

INTERNATIONAL MONETARY FUND

IMF Country Report No. 23/140

JORDAN

April 2023

FINANCIAL SECTOR ASSESSMENT PROGRAM FINANCIAL SYSTEM STABILITY ASSESSMENT

This paper on Jordan was prepared by a staff team of the International Monetary Fund. It is based on the information available at the time it was completed on February 23, 2023.

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International Monetary Fund Washington, D.C.



PR23/124

Jordan —Financial Sector Assessment Program and Financial System Stability Assessment

FOR IMMEDIATE RELEASE

Washington, DC – April 21, 2023: The Executive Board of the International Monetary Fund (IMF) concluded the Financial Sector Assessment Program (FSAP) [1] with Jordan on March 17, 2023 without convening formal discussions. [2] The Financial System Stability Assessment (FSSA) report was completed on February 23, 2023. The report is based on the work of joint IMF/World Bank FSAP missions to Jordan during June and October 2022.

Jordan's financial sector, dominated by banks, has withstood several large external shocks (Global Financial Crisis, Arab Spring, war in Syria and influx of refugees, and COVID-19) since the latest FSAP that was conducted in 2008-09 in part thanks to measures implemented by the authorities to enhance the system's resilience and oversight. At the current juncture, global growth headwinds, high energy and food prices, and higher interest rates are putting pressure on corporate and household sector balance sheets.

The FSAP's systemic risk analysis found that Jordan's banking sector appeared broadly resilient. Banks would be able to withstand a large global stagflationary shock, if it were to occur, given high levels of systemwide regulatory capital and robust earnings. While contagion risk among banks is limited, credit concentration risk is substantial and banks' exposures to the sovereign are large. Nonfinancial corporations' debt at risk could increase significantly in an adverse scenario. Banks have ample liquidity, however, and can manage significant liquidity pressures.

The challenging external risk environment highlights the need to further strengthen the financial stability framework. The authorities have introduced key elements of the Basel III, IFRS 9, and domestic systemically important bank (D-SIB) frameworks and have upgraded the financial integrity framework. The FSAP recommended that the banking supervision approach be more risk-based and forward-looking. Pillar 2 supervisory assessments should be developed for more risk-sensitive capital requirements. The macroprudential framework needs stronger decision-making and a more refined strategy. Several data gaps should be filled to implement stress tests on a globally consolidated basis, run systemic foreign currency liquidity analyses, and perform more granular analyses of household and corporate sector vulnerabilities to guide the calibration of borrower-based macroprudential tools. The sovereign-bank nexus needs to be analyzed further and related prudential policies for enhancing system resilience could be considered. Risk-based Anti-Money Laundering/Combatting the Financing of Terrorism (AML/CFT) supervision should also be improved. The resolution framework should be further enhanced, including by creating a multiagency crisis management committee.

^[1] The Financial Sector Assessment Program (FSAP), established in 1999, is a comprehensive and in-depth assessment of a country's financial sector. FSAPs provide input for Article IV consultations and thus enhance Fund surveillance. FSAPs are mandatory for the 47 jurisdictions with systemically important financial sectors and otherwise conducted upon request from member countries. The key findings of an FSAP are summarized in a Financial System Stability Assessment (FSSA).

^[2] The Executive Board takes decisions under its lapse-of-time procedure when the Board agrees that a proposal can be considered without convening formal discussions.



INTERNATIONAL MONETARY FUND

JORDAN

FINANCIAL SYSTEM STABILITY ASSESSMENT

March 3, 2023

KEY ISSUES

Context: The banking sector dominates Jordan's financial system, and its strength is essential to support macroeconomic stability and the peg to the U.S. dollar. The authorities have implemented measures to enhance the system's resilience and oversight since the 2008–09 FSAP, allowing it to withstand large shocks (Global Financial Crisis, Arab Spring, war in Syria and influx of refugees, COVID-19). Global growth headwinds, high energy and food prices as well as sharply rising interest rates are pressuring nonfinancial sector balance sheets.

Findings: The banking sector appears broadly resilient, although there are pockets of vulnerability. High starting levels of systemwide regulatory capital and a robust earnings-generating capacity would allow banks to absorb even a large global stagflationary shock were it to occur. While contagion risk among banks is limited, concentration risk is substantial. Banks' exposures to the highly indebted sovereign are large. Nonfinancial corporations' debt at risk would increase significantly in an adverse scenario. Banks can manage significant liquidity pressures, but foreign currency liquidity requires careful monitoring.

Policy advice: The challenging risk environment highlights the need to fill the remaining gaps in the financial stability framework. The banking supervision approach should be more risk-based and forward-looking. Specific regulations for material risks should be issued and Pillar 2 supervisory assessments should be developed for more risk-sensitive capital requirements. The macroprudential framework should be improved by strengthening decision-making and refining the strategy. Data gaps should be filled to implement stress tests on a globally consolidated basis, run comprehensive systemic foreign exchange (FX) liquidity analyses, and perform more granular analyses of household and corporate sector vulnerabilities to guide the calibration of borrower-based macroprudential tools. The sovereign-bank nexus needs to be analyzed further and related prudential policies to enhance system resilience could be considered. Risk-based AML/CFT supervision should also be improved. A multi-agency crisis management committee should be formed, resolution plans for large banks be drafted, and agreement on a borrowing arrangement be reached to be prepared for potential depositor payout.

- The FSAP team was led by Jérôme Vandenbussche, IMF, and Smita Wagh, World Bank, and included Hee Kyong Chon, Serpil Bouza, Attila Csajbok, Pierre Guérin, Mohammed Janahi, Xinyi Su, Robin Sykes, and Yang Yang (all IMF), Geraldine Low and Vern McKinley (IMF external experts), Andrej Popovic, Krishnamurti Damodaran, Ivor Istuk, Nilima Ramteke, and Fiona Elizabeth Stewart (all World Bank), Michael Fuchs and Prasanna Seshan (World Bank external experts). Monica Devi, Leroy Perumal (both IMF), Vikki Taaka, and John Tapia (both World Bank) provided valuable support and inputs.
- The mission met H.E. Dr. Adel Al-Sharkas, Governor of the Central Bank of Jordan (CBJ), H.E. Dr. Mohamad Al-Ississ, Minister of Finance, H.E. Mr. Mu'taz Ibrahim Barbour, Director General of the Jordan Deposit Insurance Corporation (JODIC), H.E. Dr. Adel Bino, Jordan Securities Commissioner, Mr. Omar Fanek, Director at Reform Secretariat, Ministry of Planning and International Cooperation (MOPIC), and senior officials at the CBJ, Ministry of Finance, MOPIC, JODIC, Jordan Securities Commission (JSC), Jordan Loan Guarantee Corporation, banks, industry associations, and other public and private sector organizations.
- The FSAP assesses the stability of the financial system as a whole and not that of
 individual institutions. It is intended to help countries identify key sources of
 systemic risk in the financial sector and implement policies to enhance its resilience
 to shocks and contagion. Certain categories of risk affecting financial institutions,
 such as operational or legal risk, or risk related to fraud, are not covered in the
 FSAP.
- This report was prepared by Jérôme Vandenbussche and Hee Kyong Chon with contributions from the Jordan FSAP team.

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This report is based on the work of the Financial Sector Assessment Program (FSAP) mission that visited Jordan in June and October 2022. The FSAP findings were discussed with the authorities during October-December 2022.

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Glossary

AML/CFT Anti-Money Laundering / Combating the Financing of Terrorism

ASE Amman Stock Exchange
B2B Business to Business

BCP Basel Core Principles for effective banking supervision, 2012

BSD Banking Supervision Department

CAMEL Capital, Asset quality, Management, Earnings, and Liquidity

CAR Capital Adequacy Ratio
CBJ Central Bank of Jordan

CCyB Countercyclical Capital Buffer

CET1 Common Equity Tier 1

CMC Crisis Management Committee

DBR Debt Burden Ratio

D-SIBs Domestic Systemically Important Banks

FATF Financial Action Task Force

FSAP Financial Sector Assessment Program

FSC Financial Stability Committee
FSI Financial Soundness Indicator

FX Foreign Exchange

G2B Government to Business
GCC Gulf Cooperation Council
HQLA High-Quality Liquid Assets

ICAAP Internal Capital Adequacy Assessment Process

ICR Interest Coverage Ratio

IFRS International Financial Reporting Standards

IMF International Monetary Fund

IRRBB Interest Rate Risk in the Banking Book

JD Jordanian Dinar

JODIC Jordan Deposit Insurance Corporation

JSC Jordan Securities Commission

LCR Liquidity Coverage Ratio

LGD Loss Given Default

MENA Middle East and North Africa

ML/TF Money Laundering and Terrorism Financing

MoF Ministry of Finance

MoU Memorandum of Understanding

JORDAN

MSME Micro, Small, and Medium Enterprise

MTPL Motor Third Party Liability
NFC Non-financial Corporation
NPE Nonperforming Exposure
NPL Nonperforming Loan
PD Probability of Default
PPP Public Private Partnership
RBS Risk-Based Supervision

ROA Return on Assets

ROCA Risk management, Operational controls, Compliance, and Asset quality

RTGS-JO Real Time Gross Settlements system-Jordan

SME Small and Medium Enterprise
UBO Ultimate Beneficial Ownership

USD United States Dollar

WEO World Economic Outlook

EXECUTIVE SUMMARY

The banking sector, which dominates Jordan's financial system, has withstood a series of large external shocks since the 2008–09 FSAP and is currently facing global headwinds. While financial cycle indicators do not point to overheating, banks' exposures to the highly indebted sovereign are large, and household borrowers appear stretched. These vulnerabilities could amplify the impact of a crystallization of key macrofinancial risks currently facing the economy, which stem from intensifying spillovers from the war in Ukraine, further shocks to energy and food prices, faster-or stronger-than-expected U.S. monetary policy tightening, and the possibility of a new COVID-19 outbreak.

Banks are broadly resilient despite pockets of vulnerabilities. High starting levels of systemwide regulatory capital and a robust earnings-generating capacity would allow most banks to absorb a large stagflationary shock, resulting in a manageable aggregate capital shortfall. Domestic contagion risks appear limited, but concentration risk is substantial. Banks have ample liquidity and could manage significant liquidity pressures, but FX liquidity requires careful monitoring given Jordan's fixed exchange rate regime. International reserves remain adequate to withstand severe systemwide FX liquidity shocks. The share of corporate debt at risk in an adverse scenario appears sizable.

The authorities have strengthened the financial stability framework in recent years, but further steps are warranted. They have implemented most previous FSAP recommendations (Appendix I), have introduced key elements of the Basel III framework, IFRS 9, and regulations pertaining to Domestic Systemically Important Banks (D-SIBs), and have upgraded the AML/CFT framework since the last FATF assessment. The CBJ's stress testing capacity and the crisis management framework have been enhanced. Yet, the following additional measures should be considered:

- **Systemic risk analysis.** Data gaps should be filled to enhance cross-border systemic risk analysis, implement stress tests on a globally consolidated basis, run comprehensive systemic FX liquidity analyses, and perform more granular analyses of household and corporate sector vulnerabilities. Careful monitoring of banking sector FX liquidity and continued attention to banks' sovereign exposures and banking system's concentration risk are warranted.
- Macroprudential policy framework. The framework should be improved by strengthening
 decision-making, refining the strategy, and enhancing communication. Readiness to implement
 borrower-based macroprudential tools should be developed, and prudential policies to enhance
 system resilience against a strong sovereign-bank nexus could be considered.
- **Banking regulation and supervision.** The banking supervision approach should be more risk-based and forward-looking, undertaken on more adequate solo and consolidated bases. The CBJ has a conservative regulatory approach with high minimum required capital ratios, which could be made more risk-sensitive. It should develop appropriate supervisory methodologies to assess Pillar 2 risks and the additional capital that banks might need to hold to make it more sensitive

to individual banks' specific risk profiles. Regulatory and supervisory frameworks for some key risk areas need improvement to make them more enforceable. Continued close monitoring of rescheduled and restructured loans by the CBJ is warranted. The CBJ also needs to ensure it has adequate supervisory resources.

- **Financial integrity.** The authorities should continue strengthening AML/CFT risk-based supervision (RBS) for banks and nonbank financial institutions, especially for customer due diligence obligations. They should ensure that information on the beneficial ownership of legal persons is available on a timely basis and consider measures to mitigate the risks from virtual assets.
- Payment systems. The CBJ should take actions toward better risk management and efficiency of Real Time Gross Settlement System – Jordan. A robust/holistic risk-management framework, including collateral management, intra-day liquidity facility policy, and business continuity should be established.
- **Financial safety net and crisis management**. A multi-agency crisis management committee should be formed with relevant domestic agencies to improve the level of crisis preparedness. The CBJ should draft resolution plans for D-SIBs starting with the major cross-border D-SIB. The JODIC should ensure that it has a more effective system of depositor compensation installed by developing a means of payment for compensating depositors and running simulation exercises. An agreement should be reached among agencies on a borrowing source or debenture issuance arrangements to provide JODIC with a financial backstop.

Addressing development issues is also essential. Tackling the systemic issue of late payments across the supply chain would be desirable to boost access to finance through factoring and accounts receivable finance. Developing a strategy for Islamic finance would be an important step toward tapping its growth potential. Reversing the decline in capital markets will require building a benchmark yield curve and reviving the public-private partnership (PPP) project pipeline. The CBJ schemes providing subsidized funding to supervised entities should become more targeted and be phased out as the recovery gains momentum, and the authorities are advised to conduct a comprehensive stocktaking of development finance initiatives with a view to ensuring greater alignment and coordination.

Table 1. Jordan: FSAP Key Recommendations Recommendation Agency Time*			
	Agency	Time	
Systemic Risk Analysis and Macroprudential Policy Framework Fill data gaps to (i) further incorporate cross-border dimensions and interconnectedness in	СВЈ	МТ	
systemic risk monitoring; (ii) enable top-down bank stress testing on a globally consolidated	CBJ	IVII	
basis; (iii) model probabilities of default (PDs), including on more granular loan portfolios.;			
(iv) expand the analysis of nonfinancial corporate vulnerabilities to a broader set of firms;			
(v) analyze household vulnerabilities at a more granular level			
Enhance readiness to implement borrower-based macroprudential tools	СВЈ	MT	
Monitor closely and analyze the intensity of sovereign-bank linkages and consider	СВЈ	MT	
implementing prudential policies to enhance system resilience, if warranted	CB	1411	
Continue to monitor closely concentration risk on large nonfinancial corporate exposures in the	СВЈ	MT	
banking sector.	CD	1011	
Monitor the LCR by significant currency; analyze FX liquidity separately from total liquidity	СВЈ	ST	
	CBJ	ST	
Strengthen and revamp the role of the Financial Stability Committee	Свл	31	
Financial Sector Oversight	CDI	L NAT	
Continue to update the bank supervisory framework to ensure it is more risk-based, forward	СВЈ	MT	
looking, undertaken on more adequate solo and consolidated bases	CDI		
Develop Pillar 2 risks assessment methodologies to make capital assessments more sensitive to	СВЈ	MT	
individual banks' risk profiles			
Review and further closely align prudential requirements on asset classification, concentration	CBJ	ST	
risk and related party exposures with Basel Core Principles and guidance; strengthen			
supervision in these areas			
Implement enforceable regulations in key risk areas (market, operational, IRRBB, country and	СВЈ	MT	
transfer risk), review and revise outdated or misaligned guidance/regulations (credit risk			
management, FX liquidity risk management); strengthen supervision in these areas	CDI	NAT.	
Ensure adequate banking supervision staff resources	CBJ	MT	
Continue to progress in implementing the FATF action plan through strengthening risk-based	CBJ	ST	
AML/CFT supervision; continue to ensure that D-SIBs' cross-border operations adhere to			
AML/CFT requirements that are at least as conservative as CBJ's requirements		CT.	
Enhance identification and verification of Ultimate Beneficial Ownership of legal persons/	Companies	ST	
arrangements	Controller		
Complete the risk assessment of virtual asset activities and implement a framework for	CBJ	ST	
mitigating AML/CFT risks from virtual assets			
Establish a sound risk-management framework for comprehensively managing legal, credit,	RTGS-JO	ST	
liquidity, operational, and other risks of RTGS-JO			
Financial Safety Net and Crisis Management	CDL L: -	Loz	
Set up a multi-agency crisis management committee (based on an MoU) to adequately	CBJ, MoF,	ST	
operationalize the crisis management framework	JODIC		
Develop procedures for resolution planning and draft resolution plans for D-SIBs, starting with	CBJ, JODIC	MT	
the major cross-border D-SIB, leveraging MoUs for cross-border cooperation		_	
Design and operationalize a process for the compensation of depositors	JODIC	MT	
To prepare for a depositor payout, come to an agreement on a borrowing source or make	JODIC, CBJ,	MT	
arrangements for issuing debentures	MoF	<u></u>	
Financial Development Issues			
Reassess the subsidized funding schemes to specific sectors and stay on track with planned	CBJ	I	
phasing-out and better targeting		<u> </u>	
Assess the appropriateness of introducing a late payments law for B2B and G2B transactions	CBJ	MT	

BACKGROUND

A. Macrofinancial Context

- 1. Jordan's post-COVID economic recovery has been challenged by global headwinds. Output contracted moderately in 2020 and rebounded by 2.2 percent in 2021. Growth in 2022 is expected to be slightly higher at 2.7 percent as the repercussions of Russia's war in Ukraine, high global energy and food prices, weak global growth, and tight global financial conditions offset the positive effects of the vanishing of domestic pandemic-related disruptions, a rebound in tourism and remittances from Gulf Cooperation Council (GCC) countries, and strong demand for Jordan's commodity exports (Figure 1, Table 2). Unemployment remains high near 23 percent as of 2022:Q3. Inflation has picked up and reached 5.4 percent y-o-y in September 2022. Public debt has risen further, reaching an estimated 90.7 percent of GDP at end-2021.
- 2. The CBJ, whose monetary policy is anchored by the peg to the U.S. dollar, has been effective in maintaining macroeconomic and financial stability throughout the pandemic. At the onset of the shock, the CBJ implemented a sizable package of support measures. It cut its policy rates, injected liquidity, and introduced a small- and medium-sized enterprise (SME) subsidized lending scheme.¹ It also allowed banks to postpone repayments and restructure credit facilities without considering this a restructuring or rescheduling for borrowers that were directly impacted by COVID-19.²
- 3. To preserve monetary stability, the CBJ increased its policy rates by 350-375 basis points between March and November 2022, broadly in line with the U.S. Federal Reserve. These actions have brought policy rates above their pre-pandemic levels, but overall growth of nominal claims on the private sector has remained robust reaching 8.2 percent y-o-y in September 2022 (Figure 2). International reserves have remained comfortable, reaching USD 16.2 billion at end-November 2022, and confidence in the peg remains strong with deposit dollarization hovering near a multi-year low of about 19 percent. In mid-June 2022, to attenuate the impact of rising rates on household borrowers with a variable interest rate loan, the CBJ instructed banks to offer them a new repayment schedule with monthly installments fixed at their current levels.³

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¹ This scheme was to help finance the operational expenditures of firms hard-hit by the pandemic. The CBJ also eased the terms of its pre-existing program to support specific economic sectors.

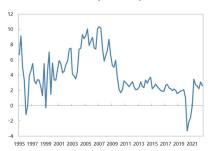
² This scheme expired at the end of 2021. Postponed loan repayments amounted to 9 percent and 4 percent of total loans in 2020 and 2021 respectively. See Appendix II for further details on the CBJ's pandemic-related support measures of a prudential nature.

³ In practice, the CBJ gave banks some flexibility in the implementation of this instruction. In November, the CBJ further clarified that banks were encouraged to fix the installment only if it was in the interest of the bank and the customers, while remaining consistent with applicable legislation and banks' internal policies.

Figure 1. Recent Macroeconomic Developments

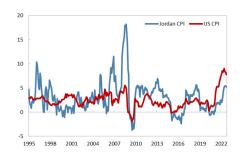
The economy has shown signs of broad-based recovery in 2022 $\ldots^{1/2}$

GDP Growth, 1995:Q1-2022:Q3 (Percent, year-on-year)



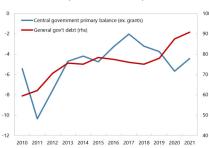
Inflation has increased, driven mainly by high energy prices...

CPI Inflation, 1995:M1-2022:M10 (Percent, year-on-year)



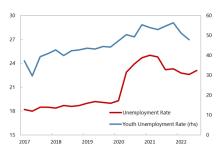
 ${\it Government\ debt\ has\ kept\ rising...}$

Public Debt and Public Balances, 2010-2021 (Percent of GDP)



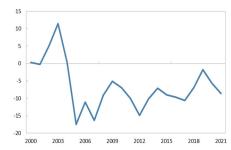
...with the still high unemployment rate slightly declining.

Unemployment Rate, 2017:Q1-2022:Q3 (Percent)



...while the current account deficit has widened due to rising import prices.

Current Account, 2000 -2021 (Percent of GDP)



...in a challenging market environment.

EMBIG Spread, Selected Countries, 2015:M11-2022:M10 (Basis points)



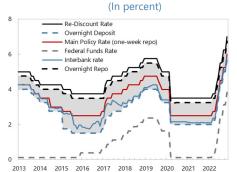
Sources: National authorities; Haver; and IMF staff calculations.

¹/The pandemic affected contact intensive sectors (transport, manufacturing, nonfinancial services and retail) the most. The March 2021 stimulus aimed at financing job creation in some sectors including agriculture, tourism, Information Communication Technology and start-ups.

Figure 2. Monetary and Financial Indicators

Policy rates have risen since March 2022, in line with U.S. Federal Reserve rate increases...

Policy Rates



...contributing to a sharp rebound in deposit and lending rates.

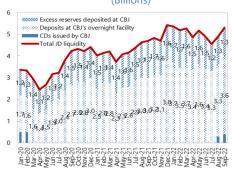
Interest Rates



Banks' liquidity conditions continue to remain comfortable...

... and private sector credit growth has been robust.

Banks' JD Liquidity (Billions)



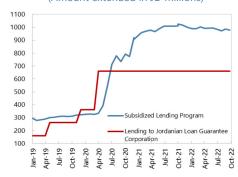
Domestic Credit Developments



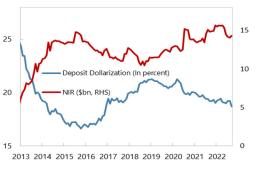
The CBJ has expanded its subsidized lending programs during the pandemic, but demand has slowed.

Adequate reserves have brought deposit dollarization down to its lowest level in recent years.

CBJ Subsidized Lending Schemes (Amount extended in JD millions)



Reserves and Dollarization



Sources: Central Bank of Jordan; Jordan Department of Statistics; Haver; and IMF staff estimates.

B. Financial System Structure

- **4. The banking sector is large and dominates the financial system.** Banks' domestically consolidated assets amounted to 97 percent of financial sector assets, or 180 percent of GDP, at end-2021 (Table 3, Figure 3). The banking sector also has a substantial presence abroad. As a result, globally consolidated assets are significantly larger, reaching 304 percent of GDP. At end-2021, the banking system comprised 23 banks, of which six were classified as D-SIBs and four were Islamic.⁴ The insurance sector remains small.⁵
- 5. While domestic financial sector interconnectedness is low (Table 4), cross-border interconnectedness through ownership links is significant and heterogeneous across banks and regions. At end-2021, nine banks were foreign-owned.⁶ Eight banks had foreign entities abroad that accounted for 40 percent of globally consolidated bank assets, the bulk of which belonged to the largest bank. Half of foreign entities' assets were in GCC countries, reflecting the largest bank's portfolio. Most of the other banks with a foreign presence concentrate on West Bank and Gaza and other non-GCC countries in the Middle East and North Africa region. Cross-border lending appears limited.
- **6. Banks generally follow a traditional business model.** On a domestic consolidation basis, loans make up half of total assets, securities account for 22 percent, of which the bulk is Jordanian government securities, while the rest is mostly cash and cash-like instruments (see Figure 3). On the liability side, the share of deposits is 77 percent, other liabilities are limited, while equity accounts for 13 percent. The traditional business model is also reflected in the revenue structure with net interest income accounting for 80 percent of operating income.
- 7. The capital markets infrastructure is reasonably well developed, though markets remain shallow and dominated by government bond issuance. The absolute size of the markets is reasonable compared with regional and global peers but is failing to grow. Three-quarters of the market capitalization is from the banking and mining sector, with over 50 percent from three listings. Fixed income markets are dominated by public sector issuance. Corporate bonds (including public entities) accounted for less than 1.5 percent of GDP in 2021. Secondary market trading is limited, and most companies' free float is low.

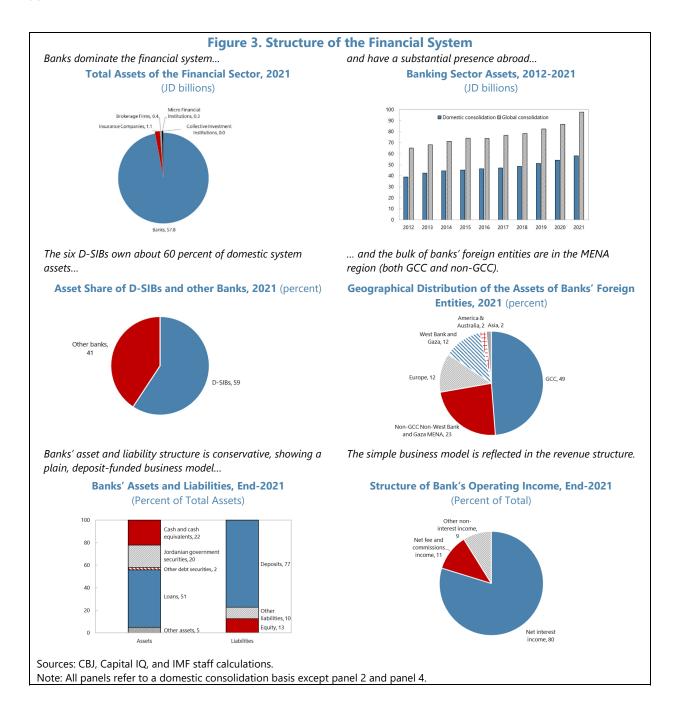
⁴ The Islamic banks' asset share amounted to 16.2 percent on a domestic consolidation basis at end-2021.

⁵ A public pension scheme run by the Social Security Corporation is not included in the financial system perimeter. Its assets are managed by the Social Security Investment Fund and amounted to 37 percent of GDP at end-2021.

⁶ Three were subsidiaries and another six were branches. Branches of foreign banks operating in Jordan are subject to capital requirements which are equivalent to those of other Jordanian banks.

⁷ The market is overseen by the Jordan Securities Commission, with trading facilitated by the Amman Stock Exchange and the Securities Depositary Centre providing clearing and settlement.

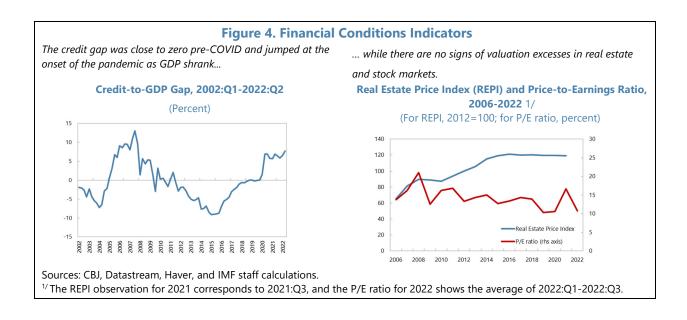
⁸ Stock market capitalization shrunk from 250 percent of GDP at the time of the previous FSAP in September 2008 to 48 percent of GDP at end-2021, reflecting the delisting of some firms, the dearth of initial public offerings since 2012, and lower valuations.



VULNERABILITIES AND RISKS

8. Financial cycle indicators do not show signs of overheating (Figure 4). Real bank credit growth has been moderate in recent years. The credit-to-GDP gap jumped in 2020 as economic activity contracted and has since stabilized, supported by the CBJ's policy response to the pandemic. Nominal real estate prices have been broadly stable since 2015. Bank credit to the real estate sector has grown in line with total bank credit, and the average loan-to-value ratio for residential and commercial real estate loans reached 73 percent and 70 percent in 2020, respectively.

- **9. Banks have robust solvency and liquidity ratios and have remained stable.** The latest available total capital adequacy ratios, leverage ratio, and liquidity coverage ratio stood well above regulatory minima (Table 5, Figures 5–6).⁹ Profitability started recovering after the large COVID-related provisioning of 2020 but has not yet reached its pre-pandemic level. Credit risk stemming from foreign currency lending is limited, as households are not allowed to take FX loans while firms can only do so if they have a natural hedge (Figure 7). The nonperforming loan (NPL) ratio has recently fallen slightly below its pre-pandemic level of 5 percent.
- **10.** The size of banks' exposures to the highly indebted sovereign is large. Jordan is a country where banks' high exposures to Jordanian government securities (about 20 percent of total assets) coincide with high public sector indebtedness. ¹⁰ Loans to the government and other public sector, including to state-owned enterprises, amount to another 4 percent of assets.



⁹ For example, at end-2021, the average common equity Tier 1 (CET1) and Tier 1 capital ratios on a globally consolidated level were comfortably above the minimum requirements at 16 percent and 16.4 percent respectively, and the total capital adequacy ratio was 17.3 percent.

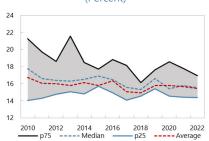
¹⁰ See Chapter 2 of the IMF's April 2022 Global Financial Stability Report for an analysis of the sovereign-bank nexus in emerging markets.

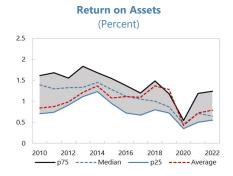
Figure 5. Selected Bank Soundness Indicators, 2010-2022 1/

Banks' capital has remained well above the regulatory minimum...

...while profitability has been recovering as most pandemicrelated provisioning took place in 2020.







Sources: Bloomberg; and IMF staff calculations.

Note: The sample includes the following 14 Jordanian banks: Arab Bank PLC, Housing Bank for Trade and Finance, Bank of Jordan, Bank Al Etihad, Jordan Kuwait Bank, Cairo Amman Bank, Capital Bank of Jordan, Arab Jordan Investment Bank, Société Générale de Banque – Jordanie, Jordan Ahli Bank, Safwa Islamic Bank, Invest Bank, Jordan Commercial Bank, Arab Banking Corp. The average is weighted by total assets. Data are on a global consolidated basis.

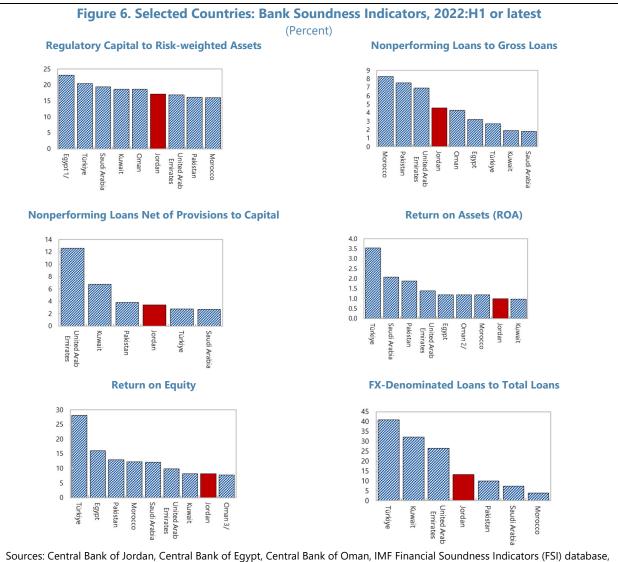
 $^{1/}$ Data shown for 2022 are for 2022:H1.

11. Household borrowers appear stretched and nonfinancial corporations (NFCs) moderately leveraged (Figures 8–9). The household-debt-to-GDP ratio has edged down since the global financial crisis, but it is higher than in many regional peers. Household borrowers' debt burden ratio (DBR) is elevated at 45 percent and has increased by 4½ percentage points since 2017, pointing to rising liquidity pressures and higher default risks. 11 Bank credit to NFCs—excluding commercial real estate—stood at 40 percent of GDP at end-2021, an increase by 5.5 percentage points of GDP since 2016. Granular information, which is only available for listed firms, indicates that debt-at-risk shot up in 2020 and declined to pre-pandemic levels in 2021. 12 Aggregate debt-to-equity ratio of listed firms in Jordan stood at about 54 percent in 2021, lower than its regional peers (about 70 percent in Egypt and 100 percent in Tunisia and Morocco).

12. These domestic vulnerabilities could amplify the impact of a crystallization of key downside risks. The latter may stem from intensifying spillovers from Russia's war in Ukraine, further adverse shocks to food and energy prices, and a faster-than-expected monetary policy tightening in the U.S. These, as well as other significant global and domestic risks —including those arising from social tensions in a context of high unemployment—and their potential impacts, are presented in the Risk Assessment Matrix (Table 6).

¹¹ The debt burden ratio is akin to a debt-service-to-income ratio and is calculated as monthly principal and interest payments divided by monthly disposable income.

 $^{^{12}}$ Debt-at-risk is defined as the debt of firms with an interest coverage ratio below 1 as a share of total debt.



Sources: Central Bank of Jordan, Central Bank of Egypt, Central Bank of Oman, IMF Financial Soundness Indicators (FSI) database, Haver Analytics.

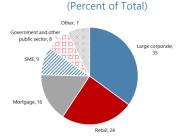
Note: Data are the latest available for each country. The figure shows data as of 2021:Q2 for Morocco; 2021:Q3 for Kuwait; 2022:Q1 for Türkiye; and 2022:H1 for Egypt, Jordan, Oman, Pakistan, Saudi Arabia, and United Arab Emirates. Exceptions are noted.

- $^{1/}$ The latest Regulatory capital to risk-weighted assets indicator of Egypt is for 2021Q4.
- ^{2/} The latest ROA of Oman is for 2021Q1.
- ^{3/} The latest return on equity of Oman is for 2021Q1.

Figure 7. Banking Sector Business Model Indicators

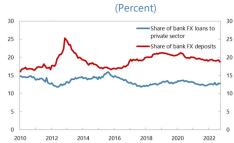
Banks have a well-diversified loan portfolio across market segments...

Loan Portfolio Composition, End-2021



... and foreign currency lending is limited, but deposit dollarization exhibited some swings in the past.

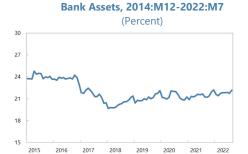
Dollarization of Bank Loans and Deposits, 2010:M1-2022:M9



...and high in international comparison.

Banks' exposure to the sovereign is substantial...

Banks' Exposure to Central Government as a Share of Total



Banks' Exposure to Central Government Debt (Percent of total assets, end-March 2022)



 $Sources: CBJ, \, Haver, \, Monetary \, and \, Financial \, Statistics, \, IMF \, staff \, calculations.$

Note: All panels refer to a domestic consolidation basis

Figure 8. Household Vulnerability Indicators

Household leverage has been declining...

Household Debt to GDP, 2005:Q1-2021:Q4

(Percent)

40

35

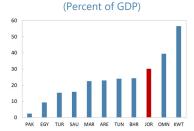
30

25

2007 2009 2011 2013 2015 2017 2019 2021

... but is high relative to peers.

Household Debt, 2021:Q4



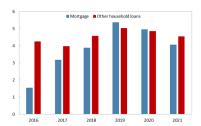
The debt burden ratio is high and has been rising...

Household Debt Burden Ratio, 2017-2021
(Percent)

46 45 44 43 42 41 40 39 38 ...while the nonperforming loan ratio did not deteriorate during the COVID-19 pandemic.

NPL Ratio by Category of Household Loans

(Percent of Total Loans)



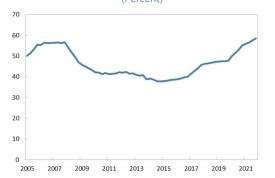
Sources: Haver; The Institute of International Finance; Central Bank of Jordan; IMF Staff Calculations.

Note: The debt burden ratio is calculated as the monthly principal and interest payments relative to monthly disposable income (akin to a debt-service-to-income ratio).

Figure 9. Nonfinancial Corporations Vulnerability Indicators

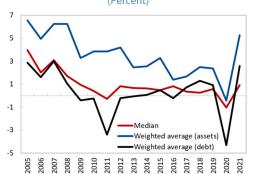
The corporate debt-to-GDP ratio has been rising...

Nonfinancial Corporate Debt to GDP, 2005:Q1-2021:Q4 (Percent)



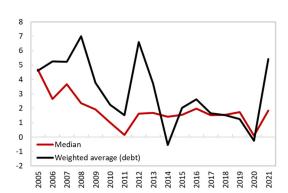
Listed firms' profitability has been weak but rebounded strongly in 2021...

Corporate Profitability: Return on Assets (Percent)



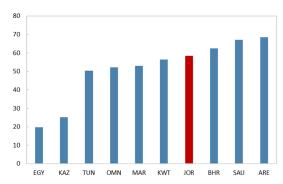
The average interest coverage ratio has been relatively low...

Capacity to Service Debt: Interest Coverage Ratio



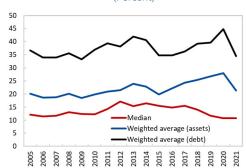
...but is moderate relative to peers.

Nonfinancial Corporate Debt, 2021:Q4 (Percent of GDP)



...and the debt-to-assets ratio has been stable.

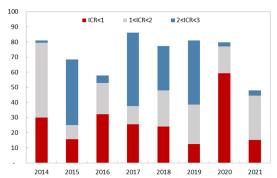
Corporate Leverage: Debt to Assets Ratio (Percent)



...and corporate debt-at-risk improved in 2021 following the jump in 2020 because of COVID-19.

Share of Corporate Debt by Level of Interest Coverage Ratio, 2014-2021

(Percent of total corporate debt; listed firms only)



Sources: CBJ, Haver, The Institute of International Finance, Amman Stock Exchange, Worldscope, IMF staff calculations.

Notes: The top two panels are based on Institute of International Finance debt data, which include domestic bank loans, cross-border loans, and corporate bonds. The other panels are based on data for listed firms.

- **13. Given its large foreign exposures, the banking system is also vulnerable to cross-border contagion.** However, under the current macroeconomic outlook, the performance of exposures to GCC countries, which have enjoyed a GDP windfall due to high energy prices, will likely mitigate weaknesses in the other economies where Jordanian banks' foreign entities operate. In addition, the CBJ imposes a capital surcharge of 2 percent of risk-weighted assets to banks with foreign entities, which could be used as a buffer.
- **14.** Climate change-related vulnerabilities are increasingly relevant. Water stress and droughts are the main sources of physical risk as Jordan is one of the most water scarce countries in the world.¹³ The CBJ is currently developing its Green Finance Strategy, which aims to cover both climate-related financial risks and opportunities related to the green transition.¹⁴

SYSTEMIC RISK AND FINANCIAL SECTOR RESILIENCE

- 15. The FSAP assessed the resilience of the banking and nonfinancial corporate sectors. It performed standard bank solvency and liquidity stress tests (covering all banks), coupled with an analysis of banking sector contagion and a corporate stress test on a dataset of publicly listed companies. Given the key role FX liquidity plays in maintaining the peg, a system-wide FX liquidity exercise was also conducted (Appendix III). The FSAP did not analyze the resilience of the household sector because of the unavailability of micro-level household data, which should be addressed over time.
- 16. Key risks were mapped into an adverse scenario which, together with the baseline scenario, underpins the systemic risk analysis (Figure 10, Table 7). The baseline scenario is aligned with the July 2022 World Economic Outlook (WEO) update and both scenarios span a three-year horizon (2022–24). In the adverse scenario, the worsening of the war in Ukraine would hamper cross-border trade, lower Jordan's trading partners' growth, and add to existing supply chain disruptions. Global food and energy prices would increase further and de-anchor inflation expectations. Major central banks would counter by tightening monetary policy faster than expected. Tighter global financial conditions would trigger capital outflows. To preserve monetary stability, the CBJ would raise policy rates very intensely to accommodate increasing risk premia. In this severe but plausible adverse scenario the dollar peg would hold, but the shocks would cause a deep recession and lead to a sovereign downgrade.¹⁵

¹³ As in other countries, sectors highly dependent on fossil fuels or with a high intensity of greenhouse gas emissions may become more exposed to transition risk should global mitigation efforts be stepped up. In recent years, the pursuit of energy security has prompted the exploration of domestic fossil fuel resources, expansion of renewable energy, and securing stable natural gas supplies from neighboring countries.

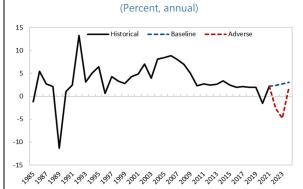
¹⁴ The CBJ has received World Bank technical assistance in this area and the draft Strategy is expected to be prepared by mid-2023.

¹⁵ The two-year GDP growth rate in the adverse scenario would be 2.4 standard deviations below the historical mean. Jordan's sovereign credit rating would be downgraded by one notch, from the end-2021 B+ (S&P) to B.

Figure 10. Key Variables of the Baseline and Adverse Scenarios

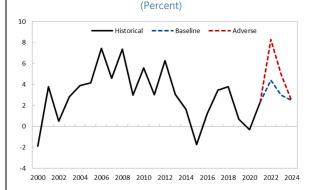
In the adverse scenario, Jordan experiences two consecutive years of recession...

Real GDP Growth



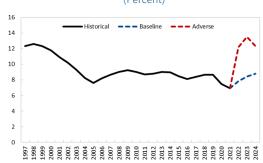
Supply chain disruptions and higher commodity prices would cause a spike in inflation...

Annual CPI Inflation



...with the tight monetary conditions also reflected in a substantial increase in banks' lending rate.

Lending Rate ^{2/}
(Percent)



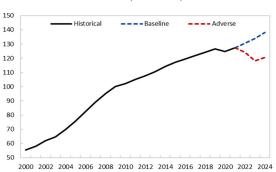
Source: IMF staff.

 $^{1/}$ Overnight discount window rate

^{2/} Interest rates on loans and advances (CBJ)

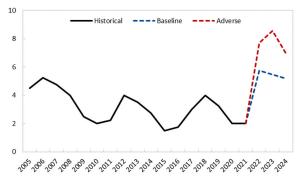
...with output falling back to 2016 levels...

Real GDP Level (2010=100)



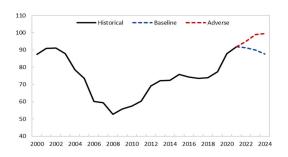
...while monetary policy would have to tighten substantially to fend off the pressure on the peg from larger-than-expected U.S. Federal Reserve rate hikes and risk premia increases...

> Policy Rate ^{1/} (Percent)



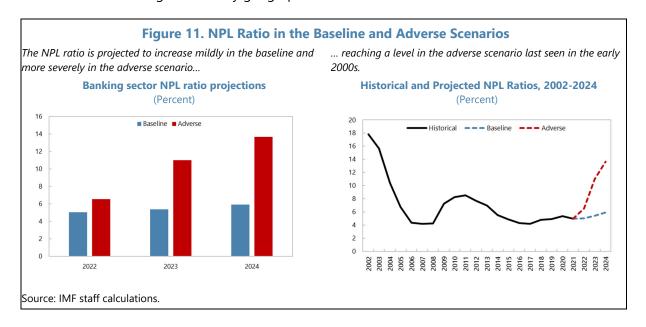
The recession and higher interest rates would worsen public debt dynamics and raise concerns about sustainability, resulting in a sovereign downgrade.

Government Debt (Percent of GDP)



A. Banking Sector Stress Test

17. The solvency assessment suggests broad resilience at the aggregate level but exposes vulnerabilities in some banks. High starting levels of system-wide capital and robust earnings-generating capacity allow the majority of banks to absorb the large shock under the adverse scenario, resulting in a manageable aggregate capital shortfall. The quality of the credit portfolio is projected to worsen in both scenarios (Figure 11). An important caveat is that credit risk modelling was done on banks' total loan portfolios as sufficiently long historical data series on more granular portfolios were not available. Data limitations also prevented the full-fledged credit risk modelling of Jordanian banks' foreign entities by geographies.¹⁶



18. The total Capital Adequacy Ratio (CAR) declines slightly from 18.2 percent at end-2021 to 16.6 percent in the baseline and to 13.5 percent in the adverse scenario, remaining above the 12 percent hurdle rate in the aggregate. In the baseline, the main drivers are interest rate increases, rising loan losses, and growth in risk-weighted assets (RWA) as the balance sheet grows steadily in line with nominal GDP. One bank is already slightly below the minimum capital requirement before stress, and 3 additional banks, including a D-SIB, become undercapitalized. The combined capital shortfall amounts to 0.34 percent of GDP. In the adverse scenario, eight small-and mid-sized banks and one of the six D-SIBs (29 percent of system assets, in total) become undercapitalized. The combined capital shortfall amounts to 1.6 percent of GDP. The minimum leverage ratio (4 percent) is breached by four banks mostly because of credit impairments. Sovereign risk, in the form of loss provisions on the Held-To-Maturity government securities portfolio, accounts for one third of the CAR decline. The contribution from income items in the

¹⁶ Assumptions on profits from subsidiaries abroad were applied instead.

¹⁷ According to information received from the CBJ, this D-SIB increased its capital in 2022.

adverse scenario is only slightly smaller than in the baseline, suggesting that the pre-provision earnings generating capacity of the banks is quite robust.¹⁸

- **19. Concentration risk is substantial.** Sensitivity tests show that most banks would be vulnerable to the default of their largest nonfinancial corporate exposures. The default of the 10 largest exposures would lead 14 banks to undercapitalization with a collective capital shortfall of 2.5 percent of GDP. Exposures were taken into account with the conservative assumption of no government guarantees. ¹⁹
- **20. Domestic contagion risk appears limited**. Based on 2021 data, no failure of a Jordanian bank would cause a failure in another domestic bank as interbank positions are small relative to banks' capital, except for one bank. Three banks in the sample would become slightly undercapitalized relative to the 12 percent regulatory minimum. A complementary market-based spillover analysis using daily equity returns data indicates that total interconnectedness among banks increases during stress episodes, while systemic banks tend to generate stronger spillovers in the system (Figure 13).
- 21. Banks hold ample liquidity and can manage significant liquidity pressures. Their simple funding structure based on historically stable customer deposits presents low funding risk. Their large holdings of government securities and central bank instruments imply low liquidity risk. The authorities implemented in 2021 a minimum liquidity coverage ratio (LCR) requirement of 100 percent both in Jordanian dinar and in all currencies combined, and with conservative regulatory parameters for cash outflows.²⁰ In a scenario with significant liquidity pressures including higher haircuts on government securities, the aggregate all currencies LCR declines from 220 percent to 205 percent, and no bank exhibits a liquidity shortfall (Figure 14, Table 8).
- 22. Nevertheless, stress tests of FX liquidity revealed pockets of vulnerability, which remain hidden under the current LCR reporting format. Because the LCR regulation in Jordan requires banks to report the LCR in domestic currency and in all currencies combined, the FX component of liquidity does not get separated and monitored on its own. The FX LCR (computed by the FSAP team) provides insights on banks' resilience when the domestic currency gets under pressure and obtaining FX on the spot market becomes difficult. While the aggregate FX LCR is high at 185 percent, 8 banks have substantial FX maturity mismatches, and the FX liquidity shortfall (relative to a 100 percent hurdle rate) is 3.8 percent of the CBJ's end-2021 international reserves. In

¹⁸ A cautionary note has to be provided here as the "stagflation" narrative of the adverse scenario implies that nominal GDP growth remains positive, and the resulting balance sheet growth supports earnings.

¹⁹ If allowing for state-owned large borrowers to be fully protected by government guarantees, 10 banks would still become undercapitalized, but the aggregate total CAR ratio would remain above 12 percent and the combined capital shortfall would be more manageable at 1.4 percent of GDP.

²⁰ The only noticeable deposit withdrawal in recent history took place in 2012 in the aftermath of the Arab Spring, but the largest monthly deposit outflow ratio was only 3 percent of total deposits. Local currency deposits were converted to dollars and largely kept in the banks.

the scenario with a higher haircut on government securities, the FX LCR would drop to 141 percent, and the size of the FX shortfall would reach 4.9 percent of the reserves.

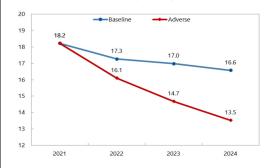
23. While the CBJ has made progress in enhancing its stress testing and monitoring capacity since the last FSAP, there is scope for further improvements. The CBJ substantially improved its top-down solvency and liquidity stress testing frameworks and started to organize regular bottom-up stress testing exercises with the banking industry, featuring a common scenario constructed by the CBJ. Looking forward, the CBJ should urgently fill data gaps to expand the perimeter of its top-down solvency stress test to the globally consolidated level. It should enhance its current practice of modeling the aggregate NPL ratio by collecting data to model PDs and do so on more granular loan portfolios. Since banks' exposure to the highly indebted domestic sovereign is large, a close monitoring and regular analysis of sovereign-bank linkages is warranted. Continued attention to the banking system's concentration risk is also needed. In liquidity analysis, although the shortfalls discussed above are moderate compared to the CBJ's international reserves, special attention should be paid to FX liquidity, and the LCR should be calculated and monitored separately in FX as well. The CBJ should also collect comprehensive bilateral exposures for banks and perform contagion stress testing on a regular basis. Given Jordanian banks' material exposures in foreign jurisdictions, the CBJ should consider further incorporating cross-border dimensions in its Financial Stability Report.

Figure 12. Bank Solvency Stress Test Results

The aggregate CAR remains above the regulatory minimum of ... and the banking sector does not become overleveraged. 12 percent even in the adverse scenario...

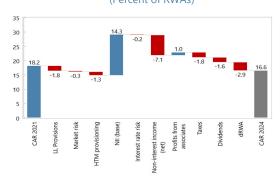
Capital Adequacy Ratio (CAR) in the Baseline and Adverse **Scenarios**

(Percent)



Credit losses and an increase in RWA contribute to a slight decrease in CAR in the baseline.

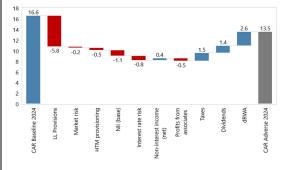
Baseline Scenario: CAR impact over 3 years (Percent of RWAs)



The earnings-generating capacity of banks remains robust, showing only a slight decline from baseline to adverse.

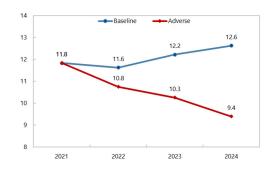
CAR impact: Differences in the Contributions of Key Factors over 3 years across Adverse and Baseline Scenarios

(Percent of RWAs)



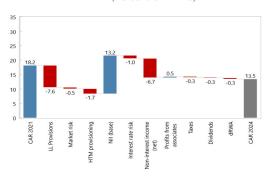
Leverage Ratio in the Baseline and Adverse Scenarios

(Percent)



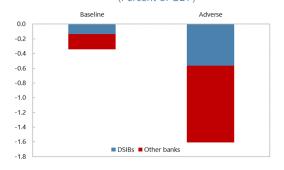
In the adverse scenario, the major drag on CAR is credit losses, while sovereign risk also plays a role.

Adverse Scenario: CAR impact over 3 years (Percent of RWAs)

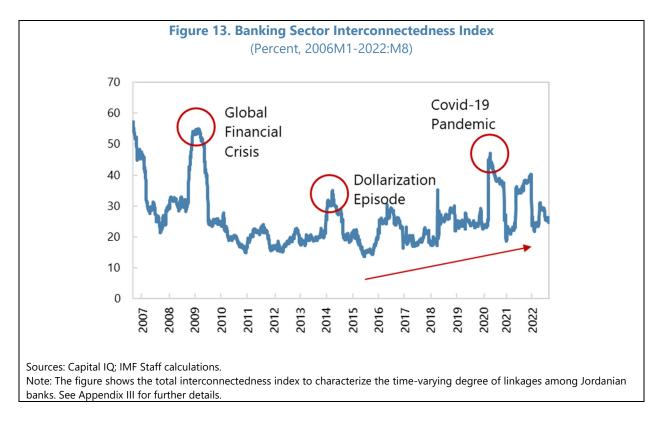


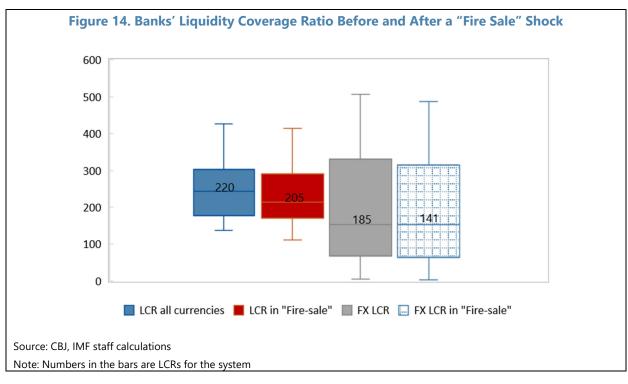
The combined capital shortfall remains manageable, even in the adverse scenario.

Capital Shortfalls in the Baseline and Adverse Scenarios (Percent of GDP)



Source: IMF staff calculations.





B. Systemic FX Liquidity Analysis

24. The FSAP's systemic FX liquidity analysis suggests that international reserves can withstand severe FX liquidity shocks. The analysis is based on the end-2021 network of cross-sectoral financial claims, notwithstanding significant data gaps (Figure 15). NFCs have the largest external FX-denominated liabilities, amounting to 94 percent of GDP, while their FX liabilities to the domestic banking sector amount to 9 percent of GDP. Households have sizeable FX deposits (14 percent of GDP) and cannot borrow in FX, providing a bulwark against FX shocks. Banking sector FX liabilities (18 percent of GDP) are matched by an equivalent amount of FX assets, reflecting the tight regulation on banks' net open positions.²¹ A large capital outflow shock (calibrated using a capital-flows-at-risk methodology), a shift from local currency deposits to FX assets held abroad, and FX deposit withdrawals would put pressure on international reserves, especially if combined, but would remain far from depleting them. ²² The CBJ is encouraged to run systemwide FX liquidity risk analyses in the future. To make them as useful as possible for financial stability analysis, flow of funds data should be enhanced.

C. Nonfinancial Corporate Sector Stress Test

- 25. The corporate stress test results indicate significantly heightened vulnerabilities under the adverse scenario (Figure 16). The aggregate return on assets (weighted by debt) would drop to -1.2 percent in 2023 in the adverse scenario compared to 1.8 percent in the baseline and 2.6 percent at end-2021. The aggregate interest coverage ratio (ICR) would decline to 1.6 in 2023 in the adverse scenario versus 4.7 in the baseline and 5.4 at end-2021. Debt at risk would surge by 33 percentage points in 2023 to 53 percent of total debt under the adverse scenario.²³ This increase in NFC vulnerability is consistent with the deterioration in banks' asset quality discussed above. Differentiating results across firms according to size reveals that low profitability and debt servicing capacity are likely to remain a persistent challenge for smaller firms.
- 26. To enhance the CBJ's corporate sector risk analysis in the future, expanding it to a broader set of firms is recommended. The CBJ has implemented corporate sector stress tests in the form of sensitivity analyses using data on listed firms for several years. In the future, expanding the sample (for example by including the largest 20 borrowers at each bank) would be desirable. Developing a framework for corporate stress tests over a multi-year horizon would also help make these stress tests more consistent with bank stress tests.

²¹ There is a ceiling of 5 percent of banks' open positions relative to banks' shareholder equity per currency (and 15 percent across all currencies). The US dollar is only subject to the 15 percent limit. In the systemic FX liquidity analysis, banks are assumed to liquidate their FX liquid assets to withstand the FX liquidity shock, with haircuts applied on foreign currency sovereign bonds calibrated as in the bank liquidity stress test.

²² Results shown in Figure 15 (panels 2 and 3) are presented in terms of selected statistics and the predictive distribution before and after a shock combining higher global risk aversion and lower domestic growth. When this shock materializes, the mode of the distribution of capital flows becomes negative, the probability of capital outflows increases sharply, and downside risks to capital flows increase significantly.

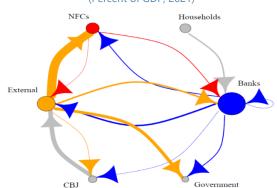
²³ Debt-at-risk is the share of debt in firms with ICR<1 in total debt.

Figure 15. Systemic FX Liquidity Analysis

NFCs have the largest FX liabilities, followed by the sovereign and banks

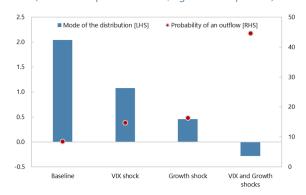
Lower domestic growth and tighter global financial conditions are associated with weaker capital flows and a higher probability of capital outflows...

Jordan Financial FX linkages Map (Percent of GDP, 2021)



Selected Properties of the Distribution of Total Capital Flows Under Various Shock Scenarios

(Left scale in percent of GDP; right scale in percent)

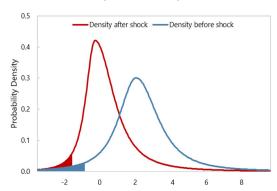


 \dots and adverse shocks increase downside risks to capital flows.

International reserves are adequate to withstand capital outflow shocks, but a large conversion of domestic deposits into FX held abroad would stress their level.

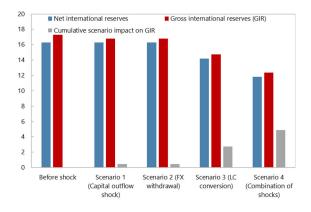
Distribution of Total Capital Flows Before and After an Adverse Shock

(Percent of GDP)

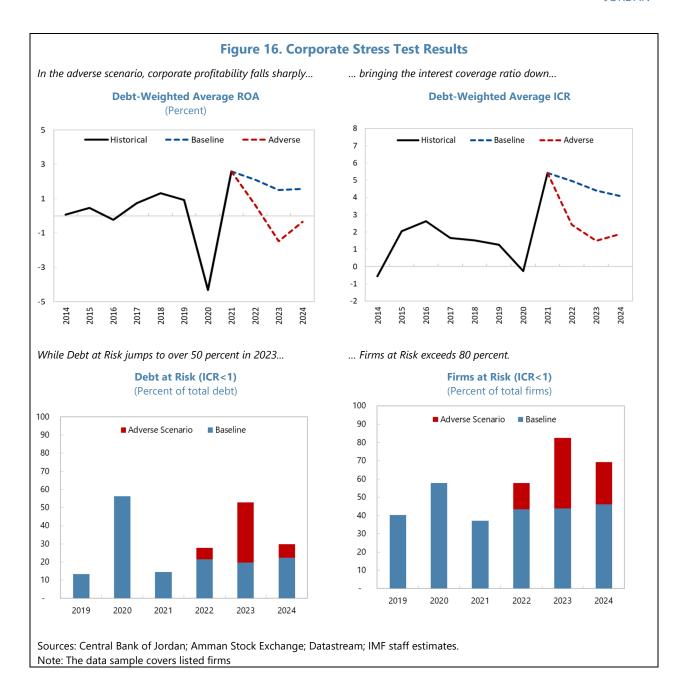


Impact of Systemwide FX Liquidity Stress on International Reserves

(USD billion)



Sources: IMF's Statistics Department; IMF Balance of Payments; Haver Analytics; Central Bank of Jordan; and IMF Staff calculations Note: In Panel 1, NFCs indicates Nonfinancial Corporations. Yellow lines denote liabilities to foreign investors, blue lines denote bank assets, red lines denote NFC assets, and grey lines indicate assets of the other sectors. Bubble size represents the financial footprint of the sector, which is calculated as the sum of financial assets and liabilities. Panel 2 shows the separate impact of a VIX shock, domestic growth shock and the combined shock of VIX and domestic growth on the mode of the predictive distribution of total flows—the most frequent value of the distribution—and on the probability of outflows—that is, the probability of negative total flows. The baseline presents results before the shock based on full-sample estimates. Panel 3 assumes a 2-standard deviation increase in the VIX and a 2-standard deviation decline in domestic growth. Shaded areas denote the 5th percentile of the predictive distribution. In Panel 4, Scenario 1 assumes capital outflows by non-residents amounting to 2 percent of GDP corresponding to the 2.5th percentile of the distribution of total capital flows following a two-standard deviation adverse shock to global financial conditions and domestic growth. Scenario 2 assumes households and NFCs withdraw 20 percent of their FX demand deposits, which is in the range of run-off rates used for the calculation of banks' Liquidity Coverage Ratio. Scenario 3 assumes a 15 percent withdrawal of dinar deposits and their conversion into FX assets held abroad, which would bring the deposit dollarization rate to 28 percent. Scenario 4 is a combination of Scenarios 1, 2, and 3.



FINANCIAL SECTOR OVERSIGHT

A. Macroprudential Framework and Tools

- **27. The CBJ has a broad mandate to safeguard financial stability.** The CBJ Act was modified in 2016 to include an explicit financial stability objective. The CBJ has activated macroprudential tools that have mostly focused on banks (Table 9). Financial stability reports have been published annually since 2012 to provide a wide-ranging overview of recent developments, vulnerabilities, risks facing the Jordanian financial sector, and policy actions.
- **28.** The CBJ's institutional framework for macroprudential policy needs to be further developed to bring it in line with international good practices. The CBJ's internal Financial Stability Committee (FSC) prepares macroprudential decisions for adoption by the Governor. Nevertheless, the institutional setup and processes are rather informal as evidenced by the lack of prescheduled meetings of the FSC and the limited external communication on macroprudential policy decisions. Formalizing the framework for the FSC by revamping its mandate and increasing the frequency of its formal meetings would help assert the CBJ's willingness to act.²⁴ Further, the accountability and transparency of the CBJ's macroprudential framework would be enhanced by further refining its recently published macroprudential strategy.²⁵ The countercyclical capital buffer (CCyB) rate has been set to zero percent since its inception in September 2016. In view of the global COVID-19 crisis experience, the CBJ could reflect on the appropriate level of a positive cycle-neutral CCyB rate, which would help provide policy accommodation in downturns to address shocks unrelated to the credit cycle.²⁶
- 29. The CBJ should enhance its readiness to implement borrower-based tools such as caps on DBR and loan-to-value ratio. These tools would be particularly suitable where broad-based credit developments are not excessive, but pockets of vulnerability and elevated riskiness of credit in the nonfinancial sector exist. Many regional and global peers have implemented them to address vulnerabilities from the household sector (Table 9).
- **30.** The sovereign-bank nexus requires close monitoring and adopting related prudential policies should be considered, if warranted, given sovereign vulnerabilities. The CBJ should enhance its monitoring of the sovereign-bank nexus including by collecting a comprehensive

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²⁴ Since the end of the main FSAP mission, to enhance coordination for risk assessment and mitigation, representatives of the Insurance Supervision Department and Microfinance Institutions and Credit Bureau Supervision Department have become members of the Financial Stability Committee.

²⁵ A refined macroprudential strategy should include intermediate objectives to guide the operational implementation of macroprudential policy and the list of instruments that can be activated by the CBJ, including the approach to setting the countercyclical capital buffer (CCyB) rate.

²⁶ See the recent statement by the Basel Committee on Banking Supervision ("Newsletter on positive cycle-neutral countercyclical capital buffers rates") that supports the ability of authorities to set positive cycle-neutral CCyB rates. A positive cycle-neutral CCyB rate could provide valuable policy space as the buffer can be relaxed in response to adverse shocks. The trade-off between the cost of the extra buffer (in terms of access to finance and higher lending rates) and its benefit (provide policy accommodation under stress) would have to be considered.

dataset of sovereign-bank linkages on a regular basis— and consider prudential policy measures based on this enhanced monitoring—including supervisory responses such as stress testing requirements, diversification of excessive holdings, as well as additional capital requirements above certain concentration thresholds—to moderate this nexus in a way that increases resilience and discourages excessive concentration while avoiding unintended side-effects, with an adequate phase-in period.

B. Banking Supervision and Regulation

- **31.** The CBJ has strengthened its regulatory and supervisory frameworks since the last **FSAP.** The CBJ has introduced key elements of the Basel III capital framework, IFRS 9, as well as regulations pertaining to D-SIBs. It has signed memoranda of understanding (MoUs) with foreign regulators and implemented a supervisory college. Pre-COVID-19, the CBJ performed onsite cross-border examinations of banking groups.
- **32. Although the CBJ possesses the necessary operational independence, the level of vacancies in the Banking Supervision Department (BSD) poses challenges.** The CBJ has the necessary autonomy to set an appropriate budget for ensuring adequate resources are in place for effective banking supervision. Nevertheless, the BSD at present has a high number of vacancies, making it difficult to effectively deliver on its mandate. Going forward, the CBJ will need to ensure adequate staffing and technical expertise.
- 33. The capital adequacy framework for banks is aligned with the Basel framework and proportionate to the risks and complexities of the local banking industry, with minimum capital requirements set significantly higher than under the Basel framework. All banks are required to submit Internal Capital Adequacy Assessment Process assessments annually and the CBJ has not yet felt the need to require a bank to hold additional capital as a Pillar 2 requirement. The CBJ should consider developing appropriate supervisory methodologies to assess Pillar 2 risks and the additional capital that banks might need to hold to make capital more sensitive to individual banks' risk profiles.
- **34.** The CBJ's CAMEL/ROCA risk rating system and supervisory programs need to be more risk-based and forward-looking. The CBJ's onsite inspection program takes too long resulting in stale/dated findings.²⁷ The CBJ can make the supervisory ratings more risk-focused, and develop guidance for linking the scope, frequency, and intensity of supervision to systemic importance and risk profile. The CBJ should include risk- or component-focused assessments, utilize thematic reviews, and streamline supervisory processes to achieve timely outputs.
- **35.** The CBJ is supervising banks on a "solo" and consolidated basis but both dimensions need to be improved. The CBJ should review and redefine its supervisory approach to have a clearer view of bank risks on a "solo" basis (to include foreign branches) and a more comprehensive consolidated supervision (to include material entities/affiliates). The current supervisory focus is

²⁷ The CBJ's ongoing work to automate onsite inspection processes would help resolve the issue.

generally on the bank's operations through its Jordan branches²⁸ and the consolidated bank without sufficient consideration of the risks arising from the entities in the wider group. Onsite supervisory assessments are only at the level of the consolidated bank. The CBJ currently undertakes consolidated supervision focused more on an accounting basis rather than a prudential basis. Adopting a "prudential lens" would include setting group-wide prudential requirements/limits for material entities/affiliates in the bank/banking group, and undertaking a deeper assessment of the group-wide risks associated with potential contagion and reputational risk issues.

- **36.** Regulation and supervision of transactions with related parties need to be improved and those for country and transfer risks need to be explicitly established. Definitions, prudential exposure limit, and governance requirements for related party and related party transactions are not fully aligned with Basel requirements and expectations. The CBJ is yet to issue a regulation that explicitly requires banks to establish appropriate risk management policies and procedures for country and transfer risks.
- **37. Prudential and accounting frameworks jointly establish a framework for asset classification and provisioning.** The prudential framework operating in Jordan, whereby banks must comply with the more conservative of the prudential loan classification and provisioning requirements or the IFRS 9 requirements, has helped the CBJ remain aware of the quality of the credit portfolio and the adequacy of provisions held by banks. Deferred loans benefiting from COVID-19-related support measures remained subject to IFRS 9 provisioning. The CBJ has monitored them (above a JD 1 million size threshold) on a half-yearly basis and has not observed any significant deterioration in their quality to date. Continued monitoring of rescheduled and restructured loans by the CBJ and further strengthening of the prudential framework in this area²⁹ is warranted.
- 38. Regulatory and supervisory frameworks for some key risk areas need improvement and the CBJ's expectations regarding banks' risk management needs further clarification. Regulatory requirements and supervisory expectations for risk management are distributed over several regulations and in the Banking Law. The CBJ has yet to issue enforceable regulations for several specific risks. The key risk areas needing improvement include: credit concentration risk (requirements or expectations regarding banks' concentration risk management framework are not adequately explicit or detailed); market risk; operational risk; interest rate risk in the banking book (IRRBB); and liquidity requirements.³⁰

²⁸ The CBJ requires some prudential reports and financial statements on the solo level (Jordanian branches + foreign branches of the Jordanian bank) such as: Capital Adequacy Ratio, financial statements for CBJ purposes which shows the financial position and income statements balances in JOD and Foreign currency.

²⁹ For instance, current CBJ prudential regulations on classification of credit facilities allow banks to: (a) upgrade a nonperforming exposure as performing upon rescheduling, up to three times during the life of the exposure; and (b) continue to classify a restructured exposure as performing up to two restructurings in a year. This mechanical classification could hamper timely recognition of NPLs.

 $^{^{30}}$ See the subsection on banking sector stress tests above for a recommendation to enhance FX liquidity monitoring.

C. Financial Market Infrastructures

39. The payment and settlement system is a systemically important financial market infrastructure and needs to be operated in a sound and efficient manner. The CBJ should take actions toward better risk management for comprehensively managing legal, credit, liquidity, operational, and other risks, and improved efficiency of the Real Time Gross Settlement System. The Enterprise Risk Management framework covers financial and nonfinancial risk but detailed guidance and policies are focused on operational risk. A robust/holistic risk management framework should also thoroughly cover collateral management, intra-day liquidity facility policy, and business continuity.

D. Financial Integrity

- 40. In October 2021, Jordan was publicly listed by the Financial Action Task Force (FATF) due to outstanding deficiencies in its AML/CFT framework.³¹ The 2019 assessment of Jordan's AML/CFT framework identified major deficiencies related to technical compliance and effective implementation of AML/CFT measures.³²
- 41. Since the assessment, the authorities have addressed the identified deficiencies by: (1) adopting a new AML law; (2) improving RBS for banks; (3) creating specialized units and increasing staffing; and (4) amending laws to collect beneficial ownership for companies and trusts and developing an electronic register to store basic and ultimate beneficial ownership information. In June 2022, the MENAFATF upgraded Jordan's technical compliance with several recommendations.³³ The authorities should continue strengthening the effectiveness of the AML/CFT system in accordance with the action plan agreed with the FATF, including through measures to finalize the virtual assets risk assessment and implement appropriate AML/CFT measures for mitigating risks from virtual asset activity.³⁴
- **42.** The CBJ should continue enhancing AML/CFT RBS of banks and ensuring adequate supervisory oversight of D-SIBs with cross-border operations. Since 2019, the CBJ has undertaken several onsite inspections focusing on banks with a moderate and high residual risk rating. The CBJ should continue to ensure that Jordanian AML/CFT laws are being adhered to by the branches/subsidiaries of banks operating in foreign jurisdictions by way of onsite inspections. CBJ regulations require banks with cross-border operations to implement home and host supervisor

³¹ FATF Jurisdictions under Increased Monitoring – October 2021

³² The Middle East & North Africa FATF (MENAFATF) carried out the assessment. The Mutual Evaluation Report was adopted in November 2019. It rated Jordan as having low to moderate effectiveness against 9 of the 11 immediate outcomes and Partially Compliant / Non-Compliant on 21 of the 40 recommendations.

³³ <u>Jordan's 2022 Technical Compliance Assessment</u> by the MENAFATF.

³⁴ The action plan agreed with FATF includes a requirement to complete a national Virtual Assets ML/TF risk assessment to deepen authorities' understanding of risks arising from this emerging sector.

requirements, whichever is more conservative. The CBJ should ensure that appropriate sanctions are imposed to enforce compliance with AML/CFT requirements.

43. Progress has been made in implementing Customer Due Diligence measures by banks, but key improvements are still required. Compliance with AML/CFT preventative measures should be enhanced in the identification and verification of beneficial owners of legal persons and arrangements. Dissemination of sectoral updates to the national ML/TF risk assessments, particularly the risk assessment of legal persons and arrangements, should be expedited to improve public and private sector understanding of these risks.

FINANCIAL SAFETY NET AND CRISIS MANAGEMENT

- **44.** The CBJ and the JODIC are the key authorities for the financial safety net and crisis management.³⁵ The CBJ is leading efforts to further build this capacity. The JODIC is responsible for implementing elements of bank resolution and operates separately from the CBJ under the auspices of a MoU with the CBJ. Since the last FSAP, progress has been made in further building the infrastructure for the financial safety net and crisis management, from both legal and operational perspectives.³⁶ The legal reforms provided tools to support the resolution function, including the addition of the power of the CBJ to license and operate a bridge bank institution, and revisions to the emergency lending powers of the CBJ.³⁷
- **45. Setting up a multi-agency crisis management committee (CMC) is recommended.** The current bilateral focus should be expanded to include participation of the Ministry of Finance (MoF) in a CMC. An agreement regarding such a committee would formalize the protocol of coordinating inter-institution crisis preparedness and management issues. The CMC would be a consultative forum with the CBJ, MoF, and the JODIC as members.³⁸ This consultative nature would assure that the independence of the members is not compromised.³⁹
- **46.** The CBJ, as resolution authority, needs to ready itself for the possibility of resolution of a D-SIB by preparing resolution plans. Drafting such plans has not yet been a priority for the CBJ, but some early planning has begun.⁴⁰ The CBJ should develop procedures for resolution planning and draft resolution plans for D-SIBs. There should be structural separation and

³⁵ The last systemic financial crisis dates back to 1989, when the third largest bank failed.

³⁶ Reform measures include amendments to the Central Bank of Jordan Law (2016), Banking Law (2019), and Deposit Insurance Corporation Law (2019). Operational procedures adopted since the last FSAP include a draft Banking Crisis Management Guide (2016), D-SIB Instructions (2017) and Instructions to Banks on Emergency Liquidity Assistance (2021), as well as multiple cross-border MoUs.

³⁷ The CBJ has drafted and approved instructions for emergency liquidity assistance, but a public version of the instructions has not been made available to the banks and internal guidelines have not yet been drafted.

³⁸ The Jordan Securities Commission could periodically provide briefings to the CMC as needed.

³⁹ MoF involvement in bank-specific resolution decisions should be restricted to cases where taxpayer money is at risk

 $^{^{40}}$ The D-SIBs have been required to have recovery plans since 2018.

operational independence between the CBJ's functions as lender of last resort, prudential supervisor, and resolution authority. Increased cooperation with foreign counterparts is needed regarding resolution planning for cross-border banks.

- 47. The JODIC has the authority under its enabling statute to borrow or issue debentures, but the source of borrowing or arrangements relating to issuance of debentures have not yet been decided. ⁴¹ To prevent delays in payment of insured depositors, expedited procedures and stand-by agreements should be reached regarding access to funding.
- 48. The JODIC should ensure that it has the technical and operational capacity to compensate insured depositors within seven business days by running simulation exercises and developing a method for compensating depositors.⁴² Without a historical case or simulation exercise of depositor compensation, the ability to pay depositors in a timely fashion is untested. The JODIC Law mandates the payment of the sum due to the insured deposit holder within 30 days from the date of the liquidation decision. According to the JODIC, member banks' existing core banking systems enable them to report on a single customer view basis that would facilitate timely payment. However, no decisions have been made by the JODIC regarding the means of payment.⁴³

FINANCIAL SECTOR DEVELOPMENT

49. Access to finance remains one of the major challenges for micro, small, and medium enterprises (MSMEs) in Jordan. Banks' low appetite for lending to small businesses stifles competition in the area of MSME credit. Limited sources of affordable funding for nonbank credit providers that cater to MSMEs also make their products expensive and uncompetitive. Lenders rely almost exclusively on immovable collateral and personal guarantees as security. This, in turn, reduces MSMEs' access to formal credit products as most MSMEs have only movable assets to offer as collateral. While the new secured transaction framework reflects good practices, comprehensive trainings should be provided to the lenders and main stakeholders to facilitate movable asset finance.⁴⁴ To reduce payments delays across the supply chain and support the development of factoring and accounts receivable finance, the authorities should consider introducing a late payments law applicable to business-to-business (B2B) and government-to-business (G2B) payments with financial penalties for violators.

⁴¹ See Principle 9.4 from the IADI Core Principles regarding sources and uses of funds. Sole reliance on borrowing from markets or banks is not considered an adequate source of emergency funding for a deposit insurance scheme. JODIC's level of reserves are about JD 1.1 billion at end-2021, which provides approximately 50 percent of the needed funding to resolve one of the two largest systemic institutions.

⁴² The CBJ and JODIC intend to revise and extend their current MoU signed by them to provide more detailed technical and operational arrangements to support prompt compensation of insured depositors.

⁴³ The most likely approach would involve having a process for banks to apply to the JODIC and the CBJ to act as an agent bank in compensating depositors.

⁴⁴ The Secured Transactions Law (2018) establishes key requirements for creation and enforcement of security over movable assets.

- **50.** The CBJ should stay on track with current plans to reassess and phase out schemes that provide subsidized funding to specific sectors and SMEs.⁴⁵ Rather than funding development finance initiatives and managing them through the CBJ's representation on their boards, the CBJ should focus on the regulatory and supervisory oversight of these initiatives with a view to maintaining financial stability. The authorities are also advised to conduct a comprehensive stocktake of development finance initiatives with a view to significantly reducing their number, increasing their effectiveness, and ensuring greater alignment and coordination.
- **51. Reviving the declining capital markets will require a multi-pronged approach.** This includes building a benchmark yield curve, reviving the PPP project pipeline, broadening the investor base (both international and domestic), and launching new investment instruments. New products may encourage further regional and international investors as well as local retail investor participation. Supporting 'green' and Sharia-compliant products could act as catalyst for the markets overall.
- **52. The potential of Islamic finance has not yet been fully tapped.** The financially excluded have significant levels of latent demand for Sharia-compliant financial services. Consistent application of Sharia and customized regulations for Islamic banks are essential for enabling them to improve access to finance for the MSME sector. Sukuk programs can also be useful to provide Sharia compliant liquidity risk management options. Given the sizable demand, a comprehensive National Strategy for Islamic Finance should be developed and implemented.

AUTHORITIES' VIEWS

- **53.** The authorities appreciated the open and constructive discussions with the FSAP team and found the comprehensive assessment and recommendations useful. They highlighted the enhancements to the financial stability framework since the 2008–09 FSAP and the anticipated benefits of the recent widening of the CBJ's supervisory umbrella. They also underlined the resilience of the domestic financial system to global and regional shocks over the past decade and a half, as recognized by the FSAP team.
- **54.** The authorities broadly agreed with the systemic risk assessment. They agreed with the need to fill the identified data gaps, noting that closing some of them would require time. They welcomed the bank solvency stress test results, which were broadly in line with their own, further noting banks' high levels of capital and conservative business model and prudent lending standards. They also pointed to the effectiveness of their policy response to the COVID-19 crisis as evidenced by the smooth flow of credit to the private sector and the lack of deterioration in loan quality since the end of the loan deferment measure at the end of 2021. Against the backdrop of severe global

⁴⁵ The CBJ plans to make the JD 1.3 billion program more targeted in the medium term and to discontinue the JD 700 million SME program by the end of 2023.

headwinds, they recalled the CBJ's commitment to prudent monetary policy, anchored by the peg to the U.S. dollar, which continues to serve the Jordanian economy well.

- **55.** The authorities welcomed the FSAP's acknowledgement of progress in financial sector oversight. They highlighted the breadth of their systemic risk monitoring and macroprudential policy toolkit and observed that they would review their macroprudential policy framework as needed based on the FSAP recommendations. Noting their successful implementation of IFRS 9 and key elements of the Basel III framework, they also indicated their openness to addressing the FSAP findings in banking supervision and regulation. They intended to keep improving the RBS framework as well as prudential tools and techniques and have already begun the process of RBS enhancement in the context of IMF-provided technical assistance. They planned to review and further develop the methodologies of their Pillar 2 framework, and to amend regulations relating to key risk areas as needed. Finally, they underscored the significant progress made in strengthening the AML/CFT framework since the last FATE assessment.
- 56. The authorities also appreciated the financial safety net and crisis management assessment. They welcomed the FSAP's recognition of the progress made in recent years, including the amendment of the Deposit Insurance Law, the CBJ Law, and the Banking Law to strengthen the crisis management and resolution framework, the development of a crisis manual, and the establishment of an emergency liquidity assistance framework. They noted the early steps they have taken in resolution planning for large banks with cross-border operations. They supported the FSAP recommendation to create a multi-agency crisis management committee of a consultative nature, allowing for better coordination and crisis preparedness. They underscored that the MoF's role in the financial safety net and crisis management should be consultative only, so as to preserve the independence of the CBJ and JODIC. They also emphasized that (i) the current high level of solvency in the banking sector, (ii) the ability and willingness of the main bank shareholders to support their institutions if the need arises, and (iii) the high level of JODIC reserves (3.3 percent of GDP), would significantly lower the need to use public resources to deal with any future crisis. They mentioned that enhancing the readiness to compensate insured deposits in a timely manner would be discussed soon in the context of the revision and extension of the relevant inter-agency MoU.

	Act. 2018	Act. 2019	Act. 2020	Est. 2021	Proj. 2022	Proj. 2023	Proj. 2024	Proj 2025
		(Annua	al percent	change ur	less othe	rwise note	ed)	
Output, Prices, and Unemployment		(/	
Real GDP at market prices	1.9	2.0	-1.6	2.2	2.7	2.7	2.7	3.0
GDP deflator at market prices	1.7	1.7	-0.2	1.3	3.8	3.8	2.9	2.
Nominal GDP at market prices	3.7	3.7	-1.8	3.5	6.6	6.6	5.7	5.
Nominal GDP at market prices (JD millions)	30,482	31,597	31,369	32,478	34,625	36,911	39,004	41,17
Nominal GDP at market prices (\$ millions)	42,993	44,566	44,245	45,809	48,836	52,060	55,013	58,07
Consumer price inflation (annual average) Consumer price inflation (end of period)	4.5 3.8	0.7 0.7	0.4 -0.3	1.3 2.3	4.4 5.5	3.8	2.9	2.
Unemployment rate (period average, percent) 1/	18.6	19.1	22.7	24.1	5.5	3.0	2.9	2.
onemployment rate (period average, percent) 1/	10.0		ercent of G				***	
Fiscal Operations		(, -				,		
Revenue and grants	25.7	24.3	22.5	25.0	26.1	25.8	25.9	25.
Of which: grants	2.9	2.5	2.5	2.5	2.4	2.1	1.8	1.
Expenditure 2/	29.3	29.2	29.8	31.3	31.7	31.0	30.6	30
Unallocated discretionary fiscal measures 3/	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
Overall central government balance 4/	-3.3	-4.9	-7.3	-6.3	-5.6	-5.2	-4.7	-4.
Overall central government balance excluding grants	-6.2	-7.4	-9.8	-8.8	-7.9	-7.3	-6.5	-5
Primary government balance (excluding grants)	-2.9 -0.3	-3.7	-5.6 -0.3	-4.4 -0.5	-3.7 -0.6	-2.9 -0.9	-1.7 -0.8	-0.
NEPCO operating balance WAJ overall balance	-0.3	0.0 -0.9	-0.3	-0.5	-0.8	-0.9	-0.8	-0. -0.
Water distribution companies overall balance	0.0	0.0	-0.8	-0.7	0.0	0.0	0.0	-0.
Combined public sector balance 5/	-4.1	-4.7	-7.0	-6.0	-5.2	-4.6	-3.2	-2.
Consolidated general government overall balance, excl. grants	-4.1	-4.9	-8.2	6.7	-5.3	-4.8	-4.1	-3.
Consolidated general government primary balance, excl. grants		-0.7	-4.5	-3.4	-1.6	-1.0	0.1	1.
Government and guaranteed gross debt 6/	92.9	97.4	88.8	112.3	113.1	112.6	112.0	111.
Government and guaranteed gross debt, net of SSC's holdings 6/	75.1	78.0	87.5	90.7	89.7	88.2	86.2	84.
Of which: external debt	36.6	35.0	40.6	41.2	42.8	44.8	43.6	41.
External Sector								
Current account balance (including grants), of which:	-6.9	-1.7	-5.7	-8.7	-7.8	-5.7	-4.7	-3
Exports of goods, f.o.b. (\$ billions)	7.8	8.3	8.0	9.4	12.0	12.2	11.5	12
Imports of goods, f.o.b. (\$ billions)	18.1	17.1	15.4	19.2	23.9	22.9	22.4	22
Oil and oil products (\$ billions)	3.8	3.2	2.1	3.0	4.4	3.9	3.8	3.
Current account balance (excluding grants)	-10.4	-4.7	-9.0 1.5	-11.9	-10.8 1.7	-8.8 2.4	-7.3 2.7	-5. 3.
Private capital inflows (net) Public grants and identified budget loans (excl. IMF)	2.3	1.4 5.8	5.9	1.1 6.1	5.8	5.9	4.1	3
· · · · · · · · · · · · · · · · · · ·			al percent					
Monetary and Financial Sector		(Alliida	ii percent i	criange ui	ness Other	wise note	u)	
Broad money	1.3	4.8	5.8	6.7	6.6	6.6	5.7	5.
Net foreign assets	-19.3	3.1	0.2	-0.8	-6.7	16.8	2.7	6.
Net domestic assets	9.1	5.3	7.4	8.7	9.7	4.6	6.3	5.
Credit to private sector	5.2	4.2	6.3	4.9	6.3	4.3	5.5	6.
Credit to central government Real estate price index (annual average, 2012=100) 7/	10.3 120.3	13.7 119.7	11.4 119.6	13.8 119.0	2.2	-2.6	5.5	7.
Residential real estate price index (annual average, 2012=100) 8/	108.8	109.0	106.8	104.3				
Nonresidential real estate price index (annual average, 2012=100) 9/	101.4	102.1	101.4	100.3				
Stock market capitalization (end of period, percent of GDP)	56.7	49.7	41.5	49.9				
Memorandum Items:								
Gross usable international reserves (\$ millions)	12,513	13,512	15,127	17,272	16,061	16,561	16,458	17,04
In months of prospective imports	6.8	8.8	7.8	7.0	6.7	7.0	6.8	6.
In percent of reserve adequacy metric Net international reserves (\$ millions)	96.2 11,430	99.8 12,765	110 13,844	115 15,646	98.6 13,927	95 14,465	91 14,498	15,29
Net international reserves (\$ millions) Population (millions) 10/	11,430	12,765	13,844	10.3	13,927	10.3	10.3	15,29
Nominal per capita GDP (\$)	4,314	4,412	4,311	4,461	4,741	5,048	5,330	5,61
Real effective exchange rate (end of period, 2010=100) 11/	118.7	116.6	105.5	99.2	-1,7-1	5,5.0	0,000	5,51

Sources: Jordanian authorities; ASE; Haver; and IMF staff estimates and projections.

1/ The Department of Statistics changed the methodology of the Survey of Employment and Unemployment in 2017 following ILO recommendations. The variable now reports unemployment rates for Jordanians only (excluding foreigners).

2/ Includes other use of cash (i.e. off-budget expenditures).

3/ Estimated amount of fiscal measures that are needed to meet the programmed fiscal adjustment over 2022-25.

^{3/} Estimated amount of fiscal measures that are needed to meet the programmed fiscal adjustment over 2022-25.
4/ Includes statistical discrepancy.
5/ Defined as the sum of the primary central government balance (excl. grants and transfers to NEPCO and WAJ), NEPCO operating balance, WAJ overall balance, and, starting in 2019, Aqaba, Miyahuna, and Yarmouk Water Distribution Companies overall balance.
6/ Government's direct and guaranteed debt (including NEPCO and WAJ debt). SSC startof for Social Security Corporation. The authorities securitized domestic arrears amounting to 2.3 and 0.3 percent of GDP in 2019 and early 2020, respectively, part of which was previously assumed to be repaid over a three-year period.
7/ The real estate price index for 2021 has not yet been published. The latest available data point is for 2021Q3.

^{8/} The residential real estate price index for 2021 has not yet been published. The latest available data point is for 2021Q3.

8/ The residential real estate price index for 2021 has not yet been published. The latest available data point is for 2021Q3.

9/ The nonresidential real estate price index for 2021 has not yet been published. The latest available data point is for 2021Q3.

10/ Data from the 2017 Revision of World Population Prospects of the UN population

11/ INS data. CBJ staff's estimates, based on updated trade weights, shows a more moderate pace of real appreciation over the past few years.

	2016	2017	2018	2019	2020	2021
Number of Institutions						
Banks	25	25	24	24	24	23
o/w large banks 1/	6	8	8	7	7	6
o/w foreign-majority owned	7	7	8	9	8	9
o/w domestic-majority owned	9	9	8	7	8	7
o/w foreign branches	9	9	8	8	8	7
Insurance companies	24	24	24	24	24	23
o/w life	1	1	1	1	1	1
o/w mixed	15	15	15	15	15	15
o/w non-life	8	8	8	8	8	7
Collective investment institutions	2	2	2	2	1	1
Brokerage firms	61	61	60	59	58	59
Microfinance institutions	N/A	N/A	9	9	9	9
Financial System Assets (in billions of dinar)						
Banks (domestic assets) 2/	46.3	47.1	48.6	51.2	54.1	57.8
o/w large banks	26.5	31.4	32.4	31.4	31.2	32.4
o/w foreign-majority owned	27.5	27.8	31.1	34.9	34.3	38.7
o/w domestic-majority owned	14.9	15.5	13.9	12.6	16.4	16.2
o/w foreign branches	3.9	3.9	3.5	3.6	3.4	2.8
Banks (globally consolidated assets) 3/	73.8	76.6	78.4	82.4	86.8	97.7
o/w large banks	53.1	60.1	61.5	61.8	62.6	72.9
o/w foreign-majority owned	53.3	55.4	59.4	65.2	65.3	77.4
o/w domestic-majority owned	16.6	17.4	15.4	13.5	18.1	17.4
o/w foreign branches	3.9	3.9	3.5	3.6	3.4	2.8
Insurance companies	0.9	1.0	1.0	1.0	1.0	1.1
o/w life	0.1	0.1	0.1	0.1	0.1	0.1
o/w mixed	0.6	0.7	0.7	0.7	0.7	0.9
o/w non-life	0.2	0.2	0.2	0.2	0.2	0.1
Collective investment institutions	0.0	0.0	0.0	0.0	0.0	0.0
	0.4	0.4	0.5	0.4	0.4	0.4
Brokerage firms Microfinance institutions	N/A	N/A	0.3	0.3	0.3	0.3
Financial System Assets (in percent of GDP)	160.0	165.5	1610	1610	1710	150.0
Banks (domestic assets)	168.8	165.5	161.9	161.9	174.3	179.8
o/w large banks	96.7	110.3	108.0	99.4	100.7	100.9
o/w foreign-majority owned	100.2	97.6	103.8	110.4	110.6	120.5
o/w domestic-majority owned	54.4	54.3	46.4	40.0	52.8	50.4
o/w foreign branches	14.2	13.5	11.7	11.5	11.0	8.7
Banks (globally consolidated assets)	268.8	269.4	261.4	260.7	279.7	304.2
o/w large banks	193.7	211.3	205.1	195.5	201.7	227.0
o/w foreign-majority owned	194.2	194.7	198.1	206.5	210.5	241.0
o/w domestic-majority owned	60.4	61.1	51.4	42.7	58.3	54.2
o/w foreign branches	14.2	13.5	11.7	11.5	11.0	8.7
Insurance companies	3.3	3.3	3.2	3.2	3.3	3.4
o/w life	0.3	0.3	0.3	0.3	0.4	0.4
o/w mixed	2.3	2.3	2.2	2.2	2.2	2.7
o/w non-life	0.8	0.7	0.7	0.7	0.7	0.3
Collective investment institutions	0.0	0.0	0.0	0.0	0.0	0.0
Brokerage firms	1.5	1.5	1.8	1.2	1.2	1.2
Microfinance institutions	N/A	N/A	1.0	1.0	1.0	0.9
l Bank of Jordan						

3/ The globally consolidated assets of the licensed banks including Jordan branches

Table 4. Jordan: Cross-Sectoral Exposures (Balance Sheet Approach Matrix)(2021—Percent of GDP)

	Gove	rnment	Centr	al Bank	Other Deposito	ry Corporations	Other Financia	al Corporations	Nonfinancial	Corporations	Hous	seholds	Ex	ternal	To	otal
	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilitie
Government																
Total			2	3	43	8							35		79	11
In domestic currency			2	3	34	8									35	11
In foreign currency				0	9	0							35		44	0
Central Bank																
Total	3	2			27	5	0	3	0		19	0	6	46	55	55
In domestic currency	3	2			24	5	0	3	0		19	0	1		47	9
In foreign currency	0				2		0				0		5	46	8	46
Oth. Dep. Corporations																
Total	8	43	5	27	7	10	3	3	30	45	85	40	33	20	171	187
In domestic currency	8	34	5	24	5	8	3	3	23	36	71	40	15	2	130	147
In foreign currency	0	9		2	2	2	0	0	7	9	14		18	18	41	40
Oth. Fin Corporations																
Total			3	0	3	3									6	3
In domestic currency			3	0	3	3									6	3
In foreign currency				0	0	0									0	0
Nonfinancial Corporations Total				0	45	30							94	2	140	32
In domestic currency				0	36	23									36	23
In foreign currency					9	7							94	2	103	9
Households																
Total			0	19	40	85									40	104
In domestic currency			0	19	40	71									40	90
In foreign currency				0		14									-	14
External																
Total		35	46	6	20	33			2	94					68	168
In domestic currency				1	2	15									2	16
In foreign currency		35	46	5	18	18			2	94					66	153
Total	11	79	55	55	184	174	3	6	32	140	104	40	168	68	559	562
In domestic currency	11	35	9	47	144	133	3	6	23	36	90	40	16	2	297	300
In foreign currency	0	44	46	8	40	41	0	0	9	103	14		153	66	262	262

Source: IMF's databases on monetary and financial statistics, government finance statistics, and external sector statistics.

	2015	2016	2017	7	201	В	201	9	2020)	202	1	2022
			June	Dec	June	Dec	June	Dec	June	Dec	June	Dec	Ju
rdan Consolidation Level					(In percer	nt, unless	otherwise i	ndicated)					
isk-weighted capital adequacy ratio 2/	19.1	17.8	17.2	16.9	17.0	18.3	17.0	18.3	17.9	18.3	18.3	18.0	17
Ion-performing Ioans (NPLs) (in millions of JD)	1,010	1,019	1,159	1,236	1,342	1,299	1,342	1,299	1,473	1,496	1,517	1421.5	1388
IPLs (in percent of total loans)	4.9	4.2	4.6	4.9	5.2	5.0	5.2	5.0	5.4	5.5	5.3	5.0	4
rovisions (in percent of classified loans)	74.7	75.4	74.1	79.3	68.2	69.5	68.2	69.5	67.9	71.5	75.2	79.9	83
IPLs net of provisions (in percent of equity)	4.5	4.1	5.0	4.2	7.0	6.3	7.0	6.3	7.3	6.4	5.7	4.2	
iquidity ratio	149.0	130.1	126.7	131.9	129.5	134.1	129.5	134.1	128.9	136.5	136.2	141.5	13
eturn on assets	1.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2	0.6	0.6	1.2	1.0	
eturn on equity	10.3	9.1	9.8	9.6	9.4	9.4	9.4	9.4	5.2	5.1	9.5	8.3	
X-denominated loans to total loans ratio	13.4	11.9	10.8	10.5	11.0	11.2	11.8	12.5	12.6	12.2	11.9	12.3	13
X-denominated deposits to total deposits ratio	18.0	20.0	20.7	21.0	22.0	22.6	22.1	21.8	21.3	21.3	20.6	20.2	20
oans to deposits ratio	67.6	71.8	76.6	78.7	80.6	81.5	83.4	81.6	87.5	84.5	86.0	82.8	8-
oans to GDP ratio (in percent of GDP)	77.0	80.9	81.8	84.1	84.4	85.7	85.0	86.2	90.9	92.3	92.5	93.5	9
obal Consolidation Level													
isk-weighted capital adequacy ratio 2/						16.6	16.6	17.9	17.8	17.8	17.5	17.3	
Ion-performing Ioans (NPLs) (in millions of JD)						2,156	2,368	2,299	2,558	2,720	2,971	2,896	
IPLs (in percent of total loans)						5.0	5.4	5.2	5.7	5.9	5.6	5.4	
rovisions (in percent of classified loans)						88.3	73.8	74.6	74.5	74.6	77.7	82.8	
IPLs net of provisions (in percent of equity)						2.2	5.4	4.9	5.3	5.4	5.0	3.7	
eturn on assets						1.4	1.9	1.3	0.6	0.5	0.8	0.8	
eturn on equity						9.2	12.7	9.1	4.1	3.5	5.8	5.4	
urces: Central Bank of Jordan; and IMF staff calculations.													

	Table 6. Jordan: Risk Ass	essment Matrix
Nature / Source of the Threat	Likelihood (high, medium, or low)	Expected Impact on Economy (high, medium, or low)
Global Risks		
1. Intensifying Spillovers from Russia's War in Ukraine.	High Further sanctions resulting from the war and related uncertainties exacerbate trade and financial disruptions and commodity price volatility, with Europe, low-income countries, and commodity-importing emerging markets among the worst hit.	 High An increase in fuel prices would significantly increase the fuel import bill, the current account deficit and the external financing needs. An increase in global risk premia combined with large capital outflows could result in a negative feedback loop between the sovereign and banks and adversely impact bank balance sheets.
2. Commodity Price Shocks.	High A combination of continuing supply disruptions (e.g., due to conflicts and export restrictions) and negative demand shocks causes recurrent commodity price volatility and social and economic instability.	High An increase in fuel prices would significantly increase fuel import bill; current account deficit and external financing needs.

	Table 6. Jordan: Risk Assessme	ent Matrix (continued)
Nature / Source	Likelihood	Expected Impact on Economy
of the Threat	(high, medium, or low)	(high, medium, or low)
3. De-Anchoring of Inflation Expectations and Stagflation.	Medium Supply shocks to food and energy prices sharply increase headline inflation and pass through to core inflation, de-anchoring inflation expectations and triggering a wage-price spiral in tight labor markets. Central banks tighten monetary policy more than envisaged leading to weaker global demand, currency depreciations in EMDEs, and sovereign defaults. Together, this could lead to the onset of stagflation.	 Medium The domestic policy response to further global monetary tightening would negatively affect the nascent recovery and increase private sector vulnerabilities with adverse effects on bank asset quality. The wider risk premia would result in higher funding costs for corporates and the sovereign. Bank's asset quality would deteriorate. A negative feedback loop emerging between the sovereign and banks could emerge. A sovereign credit rating downgrade would become more likely. A stagflation and a decline in external demand would result in a decline in tourism receipts and remittances, widening the external deficit.
4. Abrupt Global	High	High
Slowdown or Recession.	Global and idiosyncratic risk factors combine to cause a synchronized sharp growth slowdown, with outright recessions in some countries, spillovers through trade and financial channels, and downward pressures on some commodity prices. EMDEs: Sharp tightening of global financial conditions combined with volatile commodity prices leads to spiking risk premia, widening of external imbalances and fiscal pressures, capital outflows, sudden stops, and debt and financial crises across EMDEs.	 The rise in risk premia, borrowing cost and corporate vulnerabilities would result in a deterioration in bank asset quality. A negative feedback loop emerging between the sovereign and banks could emerge. Capital outflows could materialize. The decline in fuel prices would reduce external financing needs. A growth slowdown would further increase unemployment and affect public debt sustainability. A sovereign credit rating downgrade would become more likely.

	Table 6. Jordan: Risk Assessme	ent Matrix (concluded)					
Nature / Source of the Threat	Likelihood (high, medium, or low)	Expected Impact on Economy (high, medium, or low)					
5. Local Covid-19 Outbreaks.	Medium Outbreaks in slow-to-vaccinate countries or emergence of more contagious vaccine-resistant variants force new lockdowns or inhibit commerce. This results in extended supply chain disruptions, slower growth, capital outflows, and debt distress in some EMDEs.	 High Slower growth and drop in government revenues increase the fiscal deficit and public debt. Corporate and household debt vulnerabilities would rise, with adverse effects on bank balance sheets An increase in global risk premia combined with accelerated capital outflows could result in a negative feedback loop between sovereign and banks and a further worsening of bank balance sheets. 					
Domestic Risks							
6. Increase in Water Scarcity Due to Climate Change	Medium Accelerated climate change leads to further reductions in water availability in Jordan, one of the most water-scarce countries on Earth.	High Water shortages, social unrest, and dissatisfaction with the government, disrupting economic activity and raising risk premia similarly to global risks 3 and 4 above.					
7. Regional Destabilization Undoes Recent Border Openings and Export Agreements	Medium Regional destabilization, including potential conflict, that draws Jordan in undoes recent gains from the border opening with Iraq and potential electricity exports to Lebanon and Syria.	Medium Weaker regional tourism inflows, and reduced opportunities for regional electricity export would weaken external balance and economic activity. Increased risk of a sovereign downgrade.					
8. Persistently High Unemployment Amplifies Poverty and Inequality	Medium Persistently high unemployment, especially among youth, and rising poverty and inequality, coupled with a growing dissatisfaction with the government, leads to widespread protests and violence	 High Recent reform momentum would weaken Investor perceptions of business environment would be damaged Growth would slow, calling sovereign debt sustainability into question The risk of a sovereign credit rating downgrade would increase. 					

()	percent)				
		2021	2022	2023	2024
Real GDP growth	Baseline	2.2	2.4	2.7	3
	Adverse	2.2	-2.6	-4.8	2
Nominal GDP growth	Baseline	4.6	6.9	5.8	5.6
	Adverse	4.6	5.5	-0.1	4.5
Inflation	Baseline	2.3	4.4	3.0	2.5
	Adverse	2.3	8.3	5.0	2.4
Central Bank Policy Rate	Baseline	2	5.8	5.5	5.2
	Adverse	2	7.7	8.6	6.9
3-year Government Bond Rate	Baseline	3.4	7.0	6.5	6.2
	Adverse	3.4	8.3	8.8	8.0
Lending Rate	Baseline	7.0	7.8	8.4	8.8
	Adverse	7.0	11.9	13.1	12.0
Unemployment Rate	Baseline	24.4	23.2	22.1	21.1
	Adverse	24.4	24.9	27.1	26.5
Change in asset prices (equity and real estate)	Adverse		-15	0	0

	Outflow R	lates (percent)		
Item	Basel Factor	Jordan LCR Regulation	Fire-Sale Scenario	FX LCR in Fire- Sale Scenario
Retail Deposits				
Stable (insured) deposits	3	15	15	15
Stable deposits (non-insured)	5	20-40	20-40	20-40
Less stable deposits	10	20-40	20-40	20-40
Haircuts on	High-Quality	Liquid Assets (Ho	QLA, percent)	
Level 1 HQLA				
Cash		0	0	0
Central bank reserves		0	0	0
Government securities (local currency)		0	19.3 (average)	Not applicable
Government securities (FX)		0	10.3	10.3
			(average)	(average)
Level 2A HQLA		15	15	15
Level 2B HQLA		50	50	50

Table 9. Selected Countries: Use of Macroprudential Policy Tools

Country	Jordan	Algeria	Armenia	Azerbaijan	Bahrain	Egypt	Georgia	Kazakhstan	Kuwait	Lebanon	Morocco	Oman	Qatar	Saudi Arabia	Tunisia	United Arab Emirates
Macroprudential tool / Position date	6/30/2021	6/30/2021	7/31/2021	7/31/2021	6/30/2021	6/30/2021	12/31/2021	7/31/2021	6/30/2021	6/30/2021	6/30/2021	9/30/2021	6/30/2021	6/30/2021	10/31/2021	6/30/2021
Broad-Based Tools																
Countercyclical capital buffer	yes	no	yes	yes	yes	no	yes	yes	yes	no	yes	yes	yes	yes	no	yes
Positive CCyB rate	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no
Capital conservation buffer	yes	yes	yes	no	no	yes	no	yes	yes	yes	yes	yes	yes	yes	no	yes
Limit on leverage ratio	yes	no	no	yes	yes	yes	yes	no	yes	no	no	yes	yes	yes	no	no
Cap on credit growth	no	no	no	no	no	no	no	no	no	no	no	no	yes	no	no	no
Household Sector Tools																
Household sector capital requirements	yes	no	yes	yes	no	no	no	yes	yes	no	no	yes	no	no	yes	no
Cap on loan-to-value ratio	no	no	no	yes	no	no	yes	no	yes	yes	pending	yes	yes	yes	yes	yes
Cap on Ioan-to-income ratio	no	no	no	no	no	no	no	no	yes	no	no	no	yes	yes	no	yes
Cap on debt-service-to-income ratio	no	yes	no	no	yes	yes	yes	yes	yes	yes	pending	yes	yes	no	no	yes
Restrictions on unsecured loans	no	no	no	yes	no	no	no	no	no	no	no	yes	no	no	no	yes
Corporate Sector Tools																
Corporate sector capital requirements	no	no	no	no	yes	yes	no	yes	yes	no	no	no	no	no	no	yes
Cap on LTV ratio for CRE	no	no	no	yes	no	no	no	no	no	yes	no	no	yes	no	yes	no
Liquidity Tools																
Liquidity Coverage Ratio	yes	yes	yes	no	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Differentiated by currency	no	no	yes	no	no	yes	yes	no	no	yes	no	no	yes	no	no	yes
Net Stable Funding Ratio	no	no	yes	no	yes	yes	yes	no	yes	no	no	yes	yes	yes	no	yes
Reserve requirements for macroprudential purposes	no	no	yes	yes	yes	yes	yes	no	no	yes	no	no	no	no	no	yes
Differentiated by currency	no	no	yes	yes	no	yes	yes	no	no	yes	no	no	no	no	no	no
Limits on foreign exchange positions	yes	yes	yes	yes	no	yes	yes	yes	yes	yes	yes	yes	yes	no	yes	no
Tools to Address Structural Risks																
Capital surcharges for systemically important institutions	yes	no	yes	yes	yes	yes	yes	yes	yes	no	no	yes	yes	yes	no	yes
Limits on the size of exposures between financial institutions	no	no	yes	yes	no	yes	no	no	no	yes	yes	no	yes	yes	no	yes
Measures to mitigate risks from financial institutions' exposures to sovereigns	no	no	no	no	no	yes	no	no	yes	no	yes	yes	no	yes	no	no

Source: IMF Macroprudential Survey, https://www.elibrary-areaer.imf.org/Macroprudential/Pages/Reports.aspx.

JORDAN

Appendix I. Implementation Status of Key Recommendations from the 2008-09 FSAP

Main Recommendations	Implementation Status	Action Taken/Comments
Short-term		
Strengthen the CARs of the vulnerable banks through the supervisory process and not by increasing the minimum nominal amount of capital required for entry.	Implemented	All banks currently comply with the CBJ regulations regarding the minimum capital requirements and no bank has breached the CAR.
Strengthen global consolidated supervision, and perform onsite cross- border examinations on complex groups	Partially Implemented	 The Banking Supervision Department conducts supervision of the banking groups on a consolidated basis through the following: Conducting onsite inspections in cross-border establishments Holding meetings with the host supervisory authorities Holding supervisory colleges with host supervisors
		Several memorandums of understandings regarding banking supervision with the supervisory authorities in the host countries have been signed.
		Information is shared with host authorities, including supervisory reports on the establishments in the host country.
		Nevertheless, the CBJ still needs to update its approach to consolidated supervision on a groupwide basis.
Prepare contingency plans to deal with stress in the	Implemented	Under the Jordanian Banking Law, the CBJ is authorized to take many measures to deal with banks that face problems.
banking system.		In 2016 the CBJ prepared a comprehensive guide for managing banking crises as a framework for identifying and dealing with weak and problem banks.
		In 2021 the CBJ prepared the "Emergency Liquidity Instructions for Banks" as a framework for dealing with liquidity distress in banks.
		According to the stress testing Instruction No 1/2016, in case the tests results show that there is a vulnerability in the bank's capital or liquidity, the CBJ will then request the bank to provide it (the CBJ) with the measures that the bank plans to take to enhance its capital or liquidity. In case the CBJ is not satisfied with the sufficiency of the measures that the bank plans to take, it has the right to take any measure necessary to enhance the bank's capital or liquidity including imposing restrictions on the distribution of bank's profits.
Continue to strengthen monitoring of financial	Implemented	Early warning tools that constitute an early warning system such as stress testing exercises, a banking sector heat map,

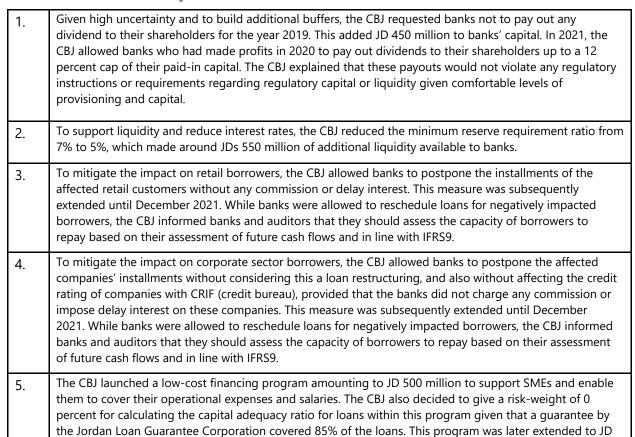
Main Recommendations	Implementation Status	Action Taken/Comments
soundness indicators (FSIs) and build an early warning system.		and a Financial Stability Index have been used to strengthen the monitoring of FSIs and monitor risks in the financial system.
Strengthen the staffing of the supervisory department of the CBJ.	In progress	Because the CBJ mandate was expanded over recent years, many supervisory departments were established (ex: Money Laundering Department, Financial Consumer Protection Department, Microfinance Institutions & Credit Bureaus Supervision Department, Financial Stability Department, Insurance Supervision Department) requiring many BSD employees to transfer out with the aim of building specialized functional capabilities in various fields. The BSD therefore currently has a high level of vacancies (including technical risk expertise) that need to be filled in order to effectively deliver on its mandate.
		The CBJ has adopted the FSI Connect tool (a web-based information resource and learning tool available exclusively to central banks, supervisory authorities, deposit insurers and eligible public sector authorities), which is run by the Financial Stability Institute and uses it as a training site for most of the supervisory departments' employees. Furthermore, they are provided with local and international training programs, and are encouraged then to get professional certificates, diplomas and degrees.
Enhance monitoring of broker-dealers and introduce procedures for early intervention.	Implemented	The JSC has issued the following Instructions which are related to the recommendation: 1- Centralized Risk System for Dealers in Securities Instructions, implemented since 2013. 2- Instructions of Separation between the Funds of Brokers and the Funds of their Clients, implemented since 2015.
Lower the threshold for the public credit registry to cover the overwhelming	Partially implemented	The Central Bank decided to amend the declaration of credit facility amounts from (30) thousand to (20) thousand Jordanian dinars.
majority of credits and disclose the full credit history and the borrower's rating from other banks to prospective lenders.		In addition to that, the public credit registry was developed to show the past dues - in addition to the outstanding balances per client- according to the highest days of outstanding as follows:
		 From (2-29) days From (30-59) days. From (60-89) days. From (90-179) days From (180-360) days More than (360) days.
		The CBJ needs to expand the coverage of the borrower's credit information provided the credit bureau to improve information to prospective lenders.

Main Recommendations	Implementation	Action Taken/Comments
Streamline government's	Status Implemented	Cash management
cash management and publish issuance calendars.		 The government created a Treasury Single Account at the CBJ. The government consolidated all the government account (ministries, departments, institutions, etc.) that were open with the CBJ and/or commercial banks in TSA. A specialized committee was formed from the Ministry of Finance staff (Public debt department, Cash management, Revenue department, General Accounts Department and Studies department) to manage the monetary process and prepare the cash flow forecasting and follow the financing requirement in coordination with Central Bank of Jordan Issuance calendar Before 2020 the Ministry of Finance used to publish the issuance calendar on its web site. As a result of the COVID-19 pandemic in 2020 and 2021, financing requirements increased to deal with the crisis. The government prepared the issuance plan for internal use and did not publish it. The government published the 2022 issuance calendar after the approval of the budget law of 2022 by the
Medium-term		Parliament
Recapitalize the central bank.	Implemented	CBJ's capital was increased from 18 to 48 million JD in 2013.
Develop explicit exit procedures both for dealing with unsound banks and to make room for a more open entry policy consistent with greater contestability in the system.	Partially Implemented	In 2016, the CBJ prepared a guide for crisis management to manage a banking crisis as a framework for identifying and dealing with weak and problem banks. This guide, together with the implementation of a multi-lateral MoU, should be shared/put in place with relevant domestic agencies to adequately operationalize the crisis management framework. CBJ's Framework for Corrective Measures is outdated (2004) and needs to be amended to reflect up-to-date references to laws, instructions and incorporate key prudential requirements (liquidity). Further, the Banking Law provisions should limit the ability of a third party to appeal CBJ's decisions to actions taken in bad faith.
		As for the open entry policy, it consists of the following: 1- Banking law articles from 6 to 20 2- Internal licensing procedures 3- Guidelines for licensing banks (which should be updated to include appropriate assessment criteria and be amended to an instruction to be enforceable).

Main Recommendations	Implementation Status	Action Taken/Comments
Enhance the stress testing capacity of the CBJ and commercial banks, focusing in particular on credit risk. Reflect regular stress tests in CAMEL scoring.	Implemented	Annual top-down stress tests are implemented, and the results are published in the financial stability report. Also, bottom-up stress tests are being implemented by banks. Both of these exercises focus on credit risk and its link to macroeconomic indicators. Bank results are reflected in CAMEL rating.
		The CBJ's top-down stress testing framework is operating on a domestic consolidation basis. Further action is needed to collect the necessary data and build capacity in the CBJ for top-down stress testing on a globally consolidated basis.
Pass the draft insurance law, which will improve the governance of the Insurance Commission and its independence from government.	Implemented	The Law was published in the Official Gazette on the 16th of May 2021 and came into effect after 30 days. By virtue of the Law the supervision over the insurance industry is transferred from the Ministry of Industry and Trade and Supply (MITS) to the CBJ. It is worth mentioning that the Insurance Commission was abolished by the Reconstruction of the Public Institutions and Departments Law of the year 2014. The Law of 2014 transferred the supervision over the insurance industry to MITS and remained under its supervision until the current Insurance Regulation Law of the year 2021 was enacted. The Law empowers the CBJ with necessary supervisory and regulatory tools to ensure the safety and soundness of the insurance/reinsurance companies and protect the rights of
		the insured and beneficiaries. Also, the international standards, best practices and Insurance Core Principles were considered when the Law was drafted.
Introduce legislation on mutual funds.	Implemented	The JSC has issued the regulation of Mutual Funds No. (115) for the year 2018.
Restructure the motor third party liability insurance.	In progress	Restructure the motor third party liability (MTPL) insurance
		 Pursuant to Instructions No. (23) of 2010 "Instructions of Compulsory Motor Insurance Premiums and the Amendments Thereof": A discount of (15%) shall be given to premiums of compulsory insurance of Jordanian motors if they have not committed any traffic violation between the commencement date of the insurance policy had the date of its renewal. The insurance company may add (50%) maximum of the premium amount for the Jordanian motor if this motor has been the cause of one or more accidents during the insurance year. In addition to adding an amount not exceeding (100%) of the premium, if such motor has been the cause of one or more accidents and the accident caused one or more death incident(s); or one total disability or more incident(s).

 The insured shall bear the excess of the amount due (deductible) for each accident caused by the motor and it must be paid when submitting claim to the Insurance Company. This amount is JD8 for the motorcycle and JD40 for all other types of motors. The CBJ has begun recently consulting with the Jordan Insurance Federation and other stakeholders to agree on a roadmap for reviewing and restructuring the compulsory motor insurance applications. The premium level for MTPL has been set by the government and has not been changed since 2010. A special division dedicated to raising financial literacy and awareness for individuals has been established within the Financial Consumer Protection Department. Multiple financial literacy campaigns and sessions are implemented regularly in different governorates. Various financial literacy materials are being published electronically through the CBJ's Facebook page and website; moreover, printed versions are distributed during the campaigns. Financial consumer protection regulations include provisions to curb predatory lending.

Appendix II. Key Prudential Measures Taken by the CBJ in Response to the COVID-19 Pandemic



700 million and prolonged until 2023.

Appendix III. Stress Testing Matrix

Domain	Top-down stress test approach by the FSAP Team	
	Banking sector: Solvency Stress Test	
Institutional perimeter	 23 banks (100 percent of banking system assets), including foreign bank branches (all banks are subject to capital requirements). 	
	 Domestic consolidation (complemented by geography-specific assumptions on profits from foreign entities of Jordanian banks) 	
	Cut-off date: Balance sheets as of end-December 2021.	
Methodology and risk drivers	 Scenario-conditional simulation of various drivers of P&L will be assessed, including credit risk (through loan/securities loss provisions), (through interest income in the banking book and interest expense for deposits and wholesale funding), market risk (through mark-to-market revaluation of bond trading portfolios and FX-denominated positions), as well as other drivers such as fee and commission income. 	
	• To assess credit risk, the future loan loss provisions will be calculated based on trajectories of PDs and assumptions on LGDs. For the former, we will use a "satellite model" that links macrofinancial conditions to default rates which are implied by the NPL stock and write-offs. Since data on the sectoral breakdown of loan portfolios is only available since 2016 (spanning only six years), modeling of PDs will be done at the level of total loans, for which longer series of bank-by-bank data (starting from 2002) are available. An analysis of the correlation between bank-by-bank PDs and the loan portfolio structure in recent years will be carried out. For the LGDs, distinction will be made between "stress" and "normal times" LGDs based on a historical analysis of NPL coverage ratios and assumed changes in recovery rates (consistent with the drop in real estate prices).	
	• To assess interest risk, the scenario-dependent net interest income will be projected using a maturity gap approach. This approach identifies the interest-sensitive assets and liabilities and when they start to receive/pay new interest rates. It then quantifies the additional income gain/loss for each future time bucket.	
	The fee and commission income will be projected to follow a growth path that is consistent with the size of the banking business.	
	 Sovereign risk captured via valuation losses applied to the whole portfolio of own- government securities. In the adverse scenario, provisions on held-to-maturity (HTM) government securities portfolio will be applied on the basis of PD, proxied with the help of sovereign credit default swap spread. 	
Stress test horizon	• 3 years (2022-2024)	

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peg, the CBJ policy rate in the baseline is projected to evolve in line with the Fed rate forecast in the July 2022 WEO update.

Domain	Top-down stress test approach by the FSAP Team
	Banking Sector: Liquidity Stress Test
Institutional perimeter	23 banks, 100 percent of banking system assets, domestic consolidation basis
Methodology	 Assess banks' ability to cover net cash outflows using their counterbalancing capacity, accounting for contractual and behavioral cash flows. Assumptions on asset price evolution possibly aligned with scenario assumptions underlying the solvency stress test. Simulation done for total liquidity and separately for foreign currency liquidity; use of the LCR regulatory metric with customized stress parameterization in line with scenario and with historical stress episodes. The FSAP imposed bank-specific haircuts on HQLA Level 1 sovereign bonds, based on their duration and the interest rate increase in the solvency stress test's adverse scenario. The weighted average of bank-specific haircuts were 19.3 percent for domestic currency sovereign bonds and 10.3 percent for foreign currency sovereign bonds, as opposed to the zero haircuts in the regulatory LCR. Horizon: 30 days.
Bar	nking Sector: Contagion Analysis (using both exposure and market data)
Institutions included	Up to 23 banks /100 percent of banking system assets, domestic consolidation basis
Data	Bilateral exposures between all banks
	Equity prices for ten Jordanian banks
	Sovereign bond spread
Methodology	• Network contagion based on Espinosa-Vega and Sole (2010), which allows default cascade simulations at different LGD rates, is used for the exposure-based bilateral domestic contagion analysis. In a system with 23 banks, the interbank exposure matrix is a square matrix of size 23x23. The analysis considers interbank exposures using the annual average of 2021 daily overnight unsecured exposures and interbank deposits in FX. The portion of loss given default (λ) is set to 1, the loss factor due to a funding shortfall (δ) is also set to 1 corresponding to a haircut ratio of 50 percent, and the fraction of lost funding that is not replaceable (ρ) is set to 0.35. A sensitivity analysis also uses as inputs capital ratios adjusted for the results of the solvency stress test.
	 Market-based analysis based on the Diebold-Yilmaz (2014) framework to assess dynamic spillovers between banks as well as between banks and the sovereign.
	Corporate Sector: Scenario-Based Stress Testing
Entities included	Firms listed on the Amman Stock Exchange
Data	Corporate financial statements (2000—2021)
	The firm level data used in the analysis covers some 140 publicly listed firms, which account for about 20 percent of the Jordan's outstanding NFC debt.

Domain	Top-down stress test approach by the FSAP Team		
	Corporate Sector: Scenario-Based Stress Testing (concluded)		
Methodology	 Micro-macro models linking macrofinancial shocks with income, debt servicing cost, and other characteristics of individual entities. Scenario-conditional distribution of interest coverage ratios and cash ratios. 		
	 The key indicators of interest are defined as (i) profitability (measured by ROA), (ii) debt servicing ability (measured ICR), (iii) leverage (measured by debt-to-assets) and (iv) liquidity (measured by cash-to-assets). The evolution of these firms-level indicators is simulated over a 3-year period under the baseline and adverse scenarios which are the same as in the bank solvency stress test. Firm-level indicators are then weighted by debt to construct financial-stability-relevant aggregate vulnerability indicators. 		
	System-wide FX Liquidity: Interconnectedness Analysis		
Sectors included	 Government, central bank, banks, other financial institutions, nonfinancial corporates, households, and external sector 		
Data	Monetary and financial statistics, government finance statistics and international investment positions; by currency		
Methodology	 Network analysis depicting the topology of cross-sector and cross-border interconnectedness. The analysis simulates demand for central bank FX liquidity assistance, assuming FX liquidity shocks arising from the household and corporate sectors as well as nonresidents. 		
	 The framework is based upon sector-by-sector liquidity analysis and quantifies FX liquidity shortages under various assumptions and scenarios. The analysis assumed a 1-month duration of the stress episode. The funding gap of the banking system—after banks used their FX liquid assets and excess reserves to cover outflows—was assessed against the CBJ's international reserves. 		
	 Banks are assumed to liquidate their FX liquid assets—mostly foreign currency sovereign bonds issued by the Jordanian sovereign—to withstand the FX liquidity shock, with a 10.3 percent haircut applied on foreign currency sovereign bonds calibrated as in the bank liquidity stress test. 		
	Capital Flows at Risk		
Sectors included	 Government, central bank, banks, other financial institutions, nonfinancial corporates, and households. 		
Data	Balance of payments. National Accounts. Chicago Board Options Exchange Volatility Index (VIX).		
Methodology	 Quantile regressions to understand how the tails of the predictive distribution of capital flows react to global and domestic factors. 		
	 Jordan has an open capital account so a reversal in flows would increase risk premia and pose risks to Jordan's peg to the U.S. dollar. The analysis focused on different drivers—VIX as a proxy for external factors and Jordan's real GDP growth as a proxy for domestic factors—across the various components of aggregate nonresident capital flows. 		

Appendix IV. Report on the Observance of Standards and Codes (ROSC): Basel Core Principles

A. Introduction

- 1. This assessment of the implementation of the Basel Core Principles for Effective Banking Supervision (BCP) in Jordan has been completed as part of the 2023 FSAP.¹ This FSAP has been undertaken by the International Monetary Fund (IMF) and the World Bank (WB), and the BCP assessment mission took place between June 5 and June 23, 2022.
- 2. This assessment was against the standard issued by the Basel Committee on Banking Supervision (BCBS) in September 2012.² The 2022 FSAP assessment team reviewed the framework of laws, rules, guidance, and practices and held extensive meetings with authorities and market participants. The authorities have opted to be assessed against both essential and additional criteria, but to be graded only against the essential criteria. The authorities provided a comprehensive self-assessment of the BCPs, as well as detailed responses to an additional questionnaire, and facilitated access to staff and to supervisory documents and files on a confidential basis.
- 3. Compliance with the BCPs was evaluated in the context of the sophistication and complexity of the financial system of Jordan. The BCPs must be capable of application to a wide range of jurisdictions whose banking sectors will inevitably include a broad spectrum of banks. To accommodate this breadth of application, a proportionate approach is adopted within the BCP. An assessment of a country against the BCPs must, therefore, recognize that its supervisory practices should be commensurate with the complexity, interconnectedness, size, and risk profile and cross-border operation of the banks being supervised. In other words, the assessment must consider the context in which the supervisory practices are applied. The concept of proportionality underpins all assessment criteria. For these reasons, an assessment of one jurisdiction will not be directly comparable to that of another.
- **4. An assessment of compliance with the BCPs is not, and is not intended to be, an exact science.** Reaching conclusions required judgments by the assessment team.
- 5. The team appreciates the very high quality of cooperation received from the authorities. The team extends its warm thanks to CBJ staff, who provided excellent cooperation, including the provision of documentation and technical support.

¹ This Report has been prepared by Geraldine Low, IMF external expert and Damodaran Krishnamurti, World Bank.

² http://www.bis.org/publ/bcbs230.htm.

B. Preconditions for Effective Bank Supervision

- 6. An effective system of banking supervision needs to be able to effectively develop, implement, monitor, and enforce supervisory policies under normal and stressed conditions. The preconditions include:
- Sound and sustainable macroeconomic policies: See the section on Macrofinancial Context,
 Part A in this report.
- A well-established framework for financial stability policy formulation: See the section on Financial Sector Oversight, Part A in this report.
- A well-developed public infrastructure: Jordan's public infrastructure, including its legal system, oversight of professionals, accounting standards, and governance and supervision of other financial markets appears adequate. The legal system of business laws, including corporate, bankruptcy, contract, consumer protection and private property laws exist. National accounting and auditing standards are substantially equivalent to international principles. The banking sector, insurance sector, and financial markets have well defined rules to govern and supervise entities by the CBJ and the JSC/ASE respectively. The Jordan Credit Bureau provides credit information services in Jordan. On financial market infrastructures, see the section on Financial Sector Oversight, Part C in this report.
- A clear framework for crisis management and an appropriate level of financial safety nets: See the section on Financial Safety Net and Crisis Management in this report.
- **Effective market discipline:** Transparent information is provided by banks to the public in Jordan. CBJ's expectations for disclosure requirements for banks are compatible with the requirements of IFRS 7 which is considered in compliance with Pillar 3 of Basel II. All banks in Jordan (excluding foreign bank branches) are listed on the ASE and are therefore bound by the disclosure requirements established by the JSC/ASE.

C. Main Findings

- Responsibilities, Objectives, Powers, Independence (CP 1–2)
- 7. The legislative and regulatory framework has been updated over recent years, but more work is needed to clarify certain aspects of CBJ's mandate and to ensure the various regulations are adequate to support the primary laws. As the primary regulator of banks, CBJ's mandate in CBJ law to protect shareholders' interest can pose a conflict of interest vis-à-vis protection of depositors' interest. Hence, CBJ law should be amended to ensure that the function of protecting depositors' interest takes precedence over the function of protecting shareholders. Further, CBJ's involvement in the provision of medium and long-term financing under diverse subsidized lending programs to supervised entities is also considered a conflict of interest with its role as banking supervisor.

- 8. Although CBJ possesses the necessary operational independence, the level of vacancies in the BSD poses challenges in delivering effectively on its banking supervision mandate. Although CBJ has the necessary autonomy and independence to set/have an appropriate budget to ensure that adequate resources for the conduct of effective banking supervision and oversight are in place, the BSD at present has a high number of vacancies making it difficult for CBJ to effectively deliver on its mandate to supervise banks/banking groups. Going forward, CBJ will need to build its banking supervision staff complement to include not only an adequate level of staffing but the necessary technical risk expertise.
- Licensing, Changes in Control, and Acquisitions (CP 4–7)
- 9. Although CBJ's UBO Instructions correctly require the assessment of the ultimate "natural" person as part of its legislative approvals, in practice, the assessment does not go beyond the "legal" person. Although the UBO Instructions correctly describes the need to go beyond the legal person ownership to assess the natural person who owns the shares of banks, in practice, the CBJ licensing division, together with the onsite inspectors, do not appear to undertake an assessment of the UBO beyond the legal person. In addition, the Banking law or the UBO instructions should be amended to require the bank to notify CBJ if they become aware of any material information which may negatively affect the suitability of a major shareholder or a party that has a controlling interest.
- 10. CBJ possesses the authority to set prudential conditions upon the granting of banking licenses, but regulations need to be updated in key areas and rendered consistent with prudential standards. CBJ's Licensing Guidelines have many of the same criteria used for ongoing supervision, however these guidelines should be updated to reflect missing criteria (assess whether applicant's structure would impede effective supervision or the implementation of corrective measures); clarify existing criteria of the Guidelines to align the criteria with the current laws and regulations; and it should be made into an instruction/regulation so that the criteria is enforceable under the law.
- 11. CBJ's regulatory authority, including the criteria to judge individual proposals regarding major acquisitions and investments needs to be formalized. Neither the Banking Law nor regulations provide criteria by which to judge individual proposals for major acquisitions and investments and therefore formalizing criteria by which CBJ judges individual proposals (internal criteria exists and is used in practice) will provide clarity to the industry. Such criteria should be in the form of a regulation/instruction to ensure enforceability but also include assessment criteria that is consistent with licensing and ongoing supervision such as having the adequate financial, managerial, and organizational resources to handle the acquisition/investment as well as an adequate assessment of the ownership structure for potential risks from non-banking activities could pose to the bank/banking group.

- Supervisory Cooperation and Cross Border Supervision (CP 3, 12, 13)
- 12. CBJ needs to broaden its approach to consolidated supervision on a group wide basis to include applying prudential standards to all aspects of the business of the bank/banking group. CBJ supervises banks/banking groups on a consolidated "accounting" basis (rather than a prudential" basis) that includes all financial and non-financial companies, and affiliates. As a result, CBJ currently assesses prudential limits, including capital, liquidity, large exposures, related party transactions, lending limits, etc. only on a consolidated accounting basis and does not necessarily take into consideration the potential negative impact of the failure of a material affiliate could have on the overall financial health of the Jordanian bank/banking group. For example, a bank has a significant investment in an affiliate operating in a foreign jurisdiction. Currently, CBJ is not assessing this affiliate from a "step-in risk" perspective. If this affiliate were to fail, the D-SIB in Jordan would potentially be required to step-in to provide additional financial support to this entity from a reputational risk perspective. A shift therefore by CBJ to a "prudential lens" would include setting group wide prudential limits (e.g., liquidity, related party transactions, large exposures), as well as undertaking a deeper assessment on the group-wide risks associated with potential contagion (e.g., intra-group transactions and exposures) and reputational risk issues.
- 13. CBJ should continue with its efforts, to undertake both supervisory colleges and joint onsite inspections for banks/D-SIB with material cross-border operations. The largest D-SIB with significant cross-border operations, requires an elevated coordinated supervisory approach by CBJ as the home regulator. To ensure an adequate crisis management preparedness plan is in place, CBJ should consider adding an additional component onto the next supervisory college to address crisis management planning. The sharing of certain aspects of the recovery plans where necessary, the development of resolution plans and the finalization and implementation of the draft crisis binder will significantly improve CBJ's, as well as other national agencies and foreign regulatory authorities', level of preparedness for a major bank crisis.
- 14. Although CBJ has multiple bilateral MoUs in place with both domestic and foreign regulators, it needs to ensure these arrangements are up to date and cover key areas such as AML/CFT and crisis preparedness requirements. CBJ should consider updating its current bilateral MoUs as well as entering into a Multilateral MoU with relevant domestic agencies, including with the MoF to adequately operationalize its crisis management framework.
- Supervision (CP 8, 9, 10)
- 15. CBJ needs to review and revise its supervisory approach to adequately focus on, not only the financial performance of the consolidated banking group, but the prudential oversight of the "solo" bank as well. Currently, CBJ's supervisory approach focuses on the

³ BCBS, Core Principles for Effective Banking Supervision, December 2012, Point 22 states: In supervising an individual bank which is part of a corporate group, it is essential that supervisors consider the bank and its risk profile from a number of perspectives, on a *solo basis* (but with both a micro and macro focus); on a *consolidated basis* (in the sense (continued)

Jordanian operations (Jordanian branches) and on the consolidated "accounting" basis for supervision of banking groups. According to Basel's approach to the prudential oversight of banks, CBJ's supervisory approach should include the prudential oversight and analysis of banks, including both Jordanian branches and foreign branches. This would entail CBJ undertaking an ongoing risk rating/assessment of banks, including addressing the need to update its collection, review, analysis, and prudential reporting requirements to be in compliance with Basel's definition of "solo" assessment of bank's operations that include the entire bank.

- 16. CBJ needs to reassess its use of the CAMEL/ROCA supervisory risk rating methodology to ensure it is kept up to date, is forward looking, assesses the potential impact of entities in the broader group and introduces peer comparisons for context. CBJ's CAMEL/ROCA risk rating methodology attempts to include new and additional risk areas within this framework, however the methodology fails to provide a clear identification of the material risks that the banks/banking groups face, together with a clear view of the adequacy of risk management control practices that help mitigate these risks. The introduction of the use of a risk matrix would assist CBJ in keeping an up-to-date view of all material risks areas (credit, market, country, transfer, etc.) of banks/banking groups operations (on both a solo and consolidated basis) together with a view of the overall strength of the risk management control functions, while maintaining a view of the quality and strength of capital, assets, liquidity, and earnings.
- 17. CBJ needs to re-assess its use and mix of both onsite inspections, offsite monitoring requirements and the introduction of internal guidance regarding the frequency, mix and scope to improve the overall effectiveness of its banking supervision. Currently CBJ's onsite inspection program, when undertaken, is not risk based (too comprehensive including all aspects of the supervisory framework), takes too long for both the onsite component and the finalization of the inspection report (sometimes takes up to one year or longer to complete the process), resulting in stale or dated findings. The inspection report results in a CAMEL/ROCA risk rating for the consolidated group only. CBJ, therefore needs to implement standards for the frequency (D-SIBs should be visited on an acceptable frequency given systemic importance/cross-border operations/risk profile), timing (standards for completion and final delivery of the report), and scope (too comprehensive, lacks the use of thematic or focused reviews). In addition, the standards should include minimum requirements onsite inspection requirements to ensure adequate coverage of problem banks. Furthermore, inspection reports should also speak to the strength of banks/banking groups quality of risk management control functions and not just to deficiencies.
- 18. CBJ should review and reconsider the need to provide the "green light" regarding the issuance of banks/banking group's annual audited financial statements to free up BSD resources to dedicate to other key supervisory duties (onsite inspection program). Currently,

of supervising the bank as a unit together with the other entities within the "banking group") and on a *group-wide* basis (taking into account the potential risks to the bank posed by other group entities outside of the banking group). Group entities (whether within or outside the banking group) may be a source of strength but they may also be a source of weakness capable of adversely affecting the financial condition, reputation and overall safety and soundness of the bank.

BSD spends an inordinate amount of time validating/checking the work of the external auditor as part of its assessment of banks/banking group's audited annual financial statements. Even if BSD staff are undertaking an onsite inspection, this work must stop so that staff under this offsite monitoring process are legislatively required to review/validate this legislative requirement for "allowing" banks to proceed with the publication of the bank's audited financial statements. This process not only appears duplicative, as CBJ should be in a position to place reliance on the external auditor's work, but it could prove to be a moral hazard to be effectively signing off on these statements. Last, offsite monitoring should be dedicated to the updating of the risk matrix, assessment of emerging risk/macroeconomic indicators, peer group comparisons on performance, as well as ongoing changes in the broader banking group structure, especially intra-group transactions/exposures to assess any underlying reputational risk issues that could negatively impede the risk profile/health of the bank/banking group.

- Corrective and Sanctioning Powers of Supervisors (CP 11)
- 19. Although the Banking Law provides an adequate range of supervisory tools for CBJ to implement corrective measures, when necessary, the Framework for Corrective Measures is outdated and, in some respects, not used adequately by supervisors. CBJ's Framework for Corrective Measures (2004) is outdated, requires updated references for minimum prudential requirements (e.g., add liquidity) and adequate references to current laws, instructions, and orders. Further, CBJ may wish to contemplate making this guideline into a regulation to ensure its supervisory actions or decisions are not questioned when/if subject to an appeal process. Moreover, the assessors noted that for some banks that breach their minimum prudential requirements (e.g., capital), that banks are given some time to "get back on side" with the use of a "board approved plan", as CBJ inspectors were of the view that the total regulatory capital was so high, this would be an acceptable "corrective measure".
- Corporate Governance, Audit, and Financial Reporting (CP 14, 26–28)
- 20. CBJ's expectation with respect to the corporate governance for banks and Islamic banks are clearly set out in the Instructions for Corporate Governance (in each of the Instructions for conventional banks and Islamic banks). Although not completed at the time of the assessment, CBJ's Instructions are expected to be updated in the coming months to incorporate requirements for both conventional and Islamic banks under one regulation, but to also reflect certain key recommended changes. The next updated Instruction is expected to incorporate some key recommended changes such as to explicitly require board members to have a "duty of care" as well as the change composition of the Risk Management Committee to ensure no representation from senior executive management (no voting power), as this is perceived as a conflict of interest.
- 21. The regulatory and supervisory frameworks for internal control, internal audit, external audit, financial reporting, and disclosures are largely well established and effective. At the same time these can be further aligned with Basel Core Principles by making internal audit risk-based, providing explicit legal protection for external auditors for disclosing

confidential information to the CBJ during their engagement, allowing supervisors access to the working papers of external auditors, and requiring supervisors to hold periodic structured meetings with external auditors. CBJ can promote greater transparency by explicitly requiring banks to publicly disclose all material entities in the group structure, providing disclosure templates to promote standardized disclosures, and requiring banks to make such disclosures at dedicated webpages on their respective websites. CBJ can also improve the contents of its aggregated and periodic system level disclosures.

- Capital (CP 16)
- 22. Jordan's capital framework is aligned with best practices and proportionate to the risks and complexities of the local banking industry. Capital adequacy framework (Pillar 1) for banks operating in Jordan is compliant with the Basel requirements. The definition of capital, components of capital, quality of capital and use of buffers are aligned with Basel III requirements, while the methodologies/approaches for determining the risk weighted assets for the Pillar 1 risks (credit market and operational) are as per Basel II. No bank is implementing the advanced approaches for computing risk weights. All banks maintain capital in accordance with the standardized approach for credit risk and standardized maturity method for interest rate risk in trading book. For operational risk, 19 banks maintain capital as per the basic indicator approach and three under the standardized approach.
- **23.** The minimum capital requirements are higher than under the Basel framework and CET1 capital is significantly high. In effect, the minimum requirements are higher than the Basel requirement by 1.5 percent (of risk weighted assets) for all banks and by 3.5 percent for banks with a foreign presence. The average capital adequacy ratio for the banking system is comfortably above the minimum requirement. As at end December 2021, the average CET1 and Tier 1 ratios for the banking sector in Jordan (at the level of consolidated banks) was 16 percent and 16.4 percent respectively, and the total capital adequacy ratio was 17.3 percent. Eligible capital is clearly defined and aligned with international standards, thus, loss-absorbing going concern components are prioritized. As per regulations, additional tier 1 capital must not exceed 1.5 percent and tier 2 capital must not exceed 2 percent. This ensures that the highest quality capital (CET 1) is a significant major component (70 percent to 75 percent) of total regulatory capital. As at end December 2021, CET 1 capital for the banking system was close to 95 percent of total regulatory capital, and the minimum for a bank was 87.6 percent. Regulations also require banks to hold a minimum Tier 1 non-risk-based leverage ratio of 4 percent, as compared to the Basel III requirement of 3 percent.
- 24. All banks are required to submit their ICAAP assessment annually, however, CBJ needs to develop appropriate methodologies to assess Pillar 2 risks and the additional capital that banks might need to hold for such risks. Supervisors review banks' ICAAP documents for the scope of assessment and adequacy of capital held by the bank vis-à-vis its internal assessment of required capital. Where a bank's stress tests indicate that its capital adequacy is likely to be under threat in a stress situation, the bank is required to provide a capital restoration plan or other plans that the bank may have for avoiding the breach. During the past five years there was no occasion

where the CBJ required a bank to hold higher capital as a Pillar 2 requirement. CBJ should consider developing appropriate supervisory methodologies to assess Pillar 2 risks and the additional capital that banks might need to hold there against. Such methodologies can equip the supervisors to challenge or validate the internal assessments of capital by banks in their ICAAP documents. These can also help the CBJ in linking the currently required additional capital to specific risks.

- Risk Management (CP 15, 17–25)
- 25. The regulatory and supervisory framework promotes a culture of risk management among banks and is evolving, but enforceable regulations for the management of specific risks are lacking. Regulatory requirements and supervisory expectations for risk management are distributed over several regulations/instructions and in the Banking Law. CBJ has yet to issue enforceable regulations for the management of specific risks that are having dedicated core principles, for example, credit risk, market risk, operational risk, liquidity risk, interest rate risk in banking book. Hence, supervisors rely on the requirements laid down for overall risk management and risk governance for supervising banks' management of the above specific risks. The supervisory methodology for bank rating is CAMEL/ROCA, which is not adequately designed for providing a risk perspective to supervision. Where possible, risk management is assessed at the level of overall risk management and the framework is less intrusive about specific risks. Consequently, the supervisory guidance for assessing risk management in banks is available only at the level of overall risk management and risk governance.
- 26. Laws, regulations, and supervision focus on components of credit risk management rather than take a comprehensive approach to credit risk management. CBJ has explicitly required banks to establish risk management framework and processes, including for managing credit risk. However, these expectations have not been articulated in a separate regulation that is focused on credit risk management, that promotes a comprehensive approach to management of credit risk. CBJ supervises credit risk management in banks through its oversight of banks' credit and investment policies and activities. It supervises the requirements established in laws and regulations on specific credit risk elements such as requirements on asset quality classification and provisioning, large exposures, and related party exposures. The CAMEL framework looks at asset quality (under A) and investment and treasury department and overall risk management (under M). Regulation and supervision of credit risk management can be improved by issuing regulations focused on credit risk management and reorienting supervision, including CAMEL/ROCA, to adopt a comprehensive view of credit risk management.
- 27. Prudential and accounting frameworks jointly establish a clear framework for the identification of nonperforming exposures (NPEs) and creation of reserves (for performing exposures) and provisioning for NPEs. Nevertheless, several elements relating to asset classification, and restructuring/rescheduling and provisioning need to be improved and fully aligned with Basel principles and guidance. For example, delinking collateral from prudential classification, strengthening the framework for restructuring and rescheduling, explicitly requiring board policies for early identification and management of problem assets, and board oversight,

disallowing board discretion to permit exceptions to prudential classification and expected credit loss (ECL) estimations, reducing the threshold for requiring assessment of classification and provisioning on individual item basis, reviewing and revising the prudential provisioning requirements established in 2009, and improving offsite monitoring of quality and provisioning of credit risk exposures. CBJ should supplement this with periodic system-level analyses of trends and concentrations in relation to banks' problem assets, risk mitigants and risk mitigation strategies to inform system level policy and response.

- 28. Regulatory and supervisory frameworks for credit concentration are in place but need improvements, the related-party transaction framework needs significant improvement, and the frameworks for country and transfer risks need to be formally established. Laws and regulations have established a set of prudential requirements aimed at addressing concentration risk in banks, but they have not explicitly established as a set of supervisory requirements or expectations regarding banks' concentration risk management framework (e.g., governance, policies, processes, controls, oversight, and assurance). Regulatory requirements and supervisory expectations on other types of concentrations (e.g., sectoral, geographic, collateral) are not adequately explicit or detailed. The framework for regulating and supervising transactions with related parties is in place but should be significantly improved to align with the Basel norms on definitions of related parties and related-party transactions, on aggregate exposures to related parties and addressing potential conflicts of interest at levels below the board. Laws or regulations do not explicitly require banks to establish appropriate risk management policies, procedures, and arrangements for actively identifying, measuring, monitoring, and managing country and transfer risks. These need to be established and aligned with the requirements in the core principles.
- 29. Regulation and supervision of market risk, operational risk, and interest rate risk in the banking book (IRRBB) are carried out from the perspective of capital adequacy but need to be upgraded for IRRBB and operational risk. In the absence of enforceable regulations on these risks and the CAMEL/ROCA methodology, offsite and onsite supervision is still evolving for these risks—more work is needed. Given that market risks are not significant for most banks, and that banks generally do not deal in structured products, write options, or sell protection, the current legal, regulatory, and supervisory frameworks established in Jordan and actual practice, seem to be proportionate to the activities and risk exposures. However, the regulation and supervision frameworks for IRRBB (to which banks have material exposures) and operational risk need to be upgraded.
- **30. CBJ** requires banks to comply with three prudential liquidity risk requirements and supervises them closely. The framework offers scope for improvement as these are not applied at the level of the "solo" bank, nor applied or monitored at the level of individual significant foreign currency, nor supplemented adequately by other liquidity monitoring tools recommended by Basel. The framework can be adapted to also focus more on foreign currency liquidity risk management, particularly in banks carrying out significant foreign currency liquidity transformation.

- Abuse of Financial Services (CP 29)
- 31. Although CBJ's AML/CFT legislative framework pertaining to banks (e.g., the AML/CFT Law and Instructions) appears effective, the CBJ should ensure a continued focus on the banking sector, including an adequate onsite inspection program for large D-SIBs with cross-border operations. CBJ's AML/CFT risk assessment framework, including its offsite annual risk assessment by banks and its onsite inspection program (whether carried out by CBJ or the EA) appear to be extensive. However, CBJ needs to assure itself that D-SIBs' cross-border operations are adhering to AML/CFT requirements that are at least as conservative as CBJ's requirements. Further, CBJ's AML Department should ensure a continued focus on banks/banking group's compliance with AML/CFT legislative and regulatory requirements, especially in light of this Department's/CBJ's growing mandate to oversee AML/CFT requirements for other sectors (e.g., microfinance institutions, money exchange entities, insurance companies, etc.).

Tab	le AIV.1. Jordan: Summary Compliance with the Basel Core Principles
Core Principle	Comments
Responsibilities, objectives and powers	The legislative and regulatory framework has been significantly updated over recent years, but more work is needed to clarify certain aspects of CBJ's mandate and to ensure the various regulations are adequate to support the primary laws.
	CBJ Law specifically provides for the protection of shareholders (Art 4(B)(3)). As the primary regulator of banks, this mandate can pose conflict of interest vis-à-vis protection of depositors' interest. Hence CBJ law should be amended to ensure that the function of protecting depositors' interest takes precedence over the function of protecting shareholders.
	CBJ's involvement with providing supervised entities with medium and long-term financing under diverse subsidized lending programs is also a conflict of interest with its role as banking supervisor.
	Given the Banking Law is supplemented by CBJ's instructions, it is necessary for CBJ to update certain guidelines to instructions (licensing, corrective measures) and develop and implement missing risk guidelines/instructions. (e.g., market risk, IRRBB, etc.). These regulatory gaps are reflected in each of the applicable CPs.
2. Independence, accountability, resourcing and legal protection for supervisors	Although CBJ has the necessary autonomy and independence to set/have an appropriate budget to ensure that adequate resources for the conduct of effective banking supervision and oversight are in place, the Banking Supervision Department (BSD) at present has a high number of vacancies making it difficult for CBJ to effectively deliver on its mandate to supervise banks/banking groups (e.g. effectively re-instate its onsite inspection program to the same extent as pre-Covid level of supervisory activity). Further, the CBJ Law does not explicitly outline the requirement to publicly disclose the reasons for removal of the governor or board member. The Civil Law appears to protect employees against lawsuits for actions taken and/or omissions made while discharging their duties in good faith, however this protection does not appear to extend to the supervisor. In addition, the language in the CBJ Law or the Civil Law does not explicitly ensure both the supervisor and its staff are adequately protected against the costs of defending their actions and/or omissions made while discharging their duties in good faith (or in a legitimate way in accordance with Jordanian Law).

Table Al	IV.1. Jordan: Summary Compliance with the Basel Core Principles (continued)
Core Principle	Comments
3. Cooperation and collaboration	CBJ has in place many MoUs with relevant foreign regulators. In practice, CBJ makes use of the ability to share information informally, when needed. Pre-Covid, CBJ undertook onsite inspections in foreign jurisdictions, hosted a supervisory college for a D-SIB and exchanged /shared supervisory practices with certain foreign authorities. Post Covid, at a minimum, CBJ should re-engage more formally with material foreign authorities. In addition, MoUs with foreign authorities that are considered outdated should be updated to strengthen its ability to share or exchange supervisory information on a formal basis (see CP 12 and 13 for more information).
	Further, it is recommended that CBJ update its bilateral MoUs with relevant national authorities, to ensure the adequate exchange of information (including AML/CFT), although this is undertaken currently in an informal manner, and to contemplate entering into a Multilateral MoU with all relevant parties, including the MoF. The sharing of recovery plans, the development of resolution plans and the finalization and implementation of the draft crisis binder will significantly improve CBJ's, as well as national agencies and foreign regulatory authorities', level of preparedness for a major bank crisis.
	It is also recommended that the CBJ Law and the Banking Law be amended to explicitly allow for the sharing of supervisory information with domestic authorities and foreign regulators on a need basis.
4. Permissible activities	The Banking Law clearly states the permissible activities of banks, which are licensed and supervised by CBJ. There is a clear use for the word "bank" (within the meaning indicated below) and it is controlled.
	The Banking Law defines the word bank as meaning a licensed company that engages in banking activities including foreign bank branches. The Law does not define a foreign bank subsidiary; therefore, it would be beneficial to explicitly define the terms foreign bank branch and foreign bank subsidiary in the Banking Law for greater clarity.
5. Licensing criteria	Although the CBJ Law clearly states the power of CBJ's Board of Directors to both approve and revoke a bank license and CBJ's Licensing Guidelines have many of the same criteria used for ongoing supervision, these guidelines should be updated to reflect missing criteria (assess whether applicant's structure would impede effective supervision or the implementation of corrective measures); clarify existing criteria to align the criteria with the current laws and regulations; and it should be made into an Instruction/regulation so that the criteria is formally enforceable under the law (although CBJ is able to enforce its current requirements in practice).
6. Transfer of significant ownership	CBJ's UBO Instructions (issued in 2021) require that CBJ supervisory staff undertake UBO assessments with respect to a change in control request. The UBO Instructions provide an example of the ownership structure of a bank, focusing on the ownership structure below the bank. Although the UBO Instructions correctly describe the need to go beyond the legal person ownership to assess the natural person who owns the shares, in practice, the CBJ licensing department as well as the BSD onsite inspectors, do not appear to undertake an assessment of the UBO to the extent necessary (as demonstrated in an example).
	The Banking Law or the UBO instructions should be amended to require the bank to notify CBJ if they become aware of any material information which may negatively affect the suitability of a major shareholder or a party that has a controlling interest.

Table AIV	Table AIV.1. Jordan: Summary Compliance with the Basel Core Principles (continued)		
Core Principle	Comments		
7. Major acquisitions	Although neither the Banking Law nor regulations provide explicit criteria by which to judge individual proposals CBJ does have internal criteria that it utilizes effectively in practice to judge a proposal for a bank merger. It is recommended that CBJ update and formalize criteria in the form of Instructions to ensure banks and industry are aware of its expectations and criteria by which CBJ judges individual major acquisition proposals. For example, such criteria should include an assessment of whether the bank is exposed to undue risks or that the acquisition/investment will hinder effective supervision or the effective implementation of corrective measures in the future. Also, such criteria should consider the potential risks that the non-banking activities could pose to a banking group.		
8. Supervisory approach	Although CBJ collects some information on an individual bank basis, CBJ's supervisory assessment and risk rating is only undertaken at the consolidated level and does not assess the individual banks within the group on an adequate "solo" basis (Jordanian branches as well as foreign branches of the Jordanian bank). This includes a lack of a risk assessment/risk profile for banks both for onsite and offsite monitoring perspective.		
	Further, CBJ's CAMEL/ROCA risk rating methodology is only assessed at the time of the onsite inspection and therefore is not kept up to date, is not forward looking (lacking a view of the potential impacts of macroeconomic indicators) and does not assess the entities in the broader group for potential impacts on the safety and soundness of the bank, nor does the methodology make use of peer comparisons.		
	CBJ's annual stress testing program provides a limited view, of only the Jordanian branches, under certain scenarios. CBJ inspectors will need more frequent views, including "cross sectoral analysis/information" The Financial Stability Department should consider providing the onsite inspectors with more frequent views of the emerging risk factors, throughout the year, in order for BSD to adequately assess emerging risk issues that could negatively impact the financial health of the bank/banking group.		
	The introduction of the use of a risk matrix would assist CBJ in keeping an up-to-date view of all material risks areas (credit, market, country, transfer, etc.) of banks/banking groups operations (on both a solo and consolidated basis) together with a view of the overall strength of the risk management control functions, with an underlying view of the quality and strength of capital, liquidity, and earnings.		
	Last, CBJ's onsite inspection teams are required to give the green light for the issuance of the annual audited financial statements of banks), which is somewhat intensive and impedes the inspector's ability to spend more time assessing other qualitative aspects of supervision (e.g., undertaking focused risk-based inspections/reviews of banks/banking groups control frameworks).		

Table AIV.1. Jordan: Summary Compliance with the Basel Core Principles (continued)		
Core Principle	Comments	
9. Supervisory techniques and tools	CBJ needs to re-assess its use and mix of both onsite inspections (to move towards a more risk-based approach) and offsite monitoring (to implement an update to the risk profile/risk rating) which currently includes the need to sign-off on annual audited financial statements of banks and banking groups. In addition, CBJ should consider adding some additional supervisory tools, including incorporating a business model assessment and horizontal peer comparisons to be more aligned with Basel requirements.	
	CBJ also needs to implement standards for the frequency (D-SIBs should be visited on an acceptable frequency given systemic importance/cross-border operations), timing (inspections take too long, including onsite and the finalization of reports) and scope (too comprehensive, lack of thematic or focused reviews) of its onsite inspection program to ensure adequate coverage of D-SIB and problem banks. Further, inspection reports should also speak to the strength of banks/banking groups quality of risk management control functions and not just to deficiencies. It is acknowledged that CBJ's newly developed IMS is expected to greatly assist supervisors' planning processes (beginning in 2023), as well as assisting in the development of standards for the scope/timing and depth of onsite inspection programs.	
	CBJ needs to update its supervisory planning processes to ensure the overall supervisory work is focused on the material risks faced by the banks; make use of the standard referred to in the paragraph above, ensuring adequate coverage for both systemic banks, but problem banks as well. It should look forward more than one year from a planning perspective and overlay an assessment of the staff required to accomplish the supervisory plan (and highlight what cannot be achieved due to a lack of staffing or a certain kind of technical risk expertise).	
10. Supervisory reporting	Although CBJ collects, reviews, and analyses prudential reports and returns from banks, its collection of information on a "solo" basis is considered a deficiency as CBJ's Circular on Financial Statements, directs banks to submit financial statements, on a semi-annual and annual basis, on a "solo" basis (only for Jordanian banks which includes Jordanian branches but not the bank's foreign branches) and on a consolidated basis. According to Basel's definition of a "solo" basis for the banks, CBJ should be collecting all necessary prudential information to support CBJ's analysis and assessment on a solo basis (see CP 8 for more information), including the information on foreign branches of the Jordanian banks.	
11. Corrective and sanctioning powers of supervisors	The Framework for Corrective Measures is outdated, requires updated references for minimum prudential requirements (e.g., liquidity) and adequate references to current laws, instructions, and orders. Further, given that the Framework for Corrective Measures is not enforceable under the Banking Law, it may be beneficial to update this document to an Instruction to help clarify CBJ's power to utilize its corrective measures. Although the Framework for Corrective Measures has some weaknesses stated above, in practice, CBJ effectively utilizes tools in the Banking Law which supports effective intervention with problem banks on a timely basis.	
	The Banking Law does not specifically indicate that CBJ would make use of its various supervisory tools in order to intervene at an early stage to require banks to take action to prevent a breach in regulatory requirements.	
	In addition, the provisions in the Banking Law enabling interested parties to appeal CBJ decisions, may impede CBJ's ability to effectively take necessary decisions/actions on a timely basis. Therefore, such appeal processes should be limited to actions taken in bad faith only.	

Table A	IV.1. Jordan: Summary Compliance with the Basel Core Principles (continued)	
Core Principle	Comments	
12. Consolidated supervision	In general, CBJ supervises banks/banking groups on a consolidated "accounting" basis that includes all financial and non-financial companies, and equity investments in affiliates. As a result, CBJ currently assesses prudential limits, including capital, liquidity, large exposures, related party transactions, lending limits, etc. on a consolidated basis and not on a prudential basis.	
	The definition of "banking group" should include the holding company, the bank and its offices, subsidiaries, affiliates, and joint ventures, both domestic and foreign. Risks from other entities in the wider group, for example non-bank (including non-financial) entities, may also be relevant. This group-wide approach to supervision goes beyond accounting consolidation.	
	Currently, CBI does not necessarily take into consideration the potential negative impact the failure of a material affiliate for example could have on the overall financial health of the Jordanian bank/banking group.	
	For example, a bank has a significant investment in an affiliate operating in a foreign jurisdiction. Currently, CBJ is not assessing this affiliate from a "step-in risk" perspective. If this affiliate were to fail, the D-SIB in Jordan would potentially be required to step-in to provide additional financial support to this entity from a reputational risk perspective.	
	CBJ's approach to consolidated supervision on a group wide basis does not include applying prudential standards to all aspects of the business by the bank/banking group on a worldwide basis to include for example material affiliates where the bank/banking group has a significant controlling interest as well as the analysis of and unconsolidated entities in the banking group. CBJ has not set prudential limits (e.g. capital, liquidity, related party transactions, etc.) applicable on a group wide basis (only on an accounting basis), as well as undertaking a deeper assessments on the group-wide risks associated with potential contagion and reputational risk issues, including the need to collect and monitor intra group transactions and exposures.	
	CBJ should further ensure a holistic view of the risks for the entire banking group. CBJ also need to re-engage its onsite inspection program for D-SIBs with material cross-border operations to ensure a group-wide supervision.	
13. Home-host relationships	In the past, CBJ has undertaken to share prudential information with host jurisdictions on an informal basis (many MoUs are in place), has conducted a joint inspection as well as undertaken other onsite inspections in foreign jurisdictions and has hosted a supervisory college for a D-SIB (all pre-Covid).	
	CP3 has included a recommendation to update outdated MoUs to ensure an adequate sharing of supervisory information is undertaken. Further, CP3 has indicated a recommendation to review and potentially amend the CBJ Law and the Banking Law to allow CBJ to formally share confidential supervisory information with relevant authorities on a timely basis (currently this is undertaken on an information basis).	
	CBJ continue to undertake supervisory colleges with D-SIBs with material cross-border operations and potentially to undertake such colleges with other banks (e.g., if CBJ deems that any other banks have material cross-border operations) simultaneously. This would potentially increase participation by enabling host jurisdictions to attend the college to cover more than one bank and streamline the level of effort by CBJ to host colleges. Also, CBJ should add a component to future supervisory colleges that explicitly covers crisis preparedness, wherein certain aspects of the D-SIB recovery plans could be discussed, as well as working towards the introduction/implementation of group wide resolution plans.	

Table AIV.1. Jordan: Summary Compliance with the Basel Core Principles (continued)	
Core Principle	Comments
14. Corporate governance	CBJ's expectation with respect to the corporate governance for banks and Islamic banks are clearly set out in the Instructions for Corporate Governance (in each of the Instructions for conventional banks and Islamic banks). Assessors acknowledge that updated Instructions for Corporate Governance were expected to be finalized and released to the industry later in 2022. This is important as some recommended changes can be incorporated into these updated Instructions (e.g., require board members to have a "duty of care" and a change in the ability of a senior executive management representative should not be allowed as part of the Board Risk Management Committee as this is perceived as a conflict of interest).
15. Risk management process	The regulatory requirements and supervisory expectations on risk management are distributed over several regulations and in the Banking Law. CBJ is yet to issue enforceable regulations for the management of specific risks that are having dedicated core principles. Consequently, the supervisory guidance for assessing risk management in banks is available only at the level of overall risk management and risk governance. Other gaps pertain to internal use of models to measure components of risk, and how banks account for risks in their internal pricing, performance measurement and product approvals.
16. Capital adequacy	Capital adequacy framework (Pillar 1) for banks operating in Jordan is in line with the Basel requirements and yet requires banks to hold much higher minimum capital, including for D-SIBs. CBJ can consider making the additional capital more risk sensitive by establishing a linkage with Pillar 2 risks, and/or risk profile and systemic importance of banks to allow it to better articulate and recalibrate/modulate the additional capital required of banks, without imposing immediate additional capital burden on the banks.
17. Credit risk	Laws, regulations, and supervision adopts portfolio approach to credit risk management (credit and investment). Supervisory expectations for and supervision of credit risk management is supported by the requirements established in laws and regulations on specific credit risk elements such as requirements on asset quality classification and provisioning, large exposures and related party exposures, and the supervision of these elements disparately. There are a few gaps regarding requirements in regulatory and supervisory requirements pertaining to establishment of appropriate and properly controlled credit risk environment, and in other areas where regulations and supervisory focus might not be explicit. Though these do not prevent the supervisors from exercising supervision on these elements, CBJ and banks can benefit by making credit risk management an explicit component of risk management requirements and supervisory focus and assessment.
18. Problem assets, provisions, and reserves	Prudential and accounting frameworks jointly establish a clear framework for identification of NPEs and creation of reserves (for performing exposures) and provisioning for NPEs. However, the following elements of the prudential framework deviate significantly from sound principles that can result in overstating the asset quality in banks and therefore some element of under provisioning: (a) collateral can influence asset classification; (b) restructuring and rescheduling can allow banks to either avoid classifying an exposure as nonperforming or upgrade an exposure as performing; (c) repeated restructuring or rescheduling is explicitly permitted in regulations with relatively mild prudential consequences; (d) bank boards can allow exemptions to the classification determined by the CBJ's prudential norms, with CBJ's approval and ECL estimated by internal systems; (e) a high threshold is set for classification and provisioning assessment on individual item basis; and (f) prudential provisioning requirements set in 2009 have not been reviewed or updated since. CBJ should address the above gaps, improve its offsite monitoring of quality and provisioning of credit risk exposures, consider undertaking periodic, system-level analyses of trends and concentrations in relation to banks' problem assets, risk mitigants and risk mitigation strategies to inform system level policy and response that may be required.

Table AIV	Table AIV.1. Jordan: Summary Compliance with the Basel Core Principles (continued)	
Core Principle	Comments	
19. Concentration risk and large exposure limits	Laws and regulations have established a set of prudential requirements aimed at addressing concentration risk in banks, but they have not explicitly established a set of supervisory requirements or expectations regarding banks' concentration risk management framework (e.g., governance, policies, processes, controls, oversight, and assurance). Counterparty concentration	
	is the main focus, but with some gaps—solo bank focus is partial (Jordan branches only), supervisory reporting does not include exempted exposures, allows case-by-case exemptions by CBJ to exceed prudential limits, and gross exposures are not monitored actively. Regulatory requirements and supervisory expectations on other types of concentrations (e.g., sectoral, geographic, collateral) are not adequately explicit or detailed.	
20. Transactions with related parties	Regulation and supervision have key deviations from Basel norms: definition of related parties is incomplete, related party transaction has not been explicitly and comprehensively defined, the prudential limit on banks' aggregate exposure to related parties is liberal, there are gaps in the governance requirements, incomplete view of solo bank (only Jordanian branches), and the absence of explicit and comprehensive supervisory (prudential) reporting requirement for	
	transactions with related parties. These collectively result in significant gaps in the prudential regime for transactions with related parties.	
21. Country and transfer risks	Laws or regulation do not explicitly require banks to establish appropriate risk management policies, procedures, and arrangements for actively identifying, measuring, monitoring, and managing country and transfer risks. The frameworks also lack details on measurement and grading of exposure to country and transfer risks, periodical reporting of these exposures to CBJ, provisioning requirements for these risks, and for stress testing country and transfer risk exposures. Supervision of banks' management of country and transfer risks is not explicit in the current onsite and offsite frameworks.	
22. Market risk	Regulatory and supervisory requirements and expectations regarding market risk management in banks is largely based on the capital adequacy perspective, portfolio perspective (investments, classification, and valuation as per IFRS), and management of foreign currency risks through prudential limits on net open positions. Given that market risks are not significant for most banks, and that banks generally do not deal in structured products, write options, or sell protection, the current legal, regulatory, and supervisory frameworks established in Jordan and actual practice, seem to be proportionate to the activities and risk exposure.	
23. Interest rate risk in the banking book	Risk management requirements for management of IRRBB are as guidelines, which are not enforceable. CBJ's supervisory guidance for onsite inspections contained in the CAMEL and ROCA frameworks do not explicitly require supervisors to review and assess management of IRRBB in banks or provide guidance on how this can be achieved. Supervisors tend to assess IRRBB as part of the review of ICAAP documents received from banks, and while assessing the overall risk management frameworks in banks. As banks have material exposure to IRRBB, CBJ must make the regulatory and supervisory requirements/expectations more explicit, formal, and binding, and strengthen supervision of management of IRRBB in banks.	
24. Liquidity risk	The three liquidity risk requirements deployed and closely supervised by CBJ have some gaps: these are not applied at the level of the solo bank, not applied or monitored at the level of individual significant foreign currency, not supplemented adequately by other liquidity monitoring tools recommended by Basel. Regulations and supervision do not focus adequately on foreign currency liquidity risk management in banks carrying out significant foreign currency liquidity transformation.	

	Table AIV.1. Jordan: Summary Compliance with the Basel Core Principles (concluded)	
Core Principle	Comments	
25. Operational risk	Risk management requirements for operational risk management are as guidelines, which are not enforceable. CBJ's supervisory guidance for onsite inspections contained in the CAMEL and ROCA frameworks do not explicitly require supervisors to review and assess management of operational risk in banks or provide guidance on how this can be achieved. Supervisors tend to assess operational risk from a capital adequacy perspective (Pillar 1 and ICAAP). Yet, supervisors have taken action against a large bank to mitigate the weaknesses in its operational risk management.	
26. Internal control and audit	The legal, regulatory, and supervisory frameworks established in Jordan for internal control and audit, and actual practice, indicate that these are mostly in line with the requirements of this core principle. Regulations and supervisory expectations can be strengthened to make internal control and audit more effective by explicitly requiring internal audit to be risk-based, requiring adequate and appropriate resourcing of control functions, and assuring adequate authority.	
27. Financial reporting and external audit	The legal, regulatory, and supervisory frameworks established in Jordan for financial reporting and external audit, and actual practice, indicate that these are mostly in line with the requirements of this core principle. Some areas for improvement in regulations and supervision include: providing legal protection to the external auditors for sharing any confidential information with the CBJ in discharge of their duties, requiring external auditors to notify CBJ about instances of bank's failure to comply with the licensing criteria or breaches of banking or other laws, requiring that the structure and process for fair value estimation are subject to independent verification and validation, and establishing a system whereby the supervisors hold periodic (at least annual) and structured meetings with the external auditors of the banks that they supervise to discuss issues of common interest relating to bank operations. At present, CBJ does not have the power to access the working papers of external auditors.	
28. Disclosure and transparency	The legal, regulatory, and supervisory frameworks established in Jordan for financial reporting and external audit, and actual practice, indicate that these are mostly in line with the requirements of this core principle. Areas where there is scope for improvement include explicitly requiring banks to publicly disclose all material entities in the group structure, providing disclosure templates to promote standardized disclosures, and requiring banks to make such disclosures at dedicated webpages on their respective websites. CBJ can also improve the contents of its aggregated and periodic system level disclosures.	
29. Abuse of financial services	The AML/ATF legislative framework (including the AML/CFT Law, the Banking Law and the AML/CFT Instructions) pertaining to banks in CBJ's mandate appear to be effective. Further, CBJ's AML/CFT risk assessment framework, including its offsite annual risk assessment by banks and its onsite inspection program (whether carried out by CBJ or the EA) appear to be extensive. However, CBJ needs to assure itself that D-SIBs' cross-border operations are adhering to AML/CFT requirements that are at least as conservative as CBJ's requirements.	
	Certain outdated MoUs with both domestic agencies (JODIC and JSC) and foreign regulators need to be updated to reflect more specific information sharing regarding bank's/banking group's compliance with CBJ's AML/CFT legal and supervisory requirements. CBJ's AML Department should ensure a continued focus on banks/banking group's compliance with AML/CFT legislative and regulatory requirements, especially in light of this Department's requirement to oversee AML/CFT requirements.	

D. Recommended Actions

32. Table A2 below provides a set of recommended actions to improve compliance with the Basel Core Principles and the effectiveness of regulatory and supervisory frameworks:

	Table AIV.2. Jordan: Recommended Actions
Reference Principle	Recommended Action
Principle (1)	 Amend the CBJ Law and the Banking Law to remove the provision for CBJ to protect shareholders.
	 Review checks and balances on a regular basis to ensure that other objectives (e.g., developmental objectives, helping financial consumers) are subordinate to safety and soundness of the financial sector. Gradually reduce CBJ's involvement, both direct and indirect, with providing supervised entities financing.¹ Develop and implement regulations pertaining to the material risk domains.
Principle (2)	 Ensure effective supervisory planning (both on/offsite inspections) supported by adequate staffing levels, including technical risk expertise, within the BSD to effectively deliver on its mandate to supervise banks/banking groups.
	 Amend either the Civil Law or the CBJ Law to strengthen to explicitly ensure protection for both supervisors and staff against lawsuits for actions taken and/or omissions made while discharging their duties in good faith and for protection against the cost of defending.
Principle (3)	 Update bilateral MoUs with domestic authorities and contemplate entering a Multilateral MoU with all relevant agencies, including the MoF, and finalize/implement the draft crisis management binder with domestic agencies.
	Share recovery plans, develop resolutions plans on a group-wide basis with foreign regulators as well as update outdated MoUs, where necessary.
	 Consider reviewing and amending the CBJ Law and the Banking Law to allow for the sharing of confidential supervisory information with domestic and foreign regulators on a need basis.
Principle (4)	 Introduce the definition of a foreign bank branch and a foreign bank subsidiary in the Banking Law, when appropriate, to clarify the use of the term "bank".
Principle (5)	Update the Licensing Guideline to an Instruction, include missing criteria (assess whether applicant's structure would impede effective supervision or the implementation of corrective measures) and clarify criteria to align with the current laws and regulations.
1 This does not include mo	onetary policy implementation purposes, provision of emergency liquidity assistance, and provision of intraday liquidity to facilitate the settlement of large payments.

	Table AIV.2. Jordan: Recommended Actions (continued)	
Reference Principle	Recommended Action	
Principle (6)	Ensure UBO assessment goes beyond the "legal person" to the "natural person" to ascertain who ultimately owns the banks/banking groups, including performing due diligence on the natural person.	
	 Amend the Banking Law or UBO Instruction to require banks to notify CBJ if they become aware of any material information which may negatively affect the suitability of a major shareholder or party that has a controlling interest. 	
Principle (7)	Develop an Instruction that formalizes CBJ's internal criteria to judge major acquisitions, including an assessment of undue risk that the acquisition will hinder effective supervision, the implementation of corrective measures or risks to the banks/banking groups from non-banking activities.	
Principle (8)	 Update the supervisory approach to assess not only the consolidated bank/banking group but the individual banks within the group on a more adequate "solo" basis (Jordanian branches as well as foreign branches of the Jordanian bank). 	
	Re-assess CBJ's CAMEL/ROCA risk rating system to ensure it is risk based.	
	Obtain and use key macroeconomic indicators on emerging risks to incorporate a forward-looking view in its assessment of the risk profile.	
	• Expand CBJ's annual stress testing exercise to include a "consolidated" and "solo" view, not just a Jordanian operations view.	
	 Undertake cross sectoral assessments, including incorporating an assessment of the potential impacts from entities in the broader group. 	
	• Introduce a risk matrix to help keep an up-to-date view of the overall risk profile and therefore risk rating of banks/banking groups.	
	Reassess the need to provide a green light on annual audited financial statements to free up supervisory resources to focus on more qualitative aspects of supervision.	
Principle (9)	Reassess the use and mix of both onsite inspections and offsite monitoring.	
	 Adopt additional supervisory tools, including business model analysis and horizontal peer reviews. Improve its supervisory planning processes. Implement standards for the frequency, timing, and scope of its onsite inspection program. 	
Principle (10)	Update its collection, review, analysis, and prudential reporting requirements to be in compliance with Basel's definition of "solo" assessment of bank's operations (to include Jordanian banks and both domestic and foreign branches).	

	Table AIV.2. Jordan: Recommended Actions (continued)	
Reference Principle	Recommended Action	
Principle (11)	Update the Framework of Corrective Measures to an Instruction, to help clarify and enforce CBJ's use of corrective measures.	
	• Ensure the Framework has up to date references to laws, instructions and incorporate key prudential requirements (e.g., liquidity).	
	 Update the Banking Law provisions to a) explicitly indicate that CBJ would make use of its various supervisory tools in order to intervene at an early stage to require banks to take action to prevent a breach in regulatory requirements and b) limit the ability to appeal CBJ's decisions to actions taken in bad faith. 	
Principle (12)	 Adopt consolidated supervision that goes beyond "accounting" to prudential supervision, including setting group-wide prudential requirements. 	
	• Undertake assessments of bank's material investments of affiliates to assess the step- in risk from both a reputational and financial impact to the bank/banking group.	
	Collect and monitor all intra-group transactions and exposures to adequately assess contagion risk.	
	Assess the other non-financial entities in the banking group to understand potential impact on the bank/banking group.	
	 Create a group-wide supervisory group for the large D-SIBs with a lead supervisor to ensure a holistic view of the risk profile and collectively undertake consolidated supervision. 	
	Ensure foreign regulators for conglomerates with material cross-border operations are informed of CBJ's expectations plus augment the contact and sharing of adequate information with these regulators to support consolidated supervision.	
Principle (13)	Undertake supervisory colleges with D-SIB/banks with material cross-border operations at the same time to ensure greater attendance, and to include a crisis management component (e.g., to share/discuss D-SIB recovery plans, where needed, and begin group-wide resolution planning)	
Principle (14)	Update the Instructions for Corporate Governance to include the requirements for "duty of care" for board members.	
	 Update the Banking Law and Instructions for Corporate Governance to ensure that a member of the senior executive management may not be allowed to sit as a member of the Board's Risk Management Committee. 	

	Table AIV.2. Jordan: Recommended Actions (continued)	
Reference Principle	Recommended Action	
Principle (15)	Streamline the regulatory framework for risk management, and issue risk specific regulations for the material risks.	
	 Explicitly include requirements and supervisory expectations on internal use of models to measure components of risk, and how banks account for risks in their internal pricing, performance measurement and product approvals. 	
Principle (16)	 Make the currently required higher capital (than Basel requirements) more risk sensitive by establishing a linkage with Pillar 2 risks, and/or risk profile and systemic importance of banks 	
Principle (17)	 Clarify explicitly regulatory and supervisory requirements/expectations pertaining to establishment of appropriate and properly controlled credit risk environment (EC 3 elements), and credit risk management (strategy, policies, and processes) specific to credit risk management. 	
Principle (18)	 Review and revise the prudential framework for classification and provisioning to address the deviations from Basel principles and guidance, to explicitly require board approved policies and processes for identifying and managing problem assets, to improve board oversight and to improve CBJ offsite monitoring of quality and provisioning of credit risk exposures. 	
	 Undertake periodic system-level analyses of trends and concentrations in relation to banks' problem assets or risk mitigants or risk mitigation strategies to inform system level policy and response, that may be required. 	
Principle (19)	 Review and revise regulations to introduce a more comprehensive approach to supervision of concentration risk management in banks, that addresses the gaps identified in the assessment. Improve clarity in regulations on control and economic interdependence instead of allowing case-by-case exemptions. 	
	 Make the regulatory requirements and supervisory expectations more explicit and detailed for management of the types of concentrations (e.g., sectoral, geographic, collateral). 	
	 Make corresponding changes to the supervision manual, offsite reporting, and analyses, to strengthen the Supervisory Review and Evaluation Process with reference to concentration risk management by banks. 	

	Table AIV.2. Jordan: Recommended Actions (continued)	
Reference Principle	Recommended Action	
Principle (20)	 Review and comprehensively revise the regulation and supervision of exposures to and transactions with related parties to bring these on par with the specific requirements of this core principle. 	
	 Make corresponding improvements to the offsite reporting and analyses, and guidance provided in supervision manuals for conducting onsite supervision of transactions with related parties. 	
Principle (21)	 Explicitly establish regulatory requirements and supervisory expectations on identification, measurement, monitoring and management of country and transfer risks from immediate and ultimate risk perspectives; including grading these risk exposures and provisioning therefor. 	
	Introduce appropriate prudential reporting requirements, and revisions to supervisory manual.	
	 Provide appropriate training and capacity building to enhance relevant supervisory skills. 	
Principle (22)	 Issue revised regulations that articulate the supervisory expectations from a more comprehensive market risk management perspective for each material component of market risk as relevant (e.g., interest rate risk in trading book, foreign currency risk, equity risk), to provide improved risk focus to supervision. 	
	These can be supported by appropriate revisions to the supervision manual.	
Principle (23)	 Issue enforceable regulation on the management of IRRBB, that clearly articulates the supervisory expectations based on Basel Committee norms and principles mentioned in its Standard on "Interest Rate Risk in the Banking Book" issued in April 2016. 	
	 Supplement this with relevant revised offsite reporting templates, supervisory methodologies for assessment of banks' exposure to IRRBB and the potential impact on banks' capital. 	
	• Incorporate the above and other specific elements relevant for supervision of IRRBB in banks in the supervision manual.	
	 Provide appropriate training and capacity building to enhance relevant supervisory skills. 	

	Table AIV.2. Jordan: Recommended Actions (continued)	
Reference Principle	Recommended Action	
Principle (25)	 Formalize regulatory requirements and supervisory expectations for operational risk management by banks through enforceable regulations; consider including Basel Committee's latest principles issued in March 2021 on sound management of operational risk and on operational resilience. 	
	Strengthen regulation by explicitly laying down the regulatory and supervisory expectations regarding outsourcing by banks.	
	 Modify the offsite framework to systematically collect, maintain and use periodic and structured operational risk event and loss data. 	
	 Incorporate the above and other specific elements relevant for supervision of operational risk management in banks in the supervision manual. 	
	 Provide appropriate training and capacity building to enhance relevant supervisory skills. 	
Principle (26)	 Review and revise laws, regulations, and supervisory manual/guidance to achieve the following (a) formalize the internal audit function as risk-based internal audit, (b) require that the bank's back-office (control) functions must have an adequate balance in the skills and resources and have sufficient expertise and authority within the organization to be an effective check and balance to the business origination units. 	
Principle (27)	 Review and revise laws, regulations and supervisory manual/guidance to address the identified gaps. 	
	Propose amendment to the Banking law (and any other relevant law(s)) to have the power to access the working papers of external auditors.	
Principle (28)	 Review and revise laws, regulations and supervisory manual/guidance to address the address the identified gaps. 	
	 Make more disclosures on CBJ website, on financial performance and prudential indicators at aggregated level or at the disaggregated level to further promote transparency and market discipline, without compromising on the confidentiality of disclosures. 	
Principle (29)	 Continue to ensure D-SIBs with material cross-border operations are considered a priority for CBJ's onsite inspection program. Update MoUs with domestic and foreign regulators to ensure adequate information sharing arrangements are in place to address AML/CFT requirements. Ensure a continued focus of AML staff on the banking sector given CBJ's expanded mandate. 	

E. Authorities' Response to the Assessment

- **33.** The Jordanian authorities provided the following response to the assessment:
- **34.** "The Jordanian authorities thank the members of the FSAP Mission (with special thanks to the BCP team) for their dedicated, professional, and thorough work in the Jordanian Financial System Assessment Program (FSAP). Addressing the different topics under evaluation, not only with the supervisory authorities, but also with participants from the industry, sectors, and other related parties.
- **35.** As a result of this exercise, the progress made by supervisory authorities in Jordan since the last FSAP mission which took place during the period (2003-2004) and its update during the period (2008-2009) is highlighted. Thus, recognizing the country's commitment to reinforce the recommendations as indicated in the current policies, regulations, and supervisory practices on the financial system and evident to the highest international standards.
- **36.** Notwithstanding of the final grading for CPs, CBJ believes that it is important to take into account the tremendous developments and improvements that have taken place in the supervisory framework in Jordan, as well as having many topics that are still under development especially with regard to risk management.
- **37.** Regarding CP 8 supervisory approach, the procedures to apply IMS (Inspection Management System) have been finalized and launched formally. This system will enable CBJs supervisors to keep an up-to-date view of all material risk areas (credit, market, country, transfer, etc.) of banks/banking groups operations
- **38.** Regarding CP 23 Interest Rate Risk in the Banking Book (IRRBB), it is worth noting that from the practical side, this type of risk is minor for banks in Jordan due to their business models. However, the guidelines for CBJ supervisors are to ensure that banks are able to define and manage their risks. Moreover, CBJ's supervisory guidance for onsite inspections contained in the CAMEL and ROCA frameworks require banks to review and assess all types of risks including IRRBB, and we confirm that work carried out by the CBJ in this regard will be developed to be more aligned with the International Basel Standards.
- **39.** Finally, we reaffirm our commitment to continue advancing in the implementation of the recommendations, best practices and robust standards that continue to enhance the robustness, resilience, and credibility of the Jordanian financial system."