



REPUBLIC OF KAZAKHSTAN

FINANCIAL SYSTEM STABILITY ASSESSMENT

February 2024

This paper on the Republic of Kazakhstan 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 January 17, 2024.

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IMF Executive Board Concludes the 2023 Article IV Consultation with the Republic of Kazakhstan

FOR IMMEDIATE RELEASE

Washington, DC— February 7, 2024: The Executive Board of the International Monetary Fund (IMF) concluded the 2023 Article IV consultation¹ with the Republic of Kazakhstan.

In 2024, Kazakhstan's economic growth is expected to slow to 3.1 percent, mostly due to delays in expanding the Tengiz oil field, while inflation, which is still well above the authorities' target, would continue to decline. A current account deficit of 3.9 percent of GDP is projected for 2024, and the banking sector should remain sound amid easing financial conditions. In the medium-term, non-oil GDP growth would stabilize at around 3½ percent, and inflation would ease gradually to reach 5 percent by 2026–27, assuming accelerated reform implementation.

Risks to the outlook remain tilted to the downside and include: delayed reform implementation; oil price declines, further delays in the Tengiz field expansion, and disruptions to oil exports through the Caspian Pipeline Consortium (CPC) pipeline; slow growth in trading partners; spillovers from the war in Ukraine and geo-economic fragmentation; and, increased social tensions. Upside risks include accelerated reform implementation, higher oil prices, and higher-than-expected foreign investment in new sectors.

The authorities have continued their efforts to secure macroeconomic stability. The National Bank of Kazakhstan maintained tight monetary policy throughout 2023. The authorities remain committed to medium-term fiscal consolidation and have undertaken significant efforts to increase trade diversification and address governance and corruption vulnerabilities. A recently adopted climate strategy prioritizes the development of renewable energy sources to help reduce carbon emissions from currently high levels. With slow structural reform implementation in recent years, the state's footprint in the economy remains large.

According to the recently completed Financial Sector Assessment Program (FSAP), the banking system appears well-capitalized in aggregate. Kazakhstan is exposed to transition risk from domestic and global climate policies. Banking supervision has become more risk-based, but related party transactions remain challenging to monitor and consolidated supervision is still incomplete.

Finally, there remain gaps in the financial safety nets and crisis management arrangements.

¹ Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board.

Executive Board Assessment²

Executive Directors agreed with the thrust of the staff appraisal. They positively noted Kazakhstan's economic resilience in the face of multiple external shocks and welcomed the strong growth in 2023. Noting that risks to the outlook are tilted to the downside, Directors called for continued prudent macroeconomic policies and accelerated implementation of structural reforms to maintain strong and resilient growth.

Directors welcomed the authorities' commitment to fiscal consolidation which would support disinflation and help preserve buffers. They underscored that the planned introduction of new tax and budget codes is an opportunity to enhance non-oil revenues and public financial management. Directors also welcomed the reinstatement of the fiscal rules in 2024 and stressed that the rules should be simplified and better enforced, including through the creation of an independent fiscal council and stronger escape clauses. Swift implementation of the recommendations from the recent Fiscal Transparency Evaluation would enhance public data quality.

Directors welcomed the declining trend of inflation. They urged the National Bank of Kazakhstan (NBK) to continue to maintain a cautious and data dependent approach by keeping monetary policy tight until inflation is close to target and inflation expectations are well anchored. Directors also recommended strengthening the credibility and effectiveness of the monetary policy framework, including by improving the NBK's governance and independence. They encouraged a careful analysis of the macro-financial implications and governance requirements of the Digital Tenge before its full public launch.

Reflecting the findings from the recently completed Financial Sector Assessment Program (FSAP), Directors welcomed the overall soundness of the financial sector and progress in risk-based supervision. They supported the FSAP's recommendations to continue strengthening financial resilience and policy frameworks. Efforts could focus on closing data gaps, upgrading the bank resolution and crisis management framework, and reinforcing the independence, powers, and resources of the resolution authority, supported by capacity development.

² At the conclusion of the discussion, the Managing Director, as Chairman of the Board, summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities. An explanation of any qualifiers used in summings up can be found here: <http://www.IMF.org/external/np/sec/misc/qualifiers.htm>.

Directors encouraged the authorities to accelerate structural reforms to boost competitiveness, promote diversification and sustain stronger long-term economic growth. Key priorities include downsizing the state footprint in the economy and improving public sector governance, reducing corruption-related vulnerabilities, addressing infrastructure gaps and removing trade distortions.

Directors emphasized the importance of accelerating reforms to strengthen climate resilience and meet the authorities' carbon emission targets by 2030. They also called for close monitoring of climate-related risks in the financial sector.

Kazakhstan: Selected Economic Indicators, 2021–25

	2021	2022	2023	2024	2025
			(est.)	(proj.)	(proj.)
Output					
Real GDP growth (%)	4.3	3.2	4.8	3.1	5.7
Real oil	-0.6	-1.7	7.1	0.1	14.4
Real non-oil	5.5	4.7	4.2	3.9	3.4
Crude oil and gas condensate production (million tons)	85.7	84.2	90.0	90.3	103.0
Employment					
Unemployment (%)	4.9	4.9	4.8	4.8	4.8
Prices					
Inflation (% eop)	8.4	20.3	9.8	7.7	6.2
General government finances					
Revenue (% GDP)	17.1	21.8	23.1	20.7	20.6
Oil revenue	4.3	8.0	6.4	5.3	5.4
Non-oil revenue	12.9	13.8	16.7	15.4	15.1
Expenditures (% GDP)	22.1	21.7	22.9	21.8	21.5
Fiscal balance (% GDP)	-5.0	0.1	0.1	-1.2	-0.9
Non-oil fiscal balance (% GDP)	-9.3	-7.9	-6.3	-6.4	-6.4
Gross public debt (% GDP)	25.1	23.5	22.7	23.0	25.1
Net public debt (% GDP)	-3.0	-1.2	-1.0	-0.4	-0.1
Money and credit					
Broad money (% change)	20.8	13.9	16.4	17.3	14.0
Credit to the private sector (% GDP)	24.4	21.5	17.0	18.2	16.7
NBK policy rate (% eop)	9.8	16.8	15.8	...	...
Balance of payments					
Current account (% GDP)	-1.4	3.1	-3.5	-3.9	-2.3
Net foreign direct investments (% GDP)	-1.0	-3.6	-3.4	-3.3	-3.6
NBK reserves (in months of next year's imports of G&S)	6.9	5.9	6.0	5.8	5.9
NFRK assets (% of GDP)	28.1	24.7	23.7	23.4	25.2
External debt (% GDP)	83.3	71.7	65.6	61.7	58.7
Exchange rate					
Exchange rate (y-o-y percent change; Tenge per U.S. dollar; eop)	2.6	6.8	-1.6	...	...

Sources: Kazakhstani authorities and Fund staff estimates and projections.



REPUBLIC OF KAZAKHSTAN

FINANCIAL SYSTEM STABILITY ASSESSMENT

January 17, 2024

KEY ISSUES

Context: Following Kazakhstan's recovery from the 2014-15 decline in oil prices, the country was hit by a series of shocks, starting with the COVID-19 pandemic, then the January 2022 social unrest, and most recently the fallout from Russia's invasion of Ukraine. So far, that has had limited impact on output, also thanks to various measures taken by the authorities to stabilize the economy. However, there are risks to the outlook. The financial system, which is small and bank-dominated, underwent significant changes during this period. Banks' largest exposures are to households while large corporates rely on non-residents for funding.

Findings: The financial system appears resilient to severe macrofinancial shocks. Capital adequacy ratios in aggregate remain robust under an adverse scenario. Liquidity risks could be aggravated by the concentration of large deposits in some banks. Related party transactions remain challenging to monitor and assess. Strong growth in consumer lending is an emerging risk, compounded by data gaps that hinder proper quantification and monitoring. Large domestic nonfinancial corporates are exposed to refinancing risks. Kazakhstan is exposed to transition risk from domestic and global climate policies. The Astana International Financial Center's (AIFC) plans to expand activity towards Kazakhstani residents raises regulatory and supervisory issues.

Policy advice: The authorities should continue to enhance top-down stress testing by closing data gaps, monitor LCR in significant foreign currencies, and strengthen oversight of asset and deposit concentration. They should also continue to closely monitor consumer loans, while strengthening data quality and regulatory requirements. Engaging in the international debate on climate would raise awareness of climate-related risks for Kazakhstan. Financial sector oversight should be further reinforced by strengthening the independence and resources of the Agency of the Republic of Kazakhstan for Regulation and Development of Financial Markets' (ARDFM), aligning the prudential framework for problem assets and provisioning with international standards, identifying and quantifying related party transaction practices, implementing consolidated supervision, and strengthening AML/CFT oversight. The authorities should tackle gaps in the resolution regime, crisis management process, deposit insurance framework, and management of emergency liquidity. Stepping up regulatory arrangements and collaboration between the domestic authorities and Astana Financial Services Authority (AFSA) is required to contain AIFC-related risks. The authorities should prepare for the possibility that the crypto market grows substantially and the current ban in the domestic market becomes untenable.

Approved By
May Khamis and Subir Lall

Prepared By
**Monetary and Capital Markets
Department**

This report is based on the work of the Financial Sector Assessment Program (FSAP) mission that visited Kazakhstan in March-April 2023 and July-August 2023. The FSAP findings were discussed with the authorities during the Article IV consultation mission in November 2023.

- The FSAP team was led by Pierpaolo Grippa, International Monetary Fund (IMF), and Pietro Calice, World Bank (WB), and included Priscilla Toffano (IMF) and Matei Dohotaru (WB) as deputy mission chiefs; Parma Bains, Stephanie Forte, Gregorio Impavido, Sujan Lamichhane, Alessandro Santoni, Sha Yu, Jiren Zhang (all IMF), Christopher F. Calabria, Nigel Jenkinson (IMF external experts), Zsolt Bango, Tania Begazo, Gian Boeddu, Ezio Caruso, Tatiana Didier, Ganbaatar Jambal, and Yaewon Yoon, Fernando Dancausa and Sergio Jose de Mesquita Gomes (all World Bank), Alex Ciborowska, Emma Ngoga, and Francis Ralambotsiferana Ratsimbazafy (all World Bank external experts). Lilly Siblesz de Doldan, Vanessa Guerrero, Jesse Steil, David Ramirez (all IMF), Gulmira Akshatyrova and Aigerim Alpkarina (all World Bank) provided administrative support. We thank Zoltan Jakab, Manisha Patel, Hannah Sheldon, Ashley Lannquist, Kateryna Zhabska, Hugo Rojas-Romagosa, Mohamad Nassar (all IMF) for supporting the analysis of this report.
- The mission met with senior officials at the Agency of the Republic of Kazakhstan for Regulation and Development of Financial Market (ARDFM), the National Bank of Kazakhstan (NBK), the Ministry of Finance (MoF) and other ministries and public agencies, as well as staff in private and development financial institutions, and several other stakeholders.
- Assessments undertaken by the Fund under the FSAP assess the stability of the financial system and not that of individual institutions. They aim at helping countries identify key threats to systemic financial stability, and policies to enhance their resilience to shocks and contagion. Certain categories of risk affecting financial institutions, such as operational or legal risks, or risks related to fraud, are not covered in FSAP assessment.
- This report was prepared by the Kazakhstan FSAP team.

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Glossary

AFSA	Astana Financial Services Authority (part of AIFC)
AIFC	Astana International Financial Center
AIX	Astana International Exchange
AML/CFT	Anti-Money Laundering/Countering the Financing of Terrorism
AQR	Asset Quality Review
ARDFM	Agency of the Republic of Kazakhstan for Regulation and Development of Financial Markets
ASPR	Agency for Strategic Planning and Reforms
BCP	Basel Core Principles for Effective Banking Supervision
BIS	Bank for International Settlements
BOP	Balance of Payments
CBAM	Carbon Border Adjustment Mechanism
CBDC	Central Bank Digital Currency
CCyB	Countercyclical Capital Buffer
CET1	Core Equity Tier 1
COVID-19	Coronavirus Disease
CPC	Caspian Pipeline Consortium
CPI	Consumer Price Index
DAR	Detailed Assessment Report
DICPs	Core Principles for Effective Deposit Insurance Systems
DIF	Deposit Insurance Fund
DLT	Distributed Ledger Technology
DSGE	Dynamic Stochastic General Equilibrium
D-SIBs	Domestic Systemically Important Banks
DSTI	Debt-Service-to-Income
DT	Digital Tenge
EAG	Eurasian Group on Combating Money Laundering and the Financing of Terrorism
EIR	Effective Interest Rate
ELA	Emergency Liquidity Assistance
EM	Emerging Market
EU	European Union
FATF	Financial Action Task Force
FDI	Foreign Direct Investment
FHC	Financial Holding Company
FSAP	Financial Sector Assessment Program
FSB	Financial Stability Board
FSC	Financial Stability Council of the Republic of Kazakhstan
FSI	Financial Soundness Indicator
FSSA	Financial System Stability Assessment
FX	Foreign Exchange

GDP	Gross Domestic Product
GFSR	Global Financial Stability Report
GHG	Greenhouse Gas
G-SIB	Global Systemically Important Bank
HQLA	High Quality Liquid Assets
IADI	International Association of Deposit Insurers
IEA	International Energy Agency
IFRS	International Financial Reporting Standard
IIP	International Investment Position
IMF	International Monetary Fund
IRRBB	Interest Rate Risk in the Banking Book
JSIFC	Jurisdictionally Separate International Financial Center
KA	Key Attributes
KASE	Kazakhstan Stock Exchange
KDIF	Kazakhstan Deposit Insurance Fund
KZT	Kazakhstani Tenge
LCR	Liquidity Coverage Ratio
LoLR	Lender of Last Resort
LTV	Loan-to-Value
MCM	Monetary and Capital Markets Department, IMF
MEGNR	Ministry of Ecology, Geology, and Natural Resources
MER	Mutual Evaluation Report
MES	Ministry of Emergency Situations
MFI	Microfinance Institution
MIID	Ministry of Industry and Infrastructural Development
ML/TF	Money Laundering/Terrorist Financing
MNE	Ministry of National Economy
MoA	Ministry of Agriculture
MoE	Ministry of Energy
MoF	Ministry of Finance
MoU	Memorandum of Understanding
MSME	Micro, Small and Medium-sized Enterprise
NBFI	Non-Bank Financial Institution
NBK	National Bank of Kazakhstan
NDC	Nationally Determined Contribution
NFC	Nonfinancial Corporations
NFRK	National Fund of the Republic of Kazakhstan
NGFS	Network for Greening the Financial System
NII	Net Interest Income
NOP	Net Open Position
NPC	National Payments Corporation
NPL	Non-performing Loans

NSFR	Net Stable Funding Ratio
NZE	Net Zero Emissions
OMO	Open Market Operation
P&A	Purchase and Assumption
PCG	Partial Credit Guarantee
PD	Probability of Default
PLF	Problem Loan Fund
RAM	Risk Assessment Matrix
RWA	Risk Weighted Asset
ROSC	Report on the Observance of Standards and Codes
SDN	Specially Designated Nationals and Blocked Persons
SIFI	Systemically Important Financial Institution
SME	Small and Medium Size Enterprise
SOE	State-Owned Enterprises
SREP	Supervisory Review and Examination Process
ST	Stress Test
STeM	Stress Test Matrix
TD	Top-down
TLAC	Total Loss Absorbing Capacity
UAPF	Unified Accumulative Pension Fund
USD	United States Dollar
WB	World Bank
WEO	World Economic Outlook

EXECUTIVE SUMMARY

Since the last Financial Sector Assessment Program (FSAP) in 2014, the financial system underwent significant changes. Major developments include stress episodes impacting the financial sector, with subsequent clean-up conducted mainly through government bailouts of trouble banks and, when feasible, through capital injections by banks' shareholders and also by using the operating income of banks; a balance sheet recomposition from corporate to consumer and mortgage loans; continued de-dollarization of the banking sectors' assets and liabilities; increased market concentration and state footprint; the establishment of the Agency of the Republic of Kazakhstan for Regulation and Development of Financial Markets (ARDFM) as supervisory and resolution agency in 2020; and the launch of the Astana International Financial Center (AIFC) in 2018.

Despite Kazakhstan's achievements, particularly implementing risk-based supervision, long-standing challenges remain while new risks have emerged. The stock of problem assets from previous crises has not been completely resolved. Related party transactions need to be continuously monitored and assessed. Strong growth in consumer lending is a key emerging risk, compounded by data gaps that hinder proper quantification and monitoring. Given Kazakhstan's high dependence on the hydrocarbon sector, the financial system could be affected by the domestic implications of global climate risk mitigation policies. Finally, because of recent changes in Kazakhstan's trade patterns, there is a risk of secondary sanctions imposed on domestic entities.

Scenario-based risk analysis points to a broadly resilient financial system, with some vulnerabilities warranting attention. Capital adequacy ratios in aggregate would remain robust under an adverse scenario, with larger solvency risks for some smaller banks. The concentration of large deposits in some banks could heighten liquidity risks connected to deposit outflows. Large domestic nonfinancial corporates, which in aggregate are mostly funded externally, are exposed to refinancing risk, highlighting the importance of strengthening the monitoring of foreign currency liquidity risk. The climate risk analysis suggests that Kazakhstan is exposed to significant transition risk from domestic and, more importantly, global climate policies.

Financial sector oversight has improved, but it would benefit from further strengthening.

Efforts should target the following key areas:

- **Independence and resources.** The legal framework should be amended to strengthen ARDFM powers, ensuring its financial independence and autonomy in deciding its organizational structure. The legal framework should also enshrine the primacy of the objective of safety and soundness of supervised entities.
- **Problem assets and related party transactions.** The prudential framework for problem assets and provisioning must be more closely aligned with international standards. Related party lending transactions should be better identified and quantified, while the arm's length principle should be applied to transfers of problem assets from banks to their asset management companies.

- **Consolidated supervision.** Risk management and key prudential requirements on banking groups should be aligned to Basel standards by finalizing the ongoing work by the ARDFM in this area.

Consumer lending is an emerging risk to financial stability and a source of potential over-indebtedness and other harms to consumers, requiring attention. The authorities have taken prudential measures to address the risks in the consumer lending segment; however, identification and management of risks is hampered by the blurred legal definition of consumer lending and issues affecting debt service to income (DSTI) estimates. The financial consumer protection framework needs strengthening to keep pace with the growth and digitalization of the segment.

Crypto assets do not currently pose financial stability risks to the domestic financial system, but this is an evolving area that requires proactive vigilance. While crypto markets in Kazakhstan remain small, the authorities should prepare for the possibility that they grow substantially and the current ban in the domestic market becomes untenable. This would require a change in the regulatory stance, entailing conduct and prudential regulation and supervision, and closer collaboration between authorities.

Although its assets still represent a relatively small share of GDP, the AIFC has ambitious plans to expand its activity, particularly towards Kazakhstani residents. For such expansion to occur while ensuring that the increased financial stability risks in Kazakhstan are successfully mitigated, it will be necessary to strengthen regulatory arrangements, ensuring alignment with international standards and best practices, and enhance inter-agency collaboration.

Recent reforms of the financial safety net and the introduction of a new resolution regime are important steps but there is need for further alignment with international standards. There are gaps in the current resolution regime, which still allows for the state to intervene in the banking system. Gaps are also present in the crisis management process and in the deposit insurance framework as well as in the management of emergency liquidity. Efforts should focus on strengthening ARDFM's operational independence, crisis preparedness, and effectiveness in resolving distressed banks; improving the deposit insurance scheme; and clarifying the roles and responsibilities of all authorities. State participation in the resolution of insolvent banks should be governed by more stringent conditions to minimize the risk of moral hazard, while the NBK's ELA framework should be further strengthened and periodically tested through simulations.

The authorities should implement policies targeted at private sector finance, competition, and capital market development. The state's role in the financial sector should be gradually rebalanced away from direct interventions towards greater use of risk sharing mechanisms and targeting. Ensuring more effective market access for new entrants, implementing better control of state support measures, and updating antitrust rules for digital platforms would be important for fostering competition. Finally, reforms should target the annual guarantee for pension funds, the development of a predictable and consistent benchmark issuance program for government securities, and more effective credit guarantee mechanisms to support the corporate bond market.

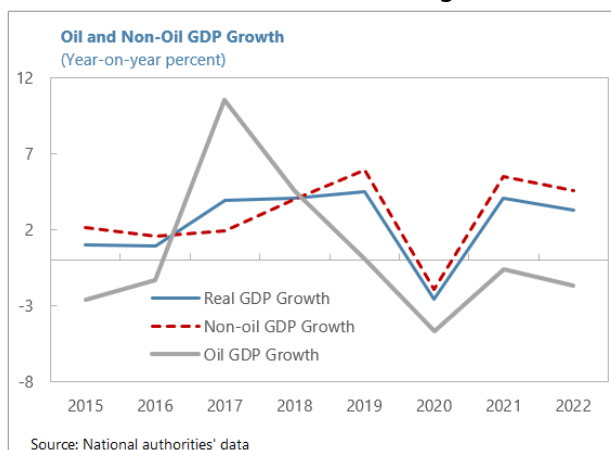
Table 1. Kazakhstan: Main Recommendations		
Recommendations	Authorities	Timeline
Systemic and Climate Risk Analysis		
Develop liquidity stress testing and monitor LCR in significant foreign currencies to better understand the risks associated with potential liquidity drain from the system	ARDFM, NBK	MT
Collect granular data on interest-sensitive assets and liabilities by maturity/repricing ladder to enhance the monitoring of interest rate risk in the banking book and to perform cash-flow analysis to complement liquidity stress testing	ARDFM, NBK	ST
Join the Network for Greening the Financial System, especially the workstreams on 'Supervision', 'Scenario Design and Analysis', and 'Monetary Policy'	ARDFM, NBK	I
Strengthen coordination between financial regulators and ministries and develop an interagency working group on climate finance and climate risk analysis, also to improve and harmonize data (including energy, emissions, and environmental data) for assessing transition and physical risks	ARDFM, NBK, AIFC, ASPR, MNE, MoF, MEGNR, MoE, MoA, MIID, MES	ST
Banking Supervision and Regulation		
Enshrine ARDFM's independence in the law, including the authority to decide its organizational structure, strengthen budgetary resources and their independent use, and enhance legal protection of staff when defending their actions in faithful discharge of duties	ARDFM, MoF	ST
Identify and quantify related party transactions, revise the legal framework to eliminate exemptions and apply the arm's length principle in relation to problem assets transactions between parent banks and asset management companies	ARDFM	ST
Extend the application of prudential standards and strengthen the requirements for risk management at consolidated level	ARDFM	ST
Expand NPL recognition criteria to IFRS9 stage 3 exposures, as well as foreclosed assets	ARDFM	ST
Strengthen the effectiveness of risk-based AML/CFT supervision of financial institutions, by ensuring adequate supervisory resources and technology, and reinforcing the primary responsibility of financial institutions to address ML/TF risks	ARDFM	ST
Macroprudential Policy and Framework		
Amend legislation to clarify roles and responsibilities of the NBK and ARDFM on macroprudential policies and update the Memorandum of Understanding on Financial Stability issues to strengthen inter-agency cooperation	NBK, ARDFM	ST
Financial Consumer Protection and Consumer Credit		
Strengthen regulatory requirements relating to creditworthiness assessment, business conduct and disclosure and transparency, including appropriate adaptation for digital contexts	ARDFM	ST
Regulation of Crypto Assets		
Upskill supervisors to better recognize risks from crypto markets, in relation to banks, but also more broadly in terms of consumer and investor protection and market integrity across the whole financial system	ARDFM, NBK, AFSA	ST

Table 1. Kazakhstan: Main Recommendations (concluded)

Continue monitoring crypto markets and—in the event of significant domestic crypto market growth—be prepared to replace the broad prohibition on crypto assets with a robust regulatory framework	ARDFM, NBK, AFSA	MT
The Astana International Financial Centre and the Kazakhstan Financial System		
Develop a financial stability protocol to enhance collaboration between the domestic financial authorities and AFSA to facilitate information sharing and the mitigation of risks to the financial system and support financial stability	ARDFM, NBK, AFSA	I
Reinforce frameworks to clarify responsibilities and minimize duplication of regulatory frameworks, and apply common (harmonized) approaches in line with international standards and good practices in any remaining cases where similar activities can be provided under two regulatory authorities to prevent arbitrage	ARDFM, NBK, AFSA	ST
Financial Safety Net and Crisis Management Preparedness		
Revise the resolution and liquidation decision-making processes to strengthen the ARDFM's operational independence, subject to robust transparency and accountability, and its staffing and resourcing; expand and clarify the rules for the injection of capital into bridge banks during episodes of systemic risk	ARDFM, MOF, MNE	I
The law should specify the forms and mechanisms of state participation in the resolution of insolvent banks (e.g.: bridge banks), tightening the conditions for the use of public resources	MoF, MNE, ARDFM, NBK	I
Ensure that there is in place a general architecture of intra- and interagency contingency plans (even bilateral), establish MoUs, and engage in financial crisis-simulation exercises to test the plans; enhance legal protection of staff when defending their actions in faithful discharge of duties	ARDFM, NBK, MoF, KDIF, MNE	I
Revise the process of Lender of Last Resort (LOLR) collateral supervision and prepositioning of eligible nonmarketable assets (ARDFM); refine the methodology for valuation of non-marketable assets haircut (NBK); ensure that the government indemnifies NBK in case LoLR is granted to prevent severe systemic disruption, where justified to prevent an accumulation of risk on the NBK's balance sheet (MoF, MNE)	ARDFM, NBK, MoF, MNE	ST
Note: I Immediate (within 1 year); ST Short term (1-3 years); MT Medium Term (3-5 years)		

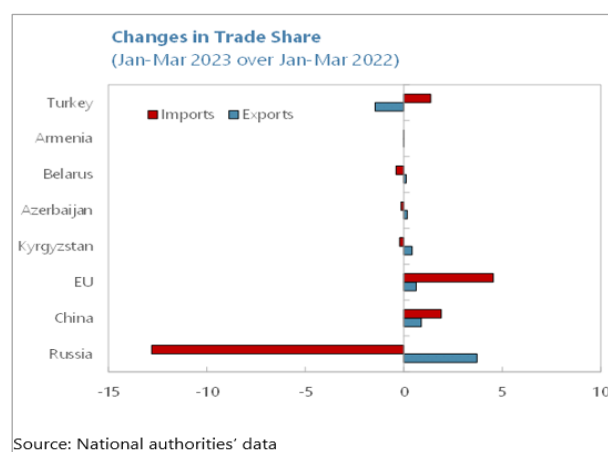
BACKGROUND

1. The Kazakhstani economy has remained resilient to recent shocks. During 2022, the economy was hit by violent protests in January (triggered by a spike in domestic fuel prices), repeated damage to the Caspian Pipeline Consortium (CPC) pipeline (which transports about 80 percent of Kazakhstan's oil export), and real and financial spillovers from Russia's invasion of Ukraine.¹ The impact on output was limited: growth reached 3.2 percent at end-2022 (Text Figure) and is projected to reach 4.8 percent in 2023.



2. Domestic demand was supported by rapid credit growth, with inflation remaining elevated. Consumer lending² growth was particularly strong (Figure 1). At end 2022, headline inflation reached 20.3 percent while the Central Bank raised the policy rate to 16.75 percent (Figure 2).

3. There are downside risks to the outlook. The risk of secondary sanctions linked to Russia's invasion of Ukraine has increased due to changing trade patterns (Text Figure). Other risks include slower than projected growth of trading partners, lower exports because of lower than projected oil prices and disruptions to the CPC pipeline (RAM, Appendix VI).



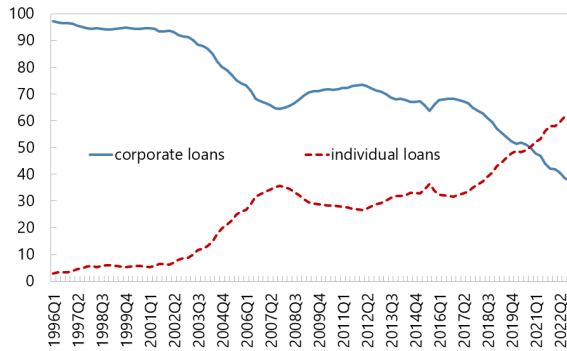
¹ Main spillovers included disruption of supply chains, sanctions to Russian banks' subsidiaries active in Kazakhstan, and the depreciation of the tenge.

² NBK's Resolution n. 188/2019 defines a consumer loan as a loan granted to an individual or individual entrepreneur: (i) not related to the purpose of financing entrepreneurial activities; (ii) used for the purchase of durable goods or for the payment of various services or (iii) used for other purchases. The recipient of a consumer loan must have a constant source of income which allows for the service of the obligations to the bank.

Figure 1. Credit Developments^{1/}

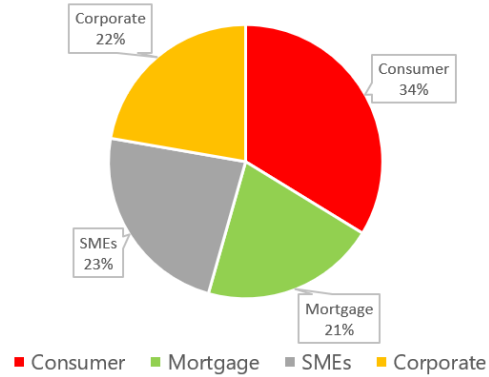
Composition of Bank Credit

(In percent of the total)



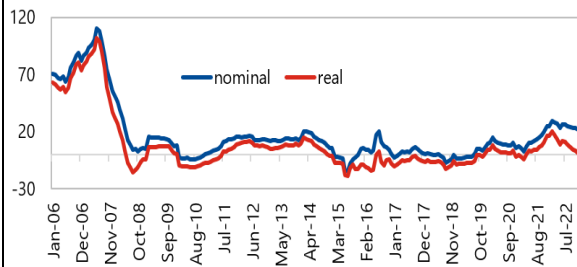
Loan Portfolio Composition

(In percent, Dec 2022)



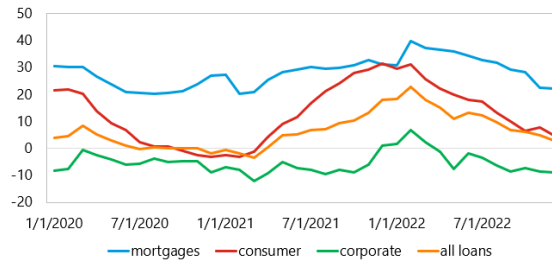
Bank Credit Growth to Private Sector

(year-on-year percent)



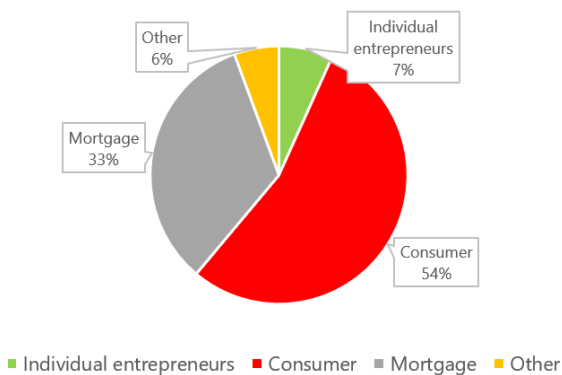
Real Credit Growth by Portfolio

(year-on-year percent)



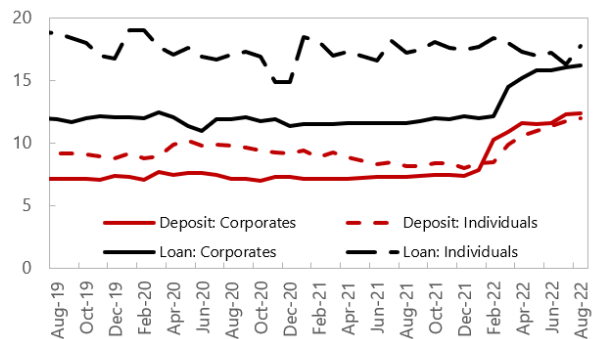
Composition of Loans to Individuals

(In percent, Dec 2022)



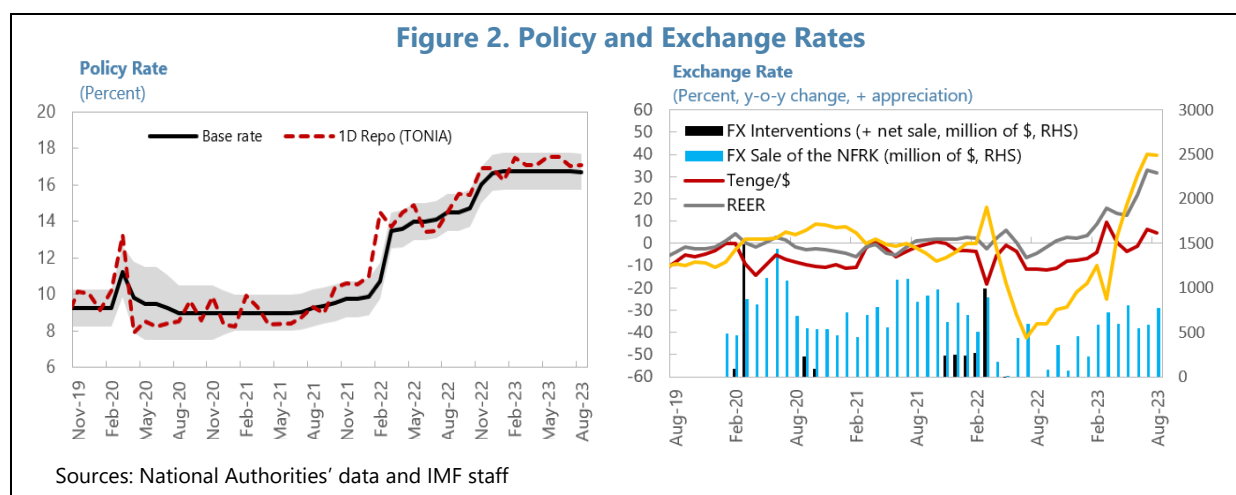
Lending and Deposit Rates

(In percent)



Sources: National Authorities' data and IMF staff calculations.

1/ Data series on bank credit starts in 1996 with total credit disaggregated into two categories: corporate credit and credit to individuals. From 2005, corporate credit is disaggregated to add credit to SMEs (encompassing both small corporates and individual entrepreneurs). From 2015 additional disaggregations include consumer credit and mortgages.



FINANCIAL SYSTEM STRUCTURE

4. The financial system is relatively small and bank-dominated. With assets representing slightly more than 60 percent of GDP (Table 2), the financial sector is relatively small. Bank credit is around 20 percent of GDP (2022), which is low both in absolute terms and when compared to peers (Figure 3). The banking sector consists of 21 commercial banks, with total assets representing 43 percent of GDP and almost 70 percent of total financial sector assets, as of end 2022 (Table 2). Banks' assets consist mostly of loans and securities, while deposits are more than 80 percent of the liabilities (Figure 4). The largest three banks represent about 53 percent of banking sector's assets. Eight banks are subsidiaries of foreign banks and two are state-owned.

Table 2. Kazakhstan: Structure of the Financial System^{1/2/}
(As of December 2022)

	Number	Assets (billion KZT)	Percent of total assets	Percent of GDP
Commercial Banks	21	44,562	67.6	42.9
Domestic banks	13	40,854	62.0	39.4
Foreign subsidiaries	8	3,708	5.6	3.6
Insurance sector	26	2,067	3.1	2.0
Accumulative Pension Fund	1	14,663	22.3	14.1
Professional participants of securities market	58	579	0.9	0.6
Mortgage and other non-banking organizations	5	2,974	4.5	2.9
Microfinance organizations	247	1,033	1.6	1.0
Total	148	65,878	100.0	63.5
<i>Memo item:</i>				
Banking conglomerates	12	55,575	...	53.6
Development finance institutions		9,922	15.1	9.6
GDP (bln KZT)		103,766		

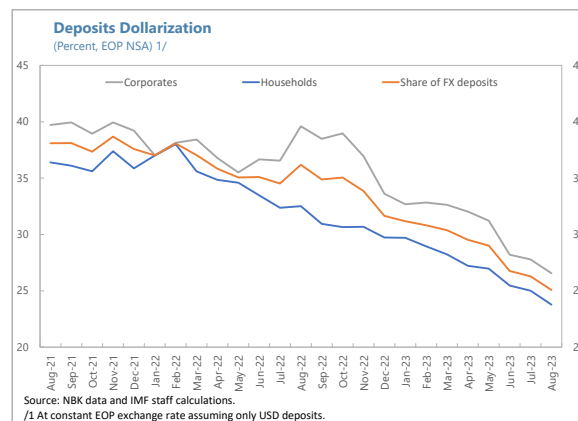
Source: National Authorities' data and IMF staff calculations.

1/Some commercial banks are also part of banking conglomerates.

2/Development finance institutions' assets are as of end-2021.

5. In aggregate, banks report sizable buffers and declining dollarization, but there is a legacy stock of distressed assets.

As of December 2022, banks reported sound capitalization and liquidity metrics, with total capital adequacy ratio at 21.7 percent on average; capital weighted LCR and NSFR at 2.0 and 1.5; and high-quality liquid assets at around 30 percent of total assets (Figure 3). Dollarization has declined but remains relatively high on the funding side (Text Figure). Reported nonperforming loans (NPLs)—narrowly defined as 90 days past due—represented 3.4 percent of total loans in December 2022, but Stage 3 loans, as publicly reported by ARDFM, were 6.6 percent (Figure 4).

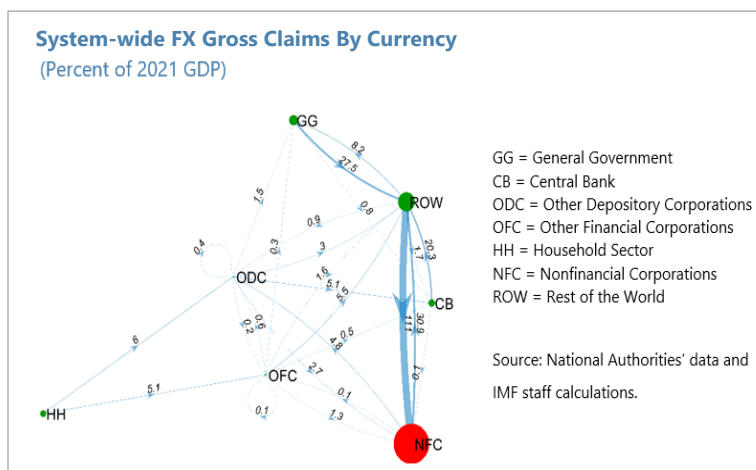


6. Sanctions to Russia increased the concentration of the banking sector in Kazakhstan.

Subsidiaries of three Russian banks, which represented 15 percent of total bank assets before Russia’s invasion of Ukraine, were subjected to international sanctions. In coordination with ARDFM, two of them were acquired by local entities, thus increasing the concentration of Kazakhstan’s banking sector. The third (0.4 percent of banking sector’s assets) was recapitalized and continues to operate as the only Russian bank in charge of intermediating payments with Russia.

7. Balance sheet analysis highlights the high dependence of resident non-financial corporates on non-residents for their funding, while the dependence of public sector entities on banks is limited.

Nonfinancial corporates, with a large presence of state-owned enterprises, are primarily funded by the nonresident sector largely as direct foreign investment (i.e., mostly illiquid FX liabilities—net FX imbalances were estimated at around 80 percent of GDP, as of end-2021 (Text Figure)).³ Claims of banks on the public sector (excluding the central bank) were about 13 percent of total banks’ assets at end-2021 and mostly liquid. The credit exposures to public entities with more than 50 percent government participation represented a small portion of the overall corporate portfolio.



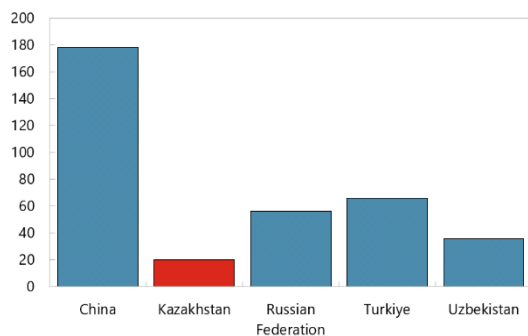
³ Data limitations allow only for broad estimates of nonfinancial corporate financial assets and liabilities, especially with the rest of the world. See Section C of the Section on Systemic Vulnerabilities for a broader discussion.

Figure 3. Financial Soundness Indicators, Cross-Country Comparison^{1/}

(Dec. 2022 or latest available date)

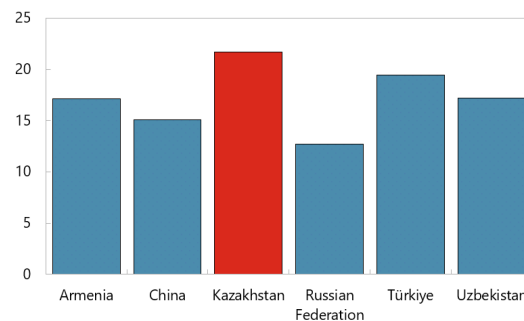
Bank Credit to GDP

(In percent)



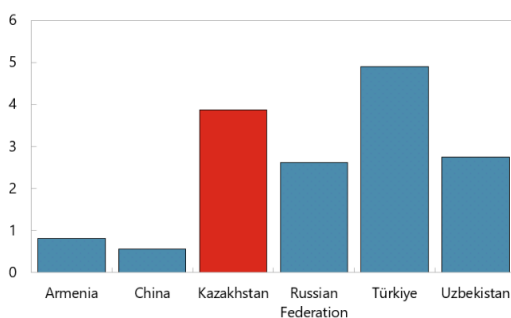
Regulatory Capital to Risk-Weighted Assets

(In percent)



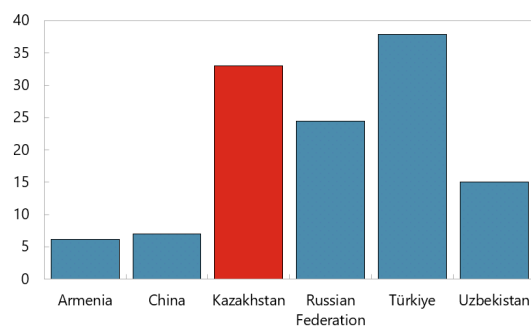
Return on Assets

(In percent)



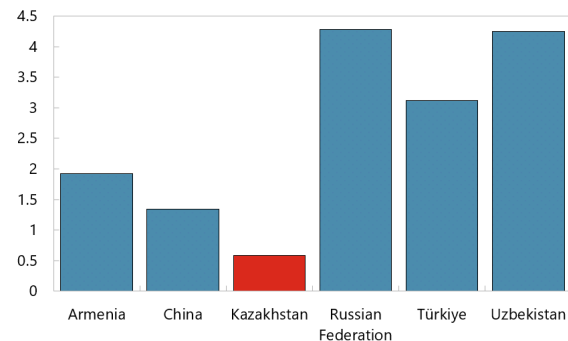
Return on Equity

(In percent)



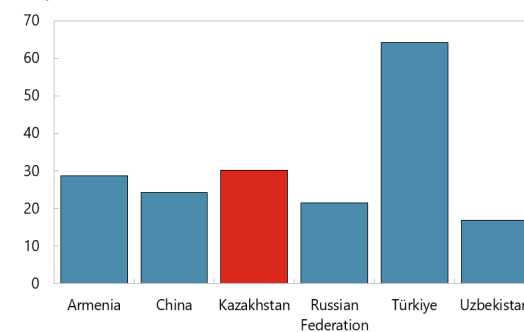
Net Open FX Position in Capital

(In percent)



Liquid Assets to Total Assets

(In percent)



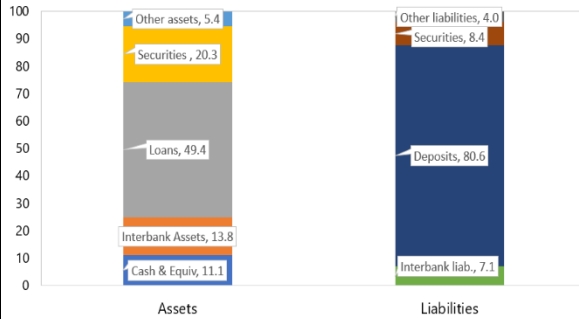
Sources: Financial Soundness Indicators

^{1/} Armenia does not report Bank Credit to GDP.

Figure 4. Banking Sector Panel

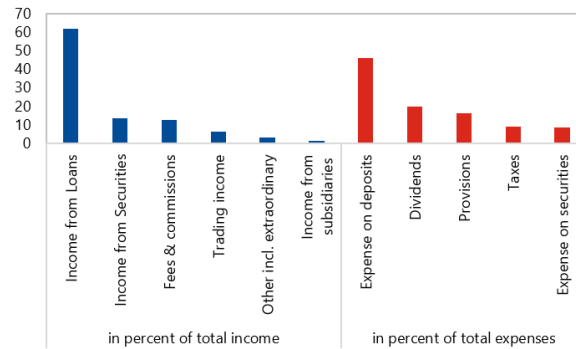
Banking Sector's Balance Sheet

(In percent, Dec 2022)



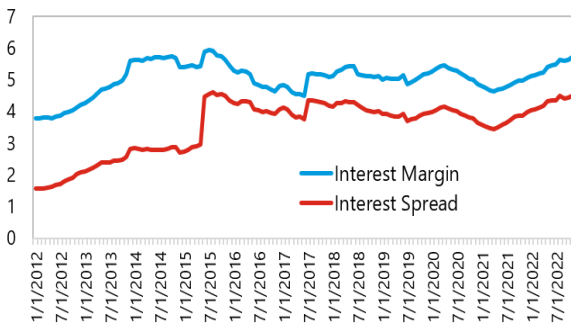
Income and Expenses

(In percent, Dec 2022)



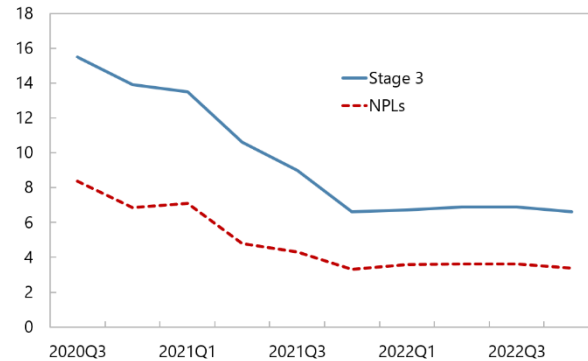
Interest Margin and Spread

(In percent)



NPLs and Stage 3 Loans

(In percent)



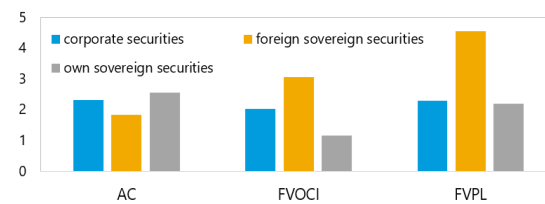
Securities Holdings by Portfolio

(In percent of total securities, Dec. 2022)



Average Duration by Portfolio

(In years, Dec. 2022)



Sources: National Authorities' data and IMF staff calculations.

8. Except for the Unified Accumulative Pension Fund (UAPF), the nonbank financial sector is relatively small. UAPF is the largest institutional investor in Kazakhstan, the insurance sector is still small (Table 2), and the Kazakhstan Stock Exchange (KASE) has a modest stock capitalization, at 20 percent of GDP (end of 2022).

9. The NBK is planning to introduce a central bank digital currency, the digital tenge (DT), by 2025. The DT project aims at promoting the adoption of more efficient methods of payment and at increasing innovation and competitiveness of the financial market (Appendix VII).

10. Kazakhstan has a jurisdictionally separated international financial center located in Astana. The Astana International Financial Center (AIFC) was launched in 2018 to attract foreign investment and to develop services that are absent or underprovided. The AIFC has its own dedicated regulator (AFSA) and separate regulatory and legal framework. It remains small (assets represented 0.6 percent of GDP at the end of 2023Q1) but has ambitious growth plans.

SYSTEMIC VULNERABILITIES AND SOURCES OF RISKS

A. Systemic Vulnerabilities

11. The assessment has identified the following systemic vulnerabilities and risks to financial stability:

- **Banks' asset quality has improved, but the stock of legacy problem assets has not been completely reabsorbed; related party transactions remain a source of concern.** The stock of problem assets from previous crises has not been completely reabsorbed. The official NPL ratio stands at about 3 percent in 2022; however, being narrowly defined as 90 days past due, it does not include all IFRS9 Stage 3 loans (which are publicly reported by ARDFM at 6.6 percent) and the non-performing portion of restructured loans. Related party lending was a major factor behind recent bank instability episodes and remains challenging to monitor and assess (see Section B of the Section on Financial Sector Oversight).
- **Rapid consumer lending is a potential source of credit risk.** By the end of 2022, the share of Stage 3 loans in consumer lending was 8.2 percent, with around 1.5 million borrowers with consumer loans 90 days or more past-due in the banking sector or who defaulted on loans granted by microfinancial institutions.⁴ Consumer lending is also concentrated in the two major banks. DSTI data shows that around 40 percent of consumer loans is granted to borrowers with DSTI higher than 40 percent (consumer lending is capped to 50 percent DSTI). But the accuracy of DSTI data is an issue, while household indebtedness appears limited in the aggregate (see Section D of the Section on Systemic Vulnerabilities).
- **FX liquidity imbalances need monitoring.** NBK gross international reserves and the government's National Fund of the Republic of Kazakhstan (NFRK) assets are large and liquid (47 percent of GDP at end 2022). Dollarization is on a declining trend, the net open position (NOP) in the banking sector is small, and differentiated reserve requirements for FX liabilities are in place. However, the lack of monitoring of LCR by currency limits the understanding of FX imbalances in the banking sector at the micro level. Furthermore, nonfinancial corporates are exposed to refinancing risk, which could be aggravated in case secondary sanctions were imposed on Kazakhstani entities (see Section C of the Section on Systemic Vulnerabilities).

⁴A new law on personal bankruptcy came into force in March 2023. It aims to help qualified debtors to get debt relief through a number of debt-restructuring procedures.

- **Climate transition risk is important.** With hydrocarbon production in 2022 amounting to almost 20 percent of GDP and more than half of exports, and revenues from the oil sector representing around 35 percent of the total, the financial system could be affected by the domestic implications of global climate mitigation policies, especially in case of a rapid or abrupt energy transition impacting the oil and gas industry (see Section E of the Section on Systemic Vulnerabilities).

B. Macrofinancial Scenarios

12. The systemic risk analysis is underpinned by a baseline and an adverse scenario. The team assessed the solvency of banks under an adverse scenario (Appendix VIII). The cut-off date for the analysis is end-2022 and the scenario horizon spans three years (2023–2025). The baseline scenario is aligned with the April 2023 IMF World Economic Outlook (WEO) projection.

13. The adverse scenario captures the potential impact of the materialization of multiple risks (Appendix VI). It considers a combination of external risks triggered by (i) an abrupt global tightening of financial conditions and ensuing slowdown, followed by (ii) a sharp correction of commodity prices and rising risk premia, and further exacerbated by (iii) intensifying spillovers from regional conflicts, resulting in economic sanctions and disruptions in the supply chains of energy and food. In the adverse scenario, cumulative two-year real GDP would be about 14 percent below the baseline by 2024, equivalent to a 2-standard-deviation shock of the cumulative two-year growth rate with respect to the historical mean (Figure 5).⁵ The economy would gradually begin to recover after the second year, driven by a rebound in oil prices and easing inflation and risk premia.

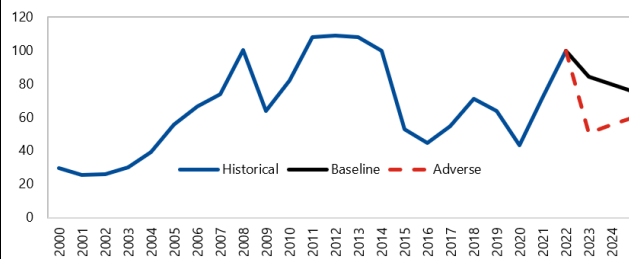
14. The climate transition risk analysis is based on scenarios that consider changes in domestic and global policies. Different scenarios were used for the “micro” and “macro” approaches (see Section E on Systemic Vulnerabilities).

- For the “micro” approach (covering banks’ corporate loan portfolios), the following scenarios were used: (i) a baseline scenario, in which countries follow their current policies until 2030, and no further climate action is taken; (ii) a Nationally Determined Contributions (NDCs) scenario, in which countries implement unconditional NDCs by 2030, and no further global climate action is taken; (iii) an orderly 1.5°C scenario, in which countries pursue an immediate, economy-wide orderly transition to 1.5°C (countries with net-zero or carbon neutrality commitments achieve their individual climate pledges; this aligns with the NGFS Net-Zero 2050 scenario); and (iv) a disorderly 1.5°C scenario, in which countries pursue an immediate transition to 1.5°C, but with more ambitious policies to reduce emissions from certain sectors (this aligns with the NGFS Divergent Net-Zero scenario).
- For the “macro” approach (covering banks’ overall loan portfolios), the team used the ‘Net Zero Emissions’ scenario from the International Energy Agency (IEA-NZE) to assess the impact of oil price and production shocks induced by climate change mitigation policies. The scenario envisages a steep decline in global oil prices up to 2030.

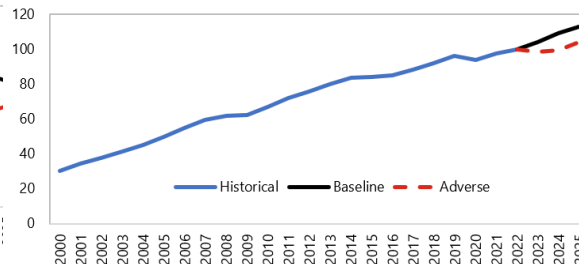
⁵ This corresponds to 4.3 and 4.9 percent growth rates in the baseline scenario and –1.5 and 0.9 percent growth rates in the adverse scenario in the first two years.

Figure 5. Solvency Stress Test Scenario

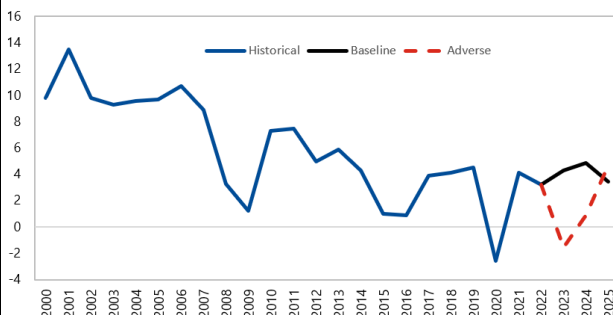
Oil Price (Index, 2022=100)



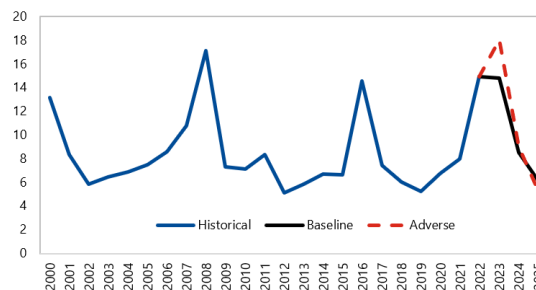
GDP Constant Price Index (Index, 2022 = 100)



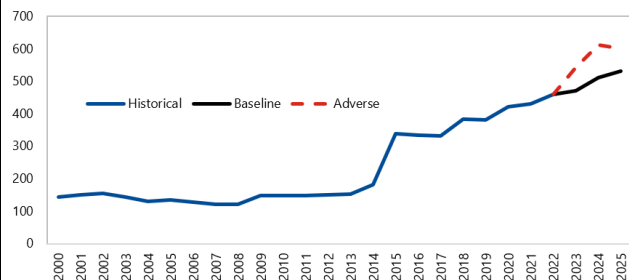
Real GDP Growth (In percent)



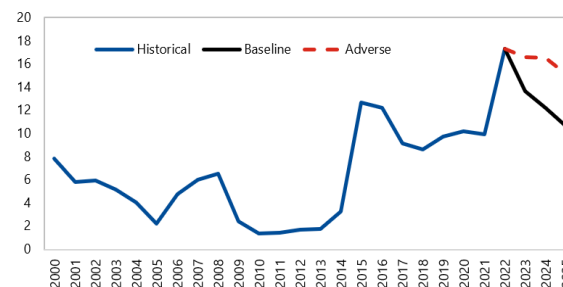
CPI Growth (In percent)



Exchange Rate (Period average)



Short-Term Rate (In percent)



Sources: IMF staff calculations.

C. Stress Tests and Liquidity Analysis

Methodologies

15. The team has examined the resilience of the financial system to macro shocks via:

- **Balance sheet analysis (BSA).** The team used this approach (i) to study macro-financial interlinkages, inter-sector dependencies, balance sheet vulnerabilities, and network contagion patterns for six resident economic sectors and the rest of the world; and (ii) to identify the

channels and quantify the impact of alternative exogenous foreign currency and liquidity macro-shocks on the balance sheets of these sectors.

- **Solvency stress test.** It considers 12 banks, covering about 90 percent of the banking system assets. The team assessed individual banks' capitalization under the baseline and adverse scenarios. A combination of econometric and accounting models was used to assess credit, market, FX and interest rate risks, and to project the major components of the banks' balance sheets and income statements. The team conducted two sensitivity analyses and evaluated asset concentration risks.
- **Liquidity stress test.** The team conducted stressed LCR analysis to assess the resilience of all 19 banks subject to liquidity requirements against sudden loss of funding. The team also explored the impact of deposit concentration via a simple sensitivity analysis.
- **Interconnectedness analysis.** The team estimated counterparty and funding risks through domestic channels.
- **Corporate liquidity analysis.** The team analyzed liquidity ratios of nonfinancial corporates with the authorities' database on non-financial sector enterprises.

Results

16. The BSA reveals systemic liquidity and FX imbalances. Nonfinancial corporates, with a short foreign currency position largely explained by foreign direct investments and intercompany loan liabilities, are exposed to foreign currency mismatches. A liquidity shock calibrated so that nonfinancial corporates need to make liquidity calls on claims with resident sectors to fund BOP outflows would affect nonfinancial corporates first, and would then likely propagate to the banking sector and eventually impact the balance sheets of the central bank and the general government.

17. The banking system is broadly resilient to severe external shocks, but vulnerabilities exist. Under the adverse scenario the aggregate CET1 capital ratio declines to 13 percent by 2024 from the starting point of 17.9 percent, but remains above the regulatory hurdle rate (7.5 percent for D-SIBs, 5.5 percent for others) (Figure 6). However, some banks face higher solvency pressures than others, with some falling below the regulatory thresholds. Aggregate capital shortfalls over the risk horizon are small at less than 0.5 percent of GDP. The major driver of capital depletion is increased credit loss provisions due to deteriorating credit conditions. Market risks appear mild, mainly because of the relatively low duration in banks' securities portfolios.

18. Additional sensitivity analyses account for the potential overestimation of capital at the starting point as well as possible higher consumer-related risk, based on simplifying assumptions. Both sensitivity analyses build on top of the stress test results under the adverse scenario. The first one considers the impact of higher default risks than currently reflected in the starting point data (to approximate for the reduction in initial capital levels as indicated in the internal desk-based AQR). The second sensitivity analysis considers higher default rates for consumer credit than historically observed. While aggregate capital remains above the regulatory minimum in both analyses, the analyses indicate a potential underestimation of capital depletion under the adverse scenario (Figure 6).

19. The banking sector displays comfortable levels of liquidity, but given deposit concentration in some banks, stress could materialize in case of significant deposit outflows.

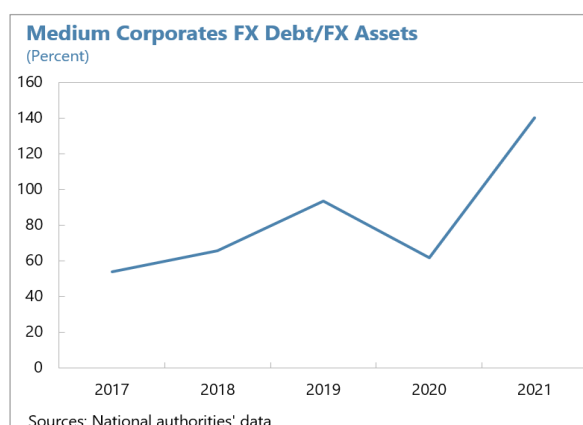
While imposing liquid asset haircuts do not materially impact liquidity, the aggregate LCR declines significantly when stressing outflows, although liquidity in general remains adequate for the majority of banks (Figure 7). The sensitivity analysis indicates at least 25 percent of banks could face funding pressures if the largest five depositors were to suddenly withdraw their funding.

20. The potential for contagion through direct interbank exposures is limited.⁶ A total of 11 banks participate in bilateral interbank borrowing and lending activities. The related exposures are only about 0.2 percent of total banking system assets and, thus, systemwide spillover risks from default of few banks is minimal.

21. FX liquidity appears to be constrained for a group of medium corporates.

While the BSA based on International Investment Position (IIP) data provides only limited information on aggregate liquidity risk, summary statistics for a group of medium-sized corporates with cash ratio⁷ in FX lower than 1 showed a sharp increase of their FX debt-to-asset ratio in the last years (Text Chart).

The authorities should build on the available datasets and create liquidity indicators, particularly in FX, to monitor refinancing risks in the non-financial corporate sector and their potential spillovers into the financial system.



22. The authorities should continue to enhance the top-down macroprudential solvency stress testing framework while closing data gaps. To improve credit risk monitoring, the authorities should collect and monitor risk-weighted assets data with a breakdown by major credit segments, both for performing and non-performing exposures. Given the importance of net interest income in commercial banking, the authorities should also collect granular data on interest-sensitive assets and liabilities by repricing ladder, including for major portfolio segments, to enhance the monitoring of interest rate risk in the banking book.

23. The authorities should strengthen the liquidity stress testing framework. It is important to monitor liquidity (including via LCR) in significant foreign currencies to better understand the risks associated with potential liquidity drains from the system and its impact on the functioning of the financial safety nets. The framework should also be expanded to include a comprehensive cash flow analysis to gain a more granular view of the overall system and complement the LCR-based stress tests.

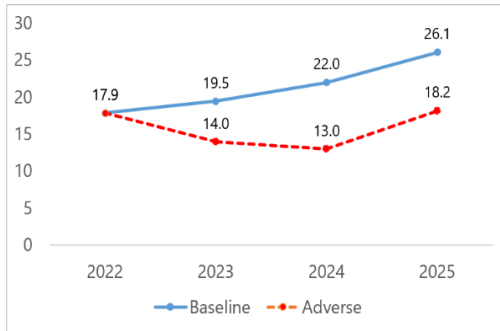
⁶ The scope for the interconnectedness analysis is constrained by general data limitations, but also by the characteristics of the financial system: capital markets are small; the interbank market is small and transactions take place via centralized repo market at the KASE stock exchange.

⁷ Cash ratio = cash and cash equivalents / short-term liabilities.

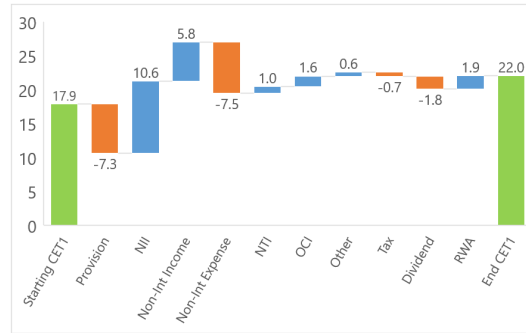
24. Asset and deposit concentration risks require additional oversight. The authorities should put in place some aggregate and bank-specific oversight measures to contain the potential risks from concentrated funding and lending profiles.

Figure 6. Bank Solvency Stress Test Results

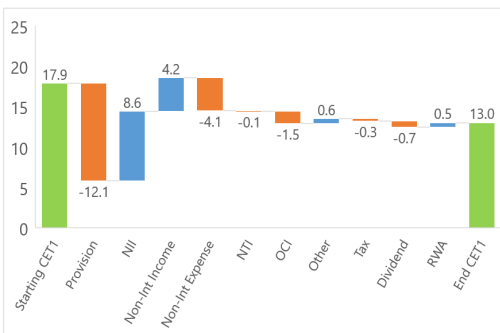
CET1 – Baseline and Adverse
(In percent)



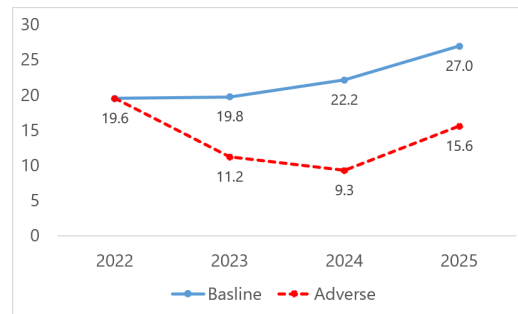
Baseline: Cumulative Capital Impact (from 2022 to 2024)
(In percent)



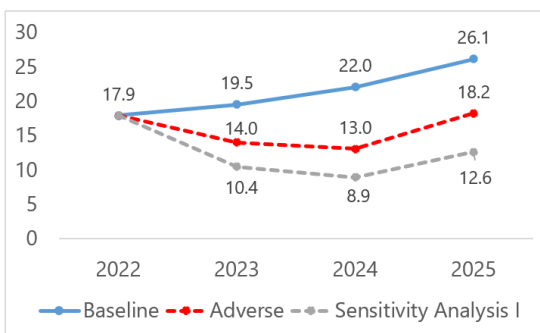
Adverse: Cumulative Capital Impact (from 2022 to 2024)
(In percent)



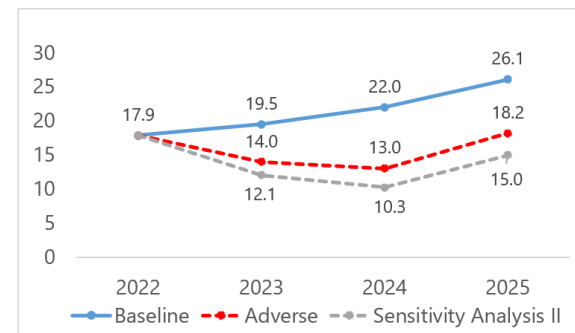
CET1—Baseline and Adverse (excluding D-SIBs)
(In percent)



CET1—Sensitivity Analysis I
(In percent)

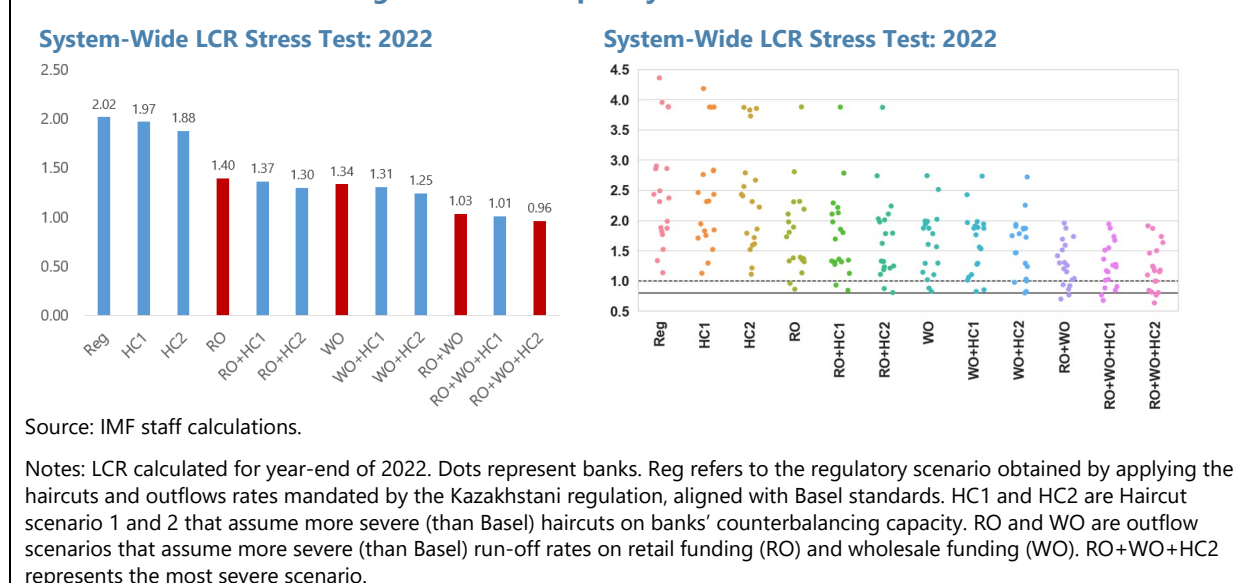


CET1—Sensitivity Analysis II
(In percent)



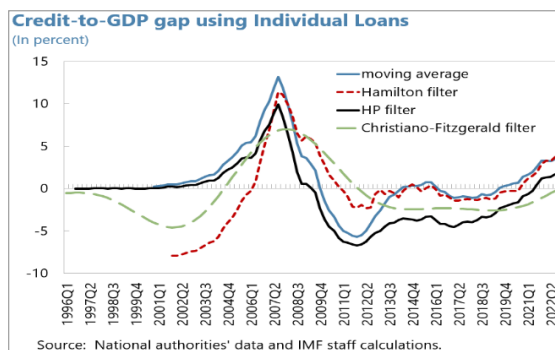
Source: IMF staff calculations.

Figure 7. Bank Liquidity Stress Test Results



D. Consumer Lending Risk Analysis

25. Estimates of the credit-to-GDP gap confirm that lending to individuals is growing above trend. While the credit-to-GDP gap for total credit hovers around zero, all estimates⁸ confirm that individual lending is growing above trend, which might represent a compensation for past below-trend credit growth. Nevertheless, this needs careful monitoring to detect potential build-up of vulnerabilities (Text Figure).



26. There are concerns about the quality of DSTI data, which the authorities have started to use only recently. Moreover, the high level of informal income, combined with several exemptions to the application of DSTI, limit the accuracy of the assessments based on DSTI. Subject to these caveats, the available data show that around 40 percent of loans refer to borrowers with DSTI over 40 percent (Figure 8), albeit household indebtedness appears limited in aggregate (11 percent of GDP).

27. To ensure that risks are appropriately captured and managed, the authorities should:

- Recalibrate the scope of consumer loans, dropping residential real estate from the definition.
- Require banks to monitor the use of consumer loans to ensure that they are not used for mortgages, SMEs, or repayment of overdue debt, and apply supervisory measures for those banks that do not strictly monitor the adequate use of those loans.

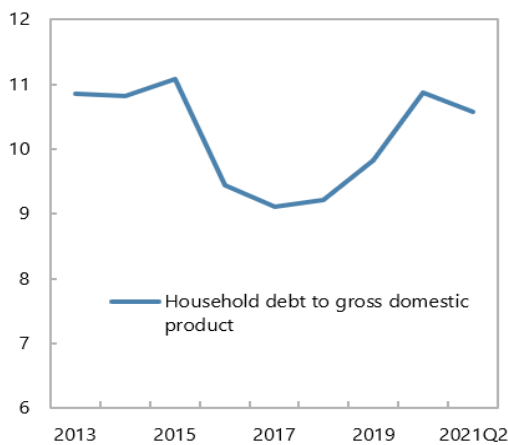
⁸ The team estimated the credit-to-GDP gap for total, corporate and individual lending using the Hodrick-Prescott, Hamilton, Christiano-Fitzgerald, and Moving Average filters over the period 1996Q1-2022Q4.

- Redefine the DSTI indicator, dropping exemptions that narrow its scope, such as current exemptions on collateralized loans.
- Strengthen the quality of DSTI data, including by collecting more information on the borrowers' informal income.
- Strengthen regulatory requirements relating to creditworthiness assessment, business conduct, and disclosure and transparency, including appropriate adaptation for digital contexts.

Figure 8. Household Indebtedness and Consumer Lending

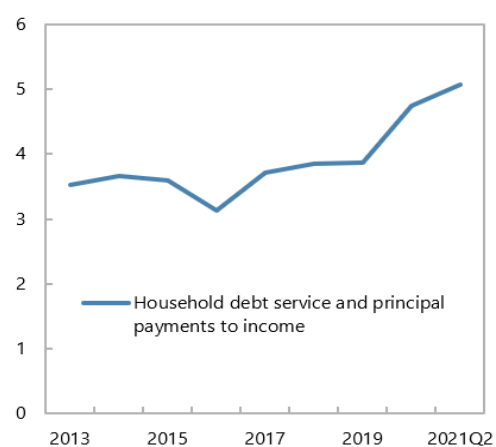
Household Debt to Gross Domestic Product

(In percent)



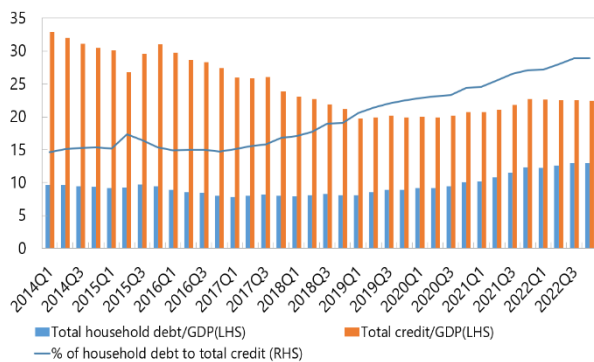
Household Debt and Principal to Income

(In percent)



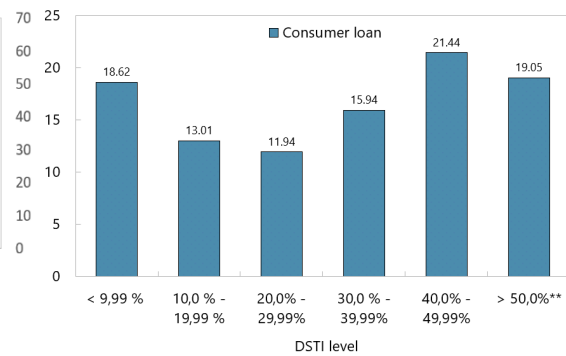
Household Debt to Total Bank Credit

(In percent)



Consumer Loan Distribution based on DSTI Levels

(In percent, end-2022)



Sources: National authorities' data and IMF staff calculations.

E. Climate-Related Risk Analysis

28. The FSAP used two approaches to assess the impact of climate-related transition risks on the financial sector. The “micro” approach used a dynamic computable general equilibrium model (IMF-ENV) to estimate the macroeconomic and sectoral impact of decarbonization policies and a firm-level model to assess the impact on firms’ financial health and banks’ corporate portfolio. The “macro” approach used the same macroeconomic model of the solvency stress test exercise to derive the evolution of probability of default and loss given default across all bank portfolios.

29. The transition risk analysis with the micro approach finds heterogeneous impacts across different corporate sectors and banks. Transition risks are concentrated in the carbon intensive sectors. Cumulative losses on corporate loans across 17 banks over the horizon 2023–2030 would be 18.1 percent higher in the disorderly transition scenario, relative to the baseline, with some banks experiencing more than 30 percent additional corporate loan losses (Figure 9).

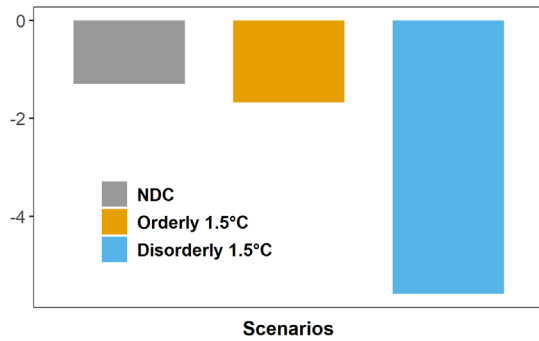
30. Transition risk can also affect other portfolios through macro channels. In the process of transitioning towards net-zero emissions by 2050, there will be significant drops in oil price and production, which in turn would lead to GDP losses and currency depreciation. Considering all loan portfolios, cumulative bank loan losses across 12 banks in the solvency stress test over a five-year time horizon (2023–2027) are 18.4 percent larger in the net-zero transition than in the baseline, with a heterogeneous impact across banks (Figure 10). Over the same three-year time horizon of the solvency stress test (2023–2025), cumulative bank loan losses would be approximately 600 billion KZT, roughly half of the losses estimated in the solvency stress test under its adverse scenario. However, the comparison is affected by the short time horizon: the solvency stress test simulates a cyclical downturn, followed by a recovery, while the impact from transition risk scenarios is expected to persist and potentially worsen over time.

31. Given the potential for substantial transition risks, the authorities should further assess the implications of climate change for the financial system. Engaging in the international debate, e.g., by joining the Network for Greening the Financial System, would help raise awareness and build capacity. Given the cross-sectoral nature of climate-related issues, the authorities should strengthen coordination between financial regulators, ministries, and other stakeholders and develop an interagency working group on climate finance and climate risk analysis. In particular, improving and harmonizing data for assessing climate-related risks could be the first step to improve interagency coordination. Furthermore, the authorities should develop capacity to conduct climate stress testing in the long run.

Figure 9. Results from Climate-Risk Analysis—Micro Approach^{1/}

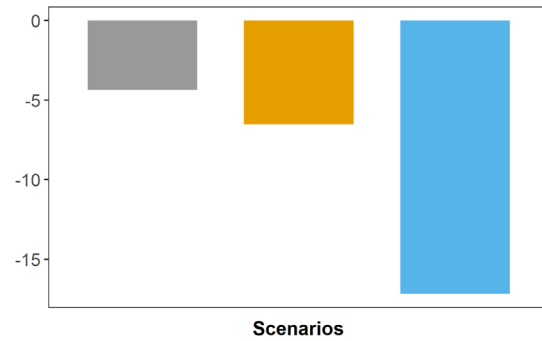
Impact on Kazakhstan’s Real GDP

(In percent, deviation from baseline in 2030)



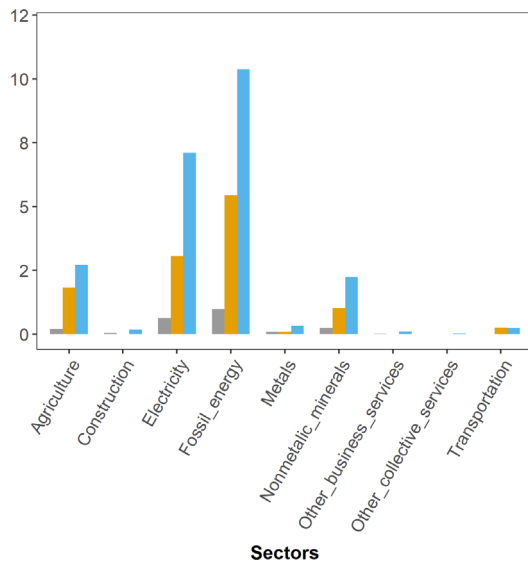
Impact on Kazakhstan’s Oil Exports

(In percent, deviation from baseline in 2030)



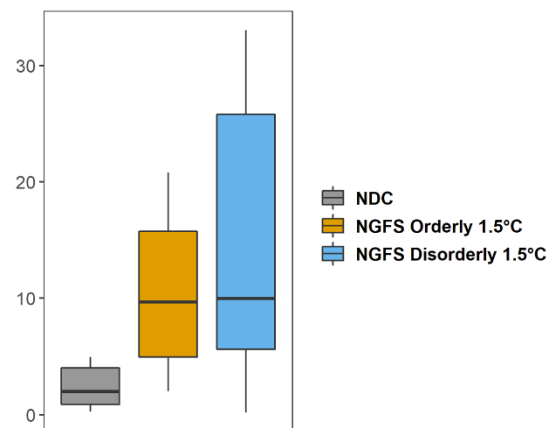
PDs across Sectors and Scenarios

(In percentage point, deviation from baseline in 2030)



Corporate Sector Cumulative Losses across Banks and Scenarios*

(In percent, deviation from baseline for 2023–2030)



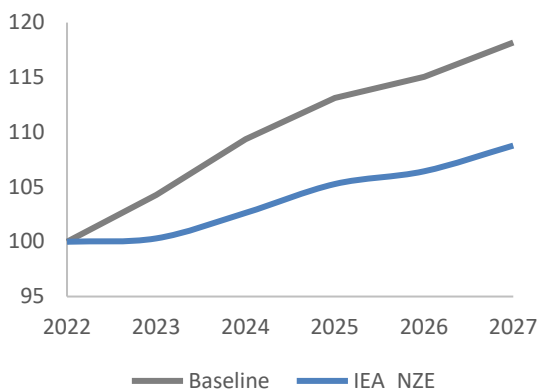
Sources: National authorities’ data and IMF staff calculation.

1/ In the boxplot (bottom right chart), the lower, middle, and upper hinges correspond to the 25th, 50th, and 75th percentiles; the upper and lower whiskers extend from the upper and lower hinges to the highest values that are within +/- 1.5 * IQR of the hinge, where IQR is the distance between the first and third quartiles.

Figure 10. Results from Climate Risk Analysis—Macro Approach^{1/}

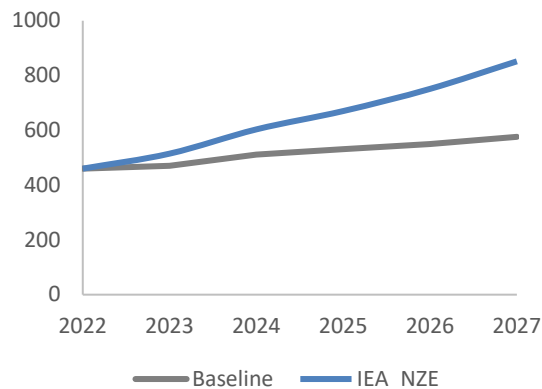
Impact on GDP

(Constant prices, 2022=100)



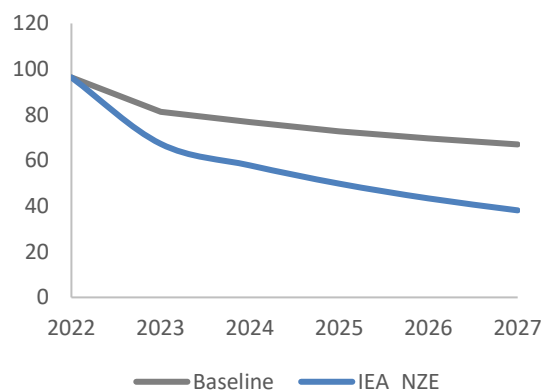
Exchange Rate

(KZT/USD)



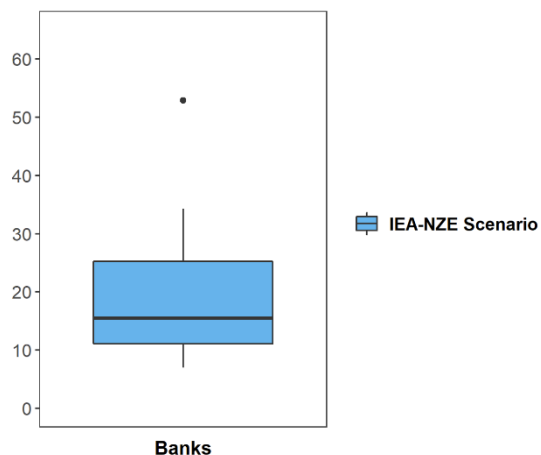
Oil Price

(SD/barrel)



Cumulative Losses on Banks' Overall Portfolio across Banks*

(In percent, deviation from baseline for 2023–2027)



Sources: National authorities' data and IMF staff calculations.

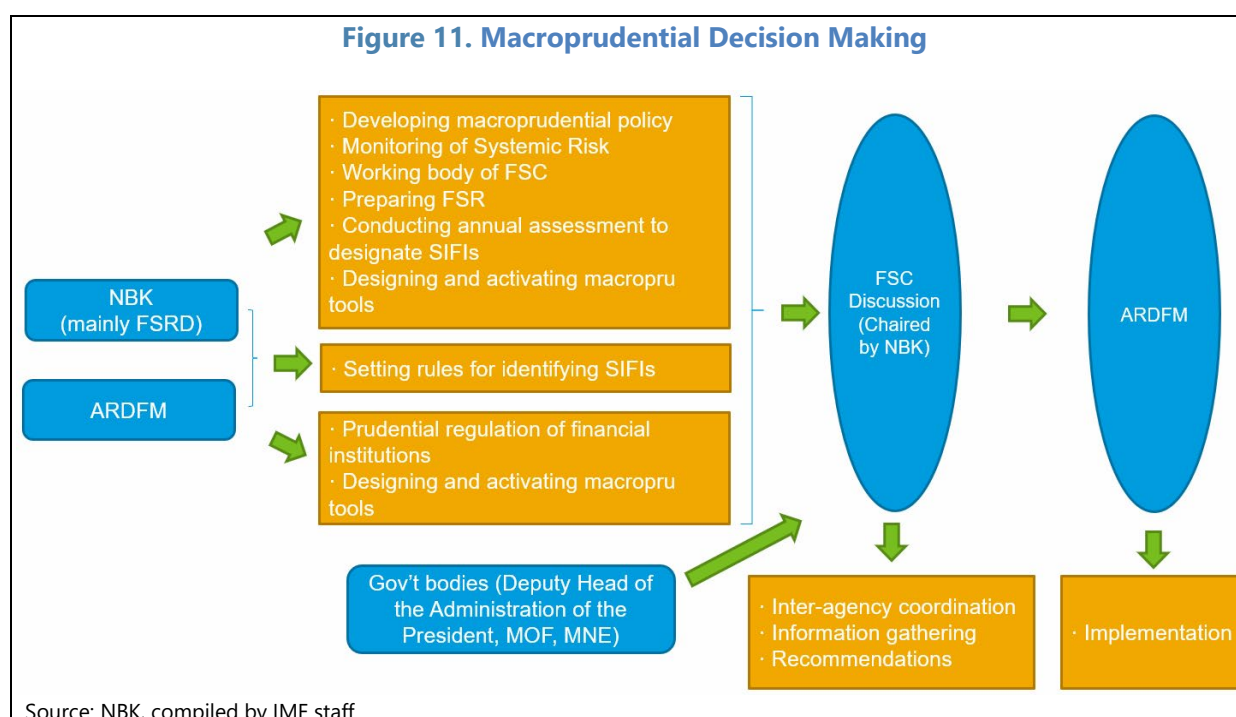
1/ In the boxplot (bottom right chart), the lower, middle, and upper hinges correspond to the 25th, 50th, and 75th percentiles; the upper and lower whiskers extend from the upper and lower hinges to the highest values that are within +/- 1.5 * IQR of the hinge, where IQR is the distance between the first and third quartiles. The outlier beyond the end of the whiskers is plotted individually.

FINANCIAL SECTOR OVERSIGHT

A. Macroprudential Framework

32. The legal framework should be amended to clarify the roles and responsibilities for macroprudential policy, and the Memorandum of Understanding on Financial Stability Issues should be updated. Some ambiguities in the division of labor between the NBK and ARDFM on the design and activation of macroprudential policy tools should be removed by amending the relevant

legal framework. Furthermore, the 2007 Memorandum of Understanding on Financial Issues needs to be updated to reflect recent changes in the institutional setting, and to clarify the responsibilities of each member of the FSC.



33. The authorities should continue to close data gaps, expand the macroprudential toolkit, and integrate top-down stress testing in the macroprudential framework. Aside from improving the measurement of DSTI (see above), collecting more reliable information on household income, non-bank corporate lending and commercial real estate prices could improve the monitoring of systemic vulnerabilities. The scope of the top-down stress testing conducted by the NBK, which currently only covers corporate loans, could be broadened to provide more valuable information in support of macroprudential policy. Finally, the authorities should refine the monitoring of the conditions for the activation of the CCyB and prepare for its triggering in case of robust evidence of an unsustainable growth. The authorities' interest in exploring the introduction of a positive neutral CCyB is welcome.

B. Banking Regulation and Supervision⁹

34. The framework for banking supervision has been reinforced since the 2014 FSAP. A major improvement was the introduction and strengthening of risk-based supervision, including by conducting a stress test and internal desk-based asset quality review (AQR), which became annual exercises complementing the supervisory review and examination process (SREP).

⁹ This subsection summarizes the outcome of the assessment of compliance of banking supervision in Kazakhstan with the Core Principles for Effective Banking Supervision of the Basel Committee (BCBS 2012).

35. The legal framework should guarantee the independence of the ARDFM and its operational autonomy in deciding its organizational structure. The recurring reorganization of the financial supervisory architecture causes institutional instability and negatively impacts the supervisor's capacity to perform its duties. The ARDFM is 'directly subordinated' to the President of the Republic of Kazakhstan, who approves its organizational structure and total staff. The law does not specify the reasons justifying removal of the Chairperson and there is no duty to publicly disclose the reasons for removal. The system of financing threatens the ARDFM's autonomy, as the ARDFM is funded from the government's budget. The ARDFM should be made financially independent, for example by levying fees on supervised entities.

36. The dual mandate of the ARDFM in promoting both financial stability and development creates tensions that may undermine its focus on ensuring the safety and soundness of the financial system. The promotional objective, which currently includes supporting the expansion of banks' loan portfolios, can conflict with the primary objective of ensuring the safety and soundness of banks and the banking system. To manage the potential trade-offs, the legal framework should create a hierarchy among the objectives, clearly stating the primacy of the safety and soundness of banks and the banking system over all other objectives. The ARDFM should embed such prioritization in public documents and strengthen its institutional arrangements.

37. There is room for improving the prudential framework for problem assets and provisioning. The ARDFM should more closely align the definition of NPLs with international standards by including all IFRS9 Stage 3 loans and foreclosed assets, and it should introduce write-off requirements for uncollectable loans.

38. Related party lending has been identified as a major driver of banks' defaults. The ARDFM should shed light on related party transaction practices, including on their materiality (e.g., via a thematic review) and propose amendments to the legal framework to ensure that the transfer of distressed assets by banks to their subsidiaries specialized in managing such assets takes place at market terms.

39. It is important to complete the implementation of the Basel II/III frameworks and exit residual forbearance measures. The ARDFM should phase out residual COVID-19 capital and liquidity forbearance measures as quickly as possible. It should also introduce the leverage ratio requirement, increase the Capital Conservation Buffer to 2.5 percent (from 2 percent) for non-domestic systemically important banks, and complete the Pillar 2 methodology by introducing capital and liquidity buffers based on a bank's overall risk profile.

40. The ARDFM should establish an effective consolidated supervision framework. Risk management and key prudential requirements such as liquidity requirements currently apply only on a solo level; in addition, risk management expectations have not been set for banking groups. This hinders the implementation of consolidated supervision.

C. Regulation and Supervision of Crypto Assets

41. Currently there appear to be limited short-term financial stability implications from crypto assets, but this can change quickly. The circulation of many types of crypto assets is currently prohibited in Kazakhstan; however, it is difficult to effectively supervise and enforce the ban. The share of the total population buying or selling crypto assets was estimated at approximately 1–3 percent as of March 2023. There is a crypto pilot project in the jurisdiction of the AIFC which allows users, including residents, to buy and sell crypto assets from regulated exchanges registered in the AIFC that are subject to regulatory oversight; however, most transactions by residents occur on global exchanges that are not subject to regulation.

42. Authorities should prepare for the possibility that the crypto market grows substantially and the current ban in the domestic market becomes untenable, requiring a change in the regulatory stance. Should crypto markets grow, greater regulatory oversight and collaboration between authorities will be required. This means that to have effective oversight of crypto markets, authorities will need to strengthen legal powers and upskill staff. They should also improve their domestic collaboration and international cooperation in relation to crypto assets, as well as improve user education through joint communication to markets and consumers.

D. The AIFC and the Domestic Financial System

43. Although still small, the AIFC has ambitious plans to expand activity, particularly towards Kazakhstani residents. Rules agreed with the NBK and ARDFM provide some constraints on provisions of financial services to residents, but the AIFC is advocating for further relaxation of restrictions on domestic intermediation as a strategic objective. Moreover, there are already a range of services, such as capital market activities and the provision of Islamic finance, that can be provided to Kazakhstani residents by either domestically-regulated firms or by firms registered in the AIFC, as well as some services, such as crowdfunding, multi-currency trading and settlement, and those offered by regulated exchanges under the crypto asset pilot, that can only be provided from the AIFC.

44. A strengthening of the regulatory arrangements and collaboration between the domestic authorities and AFSA is required.¹⁰ The planned increased engagement of the AIFC in the Kazakhstan financial system will complicate regulation and supervision and increase the risks of financial spillovers, regulatory arbitrage, and gaps between the domestically regulated system and the system in the AIFC, which may be exploited. Additional safeguards will need to be in place for such further engagement to occur while ensuring that the increased financial stability risks in Kazakhstan are successfully mitigated. In particular, regulatory arrangements and collaboration between the domestic financial authorities and AFSA will need to be reinforced, preferably by developing and codifying them in a financial stability protocol, which would include, as a minimum, the following:

- that each authority implements and upholds international standards and best practices of regulation, supervision, recovery and resolution, and enforcement.

¹⁰ Given that the AIFC is a separate jurisdiction, the FSAP did not assess its legal and regulatory framework.

- confirming financial stability in Kazakhstan as the primary objective for all prudential authorities (with all additional objectives being clearly subordinate to the primary one and not conflicting with it).
- ensuring clarity of regulatory perimeters of the domestic authorities and those of the AIFC, with clear delineation of responsibilities and boundaries.
- continuous monitoring of risks and regulatory responsibilities and boundaries, adapting frameworks quickly where needed, in order to avoid regulatory gaps.
- promoting an approach where ideally there is one regulatory authority responsible for each activity; in cases where the same activities can be provided under two different regulatory authorities, the regulators should implement a common—ideally harmonized—approach, based on international standards, to provide regulatory consistency and prevent arbitrage.
- enhancing sharing of information and collaboration between the domestic financial authorities and AFSA on risk assessment, and policy responses (including the design and implementation of new financial regulations, and participation in discussions at the FSC in relevant cases).

E. Financial Integrity (AML/CFT)

45. Risk-based AML/CFT supervision should be prioritized, along with measures to improve beneficial ownership transparency and mitigate the risks of criminal misuse of virtual assets. A 2023 assessment of Kazakhstan’s AML/CFT framework and its effectiveness¹¹ found it very effective in some areas (such as the investigation of ML/TF), but the authorities should strengthen other areas. In particular, the authorities should prioritize enhancing risk-based AML/CFT supervision of financial institutions, strengthen market entry controls, and improve their understanding of TF risks associated with legal persons. The authorities should implement measures to verify beneficial ownership information submitted to the state registry and should ensure that sanctions applied to financial institutions are proportionate and effective in deterring violations of AML/CFT obligations across the sector. Finally, the authorities should ensure that all virtual asset service providers (VASPs) are implementing AML/CFT preventive measures, including the travel rule.

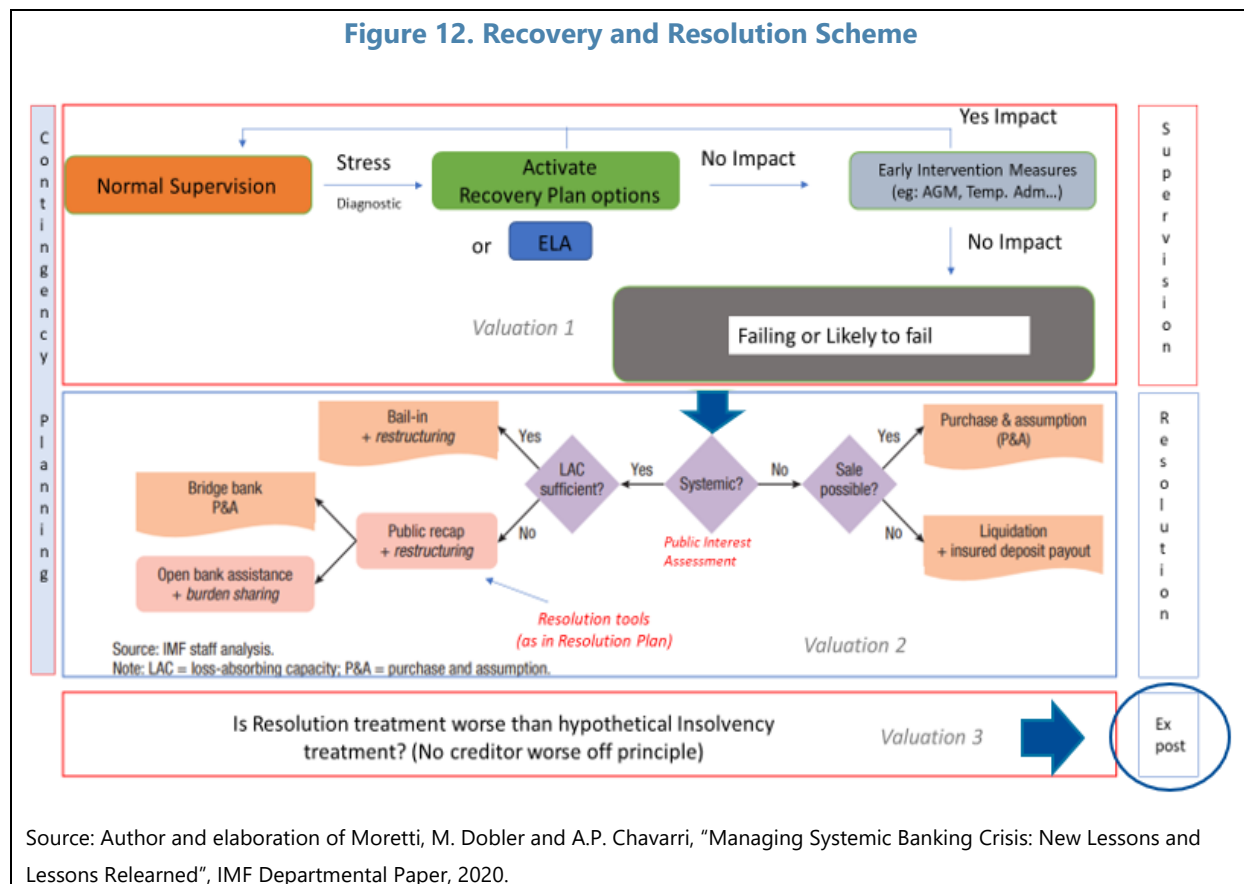
FINANCIAL CRISIS MANAGEMENT AND RESOLUTION

46. The assessment of the Financial Safety Net framework revealed inefficiencies in the resolution regime and the Early Interventions Measures (EIMs). The resolution authority should be operationalized and made independent from ARDFM’s Department of Banking Regulation with full-time management and staff. Contingency plans (at agency and inter-agency levels), memoranda of understanding, and periodical crisis management tests should be introduced, as well as resolvability assessments and recovery and resolution planning. There appear to be still too many ways for the state to intervene in banking crises (but also in normal circumstances) with different instruments (e.g., special purpose loans, Problem Loans Fund). EIMs tend to be triggered too late, causing delays in the reaction and response to the crisis and ultimately lower recovery rates on the

¹¹ The assessment of Kazakhstan’s AML/CFT regime was conducted by the Eurasian Group on Combatting Money Laundering and Financing of Terrorism (EAG), a Financial Action Task Force-style regional body of which Kazakhstan is a member. The mutual evaluation report of the assessment team’s findings was published in July 2023.

insolvent bank’s assets (Figure 12). Finally, the authorities should avoid any expansion of the national financial safety nets to the AIFC.

47. The deposit insurance framework should be fully aligned with the International Association of Deposit Insurers (IADI) principles. The Kazakhstan Deposit Insurance Fund (KDIF) is fully owned by the NBK, which dominates its board and represents it in the FSC; this limits KDIF’s operational independence. MoUs should be agreed between the KDIF and NBK to formalize the requirements on backstop facilities. The legislative 35-day period for the start of a payout should be brought in line with the IADI Core Principles. The current divergence in coverage between local and foreign currency deposits (higher for the former) could backfire in crisis situations, as it could incentivize foreign currency runs. The authorities should hence consider gradually aligning the coverage limit for foreign currency deposits with those for tenge deposits. Legal protection, which is provided only to those KDIF employees appointed as members of temporary administrations and liquidation commissions, should be extended to other participants directly involved in the resolution process.



48. The role of central bank funding should be further clarified. The organic law of the NBK enables it to provide emergency liquidity assistance (ELA); however, its conditionality (e.g., collateral criteria), which seems too restrictive, could be enhanced. Also, the law should grant the NBK the power to provide ELA in foreign currency, subject to stringent conditions. Finally, if LoLR must be provided, for financial stability reasons, to a bank that may not be able to fully comply with ELA

criteria (e.g., where there is significant uncertainty over its ability to repay, or adequate collateral cannot be mobilized in a timely fashion), an indemnity should be sought from the government.

FINANCIAL SECTOR DEVELOPMENT

49. There is a need to revisit the role of the state to tackle the deep structural challenges hindering finance for the private sector. The state's role in the financial sector should be gradually rebalanced away from direct interventions towards greater use of risk sharing mechanisms and better targeting.

50. The state footprint in the financial sector, along with increased market concentration and the emergence of conglomerates, calls for more pro-competition policies. Ensuring more effective market access for new entrants, implementing better control of state support measures, and updating antitrust rules for digital platforms would be important for fostering competition.

51. The authorities should address both demand- and supply-side issues to foster capital market development. Reforms should target the annual guarantee for pension funds, the development of a predictable and consistent benchmark issuance program for government securities, and more effective credit guarantee mechanisms to support the corporate bond market.

AUTHORITIES' VIEWS

52. The authorities appreciated the FSAP's assessment of their financial system. They found the engagement with the FSAP team useful to bring an additional perspective to their risk analysis, explore emerging issues, and discuss the evolution of their financial sector policy and regulatory frameworks.

53. The authorities broadly agreed with the conclusions of the systemic risk assessment. They concurred that the financial system is overall resilient to severe shocks and has a comfortable level of liquidity, with some heterogeneity among banks. They also underscored their commitment to strengthen data collection for stress testing and monitoring of consumer lending.

54. The authorities welcomed the assessment of the regulatory and supervisory framework but thought that the FSSA does not sufficiently reflect the progress made since the 2014 FSAP in enhancing bank stability and aligning risk-based supervision with international best standards. While recognizing that the NPL definition needs revision to align with international standards, the authorities highlighted that a large share of problem loans accumulated in previous crises has been resolved and that NPL and Stage 3 loans are declining rapidly. They took note of the recommendation on related party lending transactions, but they observed that such exposures are no longer a systemic issue, thanks to the shift to risk-based supervision, the implementation of supervisory judgment, and the enhancing of the methodology to define the relatedness of borrowers. The authorities will consider the FSAP's recommendation to substantiate the claim by conducting a thematic review. The authorities have already commenced the implementation of

recommendations to bring consolidated supervision of banking groups in line with Basel Standards and have requested technical assistance in this regard.

55. The authorities concurred with the recommendations on crypto asset regulation approaches and the need to reinforce collaboration with AFSA. They agreed that it is important to continue to upskill supervisors to better recognize risks emerging from crypto markets. They also agreed on the need to enhance collaboration between the financial authorities and AFSA to facilitate information sharing and mitigating risks.

56. The authorities have already started to implement the FSAP recommendations on the crisis management and resolution framework and provision of emergency liquidity. The authorities expressed their appreciation for the identification of deficiencies in the existing frameworks and have sought technical assistance to address them. In relation to the resolution of insolvent banks and state intervention, the authorities appreciated the recommendations on the roles and responsibilities of the different stakeholders, as well as specifying the forms and mechanism for using public funds and tightening underlying conditions; in particular, the role of the MoF in injecting capital during episodes of systemic risk and in indemnifying the NBK in case emergency liquidity is granted to protect financial stability, subject to a clarification of the circumstances under which that would be justified.

Appendix I. Selected Economic Indicators

	2021	2022	Projections					
			2023	2024	2025	2026	2027	2028
	(Annual percent change, unless otherwise indicated)							
Output and prices								
Real GDP	4.3	3.2	4.8	3.1	5.7	2.2	3.6	2.3
Real oil	-0.6	-1.7	7.1	0.1	14.4	-2.0	4.0	-2.0
Real non-oil	5.5	4.7	4.2	3.9	3.4	3.4	3.5	3.5
Contributions to GDP growth (percent)								
Private consumption	2.6	2.6	6.4	2.9	1.6	0.8	0.6	0.5
Government consumption	0.3	0.6	0.5	0.2	0.3	0.2	0.5	0.4
Gross fixed capital formation	0.4	1.2	1.8	1.1	1.4	1.1	1.3	1.2
Net Exports	0.8	-1.0	-3.9	-1.1	2.4	0.1	1.2	0.3
Consumer price index (end-of-period)	8.4	20.3	9.8	7.7	6.2	5.5	5.1	5.1
Consumer price index (average)	8.0	15.0	14.6	8.7	6.9	5.9	5.2	5.1
GDP deflator	14.1	19.7	7.8	12.3	6.1	5.8	5.6	5.2
Unemployment rate (average, percent)	4.9	4.9	4.8	4.8	4.8	4.8	4.8	4.8
	(In percent of GDP)							
Saving and Investment								
Gross national savings	25.2	27.3	21.1	19.8	21.1	21.0	20.8	20.4
Gross domestic investment	26.5	24.1	24.6	23.7	23.5	24.3	24.2	24.4
	(In percent of GDP)							
General government fiscal accounts								
Revenues and grants	17.1	21.8	23.1	20.7	20.6	20.2	20.0	19.7
Oil revenues	4.3	8.0	6.4	5.3	5.4	4.9	4.7	4.2
Non-oil revenues 1/	12.9	13.8	16.7	15.4	15.1	15.3	15.4	15.5
Expenditures and net lending	22.1	21.7	22.9	21.8	21.5	21.4	21.5	21.6
Overall fiscal balance	-5.0	0.1	0.1	-1.2	-0.9	-1.2	-1.5	-1.9
Non-oil fiscal balance	-9.3	-7.9	-6.3	-6.4	-6.4	-6.1	-6.1	-6.1
Statistical discrepancy	-0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financing	4.3	-0.1	-0.1	1.2	0.9	1.2	1.5	1.9
Domestic financing, net	1.4	2.7	1.0	2.9	4.3	3.8	3.8	3.6
Foreign financing, net	2.9	-2.8	-1.2	-1.8	-3.3	-2.6	-2.3	-1.8
<i>of which: NFRK withdrawal (+) / accumulation (-), net</i>	1.7	-2.6	-1.9	-1.9	-3.3	-3.1	-2.9	-2.6
Gross public debt	25.1	23.5	22.7	23.0	25.1	27.7	29.8	32.4
Net public debt	-3.0	-1.2	-1.0	-0.4	-0.1	0.4	1.3	2.5
	(Annual percent change, unless otherwise indicated)							
Monetary accounts								
Reserve money	12.1	8.4	14.9	17.3	13.8	4.8	6.8	5.5
Broad money	20.8	13.9	16.4	17.3	14.0	9.2	9.6	8.2
Credit to the private sector	24.4	21.5	17.0	18.2	16.7	13.1	14.4	12.6
NBK policy rate (eop; percent)	9.8	16.8	...	...	...	...	...	...
Balance of Payments								
Current account balance	-1.4	3.1	-3.5	-3.9	-2.3	-3.3	-3.4	-3.9
Trade balance	12.3	15.5	7.6	6.3	7.4	6.3	6.0	5.3
Exports of goods and services (annual percentage change)	45.6	30.5	-5.4	0.3	8.9	-1.4	1.7	-0.3
of which: Oil exports	31.2	50.9	-8.3	-3.5	15.6	-6.7	0.9	-5.7
Imports of goods and services (annual percentage change)	6.7	21.3	18.1	2.7	4.3	1.8	1.4	1.8
Capital account balance	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Financial account balance 2/	-1.3	2.6	-4.0	-4.1	-2.6	-3.5	-3.5	-4.0
Gross international reserves (in billions of US dollars)	34.4	35.1	36.5	37.1	38.2	38.9	39.3	39.7
Gross international reserves (in months of imports)	6.9	5.9	6.0	5.8	5.9	5.9	5.9	5.9
External debt	83.3	71.7	65.6	61.7	58.7	58.3	56.5	55.9
NFRK assets	28.1	24.7	23.7	23.4	25.2	27.2	28.5	29.9
Exchange rates								
Tenge per U.S. dollar (end of period)	431.7	461.0	...	...	...	...	...	...
Exchange rate (tenge per Russian rubles; eop)	5.2	5.1	...	...	...	...	...	...
Real effective exchange rate (eop, percent change) (+ appreciation)	-1.3	0.4	...	...	...	...	...	...
Memorandum items:								
Nominal GDP (in billions of tenge)	83,952	103,766	117,265	135,806	152,180	164,539	180,072	193,856
Nominal GDP (in billions of U.S. dollars)	197.1	225.5	...	...	...	...	...	...
Output gap (in percent of potential GDP)	0.2	0.0	0.7	1.0	0.5	0.2	0.0	0.0
Crude oil and gas condensate production (million tons) 3/	85.7	84.2	90.0	90.3	103.0	101.0	105.0	103.0
Oil price (in U.S. dollars per barrel)	69.2	96.4	80.5	79.9	76.0	72.7	69.9	67.5

Sources: Kazakhstani authorities and Fund staff estimates and projections.

1/ Non-oil revenue in 2023 includes a one-off dividend from Samruk-Kazyna of 1.1 percent of GDP from the sale of shares to the NFRK.

2/ Excluding reserve movements.

3/ Based on a conversion factor of 7.5 barrels of oil per ton.

Appendix II. Financial Soundness Indicators

Table 1. Kazakhstan: Financial Soundness Indicators

	2014	2015	2016	2017	2018	2019	2020	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
Capital adequacy												
Regulatory Capital to Risk-Weighted Assets	17.9	15.9	16.3	21.8	21.9	24.2	27.0	23.4	22.8	19.8	20.9	21.7
Regulatory Tier 1 Capital to Risk-Weighted Assets	13.8	13.1	14.3	17.5	16.8	19.1	21.3	19.3	18.9	16.4	17.6	18.6
Regulatory Tier 1 Capital to Assets	11.3	10.2	10.7	12.0	11.3	12.8	11.8	11.4	11.6	10.9	11.3	11.1
Asset quality												
Non-performing Loans to Total Gross Loans	12.4	8.0	6.7	9.3	7.4	8.1	6.9	3.3	3.6	3.6	3.6	3.4
Provisions as percent of NPL	51.6	66.2	72.2	89.2	75.1	80.2	77.7	75.6	77.1	76.2	72.8	76.9
Non-performing Loans Net of Provisions to Capital	27.8	13.7	9.0	3.6	6.5	5.3	5.0	3.1	3.1	3.5	3.8	3.2
Large Exposures to Capital	209.8	285.4	248.7	159.8	144.5	118.5	110.6	98.0	99.1	102.6	91.1	93.6
Earnings and profitability												
Return on Assets	2.7	1.6	1.9	0.1	3.0	3.7	3.1	4.2	4.3	2.4	3.6	4.2
Return on Equity	20.5	9.4	14.9	-2.1	21.3	25.2	19.3	30.6	31.3	15.5	25.7	30.7
Interest Margin to Gross Income	56.7	70.3	66.9	54.8	52.7	48.9	45.5	57.7	52.5	76.0	66.2	61.5
Trading Income to Total Income	2.5	-2.6	4.0	-2.0	4.2	2.5	1.9	7.2	19.6	-13.9	2.4	9.9
Non-interest Expenses to Gross Income	36.5	47.3	42.9	34.4	42.4	36.1	44.7	40.3	35.8	46.1	37.0	35.4
Personnel Expenses to Non-interest Expenses	39.4	35.7	36.6	35.3	30.5	31.2	23.5	29.8	31.5	32.7	31.0	31.1
Liquidity												
Liquid Assets to Total Assets (Liquid Asset Ratio)	18.3	20.5	24.6	33.3	34.4	33.0	39.3	30.3	29.8	28.4	29.8	29.5
Liquid Assets to Short Term Liabilities	57.6	78.3	75.7	97.7	90.8	95.9	103.6	50.5	53.2	45.6	48.6	47.0
Foreign-Currency-Denominated Loans to Total Loans	30.7	42.7	39.9	26.5	23.3	16.9	13.7	11.3	11.0	10.6	10.0	9.9
Foreign-Currency-Denominated Liabilities to Total Liabilities	54.1	66.6	50.3	44.0	42.7	38.0	35.4	32.6	37.0	37.7	36.2	33.9
Customer Deposits to Total (Non-interbank) Loans	90.3	100.5	111.7	122.9	124.3	122.4	137.6	129.8	126.6	124.9	132.7	131.1
Sensitivity to market risk												
Gross Asset Position in Financial Derivatives to Capital	6.1	38.2	14.9	5.9	13.6	6.0	2.9	1.7	7.7	6.3	2.8	1.5
Gross Liability Position in Financial Derivatives to Capital	5.6	10.0	4.8	3.9	10.1	6.5	2.5	1.4	2.6	6.6	4.1	1.5
Net Open Position in Foreign Exchange to Capital	-1.1	2.7	1.6	0.0	2.5	1.6	0.3	2.0	0.4	-23.2	-16.2	0.5

Source: Financial Soundness Indicator database and National Authorities

1/The 2022Q2 large NOP in FX to Capital reflects the exceptional support that Russian subsidiaries received from their parent companies when sanctioned.

Appendix III. Key Messages from Latest IMF Reports

1. The last Financial Sector Assessment was conducted in 2014. Its main recommendations included: (i) closely monitoring foreign-currency denominated loans and concentrated large exposure in banks; (ii) transitioning towards a more risk-based approach to supervision; (iii) reinforcing the supervisor's capacity to challenge banks' decisions on provisioning; (iv) intensifying supervision of banks' cross-border operations; and (v) adopting several measures to reinforce the resolution regime and crisis management framework.

2. The Fund's Article IV reports have followed up on the 2014 FSAP recommendations and, more recently, advised to implement additional monetary policy tightening.

- Past Article IV reports reiterated the need to strengthen the resolution regime and crisis management framework and the central bank's intervention and regulatory powers. Recent reports have commended the authorities on their progress in strengthening risk-based bank supervision, the introduction of regular internal desk-based asset quality reviews and supervisory stress tests, and the planned adoption of updated (IFRS-based) measures of non-performing loans.
- Most recently, the 2022 Article IV highlighted increased concentration and reduced competition, following the exit of Russian subsidiaries, and recommended that the central bank and the regulatory agency continue to implement compliance procedures to avoid secondary sanctions.

Appendix IV. Recent MCM Technical Assistance Activities

Lead Division	Dates	TA Mission Title	Status
FY22			
MCMFR	July–September 2022	Forensic Supervision Long-term Expert	Completed
MCMFR	January–April 2022	Risk-Based Supervision: Securities Market Supervision	Completed
MCMFS	December 2021–April 2022	Stress Testing Using Credit Registry Data	Completed
MCMDM	February 2022	Public Debt Management	Completed
MCMCO	February 2022	Central Bank Risk Management	Completed
MCMFR	July–September 2021	Strengthening Cybersecurity in Financial Institutions	Completed
MCMFR	July–September 2021	Risk-Based Supervision: Pillar 2 Liquidity	Completed
FY20–21			
MCMFR	April–May 2021	Risk-Based Supervision: Recovery Plans and Interest Rate Risk (IRRBB)	Completed
MCMFR	November 2020–January 2021	Risk-Based Supervision: Pillar 2 Implementation	Completed
MCMFR	September 2020	Risk-Based Supervision	Completed
MCMMP	August 2019	Forecasting and Policy Analysis System (FPAS)	Completed

Appendix V. Recent Article IV Recommendations Related to the Financial Sector

Table 1. Kazakhstan: Recent Article IV Recommendations Related to the Financial Sector	
2022 A-IV	<ul style="list-style-type: none"> • Prudential measures should preempt risks from rapid consumer lending growth and increased market concentration. • The authorities should continue to strengthen the bank supervision and resolution frameworks.
2021 A-IV	<ul style="list-style-type: none"> • Policies should continue to balance supporting the economic recovery and safeguarding financial stability. • Further progress in strengthening the supervisory and resolution frameworks is needed. • Risks from fast-growing consumer lending and potential bank liquidity pressures should be carefully monitored.
2019 A-IV	<ul style="list-style-type: none"> • Conducting an Asset Quality Review (AQR) and taking actions to address identified weaknesses. • Establishing a sound financial regulator following the authorities' decision to separate the financial supervision function from the NBK.

Appendix VI. Risk Assessment Matrix¹

Risks	Likelihood	Expected Impact	Policy Response
External risks			
<p>Intensification of regional conflict(s). Escalation of Russia’s invasion of Ukraine or other regional conflicts and resulting economic sanctions disrupt trade (e.g., energy, food, tourism, and/or critical supply chain components), remittances, refugee flows, FDI and financial flows, and payment systems.</p>	High	<p style="text-align: center;">Medium</p> <p>Trade disruptions could affect exports from Kazakhstan. A sustained closure of the CPC pipeline would affect the fiscal and external accounts. High oil prices would support Kazakhstan’s buffers. Migration flows could add to inflation pressures.</p>	Save oil revenue windfalls. Strengthen implementation of the medium-term fiscal framework. Diversify export routes. Allow the exchange rate to adjust to potential pressures, use buffers to smooth short-term volatility.
<p>Abrupt global slowdown or recession. Global and idiosyncratic risk factors combine to cause a synchronized sharp growth downturn, with recessions in some countries, adverse spillovers through trade and financial channels, and markets fragmentation.</p>	Medium	<p style="text-align: center;">Medium</p> <p>A global slowdown could result in lower commodity prices and volume of trade.</p>	Allow the exchange rate to adjust; if needed, use buffers to smooth volatility.
<p>Commodity price volatility. A succession of supply disruptions (e.g., due to conflicts and export restrictions) and demand fluctuations (e.g., reflecting China reopening) causes recurrent commodity price volatility, external and fiscal pressures, and social and economic instability.</p>	Medium	<p style="text-align: center;">High</p> <p>Sustained high oil prices could contribute to build external and fiscal accounts buffers. A sharp drop in oil prices would have the opposite effect and cause pressures on the financial sector via the exchange rate and slower growth.</p>	Allow the exchange rate to adjust; accumulate buffers and use them to smooth short-term volatility if needed. Continue structural reforms to promote economic diversification.

¹ The Risk Assessment Matrix (RAM) shows events that could materially alter the baseline path. The relative likelihood is the staff’s subjective assessment of the risks surrounding the baseline (“low” is meant to indicate a probability below 10 percent, “medium” a probability between 10 and 30 percent, and “high” a probability between 30 and 50 percent). The RAM reflects staff views on the source of risks and overall level of concern as of the time of discussions with the authorities. Non-mutually exclusive risks may interact and materialize jointly. The conjunctural shocks and scenarios highlight risks that may materialize over a shorter horizon (between 12 to 18 months) given the current baseline. Structural risks are those that are likely to remain salient over a longer horizon.

Risks	Likelihood	Expected Impact	Policy Response
<p>Deepening geo-economic fragmentation. Broader and deeper conflict(s) and weakened international cooperation lead to a more rapid reconfiguration of trade and FDI, supply disruptions, technological and payments systems fragmentation, rising input costs, financial instability, a fracturing of international monetary and financial systems, and lower potential growth.</p>	High	High Increased geo-economic fragmentation would disrupt traditional trade routes exacerbating inflation and costs from the lack of economic and trade diversification of the country	Accelerate reforms and initiatives (e.g., new infrastructure) to promote economic and trade diversification (away from fossil fuels) and to attract FDI. Strengthen policies and regulatory compliance against risks of secondary sanctions.
<p>Cyberthreats. Cyberattacks on critical domestic and/or international physical or digital infrastructure (including nascent crypto ecosystems) trigger financial and economic instability.</p>	Medium	Medium Cyberattacks could disrupt the payment system, which relies on electronic means to a large extent.	Provide monetary and fiscal support as needed. Accelerate efforts to enhance cyber-security.
<p>Extreme climate events. Extreme climate events cause more severe than expected damage to infrastructure (especially in smaller vulnerable economies) and loss of human lives and livelihoods, amplifying supply chain disruptions and inflationary pressures, causing water and food shortages, and reducing growth.</p>	Medium	Medium/Low Kazakhstan's agricultural sector could suffer from higher incidence of droughts.	Accelerate actions to advance the green transformation, including to foster mitigation and adaptation, and cushion the transition. Utilize fiscal buffers, if needed.
Domestic risks			
<p>Fiscal slippages, slowdown of reforms, and delays in privatization</p>	Medium	Medium Loosening fiscal policy, decreased investors' confidence, low level of competition, lack of diversification and high vulnerability to external shocks.	Implement medium term fiscal framework and strengthen fiscal rules. Step up structural reforms, accelerate privatizations. Improve public sector transparency and accountability.

Appendix VII. The Digital Tenge¹

1. The Digital Tenge (DT) project continues with the aim of achieving an operational model by 2025. The NBK established an exploratory group in 2020 that went on to develop DT prototypes, during 2021 and 2022.² A pilot is currently underway to finalize the operational model, including roles and responsibilities of participants in the DT ecosystem, identify challenges such as legal and regulatory barriers ahead of any launch of DT, and test DT's use in cross-border payments.

2. The NBK's 2022 whitepaper (2022b) outlined key design features that are being further explored. The whitepaper confirms DT will be structured under a two-tier hybrid infrastructure where second tier banks (commercial banks) and payment providers will open wallets and distribute DT to end users. The DT architecture will have elements of both centralized and decentralized technologies, with DT itself operating as an unremunerated token on DLT. The stated purpose of DT is to facilitate payments by individuals and legal entities. Additional functionalities will include programmability, offline capability, and customizable anonymity.³ The authorities continue to explore potential business models around distribution. In addition to cross-border use, the pilot is exploring the use of DT for social payments, and the integration of DT with decentralized financial services (DeFi).⁴

3. Alongside ensuring operational resilience and functionality, the implementation of a robust architecture for DT should preserve monetary and financial stability. Ensuring that DT is built as an additional, secure payment channel in Kazakhstan would enhance the resilience of the domestic payments landscape. However, to the extent CBDCs induce a degree of switching away from bank deposits, commercial banks (deposit-takers) may need to seek alternative sources of financing. This could have subsequent impacts for the cost of credit and level of lending in Kazakhstan's economy. CBDC might provide a tool to enhance the effectiveness and flexibility of monetary policy, for example through remuneration. Equally, a non-remunerated CBDC may have monetary policy implications, such as hardening the effective lower bounds of monetary policy (as physical cash today does). The extent of these impacts can be difficult to predict ahead of clear design choices and may change as developments arise. In the context of financial stability, many central banks therefore continue to explore a CBDC design where different groups of users are subject to holding limits (at an individual/entity level) or that include pricing controls (i.e.,

¹ The Digital Tenge was launched in November 2023, after the conclusion of the FSAP missions. This Appendix was finalized in July 2023.

² See NBK (2021a, 2021b, 2022a) for details of their project and results of previous technical work.

³ Customizable anonymity refers to the ability for users to be anonymous to the recipient of any transaction. The user's own wallet provider/commercial bank will always verify their identity.

⁴ DeFi refers to financial services based on new decentralized technologies and includes digital asset platforms, including cryptoasset ecosystems.

remuneration).⁵ NBK has focused on a non-remunerated form, with the potential use of limits on holdings. NBK assessments to date of this design therefore lead them to see minimal implications for financial and macroeconomic stability.

4. The composition of the domestic financial system will shape the potential ecosystem dynamics of DT operations and subsequent financial stability implications for Kazakhstan.

Customer deposits form a material part of the funding base of Kazakhstan's banking sector. Banks will need to consider how they may respond to a loss of customer deposits, for example if they have options to access alternative market-based finance, and how they may respond to increased market competitiveness in future as new players (fintechs) emerge as part of the DT system.⁶ NBK commissioned an economic assessment using DSGE modelling under a monopolistic banking sector⁷ (where user demand has been varied based on user preferences to make their assessments). There are further scenarios that could be assessed including the distribution of impacts across different banks in Kazakhstan.

5. To ensure future preparedness, the NBK could consider the range of potential user demand scenarios under both 'steady state' and stress conditions. CBDCs in production⁸ have yet to establish user demand at scale, which would allow for an evidence-based assessment of risks and benefits. Therefore, most central banks require their design to be based on ex-ante analysis. Kazakh authorities commissioned user surveys in 2022 which indicated potential demand and willingness to use DT by 60 percent of the representative sample.⁹ In practice, demand for CBDC¹⁰ may require a flexible approach by the central bank to manage any rapid fluctuations in demand. This will likely require more active monetary policy operations.¹¹ Central banks need to consider 'steady-state' demand for CBDC, alongside the demand evolution during any transition periods (particularly at the introduction/launch stage) and periods of stress i.e., shocks to confidence in the banking system which may trigger a flight to safety.¹²

6. Additional scenario analysis could be conducted to evaluate the effects of wholesale or cross-border holdings and usage. Whilst DT is broadly targeted at retail (individual) use,

⁵ A group of seven central banks working with the BIS outlined considerations around financial stability implications (2021), and specifically outlined a discussion of price and quantity approaches for CBDC in their latest update (2023).

⁶ Competitiveness of the domestic financial market, and competition in payments within the domestic financial market are two of the key policy objectives of DT.

⁷ See NBK (2022b) for a summary of the methodology.

⁸ Three central banks have launched CBDCs operational across their entire jurisdiction: The Central Bank of the Bahamas, the Bank of Jamaica, and the Central Bank of Nigeria. The People's Bank of China has also been operating a growing pilot program since 2019.

⁹ See NBK (2022b) for summaries of the commissioned survey.

¹⁰ Unlike demand for cash which is forecasted and printed ahead of time.

¹¹ Discussions of impacts on monetary policy management are included in a forthcoming Fintech Note for the CBDC Handbook. [IMF Authors, Forthcoming].

¹² See Group of Seven Central Banks working with the BIS for further discussion (2021).

commercial banks who enable the distribution of CBDC may in principle also hold DT¹³ for ‘wholesale use’. Another scenario may involve businesses holding large amounts of CBDC which may have greater impacts of disintermediation. Enabling cross-border holdings of CBDCs (non-resident holdings) or establishing interoperability among different countries’ CBDCs introduces additional factors to consider, such as the possibility of external policy or currency spillovers, and potential capital flow and exchange rate volatility.¹⁴ The extent of these impacts will also depend on the scale and speed of movements into and out of DT. Extending scenario analysis to assess these demand possibilities will help authorities in managing and designing tools and safeguards to support the wholesale or cross-border usage of DT, particularly during times of stress.

7. The role of CBDCs in strengthening connections between traditional financial services and DeFi could be a significant source of operational and economic risk. Consensus is emerging across several central banks that CBDCs must be interoperable with other forms of money such as cash and commercial bank deposits.¹⁵ However, limited analysis has been conducted regarding the implications for direct convertibility of CBDCs with crypto assets that are not denominated in the same unit of account. While this approach may enable innovative functionality, it may introduce further economic and operational risks. The ongoing DT pilot will cover the technical integration of CBDC with DeFi. This exploration will provide insights into how direct integration could open or amplify channels of risk that require management.

¹³ As their own balances of CBDC, not customer balances.

¹⁴ See IMF (2020) and the work under Building Block 19 of the cross-border payments roadmap for discussion of macro-financial considerations of CBDC (CPMI et al, 2021, 2022).

¹⁵ See G7 Public Policy Principles for retail CBDC (2021) and the Group of Seven Central Banks working with the BIS (2023).

Appendix VIII. Stress Testing Matrix

Domain	Top-down stress test approach by the FSAP Team
Banking sector: Solvency Stress Test	
Institutional perimeter and Scope	<ul style="list-style-type: none"> • 12 commercial banks, covering 90 percent of banking system assets. • Supervisory data. Starting point end of December 2022 (cut-off date). • Bank level historical data available for satellite models: quarterly covering periods from 2014Q1 to 2022Q4.
Methodology and risk drivers	<ul style="list-style-type: none"> • Scenario-conditional projections of various drivers of P&L and balance sheet were assessed using multiple risk analysis modules, under a static balance sheet assumption. • Credit risk, market risk, net interest income and non-interest income projections were considered via different risk analysis modules for all banks within scope for two scenarios: baseline and adverse. • Credit risk module involved calculation of scenario dependent projections of future loan loss provisions, considering five major credit segments based on data availability: (i) consumer secured, (ii) consumer unsecured, (iii) mortgage, (iv) corporate, and (v) SMEs. Granular projections of credit risk parameters including probabilities of default (PDs) and losses given default (LGDs) for each asset class were considered. • Interest rate risk module considered impact on net interest income, by linking interest sensitive assets and liabilities to projected interest rate paths under different scenarios, obtained by estimating econometric models to incorporate pass-through of policy rates to both asset and liability. Granular impact was captured by considering multiple sub-segments under both asset and liability segments. • Market risk impact was considered based on scenario paths of interest rates, FX, corporate spreads, and possibly other market risk factors. The impact on P&L and OCI due to FVPL and FVOCI portfolios was estimated as part of the market risk impact using duration-based approach. Market risk was based on the estimation of FV and OCI impact on the securities portfolios. Additional impact on the NOP position was also considered, consistent with FX shocks across scenarios. The unrealized losses from market risk in the AC portfolio were also quantified. • Non-interest income/expenses were projected using a simple econometric approach linking net fees and commission income and other noninterest expense of banks to the projections of macroeconomic paths, and were reflected as impact on the P&L.

Domain	Top-down stress test approach by the FSAP Team
Banking sector: Solvency Stress Test	
	<ul style="list-style-type: none"> • Satellite models: several econometric estimation models were used, such as panel fixed effects model for bank-specific historical data for PDs of various credit portfolios, effective interest rates of various interest income/expenses segments, and non-interest expenses. Aggregate historical time series of other relevant variables as needed were also linked to macro-financial scenario paths using econometric models. • Horizon: 3 years (2023—2025). • Hurdle rates: based on the minimum regulatory requirement for CET1 and total capital adequacy ratio for all banks.
Scenarios	<ul style="list-style-type: none"> • Baseline scenario aligned with April 2023 IMF WEO. • Bespoke adverse scenario addressing the most relevant risks and vulnerabilities confronting the financial system. These include simultaneous occurrence of abrupt global slowdown, and ensuing demand driven sharp reduction in oil prices, rise in global risk premia, flight of capital from KAZ, leading to exchange rate depreciation, rising inflation, and sharp monetary policy response by rates' increases higher than anticipated. These risks could get compounded by intensifying spillovers from regional conflicts, supply-chain disruptions, adding to persistent inflation and slow growth.
Concentration risk	<ul style="list-style-type: none"> • Potential effects of defaults of largest exposures, with a simulation exercise on bank capital via loan loss provision. Additional analysis was considered based on concentration of depositors and potential of a bank run. Both analyses were based on anonymous data.
Sensitivity analysis	<ul style="list-style-type: none"> • Additional sensitivity analysis was considered to assess adverse impact under counterfactual conditions (such as higher NPL ratios at the starting point (cutoff date) and significant increase in consumer lending risks).
Output presentation	<ul style="list-style-type: none"> • System-wide evolution of aggregate CET1 and/or total capital adequacy ratios. • Contribution of key drivers to system-wide net income and capital position. • Share of institutions with capital below the hurdle rates.
Banking Sector: Liquidity Stress Test	
Institutional perimeter	<ul style="list-style-type: none"> • 19 Commercial banks, covering all the banks subject to liquidity regulation. • Supervisory data Starting point end of December 2022 (cut-off date).
Methodology and scenarios	<ul style="list-style-type: none"> • Scenario analysis to cover risks from various channels, for example, (i) run on retail deposits, (ii) run on wholesale deposits, (ii) decline in asset prices and haircuts, (iv) run on FX deposits. Standard regulatory metrics of LCR and NSFR were considered. • A range of severity of deposit outflows was also considered to incorporate recent high rates of deposit outflows observed in global banking system turmoil.

Domain	Top-down stress test approach by the FSAP Team
Climate change: Transition Risk	
Institutional perimeter	<p>Macro approach: the same as solvency stress test.</p> <p>Micro approach:</p> <ul style="list-style-type: none"> • 17 Commercial banks, covering all banks with corporate exposures. • Supervisory data with firm-level information. Starting point beginning of January 2022 (cut-off date). • Sector level historical data available for regression: annual from 2014 to 2021. • Bank and sector exposure data: monthly covering periods from January 2014 to March 2021.
Methodology	<p>Macro approach: the same as solvency stress test. Adverse scenario based on IEA's Net Zero by 2050.</p> <p>Micro approach:</p> <ul style="list-style-type: none"> • Four transition risk scenarios with different stringency levels of climate mitigation actions are used to obtain global carbon prices, global energy supply, demand, trade, and prices, and KAZ sectoral output pathways and GDP through a macroeconomic model (IMF-ENV). • Bank level sectoral exposure breakdown is used in combination with baseline and adverse PDs. • Stressed delta PDs (reflecting transition risk) are fed to the standard solvency ST machinery to produce capital projections.
Output presentation	<ul style="list-style-type: none"> • Delta PDs by sector and by bank with respect to baseline. • Bank level loan losses.