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THE REPUBLIC OF KAZAKHSTAN

FINANCIAL SYSTEM STABILITY ASSESSMENT

August 2014

This Financial System Stability Assessment on the Republic of Kazakhstan was prepared by a staff team of the IMF for the Executive Board's consideration on July 21, 2014. This report is based on the work of an IMF Financial Sector Assessment Program (FSAP) mission to Kazakhstan during February 26–March 12, 2014. The FSSA was completed on July 8, 2014

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REPUBLIC OF KAZAKHSTAN

FINANCIAL SYSTEM STABILITY ASSESSMENT

July 8, 2014

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This report is based on the work of the Financial Sector Assessment Program (FSAP) mission that visited the Republic of Kazakhstan during February-March 2014. The FSAP findings were discussed with the authorities during the Article IV consultation mission in April 2014.

- The FSAP team comprised: Javier Hamann (mission chief), Sònia Muñoz (deputy mission chief), Emanuel Kopp, Pierpaolo Grippa, Koralai Kirabaeva (all MCM), Natan Epstein (MCD), Natalia Stetsenko (LEG), Harish Natarajan (World Bank), and Vern McKinley, Jose Tuya, Rodolfo Wehrhahn, Andrea Corcoran, and Manfred Balz (all external consultants). Mr. John Pollner (World Bank) also participated. The mission met Governor Kelimbetov, Deputy Governors Akishev and Kozhakhmetov, and officials from the Ministry of Finance and the Ministry of Economy. The mission also met representatives of commercial banks and non bank financial institutions (including insurance companies, pension funds, and stock market), professional associations, a rating agency, and think thanks in Almaty and Astana.

- FSAPs assess the stability of the financial system as a whole and not that of individual institutions. They are intended to help countries identify key sources of systemic risk in the financial sector and implement policies to enhance its resilience to shocks and contagion. Certain categories of risk affecting financial institutions, such as operational or legal risk, or risk related to fraud, are not covered in FSAPs.

- This report was prepared by Javier Hamann and Sònia Muñoz.

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Glossary

AMC	Asset Management Company
AML/CTF	Anti-money laundering/combating terrorism financing
BCBS	Basel Committee for Banking Supervision
BCP	Basel Core Principles for Effective Banking Supervision
BU	Bottom-up
CAR	Capital Adequacy Ratio
CMA	Council for Management of the UAPF Assets
EBIT	Earnings before Interest and Taxes
ELA	Emergency Liquidity Assistance
FMI	Financial Market Infrastructure
FSAP	Financial Sector Assessment Program
FSSA	Financial System Stability Assessment
FSC	Financial Supervision Committee
IAIS	International Association of Insurance supervisors
ICP	Insurance Core Principles
ICS	Interbank Clearing System
IFRS	International Financial Reporting Standards
IOSCO	International Organization of Securities Commissions
ISMT	Inter-Bank System for Money Transfer
KDIF	Kazakhstan Deposit Insurance Fund
LCR	Liquidity coverage ratio
MaPP	Macroprudential Policies
MoU	Memorandum of Understanding
NBK	National Bank of Kazakhstan
NIIP	Net International Investment Position
NPL	Nonperforming Loan
NSFR	Net Stable Funding Ratio
PLF	Problem Loan Fund
P&L	Profit and Loss Statement
P&A	Purchase and assumption
ROE	Return on Equity
SK	Samruk Kazyna
SME	Small- and Medium-sized Enterprise
SPV	Special Purpose Vehicle
TD	Top-down
UAPF	Unified Accumulation Pension Fund

EXECUTIVE SUMMARY

The global financial crisis exposed serious bank vulnerabilities in Kazakhstan. In the run up to the crisis, the economy grew at a high rate but the non-tradable sector—particularly construction—expanded at an unsustainable pace on the back of a surge in bank credit and an appreciating real exchange rate. Credit was financed largely through external wholesale funding and a sizeable increase in bank leverage. As the crisis erupted, external funding dried up forcing banks to deleverage aggressively. This led to a marked deceleration in non-oil economic activity and a rapid deterioration in banks' assets. These effects were compounded by the impact of the 2009 devaluation on credit risk and banks' external indebtedness.

The authorities successfully contained the ensuing systemic crisis, but left unaddressed important weaknesses that continue to linger. The government nationalized three of the largest banks and restructured their external obligations, thus preventing a collapse of the banking system. However, bank nationalization was not followed by a coherent divestiture plan. In addition, the large stock of non-performing loans (NPLs) that emerged during the crisis has not been resolved.

The banks' solvency situation is adequate but somewhat fragile as a result of legacy problems. The banking system has relatively comfortable cushions above minimum capital requirements, but these are likely to shrink as the effects of the February 2014 devaluation on credit quality work their way onto banks' books and capital requirements become tighter. Further, these cushions could vanish and capital deficiencies would arise under stress. High NPLs depress bank profitability and render banks quite vulnerable to further deteriorations in credit quality. They also limit banks' ability to increase capital in order to meet the envisaged tightening of capital requirements.

A faster transition to risk-based oversight is needed. The relative vulnerability of banks to shocks warrants increased emphasis on risk. This can be achieved through the adoption of more advanced risk-assessment tools and a more extensive use of stress test results for risk analysis. With the recent adoption of IFRS loss impairment as the standard for provisioning, more intense supervisory scrutiny is needed to counter the reliance of some banks on unrealistic valuation of collateral and the resulting under provisioning. This will require training in collateral valuation, access by supervisors to available information on real estate, and hiring staff with expertise in appraisals.

The financial safety net and resolution framework were upgraded during the crisis, but need further adjustments. The government amended the resolution framework in 2009 to incorporate several desirable features such as restructuring, purchase and assumption (P&A), and bridge bank. However, during the crisis it bypassed the use of sequential crisis management tools and nationalized banks and restructured their external liabilities. The resolution framework suffers from the absence of special authority and requires the approval of depositors and creditors. Adjustments to the ELA framework are needed to limit its availability to solvent institutions.

Measures adopted recently to address the NPL overhang represent a step in the right direction but more will be needed. The needed measures include debt write-offs; foreclosures, repossession of collateral, and recovery under insolvency proceedings; as well as the sale of NPLs and collateral by the Problem Loan Fund (PLF) and bank-owned SPVs. To operationalize this approach legal and tax changes would be needed, including improvements in the insolvency regime, the removal of obstacles to transfers of collateralized debt to the PLF and SPVs, and the introduction of tax incentives for debt write-offs and sales of collateral at below face value.

The insurance sector and the nationalized pension system face important challenges. Legislative changes in 2010 expanded the coverage of the mandatory work accident plan but did not provide for the needed funding, and earthquake exposure could exhaust the capital of the nonlife sector without adequate reinsurance. The governance structure of the UAPF leaves it vulnerable to conflicts of interest or pressures to support the development of infrastructure.

Despite significant improvements, the securities sector suffers from mispricing, uncertainty, and reputational risks. Lack of legal certainty about settlement finality is a concern and measures to address reputational risks, default risk, misconduct, and financial disruptions are lacking. The lack of intra-day liquidity support from NBK to the interbank payments system exposes it to liquidity risk.

Table 1 provides an action plan for addressing the main shortcomings highlighted in this report.

Table 1. Kazakhstan: FSAP Key Recommendations

Recommendations and Authority Responsible for Implementation	¶	Time[1]
Financial stability		
Closely monitor quality of foreign currency-denominated loans. [NBK]		I
Closely monitor banks' concentrated large exposures. [NBK]		I
Banking Oversight		
Rebalance the emphasis of supervision towards a more risk-based approach [NBK]		MT
Support the supervisor's capacity to challenge banks' decisions on provisioning [NBK]		I
Intensify the supervision of the cross-border operations of Kazakh banks and signing MoU [NBK]		NT
Analyze regularly indirect credit risk and market risk, including foreign exchange rate risk [NBK]		I
Monitor the impact of the adopted MaPPs and conduct assessments of effectiveness [NBK]		MT
Financial Safety Net, Resolution of NPLs, and Systemic Liquidity Management		
Revise purchase and assumption and bridge bank resolution options to exclude a requirement for depositor and creditor approval [NBK]		MT
Limit emergency liquidity assistance to institutions that are solvent and financially capable of paying a penalty rate of interest [NBK]		NT
Develop a procedure for documenting financial stability analysis in cases of provision of state support to the financial sector [NBK]		NT
Implement a multi-track approach for resolving the overhang of NPLs [NBK]		NT
Reduce procedural costs of enforcement obstacles arising from non-registered or junior pledge holders in foreclosures [Government/Legislator].		NT
Revise the insolvency law to strengthen protection for legal rights of secured creditors by giving them a higher priority in creditors' ranking [Government/Legislator].		NT
Incentivize out-of-court restructuring by providing tax incentives at creditor's and debtor's level for debt write-offs, partial forgiveness, bad debt and collateral sales [Government/Legislator].		NT
Operationalize the PLF by providing for its broad mandate in NPLs resolution, including bundling of NPLs and adequate financial and staffing resources [NBK/Government/Legislator].		NT
Facilitate NPLs transfers into SPVs including by revising bank secrecy rules and property rights registration of the debt assignments and collateral transfers [Government/Legislator].		NT
Public Pensions, Insurance, and Securities Market Oversight		
Include in UAPF's Charter a clear mandate for UAPF to maximize the retirement income for its members [Government/Legislator].		I
Adjust the mandatory worker's compensation to avoid collapse of the insurance sector [Government/ Parliament].		I
Reduce uncertainty in continuity of market rules; confirm legal fact and time of settlement finality [Government, NBK].		I

[1] I-Immediate" is within one year; "NT-near-term" is 1–3 years; "MT-medium-term" is 3–5 years.

MACRO-FINANCIAL SETTING AND FINANCIAL SECTOR OVERVIEW

A. Unbalanced Economic Growth and Financial Vulnerabilities

1. **Prior to the global financial crisis, Kazakhstan experienced high and unbalanced growth, and accumulated significant financial vulnerabilities** (Figure 1). The non-tradable sector, particularly construction recorded unsustainably high growth rates fueled by a credit boom financed through wholesale borrowing, mainly from Europe (Figure 2). Between 2005 and 2007, Kazakhstan's banks borrowed from abroad the equivalent of 44 percent of GDP and loaned a substantial part of those funds to non-tradable sectors. As financial conditions tightened with the onset of the global financial crisis, banks lost access to foreign financing and were forced to deleverage aggressively, triggering a decline in stock and real estate prices and a strong deceleration in non-oil economic activity, particularly in the construction sector. A 20 percent devaluation in 2009 further complicated matters, as widespread unhedged foreign currency borrowing led to further contractions in demand and problems with loan servicing.

2. **The crisis prompted the intervention of several banks and the restructuring of their external liabilities, but bad assets were not addressed.** The 2009 devaluation worsened the banks' external debt servicing problems, prompting the government acquisition of majority stakes in three large banks (Alliance, Temirbank, and BTA) and minority stakes in another two (KKB and Halyk Bank). Despite the restructuring of some of these banks' external liabilities in subsequent years, banks continued to face difficulties as the deceleration in growth, the collapse of real estate prices, and the devaluation led to a significant build up of non-performing loans (NPLs).

Figure 1. Kazakhstan: Distribution of Loans and NPLs

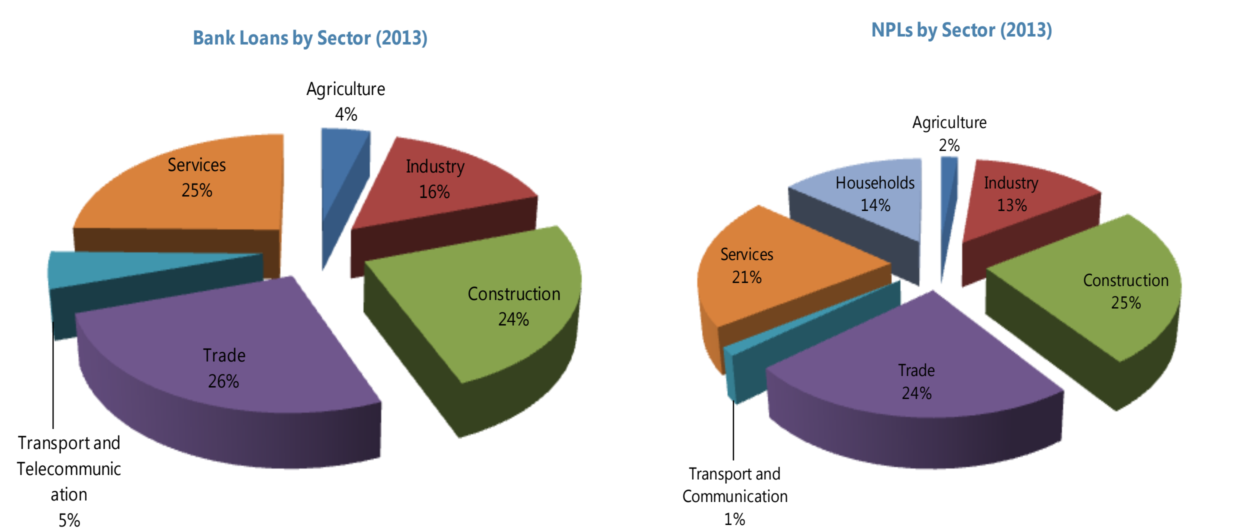
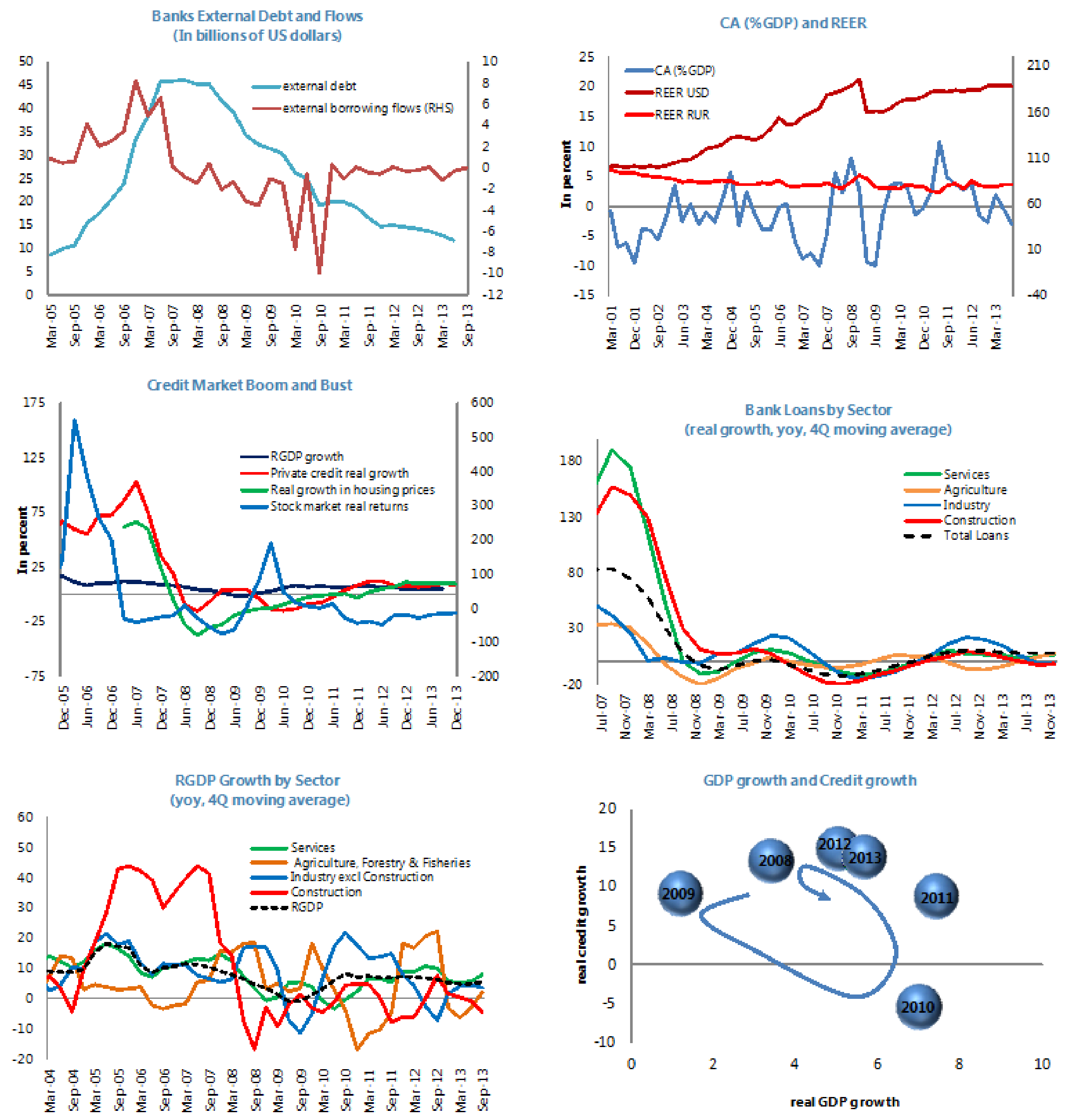


Figure 2. Kazakhstan: The Aftermath of the Crisis

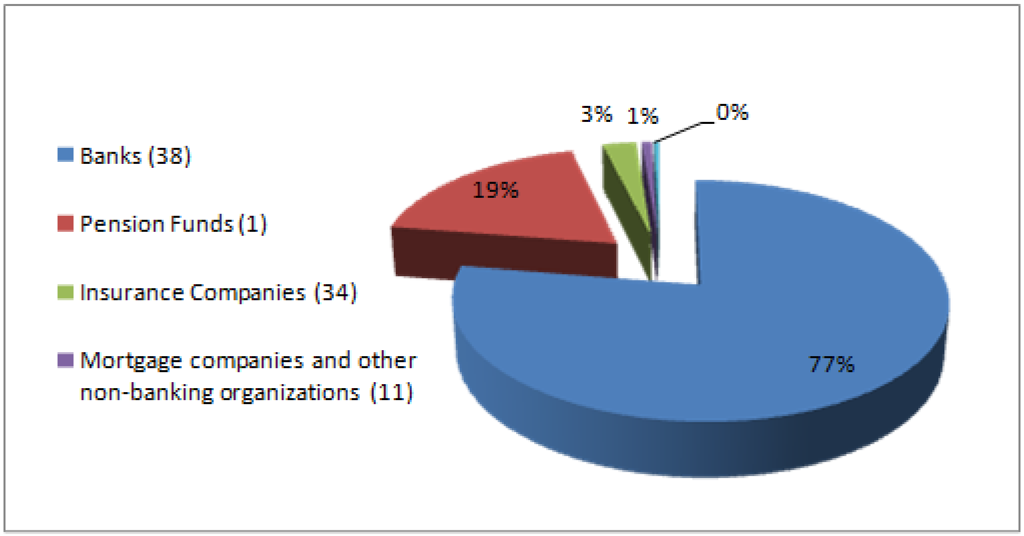


3. Banks' balance sheet repair will be key to support effective financial intermediation and balanced economic growth. The marked deleveraging after the crisis did not represent a drag on economic growth because it coincided with a needed downsizing of the construction sector. Further, the subsequent pickup in growth amidst subdued private credit was possible because it was driven mainly by commodity exports—an activity that funds itself abroad—and by directed lending and government subsidies to other economic sectors. However, to achieve sustainable growth over the medium term, it will be essential to restore the normal flow of credit in the economy, for which banks' balance sheet repair is of the essence.

B. Financial System Structure

4. Banks dominate the financial system in Kazakhstan. The banking sector consists of 38 commercial banks, which account for 77 percent of total financial system assets and 44 percent of GDP. Public sector assets represent 60 percent of total banking assets at end-February 2014.[1] There are 17 banks operating in Kazakhstan, including 14 foreign subsidiaries. Kazakh banks have a presence in neighboring countries and in Europe.[2]

Figure 3. Kazakhstan: Structure of the Financial System
(Percent of Financial Assets)



Source: NBK

Note: Figures in parentheses indicate the number of institutions in each sector.

5. Although the five largest banks accounted for more than half of banking assets in 2013, concentration has been declining as medium-sized banks have expanded their lending. Several large universal banks and some foreign subsidiaries compete for large corporate clients. The smaller banks typically operate in niche markets, and a few banks specialize in SME and retail lending. The consumer lending market is fairly concentrated with the top three banks accounting for one half of the market share and the top seven for 76 percent.[3] Some foreign subsidiaries focus on servicing companies that also operate in the home country of the parent bank, while others have

[1] The government owned 22 percent of KKB, 51 percent of Alliance Bank, 97.3 percent of BTA Bank, and 89.9 percent of TemirBank at end-February 2014. KDB (a development bank) is also owned by the government.

[2] As of January 2014, Kazakh banks have a presence in Kyrgyzstan, the Netherlands, Russia, Tajikistan, Luxembourg, Belarus, Georgia, Armenia, and Ukraine.

[3] These seven banks comprise mostly large universal banks and one medium-sized bank.

actively expanded their market share in Kazakhstan to benefit from lower funding costs. Two global banks have exited the country in the past year.[4]

6. **The public funded pension system, formerly comprised of ten private pension funds, accounts for 18 percent of the financial system**. At the beginning of 2013, the government began a gradual process of nationalization of the ten private pension funds (owned by banks) with all assets to be consolidated in the Unified Accumulation Pension Fund (UAPF) by April 2014. The government is the single shareholder of the UAPF and NBK has the fiduciary management mandate. The nationalization was justified on the need to improve returns on the assets and minimize the risk that the minimum return guaranteed by the government generates a drain on fiscal resources.

7. **The insurance sector and the rest of non-banking institutions are small**. The assets of the insurance sector (34 companies) are 3 percent of total financial sector assets and those of mortgage companies and other non-banking organizations represent less than 1 percent each. The securities exchange (KASE) is quite small, with very limited activity in equities and corporate debt.[5] The largest markets are those for foreign currency transactions among banks and government repurchase transactions made in the automated repo market.

FINANCIAL SECTOR RISKS AND RESILIENCE: RECOVERY FROM THE CRISIS IS NOT YET COMPLETE

A. Banking Sector

The current situation

8. **The crisis has had a lasting impact on the structure and solvency of the banking system.** The reduction in wholesale funding triggered by the crisis prompted banks to revise their lending strategies in order to avoid duration and currency mismatches. As a result, the system has been streamlined and rendered less vulnerable to external developments, including the February 2014 devaluation. However, deep-seated vulnerabilities remain, as high NPLs continue to saddle banks, and little progress has been made until now in resolving the nationalized banks.

9. **Weak underwriting standards, low asset quality, and low profitability are the main challenges for banks.** The system-wide NPL ratio is about 30 percent, and NPLs are concentrated in the five largest banks and reflect mainly loans to corporations and SMEs. Banks' return on assets (ROA) is low reflecting both low earnings and loan-loss charges. The system's aggregate capital asset ratio (CAR) has stabilized at around 17 percent and the Tier I capital ratio has remained at around 13 percent in recent years, following the external debt restructuring and state-funded

[4] In 2013 Unicredit Bank Austria sold its 99.75 percent of ATF Bank, and in 2014 HSBC announced the sale of its subsidiary to Halyk Bank.

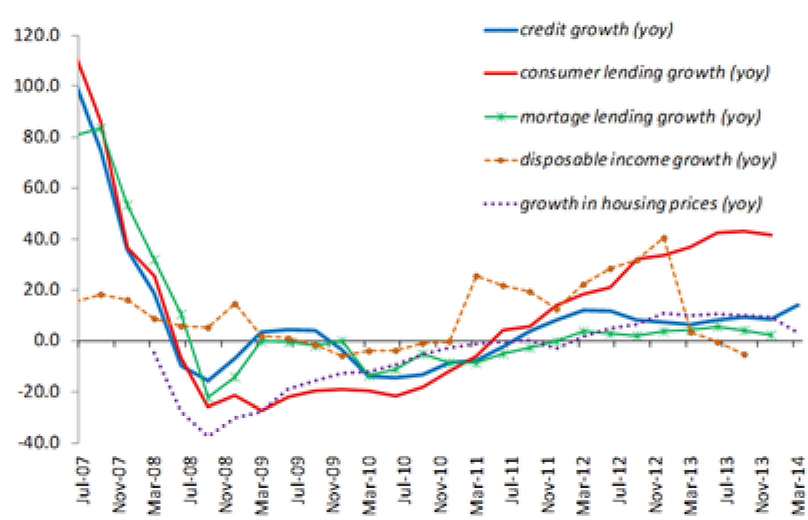
[5] There are 81 listed companies as of December 2013.

recapitalization of the state owned bank BTA. However, the capital adequacy of a number of banks is under pressure and banks are exposed to foreign currency risk, as 38 percent of loans are in foreign currency, mostly to unhedged borrowers.

10. The extent of bank weaknesses is understated by financial soundness indicators (FSIs). Longstanding concerns about collateral valuation, inadequate loan classification, and under provisioning have become more pronounced with the adoption of IFRS-IAS39 and the associated introduction of subjective factors in supervisory assessments, as supervisory skills have not been upgraded—see paragraph 59. While there is no estimate of the impact of these factors on capital adequacy ratios, the FSAP views the problem as potentially significant.

11. Credit growth has picked up slightly after years of stagnation, but rapid growth in the consumer segment raises concerns. Credit continues to grow at relatively moderate rates (about 13 percent annually), as state-owned energy and mining companies borrow abroad and investment outside the commodities sectors is recovering slowly. However, growth in lending by consumer oriented small- and medium-sized banks reached nearly 50 percent in December 2013, raising concerns about loan quality. High interest margins and the short maturity of this type of loan in the face of shortening funding maturity have made consumer lending attractive to banks.[6]

Figure 4. Kazakhstan: Credit Real Growth



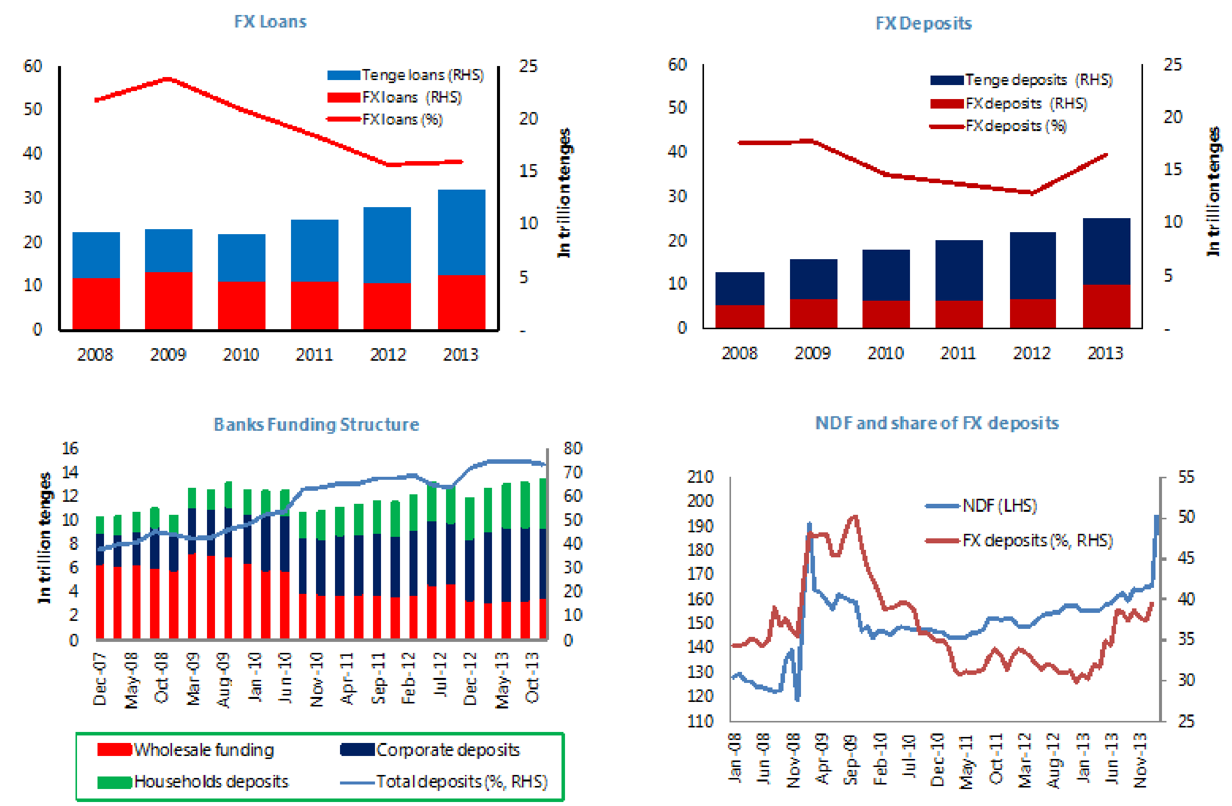
Source: Haver Analytics

12. NBK announced macroprudential policies (MaPPs) to limit the growth in consumer lending, but more could be done to improve their targeting. On December 2013, NBK announced the introduction of three MaPPs, to become effective on April 1, 2014: a 50 percent cap

[6] The cost of one-year deposit is quite low—at about 8 percent, while the lending rate is above 40 percent. The ceiling on interest rates on consumer loans is 56 percent.

on the debt-to-income (DTI) ratio, an increase in the retail lending capital risk weight from 75 to 100 percent, and a 30 percent bank-by-bank ceiling on growth in consumer loans—see Appendix I.[7] While the first two aim at containing risks associated with further consumer lending, the ceiling on lending growth is a blunt instrument that will constrain lending irrespective of the quality of borrowers and may put some banks at disadvantage relative to others—it was nonetheless used due to NBK's inability to monitor the DTI ratio. At present, data gaps seriously limit NBK's work on MaPPs, but NBK should begin to monitor the effectiveness of the MaPPs once the coverage of data on consumer loans improves with the operationalization of the credit registry.

Figure 5. Kazakhstan: Dollarization and Wholesale Funding



13. Lower reliance on market borrowings has improved the profile of banks' funding. Wholesale funding (bond and cross-border interbank borrowings) declined from its pre-crisis peak

[7] While the data on leverage in the non-financial sector are poor, the aggregate corporate debt-to-equity ratio is lower than in Emerging Asia (13 vs. 44 percent); Kazakhstan's interest coverage ratio of 35 also compares favorably to Emerging Asia's 3.4. At less than 10 percent of GDP, household debt is also relatively low.

of 50 percent to 20 percent of the banking system's total liabilities by end 2013. Owing to continued deposit growth of both retail and corporate clients and modest lending growth, the loan-to-deposit ratios for domestic and foreign currency have improved in recent years. However, the high dependence of large banks on a few corporate deposits poses concentration risks.

14. Foreign currency risk continues to be high. While lower dependence on foreign currency (FX) denominated wholesale funding has led to lower FX-related liquidity risk, dollarization keeps the economy vulnerable to exchange rate volatility and exchange rate-induced credit risk. The share of FX-denominated loans has declined by nearly 20 percentage points since 2009, while the share of FX deposits has risen and both shares now stand at a relatively high 40 percent. The impact of the recent devaluation on banks' balance sheets should be confined to a worsening of credit risk.

15. The government has recently announced an economic reactivation program based on lending to SMEs, which poses additional risks. On February 21, 2014 the government announced its intentions to use 500 billion tenge to support the economy in 2014. Half of these funds, to be provided by the Kazakhstan National Fund, will be channeled to SMEs through the banking sector. Banks will receive government funds at subsidized rates to be onlent to SMEs at below-market interest rates. Banks are expected to bear responsibility for the credit risk associated with these operations, but there are concerns about their ability to properly assess their risk .

16. Government efforts to divest intervened banks have regained momentum. SK announced recently its intention to sell its 89.9 percent stake in Temirbank (13th largest bank) and 16.6 percent of Alliance Bank (the ninth largest bank) to a local businessman, who owns two smaller banks (Kassa Nova and ForteBank). The regulatory approval for the second of these transactions was granted recently and the sale would reduce the state's participation in Alliance Bank to 51 percent. More recently, KKB, together with another local investor, has initiated the acquisition of equity stakes in BTA (see oversight section for risks on the transaction). SK would temporarily retain a minority stake in BTA.

17. Capital standards are disjointed. While Basel II has not been fully implemented, the authorities have introduced some features of Basel III.[8] NBK has announced the adoption of Basel III definitions of capital, but not the risk weights. In addition, beginning in 2013, NBK introduced new rules for loan-loss provisioning under which banks would set up two types of provisions: specific provisions based on IFRS and dynamic provisions based on a formula provided by regulators—the adoption of dynamic provisions was suspended shortly after. There is a risk that these changes are being introduced too quickly and without sufficient guidance.

[8] Capital adequacy requirements are modeled on Basel II with capital charges required for credit, operational, and market risk. NBK is currently developing guidance for banks regarding the internal capital adequacy assessment process (ICAAP). Implementation of Basel III is scheduled to commence in 2015 with full implementation expected by 2019.

Banking Vulnerabilities

18. The financial sector is faced with a number of risks (Appendix III).

- *Lower than anticipated growth in emerging markets (EM), especially in China and Russia, with the latter possibly aggravated by the Ukraine crisis.* This scenario, motivated in part by U.S. tapering, could impact foreign direct investment to the region, lower medium-term growth, and cause an additional decline in housing prices, further weakening credit quality. Echange rate depreciation would heighten indirect credit risks—if the central bank were to intervene, a loss in international reserves would take place, leading to tighter liquidity.
- *A sustained decline in oil and other commodity prices in an environment of weak global demand*. This could lead to a fall in oil prices and lower the value of Kazakh exports. The result would be a marked deceleration in domestic growth and a depreciation of the tenge, both of which fuel credit risk.
- *Insufficient progress to bring down NPLs.* These depress bank profitability, limit banks' ability to increase capital and extend credit, and pose a contingent liability for the public sector.
- *Concerns about another devaluation, rapid consumer lending growth, and/or the inconsistent implementation of regulatory reforms could trigger a confidence crisis.* System-wide deposit withdrawals and reduced access to wholesale funding could ensue, possibly triggering a liquidity crunch and/or asset fire sales.

19. The impact of these risks was quantified using stress tests.[9] The tests were carried out in a baseline (consistent with the IMF's World Economic Outlook (WEO) forecasts) and two stress scenarios characterized by temporary reductions in growth of different magnitude, stretching over a 3-year period ending in December 2016. The failure to bring down the high current level of NPLs—essentially a projection of the status quo—and the introduction of Basel III deductions (which impacts the estimated capital ratio) were assessed in the baseline. The hurdle rates were set at the regulatory minima, in line with Kazakhstan's gradual phasing in of the Basel III minimum capital requirements beginning in 2015. The risks posed by lower-than-anticipated growth in EMs and a decline in oil prices were analyzed in the stress scenarios. The impact of a confidence crisis was assessed through a combined funding and market liquidity stress scenario (Appendix IV). To illustrate the potential impact of overvaluation of collateral and forbearance, an adjusted baseline was also calculated.[10]

20. The tests show that, while the situation of the banks is currently stable, they are in a weak position to withstand shocks.

[9] NBK staff and the FSAP team performed separate tests on solvency risk, including on explicitly FX-induced credit risk. In addition, all 38 banks operating in Kazakhstan (Appendix Table 1) performed bottom up cash flow-based liquidity tests (Basel III Liquidity Coverage Ratio) for liquidity risks. Interbank contagion risks were explicitly modeled.

[10] The value of collateral was reduced by the equivalent of the change in house prices registered since December 2006, which results in a provisioning shortfall of 12.3 percent of nonperforming exposure.

- In the *baseline*, credit losses arising mainly from the February devaluation and the phase-out of capital instruments ineligible under Basel III lead to a steady decline in the banking system's capital ratio, partially eroding the initial buffers but remaining above the regulatory threshold—the Tier 1 ratio dips below the conservation buffer but also remains above the regulatory minima. However, seven banks accounting for nearly half of the system's assets, fail to meet regulatory minima in the projections; the capital shortfall is equivalent to 2 ½ percent of GDP.

- In the *stress scenarios* two additional banks fail to meet capital requirements, bringing the total to 9 banks accounting for slightly more than half of the banking system's assets. Under the more severe scenario, the capital deficiency reaches 5 percent of GDP.

- Banks that fail the tests in the baseline and stress scenarios include state-owned and private large banks, as well as smaller banks. NBK's stress tests confirm these estimates.

- In the *adjusted baseline*, the situation of the banks worsens significantly, highlighting the potential significant impact of inadequate valuation of bank assets and forbearance. No stress tests were conducted on this adjusted baseline.

21. The stress tests also reveal that FX-induced credit risk is elevated and loan portfolios are highly sensitive to changes in oil and gas prices. The tests shed light on the relative importance of various financial intermediation risks:

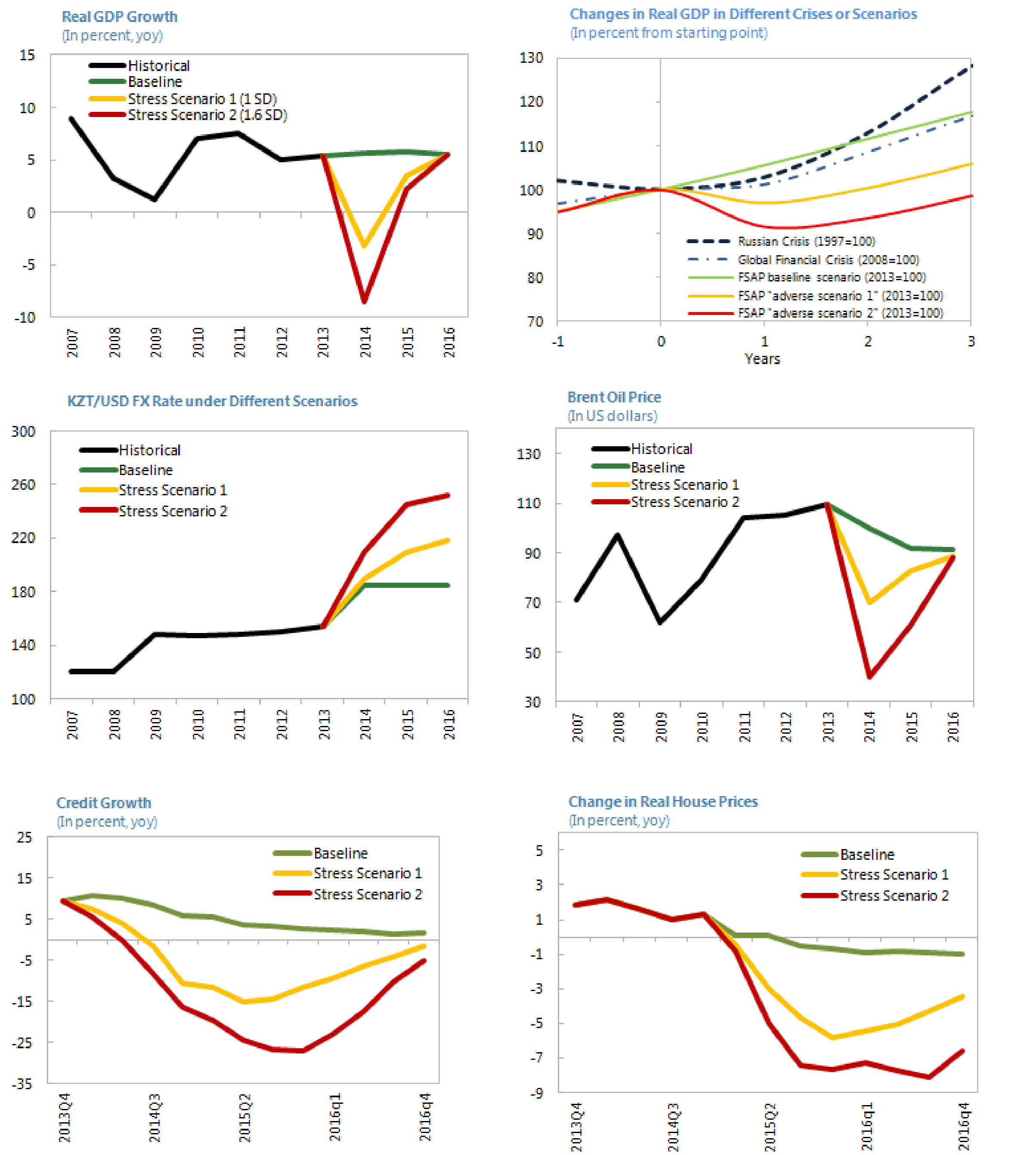
- The exchange rate was found to be a key driver of *indirect credit risk* for both the corporate and the household/SME sectors, and oil and gas prices are also important determinants of corporate credit quality. On the other hand, *direct FX risk* is small in light of banks' limited open positions.

- *Sovereign and other market risks* are low. In the stress scenarios, an adverse two-standard deviation move resulting in a 97 basis points increase in the 5-year sovereign yield has only very limited impact on results. A permanent 20 percent drop in all other asset prices, including real estate prices, could be also be absorbed by banks.

- *Concentration risk is significant.* Concentration risk measured by the impact of a default of the largest three exposures of each bank is relatively high, as capital ratios would fall by around 7 percentage points from their current level. Eleven banks (about a third of the banking system's total assets) would breach current regulatory minimum requirements if their three largest exposures defaulted.

22. The authorities' regulatory path is highly ambitious and actions need to be taken to manage the impact on bank's balance sheets. The banking system as a whole would be able to digest an immediate implementation of Basel III capital definitions. With only one exception, all the banks in the sample remain above the new minimum capital requirement in 2015 if Basel III deductions were to be phased out immediately and in full. However, increases in capital would be needed if current buffers are to be maintained or if banks were confronted with the shocks analyzed here, including those in the baseline. With an unchanged level of NPLs, a number of banks would likely need external or governmental capital injections to comply with the new regulatory solvency framework.

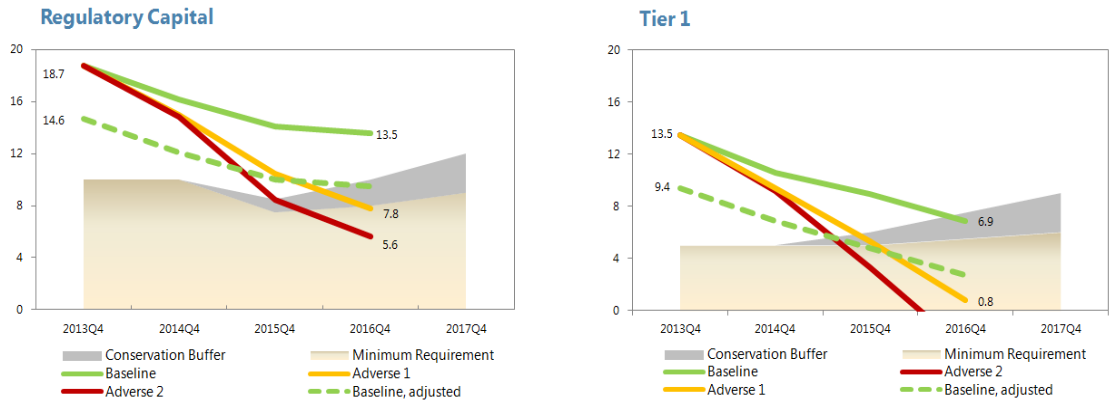
Figure 6. Kazakhstan: Macrofinancial Baseline and Stress Scenarios



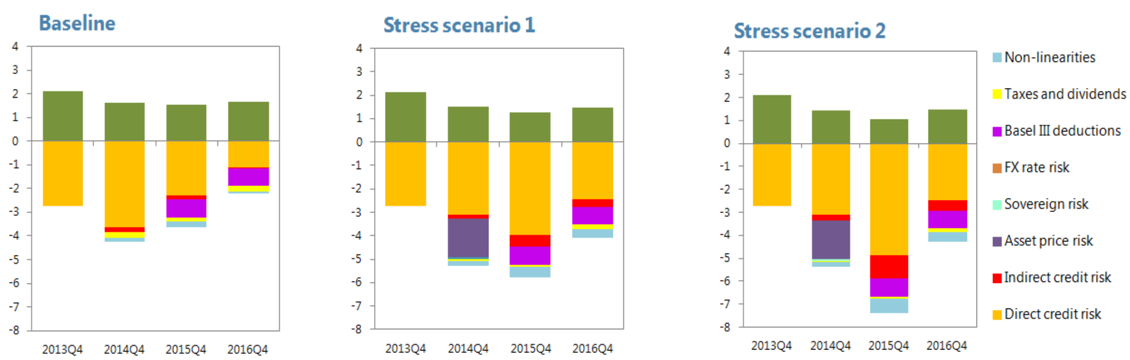
Source: NBK and IMF staff estimates.

Figure 7.Kazakhstan: Scenario Solvency Risk Results

A. Evolution of Capital (in percent of RWA)



B. Result Drivers (in percent of RWA)



Source: IMF staff estimates.

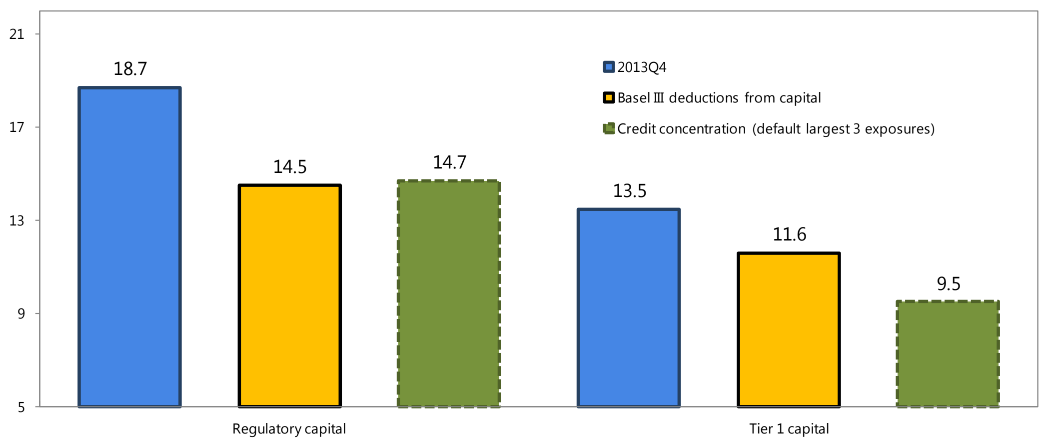
Note: Pre-impairment profit includes net interest income and net fee and commission income (panel B). The bucket "nonlinearities" also includes the effects of dynamic balance and RWA sheet evolution. While "FX rate risk" refers to (pure) market risk losses in unhedged trading positions, "indirect credit risk" covers losses from FX-induced credit default risk.

The charts in panel C show the upper and lower quartile (defining the box), the median, and the highest (lowest) ratio still within half the interquartile range. The red line gives the regulatory minimum capital requirement as of end-2016.

23. Liquidity stress tests reveal that the banking system would be able to cope with substantial funding stress, although some banks do not appear sufficiently resilient. Cash flow-based liquidity stress tests (using the Basel III LCR framework) were used to assess resilience to the Basel III scenario and to scenarios motivated by the recent run on Kazakh banks (Appendix Table 3).[11] Under the scenario suggested by the Basel Committee, the banking system's stock of High Quality Liquid Assets (HQLA) is more than sufficient to absorb the liquidity outflows while cash inflows decline and asset prices deteriorate (LCR exceeds 2). However, 12 banks, accounting for a third of the banking system's assets, would see their coverage ratio drop below the hurdle rate, pointing to pockets of vulnerability. If deposit outflows increased, secured funding fell by 30 percent, and customers drew 30 percent of their committed lines, the coverage ratio for the system would still exceed 100 percent but 17 banks (56 percent of total assets) would not be able to cover the outflows.

Figure 8.Kazakhstan: Solvency Risk: Sensitivity Analyses

Capital Levels Before and After the Application of Single-Factor Shocks
(In percent of RWA)



Source: IMF staff estimates.

24. Direct contagion risk through bilateral interbank exposures is limited. Banks net lending exposures account for less than 1 percent of total banks' assets (0.3 percent of GDP) and only six banks have net bilateral exposures above ten percent of their regulatory capital. The exposures tend to be slightly stronger between foreign subsidiaries from the same country. Pure interbank contagion stress does not result in bank failures, indicating weak connectivity among banks.[12] However, conducting scenario contagion analysis on stressed capital levels resulting from

[11] The LCR does not differentiate between currencies—the cash flows are translated into domestic denomination. Due to the structure of available data, the analysis assumes that the central bank would exchange tenge into foreign currency.

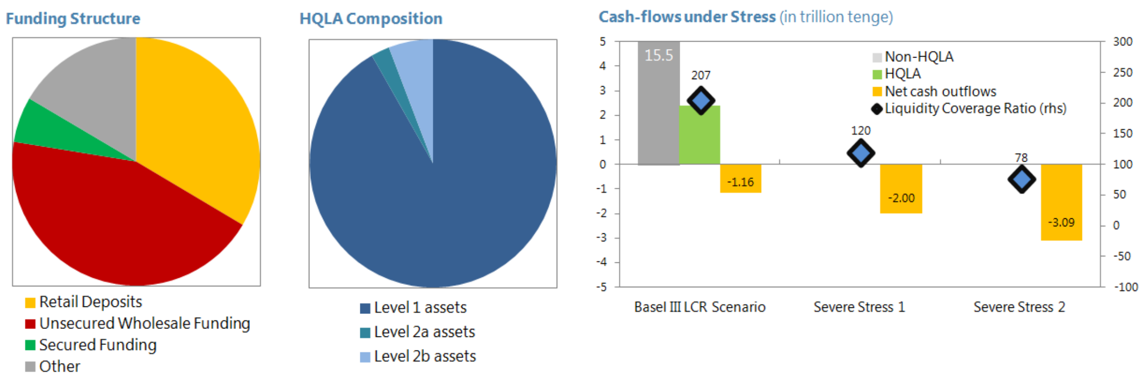
[12] The "pure" interbank contagion model illustrates what happens to other banks when one or more banks fail to repay their obligations. A bank is deemed to fail if its capital ratio falls below regulatory minima as a result. This

(continued)

the severe stress scenario (sustained decline in commodity prices) would cause an additional (but small) bank to drop below minimum capital requirements. These results are consistent with the results of NBK's contagion model.

25. Cross-border linkages have become less important. Banks external borrowing reached $11.5 billion (5 percent of GDP) in September 2013 and their assets abroad stood at $6.4 billion (2.9 percent of GDP) as of December 2013. The main source country for external borrowing is the United Kingdom (54 percent), reflecting eurobond issuances by Kazakh banks in international markets. The next largest lender is China (21 percent), which has extended a credit line to the Kazakhstan Development Bank.

Figure 9. Kazakhstan: Liquidity Risk: Scenario Analyses



Data source: Kazakh banks, NBK. IMF staff estimates.
Notes: The LCR is given in percent.

26. NBK's stress testing framework could be improved. Given the risks currently faced by the banking system, it is recommended to assess explicitly FX-induced credit risk and market risk, including asset price risk, sovereign risk, foreign exchange rate risk, and interest rate risk, at least through sensitivity analyses. With respect to liquidity risk, NBK should use the liquidity stress testing tool provided by the FSAP team and banks should be encouraged to apply this framework for surveillance and supervisory assessments. Based on the work done during this FSAP, NBK should continue estimating the impact of regulatory reforms, while coordinating closely with the banks. NBK would also benefit from making better use of the available data at the central bank, including through more effective collaboration between the Financial Stability and Statistics Departments.

stress-test measures the systemic importance of individual banks: a bank is more systemically important if its assumed default results in the larger decline in the system's capital.

B. Insurance and Pensions

27. The insurance sector is not of systemic importance, but it is faced with severe financial risks. Solvency indicators are currently at adequate levels but they may be artificially supported by reinsurance agreements that have not been closely supervised (Table 5). Portfolios are liquid and support nonlife liabilities, but there is an asset-liability mismatch for the long-term business. However, legislative changes in 2010 introduced retroactively mandatory coverage for professional sickness, creating an unfunded liability equivalent to one third of the sector's total capital. In addition, earthquake exposure, which could wipe out the entire capital of the nonlife insurance sector, is not adequately protected through reinsurance. On the life insurance front, the main risks are related to the unification of the pension sector.

28. The nationalization and unification of the pension system poses risks. The new consolidated system will likely produce savings as a result of synergies (Appendix II); however, hidden transition costs related to operational and valuation risk will likely emerge in the coming years. Appropriately, a regulation directing the investment of the pension funds into low yielding government bonds has been removed and asset management fees have been cut by half. However, it remains to establish an explicit mandate to maximize returns of the retirement income of the members, which is important in light of NBK's potential conflicts of interests as the regulator of the banks and the pension funds—see paragraph 64.

BOLSTERING THE FINANCIAL SAFETY NET

A. Weak Systemic Liquidity Management in Normal Times

29. Banks rely on the local interbank market and, increasingly, on FX swap market to manage their liquidity, which complicates systemic liquidity management. The local interbank market is an auction-driven market where 26 banks trade with each other—and with 25 other financial institutions—through repos. Owing to insufficient collateral and the segmented nature of the interbank market, several banks have increasingly turned to the FX swap market.[13] Turnover in the latter often exceeds turnover in the interbank market. Bank's increased use of the FX swap market for managing tenge liquidity complicates NBK's task of managing systemic liquidity in the face of a tightly managed exchange rate.

30. Liquidity management by banks appears to be inefficient in many cases, but banks have generally responded to excessive volatility by building tenge liquidity cushions. Weak liquidity management is particularly apparent around quarterly tax reporting periods, when, despite predictable heightened seasonal demand for tenge liquidity, several banks do not build sufficient reserve buffers in to cover the anticipated liquidity squeeze. This recurring practice has spillover

[13] About five banks account for nearly 70 percent of interbank activity.

effects elsewhere in the financial system, whereby other banks' capacity to properly manage and forecast system liquidity is undermined.

B. Untested Crisis Management Framework

Emergency Liquidity Assistance

31. **NBK has the authority to provide emergency liquidity assistance (ELA) to financial institutions facing liquidity stress, but no solvency requirement is established in the law**. NBK can engage in ELA in domestic and foreign currency. Procedures include emergency lending of two forms: last resort lending (for banks) and special purpose lending (for banks and non-banks). However, there are no provisions requiring that these facilities be extended to solvent institutions or that they be offered at a penalty interest rate.

32. **The authorities stressed that there have been no cases of ELA during the past five years, including during the recent deposit run**. However, a 'special purpose lending facility' was established and used in October 2011 in the form of a repurchase agreement denominated in foreign currency for one year and collateralized by bonds issued by SK. This appears to have been a blend of ELA and open assistance (solvency support). Additionally, SK provided liquidity support to nationalized institutions in the form of deposit placements as part of its role as holder of stakes in the nationalized banks. Going forward ELA should only be extended to solvent institutions and, if provided in foreign currency, only if sufficient foreign currency reserves are available to do so.

Amended Bank Resolution Framework

33. **The framework for bank resolution was amended during the crisis to incorporate options used commonly elsewhere**. Prior to 2009, the law offered limited resolution options short of liquidation to deal with troubled institutions: (i) a temporary closing through conservatorship; and (ii) the forced purchase of outstanding shares in a troubled institution. The prevailing framework did not allow the authorities to dilute the existing shares of undercapitalized or insolvent banks without resort to share purchase, as is common under international practice. This was corrected in 2009, along with the introduction of new options, which included bank restructuring, purchase and assumption (P&A), and bridge bank.

34. **The P&A and bridge bank options, as foreseen in the current legislation, are not yet practical**. The provisions require the approval of depositors and/or creditors, instead of giving the supervisor full authority to independently mandate these resolution methods. Although the intervention options under law imply that there is a graduated movement from temporary administration to resolution and liquidation, there are no clear triggers for each stage. No crisis simulation exercise has ever taken place.

35. **Revocation of a license does not occur simultaneously with a resolution transaction, which poses risks to effective resolution**. There are currently two separate procedures for revocation and resolution and a lag between when revocation and resolution may occur, which

would put pressure on NBK to rush the resolution decision, as the law mandates KDIF to start paying depositors within 14 business days of the court ruling of forced liquidation. In practice, this would prevent NBK from opting for options such as a P&A, which can take longer to implement.

36. The current legal framework of banks resolution procedure is lacking limitation of judicial review. According to best international practice, judicial review of the decisions regarding application of resolution measures should not be subject to their annulment and *status quo* reinstatement; possible remedies for any wrongful decision related to resolution measures should be limited to compensation of damages suffered by the affected parties.

C. Crisis Preparedness Framework

Legal Framework and Corrective Action Arrangements

37. Early response and remedial measures are contemplated in the Banks and Banking Law. These measures are available in cases of rapid financial deterioration or violation of prudential norms and include changing of organizational structure, limiting acceptance of deposits, ceasing dividend payments, increasing provisions for loan losses, dismissing bank executives, and suspending high risk operations. The option to dismiss executives has been applied to the chairmen of three banks in recent years.

38. The law grants NBK the power to authorize a party to become a large participant in a bank; however, concerns about the effectiveness of this power have arisen recently. A Presidential Decree was announced in early 2014, at a time when NBK had received an application from KKB for the purchase of BTA. The decree temporarily lifts the requirement that NBK verify compliance with prudential standards of the purchasing and purchased bank or reject the sale in case of existence of limited remedial action and/or sanctions imposed to either of the two banks. This raises serious concerns about the safety and soundness of the resulting bank and, given the size of the transaction and the very large holdings of NPLs by BTA, about the stability of the system.

Deposit Insurance

39. The Kazakhstan Deposit Insurance Fund (KDIF) has a strong capital position but its governance structure is problematic. KDIF has responsibility for standard 'pay-box' duties and can also provide limited financial assistance to sound institutions undertaking a purchase and assumption transaction, and has examination authority over member banks. There have not been any payouts of depositors since 2007, and during the recent crisis the KDIF was not involved in resolution. KDIF's adjusted fund equity to insured deposits ratio is a healthy 11 percent. Moreover, full coverage of deposit insurance is afforded to over 99 percent of deposit account holders, and the total amount of deposits insured is also high at 55 percent of total deposits. KDIF is governed by a Board of Directors that includes two current directors of banks, which is not considered a good practice.

Systemic Risk Monitoring and Coordinating Arrangements

40. The Council of Financial Stability and Financial Market Development (the Council) is in charge of coordinating the oversight of financial institutions. The Council was created in 2010 and is chaired by the Governor of NBK. It meets monthly, and its membership includes NBK, the Executive Office of the President, Ministry of Finance (MoF), the antitrust agency, and the association of financial institutions. The Council has a broad mandate that includes making recommendations on macro-prudential policy and overseeing progress on implementation of Basel III.

41. The council introduced a procedure for identifying SIFIs on the basis of five criteria. A threshold of 10 percent is established for each of five variables; banks that exceed the thresholds are considered systemically important. The variables are: the shares of bank assets, bank loans, personal bank deposits, deposits by commercial entities, and interbank payments. The Council has not published a list of SIFIs, but markets perceive that there are currently 2 banks that meet the SIFI criteria.

42. Information-sharing between safety net participants (NBK, former FSC, KDIF) is provided for under the Law on the Insurance of Deposits, but the law does not stipulate mechanisms for coordination among safety net players regarding individual troubled banks.

DELINQUENCY MANAGEMENT AND RESOLUTION OF NPLS: SOLVING THE LEGACY PROBLEM

A. Slow Progress Resolving NPLs

43. The authorities introduced a three-pronged approach to NPL resolution in 2011, but its impact has been limited. The scheme provided for three options: (i) selling NPLs to the Problem Loans Fund (PLF), an NBK-funded asset management company (AMC); (ii) transferring NPLs to bank-specific special purpose vehicles (SPVs, decentralized AMCs); or (iii) writing NPLs off. The program was not very ambitious, as it did not allow the transfer to the PLF of NPLs collateralized with real estate (the most commonly used collateral) or those in the books of state owned banks. Unsurprisingly, the impact of the strategy has been limited, as virtually no loans were transferred to the PLF, and SPVs have not been used extensively. Further, real estate-backed NPLs have not been written off by banks.

44. Other obstacles hamper the transfer of NPLs to the PLF and discourage banks from writing them off. These include bank secrecy laws, which prevent the PLF from having access to loan documentation needed for the appraisal of the loan; property registration rules that significantly restrict collateralized debt transfers in the presence of liens of third parties; and non-neutrality of taxation in cases of loan restructuring of write offs. The latter, which includes taxation of the recovery of loan-loss provisions in cases of write offs and banks' inability to recognize write-off related losses for tax purposes, is a critical obstacle to resolution.

45. A full assessment of the banking system's NPLs is needed. NPLs are largely concentrated in real estate and construction, and the underlying collateral is often an unfinished construction, which is difficult to price or sell. The authorities should consider undertaking a risk-based review of the quality of the assets held by those institutions with the highest concentration of NPLs.

46. Several measures were introduced recently to jumpstart the resolution process. In 2013, NBK introduced a ceiling of 20 percent for NPLs, which declined to 15 percent in 2014. The PLF's mandate has been broadened and further recapitalization is envisaged with funds from Kazakhstan's National Fund. Changes to the tax rules and insolvency regime providing incentives to debt restructuring are expected shortly and reforms aimed at loosening bank secrecy rules in the context of restructuring and facilitating debt assignment are currently under preparation.

47. However, the main obstacles highlighted still remain to be addressed; While the recent measures are ambitious, many of the obstacles highlighted above still need to be tackled. In particular, the proposed changes do not appear to alleviate significantly the tax burden associated with debt restructuring or to remove deficiencies in the insolvency framework. Moreover, even after its planned recapitalization, the PLF would remain underfunded and clarity is needed on how the large write-offs required to meet the NPL ceiling would be dealt with in banks' balance sheets.

B. A Multi-Track Approach to Resolve the NPLs Universe

48. Effective resolution of the NPL overhang calls for a multi-track approach to address a diverse NPL universe and significant improvements to the enabling framework. The multiple track approach includes: (i) debt write-offs; (ii) foreclosures, repossession of collateral, and recovery under insolvency proceedings; (iii) sales by PLF and SPVs of bundles of NPLs, either directly or through NPL/mortgage-backed securities for cases where the claims have value; and (iv) PLF and SPVs acquiring ownership in collateral for bundled marketing. For this approach to work it will be necessary to make legal and tax changes aimed at addressing the problems highlighted above, to introduce stronger incentives for out-of-court resolution, strengthening the insolvency regime, and lowering the costs of foreclosures.

49. Several adjustments to the legal environment are needed. These include loosening bank secrecy rules—to facilitate loan appraisals; less costly and more transparent foreclosure and insolvency proceedings; eliminating the tax burden of debt write-offs/forgiveness and the withholding tax in case of debt forgiveness to individuals; and the suspension of VAT on fixed asset purchases and foreclosures in the context of NPL resolution.

A stronger PLF and more effective SPVs

50. The PLF, or a new centralized AMC, should have a strong mandate and be operationally independent. Budgetary independence is critical to limit political interference. The mandate of the PLF would need to be expanded and consideration should be given to granting it special powers. Temporary employment of specialized business and operational restructuring consultants would also be needed. The revamped PLF or new centralized AMC must be required to report regularly to the parliament and the public, and be subject to strict audits.

51. Pooling of distressed assets for disposal would create economies of scale. Different approaches should be used for different types of NPLs. Irrecoverable NPLs with worthless collateral should be written off or, when appropriate, used as voting levers in ongoing or expected collective proceedings and in rehabilitation cases for debt-for equity swap purposes. Small-value NPLs with insignificant collateral could be outsourced to debt-collection entities for cost savings. Significant unsecured NPLs could be used for securitization and the business areas of corporate debtors to achieve a critical mass to boost their investor-appeal.[14] Significant secured claims with attractive collateral could be considered for bundled marketing by classes of collateral, such as urban commercial and residential real estate.

52. The financial engineering activities of the centralized AMC should take into account potential investor interest and aim at creating prospective demand. To support these efforts, potential buyers would need access to relevant information and appropriate due diligence procedures and a supportive legal environment would need to be in place. International markets for distressed assets—international debt and hedge funds, private equity funds and long-term financial investors—should be approached to enable efficient sales of NPLs and NPL collateral. Funded real estate development companies interested in purchasing construction sites and semi-finished constructions should also be contacted.

53. The viability of an agency able to engineer the products described above depends crucially on access to non-domestic sources of capital. While the legal framework in place does not pose insurmountable formal legal challenges in this respect, other policy actions will need to be implemented to make Kazakhstan more attractive to international investors. In this regard, the exit from the local market of three foreign banks in recent years amidst increasing regulatory uncertainty, non-transparent financial transactions (including the sale of the nationalized banks), and weak governance are a source of concern.

54. Obstacles faced by SPVs in the realization and sale of NPLs also need to be addressed. The legal and tax obstacles described earlier also hamper SPV's ability to realize NPL collateral. In addition, continued banking relationships with clients may discourage SPVs from engaging in vigorous and impartial resolution of existing NPLs. Therefore, structural separation and a clear mandate for independent decision-making for SPV managements is needed to help break the links between banks and corporates in the context of NPL resolution. Tight supervision of SPVs' activities will be needed to prevent them from hiding the true volume of NPLs through mutual transactions among banks and regulatory barriers for such trades should be contemplated.

[14] Opaque securitization could create systemic risk in poorly supervised jurisdictions. Therefore, a pre-condition for its introduction will be full transparency, adequate valuation, and proper risk management and supervision.

Broadening NBK's resolution toolkit

55. It is essential to re-assess the viability of banks holding high percentages of NPLs and, if necessary, deploy resolution tools for the unwinding of their operations. The banks that were nationalized in 2009 are expected to be placed back in private hands in the coming months. Given the systemic size and/or troubled nature of some of these institutions, they should be placed under a monitoring plan involving a high degree of scrutiny and would contemplate their potential unwinding if they failed to make substantial progress in resolving in a timely manner their outsized level of NPLs. In anticipation of a future resolution in the form of a P&A or bridge bank, it will be necessary to make amendments to the relevant Banking Law provisions for these untested resolution options. In particular, it will essential to remove the requirement of depositor and shareholder approval (see section on the Financial Safety Net).

STRENGTHENING FINANCIAL SECTOR OVERSIGHT: AVOIDING ANOTHER SURGE IN BAD LOANS

56. NBK is responsible for regulation and supervision of banks, insurers, pension funds, investment funds, credit bureaus, and securities markets. During 2011–13, the Committee for the control and supervision of the financial market and financial organizations (FSC)—then a sub-division of NBK—performed the supervisory and regulatory functions.[15] NBK is accountable to the President, who, inter alia, appoints its chair (with the consent of the Parliament) and his/her deputies. The President also approves NBK's structure, overall staff size, and wage system. The law does not specify the conditions under which the NBK chairman and his/her deputies may be removed from office. In January 2014, a Presidential decree abolished the FSC and its departments were subsequently absorbed by NBK.

57. The Payment Systems Department (PSD) of NBK and the FSC-NBK are the overseers of the Financial Market Infrastructure (FMI). The operators of the systemically important FMIs in the Kazakh market are the Kazakhstan Interbank Settlement Center (KISC), the Kazakhstan Stock Exchange (KASE), and the Kazakhstan Central Depository (KACD). All of them are majority-owned by NBK. PSD-NBK oversees the FMIs operated by the KISC as well as payment instruments and services, while FSC oversees the FMIs operated by the KASE and KACD.

A. Bank Regulation: Achieving Better Implementation

58. Supervision is intensive and intrusive, but oriented towards compliance. Although some forms of risk-based supervision, such as CAMELS ratings, have been introduced, supervisors focus mainly on the conformity of banks' processes and practices with regulations. Less attention is devoted to the assessment of banks' risks. Supervisors should rely more on risk assessment tools

[15] From 2004 to 2011 the regulatory and supervisory functions were performed by the Agency of the Republic of Kazakhstan on Regulation and Supervision of the Financial Market and Financial Organizations (FSA), an independent entity that reported directly to the President.

and a more intensive use of stress test results in the area of capital adequacy. Training and staff exchanges with foreign supervisory authorities should be considered.

59. Supervision needs to be strengthened in three key areas. The introduction of IFRS-IAS39—which leaves room for discretion in the assessment of provisions—without adequate training for supervisors has weakened their ability to scrutinize banks' provisions. NBK should contemplate additional training of examiners on collateral valuation and secured improved access by supervisors to the Real Estate Registry. Weaknesses in the assessment of market risk (non-inclusion of commodity risk) in the trading book and interest rate risk in the banking book need to be addressed, including by providing guidance on model risk and validation; interest rate risk in the banking book should be assessed separately from market risk. Home-host relationships are inadequate in light of the active cross-border activity of the main Kazakh banks. More frequent contacts and information exchanges with foreign supervisors are needed to facilitate effectively monitoring the foreign operations of the domestic systemic players.

60. The phasing in of Basel III provisions needs to be calibrated with caution. NBK is planning to start the implementation of Basel III in 2015 and to complete it by 2019. During this period, priority to the implementation of Pillars 2 and 3 of the Basel framework. The former requires the introduction of ICAAP requirements; the design of a supervisory review process based on both, NBK's own risk assessment system and the review of banks' ICAAP reports. Disclosure requirements should converge as much as possible towards those set by Basel in order to foster market discipline and encourage banks to upgrade their risk management systems.

61. Parliamentary approval of amendments to the Law on Anti-Money Laundering and Combating of Terrorism Financing (AML/CFT) is expected this year. Kazakhstan's AML/CFT framework was evaluated by the Eurasian Group (EAG) in 2010. The 2011 mutual evaluation report revealed major deficiencies, notably with respect to guidance on customer due diligence requirements, politically exposed persons, correspondent banking, identification of high-risk accounts and identification of beneficial owners. Prompt implementation of amendments to the AML legislation is a high priority for NBK. Regulations and guidelines for monitoring are being drafted and will be issued when the law is passed to become effective on January 1, 2015. The authorities are recommended to comply with the FATF revised standard. Kazakhstan is tentatively scheduled to undergo a reassessment by EAG in April 2017.

B. Insurance Sector: Stronger Prudential Requirements and Reinsurance Supervision

62. Insurance legislation has been updated and supervision brought closer to international best practices, but more emphasis on risk is needed. Largely in response to the crisis, the sector's regulation underwent a major overhaul. Over 88 changes updated Law No 126-II on Insurance Activity and 14 changes related to insurance were made to the Civil Code. The solvency regime is basically Solvency I with some enhancements. To compensate for the lack of sensitivity inherent to Solvency I, NBK requires sensitivity testing and asset liability matching analysis on a regular basis.

However, the regime does not map insurers' risks into capital requirements. The supervisory approach has some risk-based features, but all insurers continue to be treated with the same intensity. NBK has a wide set of preventive and corrective measures that are enforced consistently.

63. Supervision of reinsurance is inadequate. The use of reinsurance by insurance companies has lead to a mechanical improvement in solvency indicators, but this may mask insufficient risk transfer. Careful analysis of the reinsurance agreements is needed to verify that they are effectively transferring risk. Also, the proper level of reinsurance protection acquired by the insurers needs to be a focus of supervision.

C. NBK Management of Pensions: Sound Investment Practices are Key

64. The pensions system has been consolidated into a single pension fund (UAPF) owned by the government and managed and supervised by NBK.[16] The Charter of the UAPF delegates the fiduciary ownership role of UAPF to NBK and charges the Council for Management of the UAPF Assets (CMA) chaired by NBK with designing its investment policy. The law preserves the key parameters of the funded pension system created in 1997, including the government guarantee of the preservation of contributions in real terms.

65. The governance of UAPF is not in line with best practice. NBK chairs the board of the UAPF in its role as fiduciary owner, makes investment decisions as chair of CMA, and is the supervisor, custodian, and statutory asset manager. Separation of the control functions from the ownership is recommended. CMA should be subject to the same transparency and accountability standards required from listed companies in major markets, and should avoid investments whose risks that are not well understood—direct infrastructure financing and investments to support entities in financial distress.

D. Securities Markets: Reducing Uncertainty and Mitigating Mispricing and Reputational Risks

66. Oversight of the securities markets has improved. The powers of the entities in charge of securities regulation and supervision have expanded, and customer protections and market transparency have improved. The improvements include the adoption of IFRS and Auditing Standards for issuers and public interest entities; strengthened accountability for unlisted securities through the establishment of a single securities registry; and the requirement that licensed firms establish a system of risk management and internal controls to better identify and manage operational and other risks.

67. However, the securities sector suffers from mispricing, uncertainty, and reputational risks due to uneven implementation. Instability in the rules governing market practices and

[16] See appendix on the new pension framework for more details

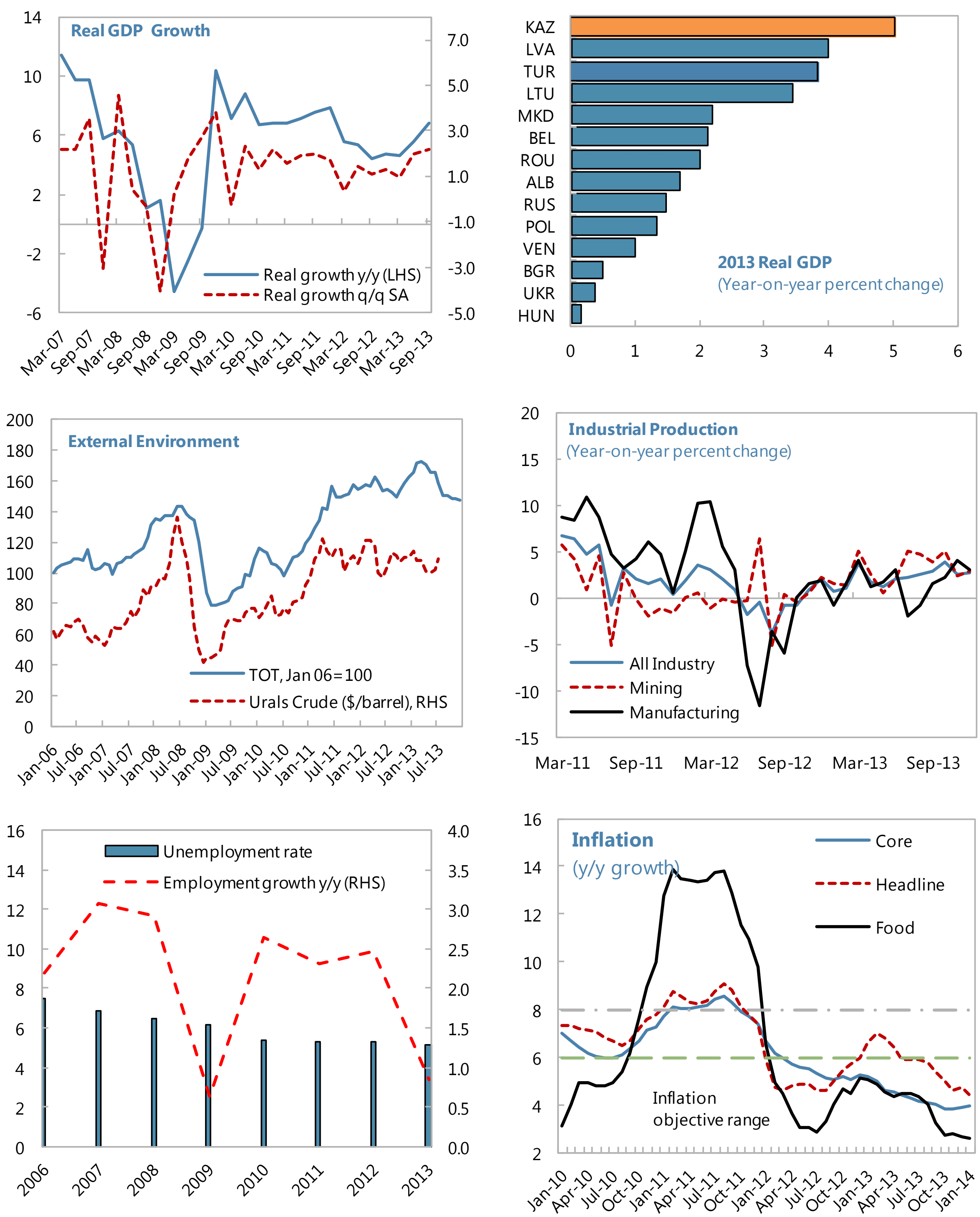
inconsistent approaches to reform create uncertainty about the validity of transactions to the detriment of market development and pricing. With only a few transactions occurring in a secondary market over a lengthy period of time, it is difficult to establish whether the price obtained in the market is true and bona fide. This may prevent properly haircutting and valuing collateral or accounting for net asset values in open-ended funds. Moreover, standard measures to address reputational risks, default risk, misconduct, and financial disruptions are lacking and should be adopted.

E. Financial Market Infrastructure: Addressing Gaps in Risk Management

68. There is legal uncertainty on the finality of payments and settlements. The law on payment and transfers does not define when a transfer or payment is final and irrevocable in the FMI. Similarly, the Securities Market Law does not provide finality of securities market transactions. Amendments to the relevant laws should be passed to eliminate uncertainty regarding finality and irrevocability of payments and settlements.

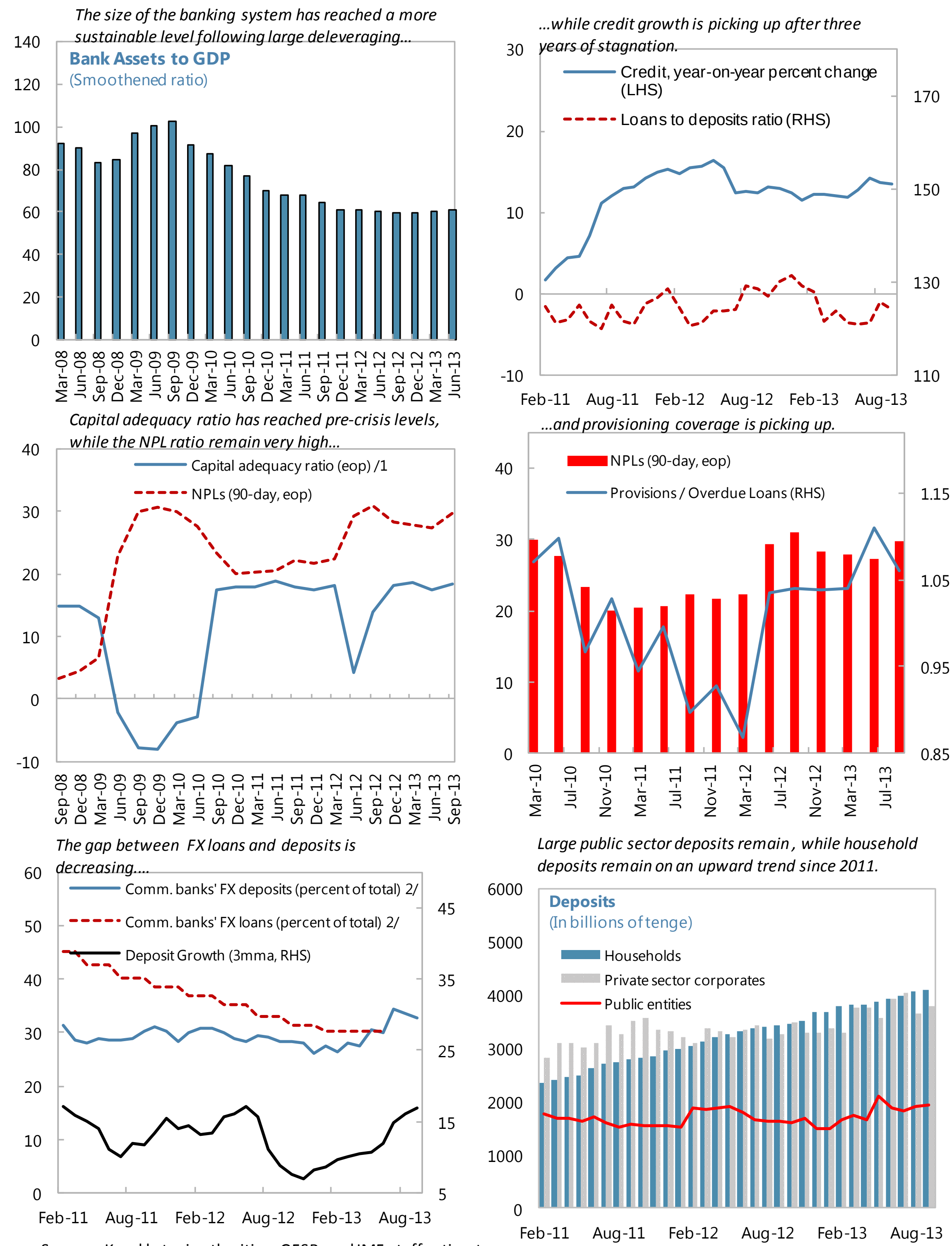
69. The lack of an intra-day liquidity support from NBK to the Inter-Bank System for Money Transfer (ISMT) exposes the system to liquidity risk. There is no reliable access to liquidity in the ISMT and liquidity risk can be high during evening settlement of foreign exchange transactions (when liquidity from the repo market is not available) or when large value payments occur at the end of the day. Similar problems exist with incoming settlement instructions from the securities market.

Figure 10. Kazakhstan: Economic Developments



Sources: Kazakhstani authorities; and IMF staff estimates.

Figure 11. Kazakhstan: Banking Sector Developments

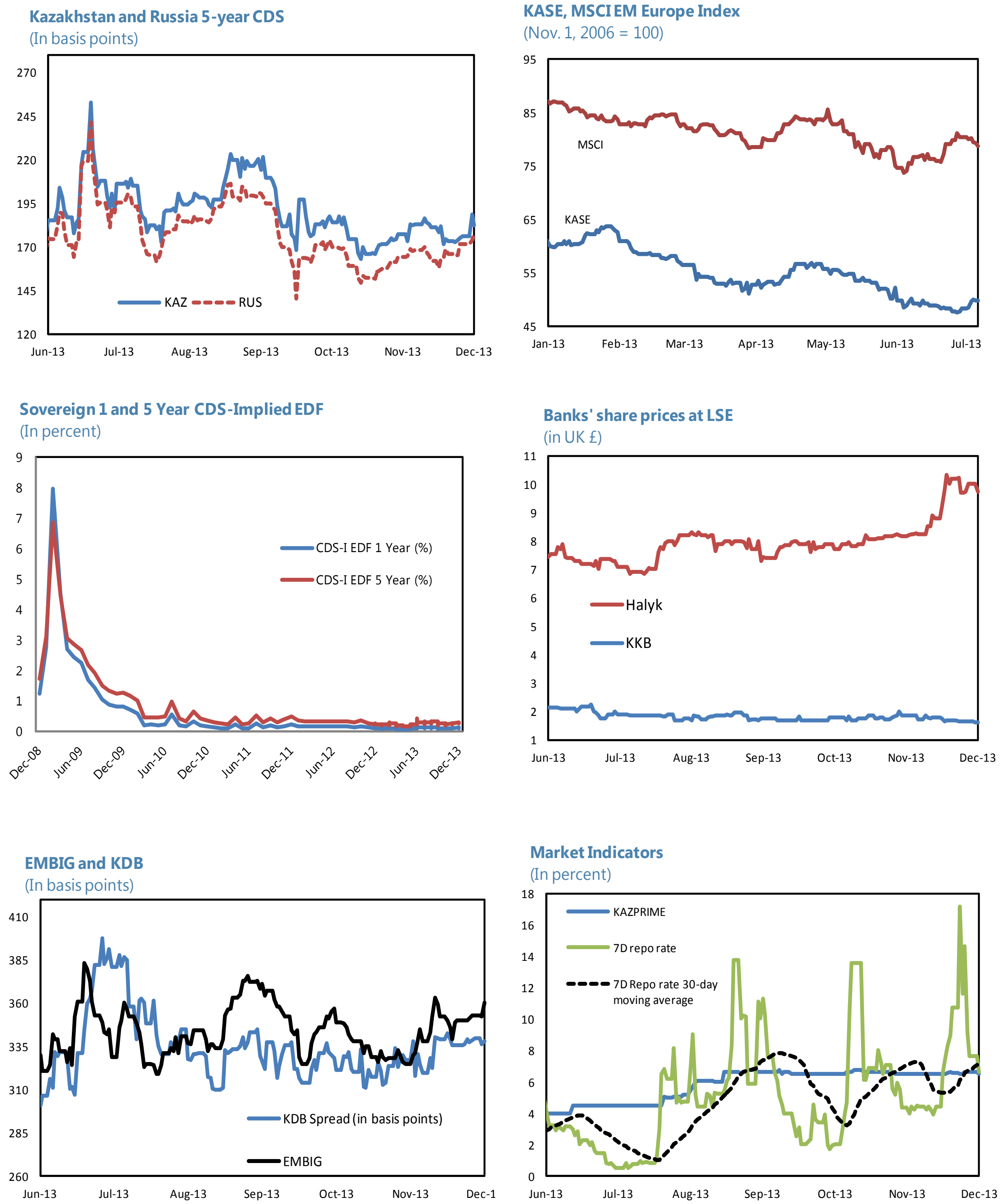


Sources: Kazakhstani authorities, GFSR, and IMF staff estimates.

1/Authorities did not provide systemwide CAR data during BTA's second debt restructuring, hence the gap in the CAR graph.

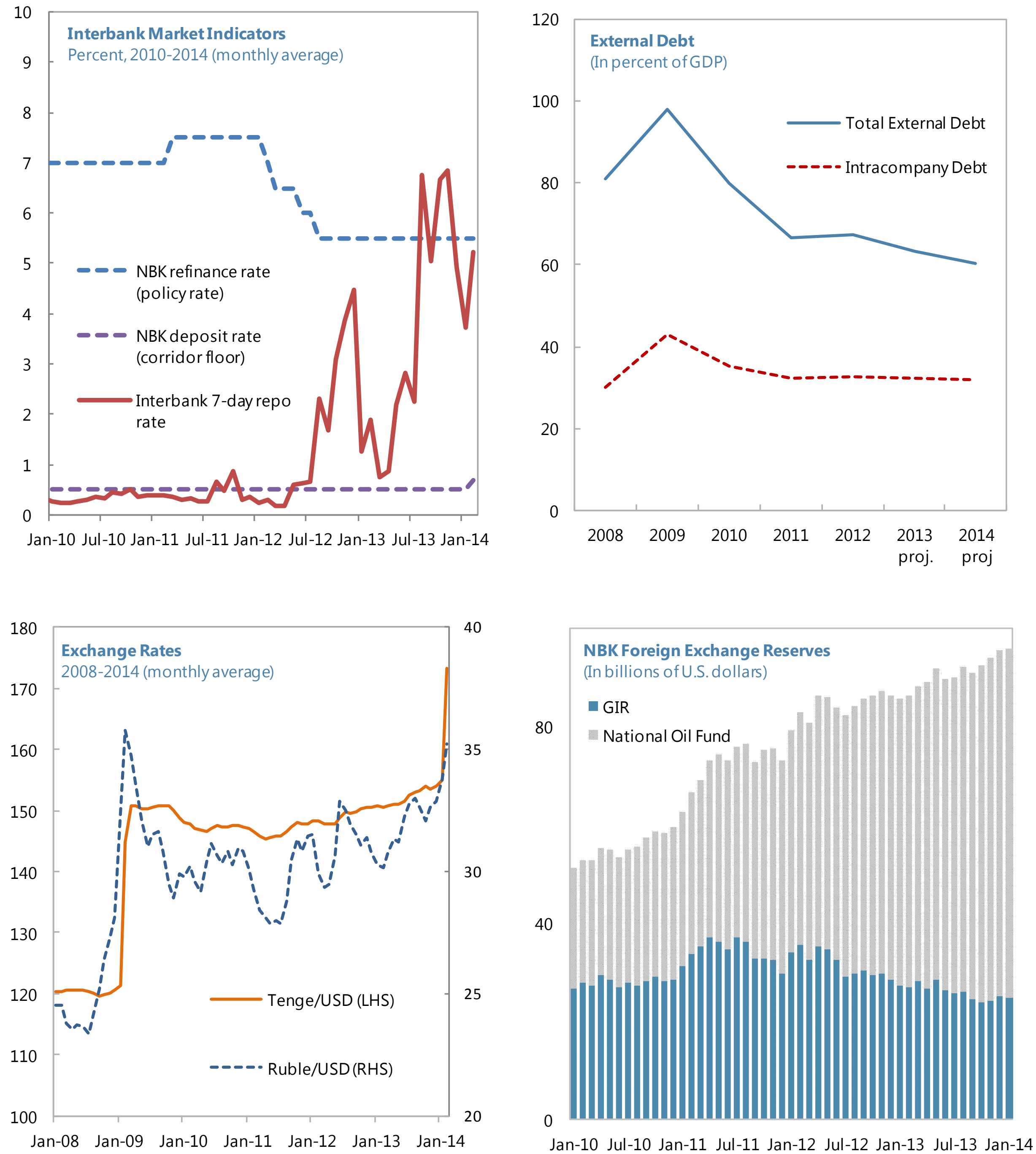
2/ Accounting for exchange rate valuation effects.

Figure 12. Kazakhstan: Capital Markets and Expected Default Frequencies



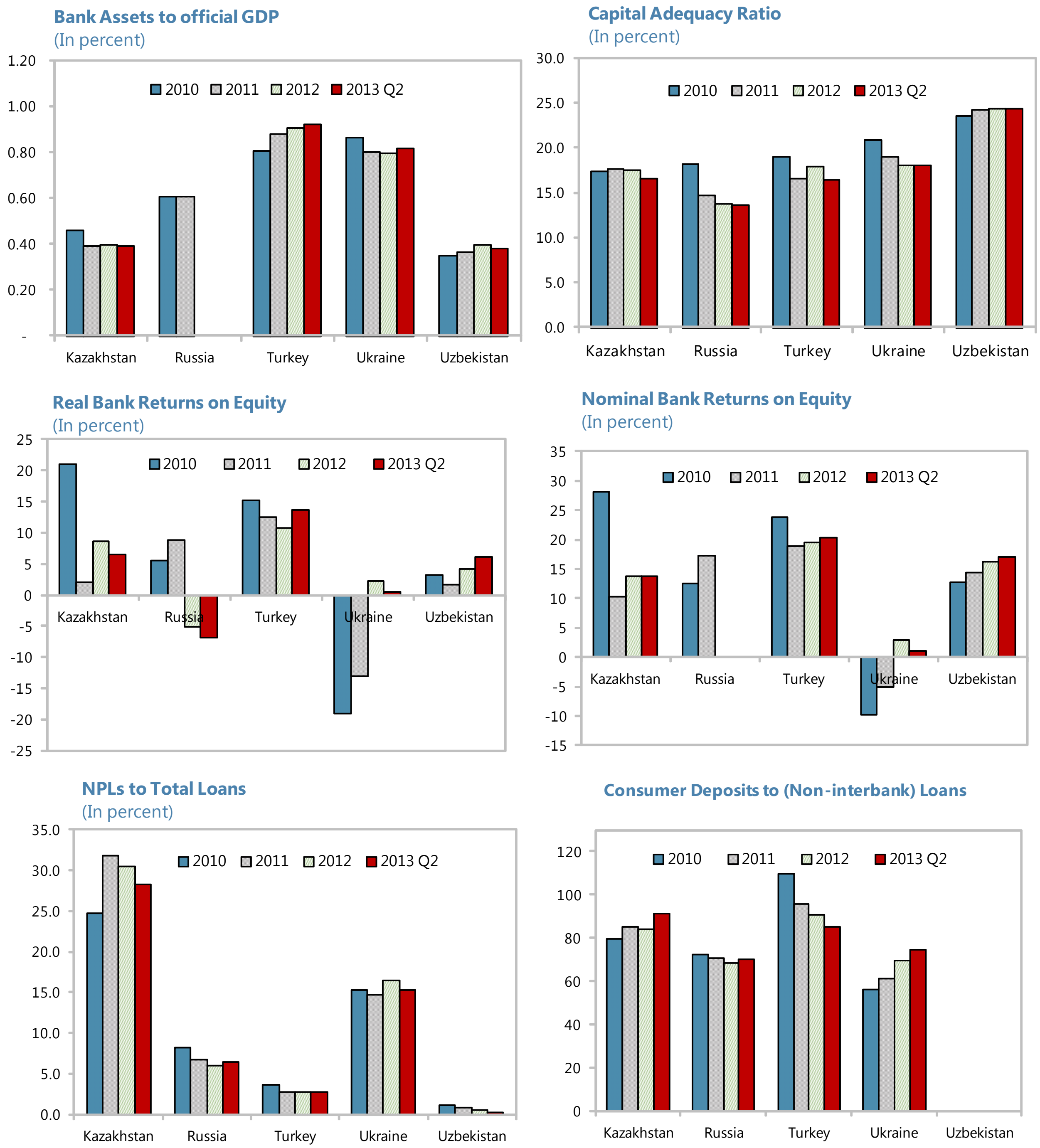
Sources Bloomberg.

Figure 13. Kazakhstan: Monetary and External Sector Developments



Sources: Kazakhstani authorities; Bloomberg, and IMF staff estimates.

Figure 14. Kazakhstan: Key Financial Soundness Indicators—Cross-Country Comparison



Sources: IMF FSI database, and World Economic Outlook.

Table 2. Kazakhstan: Selected Economic Indicators, 2010–2019

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
						Projections				
				(Annual percent change, unless otherwise indicated)						
National accounts and prices										
Real GDP	7.3	7.5	5.0	6.0	5.7	6.1	5.7	5.5	5.4	5.4
Real oil	6.1	1.4	-2.2	3.5	1.2	7.2	5.6	5.2	4.9	4.8
Real non-oil	7.9	10.2	8.0	6.9	7.3	5.8	5.7	5.6	5.6	5.6
Nonoil output gap (in percent of potental nonoil GDP)	-3.5	0.0	1.8	2.9	3.9	3.3	2.7	2.1	1.5	0.8
Crude oil and gas condensate production (million tons)	80	81	79	82	83	89	94	99	104	109
Consumer price index (p.a)	7.1	8.3	5.1	5.8	9.1	8.2	7.3	6.8	6.5	6.3
Core Consumer Price Index (p.a.)	6.5	8.0	5.6	4.3	10.0	8.2	7.2	6.8	6.5	6.3
GDP Deflator	19.5	17.6	4.8	4.3	10.9	7.1	6.4	6.3	6.2	6.2
Exchange rate (tenge per U.S. dollars; eop)	-0.7	0.4	1.5	2.2	20.4	3.0	3.0	3.0	3.0	3.0
				(In percent of GDP, unless otherwise indicated)						
General government fiscal accounts										
Revenues and grants	23.9	27.7	26.9	26.2	26.4	26.1	25.6	25.0	24.5	24.0
Of which: oil revenues	11.7	14.7	13.4	12.4	12.9	12.4	11.7	11.0	10.4	9.9
Expenditures and net lending	22.5	21.8	22.4	21.3	22.2	22.2	21.8	21.1	20.9	20.7
Overall fiscal balance	1.4	5.9	4.5	4.9	4.2	3.9	3.7	3.9	3.5	3.3
Financing	-1.6	-4.8	-4.0	-3.4	-4.2	-3.9	-3.7	-3.9	-3.5	-3.3
Domestic financing	1.8	1.5	2.7	2.2	-0.2	2.7	2.7	2.3	2.5	2.5
Foreign financing	1.0	0.4	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1
NFRK	-4.5	-6.7	-6.9	-5.8	-4.3	-6.7	-6.6	-6.3	-6.1	-5.9
Non-oil fiscal balance (percent of GDP)	-10.3	-8.8	-8.9	-7.5	-8.7	-8.5	-8.0	-7.1	-6.9	-6.6
Non-oil fiscal balance (percent of non-oil GDP)	-14.4	-13.0	-13.0	-10.7	-12.6	-12.0	-10.9	-9.5	-9.0	-8.5
				(Annual percent change, eop, unless otherwise indicated)						
Monetary accounts										
Reserve money	5.0	10.3	1.9	7.3	15.2	10.8	9.6	9.4	9.4	9.4
Broad money	14.1	14.1	7.9	10.2	17.1	13.7	12.5	12.1	12.1	12.1
Broad money velocity (annual average)	2.6	2.8	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
Credit to the private sector 1/	0.9	14.9	12.4	12.8	17.0	12.3	11.6	11.4	11.2	11.1
Credit to the private sector (percent of GDP)	39.5	35.9	36.7	37.4	37.4	37.0	36.7	36.4	36.2	35.9
NBK refinance rate (eop; percent)	7.0	7.5	5.5	…	…	…	…	…		…
				(In billions of U.S. dollars, unless otherwise indicated)						
External accounts										
Current account balance (percent of GDP)	0.9	5.4	0.3	0.1	1.9	1.8	1.6	1.5	1.3	1.3
Exports of goods and services	65.5	89.5	91.8	88.4	90.3	91.5	94.0	97.3	101.0	105.7
Oil and gas condensate	37.0	55.2	56.4	57.5	57.9	57.9	58.0	58.6	59.4	61.2
Imports of goods and services	44.3	51.3	62.0	61.6	61.8	63.7	67.1	71.0	75.4	79.7
Foreign direct investments (net, percent of GDP)	-2.5	-4.6	-5.8	-3.7	-5.6	-5.1	-4.8	-4.4	-4.1	-3.9
NBK gross reserves (eop) 2/	28.3	29.3	28.3	24.7	24.2	24.9	25.4	26.1	26.8	27.5
In months of next year's imports of goods and services	6.6	5.7	5.5	4.8	4.6	4.4	4.3	4.2	4.0	
NFRK assets (eop)	31.0	43.6	57.8	70.5	79.8	95.5	112.3	129.8	148.2	167.6
Total external debt 3/	118.2	125.4	136.9	147.7	149.5	154.1	160.4	166.8	173.7	179.9
In percent of GDP	79.9	66.7	67.3	67.0	69.0	65.8	62.7	59.9	57.4	54.7
Excluding intracompany debt (percent of GDP)	44.5	34.6	34.6	34.0	32.5	29.4	27.0	24.8	23.0	21.1
Memorandum items:										
Nominal GDP (in billions of tenge)	21,816	27,572	30,347	33,521	39,268	44,649	50,210	56,306	63,048	70,554
Nominal GDP (in billions of U.S. dollars)	148.0	188.0	203.5	220.3	216.6	234.3	255.8	278.5	302.8	329.0
Crude oil, gas cnds. Production (millions of barrels/day) 4/	1.67	1.69	1.65	1.71	1.73	1.85	1.96	2.06	2.17	2.27
Oil price (in U.S. dollars per barrel)	79.0	104.0	105.0	104.1	104.2	97.9	93.0	90.0	88.1	86.6

Sources: Kazakhstani authorities, and Fund staff estimates and projections.

1/ In 2009, credit growth would be -2.5 percent, if adjusted for the devaluation.
2/ Does not include NFRK.
3/ Gross debt, including arrears and other short-term debt.
4/ Based on a conversion factor of 7.6 barrels of oil per ton.

Table 3. Kazakhstan: Financial System Structure, 2005–13

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Number									
Banks	34	33	35	37	38	39	38	38	38
of which: Domestic-majority owned	10	13	17	19	19	18	19	19	21
Foreign-majority owned	24	20	18	18	19	21	19	19	17
Banking conglomerates	...	...	...	15	15	14	13	14	14
Insurance companies	37	39	41	44	41	38	38	35	34
Life	3	4	7	8	7	7	7	7	7
Non-life	34	35	34	36	34	31	31	28	27
Pension funds	14	14	14	14	14	13	12	11	11
Securities dealers	67	69	63	71	50	44	42	29	22
Real estate investment funds with fixed capital	36	37	61	66	49	39	33	33	26
Financial system assets (in billions of US dollars or in percent)									
Banks	n.a.	n.a.	11,684.6	11,889.6	11,557.3	12,031.5	12,817.9	13,880.0	15,461.7
of which: Domestic-majority owned	494.5	2,050.1	7,190.8	7,095.2	8,856.6	7,935.3	8,875.4	9,694.3	11,513.9
Foreign-majority owned	4,020.5	6,821.9	4,493.8	4,794.3	2,700.7	4,096.2	3,942.5	4,185.6	3,947.8
Banking conglomerates	n.a.	n.a.	n.a.	10,966.3	10,852.3	10,867.3	10,685.3	11,675.8	n.a.
Insurance sector	73.4	135.5	223.6	268.8	297.3	343.2	387.7	442.7	523.4
Life	2.9	7.0	13.2	17.8	22.8	36.1	50.8	78.7	114.9
Non-life	70.5	128.5	210.4	251.0	274.4	307.1	336.9	364.1	408.5
Pension funds	650.2	915.1	1,211.9	1,412.9	1,860.8	2,260.1	2,652.2	3,188.3	3,735.9
Mutual funds	29.8	116.0	312.9	320.0	360.9	292.6	485.1	623.2	455.5
: Open-end	0.7	1.3	1.6	1.4	0.8	0.8	0.6	0.5	0.3
: Closed-end	11.3	45.9	194.5	150.7	295.6	262.0	453.9	573.7	417.0
Stock market participants	30.4	193.7	356.0	446.0	174.7	160.7	137.2	104.2	88.1
Assets as percent of GDP									
Banks	...	...	91.4	74.1	68.0	55.2	46.5	45.7	44.9
Banking groups	...	...	...	68.3	63.8	49.8	38.8	38.5	n.a.
Insurance companies (life and nonlife)	1.0	1.3	1.7	1.7	1.7	1.6	1.4	1.5	1.5
Pension funds	8.6	9.0	9.4	8.8	10.9	10.4	9.6	10.5	10.8
Mutual funds	0.4	1.1	2.4	2.0	2.1	1.3	1.8	2.1	1.3
Nominal GDP (bln tenge)	7,590.6	10,213.7	12,849.8	16,052.9	17,007.6	21,815.5	27,571.9	30,347.0	34,443.4
Exchange rate (USD/KZT)	133.77	127.00	120.30	120.79	148.46	147.50	148.40	150.74	154.06

Source: NBK

Table 4. Kazakhstan: Financial Soundness Indicators of the Banking System, 2008–2013

	2008	2009	2010	2011	2012	2013
Capital adequacy						
Regulatory capital	1,947,847,477	(913,609,096)	1,821,426,747	1,955,839,253	2,072,261,186	2,347,419,468
of which Tier 1	1,525,126,295	(1,054,272,293)	1,418,504,001	1,491,710,697	1,561,287,211	1,691,019,203
Common shares and retained earnings	973,974,784	(1,506,090,630)	3,621,086,427	2,348,388,427	2,375,498,914	2,846,571,560
Preferred shares	54,493,819	87,149,807	247,585,979	250,165,411	213,423,818	211,957,375
Hybrid instruments	102,540,535	66,694,309	44,250,000	42,992,370	38,212,590	39,054,210
of which Tier 2	495,130,072	312,184,154	451,490,511	515,033,661	509,959,014	663,112,616
of which Tier 3	916,725	1,096,059	2,393,714	1,543,836	1,014,961	1,725,300
Risk Weighted assets	13,106,297,519	11,326,657,760	10,312,308,873	11,331,483,460	11,533,713,396	12,698,095,997
of which for Credit risk	12,527,919,747	8,824,035,684	9,438,734,231	10,470,265,593	10,904,794,286	12,018,555,375
of which Market risk	242,779,323	2,027,841,138	295,672,291	282,200,226	235,319,787	295,520,354
of which Operational risk	335,598,449	474,780,938	577,902,351	579,017,641	393,599,323	384,020,268
Regulatory capital as percent of risk-weighted assets *	15%	-8%	18%	17%	18%	18%
Regulatory Tier I capital to risk-weighted assets *	12%	-9%	14%	13%	14%	13%
Capital as percent of assets *	12%	-8%	11%	10%	14%	13%
Asset composition and quality						
Sectoral distribution of bank credit to the private sector (as percent of total credit to private sector) *						
Mining and quarrying	3%	3%	4%	3%	3%	3%
Manufacturing	7%	7%	7%	9%	9%	8%
Real estate activities	4%	7%	7%	7%	6%	6%
Agriculture, Forestry and Fishing	3%	3%	4%	3%	3%	3%
Construction	22%	21%	20%	20%	19%	18%
Wholesale and retail trade; repair of motor vehicles and motorcycles	21%	21%	21%	21%	21%	20%
Transportation and storage	2%	2%	2%	3%	3%	3%
Accommodation and food service activities	2%	3%	3%	3%	3%	2%
Financial and insurance activities	4%	3%	3%	4%	4%	4%
Consumer loans	11%	8%	9%	10%	12%	17%
Real estate loans of households	9%	10%	9%	8%	8%	7%
Other households loans	2%	1%	1%	1%	1%	1%
Asset quality						
Non-performing loans (NPL) as percent of gross loans *	5%	22%	24%	31%	30%	31%
Provisions as percent of NPL	69%	75%	63%	70%	77%	83%
NPL net of provisions as percent of tier I capital *	10%	-48%	56%	65%	52%	41%
Large exposures as percent of tier I capital *	166%	-279%	216%	252%	264%	256%
(10-largest credit to net credits) 25-largest credit to total loans	27%	31%	34%	36%	35%	32%
Memorandum items:						
Written off loans**	42,737,381	81,501,500	162,224,155	152,541,263	234,856,833	307,865,774

Table 4. Kazakhstan: Financial Soundness Indicators of the Banking System, 2008–2013 (concluded)

	2008	2009	2010	2011	2012	2013
Earnings and profitability						
Gross profits as percent of average assets (ROAA) *	0%	-24%	12%	0%	2%	2%
Gross profits as percent of average equity capital (ROAE) *	1%	-1198%	843%	-3%	13%	13%
Net interest margin (net interest income as percent of interest bearing assets) *	6%	4%	3%	4%	4%	6%
Gross income as percent of average assets	7%	4%	16%	5%	13%	8%
Net interest income as percent of gross income	77%	105%	16%	71%	27%	60%
Non-interest income as percent of gross income	23%	-5%	84%	29%	73%	40%
Trading net income as a percent of gross income *	3%	-43%	0%	-2%	-3%	4%
Non-interest expenses as percent of gross income *	35%	65%	21%	68%	68%	38%
Personnel expenses as percent of non-interest expenses *	11%	22%	6%	21%	8%	14%
Spread between reference loan and deposit rates *	744.98	501.56	393.16	450.68	446.62	492.53
Liquidity						
Liquid assets as percent of total assets *	14%	19%	21%	21%	18%	17%
Liquid assets as percent of short-term liabilities *	49%	53%	64%	58%	47%	53%
Foreign currency loans as percent of total loans *	52%	57%	50%	44%	38%	38%
Foreign currency liabilities as percent of total liabilities *	60%	54%	44%	40%	35%	43%
Deposits as percent of assets (excl. interbank deposits)	39%	53%	57%	61%	61%	64%
o/w Household deposis	13%	17%	19%	22%	25%	26%
o/w Corporate deposits	26%	35%	38%	39%	37%	38%
o/w Interbank deposits	3%	2%	2%	1%	1%	2%
o/w other	19%	16%	1%	1%	1%	1%
Net Interbank positions	105,559,519	932,923,759	995,720,796	1,326,108,128	1,317,312,525	1,571,551,376
Gross Interbank Assets	1,233,755,483	1,884,129,092	1,609,492,180	1,729,400,232	1,705,537,865	2,040,070,848
Gross Interbank Liabilities	1,128,195,964	951,205,333	613,771,384	403,292,104	388,225,340	468,519,472
Other wholesale/market-based funding as percent of assets	28%	42%	34%	31%	26%	25%
Loans as percent of deposits *	198%	156%	131%	132%	135%	134%
Sensitivity to market risk						
Off-balance sheet operations as percent of assets	82%	79%	63%	76%	76%	74%
Gross asset position in derivatives as a percentage of tier I capital *	12%	-8%	3%	2%	5%	6%
Gross liability position in derivatives as a percentage of tier I capital *	9%	-7%	5%	4%	5%	6%
Net (long) open position in foreign exchange as a percentage of tier I capital *	3%	57%	-2%	0%	-5%	-5%

Source: NBK.

**Excluding BTA and credit cards

*Core and encouraged set of indicators. Indicates available aggregate data for all banks.

Table 5. Kazakhstan: Financial Soundness Indicators of the Non-Banking System, 2005–2013

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Insurance sector									
Non-life									
Capital adequacy									
Solvency margin	2.9	2.3	2.4	2.4	2.9	3.6	3.4	3.7	3.2
Net premium/capital	0.9	1.0	0.8	0.5	0.4	0.4	0.5	0.5	0.6
Capital/total assets	0.5	0.5	0.5	0.4	0.5	0.5	0.4	0.5	0.4
Asset quality									
(Real estate + unquoted equities + debtors)/ total assets	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0
Debtors / (Gross premium + reinsurance recoveries)	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0
Equities / total assets (in percent)	1.8	0.9	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Yield of investments (in billion tenge)	3.2	5.9	10.5	16.7	18.9	18.8	15.1	21.5	19.9
Reinsurance and actuarial issues									
Risk retention ratio (net premium / gross premium) (in percent)	67.0	67.3	63.3	60.1	54.6	55.6	53.9	45.5	50.3
Net technical reserves / average of net claims paid in last three years	...	...	...	2.9	2.1	1.9	2.6	3.8	3.5
Net technical reserves / average of net premium received in last three years	...	...	...	0.6	0.6	0.7	0.7	0.8	0.8
Liquidity									
Liquid assets / Current liabilities	2.7	2.3	2.8	3.3	3.5	3.6	3.5	3.2	2.4
Life									
Capital adequacy									
Capital/total assets	0.5	0.2	0.4	0.3	0.3	0.2	0.2	0.1	0.1
Capital/technical reserves	1.4	0.4	0.9	0.6	0.5	0.4	0.3	0.2	0.2
Asset quality									
(Real estate + unquoted equities + debtors)/ total assets	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Debtors / (Gross premium + reinsurance recoveries)	89.8	17.8	15.2	5.8	16.9	25.4	41.6	82.2	66.3
Equities / total assets (in percent)	42.8	16.8	0.7	1.5	0.1	0.0	0.0	0.0	0.0
Yield of investments (in billion tenge)	0.1	0.6	0.8	1.4	1.8	2.0	3.2	4.5	6.4
Reinsurance and actuarial issues									
Risk retention ratio (net premium / gross premium) (in percent)	91.4	94.8	96.5	98.0	97.4	95.3	97.7	88.1	86.0
Net technical reserves / average of net premium received in last three years	...	...	...	1.0	1.1	1.2	1.1	1.1	0.9
Coverage ratio (assets/ liabilities)	2.5	1.7	2.1	2.1	1.8	1.6	1.4	1.3	1.2
Liquidity									
Liquid assets / Current liabilities	2.1	1.4	1.9	1.6	1.5	1.4	1.4	1.2	1.2
Life and nonlife solvency status (no. of institutions)									
Actual solvency margin/minimum : <100 %	1.0	4.0	3.0	2.0	3.0	1.0	2.0	0.0	2.0
Actual solvency margin/minimum : 100-110 %	11.0	6.0	11.0	11.0	6.0	4.0	2.0	9.0	5.0
Actual solvency margin/minimum : 110-125 %	6.0	8.0	3.0	7.0	8.0	4.0	4.0	5.0	7.0
Actual solvency margin/minimum : 125-150 %	6.0	5.0	7.0	7.0	4.0	10.0	9.0	7.0	3.0
Actual solvency margin/minimum : >150 %	13.0	16.0	17.0	17.0	20.0	19.0	21.0	14.0	17.0
Pension Funds									
Capital adequacy									
Capital/technical reserves									
Reserve capital (bn KZT)	1.4	1.7	4.1	5.1	5.1	8.3	8.2	8.1	5.2
Reserve to ensure financial stability (bn KZT)	0.0	0.0	0.0	0.0	0.0	0.0	8.2	0.8	0.1
Other reserves (bn KZT)	0.2	0.9	1.5	0.8	3.0	4.7	2.3	0.8	0.8
Equity (Liquid and other assets - Liabilities according balance-sheet) bn KZT	9.9	17.3	25.3	36.7	60.8	77.5	73.8	92.2	48.9

Table 5. Kazakhstan: Financial Soundness Indicators of the Non-Banking System, 2005-2013 (concluded)

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Pension Funds									
Asset quality									
Fixed assets net of accumulated amortization and depreciation (bn KZT)	0.9	2.1	3.1	4.9	6.4	5.4	4.1	4.0	3.3
including fixed assets in the form of real estate (bn KZT)	...	...	...	...	...	4.2	3.0	2.9	2.6
Accounts receivable (bn KZT)	...	...	...	...	0.1	0.0	0.0	0.0	0.0
Other receivables (net of reserves for depreciation), bn KZT	0.2	0.1	0.2	1.4	4.7	0.0	0.9	0.1	0.2
Total assets (bn KZT)	12.4	24.5	31.1	64.4	85.2	88.2	93.6	107.3	89.6
Payments									
Pension payments and transfers to insurance organisations (bn KZT)	35.8	47.9	63.1	92.1	132.2	186.9	233.2	323.0	423.7
Investment portfolio of accumulative pension funds, (bn KZT)	634.9	898.0	1,195.1	1,378.4	1,839.6	2,223.8	2,546.1	3,129.4	3,631.1
Pension assets (bn KZT)	650.2	915.1	1,211.9	1,412.9	1,860.8	2,260.1	2,652.2	3,188.3	3,735.9
Yield of investments									
Accrual investment income (bn KZT)	183.0	306.1	411.3	382.0	596.6	713.6	703.0	851.1	972.8
Actuarial issues									
Replacement ratio in % (including base pension)	...	...	...	...	...	...	...	...	46.0
Coverage ratio (assets/ liabilities)	24.3	17.9	20.1	3.9	6.9	21.9	11.5	17.7	22.3
Assets (bn KZT)	12.4	24.5	31.1	64.4	85.2	88.2	93.6	107.3	89.6
Lliabilities (bn KZT)	0.5	1.4	1.5	16.7	12.3	4.0	8.1	6.1	4.0
Management soundness									
Assets per employee (total assets/number of employees) in bn KZT	...	...	...	...	...	0.6	0.6	0.8	1.5
Liquidity									
Liquid assets (bn KZT)	10.4	18.7	26.8	53.4	73.1	82.8	82.9	99.1	51.9
Outflow payments / income in %	7.0	7.0	6.7	7.8	8.9	10.3	11.6	13.1	14.0
Corporate sector 1/									
Total debt as a percentage of equity *	131.0	137.6	132.8	146.4	177.4	163.0	158.4	147.0	...
Profitability (Return on equity) * 2/	40.8	49.3	48.0	43.2	29.8	39.6	44.7	35.7	...
Net foreign exchange exposure as a percentage of equity *	...	...	...	...	...	-7.3	4.4	2.1	...
Household sector									
Total assets/GDP	136.8	156.6	175.9	128.4	117.9	102.8	88.0	86.3	...
Financial Assets/GDP	13.4	17.0	18.8	15.5	17.0	16.0	15.4	16.8	...
Debt as a precentage of GDP * 3/	9.9	16.5	18.1	13.3	11.6	8.7	7.7	8.9	...
Financial savings ratio as a percentage of GDP	...	3.1	4.6	0.1	-2.5	-0.5	2.8	1.3	...
Real estate sector									
House price inflation 4/ *	34.9	41.8	58.2	1.4	-9.8	-1.1	7.0	6.7	13.0
Astana	16.4	63.4	50.1	-6.9	-17.6	-1.6	4.2	12.3	19.9
Almaty	53.9	62.2	83.9	-15.1	-19.5	-7.1	0.1	0.9	5.0

Sources : NBK.

1/ For the medium and large enterprises (more than 50 people).

2/ Equity is calculated as an average value at the beginning and the end of a year.

3/ For the periods of 2003-2006 debt of households comprises debt of residents and non-residents. Since 2007 households' debt includes only debt of residents and debt to microcredit and credit

4/ Percent change in house price index.

* Encouraged set of indicators

Appendix I. KAZAKHSTAN: LIST OF RECENT MACROPRUDENTIAL POLICY MEASURES

Dynamic Provisioning. Introduced in January 2013, with an aim to limit procyclicality. Currently suspended (from January 2014), while retaining its volume in the structure of capital as accumulated at end-2013.

70. Reserve Requirement Ratios. Introduced in May 2006, amended in 2012, with an aim to limit liquidity risks. Minimum reserve requirements (MRRs) prior to 2012 were applied to the required share of bank liabilities associated with cash in vault and correspondent accounts with the NBK, in both tenge and foreign currency. In November 2012, amendments were made to differentiate MRRs between short-term (less than 1 year) and long-term (over 1 year) bank liabilities, with the aim of (i) helping to limit the inflow of short-term speculative capital, (ii) diversifying portfolio of banks, (iii) developing the market of long-term bank instruments, and (iv) reducing pressure on the foreign exchange market. From December 2012 the MRR ratios are (i) 2.5 percent on short-term domestic liabilities; (ii) 0 percent on long-term domestic liabilities, (iii) 6 percent on short-term foreign liabilities; and (iv) 2.5 percent on long-term foreign liabilities.

71. Liquidity Requirements. Introduced in 2005, amended in 2009 and in 2012. Maximum value of к9 ratio (liabilities of non-residents to equity) relaxed from 2 to 3, starting in July 2009. The current liquidity ratio k4 (average monthly highly liquid assets of a bank to average monthly demand liabilities) was introduced to differentiate between tenge and foreign currency liquidity, with the regulatory value to be equal to 0.3. In 2012, liquidity ratios were tightened, from July, 2012—at least 0.08, and from July, 2013—at least 0.09, adding contingent liabilities to the calculation of capital adequacy ratio (k1-1).

72. Limits on Open FX Positions or Currency Mismatches. Limits on Open FX Positions were introduced in 2002, as follows: (i) for currencies of countries with the S&P rating of at least "A" (or equivalent): 12.5 percent, (ii) for euro: 12.5 percent, (iii) for currencies of countries with the S&P rating below "A" (or equivalent): 5 percent, (iv) net foreign currency position limit: 25 percent. NBK introduced a 30 percent limit on open foreign currency off-balance sheet positions, effective from July 2014. The measure is aimed at preventing speculative pressure in the spot market and to control foreign exchange risk off-balance sheet on a net basis.

73. Measures in non-collateralized consumer lending. Effective from April 1, 2014. NBK introduced: (i) a 50 percent cap on debt-to-income ratio, (ii) an increase in the retail lending risk weight for capital adequacy to 100 percent (from 75 percent), and (iii) a 30 percent limit for growth in consumer loans for each bank. Measures are aimed at minimizing risks associated with rapid growth in consumer lending.

74. General Countercyclical Capital Buffer. Plan to introduce from 2016.

75. Capital Surcharges on SIFIs. Plan to introduce from 2016.

Appendix II. Kazakhstan: Funded Pension System

Structure of the Funded Pension System

1. **The pension reform that started 1998 has generated important outputs for the country.** The ownership of individual accounts, the statements received, and the public discussion on pension matters have certainly increased the awareness of the population about the need to save for retirement and individual responsibility for old age income. At the end of 2013, the accumulated pension assets in 9,449,901 depositors' individual pension accounts amounted to 3,731.9 billion KZT or around 12 percent of GDP for the mandatory pension scheme. The increase in pension accumulations based on mandatory pension contributions over the period of January 1, 2013 to January 1, 2014, came to 17.4 percent. Voluntary pensions have not been successful, with accumulated assets at the end of 2013 of 1.4 billion KZT in 42,906 depositors' individual pension accounts.

Kazakhstan: Accumulated Assets and Number of Individual Accounts in the Pension Sector, 2008–2013

	2008	2009	2010	2011	2012	2013
Pension assets (KZT million)	1,412.87	1,860.84	2,260.13	2,652.23	3,188.26	3,735.91
Number of individual retirement accounts owned (thousand):						
Compulsory pension (in thousand)	9,613	7,732	7,990	8,137	8,423	9,450
Voluntary pension	41,499	41,682	39,534	38,318	37,793	42,906
Voluntary professional pension	4,030	4,076	4,045	4,102	4,225	4,227

Source NBK.

2. **The pension system has undergone several reforms since its inception, with the latest entailing a radical restructuring of the sector in 2013.** On June, 2013, the Law on Pensions of the Republic of Kazakhstan (LP-2013) was adopted, under which all pension assets of existing funded pension funds were consolidated in the Single Funded Pension Fund (UAPF). The new pension law addresses three issues:

- LP-2013 establishes the UAPF as a joint-stock company fully owned by the government of the Republic of Kazakhstan. It has the monopoly of the mandatory pension system and also participates in the voluntary pension business and the payout of annuities.

- It transforms the voluntary occupational pension for persons employed under arduous and hazardous working conditions into a mandatory pension with a five percent of salaries' cost to employers. This will affect around 350 thousand employees currently with only 4,231 individual accounts and 83 billion KZT.

- It raises, in ten years, the retirement age of women from 58 years to that of men, 63 years.

3. Key parameters of the funded pension system in existence since 1998 have been preserved:

- The government guarantees the preservation of contributions in real terms.
- The duty of the UAPF to maintain individual records of pension accumulations and payments;
- The separation of accounting and financial reporting for pension assets and its own assets.

4. Several existing regulation for the private pension funds have been removed through the LP-2013 or have not been carried out yet as in the past:

- The following prudential requirements are no longer applicable to the UAPF: own capital and the peers' return benchmarking;
- Separation of the custodian from the pension fund management;
- Related party investments;
- The portfolio structure publication has yet to take place;
- Onsite inspection has not been carried out and supervision requirements have not been specified.

5. The consolidation of the private pension funds into the UAPF aims at addressing the sustainability and adequacy of the pensions. The most important problem to be tackled is the prevalent low, even negative, net real return on pension savings in individual accounts, which have under-performed real wage increments with a few exceptions (table 3). The lack of compensation to the owners of the private pension funds probably reflects the costs of the government guarantee related to investment underperformance. There is no estimate of the total cost of the government guarantee. Currently the costs are low, but are expected to grow significantly in the coming years. In 2013, the government budget paid 10 billion KZT to 100,000 pensioners.

Kazakhstan: Performance of the pension assets returns against the real wage index

Period	Rate of return of Funds* (in%)	Real wage index** (in %)
01.01.2007	12.69	16.60
01.01.2008	9.47	0.40
01.01.2009	-0.84	3.70
01.01.2010	11.95	1.20
01.01.2011	4.39	7.50
01.01.2012	2.59	12.40
01.01.2013	4.00	0.90
01.01.2014	2.37	na

Source: NBK.
** based on data from www.afn.kz*
*** based on data from www.stat.gov.kz.*

1. **Increasing the returns on the accumulated pension assets remains a critical issue.** World Bank calculations[1] indicate, under pre-reform conditions and with a zero real return on the investments, the collapse of the replacement ratio. Even under the parametric changes that raise women retirement age to 63, at par with men's retirement age, and an additional five percent contribution, the replacement ratio would still only be at 16 percent, down from the current 26 percent (without the base pension). These numbers highlight the importance of increasing the yield on the pension assets.

2. **The 2013 year-end presidential speech indicated that an additional five percent contribution to the pensions, paid by the employers, will be enacted in 2014.** The additional five percent contribution will help offset the low replacement ratio either in the form of a defined contribution or defined benefit scheme. Both studied options consist of nominal schemes that assign the assets to individual accounts; however, the funds have a notional character. Actuarial studies indicate that the additional five percent contribution will result in an increase of the replacement

[1] The World Bank. "Kazakhstan's Pension System and Options for Reform," June 8th 2012.

ratio from five to 16 percent, depending on the chosen scheme and under different investment return scenarios. Critical remains the necessity to invest at a rate higher than inflation.

3. **The UAPF is owned by the government and managed and supervised by NBK**. The Charter of the UAPF specifies that its supreme authority is its single shareholder, the government of the Republic of Kazakhstan. The fiduciary ownership role of the UAPF has been delegated to the NBK. The governing authority is its Board of Directors, its executive authority is its Executive Board, and the authority that oversees its financial and business activity is its Internal Audit Service. The supervision and consumer protection remains with the NBK. As of now, the consolidation process is ongoing. Of the 10 initial private pension funds, two remain yet to be consolidated into the UAPF. These two remaining private pension funds account for 44 percent of the assets. The consolidation is scheduled to be completed in April 2014.

4. **The investment policy will be overseen by the Council for Management of the UAPF Assets (CMA) chaired by the NBK.** With the presidential decree 753 of February 2014, the CMA is created as a consultative body to the President of the Republic of Kazakhstan. The UAPF's investment policy statement will be subject to approval by the National Bank Executive Board under the assistance of the CMA. Among the functions of the CMA are**:**

- Considering and developing proposals to improve the management of the pension assets;
- Developing proposals for a list of permitted investment instruments and the approval of this list.

5. **The CMA is chaired by the NBK governor, its members represent the government as well as the private sector and has four independent experts:**

- The Assistant to the President of the Republic of Kazakhstan
- The Deputy Prime Minister of the Republic of Kazakhstan - Minister of Finance of the Republic of Kazakhstan
- The Deputy Chairman of the National Bank of Kazakhstan
- The Chairman of the association of legal entities "Association of Financiers of Kazakhstan" (by agreement)
- The Chairman of the Board of Directors of NUH Cimento Sanayi AS, an independent expert (as agreed)
- The Managing Partner of «Global Sovereign Advisors», independent expert (as agreed)
- The Head of the " Deutsche Bank AG " in the Republic of Kazakhstan , Managing Director «Deutsche Bank AG», independent expert (as agreed)

- The Honorary chairman of the Society of Actuaries of Kazakhstan , Chairman of the «Sze Associates Ltd», independent expert (as agreed)

- The Chairman of the Exchange Council , an independent Director of JSC "Kazakhstan Stock Exchange" (as agreed)

6. The asset manager of the UAPF is, by statute, the NBK. Management of the UAPF's pension assets will be handled by the National Bank on the basis of a fiduciary management contract entered into by the National Bank, the Government and the UAPF. An investment committee for the UAPF, consisting of the deputy governor and the department heads, will be formed to assist the NBK in the management of the assets. The expertise acquired by the NBK as the asset manager of the sovereign oil fund will be used when considering international investments for the UAPF.

7. External assets managers can be engaged. The NBK, maintaining the full fiduciary responsibility, can transfer, in total or partially, the asset management function to external asset management companies. The main conditions to qualify as a pension asset manager as established by the NBK include:

- the possession of a license to manage an investment portfolio;

- the absence of violations, during the last reporting month preceding the date of submission of an application, of prudential standards established by the National Bank;

- the absence of losses based on the results of one of two complete fiscal years.

- If an applicant is a member of a banking conglomerate, the data of the consolidated financial statements of said banking conglomerate's parent entity are used for assessing compliance with the requirement established in this sub clause;

- The possession of experience for one of the two preceding complete fiscal years in the management of assets (excluding investment funds' assets) equivalent to at least 50,000,000 times the monthly unit of account established in the law on the republic budget for the relevant fiscal year that is current as of the time of management of the assets.

- If an applicant is a member of a banking conglomerate, assets that are (were) under management by members of said banking conglomerate licensed to engage in investment portfolio management (investment management of pension assets) are counted toward meeting the requirement established in this subclause;

- The possession of a minimum credit rating no lower than "B+" on the Standard & Poor's international scale, or a rating of comparable level by one of the other rating agencies by the management company's parent entity and/ or the management company.

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Of the legal entities currently still in existence as pension funds, only one would fulfill these requirements.

8. The process of consolidating the pension system into the UAPF creates large operational risk. To receive the assets and accordingly the liabilities of each pension fund, the UAPF has created a new IT system. The transfer team for each pension fund addresses the issues of IT compatibility. The schedule to transfer all pension assets by April 2014 is intensive due to the complexity of the process that not only encompasses the transferring of the assets but also the complete historical data on each individual account, which can extend 15 years. A great amount of records is on paper and distributed over several subsidiaries of the larger pension funds.

9. The transfer of assets into the UAPF is carried out using the valuation used by each private pension fund. The valuation of traded assets is valued at market value at the date of the consolidation. For illiquid assets, the valuations as carried out by the private pension fund are used. The asset classification for purpose of accounting is also transferred unchanged into the UAPF. In this manner, the unit value of the members of any given pension fund are preserved. The NBK will conduct an external valuation of all assets using one of the international audit firms once the consolidation process is concluded. The executive board of NBK will take the decision on the valuation results, and how to transfer possible losses or gains to the UAPF members.

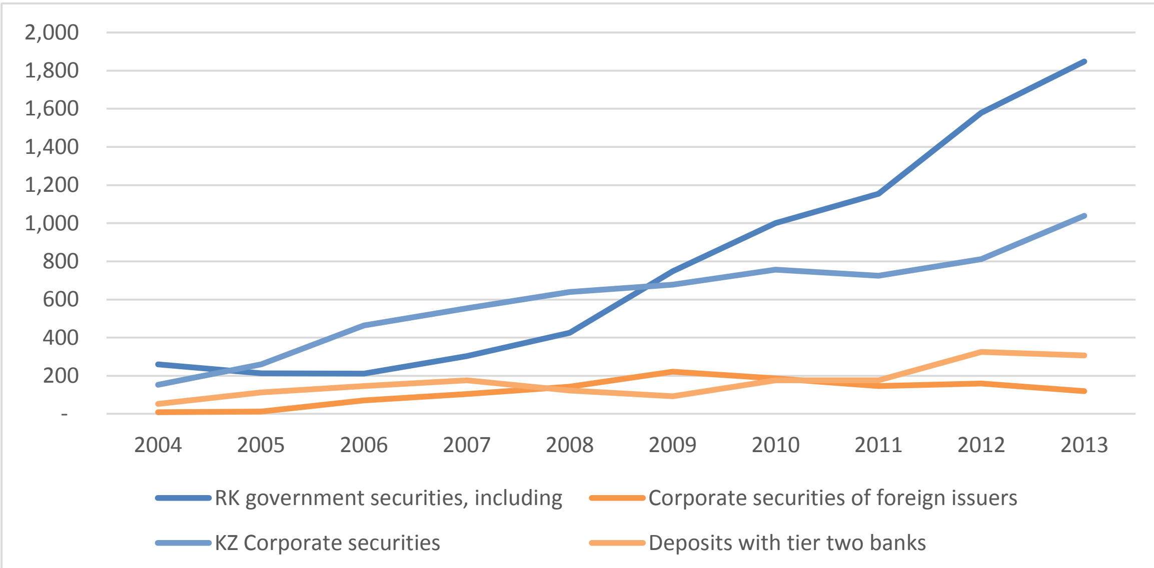
10. During the period of consolidation of the pension assets into the UAPF temporary investment guidelines are in place, however, they have had little effect on the existing asset composition. According to the Resolution No. 70 of the National Bank Executive Board, investments are limited to highly liquid, low-risk financial instruments, until all pension assets are consolidated into the UAPF. These instruments include Republic of Kazakhstan government securities, refined gold, the financial instruments of Republic of Kazakhstan national companies and rated second-tier banks, and bonds issued by international financial organizations. These investment guidelines have not significantly impacted the investment mix.

Kazakhstan: Investment Portfolio of the Funded Pension Sector (in KZT billion)

Financial Instruments	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
RK government securities, including	259	213	212	303	425	749	1,001	1,154	1,579	1,849
Corporate securities of foreign issuers	9	12	71	104	143	222	186	146	159	119
KZ Corporate securities	153	260	464	554	639	679	757	724	812	1,039
Deposits with tier two banks	53	112	146	177	123	92	176	177	325	307
Other	7	37	5	57	48	98	104	345	254	317
Total	481	635	898	1,195	1,378	1,840	2,224	2,546	3,129	3,631

Source: Authorities.

Kazakhstan: Development of the Investment Mix of the Funded Pension System (in KZT billion)



Source: Authorities.

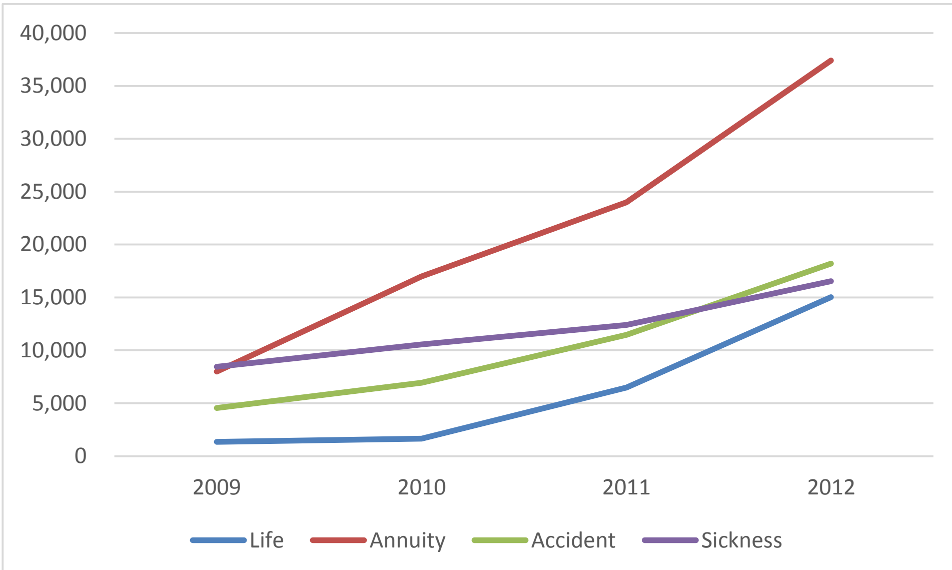
11. The transition measures include a prohibition on annuities payouts and transfers among pension funds. To limit outflows, the National Bank Executive Board adopted Resolution No. 77, pursuant to which transfers of the pension accumulations of depositors (recipients) from funded pension funds to insurance companies were suspended until the consolidated process is completed. This has affected the life insurance sector that was growing from providing annuities emanating from the mandatory pension funds and workers compensation.

Kazakhstan: Life Insurance Products (in KZT thousand)

	2009	2010	2011	2012	Sep. 2013
Life	1,334,183.00	1,655,326.00	6,473,350.00	15,023,353.00	21,293,557.00
Annuity	7,999,092.00	16,990,515.00	24,005,477.00	37,417,168.00	25,944,567.00
Accident	4,548,504.00	6,941,470.00	11,476,636.00	18,185,196.00	14,289,575.00
Sickness	8,443,463.00	10,546,724.00	12,402,728.00	16,550,012.00	16,729,991.00
Total	22,323,234.00	36,134,035.00	54,358,191.00	87,175,729.00	78,257,690.00

Source: Authorities.

Kazakhstan: Life Insurance Products Growth Trend (in KZT million)



Source: Authorities.

Key Findings and Recommendations

12. The reform is expected to have several positive immediate effects but it will also add significant risk. The cost savings created by synergy, higher negotiation power for the investments, better control of the payment of the contribution by the employers are among the main benefits under the consolidated system. On the other hand, the checks and controls of the UAPF will become of paramount importance in maintaining the investment policy free from undue interference. The crowding out of private investors would require special attention. Finally, the lack of competition and of a benchmark could generate subpar performance.

13. Hidden or implicit transition costs related to the consolidation of the pension system will emerge in the coming years:

- To facilitate the consolidation of assets into the UAPF, the investment instruments of the pension funds have, since February 2013, been restricted to highly liquid, low-risk financial instruments, including Republic of Kazakhstan government securities, refined gold, the financial instruments of Republic of Kazakhstan national companies and second-tier banks, and bonds issued by international financial organizations. This transitional measure has increased the reinvestment risk of the pension assets and provided for an extremely low annual return.

- The operational risk is high since transferring individual accounts with their full historic transactions from different IT systems into a newly developed IT system of the UAPF is not a trivial exercise.

- Valuation of assets during the consolidation using the different accounting interpretation applied by the different pension funds could result in a reduction of the individual accounts' value and an additional liability for the UAPF if the impairment reserve transferred to compensate for assets under stress results insufficient.

Recommendations

- **Fair treatment of members should guide the revaluation of the transferred assets.** Once the consolidation is completed and the external audit valuation concluded, the guidance principle for allocating possible losses or gains to individual accounts should be based on a fair treatment principle of all members.

- **Clear requirements on operational effectiveness should be introduced and monitored.** In the absence of competition, the UAPF needs clear benchmarking and control of its effectiveness to avoid excessive costs and operational inefficiencies.

14. The current governance structure of the UAPF creates severe vulnerabilities, with NBK performing several roles that hardly allow for checks and controls. The NBK chairs the board of the UAPF in the fiduciary role of the owner, it chairs the Council for the Management of the UAPF Assets (CMA) that decides on the investment policy and is the statutory asset manager, the custodian, the supervisor and the consumer protection responsible. The representation at the CMA of the contributors through an independent respected knowledgeable contributor is missing and the nomination procedures and service duration terms for its independent members are not specified in the law.

15. Ensuring good governance is essential to meet the goal of maximizing retirement income for their participants. With the consolidation of the pension system into a single pension fund, the largest institutional investor is now under the fiduciary ownership and management of the NBK. Given its dominance[2] , the investment policy and strategy will have a direct impact on the development and behavior of the financial sector. Sufficient independence and knowledge of the investment board is of upmost importance, with proper representation and voice of the pension participants. An accountable and transparent governance supported by the UAPS board structure and of the CMA will have to provide sufficient oversight to avoid, among others, the following risks:

- Political undue interference with the investment decisions. For instance, by setting minimum investment shares in fixed income securities with negative real yield.

[2] The UAPF manages around 20 billion USD of assets and currently has around 400 million USD of net annual inflow through contributions after payouts.

- Avoid investments that are not fully understood, like direct infrastructure financing.
- Provide for the right level of risk appetite and return that are in line with the long-term character of the liabilities.
- Forbid payments of annuities on an unfunded fashion, by paying internally the annuities without setting the corresponding appropriate technical reserve.
- Use accounting discretion for filling gaps. For instance, by allocation assets in different accounting categories at will and by allowing arbitrary valuation of illiquid assets.
- Direct investments for supervisory purposes, for instance to support entities in financial difficulties.

Recommendations

- **The current governance structure is not in line with basic governance best practice.** For instance, the OECD guidelines on pension fund governance and investment require a governance structure that ensures an appropriate division of operational and oversight responsibilities, and the suitability and accountability of those with such responsibilities[3]. Reconsidering the multiple roles assigned to the NBK is recommended to achieve separation of management from control.
- **Separation of the supervisory function from the ownership of the UAPF is recommended.** To avoid possible supervisory capture and conflict of interests, the supervision of the UAPF, including the consumer protection of pension fund participants, and its ownership should not be handled by the same institution. This will allow for an arms-length control process, as required by international best practice.
- **An external custodian for the UAPF accumulation assets should be appointed.** The custodian can only add value as an additional control function if it is independent.
- **Transparency and timely reporting are needed to promote credibility of the system.** Frequent, detailed and useful reporting policies should be implemented by the UAPF to gain credibility as a new institution.

[3] This central principle of governance of separation of oversight from operation is enshrined in both the OECD's "Guidelines on Pension Fund Governance" and ISSA's "Guidelines for the Investment of Social Security Funds". At the center of the governance structure is a governing body that has ultimate responsibility for the fund and is accountable to its beneficiaries. The members of this body must have clear fiduciary duties and a specific, measurable mandate, and must possess relevant expertise to be able to carry out their functions. According to the OECD guidelines for pension fund governance (again, in common with the ISSA guidelines), reserve funds should have appropriate control, communication and incentive mechanisms that encourage good decision-making, proper and timely execution, transparency and regular review and assessment. Control systems should include a code of conduct and mechanisms to addresses conflict of interest situations. Reserve funds should also be required to disclose publicly relevant information and should have procedures in place to address complaints from the general public.

16. The central weakness of the pension system resulting from poor investment returns remains unsolved, with the investment policy still to be determined. The past inappropriate prudential regulation directing directly or indirectly the investments of the pension funds in government bonds having real negative returns has been removed and the asset management fees have been cut in half. However, there is no indication on how to derive an investment strategy resulting in long-term investments with appropriated yields. The investment policy for the UAPF, to be determined in the coming months, will need to allow for the appropriate investment instruments, sensible risk appetite, duration matching of the liabilities and a clearly stated objective to maximize returns for the retirement income of the members.

Recommendations

- **The overarching objective of the investment strategy is missing in the law**. Without a clear objective stated in the law guiding the purpose of the accumulation pensions assets' investments, the investment strategy could only be defined loosely, thus reducing its effectiveness. A clear mandate for the UAPF to maximize the retirement income for its members should be stated in the UAPF charter or the pension law.

- **The investment strategy should reflect the nature of the liabilities**. Due regard to the long term character of the liabilities should be given when designing the investment strategy and the metrics for the investment performance.

- **The relevance of the investments for a DC plan requires full transparency and accountability of the CMA.** The required transparency and accountability, similar to the one found in listed companies in major markets, would be necessary to maximize the effectiveness of an investment policy. This could include:

    a. Individual accountability of the CMA members
    b. Full transparency of the board decisions, including publications of the minutes with individual Council members' statements and opinions
    c. Fixed-term appointments for the independent council members
    d. Rotation of the chairman
    e. Appointment of a strong pension participants' representative.

- **The use of external asset managers is necessary to optimize returns**. The involvement of several assets managers to allow for competition and diversification in managing the UAPF assets. This is even more relevant in the absence of a benchmark for the investments' performance.

- **All necessary expertise should be available for investment decisions.** In addition to asset management and investment expertise, actuaries should be available to support the investment decisions.

- **Special expertise should guide complex investments**. A specialized party should evaluate infrastructure and other form of direct investments and the investments of the pension fund in this area should be through financial instruments issued for that purpose.

- **To add efficiency to the system, a reduced role of the UAPF in the payout phase should be considered.** The payout phase requires technical skills in longevity assessment that are found in life insurance companies. It is recommended to assign life insurers to the annuities' payout. This separation of the payout phase will increase discipline in the pension system and add an additional control by an external party when transferring assets.

- **Market consistency and fair market valuations should add transparency into the system.** Clear accounting rules should be drafted to support transparency and market consistent valuation of the assets.

17. The additional five percent contribution to the pensions, planned to be introduced during 2014, presents an opportunity to improve the pension system. The additional five percent contribution will help offset the low replacement ratio but should not be a substitute for tolerating underperforming accumulated pension assets. Including a death benefit to cover future salary payments until retirement age should be evaluated[4]. Notional schemes that are currently under consideration, where the assets are accounted for in individual accounts but do not physically exist, require increased governance and investment discipline to avoid creating uncovered liabilities.

Recommendations

- **Independent and intrusive governance and investment discipline will be key for success**. If outstanding governance and elevated investment discipline for the managing of the additional five percent contributions cannot be guaranteed, a traditional DB or DC should be preferred.

- **Administration cost should be kept low**. Consideration should also be made to the administration costs. Maximum possible synergies, with due regard to diversification and low maintenance investments, should have priority.

- **Enhancing the pension system with meaningful benefits is recommended.** Adding death benefits in the form of income replacement until retirement age should be considered given an attractive cost benefit analysis.

18. Linkages of the insurance and pension sectors with the banking sector do not appear of systemic relevance. Notwithstanding that about a quarter of the insurance sector assets (750 million USD) are held in bank deposits, the amount is not of systemic relevance for the banking sector.[5] The

[4] Several funded pension system include this benefit and the actuarial cost could be around 0.5 percent of the insured salary

[5] See for data the FSAP Technical Note on Insurance

banking channel is not relevant to the distribution of insurance, with few companies using it to place life products and bank loan related insurance. The pension sector has been providing liquidity in the form of direct deposits and repo transactions for an estimated amount of 20 percent of total accumulated assets (four billion USD). With the current consolidation of the system into a single pension fund with no bank ownership, the access to liquidity will change[6] but is not expected to dry out according to the current investment policy of the NKB. The profits of the pension fund have been positive over the years (75 million USD in 2012 and 90 million in 2013) and this source of income will be no longer available for the bank owners of pension funds, but given its size the effect cannot be seen as systemic relevant to the banking sector.

Recommendations

- **Investments in the financial sector need increased attention.** The management of the assets by the NBK, which at the same time is the bank supervisor, could be a source of conflict of interests that needs to be managed when providing liquidity to the banking sector in the form of direct investments. Proper safeguards should be incorporated into the investment decision in areas of NBK supervisory competence.

[6] In the last years, 65 percent of the deposits are held with the owner bank.

Appendix III. Kazakhstan: Risk Assessment Matrix

<table>
<tr><th rowspan="2">Nature/Source of Main Threats</th><th colspan="2">Overall Level of Concern</th></tr>
<tr><th>Likelihood of Severe Realization of Threat in the Next 1–3 Years
(high, medium, or low)</th><th>Expected Impact on Financial Stability if Threat is Realized
(high, medium, or low)</th></tr>
<tr><td>1. Lower than anticipated growth potential in emerging markets, especially in Russia and China, in line with a maturing of the cycle in emerging countries, and misallocation of investment.</td>
<td>Staff assessment: High
• The high output growth rates in Emerging Markets (EM) prior to the global financial crisis have in the past raised concerns about their sustainability.
• Disappointing activity in EM, also due to lower demand in Western Europe and the US (driven by US tapering or increase in geopolitical tensions surrounding Russia/Ukraine), would now bring about a reassessment that the cycle is more mature than previously thought.
• Russia and China make up 30 percent of gross exports. Shocks to Russian output growth and an eventual unwinding of excess capacity in China would hit the Kazakh economy severely.</td>
<td>Staff assessment: Medium
• Emerging market trend growth would, correspondingly, be lower as a result of weaker than expected productive capacity and human capital. Kazakhstan's output growth would decelerate noticeably, driven mainly by reduced exports and a contraction in FDI.
• An additional increase in credit risk would induce loan loss impairments and lead to a further increase in the stock of nonperforming loans to increase further, weighing on banks' profitability and hampering credit intermediation.
• In this scenario, house prices are expected to fall markedly. Depressed real estate prices would reduce the value of residential and commercial real estate collateral, which in turn elevates banks' loan loss rates.
• In addition to the pressures on the Kazakh tenge induced by US tapering, the scenario simulates the effects of a further depreciation of the foreign exchange (FX) rate. This mainly manifests in elevated credit risk from FX-denominated loans to mostly unhedged borrowers Furthermore, this negatively affects liquidity in the system.
(In the stress tests, these risks are incorporated through an adverse macroeconomic scenario in the solvency stress test.)</td></tr>
</table>

2. Sustained decline in commodity prices (particularly oil prices) (triggered mainly by deceleration of global demand and coming on stream of excess capacity)	**Staff assessment: Medium** • Petroleum exports are the key driver of Kazakhstan's growth. • A large number of new projects coming on stream are expected to generate global excess capacity—both in the oil and gas sector and other commodities—while global demand growth remains weak. This is expected to inhibit exploration and development of projects.	**Staff assessment: High** • Kazakhstan's output growth would decelerate noticeably, mainly driven by reduced oil exports and a fall in oil-related capital inflows. • Further increase in nonperforming loans, along with higher loss rates due to real estate collateral devaluation, would put additional pressure on loan generation and bank profitability. • The Kazakh Tenge could come under sustained downward pressure, and also the devalued exchange rate could no longer be defended. Systemic liquidity risk and FX-induced indirect credit risk would increase substantially. *(In the stress tests, these risks are incorporated through an adverse macroeconomic scenario in the solvency stress test.)*
3. Loss in confidence triggers domestic banking crisis	**Staff assessment: Medium** • A sudden hit on confidence would be triggered by (i) fears of further currency devaluation, (ii) an inconsistent implementation of regulatory reforms, and/or (iii) concerns about rapid consumer lending growth. • The high growth in secured and unsecured consumer lending of the last one and a half years would end suddenly if perceived as unsustainable. This scenario may become increasingly likely, if measures to curb the growth in consumer lending are further delayed, stalled or implemented ineffectively. • Almost 40 percent of loans are denominated in foreign currency. The large devaluation of the	**Staff assessment: Medium** • Uncertainty about which banks are vulnerable would induce markets and depositors to become skeptical about the health of the domestic banking system as a whole, which would trigger a systemic domestic banking crisis. • Considerable liquidity withdrawals by both individual depositors and institutional investors induce renewed stress in deposit and wholesale funding markets. In order to be able to meet their obligations, banks would be forced to liquidate assets, some at fire-sale prices because of the systemic nature of the crisis. • Delays in the implementation of and inconsistencies in the regulatory reform agenda increase

	tenge, which further undermined market confidence, has contributed to the serious, yet short-lived, run on three banks. • Inconsistent implementation of regulatory reforms and macroprudential measures could add to the current regulatory uncertainty, and result in ineffective incentive structures and a loss in confidence in the domestic financial system.	uncertainty and induce banks to reduce lending activities in order to build up capital and liquidity buffers, and possibly also to anticipate Loan-to-value and other macroprudential measures. Lower credit supply would then adversely affect investment and exports, and, in turn, would lower the quality of loan portfolios further. • Reduced credit supply undermines potential domestic growth, and the uncertainty about policy action and effectiveness also negatively affect FDI. *(In the stress tests, these risks are incorporated through a liquidity stress test covering market and funding liquidity shocks.)*
4. Failure to reduce the level of NPLs	**Staff assessment: High** • Addressing the ongoing deterioration of asset quality has been challenging, and hopes that growth recovery would restore bank balance sheets have not materialized. At more than 30 percent to total loans, the high stock of NPLs constitutes a looming contingent liability for the state/public sector. • The current strategy anchored on an asset management company (PLF), and special purpose vehicles, for instance) has not had a significant impact because of insufficient political support, legal obstacles, and the exclusion of NPLs collateralized with real estate.	**Staff assessment: Medium** • Persistently high NPLs are hampering financial intermediation and this would be further aggravated by waning foreign investor interest in extending credit to Kazakh banks. • Uncertainty about how this problem will be addressed, and with banks unwillingness to support the government's diversification strategy, may cause investor and consumer confidence to drop. • High levels of nonperforming loans may adversely affect asset prices and the banks' loss rates on both nonperforming and performing credit exposures. Moreover, the negative carry from excess liquidity and low lending activity undermines banks' profitability. • The considerable size of this contingent liability likely reduces the government's scope for further stimulus, implying an additional hit on economic activity.

		(In the stress tests, these risks are incorporated through an adverse macroeconomic scenario and by means of specific sensitivity analyses.)

Appendix IV. Kazakhstan: Macroeconomic Scenarios

- *The risk of lower than anticipated growth potential in emerging markets, especially in Russia and China, including from the impact of US tapering or the Ukraine crisis* (RAM risk #1), is analyzed in stress scenario 1, which entails a decline in real GDP of 9 percentage points over two years, corresponding to a one-standard deviation move in two-year cumulative growth, or the highest decline registered since the break-up of the Soviet Union.[1] The scenario also accounts for an additional depreciation of the tenge that leads to higher credit risk on FX-denominated loans to mostly unhedged borrowers, and affects liquidity in the system.

- *A sustained decline in commodity prices, particularly oil prices* (RAM risk #2), is illustrated in stress scenario 2. A severe oil price shock (40 USD a barrel) is assumed, which results in an unprecedented 14.4 percentage points reduction in real GDP growth over two years (1.6 standard deviations). An additional increase in NPLs, together with higher loss rates due to real estate collateral devaluation, put additional pressure on loan generation and bank profitability. Moreover, the Kazakh tenge comes under sustained downward pressure, and systemic liquidity risk and indirect credit risk would increase substantially.

- *The impact of a confidence crisis* (RAM risk #3) is assessed through a combined funding and market liquidity risk scenario. A sudden drop in confidence, which may be triggered by (i) fears of another currency devaluation, (ii) an inconsistent implementation of the regulatory reform agenda, (i) and or mounting concerns about rapid consumer lending growth. Uncertainty about which banks are vulnerable to a sudden stop would induce markets and depositors to become skeptical about the health of the domestic banking system as a whole, which would trigger a systemic domestic banking crisis. Considerable liquidity withdrawals by both individual depositors and institutional investors, along with a deterioration of asset prices, induce renewed stress in deposit and wholesale funding markets.

- *The consequences of a failure to bring down the high current level of nonperforming loans* are analyzed for RAM risk #4. Nonperforming loans weigh heavily on banks' profitability and hold back bank intermediation. Also, widespread concerns about under-provisioning for already defaulted exposures (for instance, due an optimistic collateral valuation and misclassification of restructured loans) would require an increase in loan-loss provisioning or, equivalently, result in higher effective loss rates when these exposures are finally written off. The high levels of nonperforming loans adversely affect asset prices and the banks' loss rates on nonperforming exposures. Moreover, the negative carry from excess liquidity and low lending activity undermines banks' profitability. The considerable size of this contingent liability likely reduces the government's scope for further stimulus, which would induce an additional hit on economic activity.

- *The tests also analyze the likely impact from the phase-in of Basel III deductions and the introduction of new, more demanding minimum capital requirements.*

[1] This is consistent with a drop in oil prices to a level of 70 USD a barrel after one year, followed by a gradual recovery during the third year of the forecasting period.

Appendix Table 1. Banking System Assets, January 1, 2014

	Total Assets /1		Market share
	KZT	USD /2	Percent
JSC"BTA Bank"	1,516,956	8,200	9.8
JSC "Halyk Bank Kazakhstan"	2,441,764	13,199	15.8
JSC "KASPI BANK"	850,885	4,599	5.5
JSC "AsiaCreditBank"	92,268	499	0.6
SJSB "Taib Kazakh Bank"	21,297	115	0.1
JSC "Bank Pozitif"	21,375	116	0.1
Temirbank, JSC	302,611	1,636	2.0
JSC "RBK Bank"	222,855	1,205	1.4
SJSB Citibank Kazakhstan JSC	324,765	1,755	2.1
JSC "Bank CenterCredit"	1,072,420	5,797	6.9
SJSB "KZI Bank"	26,104	141	0.2
JSC "Home Credit Bank"	117,412	635	0.8
Qazaq Banki, JSC	48,639	263	0.3
SJSB "Bank of China in Kazakhstan"	104,705	566	0.7
SJSB "Savings bank of Russian Federation"	1,035,822	5,599	6.7
JSC "KazInvestBank"	92,848	502	0.6
Subsidiary Bank RBS (Kazakhstan)", JSC	51,447	278	0.3
JSC "Commercial and Industrial Bank of China in Almaty"	49,466	267	0.3
JSC "Eximbank Kazakhstan"	55,079	298	0.4
SJSB "Alfa-bank"	171,024	924	1.1
JSC "Eurasian Bank"	588,521	3,181	3.8
SJSB "HSBC Bank Kazakhstan"	187,463	1,013	1.2
JSC "ATFBank"	896,136	4,844	5.8
JSC "Nurbank"	253,467	1,370	1.6
JSC "Delta Bank"	190,266	1,028	1.2
SJSB"PNB"-Kazakhstan"	13,815	75	0.1
JSC "Tsesnabank"	921,278	4,980	6.0
JSC "Zaman-Bank"	14,559	79	0.1
JSC "Alliance Bank"	563,067	3,044	3.6
JSC "Kazkommertsbank"	2,501,167	13,520	16.2
JSC "National Bank of Pakistan in Kazakhstan"	5,560	30	0.0
JSC "Housing Construction Savings Bank of Kazakhstan"	355,162	1,920	2.3
"ForteBank", JSC	38,309	207	0.2
Astana-Finance Bank", JSC	79,552	430	0.5
JSC "Shinhan Bank Kazakhstan"	17,482	94	0.1
Subsidiary JSC Bank VTB (Kazakhstan)	143,964	778	0.9
JSC "Bank Kassa Nova"	56,197	304	0.4
Al-Hilal Islamic Bank JSC	17,042	92	0.1

Source: NBK.

Notes: /1 Numbers in KZT and USD million.

/2 USD conversion based on KZT/EUR FX rate of 185.

Appendix Table 2. Stress Test Matrix (STeM) for the Banking Sector: Solvency, Liquidity, and Contagion Risks

Domain		Assumptions		
		Bottom-Up by Banks (if applicable)	Top-Down by Authorities (if applicable)	Top-down by FSAP Team (if applicable)
BANKING SECTOR: SOLVENCY RISK				
1.Institutional Perimeter	Institutions included	n.a.	• 38 banks and banking groups operating in Kazakhstan, including banks under restructuring.	
	Market share	n.a.	• 100 percent of total banking sector assets.	
	Data and baseline date	n.a.	• Cut-off date as of year-end (December) 2013. • Regulatory reporting data, market data, data reported by banks specifically for the 2014 FSAP stress test. • Bank information on highest level of consolidation, but excluding non-bank activities.	
2. Channels of Risk Propagation	Methodology	n.a	• Balance sheet stress test based on NBK credit risk stress testing framework	• Balance sheet stress test specifically developed for 2014 FSAP
	Satellite Models for Macro-Financial linkages	n.a.	• Sectoral NBK credit risk model (Merton-type multifactor portfolio model (Duellmann and Erdelmeier, 2009) • Credit growth resulting from general macroeconomic forecasting model. • Feedback from financial	• Sectoral Dynamic State Space credit risk model (Kopp, forthcoming) • Credit growth resulting from general macroeconomic forecasting model. • Feedback from financial stress to real economy modeled through VAR model with endogenous

Domain		Assumptions		
		Bottom-Up by Banks (if applicable)	Top-Down by Authorities (if applicable)	Top-down by FSAP Team (if applicable)
			stress to real economy modeled through VAR model with endogenous macroeconomic and financial variables.	macroeconomic and financial variables.
	Stress test horizon	n.a.	• 2014–2016 (3 years)	
3. Tail shocks	Scenario analysis	n.a.	• Baseline scenario: GDP growth based on IMF's WEO forecast. • Stress scenario 1: "Lower than anticipated growth potential in emerging markets, especially in Russia and China" (RAM risk #1): Disappointing activity in emerging markets (EM) would now bring about a reassessment that the cycle is more mature that previously thought. Emerging market trend growth will be lower as a result of weaker than expected productive capacity and human capital. Shocks to Russian output growth and a hard landing in China would hit the Kazakh economy severely, predominately through a negative external demand shock. Scenario materializes through a gradual drop in Brent oil price to a level of 70 USD a barrel until the end of the first year of the forecasting horizon—a shock corresponding to a 5 percent probability, with cumulative GDP growth dropping by 9 percentage points over two years (a 1-sd move in two-year cumulative growth in real GDP, measures during 1994-2013). This corresponds to the highest recorded historical shock since the break-up of the Soviet Union. • Stress scenario 2: "Sustained decline in commodity prices, particularly oil prices" (RAM risk #2): Petroleum exports are a key driver of Kazakhstan's growth and government revenues. Both a reduction of export volumes and deterioration in raw oil prices would adversely affect these. Kazakhstan's output growth would	

Domain		Assumptions		
		Bottom-Up by Banks (if applicable)	Top-Down by Authorities (if applicable)	Top-down by FSAP Team (if applicable)
			decelerate noticeably, mainly driven by reduced oil exports and a fall in oil-related capital inflows. Brent oil price drops to 40 USD within one year, with a gradual recovery in 2014 and 2015. Cumulative GDP growth falls by 14.4 percentage points over two years, corresponding to 1.6 standard deviations of two-year cumulative growth in real GDP. •	
	Sensitivity analysis	n.a.	• Credit concentration credit risk: Simulation of default of the largest three exposures. • Full phase-in of Basel III capital deductions	
4.Risks and Buffers	Risks/factors assessed (How each element is derived, assumptions.)	n.a.	• Credit risk (scenario analysis) • Regulatory risk from adapting Basel III capital definitions (scenario analysis) • Interbank contagion risk. •	• Credit risk (scenario analysis) • FX risk (scenario analysis) • Credit concentration risk (sensitivity test) • Real estate price risk (scenario analysis) • Regulatory risk (provisioning requirements; change of regulatory regime)
	Behavioral adjustments	n.a.	• Credit growth according to NBK macro model.	• Credit growth according to NBK macro model. • Dividend payout: 75

Domain		Assumptions		
		Bottom-Up by Banks (if applicable)	Top-Down by Authorities (if applicable)	Top-down by FSAP Team (if applicable)
			• Dividend payout: not applicable. • Taxation not included. • No changes in portfolio allocation / business mix.	percent • Taxation of positive net profit at average 2013Q4 tax rate of 19 percent • No changes in portfolio allocation / business mix.
5. Regulatory and Market-Based Standards and Parameters	Calibration of risk parameters	n.a.	• Point-in-time default probabilities • LGD assumed at 57 percent under the baseline, and 60.4 percent in the stress scenarios •	• Point-in-time default probabilities, through loss rates • LGD assumed at 57 percent under the baseline, and 60.4 percent in the stress scenarios • LGDs further driven by (potential) under-provisioning
	Regulatory/Accounting and Market-Based Standards	n.a. n.a.	• Current regulatory regime: K1 and K2 minimum requirements (i.e., 5 and 10 percent of RWA, respectively) • Future regulatory regime: Basel III hurdle rates for CET1, according to Basel III phase-in schedule.	
6. Reporting Format for Results	Output presentation	n.a.	• Evolution of capital ratios • Number of banks, capital shortfall, and percentage of total assets below minima • Impact from phase-out of capital components under Basel III	

Domain		Assumptions		
		Bottom-Up by Banks (if applicable)	Top-Down by Authorities (if applicable)	Top-down by FSAP Team (if applicable)
			definitions	
BANKING SECTOR: LIQUIDITY RISK				
1. Institutional Perimeter	Institutions included	• 38 banks and banking groups operating in Kazakhstan.		
	Market share	• 100 percent of banking sector's total assets.		
	Data and baseline date	• Bank internal information on assets, liabilities, contractual as well as behavioral in- and outflows, specifically reported for the purpose of the FSAP liquidity stress test. •		
2. Channels of Risk Propagation	Methodology	• Calculation tool designed by the IMF team for the 2014 FSAP stress test, asking banks to map information into the data structure of the Basel III Liquidity Coverage ratio (LCR).		
3.Risks and Buffers	Risks	• Funding liquidity risk (liquidity outflows) • Market liquidity risk (price shocks). • Deposit concentration risk.		
	Buffers	• Banks' high-quality liquid assets (HQLA) after the application of haircuts (market liquidity shocks). Banks' stock of HQLA, after the application of haircuts, has to be high enough to cover substantial funding shocks over a one-month stress horizon (i.e., the hurdle rate is 100 percent, compared to the 60 percent hurdle rate under Basel III).		
4. Tail shocks	Size of the shock	• Comprehensive, consistent stress scenario with a series of market and funding liquidity shocks, resembling the Lehman	• Comprehensive, consistent stress scenario with a series of market and funding liquidity shocks, resembling the Lehman crisis of 2008. • Outflows as specified in Committee on Banking Supervision (2013), "Basel III: The Liquidity Coverage Ratio and liquidity	

Domain		Assumptions		
		Bottom-Up by Banks (if applicable)	Top-Down by Authorities (if applicable)	Top-down by FSAP Team (if applicable)
		crisis of 2008. • Outflows as specified in Committee on Banking Supervision (2013), "Basel III: The Liquidity Coverage Ratio and liquidity monitoring tools'" January 2013. • If stable funding couldn't be differentiated from less stable, the more conservative approach had to be applied.	monitoring tools'" January 2013. • If stable funding couldn't be differentiated from less stable, the more conservative approach had to be applied. • Additional analysis of higher deposit outflows (30 and 50 percent), loss of secured and wholesale funding loss (30 and 50 percent). Other run-off rates can be found in the detailed scenario table.	
5. Regulatory and Market-Based Standards and Parameters	Regulatory standards	• Basel III standards (revision as of January 2013). See Committee on Banking Supervision (2013), "Basel III: The Liquidity Coverage Ratio and liquidity monitoring tools," Basel, January 2013.		
BANKING SECTOR: CONTAGION RISK				
1.Institutional Perimeter	Institutions included	n.a.	• 38 banks and banking groups operating in Kazakhstan, including banks under restructuring	• 38 banks and banking groups operating in Kazakhstan, including banks under restructuring.
	Market share	n.a.	• 100 percent of banking sector's total assets	• 100 percent of banking sector's total assets.
	Data and baseline date	n.a.	• Regulatory reporting data, market data.	• Regulatory reporting data, market data, data reported by banks specifically

Domain		Assumptions		
		Bottom-Up by Banks (if applicable)	Top-Down by Authorities (if applicable)	Top-down by FSAP Team (if applicable)
			• Bank information on highest level of consolidation, but excluding non-bank activities (if any). Data does not include mutual claims to non-residents.	for the 2014 FSAP stress test. • Bank information on highest level of consolidation, but excluding non-bank activities (if any).
2. Channels of Risk Propagation	Methodology	n.a.	• Interbank contagion analysis	• Interbank contagion analysis
3. Tail shocks	Size of the shock	n.a.	• Using macroeconomic stress scenario of credit risk.	• Stress scenario based on current regulatory capital levels; • Applied in stress scenario "sustained decline in commodity prices."
4. Reporting Format for Results	Output presentation	n.a.	• Loss in Kazakhstan's banking system due to distress in other banking system (in percent of pre-shock capital), as part of general stress testing results.	• Capital shortfall (in percent of GDP), separate from general scenario stress testing results.

Appendix Table 3. Liquidity Risk: Scenarios and Run-off Rates

(Percent)

	Basel III LCR	Severe Stress 1	Severe Stress 2
Retail Deposits			
Demand deposits			
Stable deposits	5	30	50
Less stable retail deposits	10	30	50
Term deposits, residual maturity > 30d	0	0	0
Unsecured Wholesale Funding			
Demand and term deposits, residual maturity < 30d, small business			
Stable deposits	5	30	50
Less stable deposits	10	30	50
Operational deposits generated by clearing, custody, and cash management activities	25	30	50
Portion covered by deposit insurance	5	5	5
Cooperative banks in an institutional network	25	25	25
Nonfinancial corporates, sovereigns, central banks, multilat dev banks, PSEs			
Not fully covered by deposit insurance	40	40	60
Other legal entity customers	100	100	100
Secured Funding			
Secured funding with a central bank, or backed by Level 1 assets	0	0	0
Secured funding backed by Level 2a assets	15	30	50
Secured funding backed by non-Level 1 or non-Level 2a asset, with domestic sovereign, multilat dev banks, or domestic PSEs as a counterparty	25	30	50
Fundign backed by RMBS eligible for Level 2b	25	30	50
Funding backed by other Level 2b assets	50	50	50
Other secured funding transactions	100	100	100
Additional Requirements			
Valuation changes on non-Level 1 posted collateral securing derivatives	20	20	20
Excess colateral held by bank related to derivate transactions that could be called anytime	100	100	100
Liquidity needs related to collateral contractually due on derivatives transactions	100	100	100
Increased liquidity needs related to derivative transactions allowing collateral substitution	100	100	100
ABCP, SIVs, conduits, SPVs, or similar			
Liabilities from maturing	100	100	100
Asset backed securities	100	100	100
Undrawn but committed credit and liquidity facilities			
Retail and small business	5	30	50
Nonfinancial corporates, sovereigns, central banks, multilat dev banks, PSEs			
Credit facilities	10	30	50
Liquidity facilities	30	40	50
Supervised banks	40	40	50
Other financial institutions			
Credit facilities	40	40	50
Liquidity facilities	100	100	100
Other legal entity customers, credit and liquidity facilities	100	100	100
Other contingent funding liabilities			
Trade finance	5	30	50
Customer short positions covered by customers' collateral	50	50	75
Additional contractual outflows	100	100	100
Net derivate cash outflows	100	100	100
Any other contractual cash outflows (not listed above)	100	100	100

Source: Basel Committee of Banking Supervision, IMF staff.

Appendix Table 4. Progress on 2008 FSSA Recommendations

2008 Main Recommendations	Implementing Agency	Status of Implementation
• Strengthen the framework for bank resolution and crisis management. • Assess options to recapitalize the Deposit Insurance Fund (KDIF).	FSA, NBK, KDIF	• **Partially implemented.** Financial Stability Law (Law of the Republic of Kazakhstan dated October 23, 2008 N. 72-IV) and subsequent regulatory documents issued by the FSA (N. 176, 177 and 183 of 2009) establish a mechanism for prompt recovery of a problem bank's operations, entitle the Government to buy at least 10% of a troubled bank's shares, introduce early warning system and response measures in case of systematic deterioration of a bank's financial indicators, establish criminal liability for banks' large participants and executives in case of action/inaction which resulted in insolvency and subsequent liquidation of the bank. However the new powers have not been invoked and are thus untested; also, the stabilization bank and P&A require depositor and/or creditor approval, which puts into question the promptness and effectiveness of their implementation. • **Implemented.** KDIF capital increased from 100 bln to 161 bln Tenge between 2008 and 2013.
• Complete contingency plans, including by operationalizing the Memorandum of	NBK, FSA, Government	**Implemented.** November 2008 Joint Action Plan of the Government of the

Understanding (MOU) between the National Bank of Kazakhstan (NBK), FSA and Government.		RK, the NBK and the FSA (financed by the National Fund) aimed at the stabilization of the economy and financial system for 2009–2010.
• Complement ongoing efforts to improve financial surveillance, including with improvements to the Early Warning System (EWS) at the NBK and completion of a microeconomic EWS by the FSA.	NBK, FSA	**Partially implemented.** The 2008 prompt action plan describes how the supervisor should interact with the management and shareholders of a bank in order to promptly develop a recovery plan and efficiently address the problems at hand. The 2008 Financial Stability Law establishes early warning and response system. However the methodology for macro-EWS is not used in practice and currently under revision.
• Ensure that individual banks prepare contingency plans to address possible systemic shocks and individual vulnerabilities.	FSA	**Partially implemented.** The Instruction on risk (Resolution n. 359/2005 and subsequent amendments) requires banks to implement contingency plans for circumstances that may affect their financial stability, but not to address possible systemic shocks.
• Improve supervision of liquidity management at banks; continue to monitor exposure to wholesale foreign funding at banks and repayment schedules.	FSA	**Implemented**. Introduction (in 2009) of specific requirements for liquidity risk management in the Instructions on risk: the determination by the banks of an acceptable level of the liquidity risk: requirements for management of daytime liquidity risk and collateral; establishment of policies and practice of maintaining an adequate level of liquidity, including through a contingency stock of liquid assets; requirement to conduct liquidity stress-tests.
• Strengthen evaluation of the quality of the loan portfolio (both in-situ and extra-situ) in individual banks with particular emphasis on sectoral trends and concentration of exposures. • Enhance monitoring of exposures to construction companies, particularly at large banks. Establish capacity to better assess household indebtedness levels and its implications for the quality of bank consumer	FSA	**Partially implemented.** Since January 1, 2013 banks create provisions according to the International Financial Reporting Standards (IFRS); supervisory staff (both on- and off-site) have been trained to assess banks' loan portfolio quality under the new regime, but still lack the needed expertise and confidence to challenge banks' valuations, especially as it concerns collateral valuation. No specific action to

loan portfolio.		increase the emphasis on sectoral trends and concentration of exposures • **Not implemented.**
• Collect better information about the composition of banks' assets and liabilities abroad, including with regard to maturity, pledges, availability, etc.	FSA	**Partially implemented.** Banks must provide the following reports containing information on non-residents by maturity, currencies, financial instruments: 1. Loans granted to non-residents of the Republic of Kazakhstan, which are in arrears on principal and (or) accrued interest, by industry and contingencies and contingent liabilities . 2. Received and outstanding external borrowings, including raised through subsidiaries of banks. 3. Explanation of correspondent accounts and deposits placed in other banks. 4. Information about the structure of the securities portfolio. 5. Investments in capital of other legal entities. However no information on pledges is collected.
• Move further toward a modern, risk-based approach to supervision paying greater attention to the need for effective corporate governance and risk management in the banks.	FSA	**Partially implemented.** A CAMELS rating system has been implemented, but much remains to do to focus more on the effectiveness of banks' risk management (e.g., through the implementation of ICAAP, reinforcing the stress-test framework, etc.).
• Improve consolidated supervision, including cross-border supervision.	FSA	**Partially implemented.** The NBK has signed a number of MoUs with foreign supervisors, that allow for information exchange; two foreign authorities have been allowed to conduct on-site visits to local subsidiaries of banks they oversee as home supervisor; the NBK has not conducted inspections abroad on foreign subsidiaries of Kazakh banks.

		The NBK has not signed yet a MoU with a foreign authority of a country where a Kazakh bank holds a significant participation of certain relevance.

Appendix V. Kazakhstan: Report on the Observance of Standards and Codes: Basel Core Principles—Summary Assessment

A. Introduction

1. **This assessment of the current state of the implementation of the Basel Core Principles for Effective Banking Supervision (BCP) in Kazakhstan has been completed as part of a FSAP update undertaken by the International Monetary Fund (IMF) during January-February 2014**. It reflects the regulatory and supervisory framework in place as of the date of the completion of the assessment. It is not intended to represent an analysis of the state of the banking sector or crisis management framework, which are addressed in the broader FSAP exercise.

2. **An assessment of the effectiveness of banking supervision requires a review of the legal framework, and detailed examination of the policies and practices of the institutions responsible for banking regulation and supervision**. In line with the BCP methodology, the assessment focused on the NBK as the main supervisor of the banking system, and did not cover the specificities of regulation and supervision of other financial intermediaries, which are covered by other assessments conducted in this FSAP.

B. Information and Methodology Used for Assessment

3. **The Kazakhstan authorities agreed to be assessed according to the Revised Core Principles (BCP) Methodology issued by the BCBS (Basel Committee of Banking Supervision) in September 2012**. The current assessment was thus performed according to a revised content and methodological basis as compared with the previous BCP assessment dated 2004. It is important to note, for completeness' sake, that the two assessments will not be directly comparable, as the revised BCP have a heightened focus on risk management and its practice by supervised institutions and its assessment by the supervisory authority, raising the bar to measure the effectiveness of a supervisory framework (see box for more information on the Revised BCP).

4. **The authorities chose not to be assessed and rated against Additional Criteria.** To assess compliance, the BCP Methodology uses a set of essential and additional assessment criteria for each principle. The essential criteria (EC) are the only elements on which to gauge full compliance with a CP. The additional criteria (AC) are recommended best practices. The assessment of compliance with each principle is made on a qualitative basis. A four-part grading system is used: compliant; largely compliant; materially noncompliant; and noncompliant. This is explained below in the detailed assessment section. The assessment of compliance with each CP is made on a qualitative basis to allow a judgment on whether the criteria are fulfilled in practice. Effective application of relevant laws and regulations is essential to provide indication that the criteria are met.

5. The assessment team reviewed the framework of laws, rules, and guidance and held extensive meetings with officials of the NBK and FSC, and additional meetings with auditing firms, and banking sector participants. The authorities provided a self-assessment of the CPs with information on laws and supervisory practices and responses to additional questionnaires, and facilitated access to supervisory documents and files, staff, and systems.

6. The team appreciates the very high quality of cooperation received from the authorities. The team extends its thanks to staff of the authorities who provided excellent cooperation, including extensive provision of documentation and access, at a time when staff was burdened by many initiatives related to revisions of existing regulations.

7. The standards were evaluated in the context of the Kazakhstan financial system's structure and complexity. The CPs must be capable of application to a wide range of jurisdictions whose banking sectors will inevitably include a broad spectrum of banks. To accommodate this breadth of application, a proportionate approach is adopted within the CP, both in terms of the expectations on supervisors for the discharge of their own functions and in terms of the standards that supervisors impose on banks. An assessment of a country against the CPs must, therefore, recognize that its supervisory practices should be commensurate with the complexity, interconnectedness, size, and risk profile and cross-border operation of the banks being supervised. In other words, the assessment must consider the context in which the supervisory practices are applied. The concept of proportionality underpins all assessment criteria. For these reasons, an assessment of one jurisdiction will not be directly comparable to that of another.

Box 1. The 2012 Revised Core Principles

The revised BCPs reflect market and regulatory developments since the last revision, taking account of the lessons learnt from the financial crisis in 2008/2009. These have also been informed by the experiences gained from FSAP assessments as well as recommendations issued by the G-20 and FSB, and take into account the importance now attached to: (i) greater supervisory intensity and allocation of adequate resources to deal effectively with systemically important banks; (ii) application of a system-wide, macro perspective to the microprudential supervision of banks to assist in identifying, analyzing and taking pre-emptive action to address systemic risk; (iii) the increasing focus on effective crisis preparation and management, recovery and resolution measures for reducing both the probability and impact of a bank failure; and (iv) fostering robust market discipline through sound supervisory practices in the areas of corporate governance, disclosure and transparency.

The revised BCPs strengthen the requirements for supervisors, the approaches to supervision and supervisors' expectations of banks. The supervisors are now required to assess the risk profile of the banks not only in terms of the risks they run and the efficacy of their risk management, but also the risks they pose to the banking and the financial systems. In addition, supervisors need to consider how the macroeconomic environment, business trends, and the build-up and concentration of risk inside and outside the banking sector may affect the risk to which individual banks are exposed. While the BCP set out the powers that supervisors should have to address safety and soundness concerns, there is a heightened focus on the actual use of the powers, in a forward-looking approach through early intervention.

The number of principles has increased from 25 to 29. The number of essential criteria has expanded from 196 to 231. This includes the amalgamation of previous criteria (which means the contents are the same), and the introduction of 35 new essential criteria. In addition, for countries that may choose to be assessed against the additional criteria, there are 16 additional criteria.

While raising the bar for banking supervision, the Core Principles must be capable of application to a wide range of jurisdictions. The new methodology reinforces the concept of proportionality, both in terms of the expectations on supervisors and in terms of the standards that supervisors impose on banks. The proportionate approach allows assessments of banking supervision that are commensurate with the risk profile and systemic importance of a wide range of banks and banking systems

8. **To determine the observation of each principle, the assessment has made use of five categories: compliant; largely compliant, materially noncompliant, noncompliant, and non-applicable.** An assessment of "compliant" is given when all EC are met without any significant deficiencies, including instances where the principle has been achieved by other means. A "largely compliant" assessment is given when there are only minor shortcomings, which do not raise serious concerns about the authority's ability to achieve the objective of the principle and there is clear intent to achieve full compliance with the principle within a prescribed period of time (for instance, the regulatory framework is agreed but has not yet been fully implemented). A principle is considered to be "materially noncompliant" in case of severe shortcomings, despite the existence of formal rules and procedures and there is evidence that supervision has clearly not been effective, the practical implementation is weak or that the shortcomings are sufficient to raise doubts about the authority's ability to achieve compliance. A principle is assessed "noncompliant" if it is not substantially implemented, several ECs are not complied with, or supervision is manifestly ineffective.

Finally, a category of "non-applicable" is reserved for those cases in which the criteria would not relate to the country's circumstances.

C. Overview of the Institutional Setting and Market Structure

9. The National Bank of Kazakhstan is the central bank of Kazakhstan. Although it is an independent institution, it is subordinate to the President of Kazakhstan. The primary goal of the NBK is to ensure the stability of prices in Kazakhstan. To accomplish this goal, the NBK develops and implements Kazakhstan's monetary policy, ensures the functioning of payment systems, implements foreign exchange regulation and foreign exchange control, promotes the stability of the financial system and carries out statistical activities in the areas of the monetary system and the external sector.

10. The NBK is responsible for the supervisory and regulatory functions in the Kazakhstan financial sector. These functions were performed by the Agency of the Republic of Kazakhstan on Regulation and Supervision of the Financial Market and Financial Organizations (FSA), an independent entity that reported directly to the President, from 2004 until April 2011, when they were transferred to the NBK on the basis of a presidential decree. Since April 2011, the NBK's functions in respect of the control and supervision of the financial sector have been performed by the Committee for the control and supervision of the financial market and financial organizations of the NBK (FSC), which is a sub-division of the NBK.

11. The FSC has the authority to regulate and supervise Kazakhstan's banking and insurance sectors, as well as the activities of accumulated pension funds, investment funds, credit bureaus and the securities market. In this respect, the FSC grants licenses to financial institutions, monitors and supervises the activities of such institutions, applies necessary sanctions and participates in the liquidation of financial institutions. Following the recent pension reforms that were introduced by the Pension Law in June 2013, the NBK now manages the Unified Accumulated Pension Fund (UAPF) on behalf of the Government, on the basis of a trust management agreement between the NBK and the Government.

D. Preconditions for Effective Banking Supervision

Soundness and sustainability of macroeconomic policies

12. Kazakhstan has a two-tier banking system with the NBK comprising the first tier and the commercial banks comprising the second tier (with the exception of the Development Bank of Kazakhstan, which as a state development bank has a special status and belongs to neither tier). There are 38 commercial banks in Kazakhstan, including 17 banks with foreign participation and one bank 100 percent owned by the state. The banking sector of Kazakhstan is relatively large with total assets equivalent to 45 percent of GDP and relatively concentrated, with the top five banks accounting for 56 percent of banking system assets (as at November 1, 2013).

13. Kazakhstan's banking sector has been adversely affected by the global financial crisis. Between 2000 and 2007, while the economy was experiencing rapid growth, banks in Kazakhstan incurred high levels of foreign debt in order to fund a rapid expansion of credit, largely concentrated in the construction and real estate sectors. Following the onset of the global financial crisis that began in 2008, credit growth stopped due to the lack of availability of wholesale debt financing, deposits were volatile and property prices significantly decreased. Oil prices declined markedly, which had an adverse impact on the Kazakhstan economy. These factors caused significant losses for Kazakhstan banks and a general destabilization of the banking sector in 2008 and 2009. In response to the pressure faced by major banks, new banking legislation was introduced related to financial stability and bank restructurings. The Government's capital injections into the Kazakhstan banking sector are estimated at 6.4 percent of GDP in 2009, compared, for example, to the United Kingdom and the United States where, according to the IMF, capital injections represented 3.9 percent and 2.2 percent of 2009 GDP, respectively.

14. The FSA amended capital adequacy and credit exposure standards in September 2005, when it set limits and rules for calculating capital adequacy, single party exposure, liquidity ratios, and open currency positions. In November 2005, the regulations regarding regulatory capital and risk management came into effect. These regulations represented a substantial step towards the implementation of the Basel Accord. In February 2007, to reduce the risks associated with rapid growth in the external debt of Kazakhstan's banks, the FSA introduced amendments to the capital adequacy regulations that imposed limits on levels of foreign borrowings or "external liabilities".

15. The NBK requires banks to maintain a Tier 1 capital to RWA ratio of 6.0 percent, and a total capital adequacy ratio of 12.0 percent. As of November 1, 2013 the total capital adequacy ratio of commercial banks was 18.5 percent and Tier 1 capital to RWA ratio was 13.5 percent. The Basel III capital requirements are to be implemented in Kazakhstan during the period from 2015 to 2019. In order to reflect the specific characteristics of the banking sector in Kazakhstan, the transition period and minimum capital requirements to be set for Kazakhstan banks have been defined on the basis of research conducted by the NBK.

16. The banking system has not yet recovered fully from the most acute stage of the global financial crisis and remains under stress. The poor quality of banks' loan portfolios is one of the key problems of the banking sector. NPLs in the banking sector accounted for 29.4 percent of all loans as of November 1, 2013. To address the poor quality of the loan portfolios of banks, the NBK has introduced a set of special policy measures, including the establishment of a Fund for Problem Loans in 2012. The fund, which is fully owned by the NBK, is focused on buying NPLs, excluding personal real estate mortgages and consumer loans, from banks and managing such assets. The latter refers to development and further implementation of solutions regarding bad debtors (i.e. restructuring of their obligations and/or sale of collateral). In addition to the fund, NPLs can also be transferred to banks' own subsidiaries, which are authorized to manage, sell, restructure and securitize problem assets. The foregoing mechanisms are supplemented by special terms and conditions for bad debt remission without additional tax liabilities for banks when transferred to the PLF. In addition, since 2013 the NBK has enforced special regulatory ceilings on NPLs to stimulate the process of reducing NPLs by banks.

17. Starting in the second half of 2008, the NBK adopted a number of measures aimed at providing additional liquidity to banks. With effect from March 2009, the minimum level at which second tier banks must maintain monetary reserves was decreased from 2.0 percent to 1.5 percent with respect to domestic liabilities and from 3.0 percent to 2.5 percent with respect to other liabilities. Effective May 31, 2011 the minimum level at which second tier banks must maintain reserves was increased from 1.5 percent to 2.5 percent with respect to domestic liabilities and from 2.5 percent to 4.5 percent with respect to other liabilities.

18. Banks exceed the established regulatory liquidity ratios and minimum reserve requirements, thus evidencing their low appetite for assuming liquidity risk. System liquidity is relatively high. However, short-term liabilities are the main funding source. In addition, there is a limited range of collateral that can be used to attract longer-term liquidity, including through borrowings from the NBK. Therefore, the lack of long-term sources of funding for banks remains a problem issue[1].

19. Currently, foreign banks are prohibited from opening branches in Kazakhstan. Accordingly, foreign banks must establish a Kazakhstan subsidiary or joint venture in order to provide banking services. As at November 1, 2013 there were 17 banks with foreign participation operating in Kazakhstan, including RBS Kazakhstan, Citibank Kazakhstan, HSBC Bank Kazakhstan[2], and Sberbank Kazakhstan. Under applicable legislation, banks with foreign participation exceeding one-third are classified as foreign-owned. Banks with less than one-third direct or indirect foreign ownership are considered domestic banks. All banks and banking conglomerate members are subject to regulation and supervision by the NBK and its subdivision FSC on a consolidated basis.

The framework for financial stability policy formulation

20. The NBK has the responsibility independently or in conjunction with other state bodies to develop and implement measures aimed at ensuring financial stability. In order to provide financial stability, the NBK monitors macroeconomic and macrofinancial factors affecting financial stability, carries out macroprudential regulation of the financial system, and acts as a lender of last resort for banks.

21. To conduct macroprudential regulation, the NBK monitors systemic risks, determines the criteria to recognize financial institutions as a systemically important, and may establish additional prudential standards and limits for systemically important financial institutions. In addition, in case of a systemic financial crisis, the NBK independently or jointly with the Government may introduce restrictions on certain types of banking and other operations of financial institutions.

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[1] An episode of bank runs occurred recently in Kazakhstan. It was apparently triggered by an anonymous SMS message circulating early on the morning of February 18 and warning about three of the country's private banks - Kaspi Bank, Alianz Bank, and Centercredit Bank – being on the verge of bankruptcy. The rumor sparked runs on the three banks, which experienced deposit drains for several days (e.g. Centercredit experienced an outflow of 17% of its deposits in the first two weeks). Some of the outflow was reversed in the next weeks; but, by the time the team left the country (March 13th), not completely yet.

[2] HSBC will sell its Kazakhstan unit for $176 million to Halyk Savings Bank. The deal should be completed in the fourth quarter of 2014.

22. In 2010 the Financial Stability Council was established to carry out inter-agency coordination on the issues of financial stability and effective development of the financial sector of Kazakhstan. The Council is a consultative and advisory body under the President of Kazakhstan. Members of the Board shall be approved by the President of Kazakhstan. The Chairman of the NBK is the Chairman of the Council. Also, the Council is composed of the representative of the President of Kazakhstan, the Deputy Prime Minister of Kazakhstan, the Heads of the Competition Protection Agency (Antimonopoly Agency), the Ministry of Finance, the Deputy Chairman of the NBK, and the Chairman of the association of legal entities "Association of Financiers of Kazakhstan". The functions of the Council are to develop proposals for systemic risks to financial stability on the basis of regular monitoring, as well as developing proposals for the formation of the strategy and principles of regulation of the financial sector to minimize systemic risks and prevent threats to financial stability, and other functions. In accordance with its objectives and functions the Council is to coordinate its activities with relevant state bodies of the Republic of Kazakhstan, and collaborate with the interstate, intergovernmental, and interbank coordinating advisory bodies on matters falling within the competence of the Council.

A well developed public infrastructure.

23. Kazakhstan has a public infrastructure supporting banking supervision. Kazakhstan has a system of business laws (Civil Code; Law on joint stock companies № 415-II dated from May 13, 2003; Law on bankruptcy № 67-I dated from January 21, 1997; Law on consumer protection etc.). The Kazakhstan legal system is based on civil law. The legislative branch is composed of a parliament with two chambers: Senate and Majilis. The judicial branch is independent. The judicial system of Kazakhstan consists of the Supreme Court of Kazakhstan, local and other courts established under the Constitution, and the Constitutional Law on the judicial system and status of judges.

24. The accounting and auditing frameworks are established in laws (Law on accounting and financial reporting N 234-III dated February 28, 2007 and Law on audit N304-I dated November 20, 1998). According to these laws, banks are required to prepare financial statements in accordance with IFRS and auditing is carried out by audit firms in accordance with the ISA. The NBK sets qualification requirements for auditors regarding audit of the financial institutions, including banks. Thus, audit of the banks may be conducted only by auditors who comply with the requirements set by the NBK.

25. To promote the adequacy of financial sector regulation, the Government, NBK, FSA and subsequently the FSC have undertaken significant structural reforms in the banking sector, aimed at promoting consolidation in the banking sector and improving the overall stability of the system. Reform of the banking sector in Kazakhstan started in 1995 with the introduction of international prudential standards, including capital adequacy requirements and liquidity ratios to regulate and protect the banking system; transparency requirements for the auditing of banks by local and international auditors; and harmonization of local accounting practices with IFRS. Guidelines are established for bank inspections and for periodic reporting by commercial banks to the NBK. Since 2003, all banks are required to develop and install internal risk management systems. The objective of these reforms was to bring supervisory practices closer to international standards to allow for a more transparent view of banks' levels of capitalization and exposure to financial risks. Banking laws are frequently updated to keep pace with international standards.

The framework for crisis management, recovery, and resolution

26. As a result of the global financial crisis and its adverse effects on the Kazakhstan banking sector the legal and operational framework for crisis management, recovery, and resolution have been substantially amended. The NBK has a number of alternative methods for recovery and resolution of troubled banks. These approaches are mostly contained in new amendments to the legal framework and have not been tested. Law on Banking N2444 provides NBK powers to undertake the following recovery or resolution actions:

- Conservatorship: this involves a "temporary bank closing" and appointment of a temporary administrator for purposes of improving the bank's financial condition (Articles from 62 to 67-1 of the Law on Banking N2444);

- Purchase and assumption transaction (P&A): during a conservatorship, the temporary administrator has the authority (with NBK approval) to sell/transfer some or all of the bank's assets and liabilities to another bank. (Article 61-2 of the Law on Banking N2444);

- Stabilization/Bridge bank: a problem bank can be restructured into a stabilization bank by the temporary administrator. The main role of the stabilization bank is to hold "good" assets while the segregation of additional? "good" and "bad" assets of the distressed bank is in progress. Once the segregation has been completed, the current framework envisions that the stabilization bank would be sold to another bank designated by the NBK, subject to the consent of the depositors. Due to its special status and purpose, a stabilization bank is not subject to capital adequacy requirements and other prudential norms (Article 61-3 of the Law on Banking N2444);

- Forced takeover of bank shares by the NBK or the national management holding company with the approval of the Government (Article 16, paragraph 6 of the Law on Banking N2444).

27. Aside from the resolution measures that can be initiated by the NBK (or a temporary administrator appointed by the NBK), several Kazakhstani banks have undergone a form of voluntary "bail in" involving write-downs of debt and/or debt-to-equity restructuring. Particularly, under the Bank Restructuring Law N185-IV introduced after the crisis in 2009, three banks (BTA, Alliance Bank, and Temir Bank) organized voluntary debt restructurings with their creditors after defaulting on their debts. This involved an agreement whereby creditors accepted a write-down of the face value of the bank's debts ("creditor haircuts"). The sovereign wealth fund converted some $1.2 billion of its deposits in BTA bank into equity.

The adequacy of systemic protection (or public safety net)

28. To protect the interests of individual depositors and provide financial stability a self-funded domestic deposit insurance program was established in December, 1999. All banks that are authorized to open accounts and take deposits from private individuals must participate in the deposit insurance program. The Kazakhstan Deposit Insurance Fund (KDIF), owned by the NBK, guarantees and reimburses the deposits of individuals up to the level of KZT 5 million (about USD 33,000). The revocation of a bank's license triggers the deposit guarantee system and the compulsory liquidation of the bank.

Effective market discipline

29. The Law on JSC N415 (May 13, 2003), Law on banking N2444 (August 31, 1995), and Law on accounting and financial reporting N 234-III (February 28, 2007) establish rules on corporate governance, transparency and audited financial disclosure, incentive structures for the hiring and removal of managers and board members, responsibilities of managers and board of directors, and protection of shareholders' rights. Particularly, banks and bank holding companies are required to publish their annual consolidated financial statements (in the absence of subsidiaries—non-consolidated financial statements), as well as their audited reports after confirmation by auditing organizations of the authenticity of the data contained in them and the approval of financial statements by the annual stockholders' meeting of the bank.

E. Main Findings

Responsibility, Objectives, Powers, Independence, Accountability and Cooperation (CPs 1–3)

30. Kazakhstan has implemented a comprehensive legislative framework to support the supervisory process, and work continues to address areas not meeting international standards. The law on AML/CFT is undergoing further amendments to address deficiencies in coverage of customer due diligence, correspondent banking and to set requirements for a risk-based approach by banks. Work is also proceeding on amending Instruction 359 to incorporate risk management requirements in areas that include operational risk, liquidity and market risk management.

31. However, the effectiveness of implementation by banks and monitoring by the FSC is affected by insufficiently detailed guidance for banks and FSC staff. For example, training on market risk and interest rate risk management and loan loss provisioning will be required to allow the FSC to pay sufficient attention to risk measurement and control and reduce its excessive reliance on compliance.

32. The structure of the Executive Board of the NBK may expose the supervisory decision-making process to extraneous considerations; additionally, the condition for removal of the Board lacks transparency. The composition of the Executive Board includes the Minister of Finance, the Minister of Economy and a representative of the President as voting members and may bring considerations to a safety and soundness decision that are not of a prudential nature. The President of the Republic can remove the Head of the NBK and other Executive Board members but the legislation does not impose requirements on the removal (such as misconduct) nor does it require publication of the decision and reason.

33. The increase in regulation and planned enhancements in risk management requirements support a need to review the adequacy of FSC staff in terms of numbers and skill levels. The demands on FSC staff have increased with the enhancements to the supervisory process and the complexity of new regulations on risk management and provisioning. Under-staffing is particularly relevant in the off-site supervision of banking conglomerates.

34. Legal protection of staff under the Civil Code should be clarified by issuing internal NBK guidelines on its application to NBK staff. Guidelines would clarify how remuneration for legal expenses be paid and establish the threshold for guilt; for example, staff is only responsible for gross negligence and for acts committed intentionally in the exercise of their functions.

Ownership, Licensing, and Structure (CPs 4–7)

35. The processes in place and the regulatory requirements ensure that major ownership issues and changes are reviewed by the NBK. Thresholds have been established on significant ownership changes and investments and the definitions of control are comprehensive.

Methods of Ongoing Supervision (CPs 8–10)

36. The supervisory approach is intensive, based on constant off-site monitoring and reasonable frequency of inspections, according to a proportionality principle. The supervisor regularly receives a wide range of data, also at high frequency (daily). Data are processed through internally developed software procedures, which are tailored to the needs of the supervisor. Banks are regularly rated through a CAMELS system.

37. The focus of the supervisory activity is primarily oriented towards a granular verification of compliance with rules, with less room left for more advanced risk-based analysis. The credit registry is largely underused. The forward-looking aspect of risks is present, but it is captured in a somewhat mechanistic way. The FSC periodically receives the results of mandatory internal stress-tests from the banks, but their quality and integration into banks' decision-making is far from satisfactory.

Corrective and Sanctioning Powers of Supervisors (CP 11)

38. The NBK is equipped with broad discretionary enforcement powers to address areas of weaknesses in banks or their non-compliance with applicable laws, regulations, or supervisory instructions. The banking law provides the NBK with authority to require preventive and corrective action over a broad range of activities.

39. A well-designed enforcement process is in place and linked to the bank's condition to ensure that supervisory action is initiated promptly when a situation is identified. Remedial measures include a letter of commitment from the bank's Board of Directors, a written agreement with the bank concurring on action plans, a written order to implement corrective action, and a written warning on the imposition of sanctions. Possible sanctions include: fines, suspension or revocation of a license, placing the bank in conservatorship, and transfer of the bank's ownership.

Consolidated and Cross-Border Banking Supervision (CPs 12–13)

40. The Banking Law provides a definition of banking conglomerate that includes the significant participations of the bank and its bank holding company. The FSC performs its supervision of such conglomerates on a consolidated basis and regularly reviews their compliance with the prudential standards and the other regulatory requirements established by the law and the regulations.

41. The NBK is open to cooperation with foreign supervisory authorities, but further steps need to be taken to guarantee an effective cross-border supervision of Kazakh banking conglomerates. At the bilateral level, the NBK has signed MoUs with most of the foreign supervisory authorities it is in contact with either as home or host supervisor; however, it has not signed yet a MoU with a foreign authority of a country where a Kazakh bank holds a significant participation of a certain relevance. At the multilateral level, the experience of the FSC as host supervisor is in its initial stages (through the participation in supervisory colleges headed by two foreign authorities), while that as home supervisor has to be planned yet.

Corporate Governance (CP 14)

42. There is an extensive set of legislative and regulatory requirements on the internal governance of banks, whose observance is routinely verified by the supervisor. The main missing elements are a prescription for banks (or at least for the systemic ones) to establish a committee for risk oversight and experience requirements for the non-executive members of the Board.

Prudential Requirements, Regulatory Framework, Accounting and Disclosure (CPs 15–29)

43. The provisions on risk management are almost completely contained in Instruction N. 359, which the NBK is planning to replace with a new regulatory document. There are a number of elements of a sound risk management environment that are missing among the requirements of the current Instruction; in particular, a more specific and careful attention to model risk (a requirement for the Board to ensure that uncertainties are attached to risk measurements, specific supervisory standards regarding the use of models and their regular and independent validation), guidance about the management of the exceptions to established policies, processes and limits (with the requirement that they receive the prompt attention of, and authorization by, the appropriate level of management and of the bank's Board where necessary), and a requirement to establish the function of CRO or other equivalent function.

44. Capital adequacy requirements are modeled on Basel II standards with capital charges required for credit, operational, and market risk. For credit risk, the standardized approach was implemented. Operational risk is calculated using the basic indicator approach and market risk is measured under the standardized approach. The NBK is currently developing guidance for banks regarding its expectations for the internal capital adequacy assessment process (ICAAP). Implementation of Basel III is scheduled to commence in 2015 with full implementation by 2019.

45. Provisioning requirements moved from a fully prudential/regulatory approach established by the NBK to the adoption of IFRS, but implementation did not contemplate developing attendant definitions and guidelines to help frame identification of impairment indicators. In 2013 the NBK adopted IFRS loss impairment as the standard for provisioning. But in making the transition the FSC did not undertake certain activities and actions needed to ensure that the continuity of the ability of the FSC staff to judge the adequacy of provisions would be preserved. These actions include training staff to raise skill levels (especially to review the valuation of collateral), getting access to statistics on real estate and considering the possibility of hiring staff with expertise in professional appraisals, establishing standards for restructuring loans and setting requirements for upgrading loans after restructuring or extending.

46. Country risk monitoring is limited to ensuring the banks adequately weigh the risk in capital adequacy computations and that exposure limits are not exceeded. The FSC has not issued guidelines on provision of country/transfer risk and in its monitoring does not focus on country risk.

47. The coverage of market risk in the regulation is extensive but insufficient. Commodity risk is not included in the definition of market risk. There are no requirements for the banks to establish policies and processes for the calculation, when needed, of valuation adjustments. Other elements missing are the same already observed for the standards on risk management (about management of exceptions, validation of model and controls on their use).

48. The main requirements for an adequate interest risk management framework are in place, but with no distinction between the trading and banking books and no guidance to banks on the interest rate shocks to adopt. Interest rate risk is treated as part of market risk; this lack of distinction and separate treatment of the interest rate risk for the banking book from market risk introduces margins of ambiguity about the scope of application and could reduce the consideration for the specificities of interest rate risk (e.g., optionality).

49. The regulation provides for a wide range of requirements for a prudent and appropriate liquidity risk framework. The NBK is planning to make its liquidity requirement regime evolve along the lines of the latest regulatory developments on liquidity risk, with due consideration for the characteristics of the local market.

50. Regulatory standards have been issued on the management of operational risk, however, the guidelines do not fully address outsourcing risks and the development of business continuity plans. Revisions to existing guidance have been drafted to address shortcomings. The revisions will incorporate quarterly reporting by banks on operational risk and will provide guidance on business continuity plans. Currently there is no ex-ante review by FSC of outsourcing arrangements by banks and the existing guidance does not address baseline due diligence elements, aimed at ensuring an effective control environment, contingency planning, and access for FSC to assess the service provider.

51. Banks are required to prepare their financial statements according to the IFRS and the NBK does not impose any differing requirements to the valuation of financial instruments. The laws and the regulation set forth a series of requirements for external audit of banks' financial statement; however there is no requirement for banks to rotate their external auditors from time to time.

52. There is a series of requirements in place for banks to disclose information on both solo and consolidated bases, but with limited coverage of risk-related issues (exposures, strategies).

53. Anti-Money laundering regulation is deficient and significant amendments are being contemplated. The FSC has been very active in the implementation and supervision of the existing AML/CFT Law through onsite inspections. However, the existing Law fails to meet international standards, primarily in the areas of correspondent banking and customer due diligence, which limits the effectiveness of supervision and enforcement. Amendments are pending in Parliament to address these deficiencies and approval is expected by summer 2014.

Table 1. Summary Compliance with the Basel Core Principles—Detailed Assessments	
Core Principle	Comments
1. Responsibilities, objectives and powers	
2. Independence, accountability, resourcing and legal protection for supervisors	The composition of the NBK Executive Board jeopardizes independence by the voting presence of significant executive branch representation (Deputy Head of the Presidential Administration, the Minister of Finance and Minister of Economy). The NBK Chairman and Deputy Chairmen are appointed for a minimum term by the President; however, the law does not specify the reasons for which they may be removed from office during their term. Demands (skills and staffing) on FSC will increase with implementation of revisions to Resolution 359 and to the anti-Money Laundering legislation and the recent implementation of IFRS provisioning practice. The NBK has not developed internal operational guidelines and statutes to clarify how Article 922 of the Civil Code on legal protection is implemented and applied operationally to NBK staff.
3. Cooperation and collaboration	
4. Permissible activities	
5. Licensing criteria	
6. Transfer of significant ownership	
7. Major acquisitions	
8. Supervisory approach	The supervisory approach presents elements of risk-based supervision; however supervisory activity is still focused mainly on verifying the compliance of the banks with the extensive set of rules provided by laws and regulations, with less room left for higher-level analyses of their risk profile. The forward-looking aspect of risks is present, but it is captured in a mechanistic way. Resolvability is not taken into consideration in the analysis of the systemic banks.

9. Supervisory techniques and tools	The results of the bottom-up stress-tests are used by the supervisor mainly for reporting and compliance-check purposes, rather than as a source of (potentially) rich information for subsequent analyses aimed at gaining a deeper insight into the nature and evolution of banks' risks. Stress-tests of the top-down kind run by the financial stability department are substantially not integrated into supervisory analysis. The distribution of the off-site analysts across the supervised entities is not commensurate to their relative importance and systemic relevance: banking conglomerates are typically assigned to a single analyst, with a consequent disproportionate operational burden.
10. Supervisory reporting	
11. Corrective and sanctioning powers of supervisors	
12. Consolidated supervision	There are gaps in the consolidated supervision of cross-border banking groups.
13. Home-host relationships	The NBK has not signed yet a MoU with a foreign authority of a country where a Kazakh bank holds a significant participation of certain relevance. The FSC has not established supervisory colleges for Kazakh banks with significant foreign operations.
14. Corporate governance	Banks are not required to establish a committee for risk oversight; the NBK is planning to introduce such a requirement in an upcoming amendment of the Instruction on risk. There are no experience requirements for the non-executive members of the Board. There are no requirements for the Board to determine the bank's risk appetite, establish and communicate corporate culture and values, and maintain plans for succession; the NBK is planning to introduce a requirement, in an upcoming amendment of the Instruction on risk, for the Board to set and approve the acceptable level of risk within the framework of the strategy and for compliance with this requirement to be monitored through reporting on current performance and risk profile of the bank..
15. Risk management process	There is no requirement for the Board to ensure that uncertainties are attached to risk measurements. There are no specific supervisory standards for the use of models and their regular and independent validation. There are no requirements for the management of the exceptions to established policies, processes and limits, and the existence of an appropriate escalation

	mechanism; the NBK is planning to introduce such a requirement in an upcoming amendment of the Instruction on risk. There is no requirement for banks to establish the function of CRO or equivalent function; the NBK is planning to introduce such a requirement in an upcoming amendment of the Instruction on risk.
16. Capital adequacy	Guidelines have not been issued for banks on internal capital assessment procedures to evaluate various risk areas and factors affecting risk and that may result in capital shortfalls. A reporting standard on internal capital planning (ICAAP) has not been established. Enhancements to existing regulations have been drafted increasing requirements for capital planning and instituting regulatory reporting.
17. Credit risk	Current guidelines on policies and risk management for credit are not sufficiently detailed to aid in managing loan processes and risk. Areas not currently fully addressed include: guidance and monitoring of controls over underwriting, problem loan management, , standard on LTV ratios, types of collateral and valuation, credit stress testing, and consideration of macro-economic risks. Authorities reported that regulations have been drafted providing broader guidance to banks on credit risk management..
18. Problem assets, provisions, and reserves	In 2013, for supervisory purposes, provisioning standards were revised from a strictly prudential/regulatory approach to impairment as defined by IAS39. The framework to support the review of the adequacy of provisioning by the FSC under the IFRS environment can be enhanced by: adopting regulatory definitions of restructured, cured and nonperforming loans, developing guidelines for the valuation of real estate collateral to arrive at fair value while reflecting foreclosure, court and sale costs under current market conditions, working with accounting industry and banks to arrive at general guidelines for impairment indicator triggers and training for FSC staff.
19. Concentration risk and large exposure limits	
20. Transactions with related parties	
21. Country and transfer risks	The FSC does not analyze the risk associated with the exposures or the bank's risk management capacity to monitor and control the risks. The FSC does not review the adequacy of bank provisioning for country/transfer risk. Country risk is important to some of the banks.
22. Market risk	Commodity risk is not included in the definition of market risk; the NBK is planning to introduce such a requirement in an upcoming amendment of the Instruction on risk. There are no requirements for the banks to establish policies and processes for the calculation, when needed, of valuation adjustments. A requirement for the Board to assess the performance of the management in the

	achievement of the bank's goals (and possibly to take actions against its members in case of deviations) sets incentives in a direction that contrasts with the principles for a sound and prudent risk management.
23. Interest rate risk in the banking book	The lack of distinction and separate treatment of the interest rate risk for the banking book from market risk introduces margins of ambiguity about the scope of application and could reduce the consideration for the specificities of interest rate risk (e.g. optionality). The NBK does not provide the banks with indications about the standardized interest rate shock and the supervisor's expectations on their internal measurement systems.
24. Liquidity risk	
25. Operational risk	The NBK has drafted revisions to Instruction 359 to address shortcomings. The revisions will incorporate quarterly reporting by banks on operational risk, provide guidance on business continuity plans and address what the FSC inspectors will review. Currently there is no ex-ante review by FSC of outsourcing arrangements by banks and the existing guidance does not address baseline due diligence elements ensuring an effective control environment, contingency planning, and access for FSC to assess the service provider.
26. Internal control and audit	
27. Financial reporting and external audit	There is no requirement for banks to rotate their external auditors from time to time.
28. Disclosure and transparency	There are no specific requirements for the disclosure of risk exposures (apart from the loans exceeding a certain threshold and for major transactions), risk management strategies, and corporate governance policies and processes.
29. Abuse of financial services	The existing Law is deficient in meeting international standards, primarily in the areas of correspondent banking and customer due diligence, which limits the effectiveness of supervision and enforcement. Amendments are pending in Parliament to address these deficiencies and approval is expected by summer 2014.

F. Recommended Actions

Table 2. Recommended Action Plan to Improve Compliance with the Basel Core Principles

Reference Principle	Recommended Action
Principle 1	
Principle 2	Augment independence of bank supervision decision-making by delegation from the Executive Board to the FSC prudential decisions. Propose legislation to have the NBK Law identify the proper reasons for dismissal of the Executive Board and its publication. Ensure that FSC staff has the skills and training to monitor compliance with the revised Instruction 359 and Impaired Asset provisioning. Develop regulations on application of Civil Code legal protection to NBK staff.
Principle 3	
Principle 4	
Principle 5	
Principle 6	
Principle 7	
Principle 8	Shift the emphasis of supervisory activity from compliance verification towards more risk-based oversight, through the adoption of more advanced risk assessment tools (e.g., by making better use of the data from the credit register) and from mechanistic early warning indicators towards a more intense use of stress testing results (e.g., as an input for the CAMELS rating system and for the decisions on specific capital requirements / capital buffers). Incorporate the aspect of resolvability into the analysis of the systemic banks and establish powers and processes to adopt appropriate measures to remove possible bank-specific barriers to orderly resolution, when identified (e.g. changes to a bank's business strategies, managerial, operational and ownership structures and internal procedures).
Principle 9	Reinforce the use of the results of the bottom-up stress-tests as an input for analyses aimed at gaining a deeper insight into the nature and evolution of banks'

	risks. Better integrate the results of top-down stress tests into supervisory analysis. Increase the staffing of off-site supervision on banking conglomerates.
Principle 10	
Principle 11	
Principle 12	Introduce explicit provisions linking the restriction of admissible activities to the adequacy of foreign authorities' supervision and/or to perceived obstacles to the exercise of effective consolidated supervision.
Principle 13	Agree and sign a MoU with the foreign authorities of the countries where Kazakh banks have subsidiaries or hold significant participations of a certain relevance. Impose restrictions on the presence of Kazakh banks in countries whose supervisory authorities prove non-collaborative. Establish supervisory colleges for the Kazakh banks with significant foreign operations.
Principle 14	Require banks to establish a committee for risk oversight. Establish requirements for the Board to determine the bank's risk appetite, establish and communicate corporate culture and values, maintain plans for succession.
Principle 15	Introduce requirements for the Board to ensure that uncertainties are attached to risk measurements and specific supervisory standards regarding the use of models and their regular and independent validation. Establish requirements regarding the management of the exceptions to established policies, processes and limits and the existence of an appropriate escalation mechanism. Require banks to establish the function of CRO or other equivalent function.
Principle 16	Provide guidelines on establishing an ICAAP in line with Basel II as NBK continues implementing Basel II and III.
Principle 17	Prompt implementation of revised Instruction 359.
Principle 18	Provide training and develop guidelines/procedures for FSC staff on the evaluation of the adequacy of provisions in an IFRS environment.

	Get access to statistics on real estate and consider the possibility of hiring staff with expertise in professional appraisals, in order to foster the examiners' ability to assess the adequacy of the collateral valuations adopted by the banks. Establish definitions for restructured, cured and nonperforming loan.
Principle 19	
Principle 20	
Principle 21	Develop procedures for FSC staff on the assessment of country risk and analysis of provisions enforcement actions to address country/transfer risk based on a country's trends in reserve levels, balance of trade.
Principle 22	Include commodity risk in the treatment of market risk. Introduce requirements for the banks to establish policies and processes for the calculation, when needed, of valuation adjustments. Remove the requirement for the Board to assess the performance of the management in the achievement of the bank's goals (possibly taking actions against its members in case of deviations).
Principle 23	Introduce a treatment of interest rate risk in the banking book separate from that of market risk. Provide the banks with indications about the standardized interest rate shock and the supervisor's expectations on their internal measurement systems.
Principle 24	
Principle 25	Broaden outsourcing risk guidelines in the revised Instruction 359 to ensure proper due diligence before entering into a relationship and ensure FSC access to the service provider.
Principle 26	
Principle 27	Establish a requirement for banks to rotate their external auditors from time to time.
Principle 28	Introduce disclosure requirements regarding risk exposures, risk management strategies and corporate governance policies and processes.
Principle 29	Prompt implementation once the AML/CFT law is approved by Parliament. Review adequacy of cash transaction reporting thresholds.

G. Authorities' Response to the Assessment

54. The National Bank of Kazakhstan (the NBK) welcomes the assessment of the Kazakhstan's banking regulatory and supervisory framework and acknowledges the extensive work done by the assessment team. Generally, the NBK appreciates the recognition of the resilience and stability of the Kazakhstan's financial system. The NBK agrees that there are some deficiencies and gaps in the bank regulations in Kazakhstan and accepts the BCP recommendations. We intend to implement recommendations provided in detailed assessment of observance Basel core principles for effective banking supervision in a reasonable time frame.