth rate reached to 2.9% in 2019 compared to 3.6% in 2018. This slowdown is mainly due to the US-China trade tensions, in addition to the geopolitical unrest in some regions worldwide. Since the beginning of 2020, the world has been experiencing the developments of unprecedented uncertainty that led the global economy to shrink sharply below the 2008 global financial crisis' downturn, owing to the repercussions of the novel COVID-19 onset all over the world, which led the global economic activity to contract significantly. The International Monetary Fund (IMF) in its recent forecast in June 2020 projected that the global economy will contract by -4.9% by the end of 2020. The IMF also anticipated that the global economy would rebound partially in 2021 and grow by 5.4%, with the economic activity returning back to normal, corroborated by the support of the monetary and financial policies to alleviate the consequences and risks of the pandemic.

### JORDAN ECONOMY

The Jordanian economy faced and is still exposed to different challenges and risks; namely the political turmoil in neighboring countries, which affected the real GDP to grow modestly by 1.9% and 2% in 2018 and 2019, respectively. The real GDP declined again in the first and second quarters of 2020 due to the repercussions of the COVID-19 pandemic, as economic growth contracted in the second quarter of 2020 to record -3.6%. Nevertheless, the monetary and financial measures taken early 2020 have significantly prevented the growth levels to contract further, as the case in several countries, which points to the effectiveness of the government's and the CBJ's policies and measures to mitigate the impacts of the pandemic on the national economy. According to the IMF's estimates of the global economic outlook for April 2020, the economic growth in Jordan is projected to contract at -3.4% by the end of 2020, and to rebound in 2021 to reach 3.7%.

### THE BANKING SECTOR IN JORDAN

The banking sector in Jordan continued to maintain sound financial indicators and a high capability of withstanding shocks and high risks 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 years (2007- 2019), with a comfortable margin that is well above the CBJ's minimum requirement of 12% and the Basel Committee's minimum requirement of 10.5%. The CAR increased significantly in 2019 to reach 18.3% compared to 16.9% in 2018. This increase was influenced by the CBJ's request for banks not to distribute profits in order to strengthen banks' capital base, hence increasing their ability to counter the repercussions of the COVID-19 pandemic and support the national economy. The core capital ratio increased to 18.1% by the end of 2019 compared to 15.4% at the end of 2018, which is close to the regulatory capital adequacy ratio, which means that banks' capital in Jordan mostly consists of the Tier 1 (core capital), which amongst other components of capital is the highest in quality and capability to absorb losses.

- **QUALITY OF ASSETS**

The non-performing loans (NPLs) to total loans increased slightly by the end of 2019 to reach 5% compared to 4.9% at the end of 2018, and according to available data, Jordan ranked in the middle of 13 Arab countries. As for the coverage ratio of NPLs, it reached to 70% at the end of 2019 indicating that the provisions sufficiently cover almost 70% of NPLs at banks.

- **LIQUIDITY**

The Jordanian banking system enjoys a sufficient and safe liquidity level as indicated by liquidity ratios registered at the end of 2019. The total high-liquid assets accounted for 45.6% of total assets at the end of 2019 compared to 44.9% at the end of 2018. This increase in the liquidity ratio is due to the larger growth in deposits than the growth of credit facilities. Legal liquidity increased to 133.8% at the end of 2019, compared to 131% at the end of 2018; the minimum requirement of legal liquidity is 100%.

- **PROFITABILITY**

The return on equity (ROE) reached to 9.4% at the end of 2019 against 9.6% at the end of 2018. The ROE in Jordan is considered low when compared to several Arab countries, given that banks in Jordan are generally conservative and risk averse, possess high levels of capital, and subject to the income tax in Jordan, which is relatively high.

- **CONCENTRATION IN THE BANKING SECTOR**

In 2019, the concentration ratios of the banking sector in Jordan continued to follow a downward trend, while the competitiveness levels kept their upward trend. The assets of the largest five banks out of 24 banks accounted for 53.6% of licensed banks' total assets at the end of 2019, compared to 60% ten years ago. The improvement in the competitiveness is due to banks continuous enhancement and continuously seeking to upgrade their businesses and products to increase their competitive capabilities, in addition to the increase in the number of banks after licensing three new banks in 2009.

- **CREDIT GROWTH AND THE CREDIT-TO-GDP GAP**

The growth rate of credit extended by banks declined in 2019, compared to 2018. Direct credit facilities grew in 2019 by 3.1% to reach JD 26.5 billion, compared to 5.3% in 2018. It is noteworthy, that the total credit facilities accounted for 83.8% of GDP at the end of 2019, compared to 85.6% at the end of 2018; Jordan is almost ranked in the middle compared to a number of countries in the region.

The results of the credit gap analysis in Jordan revealed that credit granted by banks to the private sector relative to GDP currently does not indicate a possibility of risks accumulating at the financial sector level (systemic risks). In 2019, this ratio was below its historical trend by 0.2%, which implies that no additional capital requirement buffers on banks are imposed, and this is justified in light of the normal growth rates of credit granted to the private sector, accompanied with low economic growth rates compared to the pre-global financial crisis levels.

- **STRESS TESTING**

The stress testing results, which are used to measure the ability of banks to withstand shocks, revealed that the Jordanian banking system is generally capable of withstanding high shocks and high risks. A hypothetical scenario was applied, assuming that the negative ramifications of the novel COVID-19 and the challenges it brings to the national economy are further deepened, resulting in the decrease in tourism income and direct investment, as well as the decline in national exports and the return of

expatriates from abroad. This may lead to a significant contraction in economic growth rates compared to projected levels, high level of unemployment rate, and a deterioration in the financial market. It was also assumed that the interest rates on the Jordanian dinar would increase to maintain its attractiveness as a saving currency. The results of these tests indicated that the CAR of the banking sector in Jordan after assuming the abovementioned scenario are expected to reach 16.7%, 14.9% and 14.2% for the years 2020, 2021, and 2022 respectively. Accordingly, under the severe scenario, the CAR will remain above the minimum requirement of 12% applied in Jordan, and the minimum requirement determined by the Basel Committee of 10.5%.

### • FINANCIAL STABILITY INDEX IN JORDAN

The Financial Stability Index in 2019 improved to 0.55 compared to 0.46 in 2017 and 2018. The value of this index ranges from zero to one; the closer the index to one, the stronger the financial stability in the financial system. This index was developed in 2016, considering the experiences of several countries in building their financial stability indices. The Financial Stability Index in Jordan shows that the financial system stability in Jordan is relatively satisfactory, taking into account the political and economic developments in the region and their impact on the financial stability in the Kingdom. The banking stability index in particular indicates that Jordan enjoys a highly sound, resilient, and stable banking sector, as Jordan ranked third among (20) countries with indices using the same methodology of the Financial Stability Index for Jordan.

### • OPERATIONAL EFFICIENCY OF BANKS

The average ratio of total expenses to total income of banks operating in the Kingdom increased slightly from 55.5% at the end of 2018 to 57.1% at the end of 2019. This ratio is still close to the international acceptable upper bound of 55%, however, banks with ratios exceeding this bound should control and cut down their operational expenses further.

## HOUSEHOLD SECTOR

The household debt increased to reach JD 11.2 billion at the end of 2019, compared to JD 10.8 billion in 2018 growing by 3.9% which is modestly higher than the growth recorded in 2018 of 3.7%. The growth rates of household indebtedness in 2018 and 2019 are considered relatively low compared to previous high growth rates especially during the years 2014-2015, which indicates that risks of household debt are declining in recent years.

With respect to the average monthly household debt relative to their income in Jordan (Debt Burden Ratio (DBR)), which is measured by the value of monthly installments and interests payments paid by the borrower relative to his/ her regular monthly income, it almost maintained the same level of 2018 to reach around 43% in 2019 compared to 42.5% in 2018. This ratio is considered acceptable according to international standards, as most countries record (40%-50%), which indicates that household debt risks for banks and the individuals themselves are within the acceptable and normal range compared to other countries.

## CORPORATE SECTOR

The results of stress testing of nonfinancial corporates revealed that around 58% were capable of withstanding a shock of 25% decline in their profitability, whereas only 48% of nonfinancial corporates

were able to hold out a shock of 50% decline in their profitability. Therefore, the 50% decrease in corporates' profitability will apparently affect the debt service ability of some companies. The sectoral analysis indicates that the real estate corporates sector is the most affected by these shocks, as the majority of real estate companies recorded losses in 2019. However, the year 2020 will be a tough year for the corporate sector in general, as a recent press release published by Amman Stock Exchange (ASE) outlined that net profits after tax for public listed companies in ASE has declined in the first half of 2020 by 92.7%, compared to the first half of 2019. The decline in corporates' profits is due primarily to the ramifications of COVID-19 pandemic and its implications on the companies' performance and operational activities. This led the CBJ to allow banks to defer due installments of affected companies, in addition to initiating soft financing programs to help these companies and alleviate the repercussions of the COVID-19 pandemic on their business.

### **THE REAL ESTATE SECTOR**

The real estate sector in Jordan has been impacted by the slowdown in economic activity in the Kingdom and the political and economic developments in the region more apparently since 2017 than preceding years. In 2017, the real estate trading volume dropped by 14.1%, and the real estate price index (REPI) decreased by 0.9%. However, in 2018, the REPI increased by 0.2%, yet the trading volume decreased by 13%. In 2019, the real estate trading volume declined by 12% while the REPI declined by 0.5%. It is noteworthy that during the first half of 2020 the trading volume has declined by 44% compared to the same period in 2019 owing to COVID-19 pandemic repercussions, which markedly affected the majority of economic sectors in Jordan including the real estate. This remarkable slowdown in the real estate sector requires some banks to reconsider the maximum bound of loan-to-value (LTV) of real estate mortgages, especially for those banks with LTV ratios surpassing 80%, to avoid any potential risks that may arise from possible decrease in real estate prices.

It is worth mentioning that credit facilities extended to the real estate sector for residential and commercial purposes amounted to JD 5.44 billion at the end of 2019 (forming 20.5% of total facilities extended by banks), compared to JD 5.46 billion at the end of 2018, declining slightly by 0.4% compared to a growth of 3.2% in 2018.

### **FINANCIAL INCLUSION**

On 04-12-2017, the CBJ launched the National Financial Inclusion Strategy for (2018-2020) under the patronage of his Majesty King Abdullah II and in the presence of the Prime Minister. The Strategy aims at enhancing the access to financial services of the formal financial sector by different segments of society, in a fair, transparent, and responsible manner. The strategy comprises of five pillars namely: financial education, financial consumer protection, Small and Medium sized Enterprises (SMEs), microfinance services, and digital payments. A database that supports these five pillars shall be established to ensure the accuracy and the implementation of goals, and the vision clarity of each pillar. Accordingly, the CBJ coordinated and collaborated with key stakeholders from various relevant sectors to set forth action plans for all pillars of the strategy; these plans were finalized in 2018, and published on the CBJ's website. This JFSR2019 reviews the main accomplishments and procedures taken for each of the strategy pillars. The Strategy aims at achieving two main goals; the first goal is to raise the level of financial inclusion, measured by the number of adults owning accounts in financial institutions, from 33.1% in 2017 to 41.5% by 2020. The second goal is to reduce the gender gap regarding the access to finance from 53% to 35%.

It is worth mentioning that these goals at the end of July 2020 outperformed their targeted levels in the strategy; the financial inclusion increased to around 50% exceeding the targeted 41.5%, while the gender gap decreased to 29% below the targeted 35%. This highlights the huge success of the National Financial Inclusion Strategy.

### LEGISLATIVE FRAMEWORK

The CBJ in 2019 continued the comprehensive review of the legislative framework governing the practices of the banking and financial institutions under its supervision umbrella. Chapter Two of this report detailed major supervisory amendments conducted by the CBJ during the years 2016, 2017, 2018, and 2019, in particular the amended Central Bank Law No. (24) of 2016, the amended Banks Law No. (7) of 2019, the draft Law for Regulating Insurance Business, the amended Jordan Deposits Insurance Corporation Law No. (8) of 2019, in addition to various significant banking regulations that were issued to keep up with latest developments and international best practices and experiences regarding the role of central banks in maintaining monetary and financial stability.

The paramount amendment to the Banks Law No. (7) of 2019 was enhancing the corporate governance in Jordanian banks. New articles were stipulated to support the separation of executive managements and the Boards of Directors. The mechanism of selecting members of the Boards has also been altered to emphasize the members' competencies, rather than their financial capabilities. Moreover, the number of the members of the Board was set to be at least seven members, of which independent members shall not exceed half the total members of the Board of directors.

### CYBER RISKS AND FINANCIAL STABILITY

The accelerating development in the financial technology sector (Fintech) opened the door for banks and financial institutions to improve the services they offer to customers, through using new and innovative channels, which brought recently a paradigm shift in the services provided by the banking and financial sector. This technological development enabled banks to provide more digital financial services, in particular those enhancing the access to digital financial services in an easy, efficient and secure manner, which led to saving time, effort, and money. However, these rapid technological developments are challenging for banks and financial institutions, as new risks (cyber risks) for banks and financial institutions are looming large, which may disrupt financial services essential for the national and international financial systems, undermine the security and the confidence in the financial system, and jeopardize financial stability. Chapter seven of this report discusses the concept of systemic cyber risks and their impact on the financial stability. Cyber risks can create systemic risks that may exemplify a threat to the entire complex financial system where banking and non-banking institutions are highly interrelated. The chapter also elaborates on cyber risks facing the financial and banking sector, which are relatively low, and currently do not impose any threat to the financial stability. The chapter also emphasizes that there is a pressing need for banks and financial institutions to continue to improve their security controls and put in place proper procedures and measures to withstand the cyber threats laying ahead, especially amid the augmenting tendency to use more digital financial services compared to pre-COVID-19 pandemic era.

The CBJ has adopted a set of appropriate procedures and measures in line with international best practices in cyber risk management. These procedures are addressed in chapter seven, namely: the formulation of a "Response Team to Deal with Cybersecurity Incidents for the Financial and Banking Sector", which contribute to increasing the efforts and achieving optimal utilization of capabilities to enhance the cybersecurity framework for the entire financial sector. This is besides the issuance of the instructions of adapting to cyber risks, and the CBJ's approval of the policies of the information security and cyber security management.



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

### 1-1 GLOBAL ECONOMIC DEVELOPMENTS AND ECONOMIC GROWTH

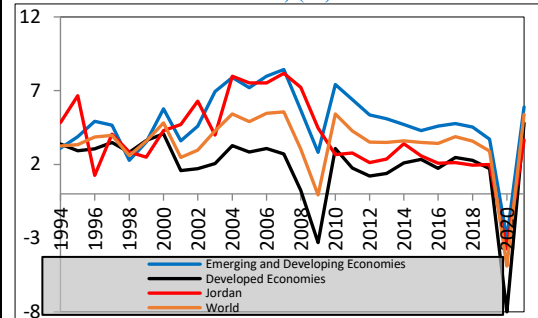
The global economic growth recorded a slowdown in 2019; the global real GDP grew by 2.9%, compared to 3.6% in 2018. This slowdown is primarily due to the US-China trade tensions, in addition to the geopolitical tensions in some regions worldwide. Since the beginning of 2020, the world has been experiencing exceptional developments of uncertainty that led the global economy to shrink sharply much worse than during the 2008 global financial crisis. This is owing to the repercussions of the novel COVID-19 pandemic that hit countries all over the world, leading to a significant downturn in the global economic activity. In its latest forecasts in June 2020, the IMF projected a -4.9% contraction of the global economic growth by the end of 2020 compared to April 2020 forecast of -3%, which is around 6 percentage points less than October 2019 forecast and January 2020 updates. The IMF also projected the global economy to rebound partially in 2021 and to grow by 5.4%, with the economic activity returning back to normal corroborated with the support of the monetary and financial policies to reduce the exacerbation of the impacts and risks of the pandemic. The cumulative GDP losses in the global economy because of COVID-19 pandemic may exceed US\$ 12 thousand billion in 2020 and 2021. (Table 1-1 and Figure 1-1).

**Table 1-1: World Economic Outlook 2020**

	Year	The World	Developed Economies	Emerging Economies
Actual Data	2018	3.6	2.2	4.5
	2019	2.9	1.7	3.7
Latest Estimates June 2020	2020	-4.9	-8.0	-3.0
	2021	5.4	4.8	5.9
Estimates of April 2020 Report	2020	-3.0	-6.1	-1.0
	2021	5.8	4.5	6.6

Source: IMF, World Economic Outlook Database, April and June 2020.

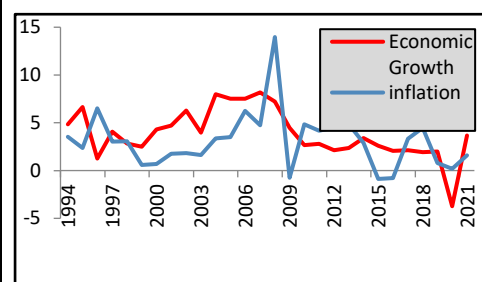
**FIGURE 1-1: REAL GDP GROWTH TRENDS AND PROSPECTS FOR JORDAN AND THE WORLD (1994-2021) (%)**



Source: IMF, World Economic Outlook Report Database, April and June 2020.

Meanwhile, the Jordanian economic growth improved modestly in 2019 to reach 2%, compared to 1.9% in 2018. However, it contracted again in the first quarter of 2020 due to COVID-19 pandemic, which reflects the negative challenges and risks that affected tourism, transport, investment, industry and trade activities. The economic growth rate in Jordan is projected at a contraction of -3.4% at the end of 2020, and is expected to rebound in 2021 to reach 3.66%, according to the IMF's projections of the World Economic Outlook for April 2020. (Figure 1-2).

**FIGURE 1-2: REAL GDP GROWTH AND INFLATION RATE DEVELOPMENTS AND PROSPECTS IN JORDAN (1994-2021) (%)**



Source:

IMF, World Economic Outlook Report Database, April 2020.

The domestic financial stability was strengthened, driven 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, as well as ensuring a resilient and sound financial sector despite the tremendous challenges it confronts.

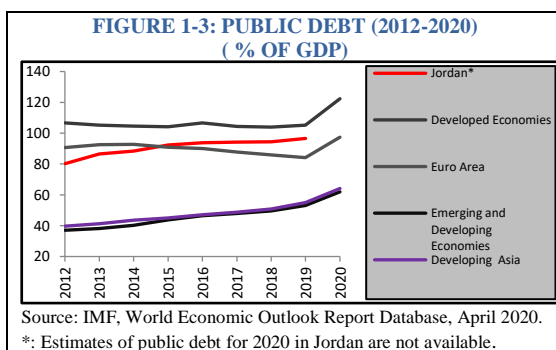
### 1-1-1 DEVELOPMENTS OF PUBLIC FINANCE

The global growth prospects are weak, and the uncertainty surrounding the COVID-19 crisis is augmenting, in addition to low inflation rates and declining interest rates. This calls for a pressing need for fiscal policies measures to withstand risks and protect individuals and companies vulnerable to income losses, high unemployment rate, and insolvency. In addition, a key priority is to accommodate spending on health services, therefore, there is an urgent need for financing and facilitating grants to support and enhance economic growth, and achieve a balance between stability and sustainability. In addition, it is necessary to reduce the possibility of a long-lasting slump in light of the negative risks in front of the global economy owing to COVID-19 pandemic.

### 1-1-2 PUBLIC DEBT

The Fiscal Monitor report of April 2020 argued that the outbreak of COVID-19 pandemic elevated public debt ratios markedly compared to previous forecasts. The decline in GDP growth rates was accompanied by a sharp decline in revenues, and consequently, public finances were used to support expenditures, obligations, and support individuals and companies.

The IMF indicated in its report that the global public debt as a percent of GDP hit high records compared to its historical levels to reach 83.3% in 2019 and is set to rise to reach 96.4% by the end of 2020, compared to 81.3% and 81.5% in 2017 and 2018, respectively (Figure 1-3).

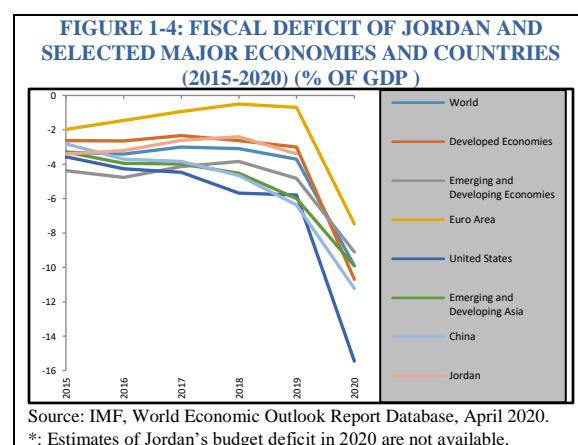


In advanced economies, the public debt to GDP ratio increased from 103.5% in 2018 to 105.2% in 2019, and according to the IMF's projections, it is set to rise substantially to reach 122.4%. As for emerging markets and developing economies, the public debt to GDP ratio increased from 49.7% in 2018 to reach 53.2% in 2019 and is expected to rise to 62% in 2020.

The report indicated that as countries proceed with their endeavors to counter the crisis, a coordinated broad-based fiscal stimulus becomes a more effective tool in strengthening the recovery and rebound of the economy, taking into consideration the maintenance of debt within sustainable limits.

### 1-1-3 FISCAL DEFICIT

The public finances trends demonstrated variations among major countries and economies according to the IMF's Fiscal Monitor report of April 2020. The global fiscal deficit increased as a percentage of GDP to 3.7% in 2019 compared, to 3.1% in 2018, and is expected to surge to 9.9% by the end of 2020, due to the repercussions of COVID-19 pandemic. (Figure 1-4).



The fiscal deficit as a percent of GDP increased by 3% in 2019, compared to 2.1% in 2018, and is set to widen significantly to around 10.7% in 2020, triggered by COVID-19 crisis. As for emerging markets and developing economies, it increased from 3.9% in 2018 to 4.8% in 2019 and is projected to surge to 9.1%

in 2020. The oil exporting countries fiscal deficit to GDP ratio increased to 1% in 2019 up from 0.6% in 2018, and is anticipated to increase substantially to reach 7.6% in 2020 owing to the ramifications of COVID-19 pandemic.

### 1-2 GLOBAL FINANCIAL SYSTEM STABILITY

#### 1-2-1 GLOBAL FINANCIAL STABILITY

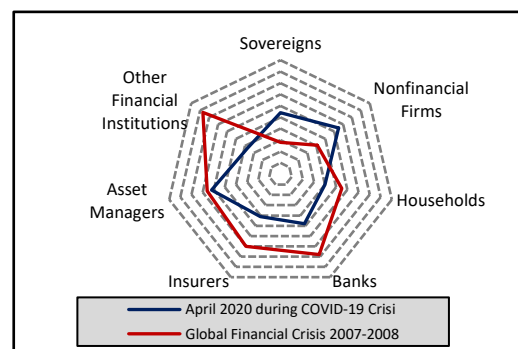
The IMF's Global Financial Stability Report of April 2020 explained that the COVID-19 crisis imposed massive challenges resulting in deterioration of the global financial conditions. The report highlighted that multilateral cooperation is essential to help reduce the intensity of the COVID-19 crisis and its damage to the global economy and the entire financial system. The report also emphasized the sharp decline in stock prices, oil prices, and the level of production in light of the weakening global demand, which affected investors' confidence and sparked a flight to safety and quality among investors. The short-term funding markets were also impacted, which may set investors under pressure to close out their positions due to liquidity and markets deteriorations.

On another front, central banks around the world have adopted bold and decisive actions to restrain the repercussions of the COVID-19 pandemic, by easing monetary policy and reducing the severity and intensity of financial conditions and financing risks, as well as maintaining the flow of credit to the economy. This is in addition to supporting individuals and companies that have been most affected by the crisis, while maintaining a balance between protecting financial stability and supporting economic activity.

The Global Financial Stability Report addressed that vulnerabilities remain a threat to the global financial stability in the medium term. Nonfinancial firms and sovereigns exemplify key vulnerabilities elevated in some systemically important economies, which implies that debt

levels are higher than their levels during the financial crisis in 2007-2008. (Figure 1-5).

**FIGURE 1-5: GLOBAL VULNERABILITIES (FINANCIAL CRISIS 2007-2008, COVID-19 CRISIS APRIL 2020)**



Source: IMF, Global Financial Stability Report, April 2020.

The report argued that key financial vulnerabilities are associated with risky credit markets; including weaker credit quality of borrowers, looser underwriting standards, and liquidity risks at investment funds. The COVID-19 crisis has resulted in price declines in credit markets of about two-thirds of the severity of the global financial crisis 2007-2008. On the positive side, the use of financial leverage by investors has declined, and banks' exposure to risks such as run risks have lessened in some segments and markets.

#### 1-2-2 LATEST DEVELOPMENTS IN THE GLOBAL FINANCIAL STABILITY REPORT JUNE 2020

In its Global Financial Stability Report update/ June 2020, the IMF stated that governments and central banks have taken swift and bold actions to alleviate the pressures of financial conditions on financial markets arising from COVID-19 crisis. These actions included reopening of some sectors and the easing of COVID-19 related lockdown measures, cuts of benchmark interest rates, providing facilities intended to sustain the flow of credit to the economy, and monetary policy accommodation to inject liquidity to support the global economy for quite some time. These actions amounted to around US\$ 11 trillion, as shown in the Fiscal

Monitor Report database 2020. Subsequently, stock markets recovered after deteriorating earlier this year, while benchmark interest rates fell significantly, leading to an overall easing of financial conditions. Financial authorities have also bolstered market confidence by; government loans guarantees, support for the restructuring of loans, and encouraging banks to use available capital and liquidity buffers to support lending.

According to the S&P 500 index, financial markets appear to be expecting a recovery, yet recent economic data and fundamentals suggest a deeper than expected economic downturn; the IMF projected the economic growth in June 2020 below the April 2020 forecasts. In addition, market assessments were overestimated for several types of stocks and bonds, which led to decreasing investors' confidence and risk appetite, threatening the economic recovery. Consequently, the authorities should strive to achieve the right balance while responding to policies taking into consideration not to augmenting vulnerabilities amid easing of financial conditions, and to continue to support economic recovery while ensuring the soundness of banks and financial institutions and safeguarding financial stability.

### **1-2-3 DOMESTIC FINANCIAL STABILITY**

Despite the challenges, difficulties, and crises confronted and still facing all countries worldwide, including Jordan, with the latest current COVID-19 pandemic, the Jordanian financial sector in general and the banking sector in particular are stable, as will be discussed later in this Report. Jordan enjoys a sound and resilient banking system that is capable to withstand shocks and high risks thanks to its high levels of capital and comfortable levels of liquidity and profitability.

## **1-3 DOMESTIC ECONOMIC AND FINANCIAL TRENDS AND PROSPECTS**

### **1-3-1 ECONOMIC GROWTH**

The economic growth rate improved slightly to reach 2% in 2019 compared to 1.9% in 2018. However, in 2020, the repercussions of COVID-19 pandemic spreading worldwide has severe impact on previous economic forecasts. The IMF indicated that the Middle East region economies are suffering from two major shocks in 2020, namely; the COVID-19 pandemic and its repercussions on the economy, and deteriorating oil prices crisis, which heightened risks level. The IMF's report projected that the economic growth rate in Jordan will shrink to -3.4% in 2020, and bounce back to around 3.7% in 2021.

International reports also highlighted that, in addition to the repercussions of the current COVID-19 pandemic, economic growth in Jordan is still heavily burdened by prolonged conflicts in the region and the implications thereto, as well as the more than expected weak public sector investments.

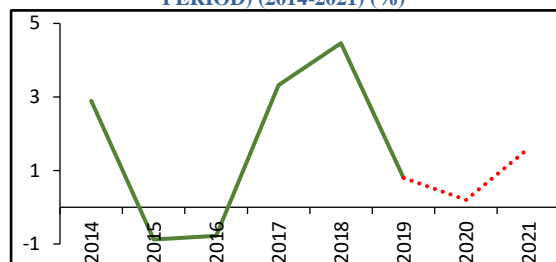
### **1-3-2 UNEMPLOYMENT**

Government measures and programs have assisted in mitigating the impact of the conflicts in the region on unemployment rates. Nonetheless, the unemployment rate increased from 18.6% in 2018 to 19.1% in 2019. During the first half of 2020, the unemployment rate was up to 23% due to the repercussions of COVID-19 crisis.

### **1-3-3 INFLATION**

With respect to the general prices level, the consumer price index increased from 100 in 2018 to 100.8 in 2019 up by 0.8%. The prospects for inflation are still limited for the next two years 2020-2021 in light of the COVID-19 pandemic outbreak, which led to a serious economic contraction resulting in a significant decline in demand and commodity prices in the world. (Figure 1-6).

**FIGURE 1-6: INFLATION RATE IN JORDAN (END OF PERIOD) (2014-2021) (%)**



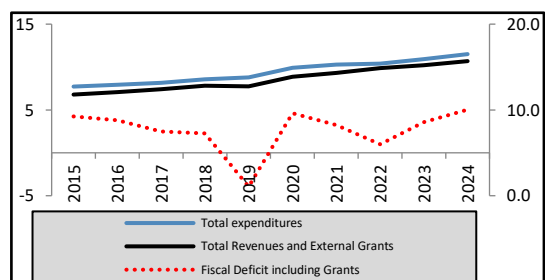
Source: CBJ, Statistical Database.

### 1-3-4 PUBLIC FINANCE DEVELOPMENTS

The overall fiscal deficit including grants increased from JD 727.6 million (or 2.4% of GDP) in 2018, to reach JD 1,058.4 million (or 3.4% of GDP) in 2019.

The forecasts which substantially influenced by the ramifications and potential effects of COVID-19 crisis and the economic effects resulting thereof, suggest the fiscal deficit as a percentage of GDP to widen for the period 2020-2021 to record 6.7% and 5.7%, respectively. (Figure 1-7).

**FIGURE 1-7: SUMMARY OF PUBLIC FINANCE IN JORDAN (2015- 2024) (% OF GDP)**

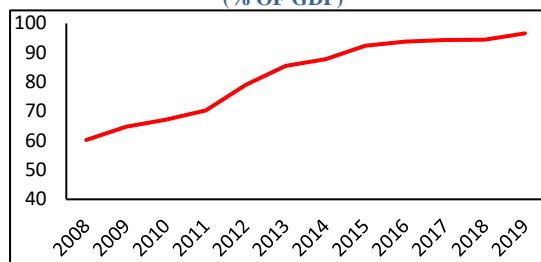


Source: Ministry of Finance, Monthly bulletin, January 2020.

Estimates of (2020-2024), World Economic Outlook Report, October 2019, which were not updated due to COVID-19 pandemic outbreak in 2020.

Total public debt increased to reach JD 30,076.2 million (96.6% of GDP) in 2019, compared to JD 28,308.3 million (94.4% of GDP) at the end of 2018. (Figure 1-8)

**FIGURE 1-8: PUBLIC DEBT IN JORDAN (2008- 2019) (% OF GDP)**



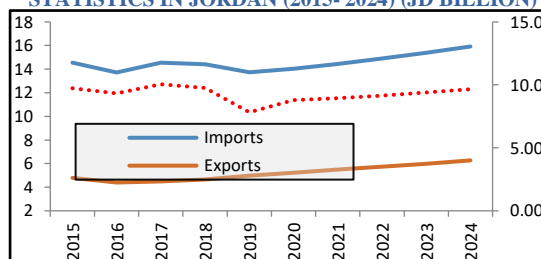
Source: Ministry of Finance, Monthly bulletin, January 2020.

\*No estimates are available for the coming period due to COVID-19 pandemic.

### 1-3-5 EXTERNAL SECTOR

In 2019, national exports increased by 6.8%, and the re-exports rose by 9.9%. In contrast, imports decreased by 4.8%. These positive developments have resulted in a shrink in the trade balance by JD 1,090.4 million or 12.2% to reach JD 7,826.9 million. (Figure 1-9).

**FIGURE 1-9: SUMMARY OF EXTERNAL TRADE STATISTICS IN JORDAN (2015- 2024) (JD BILLION)**



Source: CBJ, Statistical Database, May 2020.

Estimates of (2020-2024), World Economic Outlook Report, October 2019, which were not updated due to COVID-19 crisis outbreak in 2020.

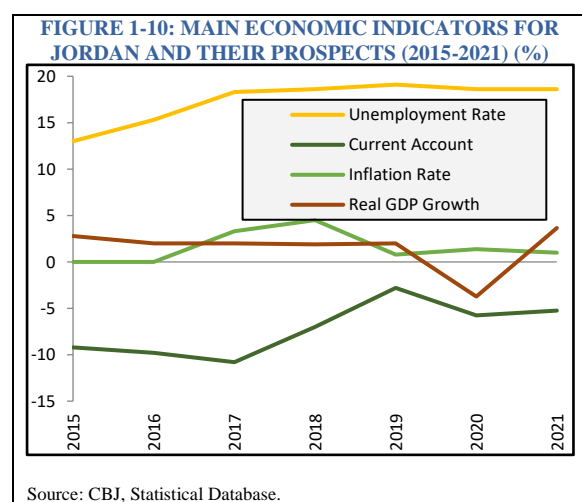
### 1-3-6 MONETARY DEVELOPMENTS

In 2019, the CBJ decreased the monetary policy instruments interest rates three times by 75 basis points. This was in line with latest developments of regional and international markets interest rates, and aims to enhance the growth of credit provided to the economic sectors, as well as to stimulate consumption and investment domestic spending, which will affect economic growth positively. This decision was supported by a comfortable level of foreign reserves and a current account improvement, in addition to the slowdown of inflation rates. In 2020, the CBJ reduced all monetary policy rates by 150 basis points to reduce the cost on borrowers and help them withstand the



repercussions of the COVID-19 pandemic. Banks have responded swiftly to this cut by reducing their interest rates before interest due dates.

Regarding the CBJ's foreign reserves, including gold and SDRs, they reached JD 10,159.5 million at the end of 2019, increasing by 7% compared to their level in 2018. This level is comfortable and sufficient to cover imports for 8 months, which is a safe period that exceeds the international standards acceptable rates.



**TABLE 1-2: SELECTED MAIN ECONOMIC INDICATORS FOR JORDAN & THEIR PROSPECTS (2005-2021)**

Year	GDP Growth Rate (%)	Inflation Rate (End of Period) (%)	Unemployment Rate (% of Labor Force)	Population (Growth Rate)	Public Debt (% of GDP)	Current Account (% of GDP)
2005	8.1	3.5	14.8	2.8	84.3	-18.1
2006	8.1	6.3	14.0	2.9	76.3	-11.5
2007	8.2	4.7	13.1	3.0	73.8	-16.8
2008	7.2	14.0	12.7	3.0	59.6	-9.3
2009	2.0	-0.7	12.9	3.1	64.4	-5.2
2010	3.5	4.8	12.5	3.2	66.9	-7.1
2011	3.3	4.2	12.9	4.3	70.6	-10.2
2012	2.0	4.5	12.2	6.0	80.2	-15.2
2013	2.2	4.8	12.6	8.8	86.6	-10.4
2014	3.5	2.9	11.9	8.2	88.5	-7.2
2015	2.8	-0.9	13.0	7.9	92.4	-9.2
2016	2.0	-0.8	15.3	2.8	93.8	-9.8
2017	2.0	3.3	18.3	2.6	94.3	-10.8
2018	1.9	4.5	18.6	2.5	94.4	-7.0
2019	2.0	0.8	19.1	2.4	96.6	-2.8
2020	-3.4	0.2			95.0	-5.76
2021	3.6	1.6			94.0	-5.26

Source: CBJ, Monthly statistical Bulletin, for Actual numbers (2005- 2019)  
IMF World Economic Outlook Database, April 2020: economic growth rates.  
Department of Statistics Database: unemployment and population growth rates.  
IMF World Economic Outlook Database, April 2020: estimates for the years (2020- 2021).  
The current account data published since 2014 are prepared according to sixth edition of balance of payments manual.

## 1-4 CHALLENGES TO STABILITY

### 1-4-1 THE RISKS OF PROLONGED DOWNSIDE DEVELOPMENTS AND THE REGIONAL SITUATION

In 2019, several economic challenges were confronting the Jordanian economy, which were an extension of previous internal and external economic crises facing Jordan since the beginning of the global financial crisis (2007-2008). These crises were deepened with the deterioration of the regional situation and the emergence of geopolitical factors in some Arab countries, in particular Syria, Iraq, Yemen and Libya since 2011 until now. The downside risks of continuous negative developments eventually ended up in several crises, including the refugees crisis which burdened the Jordanian economy with tremendous economic and social costs, and imposed massive pressures on the infrastructure, the services, and the essential sectors such as education, health, and water.

### 1-4-2 COVID-19 CRISIS

The unprecedented threats associated with the global COVID-19 crisis outbreak since the beginning of 2020 have had tremendous socio-economic impacts and costs on the global and national economy. In an endeavor to curb the effects of these accelerating developments, the CBJ decided to adopt a package of proactive and overarching measures aimed at containing the negative ramifications of this crisis on the national economy. These measures amounted to approximately JD 2.5 billion, or 8.1% of GDP.

These measures are summarized below:

- Injecting additional liquidity of JD 1,050 million to the national economy by:
  - For the first time since 2009, the CBJ reduced the required compulsory reserve ratio on deposits from 7% to 5%, which provided the banking sector with additional liquidity of JD 550 million, and enabled banks to lend and reduce the interest rates they charge on credit facilities provided to all economic sectors, including individuals and corporates.

- Conducting JD 500 million repurchase agreements with banks, for maturities up to one year, to provide financing for the public and private sectors.
- The CBJ reduced all monetary policy rates by 150 points, or 1.5%. Furthermore, banks responded immediately and cut their interest rates before contractual due dates.
- Approve the following SMEs measures:
  - The CBJ launched a JD 500 million soft financing program to support SMEs and help them counter the effects of the COVID-19 crisis. These loans are 85% guaranteed by the Jordan Loan Guarantee Corporation.
  - The definition of SMEs has been broadened to cover companies with less than 200 employees and sales or assets of less than JD 5 million, for the purposes of the soft financing program.
- Request banks to postpone loans repayments of clients in the sectors impacted by the COVID-19 crisis, corporates and individuals alike. In addition, no delayed interests or additional commissions shall be charged during 2020, and for periods commensurate with the improving clients' cash flows.
- Allow banks to restructure and reschedule loans of clients in economic sectors affected by the ramifications of the COVID-19, and no down payment is required nor any additional costs or commissions charged.
- Adopt the following measures regarding the outstanding and future facilities within the CBJ's JD 1.2 billion refinancing program to support economic sectors, until the end of 2020, as follows:
  - Reduce the refinancing program's interest rate from 1.75% to 1%, for projects in Amman, and from 1% to 0.5% for projects in other governorates. In addition, tenors of loans provided inside Amman to targeted sectors in the refinancing program were extended up to 10 years, as they are in other governorates, including two years grace period upon the client's request.
- Postpone credit facilities repayments for borrowers.
- New loans and financing within this program are risk weighted at (0%) for calculating the CAR.
- Credit limits were raised to JD 3 million for all sectors, keeping the limit for renewable energy and transportation sectors at JD 4 million.
- Expand the coverage of the program to include the export sector (sectors currently covered are the industry, tourism, agriculture, renewable energy, information technology, transportation, health, technical and vocational education and engineering consulting).
- The CBJ approved not to blacklist clients with bounced checks due to financial reasons, and no commission shall be charged, for all checks returned during the period 18/3/2020 to 30/04/2020.
- Reduce the commissions of loans guarantees, and expand the insurance coverage for the local sales guarantee program.
- Approve the following measures regarding the payment systems and promoting the use of electronic payment services and encouraging the use of digital financial services during COVID-19 pandemic:
  - During the lockdown, the CBJ remotely continued to operate all payment, settlement, and clearing systems.
  - The CBJ issued a circular ensuring that banks and payment services and electronic money transfer providers shall continue to provide basic financial services without interruption.
  - Recommend the use of e-wallets and enable payment services providers to remotely open e-wallets for customers,

merchants, and companies without any costs.

- Provide electronic channels to enable customers to send cashless money transfers abroad, in an integrated electronic form anytime and anywhere.
- Customers' cash withdrawals from other banks' ATMs are free of charge.
- Provide cutting-edge technologies that support accepting electronic payments at the points of sale located at merchants and retail business sectors.
- Enable customers to conduct cardless cash deposit and withdrawal from e-wallets using the ATMs of certain banks.
- Regulate and encourage contactless electronic payments.

## 1-5 JORDAN IN SELECTED INTERNATIONAL INDICATORS

### 1-5-1 TRANSPARENCY AND CORRUPTION PERCEPTION INDEX

Corruption is “the abuse of public resources for private gain” that leads to distortions of the country’s activities and reduces economic growth and quality of life.

Transparency International has been issuing transparency and anti-corruption indicators annually since 1995, which rank countries and territories worldwide based on how corrupt a country’s public sector is perceived to be by experts and business executives. The Corruption Perception Index methodology ranks 180 countries and territories worldwide on a 0-100 scale, where zero indicates highly corrupt, while 100 supports that a country is very clean of corruption.

The 2019 report indicates that the vast majority of countries and territories are showing a slight improvement in their overall anti-corruption practices. Jordan’s ranking has improved to (60) with a score of (48) in 2019, compared to rank (58) with a score of (49) in 2018. (Table 1-3).

**TABLE 1-3: JORDAN’S RANKING IN TRANSPARENCY AND CORRUPTION PERCEPTION INDEX FOR DIFFERENT YEARS**

Rank*			Score**					
2017	2018	2019	2014	2015	2016	2017	2018	2019
59	58	60	49	53	48	48	49	48

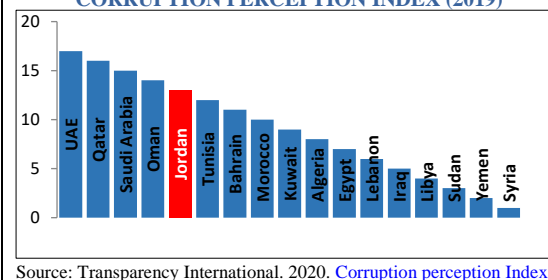
Source: Transparency International, [Corruption perception Index](#), 2020.

\* Rank: The closer the rank is to one, is better.

\*\* Score: Ranges from zero to 100. The higher the score is better.

Compared to other countries in the Middle East and North Africa, Jordan ranked fifth, preceded by (United Arab Emirates, Qatar, Saudi Arabia, and Oman). This good ranking reflects the determination of the government in strengthening transparency, combating corruption, and creating a healthy investment environment. (Figure 1-11).

**FIGURE 1-11: JORDAN AND SELECTED ARAB COUNTRIES RANKINGS IN TRANSPARENCY AND CORRUPTION PERCEPTION INDEX (2019)**



Source: Transparency International, 2020. [Corruption perception Index](#).

### 1-5-2 HUMAN DEVELOPMENT INDEX

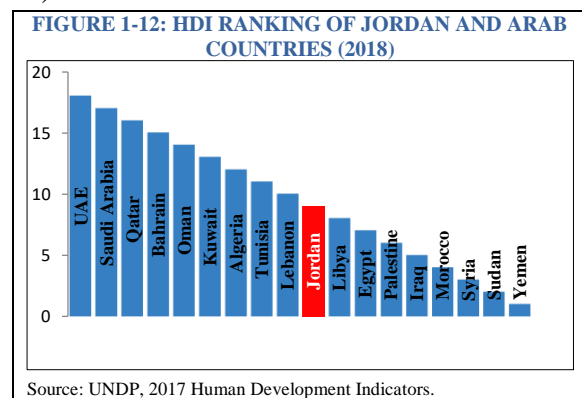
The United Nations Development Program (UNDP) issues an annual report, which is a summary measure of the achievements and trends in three key dimensions of human development: a healthy life and a high life expectancy rate, being knowledgeable, and having a decent standard of living.

The latest report of 2018 indicated that human capabilities and human development should be the ultimate criteria for assessing the human development and the progress of a country. The report includes a number of indices related to human resources development. Jordan ranked (102) out of (189) countries in 2018, which is considered high according to the human resources development Index (HDI) (Table 1-4).



TABLE 1-4: JORDAN'S RANKING IN THE HDI DIMENSIONS 2018*					
Rank	HDI Ranking	HDI (net)	Inequality Adjusted HDI (IHDI)	Gender Development Index** (GDI)	Gender Inequality Index*** (GII)
		Value			
102	Human High Development	0.724	0.617	0.868	0.469
Source: UNDP, Human development Report 2020. Latest data available for 2018 as indicated in the table. *Jordan ranked fifth in the HDI gender equality index. ** Jordan ranked 113 out of 189 countries in Gender Inequality Index.					

Compared to 18 Arab countries included in the Report, Jordan ranked in the middle, outperforming a number of Arab countries including Libya, Egypt, Palestine, Iraq, Morocco, Syria, Sudan, and Yemen. (Figure 1-12).



### 1-5-3 COMPETITIVENESS INDEX

The World Economic Forum (WEF) releases an annual report for competitiveness indicators; they rank the competitiveness landscape of the world's economies using a set of indicators and pillars that result in one composite number illustrates the competitiveness stance for a given country. The overall index comprises a set of indicators in addition to new and emerging pillars that measure productivity and growth.

This index is particularly important as it helps achieving cooperation and synergy between the government, the private sector, and civil society to stimulate production and economic activity and realizing the standards of welfare and

prosperity. The index also places a premium on the role of human capital, innovation, resilience, and agility, not only as enablers, but also as defining factors of economic success in the fourth industrial revolution era. The overall index includes a set of economic and social indicators in addition to new and emerging pillars that measure productivity and growth.

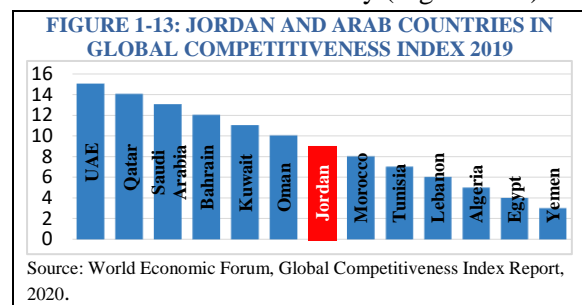
Drawing on the total average score of indicators in 2019, Jordan achieved a middle rank globally. It improved slightly by (3) ranks to record (70/141), scoring (60.9/100), compared to a rank of (73), and a score of (59.3/100) in 2018. (Table 1-5).

TABLE 1-5: JORDAN'S RANKING IN GLOBAL COMPETITIVENESS INDEX (2014-2019)									
Rank*			Score**						
2017	2018	2019	2014	2015	2016	2017	2018	2019	
65	73	70	4.25	4.23	4.29	4.30	59.29	60.9	
Source: World Economic Forum, 2019. Global Competitiveness Report. *Rank close to 1 is better. **Score between (1-100), the closer to 100 is better.									

TABLE 1-6: INDICATORS OF GLOBAL COMPETITIVENESS INDEX AND RANKING OF JORDAN FOR 2020				
No.	Indicator/ Pillar	Rank	Score*	Best Performer
<b>Pillar I: Environment Enabling</b>				
1	Institutions	46	59.8	Finland
2	Infrastructure	74	67.4	Singapore
3	Macroeconomic stability	111	69.8	Multiple (33)
4	ICT adoption	82	51.0	Korea
<b>Pillar II: Human Resources</b>				
5	Health	45	86.7	Multiple (4)
6	Skills	58	67.2	Switzerland
<b>Pillar III: Markets</b>				
7	Product market	61	55.8	Hong Kong
7	Labor market	84	57.7	Singapore
8	Financial system	33	71.6	Hong Kong
10	Market size	80	48.8	China
<b>Pillar IV: Innovation and sophistication factors</b>				
11	Business dynamism	88	56.6	United States
12	Innovation capability	64	38.8	Germany
<b>Jordan's Overall Index</b>		<b>70</b>	<b>60.9</b>	
Source: World Economic Forum, The Global Competitiveness Report, 2020. * Scores range is 0-100, The higher the score, the better. 141 countries were classified in 2020.				

Compared to Arab countries, Jordan ranked seventh, which is considered a good ranking, as Jordan leads the ranking on Morocco, Tunisia,

Lebanon, Algeria, Egypt, and Yemen and lags behind the GCC countries only (Figure 1-13).



### 1-5-4 DOING BUSINESS INDEX

The World Bank since 2004 is issuing an annual doing business Index, which primarily measures the economic performance for 190 economies around the world using a set of quantitative indicators to measure the quality and effectiveness of business environment. It also investigates government policies, laws, bylaws, and regulations that ease or discourage business practices.

In the recent report of 2020, Jordan was one of the top ten economies that witnessed an improvement in the ease of doing business, along with Saudi Arabia, Bahrain and Kuwait, thanks to numerous regulatory reforms conducted by the government. The Kingdom achieved a significant progress in 2019 ranking (75) and scoring (69/100), compared to ranking (104) and a score of (60.9/100) in 2018. Jordan progressed markedly, especially in the sub-index related to access to credit, as it improved from a ranking of (134) to ranking (4). (Table 1-7).

TABLE 1-7: JORDAN RANKING IN DOING BUSINESS INDEX (2020)									
Jordan Ranking in Doing Business indicators 2019									
2019 Ranking: (75)		Score: (69.0)				Change: (7.7)			
Starting a Business		Dealing With Construction Permits		Getting Electricity		Registering Property		Getting Credit	
Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score
120	84.5	138	60.3	69	80.5	78	66.4	4	95.0
Protecting Minority Investors		Paying Taxes		Trading across Borders		Enforcing Contracts		Resolving Insolvency	
Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score
105	50	62	78.7	75	79.0	110	55.6	112	39.7

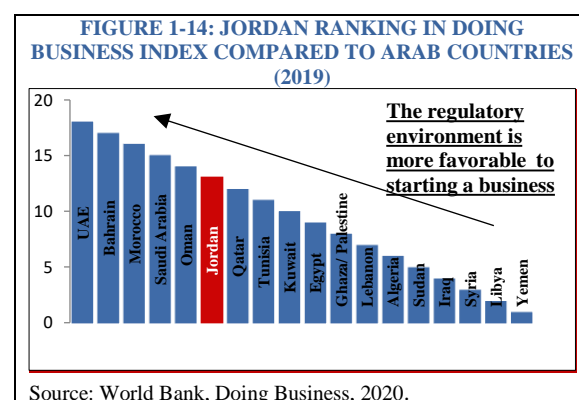
Source: World Bank, Doing Business 2020.

\*The closer the economy to 1, is better, and means the regulatory environment is more conducive to the starting and operation of a local firm.

\*\*Indicators of labor market regulation and contracting with the government were excluded from this year's rankings.

\*\*\* The ranking is determined based on the scores of 10 indicators, as each indicator has several sub-indicators, which are equally weighted.

Over the past few years, and since 2017, Jordan started to record distinguished progress in the index performance, which is due to a set of reforms that addressed key aspects of the business regulatory environment. These reforms included; improving access to credit information by establishing a credit bureau, facilitating trade across borders, facilitating customs clearance process, introducing a one-stop investment window project, facilitating electronic payment mechanisms for different invoices and tax obligations, smooth procedures for resolving insolvency in cases of bankruptcy, and launching the National Financial Inclusion Strategy in 2017.



### 1-6 CONCLUSION

Despite various developments that have hit the region in particular, and the world in general in recent years, the economic, political, and social conditions have affected a number of countries in the world, especially MENA countries, which increased challenges facing Jordan. The measures and policies adopted by Jordan's government and the CBJ helped to alleviate the severity of these ramifications and to safeguard economic, monetary, and financial stability in Jordan.

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

### 2-1 INTRODUCTION

The proper infrastructure and legislative structure are essential elements and factors to achieve financial stability. During the previous period, the CBJ continued pursuing the development of the financial system's infrastructure and respective financial legislations. The CBJ endeavors emphasized two main dimensions, namely: promoting financial inclusion in a responsible and prudent manner, and enhancing the legislative framework of the financial system.

### 2-2 PROMOTING FINANCIAL INCLUSION

#### 2-2-1 THE CONCEPT OF FINANCIAL INCLUSION

Financial inclusion is “the state wherein individuals and businesses have access to useful and affordable different financial products and services (payment transactions, saving, credit, money transfer, and insurance) delivered in a responsible and sustainable way, in a manner that meets their needs and improves their standard of living”. In this context, the fiscal and monetary policy makers in developing and emerging markets economies have embraced financial inclusion as a top priority in their policies and objectives to achieve the inclusive and sustainable growth.

Jordan recognizes financial inclusion as an essential pillar to achieve inclusive and sustainable growth in the Kingdom. The Jordanian government embarked on building a robust and sound financial infrastructure in addition to having in place legislative and legal frameworks conducive for an inclusive financial system. The CBJ has assumed the leading role in this process, supported by stakeholders from the public and private sectors, in order to ensure the

coordination and cooperation in formulating and implementing several key initiatives thereof.

Since 2012, the CBJ has been focusing on promoting financial inclusion in the Kingdom, by keeping up with latest regional and international developments of policies for promoting financial inclusion. In 2015, the CBJ started to direct and oversee the formulation of the National Financial Inclusion Strategy (NFIS) in the Kingdom, according to the Prime Minister's decision to form the National Financial Inclusion Steering Committee chaired by the CBJ's Governor. The strategy is directed towards achieving financial inclusion for low-income segments, the youth, women, refugees, and Micro, Small, and Medium Enterprises (MSMEs).

As mentioned in the Jordan Financial Stability Report of 2018, the NFIS for the period (2018-2020) was launched on 04/12/2017. The strategy covers a number of core pillars, namely:

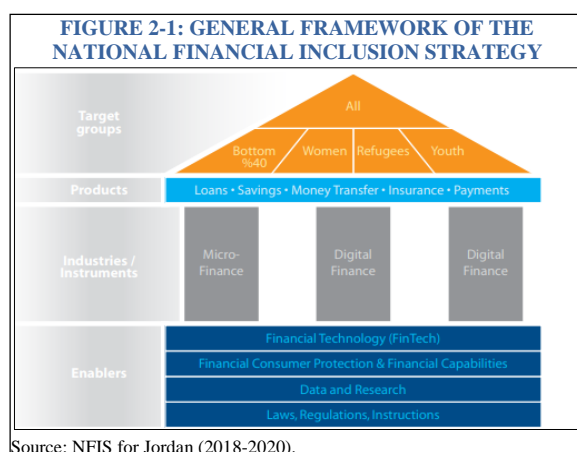
- Small and Medium-Sized Enterprises (SMEs).
- Microfinance.
- Financial Capability and Financial Education.
- Financial Consumer Protection.
- Digital Financial Services.

#### 2-2-2 VISION AND GENERAL FRAMEWORK OF FINANCIAL INCLUSION IN JORDAN

As mentioned in the 2018 Financial Stability Report, the NFIS builds on a set of priority policy areas, three of which form the core pillars of financial inclusion: microfinance, digital financial services, and SMEs finance. On another hand, four areas are considered as cross-cutting enablers, that facilitate the success of the NFIS and contribute to achieve planned objectives. These enablers include the use of financial technology (FinTech), financial consumer protection and enhancing financial

capabilities of all segments in the society, data and research, and laws and legislations.

While the NFIS targets all segments of the population and MSMEs; yet it gives special attention to the empowerment of vulnerable groups excluded from the financial services, especially vulnerable low-income groups of the bottom 40% households in terms of income in Jordan, women, youth (15-18 year-olds), and refugees.



The NFIS has two high-level goals:

- 1- To increase the level of financial inclusion, in terms of account ownership by adults in financial institutions, from 33.1% in 2017 to 41.5% by 2020.
- 2- To reduce the gender gap from 53% to 35%.

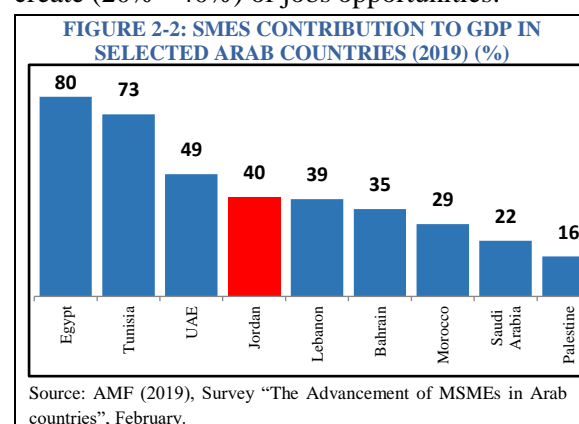
It is worth mentioning that until the end of July 2020, actual figures have outperformed the targeted levels in the strategy. The financial inclusion increased to around 50% up from the targeted level of 41.5%, while the gender gap decreased to 29% below the targeted 35%, which indicates a huge success of implementing the NFIS in Jordan.

### 2-2-2-1 SMEs

The SMEs are one of the essential cornerstones of the economy in most countries worldwide, and one of the most significant job creators. The SMEs account for about 95% of all corporates in the vast majority of countries in the

world, and they create between 40% and 60% of jobs. A recent study released by the International Finance Corporation (IFC) revealed that the “official” SMEs contribute to 33% of GDP in developing economies, and contribute up to 45% of jobs opportunities. These figures go up markedly when including the SMEs that operate in the unofficial sector. In high-income countries, the SMEs contribute to approximately 64% of GDP, and create 62% of jobs.

In addition, a report of “the advancement of MSMEs by increasing access to finance in Arab countries” issued by the Arab Monetary Fund (AMF) in 2019, indicated that these enterprises contribute to (16% - 80%) of GDP in Arab countries (figure 2-2). They also contribute to create (20% - 40%) of jobs opportunities.



The CBJ believes in the essential role that the MSMEs play in the Jordanian economy, therefore; the CBJ continued its role in supporting and encouraging these companies. During the past five years, and in collaboration with the Ministry of Planning and International Cooperation and some international and regional financing institutions, the CBJ has attracted around US\$ 445 million funding for the SMEs sector, at competitive interest rates and reasonable tenors. The funds transferred to Jordan amounted to US\$ 310 million, which were provided as loans to more than 17 thousand MSMEs, of which more than 64% are located outside Amman. The financing approximately created 7,000 new jobs, and the CBJ intends to

withdraw the remaining balance of US\$ 100 million in 2020 and 2021. This is in addition to the credit line of US\$ 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 US\$ 60 million agreements with three banks.

The CBJ rolled out financing programs directed to the sectors of manufacturing, renewable energy, tourism, agriculture, information technology, engineering consulting, health, education (vocational, technological and technical training), transportation, and exporting (including SMEs). These programs are currently offered at an interest rate of 0.5% for financing projects located in governorates outside Amman and at 1% for projects inside Amman; amounting to around JD 1.2 billion. Approximately, 1,229 projects have benefited from these programs, receiving JD 877 million as mid of June 2020. These loans were provided to the sectors of manufacturing, renewable energy, tourism, agriculture, information technology, engineering consulting, health, education (vocational and technological and technical training), and the transportation amounting to JD 342.1 million, JD 55.1 million, JD 178.1 million, JD 47.1 million, JD 11.2 million, JD 1.2 million, JD 1.5 million, JD 6 million, and JD 8.6 million, respectively. In addition, JD 35 million were granted to finance salaries payments for around 27.5 thousand workers.

The financing provided under these programs have also contributed to create 12,000 new jobs opportunities in different governorates in the Kingdom. The CBJ also has improved the terms of lending for these programs since 2015 to match the financing programs applied by Islamic banks.

With respect to promoting entrepreneurship and combating unemployment, the CBJ in 2019 allocated JD 100 million to finance the National

Self-Employment Program "INHAD". This is in line with the royal vision to reduce unemployment, and provide job opportunities for the youth by promoting self-employment rather than employment approach, and enabling the youth to establish development projects that provide them with job opportunities and a permanent source of income.

In addition, the CBJ at the beginning of April 2020 initiated a JD 500 million program to finance SMEs, and empower them to withstand the ramifications of the COVID-19 pandemic. As mid of June 2020, 3,942 projects were benefited from this program with an amount of JD 380 million. Further, 43% of these amounts were used to cover the salaries and wages of workers in these companies, totaled approximately JD 163 million, which served 79,000 workers.

With regard to collaterals required to finance SMEs, the Jordan Loan Guarantee Corporation (JLGC) was restructured, and its capital was raised, its business procedures were improved, and its scope was broadened so that the JLGC can provide required guarantees for financing SMEs. Subsequently, the number and value of projects guaranteed by the JLGC were doubled. In this context, the CBJ and the JLGC in 2019 signed a US\$100-million agreement to create a program that seeks to facilitate the issuance of bank-guarantees in support of contractors doing business outside the Kingdom. The new program, which complements the Export Credit Guarantee Program, will open the doors for various service exports that feature the Jordanian private sector, in particular the construction, engineering consultancy, and IT, thus enhancing the competitive opportunities for these exports in neighboring markets.

Moreover, in 2019, the "Housing Loans Guarantee Program- Affordable Housing" agreement was signed, which is covered by the provisions of the CBJ's advance to the JLGC. The program aims to provide the necessary



guarantees required to afford buying apartments by low and middle-income segments, which is of significant importance to the economy. The program guarantees 80% of the risks of financing provided by banks within this program.

#### 2-2-2-2 MICROFINANCE

Within the framework of the CBJ's strategic decision in 2014 to include the microfinance sector under the CBJ's supervision umbrella, microfinance institutions (MFIs) that fulfilled the licensing requirements were licensed by the end of the first half of 2018, in accordance with the provisions of the Microfinance Companies Bylaw No.(5) in (2015), and respective regulations thereto. Accordingly, the microfinance sector has become a part of the formal financial system, and currently comprises of (9) licensed MFIs, of which two MFIs provide financing in accordance with the provisions of Islamic Sharia.

The CBJ recognizes the importance of building the capacities of microfinance clients; hence, in 2017, and in cooperation with the Sanad Fund, a two-day TOT training workshop was conducted. The training was delivered to a number of employees from (8) banks and (5) MFIs to build their knowledge and improve their training skills in order to enable them to provide technical assistance to the SME's sector and transfer knowledge to others. This service shall be an essential part of the supplementary services package offered with the financing provided by MFIs. The participating financial institutions have committed to conduct training programs for SME's clients at least twice a year for a period of three years. MFIs and banks -mentioned above- conducted 125 trainings/ workshops during the previous three years, which were delivered to 2,817 clients.

#### 2-2-2-3 FINANCIAL CAPABILITIES AND FINANCIAL EDUCATION

Promoting financial and banking education is a cornerstone to strengthen the financial inclusion and enhance the financial consumer

protection. Several studies have indicated that raising individuals' financial literacy is a key factor to increase their savings, and thus, supporting economic growth through providing liquidity needed for investment. In turn, this enhances countries capability to withstand financial and economic crises. In Jordan, the CBJ highly prioritize the financial education given its importance in strengthening the financial, economic, and social stability in the Kingdom.

The CBJ believes that financial education is essential to the Kingdom; accordingly, the CBJ initiated a project to promote and deepen financial literacy in the Kingdom aiming to raise the capabilities of Jordanian Citizens as follows:

- Comprehend the fundamental principles and concepts in the financial and banking sphere.
- Manage, and optimally invest savings and personal properties.
- Increase the chances of benefiting from financial sources, services, and facilities provided by banks and financial institutions.
- Strengthen financial inclusion and enhance financial, economic, and social stability in the Kingdom.

The project deploys numerous programs that target key sectors in the society. The main program, namely; the financial education in schools was rolled out in cooperation with the Ministry of Education and INJAZ (a Jordanian non-profit organization). Financial education in schools started for the 7<sup>th</sup> grade curriculum in the academic year 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 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 in the higher education institutions.

- b- Promoting financial education by using media.
- c- Financial education for start-ups.
- d- Financial education at workplace.
- e- Financial education for woman and rural areas.
- f- Electronic financial education.

### 2-2-2-4 FINANCIAL CONSUMER PROTECTION

The Financial Consumer Protection Department at the CBJ supervises banks' compliance with the regulations issued thereof. A series of instructions aimed to strengthening the fair and transparent treatment for consumers were promulgated, the prominent of which are "The Instructions on Dealing with Customers Fairly and Transparently, no. (56/ 2012) dated 31/10/2012". In 2019, the CBJ issued the instructions of "Basic Bank Account" to facilitate access to financial and banking services by all segments of the society.

In 2018, the CBJ issued the instructions of "Financial Consumer Protection for Customers with Disabilities" aiming at removing all physical and behavioral environmental barriers that dampen or undermine consumers with disabilities access to banking and financial services. Thereafter, a survey was conducted to assess the preparedness of banks to apply the instructions, which revealed that all banks in general, were cooperating in implementing the instructions to serve this segment of our society.

In 2019, a set of circulars were issued to enhance the transparent treatment for customers; the most important of which is requesting banks not to charge additional commissions for using ATMs of other banks. With regard to protecting customers exposed to fraud when using different types of cryptocurrencies, several press releases were issued, warning customers about the risks related to dealing with these currencies.

On the front of studies and reports, the complaints report was introduced. It included

complaints of clients of banks and non-banking financial institutions under the supervision and oversight of the CBJ, in order to analyze these complaints and to identify any irregularities against consumers of financial services. The report was published on the CBJ's website depicting the classifications of these complaints, and the main channels by which these complaints were received. The number of complaints received by the CBJ from customers of banks and non-banking financial institutions reached around (1,081) complaints in 2019, mainly about contracts and terms of conduct and interest rates on loans. On the other hand, the number of consumers' complaints received and handled by the complaints handling units at banks operating in the Kingdom and MFIs totaled (18,776) complaints, mainly electronic services complaints.

As for the on-site and off-site supervision. The off-site supervision on banks and non-banking financial institutions was activated in terms of reviewing the contracts of credit products, monitoring the commissions and fees of products and services provided to consumers to ensure the adherence to the maximum limits of commissions and fees set forth in the CBJ's instructions, and monitoring links of banks and non-banking financial institutions. In addition, the on-site supervision was put in place through conducting on-site inspection over a number of banks and non-banking financial institutions, to ensure that financial consumer protection instructions are well applied. Furthermore, a new Help Line unit was established in the Financial Consumer Protection Department, dedicated to receive complaints by phone.

With regard to promoting financial awareness and literacy, the CBJ rolled out several campaigns and lectures aiming to raise the financial awareness and education for all segments of the society in various regions in the Kingdom. An awareness campaign was initiated on the International Women's Day on 9/3/2019

to emphasize women's empowerment towards responsible access to financial and banking services, which will highly enhance the financial inclusion for women and reduce the gender gap in accessing financial and banking services. In addition, another awareness campaign was conducted in several Jordanian universities on the Arab Financial Inclusion Day during the period (21-25/4/2019) to promote the financial education for students. Interactive lectures were delivered to a number of university and school students, to raise their financial education level, and to introduce them to financial consumer protection issues. Furthermore, on the International Day of Persons with Disabilities, a financial awareness campaign was rolled out dedicated to persons with disabilities in Amman, Zarqa, and Irbid during the period between 1-5/12/2019. The campaign involved educate persons with disabilities about their banking and financial rights in light of the instructions of Financial Consumer Protection for Customers with Disabilities. In addition to the mentioned-above, several educational publications were introduced and disseminated as hard copies and on the CBJ's website, in addition to educational videos, which were displayed in various campaigns and lectures. These efforts were crowned by the "CYFI SPRINTER AWARD 2019," which was awarded to the CBJ. The award recognizes prominent efforts of countries in promoting financial literacy and enhancing the financial capabilities of individuals.

## 2-2-2-5 BUILDING AN ENABLING INFRASTRUCTURE FOR ENHANCING FINANCIAL INCLUSION

### 2-2-2-5-1 DIGITAL FINANCIAL SERVICES

The CBJ in 2019 continued the upgrading and restructuring of the payment and settlements systems in the Kingdom in collaboration with banks operating in Jordan, and the other relevant stakeholders. This aims at maintaining the security and efficiency of the payment and

settlements systems, to reduce systemic and credit risks, and facilitating the circulation of money in the economy to enhance economic efficiency. The CBJ led this process supported by commercial banks represented by the National Payments Council.

- The CBJ continued to operate the Real Time Gross Settlement System (RTGS-JO) in 2019 to carry out transfer transactions between the accounts of member banks in Jordanian Dinar, US Dollar, Euro, and Pound Sterling, in addition to the transactions in the secondary market. The number of transfer transactions executed by the system totaled 292 thousand orders in 2019, amounting to JD 123.8 billion, compared to 294.6 thousand, an amount of JD 105.5 billion in 2018. Total transactions executed in the secondary market through the RTGS-JO system reached to 7,942 transactions in 2019, amounting to JD 7,509 million.

- The CBJ also maintained to operate the Automated Clearing House system (ACH) which supports 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. It included the processes of the credit and debit money transfers, pre-mandated debit transfers, and the payments of government and financial institutions, as well as other private sector institutions. The number of transfer transactions executed in the system in 2019 reached 3.1 million transactions, amounting to JD 3.8 billion against 1.9 million transactions with a total value of JD 2.6 billion in 2018.

- The CBJ continued to operate the Settlement and Depository for Government Securities system (DEPO/X), for public debt management and auctioning, in an integrated automatic manner, and as a center for the depository and settlement of government securities. The DEPO/X allows for the secure



access of the CBJ, banks, insurance companies, Social Security Investment Fund, and related parties to the government auctioning system of the government issuances of securities. It also enables the CBJ and the banking system to trade all Sharia-compliant monetary policy instruments.

- The CBJ maintained the operation of the Jordan Mobile Payment Switch (JoMoPay) in 2019. The participants in the system are seven banks, and six PSPs. Banks include Bank of Jordan, Jordan Commercial Bank, Housing Bank for Trade & Finance, Arab Bank, Cairo Amman Bank, Bank al Etihad, and Jordan Kuwait Bank. The PSPs include Al-Mutamayiza Company for Electronic Payment through Mobile Phones, Al-Hulool Company for Mobile Payment Services, Aya Company for Electronic Payment, Al-Mutakamilah for Payments Services via Mobile Phone (dinarak), Middle East Payments Services (MEPS), and Petra for Mobile Payment Services (Orange Money). The number of payment transactions executed through the system reached 4,059,924 transactions in 2019 totaling JD 174.2 million, compared to 1,431,598 transactions with an amount of JD 71.4 million in 2018.

- The CBJ continued in 2019 to provide the Electronic Bill Presentment and Payment service (eFAWATEERcom), which is operated by MadfootCom Company for electronic payments. The system is connected to all banks operating in the Kingdom to provide the service through various banking payment channels. The number of billers participating in the service reached to 196 billers in 2019, compared to 164 billers in 2018. The number of payment transactions executed through the service reached 14,529,302 transaction totaling JD 6.7 billion in 2019, compared to 9,255,744 transaction with an amount of JD 6.2 billion in 2018.

- The CBJ continued in 2019 to provide the (eFAWATEERcom) service through the Electronic Payment Portal to enable all Jordanian citizens who reside inside Jordan or abroad to inquire and pay their bills, and execute other payments using their credit cards issued by various banks worldwide, easily and securely.

- The CBJ's membership in the Alliance for Financial Inclusion and its working groups was extended. The Alliance aims directly at enhancing best solutions for setting the financial inclusion policies and standards. The Global Policy Forum which was supposed to be hosted by Jordan in September 2020 was postponed until 2021 due to Covid-19 pandemic. The Forum is considered the world's most important annual event for financial inclusion policymakers.

- The CBJ extended its membership in Better Than Cash Alliance (BTC), which substantially contributes to achieve the best ways to reduce the cost and time for government agencies delivering support through digital financial services to the less fortunate people and vulnerable groups excluded from the official financial system.

In addition to automating government payments, the CBJ in cooperation with the BTC Alliance started a project to automate the commercial sector payments. The project involved negotiations with several related government institutions and a work plan was initiated to proceed with the project.

- In cooperation with several ministries and government institutions, the CBJ has finalized the implementation of the plan of automating government payments project.

- The CBJ, in collaboration with the German Agency for International Cooperation (GIZ) and with the support and financing of the German Federal Ministry for Economic Cooperation and Development (BMZ), extended the Digi#ances- Digital Remittances

project until the end of 2021, with a financing of Euro 4.3 million. The project aims at improving the access to financial services by less fortunate people excluded from the official financial system including women, refugees, and others.

- At the beginning of 2019, the CBJ started to receive solicitations for cooperation and partnership and grants within the Mobile Money for Resilience (MM4R) initiative. The initiative aims to develop the digital financial services ecosystem, as well as improving the efficiency and effectiveness of government and humanitarian agencies cash transfers programs all over the kingdom. In 2019, the CBJ received (13) solicitations for grants in addition to two solicitations for cooperation and partnership.

- The CBJ in 2019 conducted a number of awareness sessions for different government and humanitarian agencies and organizations to discuss opportunities for cooperation and partnership with the CBJ under the (MM4R) initiative, which is financed by Bill & Melinda Gates Foundation. This aims to extend the scope of access to electronic financial services provided by the government as well as cash transfers programs provided by humanitarian agencies to the less fortunate people in particular Jordanians with low-income and refugees.

#### 2-2-2-5-2 CREDIT INFORMATION COMPANY

Since its licensing in 2015, CRIF- Jordan as a first credit information company expanded its database in terms of the number and the diversity of the sectors of information providers. By the end of 2019, CRIF signed agreements with (62) providers, compared to (54) providers and (39) providers in 2018 and 2017, respectively. In terms of sectors, the agreements were signed with (24) banks, (12) financial leasing companies, (9) MFIs, and (17) other sectors.

- On another hand, CRIF pursued developing

new services, as the CBJ in 2018 approved the launch of a series of value-added services. In 2019, CRIF initiated the credit scoring service, the Portfolio Alert service, and the Batch Enquiry service.

- According to the Doing Business report 2020, and a press release of the World Bank's office in Amman, for the first time Jordan has been selected among the top three business climate improvers by jumping an unprecedented rank of (29) in the Doing Business rankings, thanks to a series of economic reforms enacted over 2019. Jordan ranked (75) in the 2020 report out of (190) economies compared to ranking (104) in the 2019 report. The Kingdom's ranking improved markedly in the ease of access to credit indicator vaulting to ranking (4) compared to ranking (134) in 2019, a significant improvement of 130 ranks. This is due to the improvement of all indicators included in the index, namely; the depth of credit information, as Jordan scored (8) out of (8) compared to (7) in the previous report, after launching of the credit rating service for banks and other financial institutions by CRIF-Jordan.

### 2-3 THE FINANCIAL SYSTEM LEGISLATIVE INFRASTRUCTURE

The foundation of an appropriate legislative framework for the financial system would definitely enhance the financial stability; practices demonstrated that inappropriate supervisory and regulatory legislations for the financial system substantially contributed to deepen systemic financial crises once they occurred. The CBJ verifies on an ongoing basis the business and performance of the banking and financial institutions under its supervision, and ensures the soundness of their financial positions in consistency with effective laws, bylaws, regulations, and banking norms to reach the requirements of the banking soundness and the monetary and financial stability. The CBJ in 2019 proceeded with the comprehensive review

of the legislative framework governing the practices of the banking and financial institutions under its supervision umbrella. This is in line with the CBJ's strategy for effective banking supervision that complies with international best standards and practices. This review extends the efforts exerted to lay a robust ground for the banking and financial industry, as follows:

### **2-3-1 LAWS AND BYLAWS**

#### **2-3-1-1 THE CBJ LAW**

As mentioned earlier in the JFSR 2018, a Royal Decree was issued to pass the Amended Central Bank Law No. (24) of 2016, gazetted on 16/06/2016.

#### **2-3-1-2 AMENDED BANKING LAW**

The Amended Banking Law No. (7) of 2019, was enacted by a Royal Decree, and gazetted on 01/04/2019. It shall be read in conjunction with the Law No. (28) of 2000.

This amendment conducted amid rapid local, regional, and international developments in the banking supervision industry, which implies that it is necessary to cope with these developments in order to strengthen the CBJ's supervision on banks. The amended Banking Law will contribute to regulate the effective ownership interest in banks' capital, and entitle the CBJ to set controls and standards for selecting banks' external auditors, as well as enable the CBJ to take stand by measures to address troubled banks to prevent their liquidation, and achieve the financial and banking stability.

Enhancing the corporate governance in Jordanian banks is the one of the paramount amendments in the Law. The Law sets forth new articles to support the separation of executive managements from the Boards of Directors. The mechanism of selecting the members of the Board of banks has been altered so that the focus is on their competencies, rather than their financial capabilities. The number of members in the banks' Board of directors was set to at least seven members, of which independent members

shall not exceed half of the Board's members. The CBJ's prior written consent is now required for the direct and indirect ownership or transfer of bank shares, whether for one transaction or more. In addition, certain amendments are intended to improve the supervisory tools on banks, including the functions and authorities of the audit committee. Furthermore, several provisions in the law were amended regarding reforming the provisions of the required CBJ's prior consent for an effective ownership interest in a bank (10% of a bank's capital), and enable the CBJ to impose regulatory ratios in accordance with the developments in international accounting and supervision standards. This is in addition to entitle the CBJ to put in place the conditions and ad hoc requirements that the external auditor must fulfill to be qualified to audit a bank's accounts, and the CBJ is entitled to outsource a consulting body so that the CBJ can build a valid and precise perception about the bank's business.

The law also introduced certain amendments dedicated to improve the banking business environment and respond to the development of other legislations, so that banks are permitted to contribute in certain types of non-financial companies related to their banking activities, including money transfer companies and electronic payment systems. This lays the foundation for a legal framework for the recognition of electronic banking business in accordance with the requirements of the Electronic Transactions Law of 2015, or entitling banks to use electronic archiving systems instead of the currently used systems. In addition, members of the Board of directors are allowed to attend meetings by any of the cutting-edge virtual means of communication.

The law also included amendments to keep abreast of developments in Islamic banking industry. The most important amendment is Article (58) which intends to apply the rules of governance of the Sharia supervisory boards for

Islamic banks. The internationally recognized procedures followed by Islamic banks were rationalized, to maintain their ability to attract public's deposits, whether in terms of the profit equalization reserve or by increasing the share of depositors in profits.

### 2-3-1-3 DRAFT LAW FOR REGULATING INSURANCE BUSINESS

To assume the regulation and oversight of the insurance sector, the CBJ cooperated and coordinated with the Ministry of Industry, Trade, and Supply currently responsible for the supervision and oversight of the insurance sector, to draft a law for regulating insurance business. This aimed at creating a newfangled working mechanism that ensures the ability of the CBJ to oversee and monitor the insurance sector activities efficiently and effectively.

The enhanced drafted Law reflects the CBJ's vision and its endeavor to improve the regulatory and supervisory frameworks of the insurance activities in accordance with international best standards and practices. This is also in line with the CBJ's tendency to strengthen the stability and soundness of the insurance sector, as well as to improve the insurance sector to perform its prospective role in serving the economy.

While drafting the law, the CBJ considered including the supervisory and regulatory tools required to protect the insured and beneficiaries of the insurance documents, and enhancing the corporate governance requirements for insurance companies. The CBJ also was keen on the draft Law shall be embedded with the regulatory and precautionary requirements as well as necessary corrective measures to improve the services provided.

### 2-3-1-4 AMENDED DEPOSITS INSURANCE CORPORATION LAW

The amended Deposit Insurance Corporation Law No. (8) of 2019 was issued by a Royal Decree and was gazetted on 1/4/2019. It shall be read in conjunction with the Law No. (33) of 2000.

The amended Law intends to include Islamic banks under the umbrella of deposits insurance in accordance with the provisions of Islamic Sharia. This is mainly to protect all depositors at banks in the Kingdom, and to give the corporation a role in addressing the situation of troubled banks in line with the amendments of the Banking Law. It also intends to enhance the confidence in the banking system by paying the amount of insurance owed to the depositor without the condition to submit a claim.

The amended law stipulates that the corporation shall establish a fund at Islamic banks based on Wakalah agency contract. The fund's management according to a recommendation of the Ifta Council shall appoint a sharia advisor, whose task is to provide an opinion on the legal wording of contracts necessary for the business and activities of the fund, in terms of their commitment to the provisions of Islamic Sharia, provided that the advisor's opinion is binding.

### 2-3-2 INSTRUCTIONS

#### 2-3-2-1 INSTRUCTIONS FOR IMPLEMENTING THE INTERNATIONAL FINANCIAL ACCOUNTING STANDARDS OF THE AAOIFI

The instructions No. (6/2020) for implementing the financial accounting standards issued by the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) were issued on 5/7/2020. The instructions included four main aspects:

1. Impairment and Credit Losses and Onerous Commitments No. (30).
2. Risk Reserves No. (35).
3. Investments in Sukuk, Shares and Similar Instruments No. (33).
4. Investment in Real Estate No. (26).

These standards shall be applied to all Islamic banks operating in the Kingdom and at all levels. The instructions included the scope of the implementation of Accounting Standard No. (30), which includes the accounting framework and the mechanism of risk management, in

particular credit risk management to maintain the soundness and resilience of the bank's financial position. The Financial accounting standard No. (35) identifies and sets accounting and financial reporting principles for risk reserves in line with international accounting and risk management best practices. The Financial Accounting Standard No. (33) sets the classifications of Sharia-compliant investment instruments. According to the Accounting Standard No. (26), the bank shall put in place the accounting rules that govern the recognition, measurement, presentation, and disclosure of Islamic banks investments in real estate acquired.

### 2-3-2-2 INSTRUCTIONS OF LIQUIDITY COVERAGE RATIO

The instructions of Liquidity Coverage Ratio (LCR) No. (5/2020) were issued on 22/06/2020. These instructions are intended to enhance liquidity risk management in the short term by ensuring that the bank have sufficient high-quality unencumbered liquid assets, which can be converted easily and quickly into cash, to survive a 30-day stress scenario. These instructions shall be applied to all licensed banks operating in the Kingdom, including branches of foreign banks. In order to apply the liquidity coverage standard, a consolidated mechanism was included in the instructions, in addition to the requirements and method of calculating the LCR, the components of the numerator and the denominator of the LCR, and general provisions. It is noteworthy that the CBJ's requirements of LCR are in general consistent with Basel III framework.

### 2-3-2-3 AMENDED INSTRUCTIONS OF THE CBJ'S PROGRAM TO FINANCE AND SUPPORT ECONOMIC SECTORS (MEDIUM TERM LOANS TO LICENSED BANKS)

The CBJ enacted the amended instructions No. (3/6/4658) on 5/4/2020 of the CBJ's program to finance and support economic sectors. These instructions were issued in the context of the CBJ's measures to alleviate the repercussions of the COVID-19 pandemic on the

national economy, and to maintain the functioning of various economic sectors and enable them to retain their workforce. The amended instructions expanded the purposes to apply for a financing in the program to include financing operational expenses, and working capital, including salaries and wages of employees. The amended instructions also obligated banks to ensure that the salaries, wages, and expenses are deducted from the financing amount, which shall be evident in transactions or transfers to the accounts of workers and the service providers. The borrower is required to provide banks with a monthly statement of his/ her employees and their salaries from the Social Security Corporation upon paying these wages and salaries, which shall be proved to the CBJ.

### 2-3-2-4 INSTRUCTIONS OF FINANCING PROJECTS WITHIN THE NATIONAL SELF-EMPLOYMENT PROGRAM "INHAD" FOR LICENSED BANKS

The CBJ issued the Instructions for financing projects within the National Self-Employment Program "INHAD" No. (4/2019) for licensed banks on 16/9/2019. These instructions are in consistency with the royal vision to reduce the unemployment rate by strengthening the self-employment rather than the employment approach, and enabling young people to establish development projects that provide them with a permanent source of income and create job opportunities. The CBJ avails JD 100 million financing for banks with an interest rate of 1%, to re-loan the money to eligible youth with a certificate to join the program, at affordable costs and terms.

### 2-3-2-5 INSTRUCTIONS OF BORROWING FROM PARTNERS IN THE COMPANY/ CREDIT FROM LICENSED BANKS IN THE KINGDOM FOR LICENSED EXCHANGE COMPANIES ISSUED BY THE CBJ' BOARD OF DIRECTORS' DECISION NO. (172/ 2019) ON 4/7/2019

The CBJ issued the instructions of borrowing from partners in the company/ credit from



licensed banks in the Kingdom for exchange companies No. (172/2019) on 4/7/2019. These instructions require exchange companies to obtain a prior CBJ's consent to obtain a loan from the company's partners or a credit from licensed banks, using a form designated thereto. These instructions introduced the basis that shall be considered for addressing exchange companies applications, the terms for the requested loan, and the documents that exchange companies have to provide to the CBJ in case of approval.

#### 2-3-2-6 INSTRUCTIONS OF LARGE EXPOSURES LIMITS AND CREDIT CONTROLS

The CBJ enacted the instructions of Large Exposures Limits and Credit Controls No. (2/2019) on 04/03/2019, to be effective on 30/06/2019, and shall be applied to all banks operating in the Kingdom at the banking group level including financial subsidiaries (excluding insurance companies), branches in Jordan, and subsidiary banks. The instructions define the concept of exposure; all forms of direct and indirect credit granted to a natural/ legal person, and bonds, Islamic sukuk, and debt instruments issued by the same person and purchased from the same bank, in addition to the bank's investment in that (legal) entity; whether in the form of equity or any other investments. These instructions also defined related and connected counterparties of the bank and the capital base. The instructions also included the method of calculation of exposure value, the maximum limits of exposure to a single counterparty or group of connected counterparties, the maximum limits of credit granted for a real estate construction or purchase, the maximum limits of credit granted in the form of an overdraft, the credit granted to the bank's largest ten clients in the Kingdom, and the maximum limits of exposure to related counterparties.

#### 2-3-2-7 THE INSTRUCTIONS OF BASIC BANK ACCOUNT

The CBJ issued the instructions of Basic Bank Account No. (1/2019) on 04/02/2019 to all banks operating in the Kingdom. The instructions aim at facilitating the access to the financial and banking services by all segments of society, in particular financially excluded persons, and promoting financial inclusion, as well as contributing to achieving the financial, economic, and social stability. The instructions determined the requirements for opening and using the bank basic account, which is a bank account in Jordanian Dinar with specific terms and features for residents in Jordan, targeting financially excluded persons who do not have access to banks accounts. These requirements include the bank's access to the minimum data sufficient for clients' identification by using a simplified due diligence procedures to minimize the account opening requirements. The instructions also identified the basic services offered by the account, the prohibited services, the procedures and justifications for closing the account, and the maximum fees and commissions charged on the services provided by banks for this account.

#### 2-3-3 SUPERVISORY CIRCULARS

The CBJ in 2019 and the first half of 2020 has enacted several supervisory circulars as follows:

- Circular No. (10/6/984) dated 21/01/2019, directed to banks operating in the Kingdom. The Circular is regarding certain amendments to the instructions of Governance and Management of Information and Related Technologies No. (65/2016) dated 25/10/2016. This is in line with the developments and updates in the proposed international frameworks thereof, particularly the reference framework (COBIT 2019) issued by the Information Systems Audit and Control Association (ISACA) at the end of 2018.
- Circular No. (10/4/2091) dated 05/02/2019,

directed to banks operating in the Kingdom. The Circular requests banks to ensure that the customers who receive cash donations, aid, and funding from foreign sources had obtained a Cabinet's prior approval and complied with the respective regulatory framework thereto.

- Circular No. (10/4/3011) dated 21/02/2019, directed to operating banks in the Kingdom. The Circular emphasized that reporting managers at banks shall only report crimes that result in financial proceeds that may subject to a money laundering or a terrorist financing crime to the Anti-Money Laundering and Terrorist Financing Unit.
- Circular No. (27/5/3808) dated 10/03/2019, directed to banks operating in the Kingdom. The Circular is intended to regulate the final exit from the prizes linked with saving accounts at banks. Banks active in offering prizes were given enough period to address the issue without affecting their business negatively. Under the Circular, banks were allowed to continue with their programs related to prize-linked saving accounts as planned in 2019. However, starting from the beginning of 2020, prizes on savings accounts was subject to quantitative and qualitative controls attached to the Circular. Meanwhile, as of the beginning of 2021, the prizes on saving accounts programs shall be terminated completely, excluding prizes and advantages dedicated to benefit all customers using the bank's services and products. Banks are responsible for setting interest rates on and advertisement for their saving accounts on their websites, headquarters, and branches.
- Circular No. (10/1/5378) dated 04/04/2019, directed to banks operating in the Kingdom. The Circular allowed banks, within their capacities to comply with bylaws and regulations, to fulfill the required procedures related to releasing their semi-annual

financial statements, without a prior CBJ's consent, effective on 30/06/2019. This depends on the external auditor opinion, and complies with effective laws and legislations. The Circular is in line with the CBJ's endeavors to continue its approach of following up and reviewing its Instructions and Circulars, and strengthening the concept of responsibility and accountability.

- Circular No. (10/4/7732) dated 21/5/2019, directed to operating banks in the Kingdom. The Circular stipulates that banks are required to conduct ongoing monitoring of clients' accounts transactions, and compare them with information declared in the (KYC) forms, and the nature of the client's business activities as well. Banks are also requested to resort to legal consultants thereon. An appendix includes leading indicators of using personal accounts for commercial purposes and exchange and transfers purposes was attached to the Circular.
- Circular No. (10/4/11096) dated 5/8/2019, directed to banks operating in the Kingdom. The Circular is regarding offering banking services through electronic channels allow for implementing appropriate security measures. All involved employees are required to adhere to due professional care and vigilance regarding inward transfers requests received by email and any similar means.
- Circular No. (10/4/12018) dated 27/8/2019, directed to banks operating in the Kingdom. The Circular request banks to acknowledge competent security authorities and the CBJ of any detected case of embezzlement, forgery, theft, fraud, and the like, even if it is settled or did not result in material losses to the bank.
- Circular No. (27/3/16066) dated 19/11/2019, directed to banks operating in the Kingdom. The Circular concerns the prizes linked to saving accounts, which obliged all banks to

- obtain a prior CBJ's consent before any announcement and promotion of their prizes linked to all accounts, effective on 1/1/2020.
- Circular No. (10/1/16239) dated 21/11/2019, directed to banks operating in the Kingdom. The Circular is regarding the amendment of item (second) of the CBJ's Circular No. (10/1/2510) dated 14/2/2017. The item concerns the deduction of required provisions against acquired real estates, which breached the provisions of Article (48) of the Banking Law No. (28) of 2000 and its amendments, in accordance with the requirements of Circular No. (10/1/2510); by an annual rate of (5%) of total book values of those real estates starting from 2021, until reaching the required percentage of (50%) of real estates by the end of 2029. The instructions of the classification of credit facilities and calculating the provision for impairment, and general banking risks reserve have been extended.
  - Circular No. (27/4/16361) dated 24/11/2019, directed to banks operating in the Kingdom as well as financial institutions subject to the supervision and oversight of the CBJ. The Circular prohibits the direct and indirect trade of all cryptocurrencies including (Dagcoin); including purchasing, selling, swaps, future contracts, investing in investment funds, or cryptocurrencies index funds, whether for banks, corporates, or clients.
  - Circular No. (10/1/857) dated 16/1/2020, directed to banks operating in the Kingdom. The Circular allows banks to open letters of credit (LC) and finance them for exporting goods outside the Kingdom without passing through the Kingdom's borders provided that cash insurance shall be available, and cover 100% of the LC's value, using the same currency in which the LCs were issued.
  - Circular No. (10/5/4374) dated 15/3/2020, directed to all licensed banks. The CBJ reduced the compulsory reserve ratio on deposits from 7% to 5% to enhance the liquidity available for financing, reducing the cost of credit, and enhancing the attractiveness of assets denominated in Jordanian dinar, in order to alleviate the impacts of the spread of COVID-19 on economic sectors.
  - Circular No. (10/3/4375) dated 15/3/2020, directed to banks operating in the Kingdom. The Circular allows banks to postpone loans repayments of individuals and corporates in the sectors impacted by the COVID-19 pandemic; no commissions or delay interest shall be charged. Banks also are allowed to restructure and reschedule loans of clients without any down payment needed nor any additional commission charged. These arrangements shall come to end by the end of 2020.
  - Circular No. (3/6/4463) dated 16/3/2020, directed to banks operating in the Kingdom. The Circular considers reducing interest rates on the outstanding loans of the CBJ's soft financing program dedicated to finance and support economic sectors.
  - Circular No. (3/6/4657) dated 31/3/2020, directed to all licensed banks. The Circular allows banks to postpone due loans repayments of all loans granted during the period 18/3/2020 to 30/6/2020 within the CBJ's financing program to finance and support economic sectors. In addition, interest payments due in March and April were also postponed.
  - Circular No. (3/6/4723) dated 14/4/2020, directed to all licensed banks. For the purposes of the CBJ's financing program to support SMEs to confront the COVID-19 pandemic, the definition of medium companies is broadened to include companies with less than 200 workers and their total assets or sales are less than JD 5 million.



- Circular No. (27/1/4872) dated 27/4/2020, directed to all licensed banks in the Kingdom. The Circular concerns the impact of interest rates fluctuations on credit facilities extended to clients, whereby interest rates shall be altered on quarterly basis, and applied to all outstanding credit facilities. However, banks are not permitted to raise interest rates on clients unless the CBJ changes the interest rates; banks shall notify clients with the new interest rate and installment.
- Circular No. (23/2/5091) dated 5/5/2020, directed to banks operating in the Kingdom. The Circular is regarding the stress testing of banks that are required to conduct for the data of 31/12/2019, including the tests of the effect of COVID-19 pandemic; the testing shall be on the bank's branches in Jordan level and on the consolidated financial data level as well.
- Circular No. (10/5/6410) dated 9/6/2020, directed to banks operating in the Kingdom. The Circular concerns bounced checks for financial reasons during the lockdown (COVID-19 pandemic). A guiding manual was attached to banks determining how to report bounced checks. The manual also sets grace periods in terms of calendar days rather than working days for calculating grace periods for returned checks during the exceptional period of the COVID-19 pandemic, which starts from 26/2/2020 to 31/12/2020, and is divided into four periods. No commissions are charged for the first three periods starting from 26/2/2020 to 21/5/2020, while a commission of JD 5 will be charged for checks returned and settled by clients during the fourth period (26/5/2020 to 31/12/2020).
- Circular No. (10/4/7096) dated 22/6/2020, directed to banks operating in the Kingdom. The Circular acknowledges banks that according to their risk-based data analysis regarding anti money laundering and counter terrorist financing revealed that inherent risks confronting the banking sector are classified into high and medium risks according to certain categories. Policies and procedures regarding anti money laundering and counter terrorist financing shall be put into effective implementation in banks, as well as strengthening the internal control systems and risk management, and steering the financial and human resources towards high risks to mitigate and curb these risks effectively.
- Circular No. (10/5/7612) dated 28/6/2020, directed to banks operating in the Kingdom. Under this Circular banks are required to provide the CBJ on a monthly basis with the previous month's weighted average interest rates on outstanding, newly extended, and top-ups credit facilities, and the average interest rates on accepted deposits and renewals, as well as the unweighted average nominal interest rates for deposits and direct facilities in the previous month. This aims to improve the accuracy of evaluating fluctuations of banks' interest rates on deposits and facilities, and link them to the periods during which they are altered, and assess how they are consistent with the monetary policy stance.

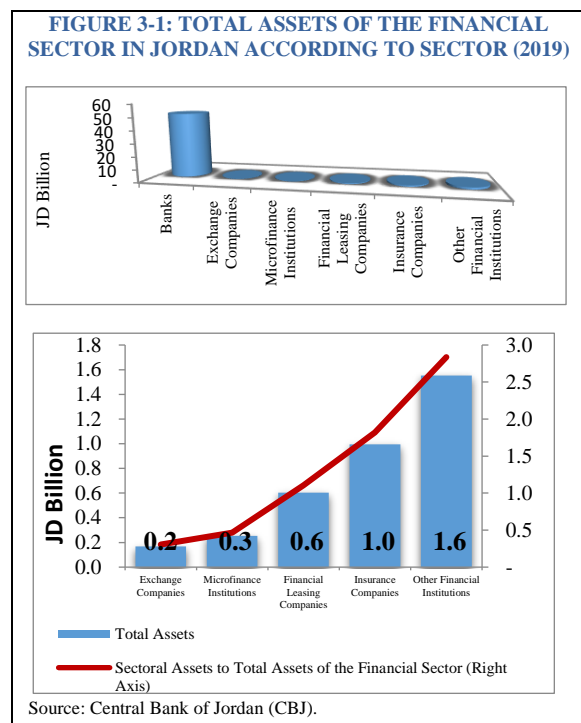
## CHAPTER THREE: DEVELOPMENTS AND RISKS OF THE FINANCIAL SECTOR

### 3-1 INTRODUCTION

The financial sector in Jordan constitutes of banks, insurance companies, financial intermediation and financial services companies, exchange companies, Micro-finance Institutions (MFIs), financial leasing companies, multi-finance companies, in addition to SMEs financing companies.

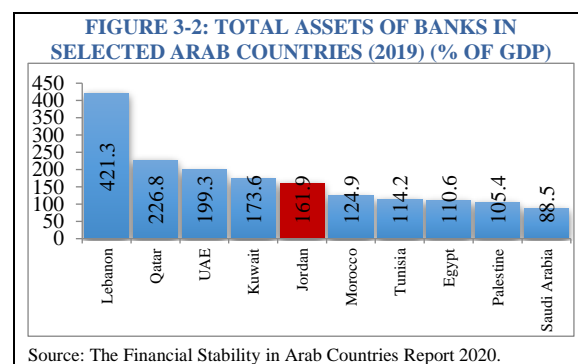
The CBJ is responsible for the oversight and supervision of the banking sector, the exchange companies, and the MFIs, which were covered under the CBJ's supervision umbrella on 01/06/2015. The CBJ will be in charge of overseeing and supervising the insurance sector, taking over from the Ministry of Industry and Trade.

Banks dominate the financial sector in Jordan; with total assets of JD 54.7 billion, accounting for 93.5% of the financial sector's total assets at the end of 2019. (Figure 3-1).

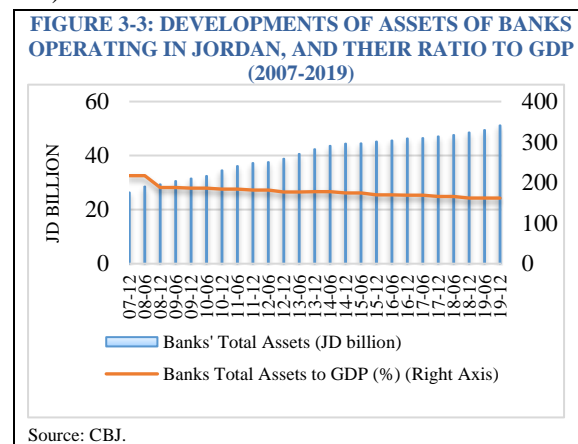


### 3-2 MAJOR DEVELOPMENTS OF THE BANKING SECTOR IN JORDAN (ASSETS AND LIABILITIES OF BRANCHES OPERATING IN JORDAN)

Licensed banks' assets totaled JD 51.2 billion at the end of 2019, forming 161.9% of GDP, which is equivalent to its level recorded at the end of 2018. Jordan is ranked in the middle amongst Arab countries selected for comparison. (Figure 3-2).

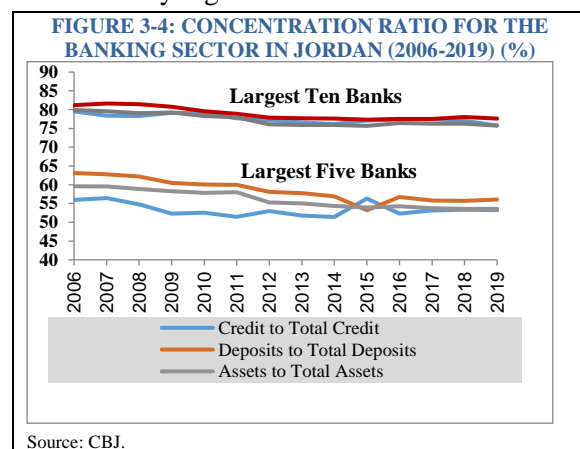


Although bank's assets as a percentage of GDP maintained their level in 2019, they were on the decline during the period (2007-2019). It decreased from 217.2% at the end of 2007 to reach 161.9% at the end of 2019, which is explained by the higher GDP growth rates compared to banks' assets growth rates (Figure 3-3).

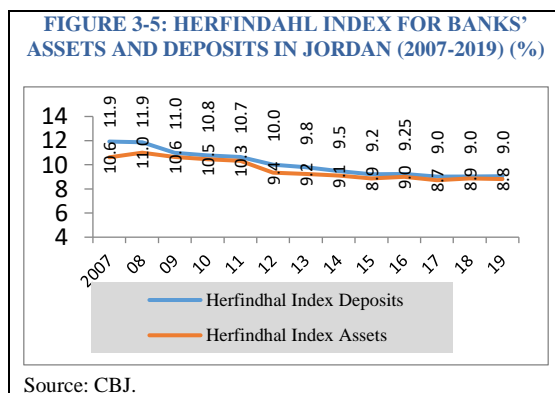


With respect to the market share of banks (concentration), the assets of the largest five banks (out of 24 banks) accounted for 53.6% of licensed banks' total assets at the end of 2019, while the assets of the largest ten banks

approximated 75.8%. It is noteworthy that the market shares of the largest five and largest ten banks are shrinking, as they were 59.6% and 79.9%, respectively in 2006. Therefore, the concentration ratio of licensed banks are on the decline (Figure 3-4). Nevertheless, the concentration in the banking sector in Jordan is still relatively high.

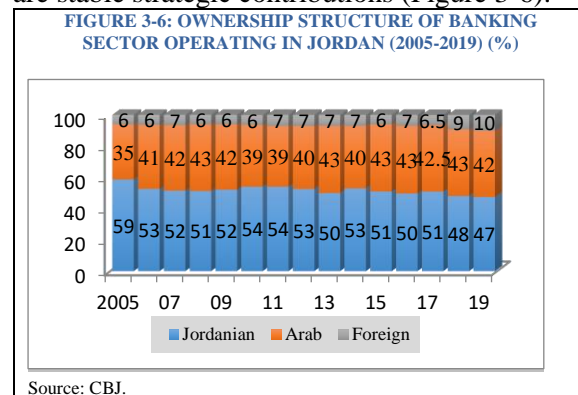


As for the competitiveness of the banking sector in Jordan; according to Herfindahl Index (HI) of the banking sector's assets, the competitiveness was improved, as the HI declined from 10.6% in 2007 to reach 8.8% by the end of 2019. These numbers suggest that competitiveness of the banking sector in Jordan is improving continuously. This is due to banks enhancement of their businesses and products to boost their competitiveness, and the licensing of three new banks in 2009, which increased the number of banks in Jordan. It is worth indicating that the decline in the concentration ratios and the enhanced competitiveness in the banking sector in Jordan are reflected positively on the financial stability in Jordan (Figure 3-5).



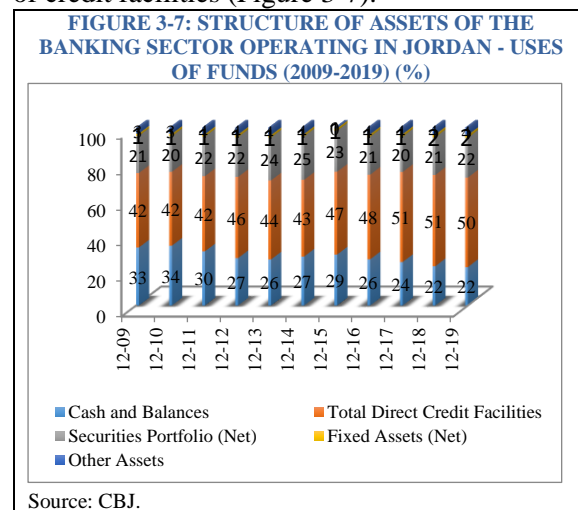
### 3-2-1 BANKS' OWNERSHIP STRUCTURE

The share of foreigners (Arabs and Non-Arabs) in the capital of licensed banks in Jordan reached to 53% at the end of 2019, against 52% at the end of 2018, which is considered amongst the highest in the region; due to no restrictions are imposed. It is worth mentioning that this share declined in 2010 and 2011, and increased again, which reflects the improvement of investors' confidence in the banking system in Jordan in particular, and the Jordanian economy in general. Most foreigners capital ownerships are stable strategic contributions (Figure 3-6).

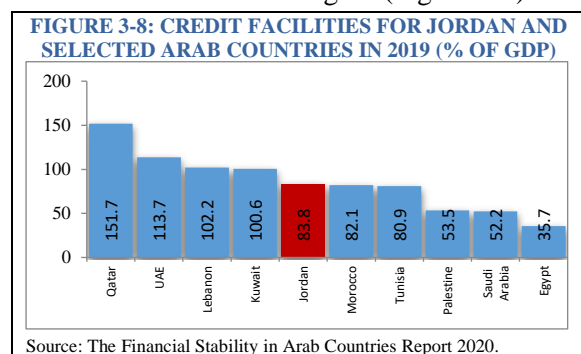


### 3-2-2 USES OF FUNDS (ASSETS)

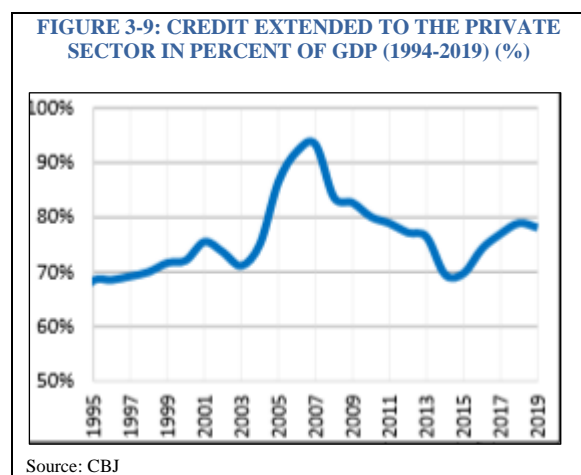
As for the structure of assets of banks operating in the Kingdom (uses of funds), credit facilities portfolio is still the largest component accounting for around 50.3% of banks' total assets at the end of 2019, compared to 51.3% at the end of 2018. This decrease is due to the growth of assets at higher rates than the growth of credit facilities (Figure 3-7).



Direct credit facilities grew by 3.1% at the end of 2019 to reach around JD 26.5 billion, compared to a growth of 5.3% in 2018. It is worth mentioning that total credit facilities in percent of GDP approximated 83.8% at the end of 2019 compared to 85.6% in 2018. Jordan ranked almost in the middle compared to selected countries in the region (Figure 3-8).

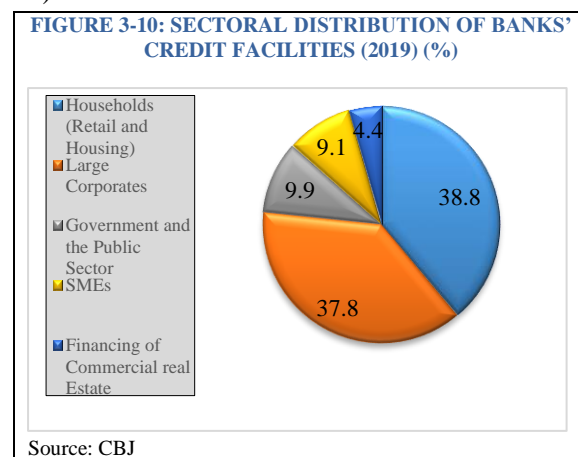


The results of the credit gap analysis in Jordan revealed that credit granted by banks to the private sector relative to GDP currently does not indicate a possibility of risks accumulation at the financial sector level (systemic risks). In 2019, this ratio was below its historical trend by 0.2%, which implies that no additional capital requirement buffers on banks are warranted, and this is justified in light of the normal growth rates of credit granted to the private sector, accompanied with low economic growth rates compared to the pre-global financial crisis levels. Figure (3-9).

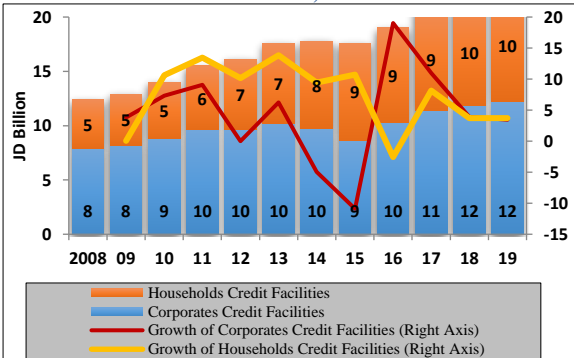


With regard to the distribution of direct credit facilities as of end 2019, facilities extended to

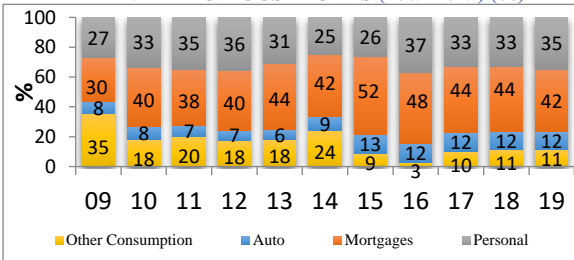
households accounted for the largest share with 38.8% of these facilities, which is the same percentage recorded at the end of 2018. Credit facilities extended to corporates formed the second largest share of 37.8% of total direct credit facilities, slightly above the 37.7% registered at the end of 2018. In addition, credit facilities granted to the government and the public sector accounted for approximately 9.9% at the end of 2019 compared to 9.7% at the end of 2018. Moreover, credit facilities extended to the SMEs at the end of 2019 decreased slightly at the end of 2019 accounting for 9.1% of total credit facilities, against 9.2% at the end of 2018. Credit facilities extended for the purposes of financing commercial real estates accounted for the lowest share of 4.4% at the end of 2019, compared to 4.6% at the end of 2018. (Figure 3-10).



As for credit facilities extended to households, mortgages accounted for the largest share of around 42.1% of households' loans as of end 2019, compared to 43.8% at the end of 2018, followed by personal loans, which formed 34.6% of households' loans at the end of 2019, compared to 32.6% at the end of 2018. Furthermore, Auto loans share of households' loans declined from 12.5% at the end of 2018 to 12.1% at the end of 2019. As for credit facilities extended to corporates, it grew by 3.5% at the end of 2019, compared to 3.9% at the end of 2018. (Figures 3-11, 3-12).

**FIGURE 3-11: DEVELOPMENTS OF CREDIT FACILITIES EXTENDED TO HOUSEHOLDS AND CORPORATES (2008-2019)**

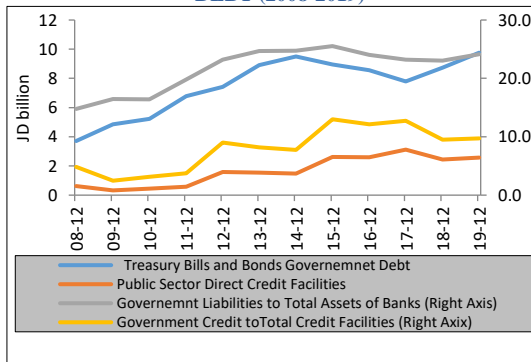
Source: CBJ

**FIGURE 3-12: TYPES OF CREDIT FACILITIES EXTENDED TO HOUSEHOLDS (2009-2019) (%)**

Source: CBJ

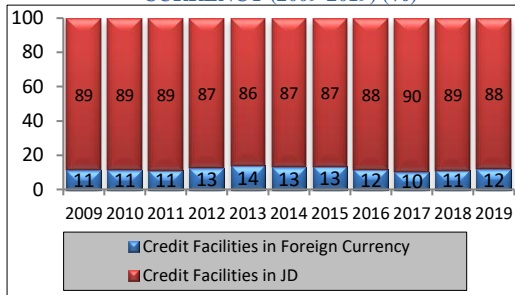
In terms of banks' exposure to government debt, whether in the form of investment in government bonds or providing government-guaranteed loans to certain public institutions, the government debt held by banks reached around JD 12.3 billion (accounting for 24.1% of banks' total assets) at the end of 2019. This is compared to JD 11.2 billion at the end of 2018 (23% of banks' total assets). It is worth indicating that government debt owed to banks constitutes of JD 9.7 billion government bonds, and JD 2.6 billion 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 24.1% at the end of 2019 (Figure 3-13).

**FIGURE 3-13: BANKS EXPOSURE TO GOVERNMENT DEBT (2008-2019)**

Source: CBJ

With regard to credit facilities according to currency, they are primarily denominated in JDs constituting about 88% of total credit facilities at the end of 2019, slightly declined from 89% recorded at the end of 2018 (Figure 3-14).

**FIGURE 3-14: CREDIT FACILITIES ACCORDING TO CURRENCY (2009-2019) (%)**

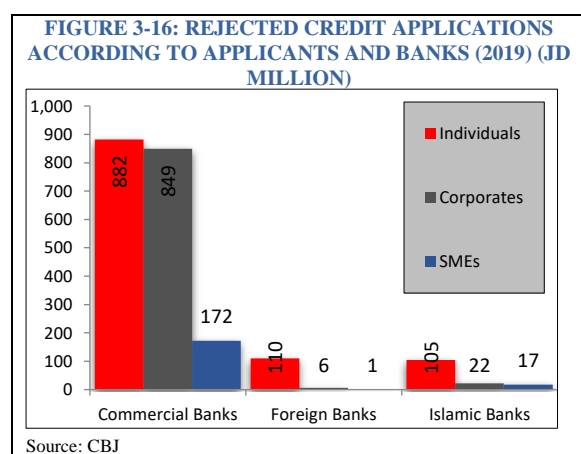
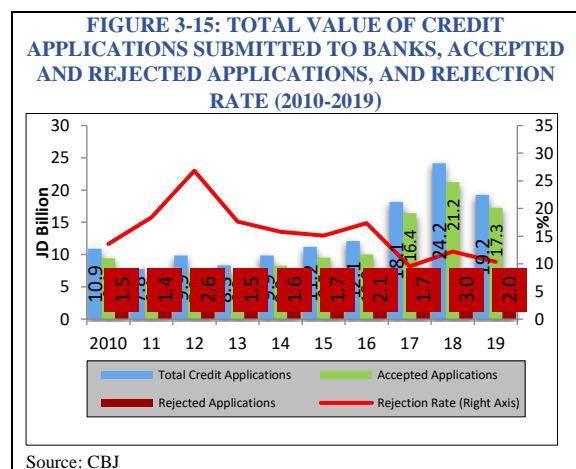
Source: CBJ

### 3-2-2-1 DEMAND FOR CREDIT AND BANKS' RESPONSE

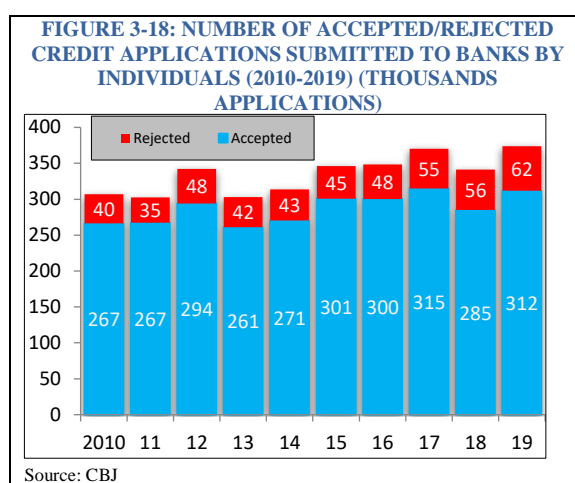
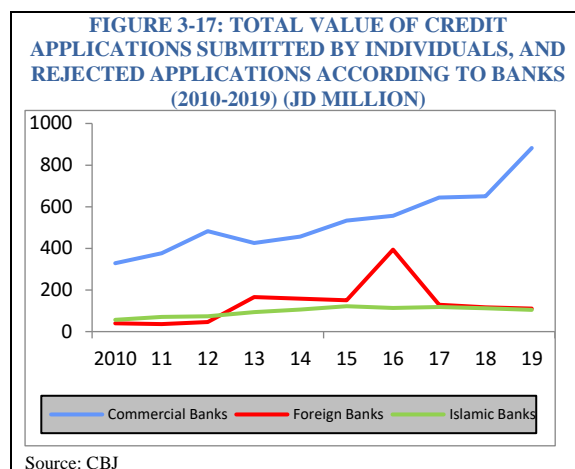
To assess the demand for credit and how banks respond to this demand; the CBJ updated and upgraded the survey conducted in 2014. Following are the primary results of the survey.

The number of credit facilities applications submitted to banks by individuals and corporates (applications by new customers in addition to applications for credit facilities top-ups) totaled 392.3 thousand applications in 2019 with a value totaling JD 19.2 billion. However, 16% of these applications were rejected, with a total value of JD 2 billion, or 10.4% of submitted applications total value, against 12.2% in 2018. Figure (3-15).





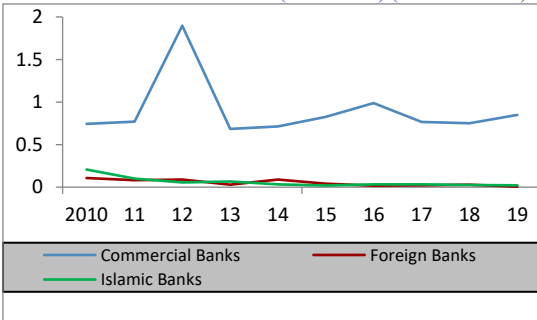
With regard to individuals' demand for credit facilities, applications submitted for new credit facilities in 2019 reached approximately 373.6 thousand applications with a total value of JD 4,885 million. 16.5% of these applications were rejected; with a value of JD 1,097 million, which is equivalent to 22.5% of applications total value submitted in 2019, compared to 21.7% in 2018. The highest rejection rate in terms of value was for applications submitted to foreign banks which approached 29.1%, compared to 27.5% for commercial banks and 8.1% for Islamic banks (Figure 3-17).



Regarding credit applications requested by corporates (large, small, and medium), the number of applications for new credit facilities in 2019 approximated 9.9 thousand applications, with a total value of JD 5,703 million. However, 10.2% of these applications were rejected, with a total value of JD 877 million composing 15.4% of the total value of applications submitted in 2019, compared to 15.6% in 2018. The highest rejection rate, in terms of value, was for applications submitted to commercial banks which reached 19.8%, compared to 2.1% and 1.6% for applications submitted to Islamic banks and foreign banks respectively.

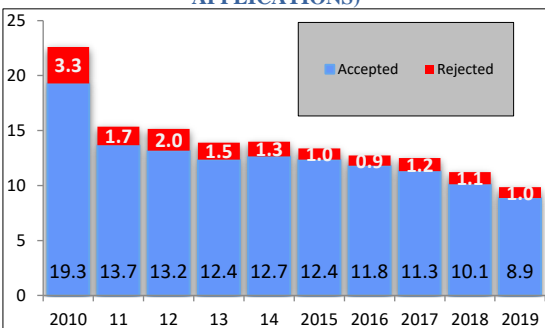


**FIGURE 3-19: TOTAL VALUE OF REJECTED CREDIT APPLICATIONS SUBMITTED BY CORPORATES ACCORDING TO BANKS (2010-2019) (JD BILLION)**



Source: CBJ

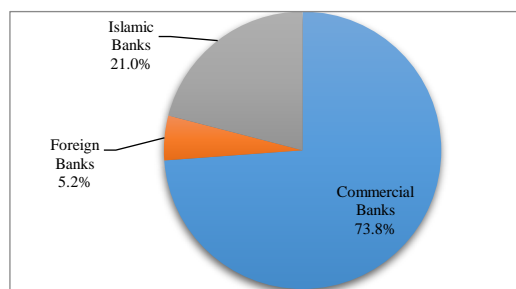
**FIGURE 3-20: NUMBER OF ACCEPTED/REJECTED CREDIT APPLICATIONS SUBMITTED TO BANKS BY CORPORATES (2010-2019) (THOUSANDS APPLICATIONS)**



Source: CBJ

It is worth mentioning that applications submitted by SMEs to banks formed 66% of total applications submitted by corporates. The SMEs applications totaled 6.5 thousand applications, with a total value of JD 1,076 million, of which 17.6% were rejected, compared to 16.2% in 2018. Most of SMEs credit applications were submitted to commercial banks, accounting for 73.8% of total value of applications. The SMEs applications submitted to Islamic banks formed around 21% of submitted applications total value, while applications submitted to foreign banks accounted for the lowest percentage of 5.2% of submitted applications total value.

**FIGURE 3-21: THE AMOUNT OF APPLICATIONS APPLIED BY SMES ACCORDING TO BANKS (2019) (%)**



Source: CBJ

The number of rejected applications requested by SMEs formed 79.9% of total rejected applications of corporates. However, the highest rejected applications were those submitted to Islamic banks, accounting for 77.3% of the total value of rejected applications of corporates.

The discussion above validates the following conclusions:

1) The value and number of rejected credit applications submitted by individuals have been on an upward trend since 2015, reflecting that banks are prudent in dealing with risks associated with lending to the households sector, and banks are improving the lending criteria for this sector.

2) Banks tend to lend to productive sectors (corporates) on the account of consumption credit facilities (facilities to individual), which may contribute positively to stimulating economic growth, as individuals are less likely to contribute to economic growth compared to other sectors. The data analysis of the survey indicates the following:

- The increase in the balances of corporate credit facilities were higher than individuals' balances.
- The rejection rate for applications requested by individuals was greater than corporates in terms of number and value.

3) Commercial banks compared to Islamic banks are conservative in providing facilities to individuals and corporates sectors, which may be attributed to the nature of Islamic banking

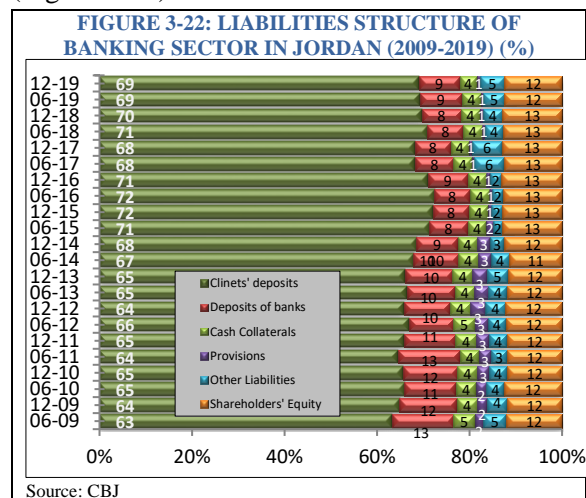
products. For example, mortgages and auto loans at Islamic banks constitute the largest share of facilities provided to the households sector. The real estate and autos are pledged as collaterals for financing, which reduces lending risks.

4) Individuals' applications were rejected by banks for the following reasons:

- Non-compliance with the requirements of bank's credit policy including income, employer, employment length required, and the client's age.
- High debt burden ratio (DBR) of clients (exceeding the accepted ratio by the bank).
- Bounced checks for insufficient balance and blacklisting of the client.

### 3-2-3 SOURCES OF FUNDS (LIABILITIES)

Analyzing the sources of funds in the banking system reveals that deposits represent the major source of funding, accounting for 69% of total sources of funds at the end of 2019 compared to 69.7% at the end of 2018; declining by 1%. (Figure 3-22).

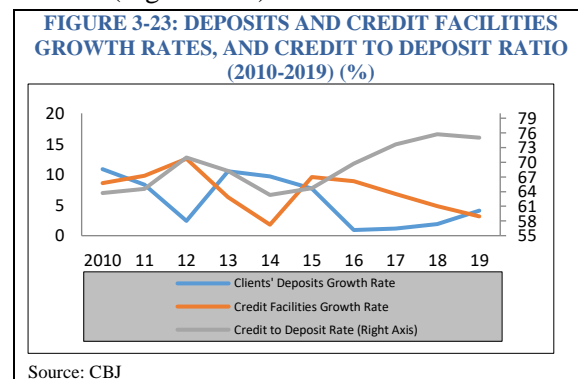


The second main source of funding is the shareholders' equity which increased from JD 6.2 billion at the end of 2018 to JD 6.3 billion at the end of 2019; growing by 1.6%.

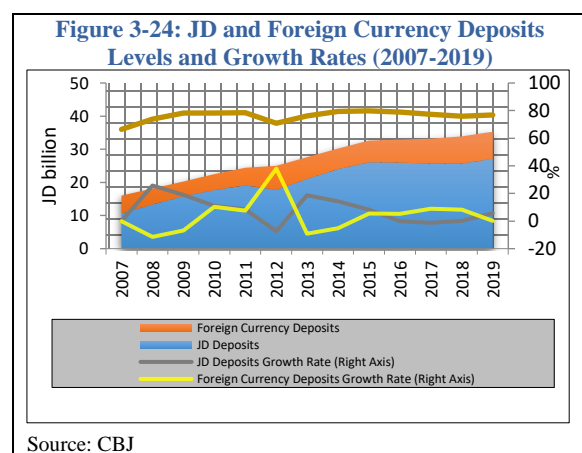
Deposits of banks are the third source of funds in terms of importance; which were increasing steadily since June 2012 to reach 10.2% of total sources of funding for banks at the end of 2013. In 2014 and 2015, they declined to

reach 8.9% and 7.8% of banks' total sources of funds respectively. However, it increased to 8.6% of banks' total sources of funds in 2016, and to 8.5% in 2018, and 8.8% in 2019.

With regard to developments of clients' deposits in the banking sector, they increased by 4.3% in 2019 to reach around JD 35.3 billion, against a growth of 2% in 2018. The deposits growth rate in 2019 was higher than credit facilities growth rate of 3.1%, accordingly the ratio of credit facilities to deposits at the banking system in Jordan moderately declined from 75.7% at the end of 2018 to reach 75% at the end of 2019 (Figure 3-23).



As for the composition 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 in respect to total deposits indicates that it increased noticeably from 66.4% at the end of 2007 to reach 78.4% at the end of 2011. However, it started to decline reaching its record low of 71% by the end of 2012 owing to unfavorable economic conditions that hit Jordan in 2012. Nevertheless, during the years 2013, 2014, and 2015, and due to the improving economic conditions, the JD-denominated deposits retrieved the upward trending to reach its peak of 79.8% of total deposits at the end of 2015. During the period (2016-2018) the JD deposits decreased to 75.8% at the end of 2018 to increase again at the end of 2019 to reach 76.8%, which is considered a comfortable level that reflect the confidence in the Jordanian dinar as a saving currency, and strengthen the monetary and financial stability in the Kingdom (Figure 3-24).



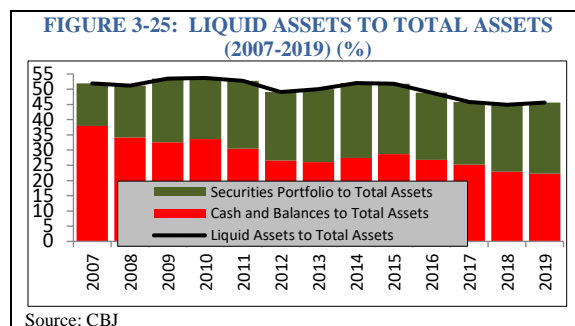
### 3-2-4 RISKS OF THE BANKING SECTOR IN JORDAN- FINANCIAL SOUNDNESS INDICATORS

Despite the conditions of the Arab Spring, the instability in the region, and resulting risks and tremendous challenges, the financial and administrative positions of the banking sector in Jordan are broadly sound and resilient. The next sections elaborate on the main developments of banks' financial ratios and indicators.

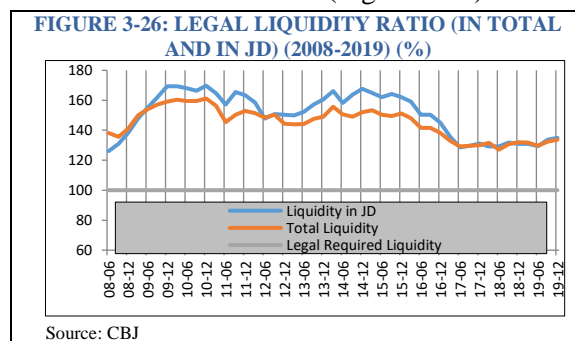
#### 3-2-4-1 LIQUIDITY

Banking sector in Jordan enjoys a safe liquidity position, as liquidity indicators at the end 2019 denote that the liquidity position of banks is sound and robust. The cash and cash equivalents ratio to total assets reached 22.3% at the end of 2019 compared to 22.9% at the end of 2018, while the share of securities portfolio (highly liquid) to total assets reached 23.2% at the end of 2019 compared to 22 % at the end of 2018.

Accordingly, high-liquid assets accounted for around 45.6% of total assets at the end of 2019 compared to 44.9% at the end of 2018. This increase is explained by the higher growth rates of deposits compared to credit facilities growth rates (Figure 3-25).



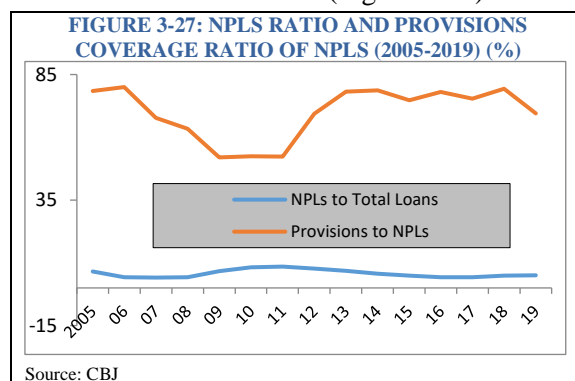
The legal liquidity ratio imposed by the CBJ on banks (the minimum requirement is 100%) increased from 131% at the end of 2018 to reach 133.8% at the end of 2019 (Figure 3-26).



#### 3-2-4-2 QUALITY OF ASSETS

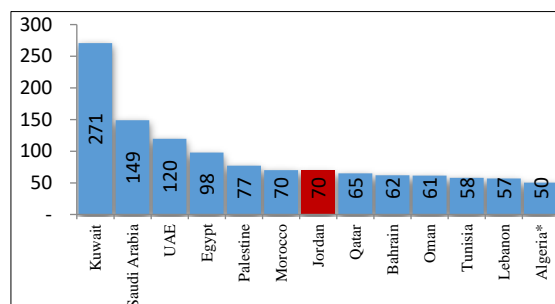
The ratio of NPLs to total loans declined further during the period (2012-2017) to reach 4.2% at the end of 2017 compared to 7.7% in 2012. The NPLs ratio to total loans increased moderately from 4.9% in 2018 to reach 5% at the end of 2019.

As for the provisions coverage ratio of the NPLs, it increased to 70% at the end of 2019, which is a positive indicator implies that around 70% of NPLs are covered. (Figure 3-27).



The banking system in Jordan ranked in the middle of 13 Arab countries in terms of the NPLs coverage ratio. (Figure 3-28).

**FIGURE 3-28: PROVISIONS COVERAGE RATIO TO NPLS FOR JORDAN AND SELECTED ARAB COUNTRIES (2019) (%)**



Source: CBJ; data of Jordan

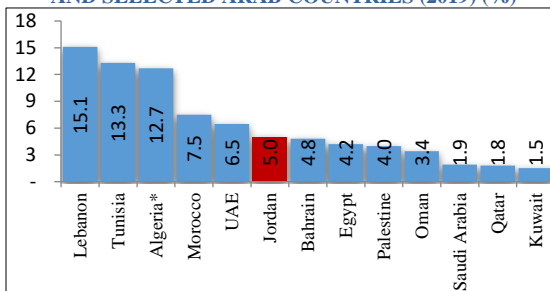
Database of the Financial Stability in Arab Countries Report: data of other Arab countries.

\*: Data available for 2018, source: IMF.

The outstanding balance of NPLs (excluding interest in suspense) at the banking system reached JD 1,299 million at the end of 2019; a slight increase of JD 63 million, compared to its level in 2018 of JD 1,236 million.

Moreover, Jordan ranked in the middle of 13 Arab countries in terms of the ratio of NPLs to total loans. (Figure 3-29).

**FIGURE 3-29: NPLS TO TOTAL LOANS FOR JORDAN AND SELECTED ARAB COUNTRIES (2019) (%)**



Source: CBJ; data of Jordan

Database of the Financial Stability in Arab Countries Report: data of other Arab countries.

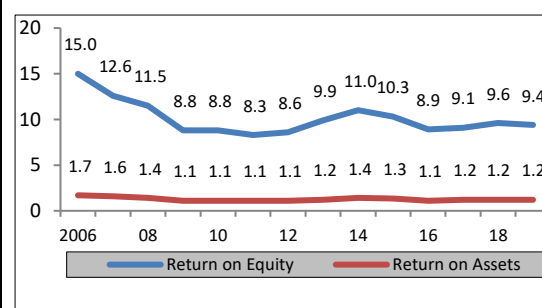
\*: Data available for 2018, source: IMF.

### 3-2-4-3 PROFITABILITY

The return on assets (ROA) of the banking system in Jordan declined during the years (2006-2010); it was down from 1.7% at the end of 2006 to 1.1% at the end of 2009 affected by the ramifications of the global financial crisis impact on banks' profits. The ROA maintained that low level until the end of 2012, to increase to 1.2% and 1.4% in 2013 and 2014 respectively,

because of the remarkable growth of banks' profits. In 2015 and 2016, banks' ROA declined to 1.3% and 1.1% respectively, which is 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%. (Figure 3-30).

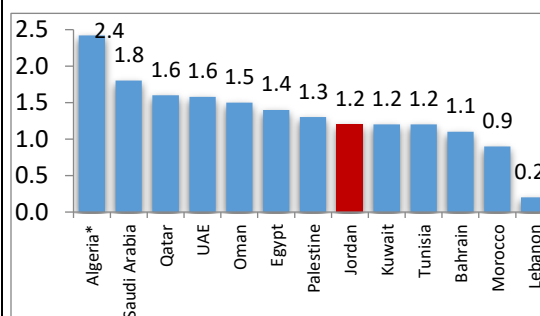
**FIGURE 3-30: BANKS' ROE AND ROA (2006-2019) (%)**



Source: CBJ

The comparison of Jordan to selected Arab countries according to banks' ROA in 2019 indicates that Jordan on par with Kuwait and Tunisia ranked in the middle among 13 Arab countries with available data. Lebanon ranked as the lowest ROA of 0.2%, whereas Algeria ranked first with a 2.4% ROA ratio. (Figure 3-31).

**FIGURE 3-31: ROA FOR JORDAN AND SELECTED ARAB COUNTRIES (2019) (%)**



Source: CBJ; data of Jordan

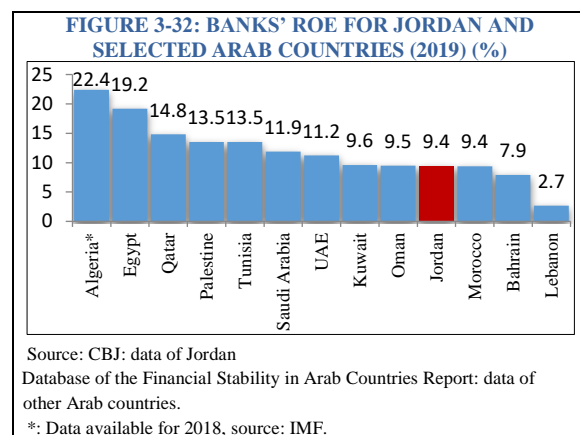
Database of the Financial Stability in Arab Countries Report: data of other Arab countries.

\*: Data available for 2018, source: IMF.

As for the return on equity (ROE), it declined slightly at the end of 2019 to reach 9.4%, compared to 9.6% at the end of 2018. (Figure 3-30).

The ROE in Jordan remains low; Jordan occupied the third lowest rank on par with

Morocco compared to selected Arab countries. Lebanon had the lowest ROE of 2.7%, while Algeria had the highest rate of 22.4% (Figure 3-32). The low ROE rate in Jordan compared to most of Arab countries is due to banks' conservatism and risk aversion, in addition to the high levels of capital held by banks in Jordan and the relatively high rates of income tax paid by banks in Jordan.

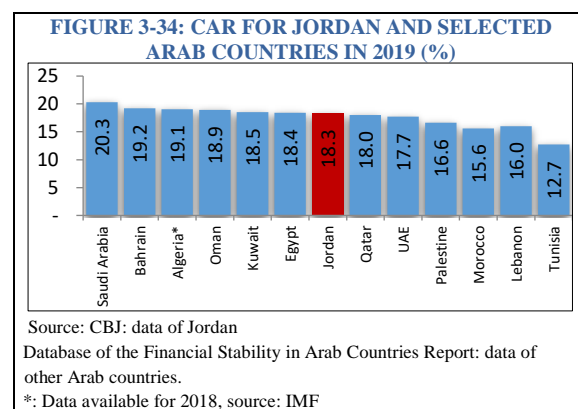
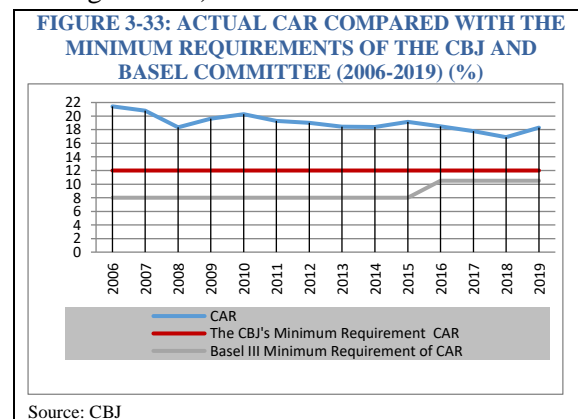


### 3-2-4-4 CAPITAL ADEQUACY

The CAR of the banking sector in Jordan is high; it ranged from 18% to 21% during the period (2007-2016). It is generally well above the 12% minimum requirement of the CBJ, and the 10.5% minimum requirement of Basel Committee. However, the CAR decreased during 2017 and 2018 as it recorded 17.8% and 16.9%, respectively. Part of the CAR's notable decline in 2018 is attributed to the implementation of IFRS 9, which requires building additional provisions for credit losses; these amounts are transferred from shareholders' equity account, in particular retained earnings. At the end of 2019, the CAR increased significantly, to reach 18.3%; owing to the CBJ's requesting banks not to distribute profits in order to support banks' capital base and enable them to confront the repercussions of COVID-19 pandemic, and to support the national economy.

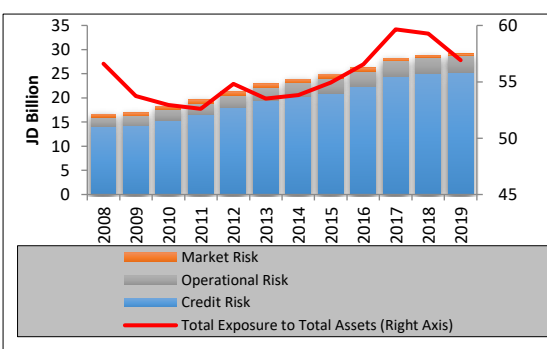
It is worth mentioning that tier I core capital ratio approached 18.1% at the end of 2019 compared to 15.4% at the end of 2018. This

denotes that most of banks' capital in Jordan is composed of tier I core capital, which is the highest quality component of the capital and the most capable to withstand losses (Figure 3-33, and Figure 3-34).



With regard to major risks faced by banks, the credit risk is the most significant forming 86.9% of total risks as of end 2019, followed by operational risk, which constituted around 12% of total risk, and market risk which accounted for 1.1% of total risk. These figures are close to their levels in 2018 reflecting the relative stability of the risks structure in banks with no substantial changes occurred. (Figure 3-35).



**FIGURE 3-35: COMPONENTS OF TOTAL EXPOSURES IN THE BANKING SECTOR (2008-2019)**

Source: CBJ

### 3-2-5 OPERATIONAL EFFICIENCY OF BANKS

Operational efficiency of banks is measured primarily by the Cost (excluding interests) to income ratio (CIR). According to a study conducted by (McKinsey & Company), banks with CIR exceeding 55% suffer from weak operational efficiency in terms of the ability to generate income while rationalizing their expenses. Therefore, a CIR below 55% is a positive indicator for the operational efficiency of banks.

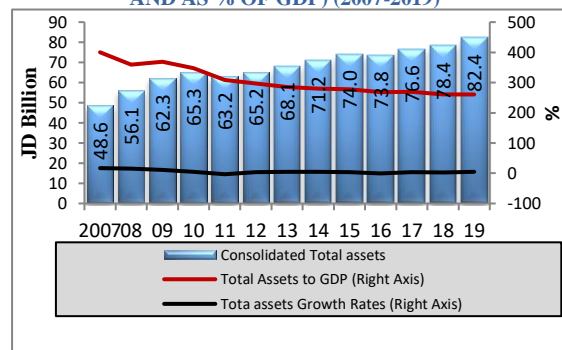
In Jordan, the CIR of banks reached to around 57.1% at the end of 2019 compared to 55.5% at the end of 2018. However, operational efficiency varies across individual banks, as the CIR exceeded 55% for (16) banks, while (8) banks registered CIRs below 55%. This implies that more than 66% of banks in Jordan need to rationalize their operational expenses more efficiently.

### 3-3 ASSETS AND LIABILITIES OF CONSOLIDATED BANKING SECTOR IN JORDAN (BRANCHES OPERATING IN JORDAN AND ABROAD, AND SUBSIDIARY COMPANIES AND BANKS)

#### 3-3-1 ASSETS

At the end of 2019, the number of Jordanian banks operating abroad reached to eight banks; the Arab Bank's assets abroad constituted

around 83.9% of total assets of banks operating abroad, and 72.1% of the Arab Bank's consolidated total assets. The total assets of the Jordanian consolidated banking sector approximated JD 82.4 billion at the end of 2019 compared to JD 78.4 billion at the end of 2018, increasing by JD 4 billion or 5.1%. Assets of branches in Jordan accounted for 62.1% of total assets of consolidated banks at the end of 2019 compared to 61.9% at the end of 2018. Despite the increase in assets of the consolidated banking sector from JD 48.6 billion at the end of 2007 to JD 82.4 billion at the end of 2019; their growth rates were trending downward from approximately 17% in 2007 to 5.1% in 2019 (Figure 3-36). This slowdown is reasonable given the repercussions of the political instability in the region and the deterioration of the global economic activity, particularly in the Euro area, which affected the operations of Jordanian banks abroad.

**FIGURE 3-36: TRENDS OF TOTAL ASSETS OF CONSOLIDATED BANKS (CONSOLIDATED LEVELS AND AS % OF GDP) (2007-2019)**

Source: CBJ

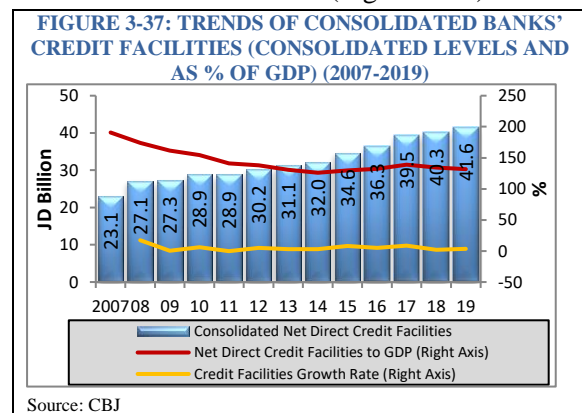
The assets of the consolidated banking sector relative to GDP reached 260.7% at the end of 2019, compared to 261.4% at the end of 2018. However, it was much higher at the end of 2007 when recorded 400%.

#### 3-3-2 CREDIT FACILITIES

The net balance of credit facilities of the consolidated banking system grew by 3.3% to reach JD 41.6 billion at the end of 2019, compared to JD 40.3 billion at the end of 2018 (a growth of 2%). The credit facilities of the

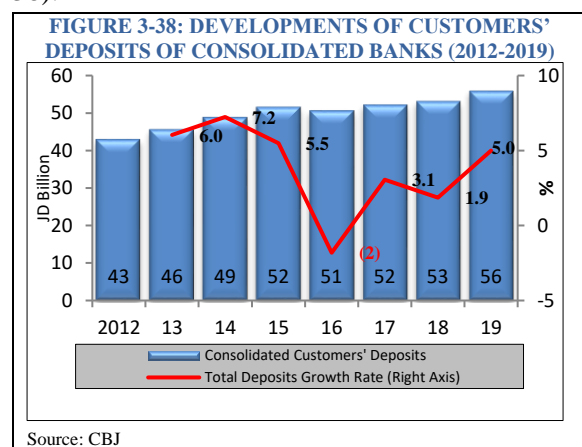


consolidated banking system as percent of GDP reached 131.6% at the end of 2019 compared to 134.3% at the end of 2018 (Figure 3-37).



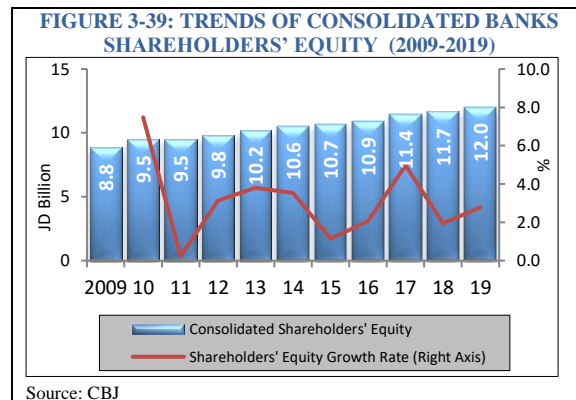
### 3-3-3 DEPOSITS

Customers' deposits (consolidated level) increased to JD 55.8 billion, at the end of 2019, growing by 5% compared to JD 53.2 billion (a growth of 1.9%) at the end of 2018. (Figure 3-38).



### 3-3-4 SHAREHOLDERS' EQUITY

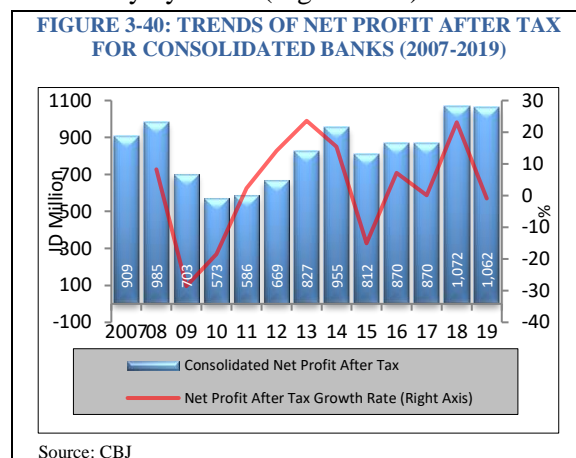
The balance of consolidated banks' shareholders' equity totaled JD 12 billion at the end of 2019, compared to JD 11.7 billion at the end of 2018. It is worth mentioning that the balance of shareholders' equity followed an upward trend since 2009 (Figure 3-39). This enhances banks' solvency and resilience to withstand risks, and strengthen the financial sector stability.



## 3-3-5 NET PROFIT AFTER TAX, ROA, AND ROE

### 3-3-5-1 NET PROFIT AFTER TAX

Banks' net profit after tax reached JD 1,062.4 million at the end of 2019, compared to JD 1,071.7 million at the end of 2018, decreasing moderately by 0.9%. (Figure 3-40).

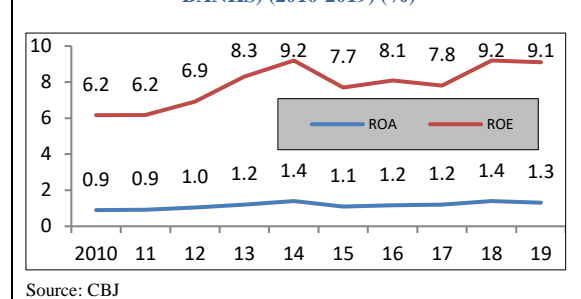


### 3-3-5-2 RETURN ON ASSETS

The ROA of consolidated banks decreased slightly to reach 1.3% at the end of 2019, compared to 1.4% at the end of 2018, due to the decline in consolidated banks' profits. (Figure 3-41).

### 3-3-5-3 RETURN ON EQUITY

The ROE of consolidated banks decreased moderately at the end of 2019 to reach 9.1% compared to 9.2% at the end of 2018. (Figure 3-41).

**FIGURE 3-41: ROA AND ROE OF CONSOLIDATED BANKS) (2010-2019) (%)**

### 3-4 FINANCIAL STABILITY INDEX

#### 3-4-1 INTRODUCTION

As mentioned in previous financial stability reports, the CBJ in 2017 developed Jordan Financial Stability Index (JFSI) according to several practices of countries designing their own indices, as each country uses different approaches in terms of variables, statistical methods, weights, and other factors. Therefore, the JFSI was developed according to international best practices thereon, considering 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 is represented by seven variables, and the capital market index, which consists of two variables. These 19 indices were calculated and analyzed using historical data for the period (2007-2019).

#### 3-4-2 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 in this regard, taking into account the specific features of the financial sector in Jordan, which

is dominated by the banking sector, therefore more than half of the indices used to calculate the composite financial stability index 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 methodology was used to re-measure the 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 sub-index according to the formula (1) below.

$$di = \frac{Ai - \min}{\max - \min} \dots \dots \dots (1)$$

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. Many 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. Subsequently, 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 sub-indices):

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

**Macroeconomics Index:**

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

**Capital Market Index:**

$$Msi = \frac{\sum_{i=1}^2 d_M}{2} \dots \dots \dots (4)$$

**Calculating the Composite Financial Stability Index:**

Using the weighted average of the three sub-indices the JFSI is calculated using the following formula:

$$JFSI = ((10/19) * Bsi) + ((7/19) * Esi) + ((2/19) * Msi) \dots \dots \dots (5)$$

The JFSI's value ranges from zero to 1.

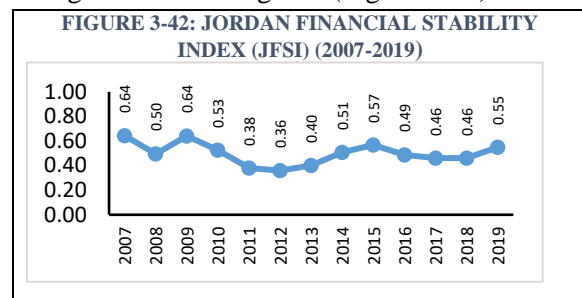
#### 3-4-3 THE JFSI RESULTS

As mentioned previously, the value of the JFSI ranges from zero to one. The closer the

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

<sup>2</sup> The minimum value is determined according to the minimum values stipulated in respective effective regulations instead of the minimum values mentioned in the study.

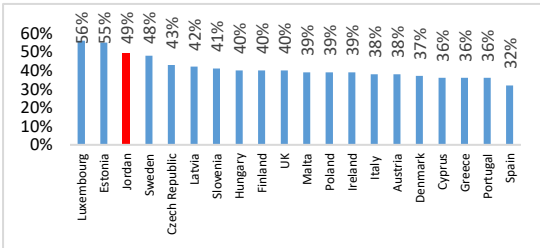
value to one, the greater the stability of the financial system. The pre-crisis value of the JFSI was 0.64 at the end of 2007, and dropped to 0.5 by the end of 2008 due to the global financial crisis. The JFSI increased to 0.64 at the end of 2009 to fall again during the period (2010-2012) with the lowest value recorded at the end of 2012 of 0.36, influenced by the Arab Spring and the refugees' crisis as well as the challenging economic conditions faced the Kingdom, particularly in 2012. The JFSI started to recover and reached 0.49 by the end of 2016. However, the JFSI had declined slightly in 2017 and 2018 to 0.46. In 2019, the JFSI improved considerably compared to 2017 and 2018<sup>3</sup> to record 0.55, which is attributed to better liquidity ratios and CARs, as well as the financial leverage of banks operating in Jordan, besides the improvement in foreign reserves and gold. (Figure 3-42).



In conclusion, the JFSI indicates that the financial system in Jordan is quite stable taking into consideration the economic developments in the region and the Kingdom and their impact on the financial stability.

The Banking Sector Stability Index in particular shows that Jordan has a sound, resilient, and stable banking sector. Jordan occupied the third rank, compared to 20 countries that developed a similar index. (Figure 3-43).

**FIGURE 3-43: THE JFSI COMPARED TO FINANCIAL STABILITY INDICES FOR SELECTED EUROPEAN COUNTRIES**



### 3-5 DEVELOPMENTS OF NON-BANKING FINANCIAL SECTOR (NON-BANKING FINANCIAL INSTITUTIONS)

#### 3-5-1 INSURANCE SECTOR

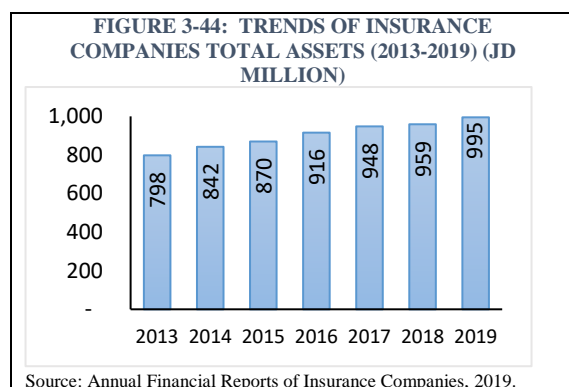
The insurance sector is an essential component of the financial system. It protects individuals and properties against risks, in addition to attracting and investing national savings to support economic development. The contribution of insurance premiums to GDP reached around 2% in 2019. Given the importance of this sector in promoting financial stability, the Cabinet on 24/02/2016 entitled the CBJ to supervise the insurance sector according to international practices of regulatory authorities. To this end the CBJ in cooperation with the Ministry of Industry, Trade, and Supply drafted the Law for regulating insurance business of 2019; the Parliament passed the draft Law in March 2020. The draft law puts in place the rules for insurance businesses practices by updating the supervisory frameworks for insurance activities, and enhancing the CBJ's ability to oversee and supervise this sector. It also aims to improve the financial solvency of insurance companies and set clear standards to monitor it, as well as to strengthen the CBJ's role in anchoring rules of corporate governance for

<sup>3</sup> One of the main drawbacks of the Financial Stability Index, which was recognized by most countries that developed it, is that the index is highly sensitive to any changes in the values of the sub-indices included in the calculation, regardless how small these changes are.

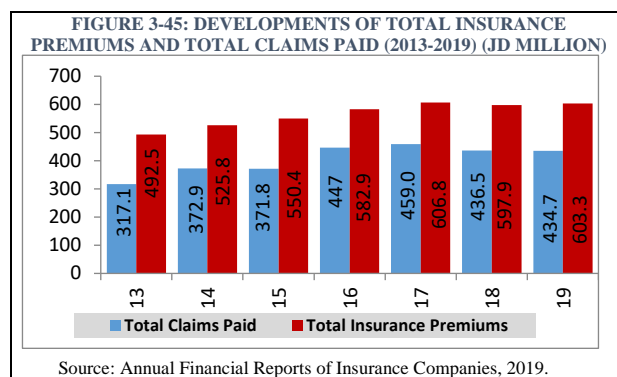
insurance companies and insurance services providers.

The Insurance sector in consists of (24) insurance companies operating in Jordan. One company is licensed to provide life insurance (a branch of foreign company); (8) companies are licensed to practice general insurance business; while (15) companies are licensed to carry out both types of insurance (life insurance and general insurance), two of which are providing Takaful insurance, and licensed to practice life insurance and general insurance. In addition, the insurance sector also includes (1,121) entities providing supporting insurance services, including insurance agents and brokers, reinsurance brokers, loss settlement specialists, inspectors, authorized delegates to subscribe, actuaries, insurance consultants, insurance business management companies, banks licensed to practice insurance business, as well as reinsurance brokers residing abroad.

Total assets of insurance companies in the Kingdom totaled JD 995 million at the end of 2019, compared to JD 959 million at the end of 2018; growing by 3.8% (Figure 3-44).



According to the annual reports of insurance companies for 2019, total insurance premiums increased by 1% in 2019, to reach JD 603.3 million, compared to JD 597.9 million in 2018. Meanwhile, total claims paid decreased by 0.42% to reach JD 434.7 million in 2019 compared to JD 436.5 million in 2018 (Figure 3-45).



With regard to the financial results of insurance companies, total investments increased from JD 563.1 million in 2018 to JD 576.1 million in 2019. Meanwhile, paid in capital increased from JD 266.4 million in 2018 to JD 271.3 million in 2019 (Table 3-1). The net profit after tax for insurance companies reached to JD 19.9 million in 2019, against JD 15.1 million in 2018, growing by approximately 31.4%.

**TABLE 3-1: FINANCIAL RESULTS OF INSURANCE COMPANIES (2014-2019)**

Item	2014	2015	2016	2017	2018	2019
Total Investments	534.4	533.6	543.5	569	563.4	576.1
Total assets	842.2	869.7	915.6	948	959	995.1
Shareholders' equity	332.8	330.7	343.7	335	317.9	327.1
Total written premiums in Jordan	525.8	550.4	582.9	606.8	597.9	603.3
Total claims paid in Jordan	372.9	371.8	447	459	436.5	434.7
Paid in capital	268	269	267	265	266.4	271.3

Source: The Jordanian Insurance sector results report for data of the period (2014-2016)  
Data of (2017-2019): balance sheets of insurance companies and monthly publications of the insurance department.

### 3-5-2 NON-BANKING FINANCIAL INSTITUTIONS

Non-banking financial institutions play a fundamental role in the economy as they provide credit to segments facing difficulties to access banks.

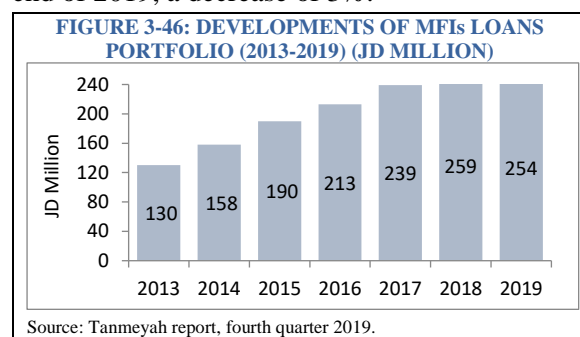
Non-banking financial institutions extend credit to customers without accepting deposits, and are subject to the oversight of the Ministry of Industry, Trade, and Supply. However, as part of the CBJ's endeavor to include non-banking

financial institutions under its supervision umbrella, the CBJ in 2015 embarked the oversight and supervision of MFIs in the first stage of including unregulated non-banking financial institutions under the CBJ's supervision; other unregulated non-banking financial institutions are to be regulated in the second stage.

### 3-5-2-1 MICROFINANCE SECTOR<sup>4</sup>

The microfinance sector in Jordan started its business in 1994, and expanded rapidly in the last few years. Microfinance loans recorded a steady growth rate during the period (2013-2015) at 21%. During the period (2016-2019) these loans grew gradually by 12%, 12%, 9%, and -2% in 2016, 2017, 2018, and 2019, respectively. (Figure 3-46).

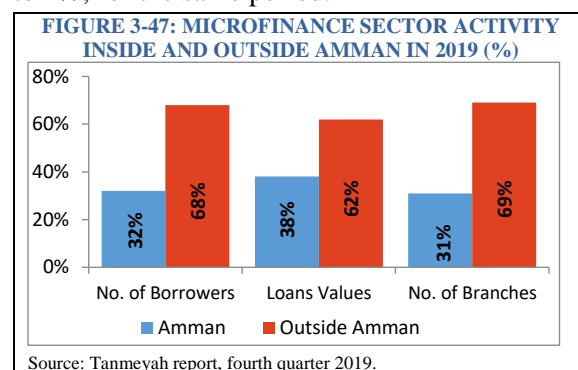
Total loans portfolio of microfinance reached to JD 254 million at the end of 2019, compared to JD 259 million at the end of 2018. The number of borrowers increased by 2% to reach 473,328 borrowers at the end of 2019 compared to 465,717 borrowers at the end of 2018. In addition, the average value of loans decreased from JD 573 at the end of 2018 to JD 558 at the end of 2019, a decrease of 3%.



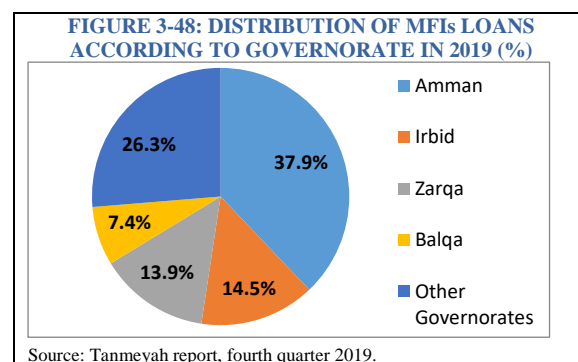
The MFIs activities mainly target women, aiming to empower them and enhance their contribution to the economy and society. In addition, the MFIs services also focus on borrowers outside Amman to achieve economic and social development throughout the Kingdom as follows:

### 3-5-2-2 MICROFINANCE SECTOR ACTIVITIES OUTSIDE AMMAN

The microfinance sector activities are concentrated outside Amman, as 68% of borrowers, 62% of total value of loans, and 69% of MFIs branches are located outside Amman (figure 3-47). In 2019, the number of borrowers grew by 4% in Amman, while in other governorates, the growth rate ranged from -5% to 4%, for the same period.



As for the distribution of MFIs Loans according to governorates in 2019 (figure 3-48); Amman received 37.9% of MFIs loans, followed by Irbid 14.5%, Zarqa 13.9%, Balqa 7.4%, while the remaining governorates received 26.3% of total loans.



<sup>4</sup> Reference: Tanmeyah report, fourth quarter 2018.



### 3-5-2-3 FINANCIAL LEASING COMPANIES<sup>5</sup>

Total assets of financial leasing companies which are subsidiaries to banks in Jordan totaled JD 604.6 million at the end of 2019 compared to JD 582.4 million at the end of 2018; a growth of 16%. Further, shareholders' equity increased from JD 309 million at the end of 2018 to JD 323 million at the end of 2019. As for the financial results of financial leasing companies, the net profit after tax increased by 23.2% from JD 17.7 million at the end of 2018 to JD 21.8 million at the end of 2019. The ROE increased from 6.8% in 2018 to reach 6.9% in 2019. The ROA also increased from 3.5% in 2018 to 3.7% in 2019. (Table 3-2).

<b>TABLE 3-2: DEVELOPMENTS OF FINANCIAL LEASING COMPANIES (2016- 2019) (JD MILLION)</b>				
<b>Item</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
Revenues	32.3	37.7	43.3	53.2
Paid-In Capital	121	142.5	175	210
Total Assets	401.6	499.7	582	604.6
Shareholders' Equity	227.8	251.8	309	323
Profit After tax	17.3	17.6	17.7	21.8
ROE (%)	8%	7.3%	6.8%	6.9%
ROA (%)	4.8%	3.9%	3.5%	3.7%

Source: Preliminary annual balance sheets for financial leasing companies (subsidiaries of banks), and the CBJ's Calculations.

### 3-5-3 THE EXCHANGE SECTOR

The number of licensed exchange companies totaled 129 companies in the Kingdom, operating as headquarters and 157 branches located in governorates all over Jordan, totaling 286 exchange sites (Table 3-3).

<b>TABLE 3-3: NO. OF EXCHANGE COMPANIES AND BRANCHES</b>			
<b>Governorate</b>	<b>NO. of Companies</b>	<b>NO. of Branches</b>	<b>Total</b>
Amman	78	99	177
Zarqa	13	15	28
Irbid	8	19	27
Aqaba	5	7	12
Other Governorates	25	17	42
Total	129	157	286

In light of the developments of the exchange sector and its notable growth in the last two decades, which made it one of the most significant and 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. This Law supersedes the old law No. 26 of 1992.

The new Law provides the legislative framework that governs the exchange activity in the Kingdom, by setting the conditions and requirements of licensing, merging, liquidation, and the management of exchange companies. In addition, it addresses the records and documents that must be retained by exchange companies, as well as validating the role of chartered accountants in auditing the exchange companies' business, in terms of expanding the scope of the auditor's functions in compliance with best practices. The Law also contributed to establish the legal basis for informing exchange companies with any decisions or instructions issued by the CBJ, and expanded the CBJ's authority to enact instructions regarding the safe ratios and limits for sound financial positions of the exchange companies, and the size of non-Jordanian workforce. The Law lays down the legal basis for the formulation of an ad hoc committee dedicated to handle complaints related to services provided by the exchange companies, which are submitted to the CBJ.

The CBJ conducts on-site and off-site supervision of the exchange sector. The off-site supervision mainly involves examining and analyzing the periodic statistical data and audited financial statements of exchange companies, and sets appropriate recommendations thereon. Meanwhile, the on-site supervision, which is

<sup>5</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.



carried out via on-site inspection teams, verifies the compliance of the exchange companies with all respective effective laws and regulations, in addition to the role of external auditors of the exchange companies as stipulated in the provisions of the Law (Table 3-4).

TABLE 3-4: LEADING INDICATORS OF THE EXCHANGE SECTOR IN 2019	
Indicator	JD Million
Total Business size	167*
Total Capital	98.3
Total Financial guarantees offered	32.4
Total Purchases of foreign currency	7,534
Total Sales of foreign currency	7,625
Return on capital (%)	2.35%*
Return on assets (%)	1.33%*
*As of end 2018.	

According to the Law, the Instructions of Holding Foreign Currency Accounts with Foreign Banks by Licensed Exchange Companies were enacted on 29/1/2017. In addition, the Instructions of Anti Money Laundering and Counter Terrorist Financing for Exchange Companies and their amendments No. (70/ 2018) were also issued on 5/7/2018. Furthermore, the Instructions of Adapting to Cyber Risks for Exchange Companies No. (17/ 2018), were enacted on 3/10/2018.

### 3-4-5 SOCIAL SECURITY CORPORATION<sup>6</sup> (SSC)

The Social Security Corporation (SSC) plays a significant role in the society as the social security umbrella includes 52,854 active firms, of which 59.7% are based inside Amman (98.7% of total active firms subscribed to the SSC are private sector firms) as indicated in the SSC annual report of 2018. In addition to its fundamental role in the society, the SSC contributes considerably in achieving the financial stability through its massive investments portfolio in financial and non-

financial assets, and in effective lending to the government through treasury bills and bonds. The following are the SSC's main features:

- The SSC has a big investment capacity with a long-term investment horizon, as it invests to finance the retirement claims of individuals of various ages, which enables the SSC to undertake investments at different maturities, and helps to diversify the risk portfolio for various maturities. This policy is particularly important during financial crises when market suffers shortages in liquidity. In this regard, the SSC's investments accounted for 35.4% of GDP at the end of 2019, compared to 34.1% in 2018.
- The SSC pursues self-financing investments, as the source of funds are the subscribers' deductions not borrowings or deposits (such as banks). Therefore, the SSC is not prone to high leverage ratio, or risks of maturity mismatch of sources and uses of funds. These two factors led to failures among several international banks during the last global financial crisis. Therefore, the SCC cannot exemplify a possible source of systemic risk in the financial system.
- The deductions of workers and employers are retained for a long period and unlike deposits at banks, they cannot be withdrawn. This implies that funds are protected against liquidity runs.

Given the importance of the SSC in stimulating investment, 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 undertakes the investments of the SSC's funds, aiming to realize meaningful and constant returns, in addition to maintaining the real value of SSC assets, as well as providing sufficient liquidity to meet the SSC's obligations. The SSIF's assets reached to

<sup>6</sup> Despite the SSC is not a non-banking financial institution; financial stability reports in most countries include it with non-banking financial institutions, given their fundamental role in achieving financial stability through their investments in financial and non-financial assets.

JD 11 billion at the end of 2019, compared to JD 10.19 billion at the end of 2018, increasing by JD 0.81 billion (7.9%). In addition, the SSIF's net income increased by JD 122.6 million, or 28% to reach JD 556.2 million at the end of 2019, compared to JD 433.6 million at the end of 2018. The SSIF distributes its investment portfolios to seven key portfolios (Table 3-5).

Investment Portfolios	2018	2019
Money Market Instruments Portfolio	1,374.7	1,353.2
Bonds portfolio	5,135.4	5,970.0
Loans portfolio	252.8	330.9
Equity portfolio	2,053.4	1,950.3
Real estate portfolio	598.4	659.0
Tourism portfolio	285.8	288.1
Other assets	490.3	445.4
Total	10,190.7	10,997.0

Source: SSIF.

The SSIF's investments are distributed among various 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 (for bond and bills with a maturity of less than one year), and the bonds portfolio (for bonds with a maturity of 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 the stocks of public listed companies traded in ASE and stocks of the strategic private equity companies, as applicable by the SSIF's investment policy. The real estate portfolio includes all real estate investments such as 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 investment portfolios, and to mitigate risks, abiding by constraints of investment.

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 banks' capital approached JD 1.1 billion at the end of 2019, accounting for 32.4% of banks' total capital in Jordan (Table 3-6).

Bank	Contribution (JD Million)	Share (%)
Jordan Kuwait Bank	52.81	21.04%
Jordan Commercial Bank	18.81	19.84%
Arab Bank PLC.	626.13	16.99%
Housing Bank for Trade & Finance	265.92	15.41%
Jordan Ahli Bank PLC	19.06	10.00%
Capital Bank	18.54	9.27%
Safwa Bank	12.36	9.09%
Cairo Amman Bank	14.77	7.55%
Bank al Etihad	21.69	8.42%
Jordan Islamic Bank	32.32	5.77%
Arab Jordan Investment Bank	8.02	4.08%
ABC Bank	1.87	2.05%
Total	1092.3	13%

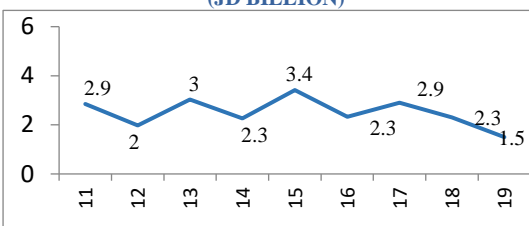
Source: SSIF

### 3-5-5 AMMAN STOCK EXCHANGE (ASE)

The ASE indicators in 2019 deteriorated compared to the previous year. The trading volume declined by 31.6%, while the free float share price index declined by 7.46%. Meanwhile, market capitalization of listed shares decreased by JD 1,207.9 million, or 7.49%, to reach JD 14,914.8 million, which is equivalent to 49.7% of GDP. The net investment by non-Jordanians declined to JD 114.1 million in 2019, compared to JD 484.5 million in 2018. A synopsis the ASE's key performance indicators in 2019 is set out next.

The trading volume in ASE dropped by JD 733.8 million to reach JD 1,585.4 million in 2019 (figure 3-49). This decline is due to the following factors:

1. The decrease of the trading volume in the industrial sector by JD 689.5 million.
2. The decrease of the trading volume in the financial sector by JD 74 million.
3. The increase of the trading volume in the services sector by JD 29.6 million.

**FIGURE 3-49: TRADING VOLUME IN ASE (2011-2019)  
(JD BILLION)**

Source: ASE

The number of shares traded in 2019 increased by 1.3 million shares to reach 1,247.2 million shares, against 1,245.9 million shares traded in 2018. In contrast, the number of executed contracts decreased to 503 thousand contracts at the end of 2019, down from around 511.8 thousand contracts at the end of 2018. As for shares traded by sector, the financial sector had the largest share that accounted for 66% of the trading volume in 2019, followed by the industrial sector for 18%, and the services sector forming 16% of the trading volume. (Table 3-7).

**TABLE 3-7: RELATIVE IMPORTANCE OF TRADING  
VOLUME BY SECTOR (2012-2019) (%)**

Sector	2012	2013	2014	2015	2016	2017	2018	2019
Industrial	19.5	13.1	16.7	10.1	30.2	22.4	42.2	18
Services	20.4	13.5	16.5	21.2	18.2	12.8	9.79	16
Financial	60.1	73.4	66.8	68.7	51.6	64.8	48	66

With regard to transactions of non-Jordanian investors in ASE, it recorded JD 114.1 million in 2019, compared to JD 484.5 million in 2018. Shares bought by non-Jordanian investors reached around JD 528.7 million in 2019, while the shares sold by non-Jordanian investors totaled JD 414.6 million (Table 3-8).

**TABLE 3-8: PURCHASES AND SALES OF SHARES BY  
NON-JORDANIAN INVESTORS IN ASE (2013-2019) (JD  
MILLION)**

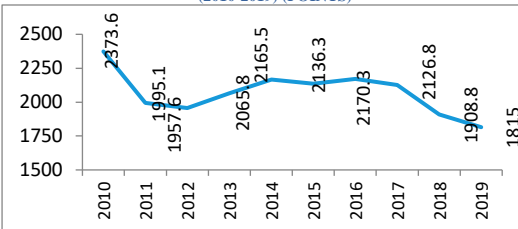
	2013	2014	2015	2016	2017	2018	2019
<b>Total Purchases</b>	939.5	362.7	981.7	666.5	994.9	1231.8	528.7
Arabs	818.5	262.1	894.3	520.3	638.7	214.4	147.5
Foreigners	121.0	100.6	87.4	146.2	356.3	1,017.4	381.2
<b>Total Selling</b>	792.6	384.8	971.1	429.4	1329.2	747.3	414.6
Arabs	693.2	247.8	873.5	304.1	1177.6	177.1	374.8
Foreigners	99.4	137	97.6	125.3	151.6	570.2	39.8
<b>Net Investment</b>	146.9	-22.2	10.6	237.1	-334.3	484.5	114.1
Arabs	125.3	14.3	20.7	216.2	-538.9	37.3	227.3
Foreigners	21.6	-36.5	-10.1	20.9	204.7	447.2	341.4

### 3-5-5-1 THE FREE FLOAT WEIGHTED SHARE PRICE INDEX

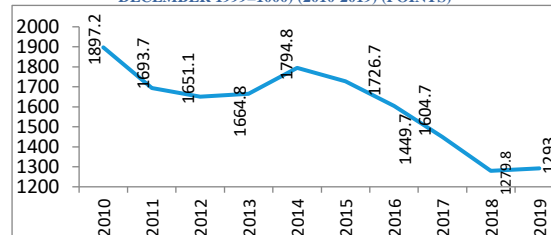
The free float weighted share price index reached approximately 1,815.8 points at the end of 2019; dropped by 93.6 points from its level at the end of the previous year. This decrease is due to the decline in both the financial sector index by 202.7 points (7.64%) and the industrial sector index by 25.7 points (1.4%), compared to their levels at the end of 2018.

### 3-5-5-2 THE MARKET CAPITALIZATION WEIGHTED SHARE PRICE INDEX

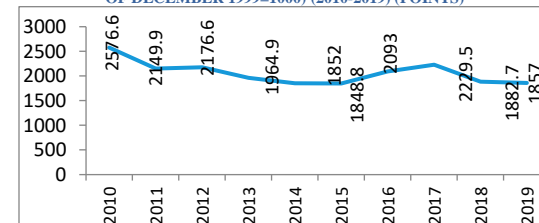
The market capitalization weighted share price index declined by 283.3 points in 2019 from its level recorded in the previous year to reach 3,513.8 points, compared to declining by 212.35 points in 2018. This drop is attributed the decrease of the indices of banks, financial companies, and industrial companies.

**FIGURE 3-50: FREE FLOAT MARKET CAPITALIZATION WEIGHTED  
SHARE PRICE INDEX (CLOSING PRICE OF DECEMBER 1999=1000)  
(2010-2019) (POINTS)**

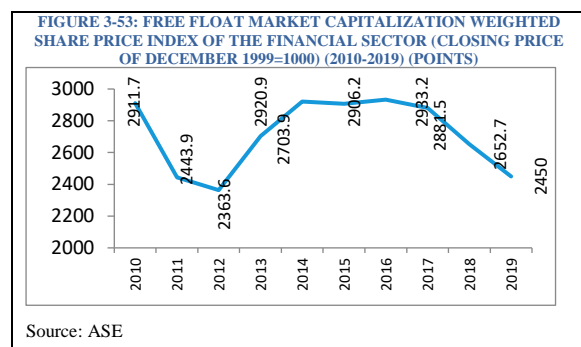
Source: ASE

**FIGURE 3-51: FREE FLOAT MARKET CAPITALIZATION WEIGHTED  
SHARE PRICE INDEX OF THE SERVICES SECTOR (CLOSING PRICE OF  
DECEMBER 1999=1000) (2010-2019) (POINTS)**

Source: ASE

**Figure 3-52: FREE FLOAT MARKET CAPITALIZATION WEIGHTED  
SHARE PRICE INDEX OF THE INDUSTRIAL SECTOR (CLOSING PRICE  
OF DECEMBER 1999=1000) (2010-2019) (POINTS)**

Source: ASE

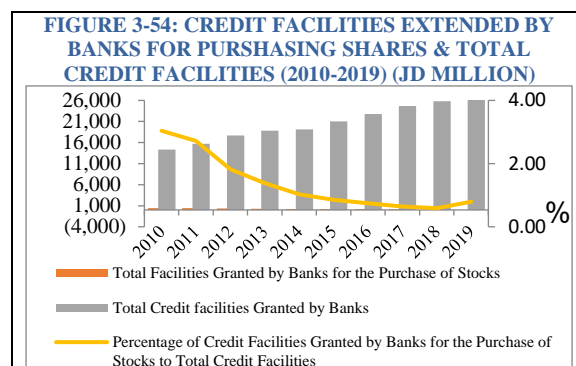


### 3-5-5-3 BANKS' EXPOSURE TO STOCK MARKETS RISKS

Capital markets are essential to stimulate the economy as they attract foreign investments, encourage national savings, and provide financing sources for economic projects, which ultimately serve the national economy. Given the significant importance of capital markets, risks facing these markets are gaining 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 investments of banks in shares. The size of banks' exposure to these risks is analyzed below:

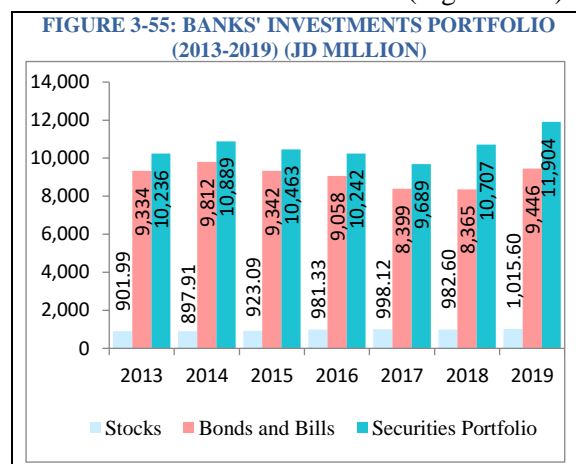
### 3-5-5-4 CREDIT FACILITIES EXTENDED BY BANKS FOR PURCHASING SHARES

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 212.2 million at the end of 2019, representing 0.8% of total credit facilities, compared to JD 152 million at the end of 2018 with an increase of 39.6%. (Figure 3-54).



### 3-5-5-5 THE SIZE OF BANKS' INVESTMENTS IN SHARES

The securities portfolio of banks in Jordan reached around JD 11,904 million at the end of 2019, compared to JD 10,707 million at the end of 2018, increasing by 11.2%. Banks' investments in shares accounted for 8.5% of total investments in securities at the end of 2019, compared to 9.2% at the end of 2018, which is much lower than investments in bonds (mostly government bonds) that capture the largest share of banks' investments in securities. Banks' investments in shares are low due to the slowdown in the ASE, as well as the restrictions imposed by the Banking Law and the CBJ's instructions on these investments (Figure 3-55).



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

### 4-1 HOUSEHOLD SECTOR

#### 4-1-1 EXPOSURE OF BANKS AND FINANCIAL INSTITUTIONS TO THE HOUSEHOLD SECTOR

In the context of the CBJ's framework for monitoring household indebtedness to banks and non-banking financial institutions, the key developments of household indebtedness and related ratios are explained below.

#### 4-1-2 HOUSEHOLD INDEBTEDNESS TO BANKS AND NON-BANKING FINANCIAL INSTITUTIONS

Table 4-1 illustrates the evolution of household indebtedness to banks and non-banking financial institutions during the period (2015-2019). The table indicates that household indebtedness approached JD 11.2 billion at the end of 2019, up from JD 10.8 billion at the end of 2018, increasing by 3.9%, which is slightly higher than the 3.7% growth recorded in 2018. The growth rates of household indebtedness in 2018 and 2019 were relatively low, compared to the high growth rates recorded in the previous period, in particular in 2014-2015, which indicates that risks of household indebtedness are declining in recent years.

<b>TABLE 4-1: HOUSEHOLD INDEBTEDNESS TO BANKS AND NON-BANKING FINANCIAL INSTITUTIONS (2015-2019) (JD MILLION)</b>					
<b>Indebtedness</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
The Banking System (JD Million)	8,967.2	8,737.2	9,452.5	9,801.3	10,167
Growth (YOY) (%)	11.2	-2.6	8.2	3.7	3.7
Non-Banking Financial Institutions (JD Million)	781.3	847.3	982.9	1,018.0	1,076.8
Growth (YOY) (%)	8.3	8.4	16.0	4.0	5.8
Total (JD Million)	9,748.5	9,584.5	10,435.4	10,819.3	11,243.8
Growth (YOY) (%)	10.9	-1.7	8.9	3.7	3.9

The rise in household indebtedness in 2019 is due to the increase in household indebtedness to banks by JD 365.7 million, or 3.7%, and to non-

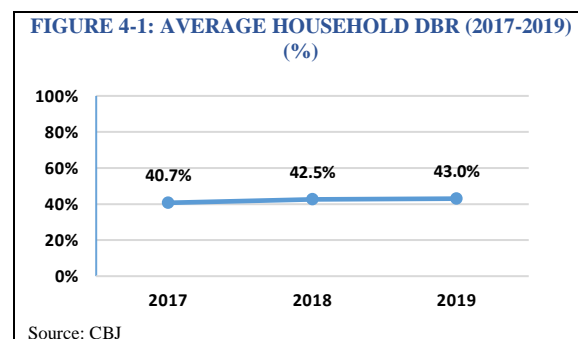
banking financial institutions by JD 58.8 million, or 5.8%. Table (4-2) clarifies the details of household indebtedness to non-banking financial institutions.

Company	2015	2016	2017	2018	2019
MFIs*	180.2	206.3	227.0	259.0	254.4
Listed Companies in ASE**	117.4	185.7	221.4	236.9	217.8
Financial Leasing Companies (Subsidiaries of Banks)	483.7	455.2	534.5	521.7	604.6
Total	781.3	847.3	983.0	1,018	1,076.8

#### 4-1-3 HOUSEHOLD DEBT BURDEN RATIO

The Debt Burden Ratio (DBR), which is measured by the monthly installments and interests payments paid by the borrower relative to his/ her regular monthly income, is one of the key ratios that measure the risks of household indebtedness for banks and the individuals themselves. High DBR implies negative effects on the financial and economic stability, as it leads to a decline in the ability of individuals to repay their loans, which increases the default rates at banks and other financing institutions. In addition, high DBR dampens the ability of individuals to spend and consume, which adversely affects economic growth.

Figure (4-1) illustrates the developments of the household average DBR in Jordan during the period (2017- 2019). The DBR increased slightly from 40.7% in 2017, to 43% in 2019. Despite the modest increase in the DBR during that period, it is still acceptable according to international standards, as the average DBR in most countries ranges (40%-50%).

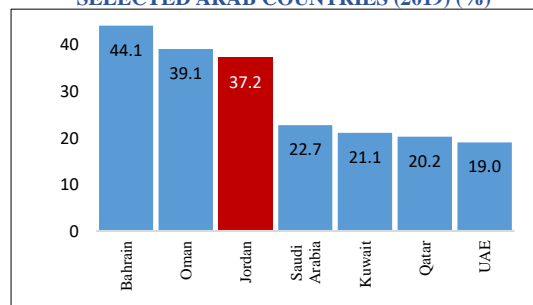




#### 4-1-4 HOUSEHOLD INDEBTEDNESS IN SELECTED ARAB COUNTRIES

Data for household indebtedness in Arab countries is limited. However, it is possible to measure household indebtedness by using the ratio of facilities extended to households relative to the total facilities extended by banks. This ratio in Jordan stood at 37.2% in 2019; Jordan ranked third among selected Arab countries, the ratio in Jordan is lower than Bahrain and Oman, yet is higher than Saudi Arabia, Kuwait, Qatar, and United Arab Emirates. (Figure 4-2).

**FIGURE 4-2: CREDIT FACILITIES EXTENDED TO HOUSEHOLDS RELATIVE TO TOTAL CREDIT FACILITIES EXTENDED BY BANKS IN JORDAN AND SELECTED ARAB COUNTRIES (2019) (%)**



Source: Central Banks websites of selected countries.

#### 4-1-5 SUMMARY

The development of household DBR during the last three years (2017-2019), indicates that this ratio increased slightly during this period to reach around 43% at the end of 2019, yet it is still within the international acceptable limits, which ranges between (40% -50%). This denotes that the risks of household indebtedness in Jordan to banks and the individuals themselves fall within the normal and acceptable levels compared to other countries.

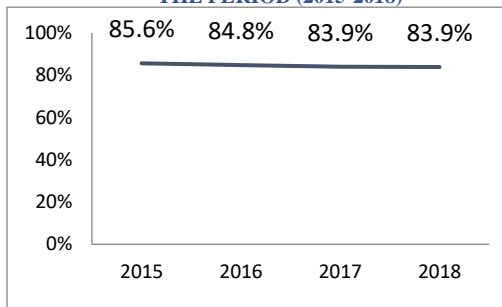
### 4-2 NON-FINANCIAL COMPANIES SECTOR

#### 4-2-1 INTRODUCTION

The corporate sector in Jordan consists of non-banking financial companies and non-financial companies<sup>7</sup>. The non-banking financial

companies sector includes insurance companies, securities companies, MFIs, financial leasing companies, and other companies providing diversified financial services. The non-financial companies sector listed in ASE includes the industrial, services, and real estate sectors, which are subject to the supervision of the Ministry of Industry, Trade, and Supply. In 2018, total assets of the non-financial companies amounted to JD 11,515 million, accounting for 83.9% of the corporate sector total assets, compared to JD 10,998 million at the end of 2017 or 83.9% of the corporate sector total assets (Figure 4-3).

**FIGURE 4-3: NON-FINANCIAL COMPANIES' ASSETS RELATIVE TO TOTAL COMPANIES' ASSETS FOR THE PERIOD (2015-2018)**

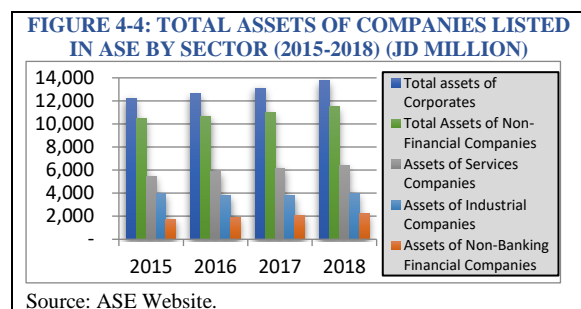


Source: ASE website.

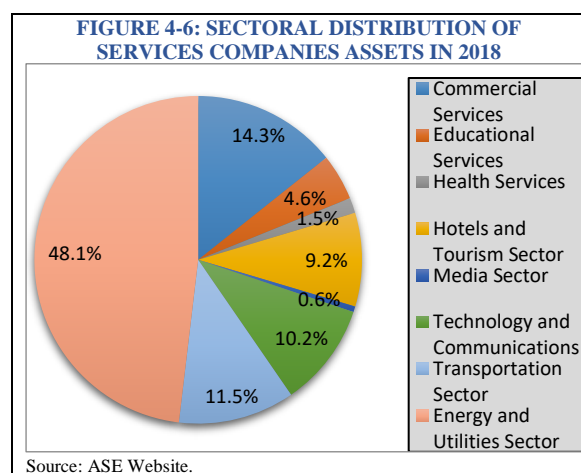
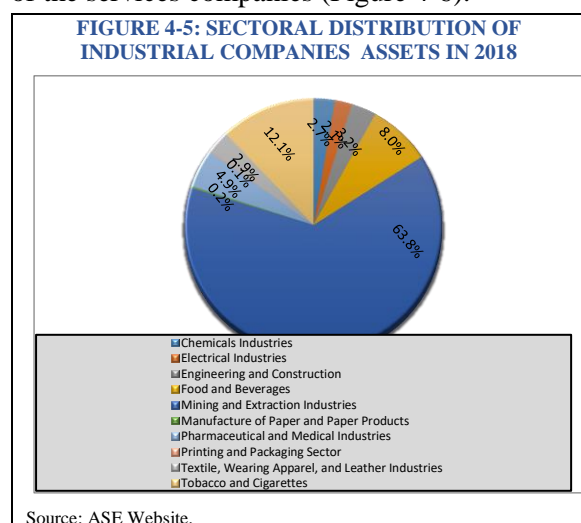
Assets of public shareholding non-banking financial companies reached approximately JD 2,216 million, accounting for 16% of the corporate sector total assets at the end of 2018. The services companies' total assets amounted to JD 6,392.8 million forming 55.5% of non-financial companies sector total assets at the end of 2018, while total assets of the industrial companies amounted to about JD 3,980.7 million, or 34.6%. The total assets of real estate companies stood at around JD 1,141.5 million accounting for 9.9% of the total assets of the non-financial companies sector at the end of the 2018 (Figure 4-4).

<sup>7</sup> Based on data of non-financial companies listed in ASE for 2018, data for non-financial companies not listed in ASE is not available (noting that some data for previous years were changed from the source).





As for sub-sectors of the non-financial companies, the assets of mining and extraction industries accounted for 63.8% of the industrial companies' total assets (Figure 4-5). As for total assets of services companies, energy and utilities sector's assets formed 48.1% of the total assets of the services companies (Figure 4-6).

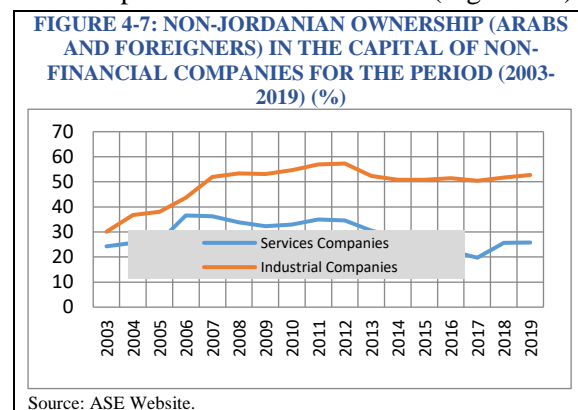


The following section elaborates on the developments of the non-financial companies sector (industrial, services, and real estate),

which at the end of 2018 consisted of 195 companies listed in ASE, according to the ASE's annual report. With regard to the evolution and risks of the financial companies' sector, they were detailed in chapter 3.

#### 4-2-2 STRUCTURE OF NON-FINANCIAL COMPANIES' OWNERSHIP

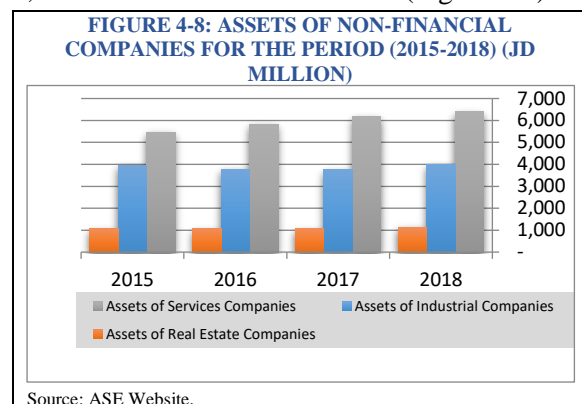
The non-Jordanian ownership (Arabs and foreigners) in the capital of non-financial industrial and services companies reached 52.7% and 25.8%, respectively, at the end of 2019 (in the form of shares, bonds, and subscription rights), compared to 51.7% and 25.7%, respectively, at the end of 2018. The non-Jordanian ownership in these companies' capital broadly reflects the investors' confidence in the Jordanian economy, noting that non-Jordanian ownerships are stable contributions (Figure 4-7).



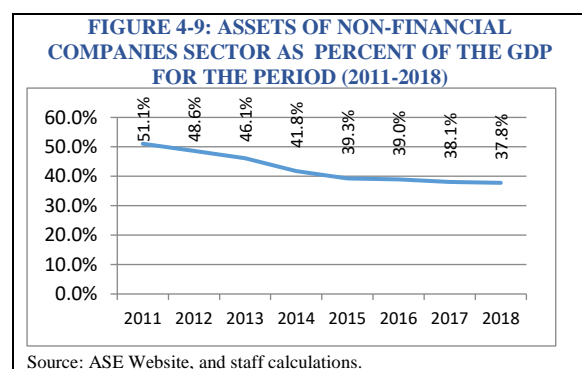
#### 4-2-3 Assets of the Non-Financial Companies

Assets of non-financial companies listed in ASE reached to about JD 11,515 million at the end of 2018, compared to JD 10,998 million at the end of 2017, growing by 4.7%. This is owing to the increase in the industrial companies' assets to reach JD 3,980.7 million at the end of 2018 compared with JD 3,761.2 million at the end of 2017, increasing by 5.8%. Furthermore, the assets of services companies and real estate companies grew by 3.7% and 6.6%, respectively, as assets of services companies increased from JD 6,166.8 million in 2017 to JD 6,392.7 million in 2018, while assets of the real estate companies

increased from JD 1,070.5 million in 2017 to JD 1,141 million at the end of 2018. (Figure 4-8).

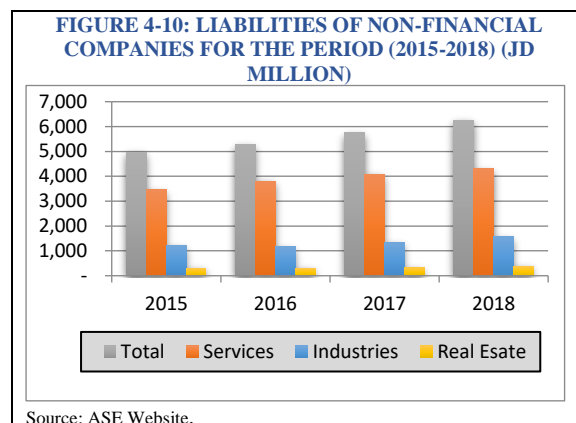


The assets of non-financial companies relative to GDP recorded 37.8% at the end of 2018 compared to 38.1% at the end of 2017 and 51.1% at the end of 2011. (Figure 4-9).

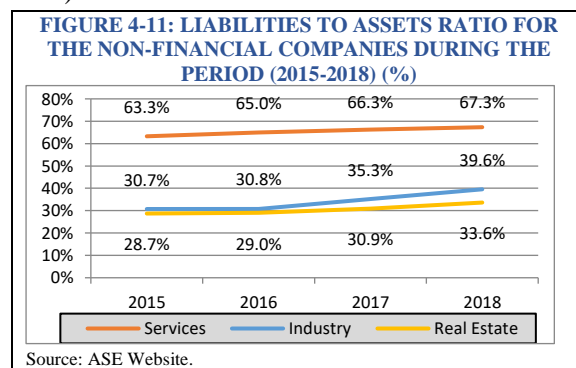


#### 4-2-4 LIABILITIES OF THE NON-FINANCIAL COMPANIES

Liabilities of non-financial companies amounted to JD 6,262.5 million at the end of 2018, compared to JD 5,746.3 million at the end of 2017, an increase of 9%. Liabilities of the service companies increased by 5.3% to reach about JD 4,304.3 million at the end of 2018 compared to JD 4,089.1 million at the end of 2017. Liabilities of the industrial companies increased by 18.7%, to stand at JD 1,574.6 million at the end of 2018 compared to JD 1,326 million at the end of 2017. As for the real estate companies, their liabilities increased by 15.8% to reach JD 383.6 million at the end of 2018 compared to JD 331.2 million at the end of 2017 (Figure 4-10).



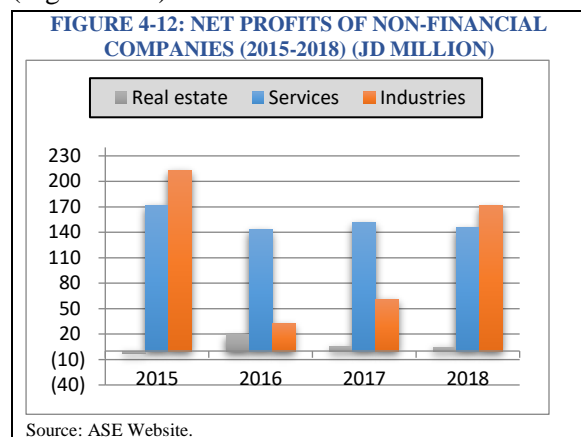
In addition, the liabilities to assets ratio increased for all sectors to reach 33.6%, 39.6%, and 67.3% for the real estate, industrial, and services companies sectors, respectively, at the end of 2018, up from 30.9%, 35.3% and 66.3% for the same sectors respectively in 2017 (Figure 4-11).



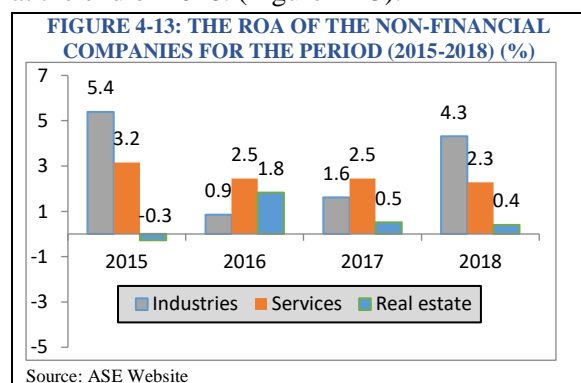
#### 4-2-5 PROFITABILITY OF NON-FINANCIAL COMPANIES

Net profit of non-financial companies increased by 47.8% to JD 321.5 million at the end of 2018 compared to JD 217.5 million at the end of 2017. This increase is mainly due to the remarkable increase in net profit of the industrial companies from JD 60.8 million in 2017 to reach JD 171.4 million in 2018. The notable increase in industrial companies' net profits is due to the increase in the profits of Jordanian Phosphate Mines Company and Arab Potash Company. The Phosphate company gained profits approached JD 48 million at the end of 2018, compared to a loss of JD 47 million at the end of 2017. The

Potash Company's profits increased from JD 90 million in 2017 to JD 125 million in 2018. In contrast, the net profits of the services and real estate companies dropped slightly at the end of 2018. The services companies profits declined from JD 151 million at the end of 2017 to 145.5 million in 2018, while the real estate profits declined from about JD 5 million at the end of 2017 to reach JD 4.5 million at the end of 2018. (Figure 4-12).

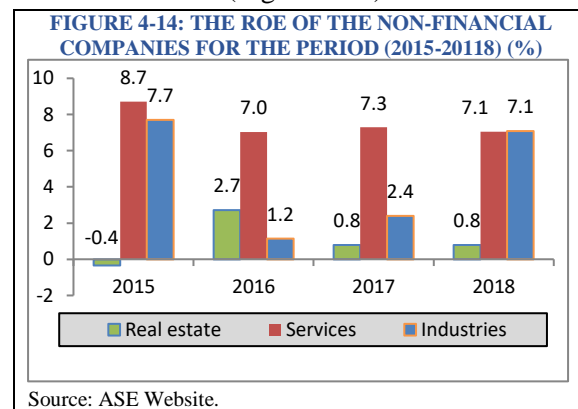


The ROA for industrial companies increased to 4.3% at the end of 2018, against 1.6% at the end of 2017. In contrast, the ROA of the services companies, and the real estate companies declined from 2.5% and 0.5% respectively, at the end of 2017 to reach 2.3% and 0.4% respectively at the end of 2018. (Figure 4-13).



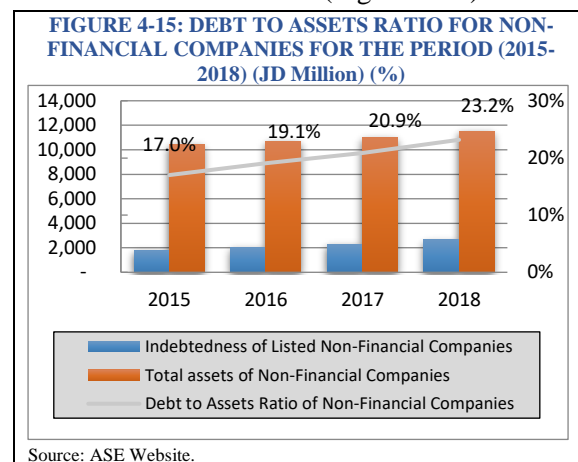
In addition, the ROE for the industrial companies increased to 7.1% at the end of 2018 compared to 2.4% at the end of 2017. On the other hand, the service companies' ROE decreased slightly to reach about 7.1% at the end of 2018, compared to 7.3% at the end of 2017.

Meanwhile, the ROE for the real estate companies remained stable at its level of 0.8% recorded in 2017. (Figure 4-14).



#### 4-2-6 FINANCIAL LEVERAGE OF NON-FINANCIAL COMPANIES

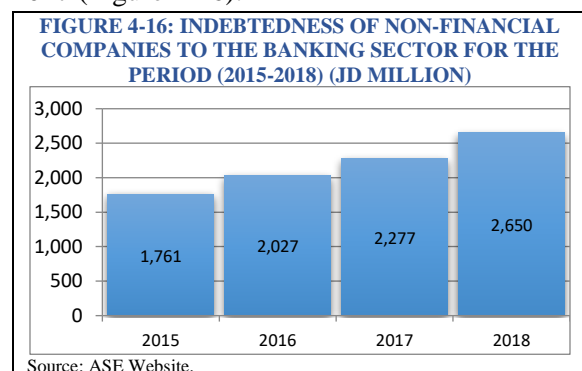
Most of non-financial companies listed in ASE are still less dependent on borrowing. The debt to assets ratio of non-financial companies stood at 23.2% at the end of 2018, compared to 20.9% at the end of 2017. (Figure 4-15).



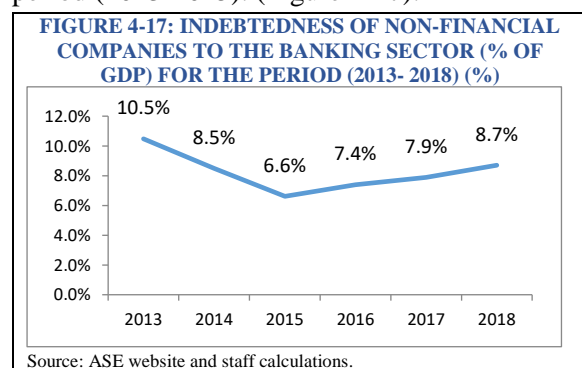
#### 4-2-7 INDEBTEDNESS OF NON-FINANCIAL COMPANIES TO THE BANKING SECTOR

The facilities extended by banks to non-financial companies listed in ASE reached to JD 2,650 million at the end of 2018 compared to JD 2,277 million at the end of 2017, an increase of 16.4%. The facilities extended to the services companies amounted to JD 1,749.2 million in 2018 compared to JD 1,599.6 million in 2017, increasing by 9.4%. The facilities extended to the real estate companies reached about JD 166.9

million in 2018, compared to JD 117 million in 2017, an increase of 42.6%. Facilities extended to the industrial companies also increased by 30.8%, to reach JD 733.6 million at the end of 2018, up from JD 560.7 million at the end of 2017 (Figure 4-16).



Furthermore, the indebtedness of listed non-financial companies to banks in percent of GDP increased for the third year in a row to reach 8.7% at the end of 2018 compared to 7.9% at the end of 2017, after recording a decline during the period (2013-2015). (Figure 4-17).



## 4-2-8 STRESS TESTING FOR NON-FINANCIAL COMPANIES

Stress tests were conducted for the non-financial public shareholding companies to assess the soundness of the corporate sector and its ability to withstand shocks, thus evaluating the companies' ability to repay their debts to banks and the financial sector in general. The Financial Stability Department in the CBJ had built a model for stress testing for the corporate sector, which relies on the Interest Coverage Ratio (ICR) for the borrowing companies, which is a widely used and significant measure to

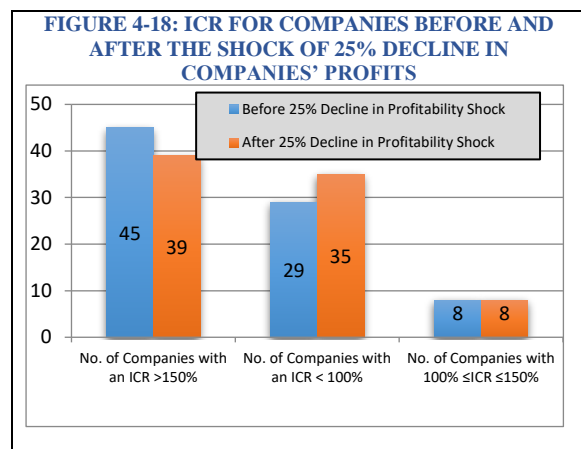
assess the companies' ability to repay their debts. The ICR is the ratio of earnings before interest and tax (EBIT) to interest expenses paid on loans. The ratio assesses the ability of borrowing companies to cover the interest expense of extended loans using current period revenues; the debt is totally covered when the ICR exceeds 150%. However, if the ICR stands within the range of (100%-150%), it means that the debt is at risk, and debt is considered uncovered if the ICR is below 100%.

Several shocks related to the decline in companies' profits were assumed to conduct the tests. The decline in profits were suggested based on the slowdown of the economic activity in the Kingdom and the potential effects of the COVID-19 pandemic. The impact of each shock on the ICR was measured; the after-shock ICR is used to assess the ability of companies to repay their debts to banks.

### 4-2-8-1 A SHOCK OF 25% DECLINE IN PROFITS OF BORROWING COMPANIES

Assuming a decrease in the profits of borrowing companies by 25% due to the weak economic activity in the kingdom and the potential impacts of COVID-19, this will lead to a decline in the ICR for these companies from 189% to 125%. The ICR will drop below the acceptable level of 150%, yet it is still higher than 100%, which means that companies' debts are covered.

On the individual level, (6) companies will have their ICRs below 100% which will increase the number of companies with an ICR below 100% from (29) to (35) companies. The number of companies with an ICR higher than 150% will decrease from (45) to (39) companies, and the number of companies with an ICR within (100%-150%) will remain stable at (8) companies. (Figure 4-18).

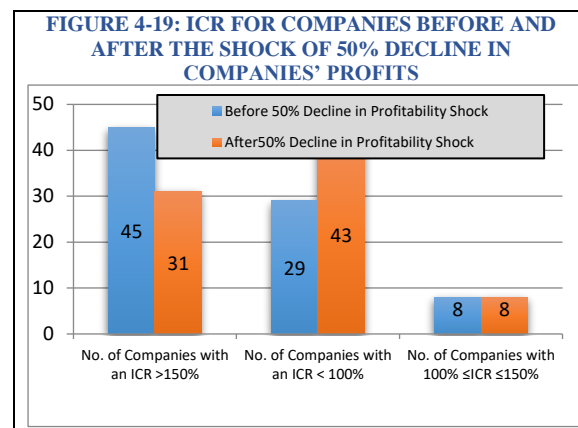


On the sectoral level, the average ICR will decrease from 194% to 135% for industrial companies and from 225% to 157% for services companies, which implies that the industrial and service companies are broadly able to withstand this shock as well. In contrast, the ICR of the real estate companies is already negative even before the shock, as most of real estate companies recorded losses in 2019.

#### 4-2-8-2 A SHOCK OF 50% DECLINE IN PROFITS OF BORROWING COMPANIES

In the event of a decrease in the profits of borrowing companies by 50% due to the weak economic activity in the kingdom, and the potential effects of COVID-19, the average ICR for these companies will drop from 189% to 61%. The ICR will fall below the minimum bound of debt coverage of 100%, which implies that the effect of this shock will apparently affect companies' debt service.

On the individual level, (14) companies will have their ICRs below 100% thus the number of companies with an ICR below 100% will increase from (29) to (43) companies. The number of companies with an ICR higher than 150% will decrease from (45) to (31), and the number of companies with an ICR between (100%-150%) will remain constant at (8) companies. (Figure 4-19).



#### 4-2-9 SUMMARY

The analysis of stress testing results of the non-financial corporate sector revealed that around 58% of companies are able to withstand a shock of a 25% decline in their profits, while only 48% of these companies are able to hold out a shock of a 50% decrease in their profits. This validates the conclusion that the scenario of a 50% decline in corporates' profits will apparently affect the debt service ability of some companies. On the sectoral level, the real estate companies sector is the most affected by these shocks as most real estate companies have recorded losses in 2019. It is worth mentioning that 2020 will be tough for the corporate sector in general, as a recent ASE press release stated that the net profits after tax for public shareholding companies listed in ASE dropped by 92.7% in the first half of 2020, compared to the same period in 2019. This decline is mainly due to the ramifications of the COVID-19 pandemic and its impact on the performance of companies and their operational activities. This triggered the CBJ to allow banks to postpone loans repayments for affected companies, in addition, the CBJ launched soft financing programs to assist and alleviate the repercussions of the COVID-19 pandemic on these companies.



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

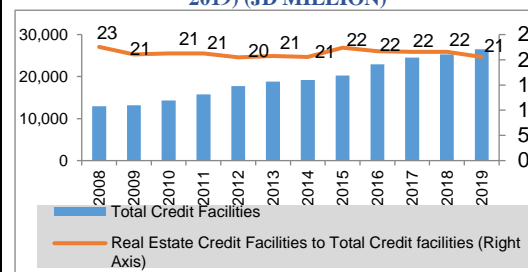
### 5-1 INTRODUCTION

The risks of the real estate sector and the financing provided to it gained an increasing attention after the global financial crisis, which started with a real estate bubble in US in 2007 that 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, owing to the influx of large numbers of Arabs from neighboring countries, especially from Iraq and Syria. This chapter will highlight the real estate sector in Jordan and the exposure of banks operating in Jordan to the risks associated with this sector. Furthermore, this chapter will also discuss the development of real estate prices in the Kingdom by analyzing the Real Estate Price Index (REPI), which is an indicator developed in cooperation between the CBJ and the Department of Lands and Survey.

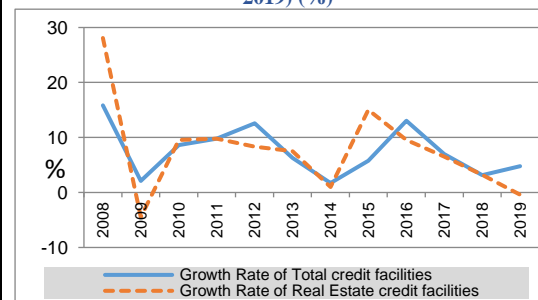
Credit facilities extended to the real estate sector for residential and commercial purposes amounted to JD 5.44 billion at the end of 2019, accounting for 20.5% of total facilities provided by banks, compared to JD 5.46 billion at the end of 2018, with a slight decrease of 0.4% in 2019 compared to a growth of 3.2% in 2018. It is noteworthy that the average annual growth rate during the years 2008-2019 reached 7.8% (Figure 5-1).

**FIGURE 5-1: DIRECT CREDIT FACILITIES TO THE REAL ESTATE SECTOR AND THEIR RATIO TO TOTAL DIRECT CREDIT FACILITIES DURING (2008-2019) (JD MILLION)**



The average annual growth rate of facilities extended to the real estate sector during the period 2008-2019 was slightly higher than the average annual growth rate in total facilities. The average of the real estate facilities reached 7.8% compared to 7.6% growth in total facilities (Figure 5-2). Nevertheless, in 2019 the real estate facilities declined by (0.4%), while total credit facilities increased by 4.8% due to the decline of the trading volume at the real estate market in Jordan in 2019 by 12% compared to 2018<sup>1</sup>, which is due to the slowdown of the economy in Jordan and its repercussions on the real estate sector.

**FIGURE 5-2: THE REAL ESTATE CREDIT FACILITIES GROWTH RATES COMPARED TO TOTAL CREDIT FACILITIES GROTH RATES FOR THE PERIOD (2008-2019) (%)**

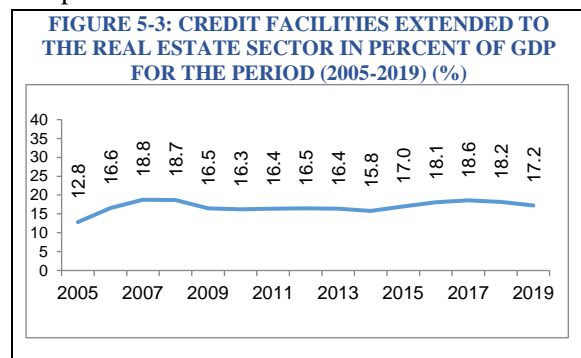


The Figure (5-3) illustrates the evolution of the facilities extended to the real estate sector in percent of GDP during the period 2005-2019. The figure indicates that during the period 2005-

<sup>1</sup> Department of Lands and Survey, the Real estate publication2019, <https://www.dls.gov.jo/ar/Pages/Real-EstateIndicators.aspx>

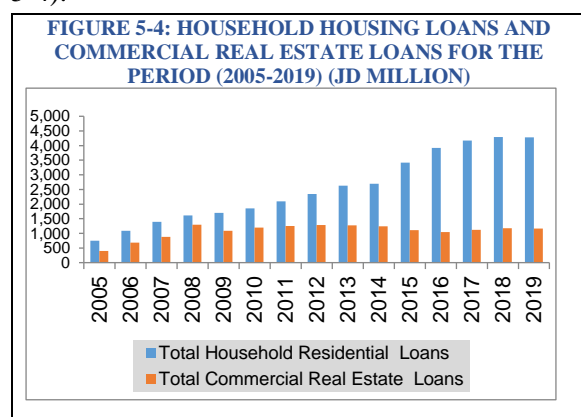


2008 this percent increased markedly to reach 18.7% at the end of 2008, and fell to 15.8% at the end of 2014 due to the repercussions of the global financial crisis and the situations in the region. In 2019, it reached to 17.2%; a decline compared to 18.6% in 2017 and 18.2% in 2018.



## 5-2 COMPONENTS OF CREDIT FACILITIES EXTENDED TO THE REAL ESTATE SECTOR

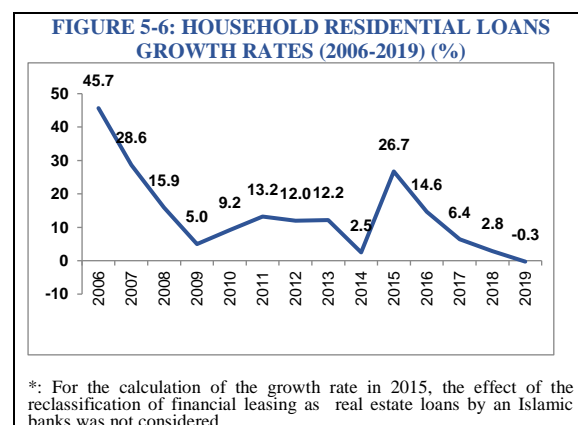
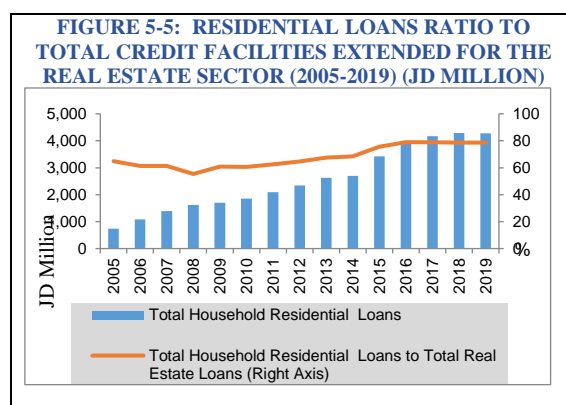
With regard to the components of credit facilities extended to the real estate sector, the household residential real estate loans accounted for 78.7% of these facilities at the end of 2019. The commercial real estate loans accounted for 21.3% of total real estate credit facilities (Figure 5-4).



### 5-2-1 HOUSEHOLD RESIDENTIAL LOANS

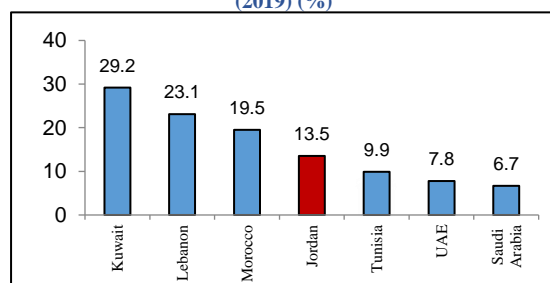
Total household real estate residential loans extended by banks declined by 0.3% to reach JD 4,277 million at the end of 2019, compared to JD 4,288 million at the end of 2018. During the pre-crisis period of (2006-2008), the household residential loans increased significantly, due to high demand for real estate, especially by non-

Jordanians; the average growth rate of residential loans reached to 30% during this period. Thereafter, during the period (2009-2010), the growth pace started to drawdown 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 faded, market conditions improved, and the demand for real estate increased due to the influx of Arab refugees, especially from Syria. However, during (2016-2019) the growth of residential loans was gradually slowing down; in 2019 residential loans declined slightly due to the geopolitical developments in the region and the increase of uncertainty and its impacts on the economic sectors in the Kingdom, in particular the real estate sector. (Figure 5-5) and (Figure 5-6).

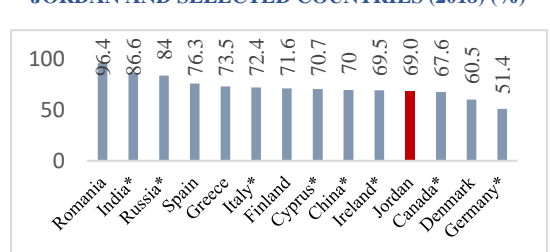


The household residential loans in percent of GDP stood at 13.5% at the end of 2019, against 14.3% at the end of 2018. Jordan occupies a middle rank among selected Arab countries; Jordan is quietly lower than Kuwait, Lebanon and Morocco, and higher than Tunisia, UAE, and Saudi Arabia (Figure 5-7). The low household residential loans to GDP ratio in Jordan, is due to the high homeownership rate of 69% in Jordan according to a survey of the General Statistics Department conducted in 2017. The low ratio is also attributed to alternative lending channels offered to Jordanians to finance their houses, including employees residential loans, and loans provided from institutions, cooperative funds, and societies such as the Housing and Urban Development Corporation.

**FIGURE 5-7: RESIDENTIAL LOANS IN PERCENT OF GDP IN JORDAN AND SELECTED ARAB COUNTRIES (2019) (%)**



**FIGURE 5-8: THE HOMEOWNERSHIP RATE IN JORDAN AND SELECTED COUNTRIES (2018) (%)\***



Source: Jordan's Data: Department of Statistics/ Population and Housing Census 2017.

\*: Data of 2017.

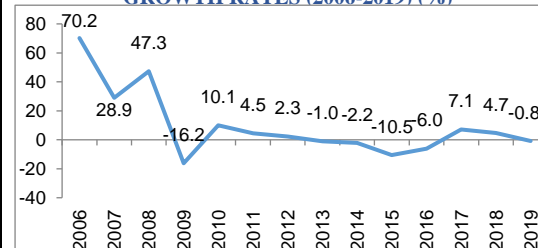
It is noteworthy that the number of apartments sold in 2019 amounted to about 33,917, compared to 34,260 apartments in 2018, declining by 1%. During the first half of 2020, the number of apartments sold approximated 10,111 compared to 13,281 apartments during the first half of 2019, with a decline of 24%, as the repercussions of the COVID-19 pandemic

clearly affecting most economic sectors, including the real estate sector.

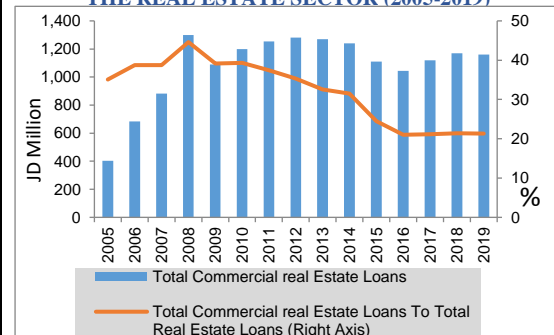
## 5-2-2 COMMERCIAL REAL ESTATE LOANS

Total commercial real estate loans extended by banks reached to JD 1,160 million at the end of 2019, forming 21.3% of total credit facilities for the real estate sector, compared to JD 1,170 million at the end of 2018, a decline of 0.8%. The commercial real estate loans were substantially growing during the pre-crisis period (2005-2008), which increased during this period from JD 400 million to JD 1,300 million, with an average annual growth rate of 49%. The commercial real estate loans noticeably declined in 2009 to around JD 1,089 million due to the significant negative effect of the global financial crisis on the commercial real estates. The commercial real estate loans were slowing down during the period (2010-2012), and declining during the period (2013-2016), however, these loans increased again in 2017, and 2018, yet they decreased again in 2019 as figures (5-9) and (5-10) indicate.

**FIGURE 5-9: COMMERCIAL REAL ESTATE LOANS GROWTH RATES (2006-2019) (%)**



**FIGURE 5-10: COMMERCIAL REAL ESTATE LOANS TO TOTAL CREDIT FACILITIES EXTENDED FOR THE REAL ESTATE SECTOR (2005-2019)**

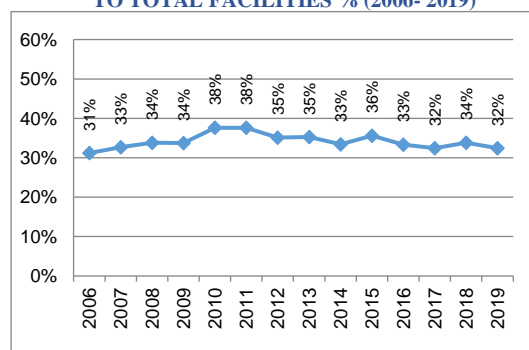


### 5-3 DIRECT FACILITIES PROVIDED USING REAL ESTATES AS COLLATERALS

Banks are directly exposed to the real estate market risks as they provide credit facilities to finance the purchase or construction of residential or commercial real estates; these real estates are generally used as collaterals for these loans. Banks are also exposed to the real estate market risks by the use of real estates as collaterals to secure the credit facilities extended by banks for different purposes. Therefore, the decline in real estates prices will affect the value of collaterals, and weaken the ability of banks to recover their funds in case of the borrower's default and inability to repay. Total direct facilities extended by banks for other purposes using real estate as collaterals amounted to JD 3,151 million in 2019 compared to JD 3,153 million in 2018.

Total direct credit facilities extended using real estates as collaterals for residential, commercial, and other purposes reached around JD 8,588 million, accounting for 32.4% of total facilities at the end of 2019, compared to 33.8% in 2018. (Figure 5-11).

**FIGURE 5-11: CREDIT FACILITIES EXTENDED BY BANKS USING REAL ESTATES AS COLLATERALS TO TOTAL FACILITIES % (2006- 2019)**



### 5-4 THE LTV RATIO LIMIT FOR HOUSEHOLD RESIDENTIAL AND COMMERCIAL REAL ESTATE LOANS IN JORDAN

The loan to the value of the mortgaged real estate (LTV) ratio is one of the most essential

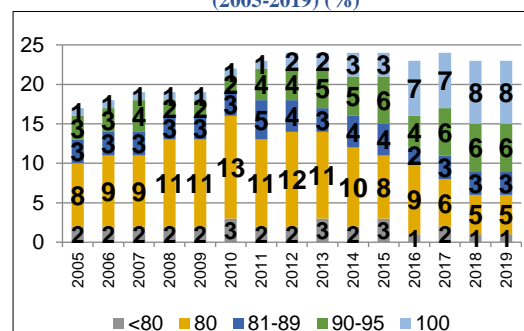
ratios and indicators to monitor in order to assess the level of banks' exposure to the real estate market risks. The immense increase in this ratio may expose banks to high risks if the real estate prices fall, thus deterring the banks' ability to recover their funds in case of clients' default due to the drop in the value of real estate collaterals for these loans.

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

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

Figure (12-5) illustrates the upper limits of the LTV ratio for household residential loans. The figure illustrates that the LTV ratio for (6) banks (forming 26.1% of banks providing household residential loans) does not exceed 80%, (3) banks have an LTV ratio between 81% and 89%, whereas, (6) banks have an LTV ratio between 90% and 95%, and the remaining (8) banks have a 100% LTV ratio.

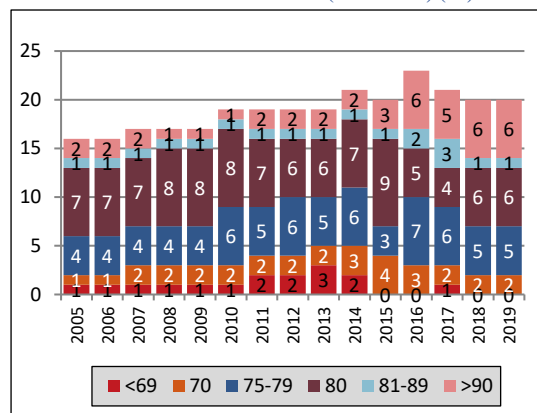
**FIGURE 5-12: THE LTV RATIO UPPER LIMIT FOR HOUSEHOLD RESIDENTIAL LOANS FOR BANKS (2005-2019) (%)**



Drawing on the figure above, it is evident that the number of banks with an LTV upper limit of 100% increased from (3) in 2015 to (8) banks in 2019, indicating that some banks in Jordan have a tendency to provide loans that exceeds the values of residential real estates in the Kingdom.

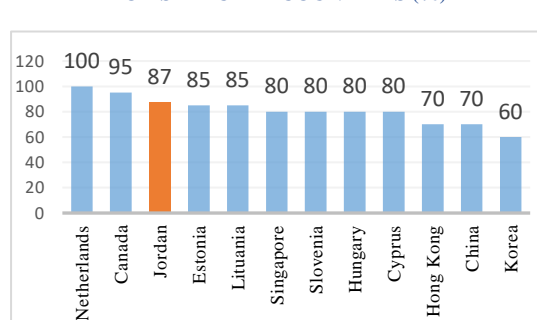
The majority of banks set the LTV upper limit for commercial real estate loans to lower than the ratio for residential loans, as 65% of banks providing commercial real estate loans have an LTV ratio does not exceed 80% (Figure 5-13).

**FIGURE 5-13: BANKS DISTRIBUTION ACCORDING TO THE LTV RATIO CEILING FOR COMMERCIAL REAL ESTATE LOANS (2005-2019) (%)**



The average LTV ratio upper limit varied among several selected countries, ranging between 60% and 100%. Banks in Jordan had an average LTV upper limit of around 87%, ranking third amongst 12 countries with available LTV data (Figure 5-14).

**FIGURE 5-14: LTV RATIO UPPER LIMIT FOR REAL ESTATE LOANS (RESIDENTIAL AND COMMERCIAL) FOR SELECTED COUNTRIES (%)\***



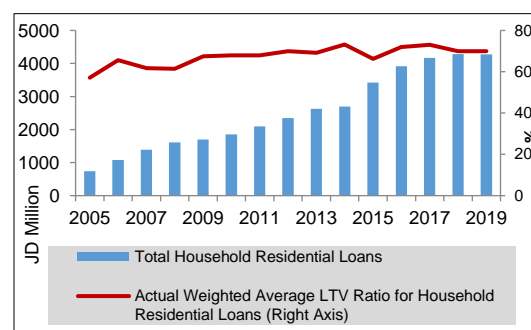
\*: Data for the compared countries are for the year 2018.

## 5-5 ACTUAL AVERAGE LTV RATIO FOR HOUSEHOLD RESIDENTIAL AND COMMERCIAL REAL ESTATE LOANS

Despite the increase of the LTV ratio upper limit for mortgaged household residential loans in some banks, the actual average of the LTV ratio upper limit is below the upper bound banks can afford (i.e. the ratio specified in banks' credit policies). The actual weighted average of the

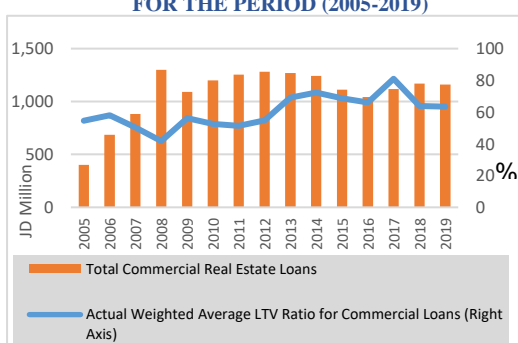
LTV ratio stood at 73.2% at the end of 2014, and dropped to 66.3% at the end of 2015, and resumed its upward trend to reach 72% at the end of 2016 and 73% at the end of 2017. The weighted average of the LTV ratio declined again to reach 70% at the end of 2018 and 2019 (Figure 5-15).

**FIGURE 5-15: ACTUAL WEIGHTED AVERAGE LTV RATIO FOR HOUSEHOLD RESIDENTIAL LOANS AND TOTAL HOUSEHOLD RESIDENTIAL LOANS (2005-2019)**



With regard to the actual average of the LTV ratio for commercial real estate loans, it declined to 64% in 2018 and 2019, against 81% in 2017 (Figure 5-16).

**FIGURE 5-16: ACTUAL WEIGHTED AVERAGE LTV RATIO FOR COMMERCIAL REAL ESTATE LOANS AND TOTAL COMMERCIAL REAL ESTATE LOANS FOR THE PERIOD (2005-2019)**



## 5-6 THE CBJ MEASURES TO MITIGATE BANKS' EXPOSURE AND ENHANCING BANKS ABILITY TO WITHSTAND THE REAL ESTATE MARKET RISKS

As mentioned in previous Financial Stability Reports, the CBJ has put in place certain limitations, aiming at reducing banks' exposure to the real estate market risks and enhancing their ability to confront these risks as follows:

1. Effective Instructions of Capital Adequacy issued by the CBJ specified the risks weighting for residential loans with LTV ratios not exceeding 80% to be 35%, however, it increases to 100% if the LTV ratio exceeds 80%. In other words, if the LTV ratio is above 80%, residential loans are subject to higher capital requirements, which improves banks' ability to withstand these risks, and strengthening the financial stability in the Kingdom.

2. The issuance of the Instructions for Large Exposure Limits and Credit Controls No. (2/2019) on 4/3/2019, which superseded the Instructions for Credit Concentrations No. (9/2001). These Instructions continued to set the maximum limit of credit provided by banks for establishing or purchasing real estates purposes at 20% of total customer JD deposits. These Instructions came into effect on 30/6/2019.

### 5-6-1 THE REAL ESTATE ASSETS PRICE INDEX IN JORDAN

The real estate assets total value is a fundamental anchor for investment activities in the economy. This is due to their high interlinkages with other investment sectors, and the implications of the real estate prices developments on inflation, the monetary policy, and the financial stability. Drawing on the high importance to calculate a real estate assets price index (Real Estate Price Index "REPI"), and as already mentioned in previous reports, in the beginning of 2014, the CBJ in cooperation with the Department of Lands and Survey developed an REPI for Jordan. The calculation is based on best international practices taking into consideration the data available at the Department of Lands and Survey. The REPI index has a significant role 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 houses value which is used to estimate wealth, and as a benchmark for international comparisons.

Figures (5-17 to 5-22) illustrate the REPI in Jordan and the change in this index during the period (2005-2019). These figures depict that the REPI in Jordan dropped from 120.3 points in 2018 to 119.7 points in 2019, a decline of 0.5%, compared to increasing by 0.2% in 2018, declining by 0.9% in 2017, a growth of 1.8% in 2016, a growth of 3.4% in 2015, and an increase of 9.1% in 2014. This validates that the real estate prices started to slowdown markedly in 2015 and 2016 recording a decline in 2017. This decline is mainly due to the drop in the trading volume in the real estate market, which is justified in terms of the slowdown in economic activity in the Kingdom and its repercussions on the real estate sector. In 2018, the REPI increased slightly by 0.2%, yet it decreased again by 0.5% in 2019, this decline is attributed mainly to the decline in the lands price index by 1%. In this regard, and as mentioned in previous reports, the REPI passed through several stages, which are summarized in three phases as follows:

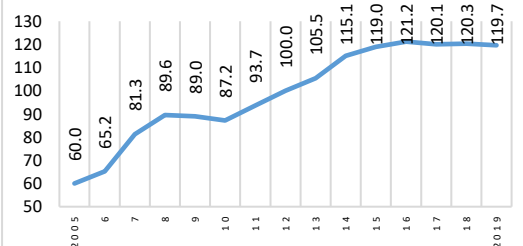
The first phase, pre-global financial crisis phase, (2005-2008), the demand for real estate especially by non-Jordanians was considerably high, in addition the prices of residential and non-residential real estates increased substantially. While the second phase (2009-2010) which was prevailed by the repercussions of the global financial crisis, accompanied by the uncertainty, and a contraction in loans extended by banks, all of which apparently contributed to decrease the demand for real estate assets, and subsequently the decline in the prices of the real estate assets. Based on that, the government in mid-2009 expanded the scope of the exemptions for apartments, which also included lands to promote the real estate market activities. 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 (2017-2019), the real estate assets prices dropped owing to several factors including, the slowdown in economic activity in

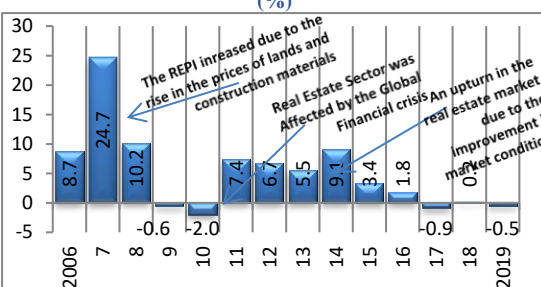


the Kingdom and its repercussions on the real estate sector, and the worsening of Jordanian workers conditions in the Gulf countries, who are considered the group most tending to purchase real estates.

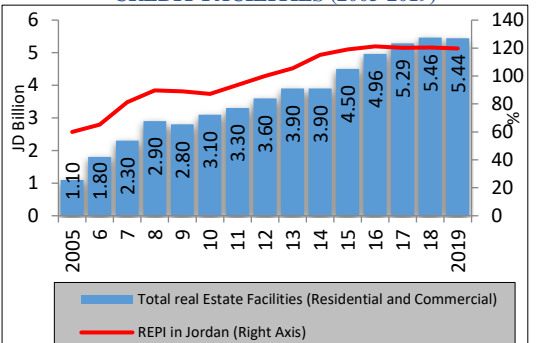
**FIGURE 5-17: THE REPI (RESIDENTIAL, COMMERCIAL, AND LANDS) IN JORDAN (2005-2019)**



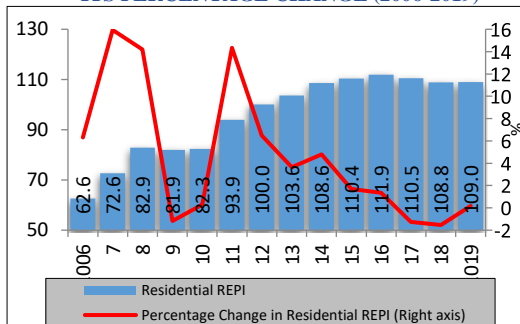
**FIGURE 5-18: CHANGES IN REPI (RESIDENTIAL, COMMERCIAL, AND LANDS) IN JORDAN (2006-2019)**



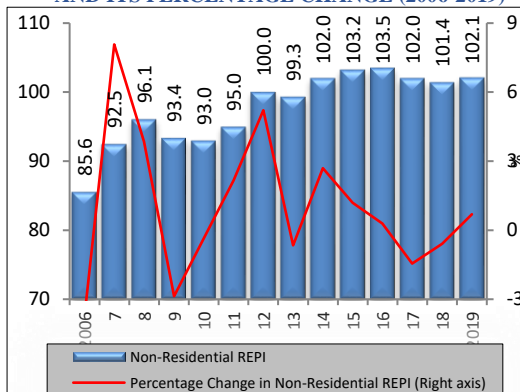
**FIGURE 5-19: REPI (RESIDENTIAL, COMMERCIAL, AND LANDS) IN JORDAN AND TOTAL REAL ESTATE CREDIT FACILITIES (2005-2019)**



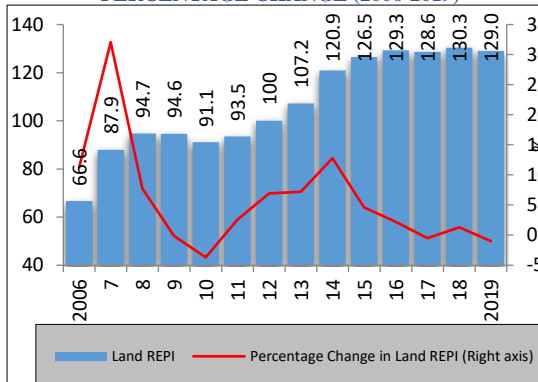
**FIGURE 5-20: RESIDENTIAL REPI IN JORDAN AND ITS PERCENTAGE CHANGE (2006-2019)**



**FIGURE 5-21: NON-RESIDENTIAL REPI IN JORDAN AND ITS PERCENTAGE CHANGE (2006-2019)**



**FIGURE 5-22: LAND REPI IN JORDAN AND ITS PERCENTAGE CHANGE (2006-2019)**

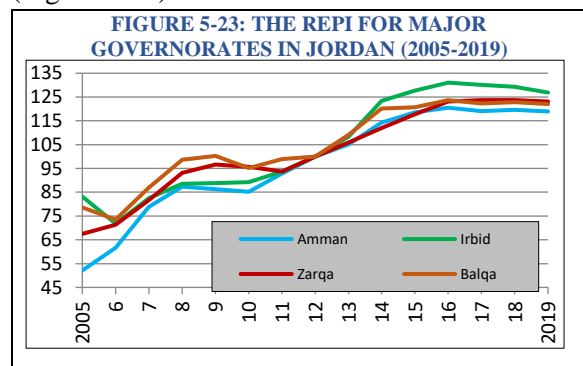


With regard to the REPI for governorates, it dropped in seven governorates, and increased in the remaining five governorates. The REPI for major governorates in Jordan was decreased; in Amman, the REPI has decreased in 2019 by 0.5%, while in Irbid it decreased from 129.3 points in 2018 to reach 126.8 in 2019, declining



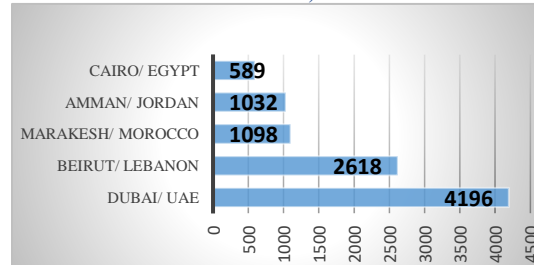
by 1.9%. The REPI in Zarqa decreased from 123.7 points in 2018 to 123.1 points in 2019, a decline of 0.5%, while in Balqa it decreased from 122.9 points in 2018 to reach 122.0 points in 2019 down by 0.7%. (Figure 5-23).

The historical developments of the REPI for Amman and other governorates indicates that the REPI for Amman increased from 52.1 points in 2005 to reach 119.0 in 2019, a growth of 128.4%. REPI for other governorates also increased but at a lower rate than Amman; the REPI for Zarqa rose from 67.5 in 2005 to 123.1 points in 2019 with a growth of 82.3%. In Balqa, it increased from 78.6 in 2005 to 122.0 points in 2019 growing by 55.2%. In Irbid, the REPI went up from 83.2 points in 2005 to 126.8 points in 2019, a growth of 52.4%. This denotes that the highest REPI increase during the last twelve years was in Amman followed by Zarqa, Balqa, and Irbid. (Figure 5-23).



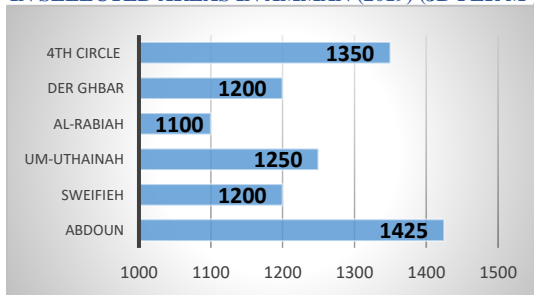
As for the average residential price per square meter in Amman, and according to the information available for West Amman areas (the most attracting for investment), the average residential price per square meter reached to JD 1,032 in 2017. It is noteworthy that the price per square meter in several Arab cities is higher than in Amman such as Marrakech, Beirut and Dubai (Figure 5-24 and Figure 5-25).

**FIGURE 5-24: SQUARED METER PRICES IN AMMAN COMPARED TO SELECTED ARAB CITIES (2017) (JD PER M<sup>2</sup>)\***



\*:Source: <http://www.globalpropertyguide.com> (website)

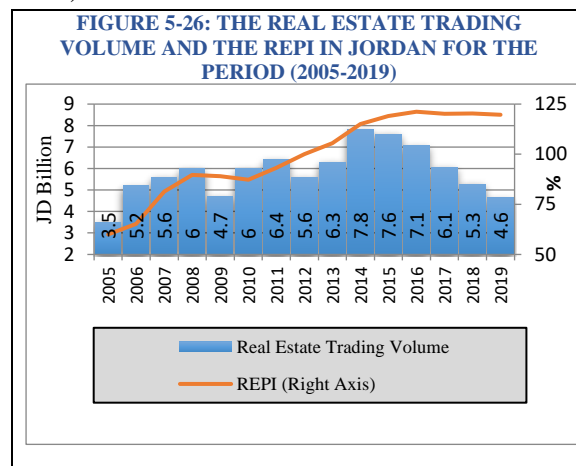
**FIGURE 5-25: THE PRICE OF ONE SQUARED METER IN SELECTED AREAS IN AMMAN (2019) (JD PER M<sup>2</sup>)\***



\*: Source: <http://www.globalpropertyguide.com>.

## 5-6-2 TRADING VOLUME IN THE REAL ESTATE MARKET IN JORDAN

The Department of Lands and Survey Report of 2019 stated that the trading volume in the real estate market in Jordan dropped by 12.0% in 2019, to reach JD 4,632 million compared to JD 5,265 million in 2018. Figure (5-26) indicates the developments of the real estate trading volume and the REPI for Jordan during the period (2005-2019).



Sales to non-Jordanians reached to JD 236.2 million at the end of 2019, constituting only 5.1% of total real estate trading volume. Sales to Iraqis accounted for the largest share in 2019 with an investment of JD 86.1 million, or 36.0% of total estimated sales to non-Jordanians in 2019 (Table 5-1).

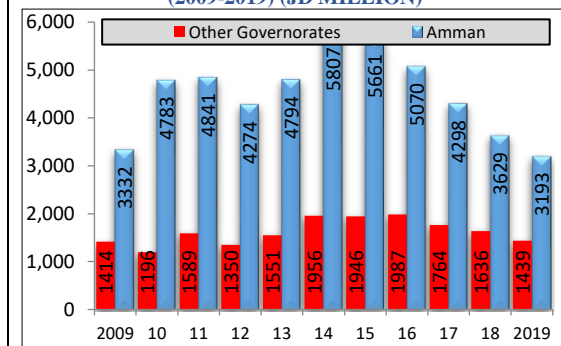
**TABLE 5-1: SALES TO NON-JORDANIANS (2012-2019)  
(JD MILLION)**

Nationality	2012	2013	2014	2015	2016	2017	2018	2019
Iraqi	224.7	205.0	266.3	215.1	168.4	157.2	111.5	86.1
Saudi	51.6	58.6	64.1	66.4	50.2	63.4	44.0	30.9
Syrian	17.0	23.7	28.6	17.5	19.4	18.1	17.5	N.A
American	13.8	22.0	N.A.	N.A.	21.5	N.A.	N.A.	N.A
Emirati	N.A.	N.A.	17.4	N.A.	N.A.	N.A.	N.A.	N.A
Kuwaiti	N.A.	N.A.	N.A.	22.9	N.A.	N.A.	N.A.	N.A
Yemeni	N.A.	N.A.	N.A.	17.3	18	N.A.	N.A.	N.A
Other	121.9	97.0	115.6	93.0	97.6	83.1	111.4	119.2
Total	429.0	406.5	492.0	432.2	115.6	321.8	284.4	236.2

Source: Department of Lands and Survey

As for the trading volume for governorates, Amman is the largest with a trading volume of JD 3,139 million in 2019, accounting for 68.9% of total trading volume in the real estate market. Other governorates' trading volume amounted to JD 1,439 million, or 31.1% of total trading volume (Figure 5-27).

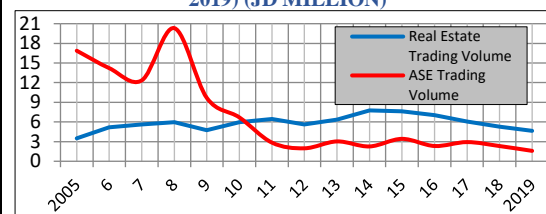
**FIGURE 5-27: REAL ESTATE TRADING VOLUME  
FOR THE CAPITAL AND OTHER GOVERNORATES  
(2009-2019) (JD MILLION)**



With regard to the real estate trading volume compared to the trading volume in ASE, the trading volume in the financial market was much higher than the trading volume in the real estate market during the period 2005-2009. This is 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 vault in the financial market, which also attracted many Jordanians investors to join. However, after deepening of the global financial crisis impact and the significant decline of prices

in the financial market, the trading volume dropped sharply in the financial market to reach below the trading volume in the real estate market, the real estate investments are safe haven compared to financial investments. (Figure 5-28).

**FIGURE 5-28: THE REAL ESTATE TRADING  
VOLUME AND THE ASE TRADING VOLUME (2005-  
2019) (JD MILLION)**



On another front, the Cabinet on 30/12/2019 decided to expand exemption measures provided to apartments and single houses regarding registration fees until 31/12/2020. The decision aimed to continue to stimulating the real estate market and enabling citizens to own proper residences. Under the decision, the first 150 square meters of apartments and lands have been exempted from registration and ownership transfer fees until the end of the year, regardless of the seller or the total area of the apartment or the number of apartments owned by Jordanians. The remaining area is now subject to lower fees and taxes, which total 50% of the rates mentioned in the law.

The decision also lowered land sale fees by 50% of the rate mentioned in the law, including transactions among relatives, partners and others. The tax on selling real estate has also been lowered to 50% of the rate stipulated in the law.

The Cabinets' decision of May 2019 was also expanded, regarding the exemption of heirs form fees related to ownership transfer and disassociation to enable heirs manage their real estates whether by sale, subdivision, or investments.

### 5-7 Summary

The trading volume in the real estate market and the REPI in Jordan, indicate that the real estate market started to be 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 2017, the real estate trading volume decreased by 14.1%, while the REPI fell by 0.9%. In 2018, despite the increase in the REPI by 0.2%, yet the real estate trading volume decreased by 13%. The real estate trading volume decreased in 2019 by 12.0%, and the REPI decreased by 0.5%. It is worth noting that the real estate trading volume during the first half of 2020 dropped by 44% compared to the same period in 2019, as the repercussions of the COVID-19 pandemic had a clear impact on most economic sectors in Jordan, including the real estate sector. The notable slowdown in the real estate sector requires some banks to consider 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

### 6-1 INTRODUCTION

Stress testing is an important tool used by regulatory authorities and banks to assess banks' ability to withstand the 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, thus using the tests results to determine the level of capital and liquidity banks required to hold in order to withstand financial shocks and high risks.

These tests are forward looking in risk assessment, and use tools that go beyond the statistical methods that rely on historical information. These tests also help senior management to understand a bank's condition in times of crisis. Stress testing is an essential part of risk management as well as the planning for capital and liquidity. Nonetheless, stress testing cannot overarch all aspects of a bank's vulnerabilities, it operates within an integrated risk management policy to enhance the soundness and resilience of banks and strengthen the entire financial system.

### STRESS TESTING FOR THE BANKING SECTOR

#### 6-2 FIRST: SENSITIVITY ANALYSIS

In general, sensitivity analysis tests are used to measure the impact of changes in single risk factors on a bank's financial position such as the increase of the NPLs ratio, changes in interest rates, changes in exchange rates and changes in stock prices. The source of the shock (i.e. the source that leads to this type of risk) is usually not identified in these tests. The sensitivity analysis that have been conducted by banks operating in the Kingdom on several risk factors are displayed next.

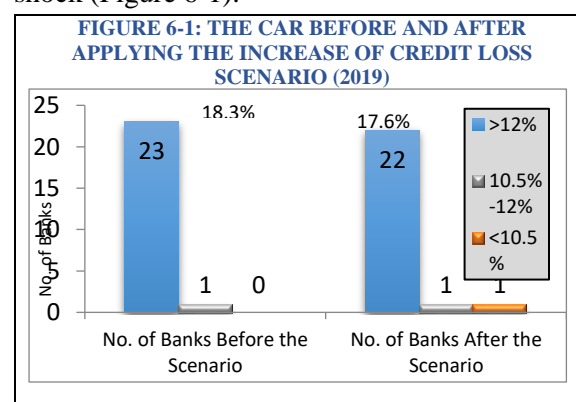
##### 6-2-1 SENSITIVITY ANALYSIS OF CREDIT RISK

The sensitivity analysis of credit risk assumed an increase of 100% in NPLs (default

rate at banks), and a 50% decline in banks' profits in 2020 compared to their levels in 2019 was also assumed due to the Covid-19 pandemic and its impact on the economic conditions in Jordan. The loss Given Default (LGD) ratio is also supposed to reach 65% of NPLs. In this case, the Capital Adequacy Ratio (CAR) of the banking sector in Jordan will drop from 18.3% to 17.6%, which implies that the banking sector is broadly able to withstand this shock, as the after-shock CAR after remains higher than the 12% minimum requirement of CAR applied in Jordan. The limited impact of this shock is due to the following:

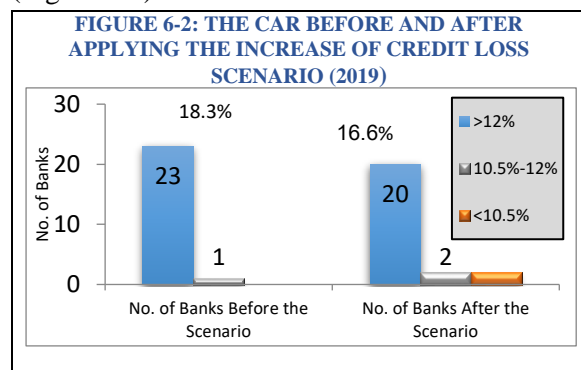
- 1- High CARs of banks in Jordan, which are considered among the highest in the region.
- 2- Banks enjoy a high level of profits, which enables them to absorb the additional provisions and losses resulting from the shock when it occurs, without significantly affecting the capital, which in turn protects banks' capital.

On the individual level, the CAR will remain higher than 12% for (22) banks, while it will get below 12% for two banks, one of them will maintain a CAR above the 10.5% international minimum requirement, which points to the ability of most banks in Jordan to confront this shock (Figure 6-1).



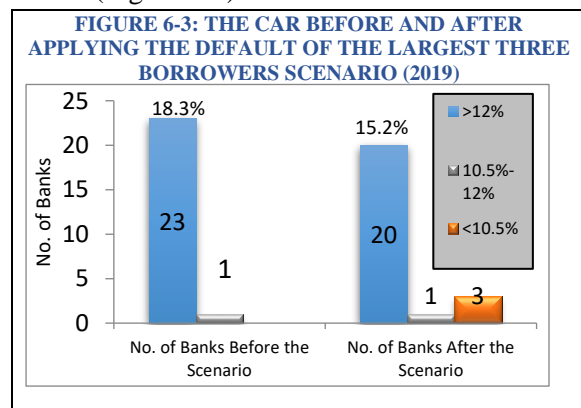
To assess banks' ability to withstand greater repercussions of the COVID-19 pandemic, the above mentioned test was intensified; the same test was applied (an increase of NPLs (banks' default rate) by 100%) under more severe scenarios. The LGD was assumed to reach 85%

of NPLs value, and banks' profits will decrease by 75% in 2020 compared to their levels in 2019. Under this scenario, the CAR of the banking sector will decrease from 18.3% to 16.6%. This validates the conclusion that the banking sector will be able to withstand this shock and these severe scenarios as well. On the individual level, the CAR will decline below 12% for (4) banks, of which two will maintain a CAR above 10.5%. (Figure 6-2).

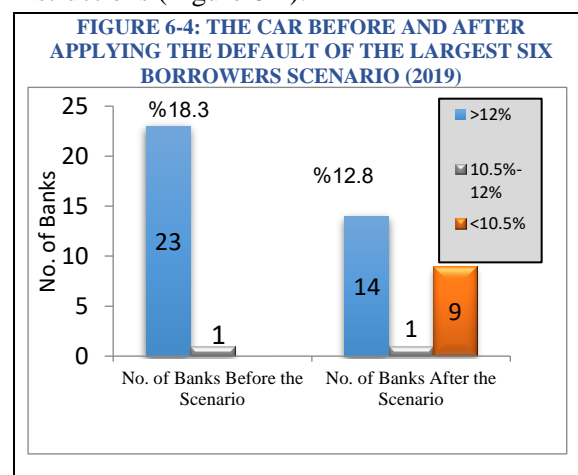


### 6-2-2 SENSITIVITY ANALYSIS OF CREDIT CONCENTRATION RISKS

As for the credit concentrations risks, and assuming the default of the largest three borrowers (excluding credit facilities provided to the government of Jordan and the government-guaranteed facilities) on the individual bank level, the CAR will remain above the minimum requirement of 12% for (20) banks and fall below 12% for (4) banks, one of which will maintain a CAR above the international minimum requirement of 10.5%. The CAR for the banking sector will drop from 18.3% to 15.2% (Figure 6-3).



On the other hand, 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 18.3% to 12.8%, yet remains above the minimum requirement of 12%. On the individual bank level, the CAR will remain above 12% for (14) banks, while it will fall below 12% for (10) banks, (9) of which will fall below the international minimum requirement of 10.5%, indicating that some banks need to reduce their concentration risks. It is worth mentioning that the CBJ monitor banks' concentration risks on ongoing basis through credit concentration instructions (Figure 6-4).



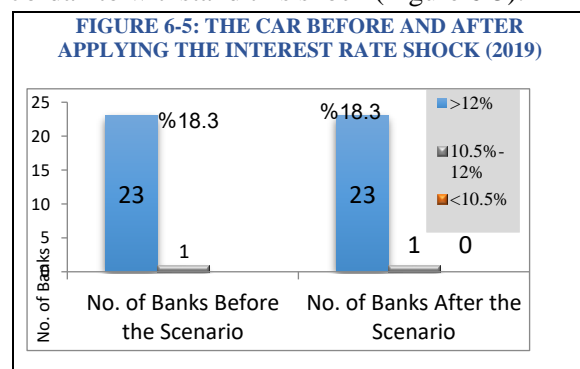
### 6-2-3 SENSITIVITY ANALYSIS OF MARKET RISKS

A set of tests were conducted to assess banks' sensitivity to market risks and their impact on capital adequacy. The analysis was limited to three types of shocks: interest rates, exchange rates and stock prices; the most commonly used variables in this regard.

#### 6-2-3-1 INTEREST RATE SHOCK

Assuming a 200 basis points increase in interest rates, the CAR of the banking sector will

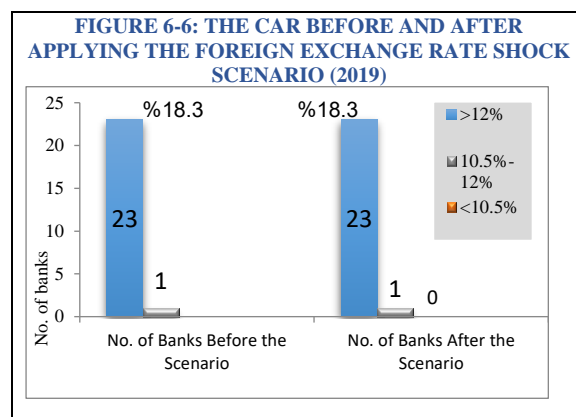
not be affected, and will remain at 18.3%<sup>9</sup>, which indicates that the impact on the banking sector in general is insignificant. On the individual level, the CAR will remain above 12% for (23) out of (24) banks, which denotes the ability of banks in Jordan to withstand this shock (Figure 6-5).



In addition, the CAR for the banking sector as a whole and for each individual bank will not be affected if the interest rates decrease by 200 basis points.

#### 6-2-3-2 FOREIGN EXCHANGE RATE SHOCK

Assuming a 25% decline in the exchange rate of the Jordanian dinar<sup>10</sup> against all foreign currencies, the banking sector's CAR will not be affected and will remain at 18.3%<sup>11</sup>. 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 currency liabilities; foreign currency positions long positions for most banks. On the individual level, the CAR will remain above 12% for (23) banks out of (24) banks as the case prior to the shock. (Figure 6-6).



#### 6-2-3-3 EQUITY PRICE SHOCK

Assuming the stock prices in the financial market went down by 30%; the CAR of the banking sector in Jordan will not be affected, and will remain at 18.3%, which implies that the effect of this shock on the banking sector is broadly immaterial. On the individual level, the ratio will remain above 12% for (23) banks, exactly as before the shock, indicating 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.

### 6-3 SECOND: MACRO-STRESS TESTING

Credit risk is one of the most significant risks faced by banks and the most affecting their solvency. Therefore, the Satellite Model was used to predict the NPLs ratio for the period 2020-2022. In this context, a series of scenarios have been assumed; medium and severe macro-stress scenarios represent hypothetical scenarios designed to assess banks' ability to withstand shocks. Assuming the worsening of unfavorable repercussions of the novel COVID-19 pandemic, and the challenges it implies on Jordan's

<sup>9</sup> The impact of the shock was calculated using the gap analysis test that examine the current state of banks in terms with the balance of assets and liabilities sensitive to interest rate risk.

<sup>10</sup> This is a hypothetical scenario aims primarily to examine banks' exposure to exchange rate risk. Noting that the CBJ's foreign currency reserves at the end of June 2020 reached to USD 14.5 billion, sufficient to cover around 8 months of the Kingdom's imports, which is considered a very comfortable level and in turn strengthens the stability of the dinar exchange rate significantly.

<sup>11</sup> This analysis does not consider the indirect effects of the decline in the exchange rate of the Jordanian dinar on the economy hence, on the NPLs of banks.



economy, namely; the decline in tourism income and direct investment, the drop of national exports, and the return of Jordanian expats from abroad, the economic growth rates will slowdown substantially compared to projected rates. In addition, the unemployment rate will increase, and the financial market will deteriorate. Moreover, the interest rates are also assumed to increase to preserve the attractiveness of the Jordanian dinar as a saving currency. To measure the impact of these assumptions on banks, the GDP growth rate (economic growth rate) was used as one of the major economic variables affecting the NPLs, and measuring its impact on the regulatory CAR and Tier1 capital<sup>12</sup> for a bank. Economic research states that the decline in economic growth rate leads to an increase in NPLs because of the decline in economic activity, and thus the ability of customers to repay their debts. Other variables such as the interest rates, stock prices, and the unemployment rate, were also used to predict the NPLs ratio.

To project the NPLs ratio, the stress testing methodology using the Satellite Model included the assumption of (3) scenarios to predict the value of the dependent variable (NPLs ratio) and to examine their effect on the CAR of banks for the coming 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 NPLs ratio, the following model was used<sup>13</sup>:

$$NPL_t = C + B_1 NPL_{(t-1)} + B_2 \Delta RGDP_{(t-1)} + B_3 UNEMP_{(t-1)} + B_4 RIR_t + B_5 ASE100_t$$

Where:

$NPL_t$ = Projected NPLs ratio for 2020

C= Constant

$NPL_{t-1}$ = NPLs ratio of the preceding year

$\Delta RGDP_{t-1}$ = Real GDP growth rate (economic growth rate)

$UNEMP_{t-1}$ = Unemployment rate of the previous year

$RIR_t$ = Real interest rate

$ASE100_t$ = ASE general price index

The statistical tests revealed a significant inverse relationship between the economic growth rate and the NPLs ratio, a significant positive relationship between the unemployment rate and the NPLs ratio, a significant positive relationship between the interest rates and the NPLs ratio, and a significant inverse relationship between stock prices and the NPLs ratio at banks, according to the following equation:

$$NPL_t = -8.2 + 0.66 NPL_{(t-1)} - 0.39 \Delta RGDP_{(t-1)} + 0.55 UNEMP_t + 0.38 RIR_t - 0.03 ASE100_t$$

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

TABLE 6-1: RESULTS OF THE ECONOMETRICS ANALYSIS		
Variable	Coefficient	T-Statistic
C	-8.2	-2.0
NPL(-1)	0.66*	7.0
RGDP(-1)	-0.39**	-1.8
UNEMP	0.55*	-2.2
RIR	0.38*	3.9
ASE100	-0.03*	-3.3
Coefficient of Determination (R <sup>2</sup> )	91.1%	
Adjusted R <sup>2</sup> Coefficient	87.3%	
(*) : Statistically significant at 95% confidence level		
(**) : Statistically significant at 90% confidence level		

<sup>12</sup> According to Basel III definition

<sup>13</sup> This model was estimated using the Fully Modified Ordinary Least Squares (FMOLS) method, which provides optimal estimates for cointegrated 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.

### 6-3-1 ASSUMPTIONS OF THE MODEL

The CBJ has developed stress tests so the NPLs ratio and its effect on banks' CAR are predicted for several coming years (Multiple-Period Stress Testing), instead of a single year. Consequently, the NPLs ratio for the period 2020-2022 was projected based on changes assumed in the economic growth rate, the unemployment rate, interest rates, and stock prices. The following scenarios have been assumed, noting that the model used is based on the assumption that banks' profits in 2020 will drop by 75% compared to their profits in 2019 owing to the repercussions of the COVID-19 pandemic, and assuming that the LGD will hit 85% of NPLs:

**TABLE 6-2: MACRO STRESS TESTING SCENARIOS FOR THE YEARS 2020-2022**

Year	Variable	Economic Growth Rate	Unemployment Rate	Real Interest Rate RIR*	General Shares Price Index
Scenarios of 2020	Baseline Scenario	-3.4	22.9	7.7	3541
	Medium Macro Stress Scenario	-5.6	24.8	8.7	2635
	Severe Macro Stress Scenario	-7.9	26.7	9.2	1318
Scenarios of 2021	Baseline Scenario	3.6	19.1	8.7	1318
	Medium Macro Stress Scenario	1.4	21.0	9.7	988
	Severe Macro Stress Scenario	-0.9	22.9	10.2	494
Scenarios of 2022	Baseline Scenario	3.5	19.1	9.7	494
	Medium Macro Stress Scenario	1.3	21.0	10.7	371
	Severe Macro Stress Scenario	-1.0	22.9	11.2	185

The shock scenarios were assumed according to the following methodology:

**Medium Macro Stress Scenario:** The projected GDP growth rate for 2020 minus one standard deviation of economic growth rate data for the period (1994- 2019). The projected unemployment rate for 2019 plus one standard deviation of the unemployment rate data for the period (1994-2019), (noting that two standard deviations were added to the unemployment rate of 2019 to forecast the unemployment rate of 2020 due to the COVID-19 crisis effect on the unemployment rate in 2020).

**Severe Macro Stress Scenario:** The projected GDP growth rate of 2020 minus two standard deviations of economic growth rate data for the period (1994-2019), the 2019-projected unemployment rate plus two standard deviations of the unemployment rate data for the period (1994-2019).

**For actual interest rates and stock prices,** the interest rates were assumed to increase by 100 and 150 basis points, while stock prices were assumed to decrease by 25% and 50% for the medium and severe scenarios, respectively. These values were set based on the assumptions included in the CBJ's Stress Testing Instructions and Basel Committee Guidelines.

\*Represents the weighted average of interest rates on credit facilities/ loans and advancements minus inflation rate.

### 6-3-2 RESULTS

Table (6-3) and Figure (6-7) illustrate NPLs ratio and CAR ratios projected for 2020, assuming the occurrence of the above scenarios; under the severe scenario, the NPLs ratio will increase from 5.0% in 2019 to 10.7% in 2020, thus the CAR will drop from 18.3% to 16.7% in 2020.

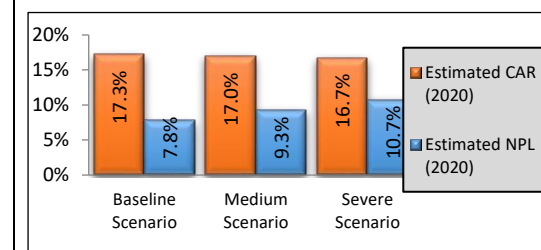
**TABLE 6-3: MACRO STRESS TESTS RESULTS FOR 2020**

Scenarios	Projected NPLs (2020)	Projected CAR (2020)
Baseline Scenario	7.8%	17.3%
Medium Macro Stress Scenario	9.3%	17.0%
Severe Macro Stress Scenario	10.7%	16.7%

\* The NPLs ratio at the end of 2019 stood at about 5.0%.

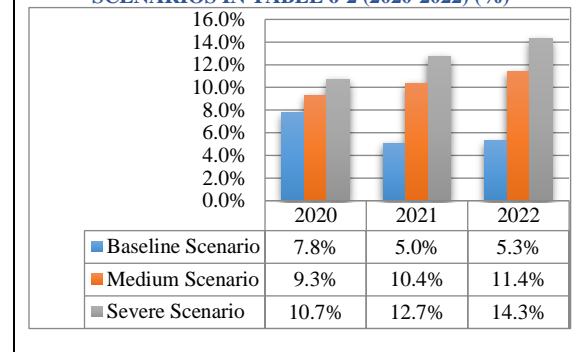
\*\* The CAR at the end of 2019 reached to 18.3%

**FIGURE 6-7: NPLs AND CAR AFTER THE APPLICATION OF ALL SCENARIOS (2020) (%)**

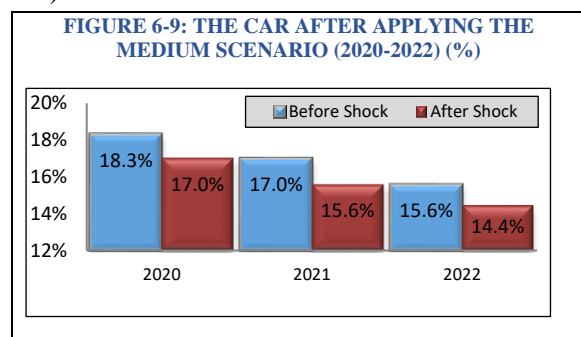


Assuming that these scenarios were occurred (Table 6-2: scenarios), the projected NPLs ratios for 2020-2022 assuming the (three) scenarios will be as illustrated in Figure 6-8.

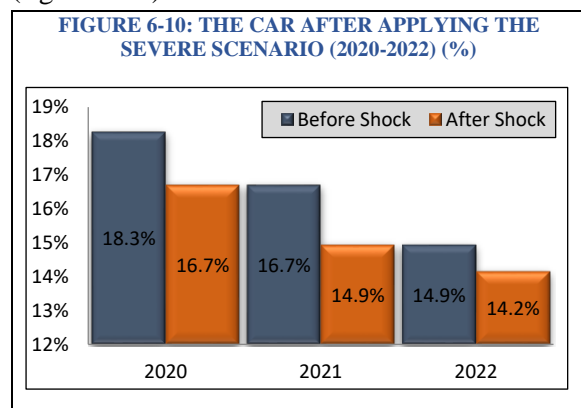
**FIGURE 6-8: THE NPLs AFTER ASSUMING THE SCENARIOS IN TABLE 6-2 (2020-2022) (%)**



Accordingly, after applying the medium scenario, the CAR for the years 2020-2022 will decline to 14.4% in 2022, which is still higher than 12% and valid for the three years (2020-2022). The CAR will be higher with an adequate margin, which implies that the banking sector in Jordan is capable to withstand this shock (figure 6-9).



Meanwhile, implementing the severe scenario indicates that the CAR will drop to 14.2% in 2022, yet it is higher than 12% for the years (2020-2022), which means that the CAR of the banking sector is high, thus the banking sector is capable to withstand this shock as well (figure 6-10).



### 6-4 SUMMARY

According to the results for the years (2020-2022), the banking sector is broadly capable to withstand the shocks and high risks resulting from the repercussions of the COVID-19 pandemic on the national economy. The CAR of the banking sector for the years 2020, 2021 and 2022 will reach to 16.7%, 14.9% and 14.2%, respectively, assuming the most severe scenario.

These positive results are due to banks in Jordan enjoying high levels of capital, and high level of profits, which enables them to absorb the additional provisions and losses resulting from the assumed shocks without a significant impact on the capital, which constitutes a sufficient safeguard 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 upgrade these tests and conducting more tests taking into consideration the risks developments at the international, regional, and national levels to ensure the soundness and resilience of the banking sector in Jordan.

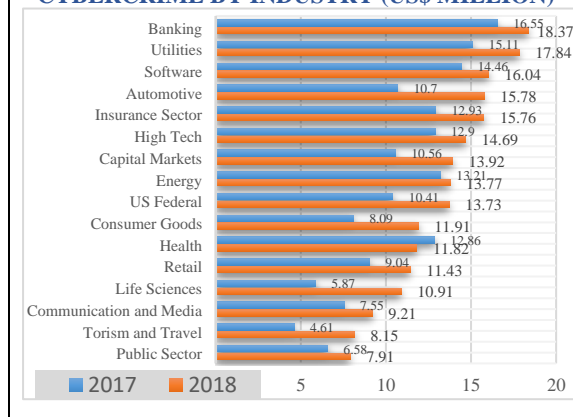
## CHAPTER SEVEN: CYBER RISKS AND FINANCIAL STABILITY

### 7-1 INTRODUCTION

The financial technology sector (FinTech) has expanded rapidly, bringing a plethora of opportunities for banks and financial institutions to improve the services offered to customers, using cutting edge and innovative channels. These channels led to a paradigm shift in the services provided by the banking and financial sector, as this technological development contributed to banks providing more digital financial services, in particular those that enhance access to digital financial services seamlessly, efficiently, and securely, which saves time, effort, and money.

Nevertheless, these technological advances are challenging to banks and financial institutions; they increase the exposure of banks and financial institutions to new risks (cyber risks). These risks may lead to disruption of financial services necessary for the national and international financial systems, undermining the security and confidence in the financial system, and jeopardize financial stability. Cyber attacks may threaten the financial system in particular; a fact confirmed by international, regional and national reports issued thereon. The financial services sector, especially the banking sector, undergo cyber attacks more often than other sectors by 65% according to the World Bank estimates<sup>1</sup>. Figure (7-1) illustrates the average annual cost of cyber attacks classified by industry for a sample of international companies in a number of countries.

**FIGURE 7-1: THE AVERAGE ANNUAL COST OF CYBERCRIME BY INDUSTRY (US\$ MILLION)**



The majority of international organizations commonly define a cyber risk as any risk of financial loss, disruption, or damage to the reputation of an organization resulting from a cyber attack that affects its information and/ or information systems.

A cyber attack refers to any attempt to destroy, expose, alter, disable, steal, exploit vulnerabilities, or gain unauthorized access to an organization data through the cyberspace<sup>2</sup>.

Cyber risks are also defined as “operational risks to information and technology assets that have consequences affecting the confidentiality, availability, or integrity of information or information systems.”<sup>3</sup>

Cyber risks have emerged recently as a serious threat to the financial system. An IMF modeling exercise has estimated that financial institutions’ average annual losses from cyber attacks could reach hundreds of US billion dollars a year, which threatens the financial stability. These attacks have already resulted in data penetration and access to confidential information, which led to destabilization of the information security, not to mention the financial losses incurred by the targeted institutions from these attacks, which may reach to hundreds of US millions dollars.

<sup>1</sup> World Bank, (2018). “Cybersecurity, Cyber Risk and Financial Sector Regulation and Supervision”, Feb.

<sup>2</sup> A notional environment in which people, software, and services communication over computer network occurs.

<sup>3</sup> (Cebula and Young (2010))

## 7-2 CYBER ATTACKS AND INFORMATION SECURITY

Cyber attacks can affect organizations through the three most critical components of information security: confidentiality, integrity, and availability of information:

Confidentiality issues arise when organizations' sensitive information is exposed to unauthorized parties such as data penetration, whereas, integrity issues relate to the improper use of systems, as in the case of fraud. Finally, the information availability issues are related to a business environment disruption that may lead to operational losses.

Cyber attacks on these three components impose different direct effects; business disruption prevents companies to continue running their operational activities and thus incurring revenues losses, fraud leads to direct financial losses, while information penetration creates reputation risk and companies may incur legal costs. Accordingly, the risk of losing customers' confidence in the aftermath of cyber attacks could be tremendous for the financial sector, as financial institutions rely on the trust of their customers, although such risks need more time to emerge. Business interruption is likely to have short-term contagion effects that may influence other institutions dealing with the affected institution by a cyber attack, and could influence the entire financial system if the financial system is very interconnected and complex.

### 7-3 TYPES OF CYBER RISKS THAT MAY FACE THE FINANCIAL SYSTEM AND EXAMPLES

#### 1. Malware

Is a collective name for a number of variant cyber threats, malware is a software designed to target and cause damage to computer functions, or perhaps stealing data, or target the computer protection systems and bypass them to control the work of the computer.

Examples include (ransomware) cyber attacks and (Locky) software, which are responsible for 6% of the attacks worldwide. In addition, the (Tinba) virus targets the financial institutions in particular; it is a modified form of an older form of viruses known as Banker Trojans, these malwares are designed to steal sensitive information of users, including login information and banking credentials.

#### 2. Phishing

Often the target is contacted by email by someone posing as a legitimate institution to deceive users into clicking on a link and enter their personal data. In recent years, Phishing scams have become more sophisticated, making it difficult for users to recognize genuine website interface versus fake website interface; these emails are often delivered as (Junk/ Spam). An example of a phishing scam, is when a user is directed to a fake website and being asked to fill in credit card data, to steal these data and use it for online purchases.

#### 3. Distributed Denial of Service attacks (DDoS)

These attacks primarily concern the disruption of the normal traffic of a targeted network, by overwhelming the network with a flood of internet traffic (i.e. make numerous connection requests). These attacks do not steal information nor represent any security breach, but rather result in a denial of services provided by the website. This may imply a huge loss to the organization.

#### 4. Man in the Middle Attack

Is a type of penetrations that occurs when a perpetrator positions himself in a conversation between two parties in the network, without their knowledge, and intercepts the real communication and makes a second communication that passes through a device using a group of certain software. One of the most famous examples of these attacks is to place a similar keyboard on the ATM's original



keyboard, and then recognize the entered data and send it to a third party.

### **5. Password Attack-Brute Force Attacks**

Is a type of attack where the attacker attempts to guess, break, and change passwords and use them for unauthorized access to the system.

### **6. SQL Injection Attacks**

Is a type of attack that makes it possible for the attacker to execute malicious SQL statements on databases through connected web applications and web pages, which leads to data corruption and systems interruption.

### **7. Social Engineering**

Is the ability to access sensitive and confidential information through psychological manipulation of people by impersonation tools or the hacker gradually gains the trust of the target. It helps to penetrate systems through manipulating people not devices.

Different types of cyberattacks broadly create a state of uncertainty in terms of intensity or magnitude of the cyber threat, especially when precautionary measures are insufficient, and no cyber security ecosystem that is capable to counter or mitigate the impact of these attacks is found. Several studies have classified the types of cyber attacks according to the perpetrator as follows:

- Cyber criminals, individuals or group of individuals who conduct attacks that constitute a cyber risk, and aims to make fraudulent acts and embezzlements, in addition to forgery and theft of financial data, or disturb connections with other parties.
- Hacktivists, an entity, company, or an organization that breaches and hacks the privacy of individuals or companies, and commit cyber attacks for the sake of a competitor, government, or a certain group.

- State-sponsored and international attackers conducts espionage to sabotage and disrupt significant sectors such as: communications, electricity, energy, or by targeting systemically important banks, and penetrating indispensable systems such as the RTGS system, or large-scale payment systems such as SWIFT, to cause impact on the national economy to achieve strategic or geopolitical objectives.

## **7-4 THE IMPACT OF CYBER RISKS ON THE FINANCIAL STABILITY**

As previously mentioned, the financial sector is particularly vulnerable to cyber attacks, which may threaten the entire financial system, as these attacks could spread rapidly through the highly interconnected financial system. The losses incurred from cyber attacks could be tremendous and threaten the financial stability, in addition to indirect costs such as reputational damage. The IMF estimates the costs of cyber attacks in the financial sectors (the data set covering 50 countries worldwide), suggest that average annual potential losses from cyber attacks may be large, close to 9% of banks' net income globally, or about US\$ 100 billion if these attacks were similar to previous attacks. However, in a severe scenario—in which the frequency of cyber attacks would be as twice as high in the past with greater contagion- losses could be three times as high as this, or US\$ 270 billion to US\$ 350 billion<sup>4</sup>.

The Financial Stability Institute conducted a survey of banking regulatory and supervisory authorities in 73 countries worldwide; in order to identify the main challenges facing the macroeconomy and the financial stability in these countries. The results of the survey revealed that risks originating from financial technology (Fintech) and the cyber risks are among the biggest challenges facing financial

<sup>4</sup> Lagarde C., (2018). "Estimating Cyber Risk for the financial Sector", IMF Blog, June.



stability. A survey conducted by the Deloitte international in 2016 indicated that 42% of the respondents considered that their institutions were effective in managing cyber risks, and placed cyber risks among the top three risks suggested to increase in the next two coming years. In addition, the (Risk.net) website ranked cyber risk amongst the ten most important operational risks for 2017, this ranking is based on interviews with chief risk officers, managers, and employees of operational risks in financial institutions, including banks and insurance companies.

In most countries, the financial sector is characterized by the interconnectedness of banks and other financial institutions. However, the financial system differs among countries in terms of the size and complexity of its operations, and the interconnectedness with the financial infrastructure as well. This implies that the cyber threats are more likely to have negative and wide spread effects on the financial system and the economy, and may have a systemic effect. This may create a source of risks that would spread to all components of the financial system, so systemic cyber risk emerges.

Systemic cyber risks emerge because of the concentration and interconnection between the components of the financial system, which may lead to its expansion and spread. According to a study prepared by the Office of Financial Research (OFR)<sup>5</sup> titled “Cybersecurity and Financial Stability: Risks and Resilience”, the cyber incident that may threaten the stability of the financial system refers to:

- The risk of concentration and lack of substitutability to a number of systemically important financial institutions and the infrastructure of financial markets, as well as the electronic concentration of operating

systems, software, cloud computing, and central network hubs that may affect the mechanism of the financial system.

- Loss of confidence due to the occurrence of a cyber event which will lead to mass withdrawals of deposits from banks, which may turn into liquidity runs, thus jeopardizing banks’ ability to pay their obligations.
- Increasing the interconnectedness of the components of the financial system would increase the contagion, which may lead to the spread of the shock across the entire financial system.

With regard to the cyber risks and their impact on the financial stability in Jordan, this effect is still limited. The number of cyber attacks against the banking sector in Jordan during the period from the beginning of 2019 until July/2020 has reached around 30 attacks, which led banks to endure minimal losses of only 0.4% of banks’ net profit. This indicates that the banking sector in Jordan is exposed to limited impact of cyber risks.

### 7-5 CYBER RISKS SCENARIOS

The financial system resilience to cyber risks is achieved by providing an appropriate environment for cybersecurity<sup>6</sup>, aiming to enhance the ability of the financial system to withstand these risks. Banks and financial institutions must broadly allocate financial provisions to confront the losses incurred from cyber risks, address vulnerabilities in internal control systems, and adopt a plan for cyber risks management. This plan shall include the identification of critical tasks, and increasing the time to recovery in response to attacks to recover soon after a cybersecurity incident, to retrieve data and recover operational events.

<sup>5</sup> The Office of Financial Research (OFR) is an independent bureau within the United States Department of the Treasury that provides high quality standards, data, and analysis to strengthen the financial stability.

<sup>6</sup> Cybersecurity: maintain the confidentiality, integrity, and availability of data and sources of data of an organization within the cyber space against any cyber threat through the means, policies, regulations, and best practices thereon.

Setting and designing scenarios for cyber risks to achieve cyber governance shall begin with identifying the sources of these risks, and the likelihood of their occurrence. In addition, the extent of the bank's interconnectedness with other banks and all financial systems shall be determined, as the operational event may escalate to a systemic risk that may threaten the entire financial system. Accordingly, to control cyber risks, mitigate their financial impact, and adopt precautionary measures against risks that may affect the bank's reputation, varied severity scenarios are put in place, as well as identifying the sources of these risks for financial institutions targeted by cyberattacks. Examples of previous or potential international events are displayed next; these scenarios are categorized into three types:

### 1. Scenarios of Significant Operational Risks

Scenario	The Impact of the operational event
A ransomware that penetrates or hacks an electronic system of a bank or a financial institution for blackmailing.	The disruption of the bank/financial institution's business until a ransom is paid, which leads to financial losses.
Forging a financial transfer with the help of an insider	Significant cash loss.
Stealing and disseminating data to harm the bank's reputation	Reputational losses, and change in the credit rating of the bank at rating institutions, which may lead to large withdrawals of deposits and liquidity runs.
Constant simultaneous cyber attacks against systemically important banks, insurance companies, and other companies.	Stealing large amounts of money from systemically important banks and insurance companies, and the denial of services provided by these institutions.

### 2. Scenarios Affecting Infrastructure:

Scenario	The Impact of the Scenario
Disruption of the financial settlement system or one of the biggest payment systems for a relatively long period of time	Shut down of the financial transfer system, which disrupts the financial clearing and financial settlements.
Spread of a virus in global communication networks and a cyber attack occurs.	Destruction of the networks devices, and the stoppage of payments systems.
The failure of an internet service provider and the cloud storage	The inability of companies to connect to the Internet to conduct their operations, as well as the suspension of operations related to the companies providing services.
Hacking of service providers such as telecommunications, energy, electricity, and financial systems companies.	Power outage or one of the sources of power and communications, which leads to the disruption of the

	financial services of the financial system
Hacking the system of trading, exchange rates, and prices of stocks and bonds in the financial market.	Disruption of the financial market and emerging of black market.
A broad-based cyber attack against international communication networks, the swift system, and the money transfers system.	Shutdown of the money transfers and swift system.

### 3. External Shocks Scenarios:

Scenario	The Impact of the Scenario
A cyber attack against banks operating in other countries.	Breaching and exposing small and medium banks' confidential data, as they are less protected, to enable hackers to steal this data.  Loss of confidence in the financial system.
Wars and armed conflicts, and a cyber attack on large corporations in a country	Shutdown of the country's infrastructure, including electricity, water, communications and energy.  Disruption of payment and settlements systems, commercial trading, transfers systems, and failure of service providers including the Internet and cloud storage

## 7-6 ENHANCING THE CYBERSECURITY TO WITHSTAND SYSTEMIC CYBER RISKS

Listed below are a number of recommendations to enhance cybersecurity and counter systemic cyber risks:

1. Central banks and regulators of the financial system shall increase their resilience in order to ensure that their oversight and supervision frameworks are highly prepared to monitor cyber security. Clear procedures, policies, and legislations shall be in place, in addition to effective protocols according to best practices in cyber risk management. The CBJ has taken, in particular, several regulatory and supervisory measures to address cyber risks, which will be discussed in detail later.
2. Due to the nature of the systemic impact of cyber risks, and the possibility of the occurrence of a broad-based instability that

disrupts the economy and the financial system, efforts must be exerted, in addition, the regulatory authorities, the government, security institutions, financial institutions, and private sector companies shall strengthen their cooperation to maintain cybersecurity. The international cooperation is also essential, as cyber threats are not restricted within the borders of any country, and the financial systems in countries are interconnected to each other, as many financial institutions including banks have branches operating abroad.

3. More efforts are required in developing and using stress testing to assess the resilience of the financial system and its ability to withstand cyber risks.

It is noteworthy that the CBJ requested banks to conduct a number of operational tests, including scenarios of cyber attacks and measuring their impact on the financial position of banks. The results were satisfied, and indicated that cyber risks in Jordan are limited, and the banking sector in Jordan is capable to withstand these risks.

4. Information and data collection about cyber incidents shall be enhanced, shared, and analyzed, as they are essential components for improving cyber security. Unless these information and data are shared, it will be extremely difficult to develop metrics to assess cyber resilience, and assess whether the levels of threat are ascending or starting to spread through the financial system. The Financial Stability Board has published recently a **cyber Lexicon**, to ensure a common language that enable the collection of consistent data and reliable measurement of these data.

### **7-7 THE REGULATORY FRAMEWORK OF CYBERSECURITY IN JORDAN AND THE ROLE OF THE CBJ IN ADDRESSING CYBER RISKS**

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The CBJ has adopted a number of regulatory and supervisory measures to manage cyber risks, as follows:

- In 2019, the CBJ, in coordination with operating banks formed a Response Team to Deal with Cybersecurity Incidents for the Financial and Banking Sector, which contributes to increasing the efforts and achieving optimal utilization of capabilities to enhance the cybersecurity framework for the entire financial sector. The team's tasks mainly include developing strategies and policies, activating the mechanisms and tools, and providing the support and commitment required to withstand cyber risks and enable the sector to detect and respond to increasing cyber security threats. The CBJ also established a new department for information security and cybersecurity in 2018.
- On 6/2/2018, the CBJ issued the Instructions of adapting to cybersecurity risks (applied to all licensed banks, financial institutions, and MFIs under the CBJ's supervision). These instructions aim at enhancing banks and financial institution's resilience to cyber attacks attempts in a highly professional and technical manner, and enables them to proceed with providing their services and carrying out their operations securely. The instructions also encourage them to invest in cyber security sphere, due to its importance and its role in achieving a technical revolution that serves the national economy. These instructions require entities under the CBJ's supervision to set and regulate appropriate procedures according to international best practices for cyber risks management, penetration tests, and strengthening controls for the security of systems, software, networks and network devices, as well as detecting, responding, and recovering from cyber security incidents to achieve an effective and efficient approach to cyber governance.

- On 9/10/2018, the CBJ issued a response plan to cyber security incidents. This plan's objective is to set a strategic framework for the organizational roles and responsibilities as well as the necessary procedures for the preparedness, response, and recovery from cyber security incidents. This is in addition to putting in place the necessary precautionary requirements and procedures, and assisting in planning, execute activities, and steering efforts required to recover from cyber security incidents, with the minimum loss and shortest time possible.

- According to the international standards, namely; the international standards ISO/ IEC 27001 and ISO/ IEC 27002, and according to international best practices, the CBJ and in consistence with the objectives and the nature of work, has adopted the "Policies of information security and cyber security management" on 16/4/2020. These policies aim to provide the comprehensive and main principles for security, technical, and practical requirements for the CBJ to protect the confidentiality, integrity, and availability of CBJ's information. These policies also confirm the commitment and administrative support for information security and cyber security and support achieving the following objectives:

1. Setting the grounds of responsibility and accountability for information security and cyber security in the CBJ.
2. Strengthening and addressing the information security and cyber security risks, and withstanding these risks and mitigating their impact to an acceptable level.
3. The administration of the services provided by the CBJ efficiently and securely.
4. The CBJ's compliance to effective laws, bylaws, and policies respective to information security and cyber security.
5. Applying necessary controls to maintain the confidentiality, integrity, and availability of information sources in the CBJ.

6. Enhance users' awareness about their responsibilities towards information security and cyber security.

- A Cyber Security Academy (KADDB) was founded to develop human resources capable of withstanding cyber risks, enable institutions to develop databases and systems to protect information, and to strengthen national efforts to develop an integrated national security system, which is a high top priority to the Hashemite Kingdom of Jordan and the CBJ. The Academy was established in the Institute of Banking Studies, which provides building capacity for institutions and individuals to improve their capabilities and skills in the cybersecurity area. In addition, a memorandum of understanding was signed between the KADDB Academy and the CBJ, so that the KADDB is entitled as a qualified body for cyber security training in Jordan, and the Academy in return provides services to the CBJ employees through training courses and programs in order to develop capabilities and competencies related to cyber security.

## 7-8 SUMMARY

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This chapter addressed cyber risks and their impact on financial stability; as was mentioned, cyber risks may create systemic risks that may threaten the entire financial system which is characterized by complexity and interdependence between its banking or non-banking institutions. The chapter also discussed cyber risks facing the banking and financial sector in Jordan, which are relatively low and do not necessarily constitute a threat to the financial stability currently. Banks and financial institutions shall continue to improve their security controls and put in place appropriate procedures and measures to confront cyber threats they may face, especially in light of the increasing tendency to use digital financial services even more than before amid COVID-19 pandemic era.