Republic of Kazakhstan: Selected Issues

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REPUBLIC OF KAZAKHSTAN

Selected Issues

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Approved by Middle East and Central Asia Department

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I. RESOLVING NONPERFORMING LOANS 1

Kazakhstani banks continue to suffer from a high and rising stock of nonperforming loans. Failure to adopt a comprehensive and transparent resolution strategy could result in further capital losses, raising contingent fiscal risks, threatening banks' compliance with regulatory standards, and limiting their ability to lend. Given the scale of problem loans and the regulatory and legal shortcomings, a centralized approach to asset resolution may be warranted, and could be based on a reinvigorated Distressed Asset Fund. Nevertheless, any strategy must be supported by a full, forward looking assessment of banks' balance sheets, and appropriately strengthened prudential frameworks.

A. Introduction and Background

- 1. **Nonperforming loans (NPLs) have risen faster in Kazakhstan than in other economies affected by the crisis.** Despite positive GDP growth throughout the crisis, banking sector balance sheets continue to suffer from declining asset quality (Figure I.1). This deterioration of balance sheets requires a comprehensive and transparent resolution strategy, and may involve recapitalization efforts at several of the leading banks, including those that are restructuring their external liabilities.
- 2. On present trends, system-wide NPLs are likely to peak at over 30 percent (on a 90-day basis), while sources of funding remain limited. Although provisioning levels are currently high, they may not be fully adequate, placing further pressure on capital levels. The combination of deteriorating asset quality, mounting pressures on banks' capital positions, and limited availability of funding will act as a collective drag on GDP growth.

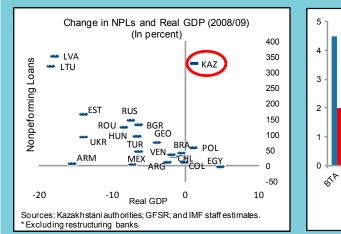
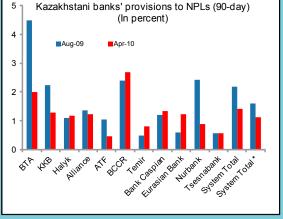


Figure I.1. High NPLs in the Crisis and Declining Provisioning Coverage



¹ Prepared by Ali Al-Eyd (MCD) and Neil Saker (MCM).

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- 3. Against this background, it is essential that the banks, in conjunction with the authorities, take comprehensive action to resolve the large and growing stock of NPLs. This would not only help to reduce the balance sheet risks from deteriorating assets—thus providing a sound basis for the resumption of credit growth—but would also mitigate the associated contingent fiscal risks. Moreover, looking ahead, NPL resolution would leave Kazakhstani banks better placed to meet the challenges of higher minimum international capital requirements and increased competition for global capital.
- 4. **Managing NPLs successfully requires complex skills and competence to ensure effective resolution and equality.** Any strategy must consider the benefits of intervention (cleaning up and strengthening balance sheets of commercial banks to facilitate renewed credit intermediation) and the need to minimize the direct fiscal costs and indirect costs of moral hazard (which can sow the seeds for new problems in the future). Such restructuring must be conducted swiftly in a comprehensive, transparent, and consistent manner within a clear time-bound program. While the resolution of NPLs can be managed by banks themselves, international experience has shown that a centralized approach based on an asset management company (AMC) is more effective.

B. Balance Sheet Vulnerabilities

5. A combination of structural weaknesses and external factors left the Kazakhstani banking system highly vulnerable to the sudden stop in capital flows. This contributed to the failure of two large banks and two smaller institutions. Key sources of vulnerability include excessive lending in foreign exchange to the nontradeables sector, reliance on wholesale funding from abroad, and shortcomings in the regulatory and supervisory framework. The authorities were forced to intervene in two top banks, take stabilizing equity stakes in two other leading banks, and provide widespread liquidity support, including the targeted placement of deposits of state owned enterprises throughout the system. Despite the large anti-crisis program (ACP), credit growth remains weak, NPLs have surged, and system-wide bank capital and profitability have suffered (Figure I.2).



Oct-09

Figure I.2. House Prices, Credits, Deposits, and Nonperforming Loans

Sources: Kazakhstani authorities; and IMF staff estimates.

1/ Deposits and credits adjusted for exchange rate movements.

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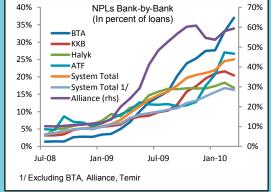
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- 6. The economy has recently shown signs of recovery, but banks' credit exposure to hard-hit sectors remains significant. This exposure—to real estate, construction, and nontradeables—will weigh on the resumption of lending activity despite the general improvement in domestic liquidity, particularly as foreign funding remains prohibitive. Credit conditions are also likely to meet headwinds from the domestic regulatory environment, which is set to tighten further in line with evolving international standards (Box I.1).
- 7. Provisioning cushions have been built up during the crisis, but the continuation of present trends in NPLs would seriously erode existing capital buffers. Banks appear well provisioned against NPLs, with aggregate provisioning-to-90-day NPLs above 100 percent. However, the underlying picture is not so clear. Indeed, the ratio has been falling over time, while the NPL figures do not include loans that have been restructured but that remain in the stock of provisioning. Experience from other countries suggests that a percentage of these restructured loans could revert to NPL status, which would drive provisioning coverage below 100 percent for most top banks. Against this, capital levels in the system have fallen sharply as the amount of loans that are 100 percent provisioned has been rising. Regulatory capital has declined by \$17.7 billion from end 2007, even taking into account the equity injections by SK in BTA, Alliance, Halyk and KKB (amounting to \$2.7 billion).²
- 8. **Further deterioration in asset quality could undermine banks' regulatory positions and their ability to lend.** A forward looking analysis of the system's balance sheets (Table 1) indicates that some banks would face difficulties in maintaining the minimum CAR if NPLs exceed 30 percent, although the two current top banks would remain compliant. At an average NPL rate of 40 percent, several systemic non-restructuring banks would drop below the minimum CAR and require recapitalization.
- 9. The outlook suggested by the sensitivity analysis points to significant problems for banks and the wider economy:
- Banks' exposure to hard-hit sectors leaves their balance sheets vulnerable. A slow recovery of growth in these sectors, or a further decline in activity, could leave banks undercapitalized, limiting their ability to extend new credit, undermining profitability, and rendering balance sheets stagnant.
- The resultant credit crunch would place additional pressures on borrowers who will be starved of working capital. This liquidity squeeze may lead to further deterioration in credit quality and a vicious circle of credit deterioration.

² As of April 2010, regulatory capital was equivalent to -2.9 percent of GDP, mainly reflecting the insolvency of BTA, Alliance, and Timur Bank. Regulatory capital for the other banks has remained quite stable over the period at just over 8 percent of GDP. Capital at the restructuring banks will revert back to positive levels sufficient to meet regulatory norms later in 2010, once the restructuring processes are finalized.

Banks' capital positions would remain weak. Even if CARs remain above minimum levels, this may be insufficient for international borrowing given the increasingly strict application of prudential norms. As a result, banks would continue to be constrained in their lending.

Table I.1. Forward Looking Balance Sheet Analysis for Commercial Banks

Sensitivi	Sensitivity Analysis Scenarios 1/					
	Actual Data	Scenario 1	Scenario 2			
	End March 2010	30% NPLs for all Banks	40% NPLs for all Banks			
NPLs (90 Day Basis) 2/	25.1	30.0	40.0			
NPLs (90 Day Basis) 2/ 3/	21.7	30.0	40.0			
Bad Debt Write Offs 2/	4.1	6.0	8.0			
Bad Debt Write Offs 2/ 3/	1.1	6.0	8.0			
Provisions/90 Day NPLs	1.5	1.3	1.0			
Provisions/90 Day NPLs 3/	0.9	0.7	0.5			
Capital Adequacy Ratio (%)	-3.8	-16.2	-22.8			
Capital Adequacy Ratio (%) 3/	19.4	8.7	0.3			
Number of banks below 12% CAR	3.0	10.0	13.0			
Number of top 6 banks below 12% CAR	2.0	4.0	6.0			
Number of banks with negative capital	3.0	5.0	5.0			
Number of top 6 banks with negative capital	2.0	4.0	4.0			
Recapitalization requirements for return to 12% CAR (US\$ bn)	12.6	21.6	25.0			
In % of 2010 GDP	10.2	17.5	20.2			
In % of 2010 GDP 3/		2.6	5.0			
Sources: FSA and IMF Staff estimates	Sources: FSA and IMF Staff estimates					
1/ All scenarios assume (i) average provisioning of 33 percent on N	PLs less than 90 days, a	nd 75 percent on NPLs over 90	days that include bad			
debts not recognized and 100 percent on write offs; (ii) bad debt wr	ite offs are 20 percent of I	NPLs; and (iii) excludes the im	pact of the			
restructuring agreements which will be finalized in 2010.						
2/ In percent of total loans.						
3/ Excludes restructuring banks.						

10. Current resolution processes for bad debts are insufficient and lack consistency.

Some banks have been dealing with NPLs under their own initiative, leveraging their knowledge of clients, but facing difficulties in addressing the underlying causes of the incapacity or unwillingness to pay. So far, industry sources report that 15 to 25 percent of loans at top banks have been restructured and only 4 percent of loans have been written off. Banks have generally been reluctant to write off bad loans because of adverse tax consequences and the expectation that depressed asset values will rise with the ongoing economic recovery. Against this, the mandate of the Distressed Asset Fund (DAF) established in 2008 to absorb banks' toxic assets as part of the ACP—has been altered reflecting the authorities' approach of providing targeted lending to SMEs and specific construction projects.³ Such policy initiatives to support priority sectors, including through subsidized credits, could distort market activity and generate additional NPLs in the future.

³ To date, the DAF has only made placements and loans to banks using its entire capital base of \$500 million.

Box I.1. Recent Trends in International Financial Regulation

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The expected changes in regulation in response to the global financial crisis will likely have important consequences for Kazakhstani banks. These include the size and composition of banks' balance sheets and their ability to undertake cross-border operations and activities.

New regulatory architecture. A number of international bodies and organizations are currently involved in setting out prudential frameworks and detailed standards and norms. These include:

- *G-20*: Drives regulatory reform agenda.
- *Financial Standards Board:* Coordinates the development of financial sector standards with national authorities and international standard setting bodies, and also addresses vulnerabilities regarding global financial stability.
- Standard setters: BIS,* IOSCO, IASIS, and IADI develop sector specific standards.
- *National authorities:* Implement standards.
- *IMF*: Undertakes surveillance of macroprudential policies and financial sector stability, and researches and assesses the implementation of standards through ROSCs and FSAPs.

Key initiatives. The international agenda is mainly bank-centric, looking at both micro prudential (bank level) regulations and macroprudential, or systemic level standards. The main issues are:

- Bank capital. Higher minimum requirements, including capital conservation buffers; counter cyclical buffers and emphasis on leverage ratios to include off-balance sheet items; new calculation of CAR to give greater emphasis to common equity (Tier I and retained earnings); phasing out of hybrid capital (Tier III); and harmonization of deductions. The determination of risk weighted assets will be tighter, with stricter requirements for trading books and risk weights of securitized assets.
- *Liquidity*. Enhanced guidance on liquidity management and supervision focus on the liquidity coverage ratio and the net stable funding ratio, with an emphasis on a risk factor approach, including stress testing outflows.
- *Risk management.* Issues including concentration risk of lending, and compensation to bank management.
- *International cooperation*. Supervisory colleges among regulators to oversee the activities of internationally active banks.

Implications for Kazakhstani banks. The emphasis on higher capital and liquidity buffers and stronger macroprudential measures will generally place a greater burden on banks, and will raise their costs. To remain in good standing with best international practice—and thus to be in a position to compete for international capital—Kazakhstani banks must be seen as being on a sound footing. This means maintaining clean balance sheets, following adequate accounting practices, and complying with a well functioning regulatory and supervisory regime. Crucial to this strategy of enhancing compliance with international norms will be a comprehensive, transparent and effective resolution of NPLs.

*The BIS also hosts and funds related committees with a less well defined but influential position.

C. Options for NPL Resolution

11. Country experiences indicate three broad approaches to NPL resolution. These include (1) the centralized approach based on a public sector asset management company (AMC); (2) the decentralized public sector AMC (for a single bank or group of banks); and (3) the bank-centric approach, in which private banks manage their own NPLs through various means—including internal AMCs or work out units, or through specific treatment of loans, such as loan duration extensions, and other mechanisms.

Public sector centralized AMC

- 12. The authorities create and capitalize an AMC to purchase NPLs from all commercial banks. NPLs are exchanged with government issued (or backed) bonds or cash.⁴ This process is typically facilitated by a full diagnostic audit and forward looking assessment of banks' assets and capital. Freed from nonperforming assets, banks are better able to restart lending activities, while the AMC disposes of or restructures the NPLs for future sale. Aside from tackling the NPL problem, the establishment of a centralized AMC can help preserve the value of bank assets by effectively setting a minimum price. This can prevent assets being sold at a "fire-sale" when, during times of economic weakness and uncertainty, markets are thin.
- 13. Country experience illustrates that successful AMCs are supported by certain minimum conditions and standards.⁵ These include (1) sufficient capital; (2) strong regulatory, prudential, and corporate governance frameworks; (3) adequate legal frameworks (namely effective collateral, foreclosure, and bankruptcy laws); (4) transparency and accountability (maintained through regular reporting and public oversight); and (5) appropriate asset valuation methods. The latter requires banks to mark assets to market values, which must then be offset by additional capital—in some cases taking current shareholders to zero and/or topping up the remaining requirement with government capital.⁶ Assets marked at face value would initially preserve banks' balance sheets, but would raise fiscal costs as the AMC would bear the burden of eventual write downs.

⁴ The AMC is typically part of a more comprehensive strategy to restructure and recapitalize the banking and corporate sectors. In this case, additional agencies may be created, resulting in the government's ownership of banks and corporations. This could weigh on administrative capacity and the ability of the authorities to privatize, reinforcing the need to restructure nonviable corporate entities, which are often the source of banking sector problems.

⁵ This AMC approach has been implemented in other cases in both developed and emerging economies, including currently in Ireland (NAMA), and previously in the United States (Resolution and Trust Corporation, RTC), Sweden (Bank Support Authority, and Securum), the Czech Republic, and in several of the Asian countries during the crisis in the late 1990s (see Box I.3).

⁶ There have also been cases in which incremental capital requirements have been imposed by the regulator to ease the burden on initial capital requirements. However, this form of "institutional regulatory forbearance" must be transparent, and supported by a strong regulatory framework.

Public sector decentralized AMC

14. The authorities create and capitalize an AMC to purchase NPLs from a single large bank. The processes and underlying conditions and standards to support the AMC are identical to those discussed under the centralized approach. In this case, however, it is possible for more than one AMC to be created to address NPLs in alternative banks. This may be desirable when problem loans are concentrated in a particular group of banks or sectors. This is similar to the experience of Kazakhstan in the mid-1990s (see Box I.2), or of China in 1999 when four AMCs were created and funded by the Ministry of Finance to deal specifically with the four large state owned commercial banks.

Private sector AMC, or an alternative internal procedure

- 15. Individual private banks establish their own AMCs or restructuring programs. This could be achieved in a variety of ways. A commercial bank could either (1) create an internal "workout unit" (a good bank/bad bank model) where all recognized bad assets are transferred and held for disposal or restructuring and future sale; or (2) lengthen the maturity of existing loans ("extend and pretend", or "evergreen") with a view to these assets going unmarked until they recover in value. In the case of the former, the workout unit is either maintained within the bank or transferred to a separate subsidiary that has its own balance sheet. The good bank/bad bank model is similar in spirit to the AMC insofar as the balance sheet can be cleaned up, facilitating a return to normal lending activities and mitigating the need for management time in resolving bad debts.
- 16. **Country experience illustrates that the authorities can facilitate a private sector AMC approach**. This can be achieved by enacting laws or providing fiscal incentives—such as removing tax distortions—for the establishment of private entities to help remove NPLs. However, under the "extend and pretend" model, bad assets may linger, limiting banks' ability to generate liquidity and thus resume lending. Nevertheless, in this case, a bank avoids having to mark assets to current prices, and therefore mitigates the need for additional capital injections.
- 17. In general, the success of a decentralized approach requires a degree of regulatory forbearance and the ability by banks to maintain depositor confidence. The latter may require support from the authorities, for example, through the continued placement of public entity deposits in the banking system and/or enhanced deposit insurance, both as seen in the case of Kazakhstan. Moreover, a key risk associated with this type of approach is the contingent liability to the fiscal authorities, which would ultimately require additional public capital should private sector asset values fail to recover. In Kazakhstan's case, however, the industrialization plan, road map initiative, recovery in oil prices, and the expected flow of bilateral funds could possibly facilitate a quicker recovery of asset prices.

⁷ Policy measures that aim at achieving income levels of advanced economies by 2030.

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Box I.2. Experiences with AMCs in Kazakhstan 1/

Following its independence, Kazakhstan embarked on a financial system restructuring exercise. The aim was to rehabilitate the large state banks and modernize the banking system and the legal and regulatory frameworks. The approach to bank restructuring reflected a mix of AMCs—mainly for the NPLs of the seven state banks—and internal work out units—mainly for commercial banks' NPL exposure to SMEs. By 1994, three AMCs had been created:

- **Rehabilitation Bank (RB).** NPLs from the mining and metallurgy sectors were channeled to the RB, which also gave priority to enterprise rehabilitation versus outright liquidation, providing some resources for financing enterprise downsizing.
- Agricultural Support Fund (ASF). Loans from the state agriculture bank, Agroprom, as well as from other banks, to a significant number of insolvent farms were handled by the ASF. However, a lack of technical expertise limited ASF's capacity to rehabilitate or liquidate farms, resulting in alternative rescheduling terms and unpaid debts.
- Exim Bank. The Exim Bank absorbed loans funded by export credit agencies with government guarantees, which ultimately limited the bank's ability to manage these NPLs and resulted in fiscal costs to the authorities.

In total, loans amounting to 11 percent of GDP were transferred to these AMCs, while state bank exposure to SMEs remained on the books of these banks. In all of the AMCs, the authorities promoted the restructuring of loans instead of foreclosure and liquidation to guard against negative social and economic impacts. Against this, prudential and regulatory frameworks were strengthened, resulting in new capital requirements and limits on exposure to individual shareholders or single borrowers. These enhancements, however, were accompanied by a significant degree of regulatory forbearance, permitting banks to meet new capital requirements over a period of time. The regulator and authorities backed this mechanism by initiating an enhanced surveillance system of noncompliant banks.

1/ See Hoelscher (1998) for a detailed discussion on AMCs in Kazakhstan.

D. Key Lessons from International Experience with AMCs

- 18. A centralized AMC is most effective when there is systemic financial fragility and the legal infrastructure for debt resolution is weak. Under these circumstances government backing provides important externalities, including:
- Coordination of markets. In the presence of limited or asymmetric market information, coordination by the public sector is vital. Private banks may engage in behavior that produces individual gains, but leads to poor collective outcomes (for example, a "fire-sale" of assets).
- Use of legal processes. Weak collateral provisions and inefficient legal processes can delay loan restructuring, and an appropriately empowered centralized AMC can override such constraints

- **Timeliness of restructuring.** A centralized AMC can attach conditions—such as recapitalization and change in the business models—that facilitate the operational and financial restructuring of banks.
- **Concentration of expertise.** The AMC is able to concentrate specialists who benefit from a system-wide understanding of the problems and options for the resolution of NPLs.
- 19. However, problems can occur if the AMC is badly designed or structured, inadequately funded, or lacks appropriate authority, transparency, and operational independence. Inadequate attention or resources to these conditions could prove burdensome to the authorities, including through:
- **Fiscal costs.** A centralized AMC requires substantial upfront resources from the budget, which could result in a rise in the public sector's debt burden.
- Operational costs. If not efficiently managed, a centralized AMC tends to incur high operational costs, leading to a slow resolution of NPLs and erosion in the value of unrestructured assets. It is important that the AMC has experienced personnel and that it is managed along profit maximizing lines to ensure the efficient disposal of assets and to avoid the subsidization of banks.
- **Reputational costs.** Operational independence must be enshrined as centralized AMCs can be susceptible to political interference and corruption. The AMC should be primarily the responsibility of the government and not the central bank. Placing the AMC under the administration of the budget from inception promotes transparency while protecting the central bank from potential conflicts between its role as a regulator and the conduct of monetary policy.

E. Policy Considerations for Kazakhstan

- 20. The centralized AMC approach may be the most suitable model for the resolution of problem loans in Kazakhstan. In particular, given the scale of NPLs, the ongoing deterioration in asset quality, and the shortcomings in the legal and regulatory structures, it is crucial that a comprehensive approach is implemented. Indeed, resolution initiatives currently underway are too fragmented, subjective and non-transparent, and may not prove sufficient to tackle the legacy issues relating to the high stock of debt.
- 21. **Kazakhstan is well placed to appropriately capitalize, structure and orient the DAF as a centralized AMC.** However, it is crucial that the DAF avoid creating incentives for moral hazard, and that it is operationally independent, transparent, and publicly accountable. Banks will have to recognize current losses, and this could give rise to capital adequacy issues as well as confidence related concerns. This may require an incremental approach to capital adequacy, conducted with the cooperation of the FSA and with a view to meeting future international minimum standards, but regulatory forbearance should be avoided. In addition, a recapitalization program should be established to support NPL carve outs. Other considerations include:

Box I.3. NPL Resolution in the Asian Crisis 1/

As a result of the Asian crisis, Indonesia, Malaysia, and Korea (and subsequently Thailand) established centralized AMCs over 1997/98. Bank-based models were not chosen due to the systemic nature of the banking sector problems and the weak legal infrastructures. Key features of these AMCs include:

- *Publicly initiated.* Central organization and funding by the government, not by the central bank.
- Enhanced legal authority. Special legal authority to enforce restructuring (Malaysia, Thailand), or use of existing legal frameworks (Korea).
- Finite horizon. Limits on the number of years the AMCs were allowed to operate.
- Alternative acquisition strategies. Focus on large, adequately secured loans (Malaysia), all secured loans (Korea), or all loans (Indonesia, where banks were nationalized). Subsidization of loans either through purchasing them near (or at) face value (Indonesia, Korea), or establishing profit sharing arrangements with the banks (Malaysia, Thailand).
- External expertise. Extensive use of external expertise, either for auditing, asset valuation, repackaging for sale, or securitization (Korea, Malaysia).

	Performance Indicators					
	Assets transferred	Disposal rate a/ (percent of assets transferred)	Cash Recovery Rate (over face value of transferred assets)	Cash Recovery Rate (over amount of disposed assets)		
IBRA	Rp 305.77 trillion	70.4	31.4	44.6		
Danaharta	RM 52.44 billion	100.0	34.1	58.7		
KAMCO	USD 91.75 billion	61.6	29.2	47.4		
TAMC	Bt 784.378 billion	73.5	1.8	2.5		

a/ as of the following dates: Korea, 11/03; Malaysia and Indonesia, 9/03; Thailand, 6/03

1/ Indonesia (Indonesian Bank Restructuring Agency, IBRA); Korea (Korean Asset Management Corporation (KAMCO); Malaysia (Danaharta). Concerns over the fiscal position prompted Thailand to initially pursue a decentralized approach, but in 2001 a centralized AMC was formed (Thai Asset Management Company, TAMC). The Philippines did not establish an AMC, relying instead on a decentralized approach. See Claessens et. al (1999), Lindregn et. al (1999), Stone (1998), and Terada-Hagiwaral et. al (2004).

- **Maintaining appropriate incentives.** Profit sharing mechanisms with commercial banks can provide incentives to ensure that loans maintain some value, helping to reduce the fiscal costs. The tax structure should also be supportive of the sale of loans to the DAF.
- **Corporate sector restructuring.** Mechanisms to tackle the underlying problems in the corporate sector would help to avoid another cycle of NPLs from occurring. This is important in the context of current policies that subsidize and guarantee lending to priority sectors.
- **Speedy disposal of NPLs, including to foreign investors.** Means to ensure that the disposal of NPLs balances the risk of a rapid disposal of assets ("fire-sale") that depresses prices, with the fact that the value of NPLs deteriorates rapidly over time.

• **Time-bound operating horizon.** Hard targets for the performance of the DAF should be set to limit the risks of it becoming a self-perpetuating bureaucracy and market perception of it as a dumping ground for NPLs.

F. Conclusion

- 22. Given the legacy of the crisis, it is important that Kazakhstan be prepared to undertake a consistent approach to NPL resolution to complement ongoing initiatives. The international experience has shown the value of a timely and proactive approach that is tailored to the specific features of the country situation. With the measures undertaken so far, including the creation of the DAF, Kazakhstan is well placed to develop a comprehensive and transparent NPL resolution strategy as an integral part of the ongoing rehabilitation of the financial system.
- 23. Importantly, however, any strategy should be accompanied by a full diagnostic assessment of all systemically important banks based on recapitalization needs. This should be complemented by stress and sensitivity analysis to assess the size and depth of the problem. Moreover, from an operational perspective, it is crucial that gaps and shortcomings in the regulatory, prudential, governance, tax and legal frameworks are identified and appropriate enhancements undertaken.

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II. SHOULD KAZAKHSTAN'S FISCAL FRAMEWORK BE BASED ON RULES?¹

15

During the last decade, the Kazakhstani authorities have demonstrated the ability to maintain a good degree of fiscal discipline without any explicit numerical rules. More recently, however, the anti-crisis measures led to a deterioration of the fiscal position. Fiscal consolidation is needed over the medium term to ensure macroeconomic stability and to prevent using the resources of the National Oil Fund to finance the deficit. Long-term targets on spending out of oil revenues and on the non-oil deficit, combined with a clear and transparent medium-term consolidation plan, would create a strong and credible framework for fiscal management. A robust and transparent public financial management (PFM) system will have to be an integral part of any effective fiscal framework.

A. Fiscal Rules: Some General Considerations

1. Typically, a fiscal rule is introduced to create an institutional mechanism aimed at supporting fiscal credibility and discipline.² Fiscal rules often aim at correcting distorted incentives in policy making. One common example of such distorted incentives is a situation where short-term political concerns lead to a lack of attention to longer term requirements. Another example is the so called "common pool problem", with influential individuals and groups failing to internalize the overall budgetary impact of their demands. A numerical fiscal rule aims at correcting these problems, by putting fiscal policymaking within rigid bounds and reducing policymakers' discretion.

2. The optimal design of a fiscal rule depends on the fiscal policy objectives.

Objectives differ depending on the specific circumstances of a country, but often include one or several of the following: (1) providing countercyclical impact from fiscal policy to the economy and facilitating the absorption of shocks; (2) reducing public debt; and (3) in the case of resource-rich countries, achieving intergenerational equity. Depending on the relative importance of these objectives, policymakers in different countries may choose to constrain different fiscal variables. For example, constraining the ratio of public debt to GDP (or any other debt-related variable) would be appropriate, if one of the primary policy objectives is reducing the level of debt. In other circumstances, a different variable may be chosen, such as the ratio of overall fiscal balance to GDP, structural balance to GDP, or some measure of expenditures. It is important to note that, while the ultimate target can be quite general (such as debt sustainability, or strong fiscal position in the long term), the target chosen for the fiscal rule has to be operational and under the control of the authorities (for example, government deficit or government debt).

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¹ Prepared by Dmitriy Rozhkov (MCD).

² IMF (2009) provides a more detailed analysis of usefulness of fiscal rules, and a discussion of design and implementation of rules.

- 3. Commodity producing countries often choose to target some measure of fiscal balance that excludes revenues from commodity exports. For these countries, the fiscal rule needs to be flexible enough to adjust to external shocks, in particular fluctuations of commodity prices. Targeting some measure of non-commodity balance helps to insulate the budget from the volatility of commodity revenues, and to avoid boom-bust cycles reflecting changes in commodity production and international prices. In fact, irrespective of the decision to use fiscal rules, the policy recommendations usually given to commodity producing countries are that (1) the non-commodity balance should feature prominently in the formulation of fiscal policy; and (2) the non-commodity balance, especially expenditure, should be adjusted gradually, to avoid destabilizing aggregate demand (Barnett and Ossowski, 2003).
- 4. In a certain sense, fiscal rules are similar to constraints that are sometimes self-imposed by individuals. The empirical evidence shows that consumers tend not to behave in line with the optimal consumption theory. In particular, consumption tends to be excessively sensitive to changes in income, and consumers appear not to regard various forms of wealth as close substitutes. In response to these behavioral biases, rules are often designed and used by consumers to constrain themselves from making suboptimal choices. One example is the use of pension plans designed to force a certain level of savings and prevent consumption from following income too closely. Fiscal rules are a similar attempt to impose constraints and shift behavior closer to the optimum for the governments.
- 5. **Available empirical evidence suggests that fiscal rules do tend to bring the intended benefits to countries that use them.** While more comprehensive analysis of the issue is certainly needed, several existing studies have linked the use of rules with improved fiscal performance.³ Fiscal rules have been also shown to contribute to the success of fiscal consolidation in OECD countries (Guichard and others, 2007), and to play a supportive role in several cases of large fiscal adjustments. This evidence has to be regarded with caution, however, since the direction of causality is not always obvious. In general, fiscal rules seem to work well in countries that have a track record of good policies and where fiscal conditions are sufficiently stable. Rules can also help to lock in reforms. However, rules will typically not help to trigger adjustment in the case of weak initial conditions.
- 6. A number of caveats have to be kept in mind when considering an introduction of a fiscal rule. Any rule has to be backed by a strong political commitment, and by determination to follow the rule once it has been adopted. Without such commitment, the rule will likely be broken, and may end up undermining policy credibility. Also, while rules may help to stick to a desirable fiscal policy, they are typically silent on the composition of fiscal adjustment required to get to the desirable policy in the first place. Therefore, in cases where the starting fiscal position is far from the targeted path, the adoption of a rule has to be complemented by a clear and credible plan to achieve the required consolidation (the

³ For evidence based on EU countries, see for example Debrun and others, 2008.

relevance of this in the case of Kazakhstan will be discussed below). Finally, rules can sometimes encourage "creative accounting", especially in cases where the chosen target is relatively complicated, and thus can also undermine policy credibility.⁴

67. Credibility, transparency and accountability are the key prerequisites of any effective fiscal rule. A strong and credible public financial management (PFM) system is an integral part of any effective fiscal rule. In fact, the presence of such a system is considerably more important than the right choice of a target. A strong PFM system has to include several key elements, in particular (1) availability of reliable data and capacity for technical forecasting of the budget variables; (2) ability to produce in-year and timely end-year reports, through a comprehensive budget reporting system; and (3) credible internal and external audit systems. The credibility of a fiscal rule framework also requires comprehensive and timely public releases of fiscal data. In fact, as will be discussed below, the experience of some countries suggests that a strong PFM system by itself can be sufficient to impose a high degree of fiscal discipline, even without any formal rules.

B. Use of Fiscal Rules: Global Tendencies and Country Cases

- 8. The widespread introduction of fiscal rules over the last two decades can be seen as a reflection of their potential benefits. The number of countries with some form of a fiscal rule has increased from 7 in 1990 to 80 in 2009 (IMF, 2010). Figure II.1 shows the increased reliance on fiscal rules over the last two decades, which can be observed across a broad range of countries, including advanced, emerging, and low income.
- 9. Commodity producing countries have experimented with various approaches to fiscal frameworks, with various degrees of success. Box II.1 describes three examples of large commodity producers that were able to successfully maintain fiscal stability and sustainability through periods of wide fluctuations of commodity prices. The example of Australia is especially interesting, since it illustrates the possibility of maintaining a conservative and credible fiscal policy without explicit numerical rules, with the help of a high degree of transparency and accountability.
- 10. Countries with well-designed fiscal rules and sound frameworks can still face serious challenges in the conduct of fiscal policy. Countries relying on fiscal responsibility laws can face strong political pressure to relax fiscal policy during a long period of commodity price boom. Countries with structural balance rules have on occasions discovered systematic biases in the calculation of permanent output and other variables, which had to be corrected. In these circumstances, credibility of the fiscal authorities and transparency of fiscal policy become the key elements that help to maintain the soundness of public finances.

⁴ This problem is not specific to countries with fiscal rules, however. It can arise, for example, in countries that do not have a fiscal rule, but need to show to the markets sufficient progress in consolidation.

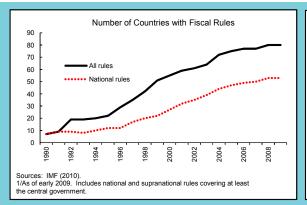
Box II.1. Fiscal Rules in Commodity Producing Countries: Three Country Cases

The three country cases described below illustrate the variety of fiscal frameworks that can be successfully implemented in commodity producing countries.

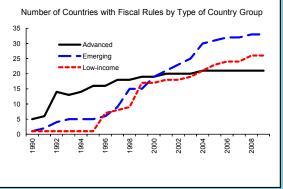
In **Australia**, the fiscal policy framework does not involve a numerical fiscal rule. Instead, the Fiscal Responsibility Law provides a framework for the conduct of fiscal policy. In line with the law, each annual budget is accompanied by a fiscal strategy statement covering the next four years. The strategy is based on several broad targets, such as (1) achieving budget surpluses on average over the cycle; (2) maintaining taxes as a share of GDP on average below the 2007-08 level; (3) improving the financial net worth of the government over the medium term. In addition, an expenditure rule that comes into force once the economy grows above trend restrains real growth in spending to 2 percent per year until the surplus reaches at least 1 percent of GDP.

In **Chile**, an explicit numerical fiscal rule has been adopted, with a target for the structural balance. Government expenditures are budgeted ex ante in line with structural revenues, i.e. the revenues achieved if (1) the economy was operating at full potential; (2) prices of copper and molybdenum were at their long term levels; (3) return on accrued financial assets were in line with the long term interest rates. The target for the structural balance was set at 1 percent of GDP in 2002-07, and then it was reduced to 0.5 percent of GDP in 2008 and 0 percent of GDP in 2009. Key inputs to the calculation of structural revenues are provided by an independent body, and the successful implementation of the rule relies strongly on the credibility of that body.

Norway is another example of a numerical fiscal rule with the structural deficit as the target variable. In this case, oil revenues are explicitly excluded from the target. The non-oil structural deficit of the central government is required to equal the long-run real return on the Government Pension Fund – Global, which is assumed to be 4 percent. However, the fiscal guidelines allow temporary deviations from the rule over the business cycle.



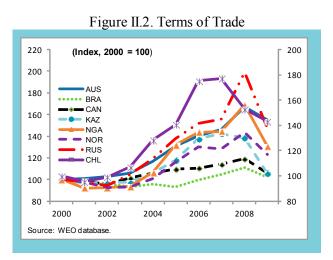




11. More recently, the global financial crisis has exposed the limits of fiscal rules in many countries. The extreme nature of the shocks faced by many countries in 2008-09 made it difficult to stick to the rules, and some of them had to be revised or adjusted. This shows that fiscal rules need to be sufficiently flexible to deal with large shocks, and should have escape clauses that are well designed. Nevertheless, the general perception of the usefulness of fiscal rules has not changed, and several countries have continued to introduce them in the last couple of years. These include Austria (who introduced rolling 4-year expenditure ceilings in 2009), Germany (set a limit on structural deficit for the federal government from 2016 and for the states from 2020) and Hungary (introduced a primary budget balance rule and a real debt rule as part of the adoption of a Fiscal Responsibility Law taking effect in 2012).

C. Kazakhstan's Fiscal Policy During the Last Decade

12. Like other commodity producing countries, Kazakhstan faced a significant terms of trade boom in 2003-08. Figure II.2 illustrates that Kazakhstan's terms of trade increased by over 40 percent between 2003 and 2007. While some other commodity producers faced an even sharper increase in their terms of trade (notably Australia, Chile, Nigeria and Russia), rising commodity prices provided a significant boost to Kazakhstan's GDP and government revenues.

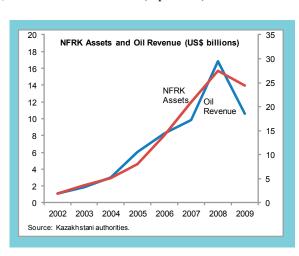


13. Nevertheless, government spending remained under control during the period preceding the global financial crisis. Spending remained relatively constant as percentage of GDP until 2008 (Figure II.3). At the same time, Kazakhstan's fiscal revenues from oil increased from \$1 billion in 2001 to \$17 billion in 2008 (or from 4½ to 12½ percent of GDP). A significant part of these revenues were used to reduce public debt and build up savings in the National Oil Fund (NFRK), which reached \$27.5 billion by end-2008 (Box II.2). In fact, at the peak of oil prices in 2006-07, about 60 percent of oil revenues were saved in the NFRK. This was an important achievement, which demonstrated the authorities' ability to maintain fiscal discipline even without formal fiscal rules.

Box II.2. National Fund of the Republic of Kazakhstan

Purpose, size and composition. The National Fund of the Republic of Kazakhstan (NFRK) was established in 2000. Its purpose is to reduce the economic impact of volatile oil prices and serve as a vehicle for saving part of Kazakhstan's oil income for future generations. The NFRK is an off-budget fund that is managed by the NBK on behalf of the government. All NFRK assets are invested abroad. At end-March 2010, 56 percent of NFRK assets were denominated in U.S. dollars, 26 percent in euros, and the rest were split between assets denominated in U.K. pounds (7 percent), Japanese yen (7 percent), and Australian dollars (4 percent).

Sources of funds. Direct taxes from the oil sector (with the exception of taxes going to local budgets) are the principal source for the generation of NFRK assets. These include the corporate income tax, royalties, the share under production-sharing agreements, and rent tax on exported crude oil and gas condensate. Proceeds from the privatization of state property in the mining and extraction and manufacturing sectors, as well as proceeds from the sale of agricultural land, are also allocated to the fund.



Use of funds. A guaranteed transfer from the NFRK is established every year by the law on the republican budget. This transfer is intended for the financing of spending under budget development programs. The new NFRK concept adopted in early 2010 sets the limit on the annual guaranteed transfer at \$8 billion (calculated as the average actual transfer in U.S. dollar terms during the last 5 years), and imposes a minimum NFRK balance of 20 percent of projected GDP at the end of the respective fiscal year (the guaranteed annual transfer is to be reduced in case the expected balance falls short of the minimum requirement).

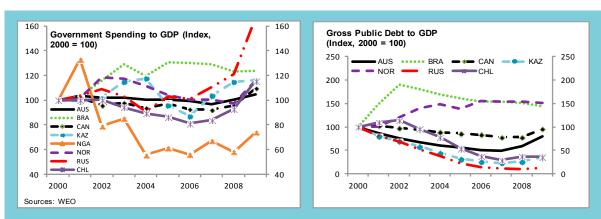


Figure II.3. Government Spending and Public Debt in Commodity Producing Countries.

- 14 The anti-crisis spending and other measures in 2008-09 resulted in a **deterioration of the fiscal position**. Even as revenues fell sharply, the authorities allowed automatic stabilizers to operate. In addition, tax cuts in the non-extractive sectors were introduced, and budgetary outlays (including for pensions, public sector wages, and social benefits) increased significantly. The large-scale stimulus was appropriate and timely, and has helped to limit the economic slowdown. Staff estimates the total fiscal impulse from the general government budget in 2008-09 at about 4½ percent of GDP. However, if offbudgetary spending is taken into account, the estimate would increase to about 7½ percent of GDP. 5 This massive stimulus significantly exceeded the average in advanced and emerging countries in 2008-09 (Figure II.4). It resulted in a deterioration of the general government fiscal position and the net financial position of Samruk Kazyna, the state development agency. The overall fiscal balance went into deficit in 2009, and the non-oil deficit exceeded 11 percent of GDP. The deficit is expected to increase further in 2010, although once the non-budgetary outlays are taken into account, the fiscal stance would improve somewhat, in line with the economic recovery. The estimated structural balance went from a surplus of 3½ percent of GDP in 2007 to a deficit of 4 percent of GDP in 2009 and 2010.
- 15. The fiscal deficit now needs to be put on a downward path to ensure macroeconomic stability and maintain a healthy debt profile. Maintaining the current level of deficit would result in either a rundown of oil savings or a rapid increase in government debt. Substantial fiscal consolidation is therefore required to bring the fiscal position back to the pre-crisis levels. The next section estimates the size of the required fiscal adjustment, and argues that a formal fiscal rule can be a useful tool within the medium term framework, to support credibility and underscore the authorities' commitment to fiscal soundness.

D. What Fiscal Rule Could Be Adopted in Kazakhstan (if Any)?

16. Given the structure of Kazakhstan's economy, the decision on how much to spend out of oil revenues has to be the cornerstone of any fiscal framework. Oil accounts for almost one fourth of GDP, 60 percent of total exports, and 40 percent of total budget revenues. The decision on how to deal with oil revenues is therefore of paramount importance to the country. Given the currently low level of public debt, debt reduction is not the primary fiscal objective. Instead, the authorities appropriately have chosen to save a substantial part of the oil revenues in the National Oil Fund, pursuing several objectives: helping to achieve intergenerational equity by transferring part of the oil wealth to future generations; limiting appreciation pressures on the real exchange rate; and stabilizing financial flows and providing a shock absorber. Saved oil revenues can also potentially be

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⁵ Some off-budget anti-crisis expenditures (such as increases in public deposits in the banking system) were excluded from the fiscal impulse calculations.

⁶ Van der Ploeg and Poelhekke, 2008 note that volatility is a quintessential feature of the resource curse.

used for development purposes, as long as this is done through productive investments that turn oil wealth into other forms of wealth, without value loss.⁷

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- 17. The projected flow of oil revenues can be used to calculate the amount that can be used for government spending. From the projected stream of revenues, the total present value can be calculated. The perpetuity equivalent of that present value can then be used as an estimate of the amount that can be spent annually, thus preserving the oil wealth for future generations.
- 18. **Production and price of oil are assumed to develop in line with the authorities' and Fund staff projections.** Oil production is assumed to grow in line with the authorities' projections in the medium term, reaching about 120 million tons a year (equivalent to 2.5 million barrels per day) in 2016-17, when full scale production is expected to begin in the Kashagan field in the Caspian Sea. After that, production is assumed to remain constant until 2040, and then to start declining gradually by 1 percent a year. For oil prices, two scenarios were considered. The "high price" scenario assumes that the oil price would reach \$90 per barrel in 2015 (slightly higher than the current WEO projections), and then remain unchanged in real terms for the rest of the projection period. The "low price" scenario assumes that the price of oil would drop to \$60 per barrel in 2010 (compared to the current WEO projection of \$75), and then stay at that level in real terms. All calculations were done in constant 2009 U.S. dollars, for ease of comparison with the current numbers.
- 19. The results of the calculations suggest that the annual spending out of oil revenues of \$10-11 billion in constant 2009 dollars should be affordable in the medium term. The present value of future oil revenues was calculated for the periods 2010-50 and 2010-75. Expanding the projection horizon beyond 2075 does not produce any further material difference in present value terms. Real discount rates of 3, 4, and 5 percent were used. The results are presented in Table II.1.

Table II.1. Sustainable Spending: Perpetuity Equivalent of Future Oil Revenues.

High Price Scenario (billions of 2009 U.S. dollars)				Low Price Scenario (billions of 2009 U.S. dollars)			
Discount Rate 3 percent 4 percent 5 percent				Discount Rate 3 percent 4 percent 5 percent			
Horizon: 2050 Horizon: 2075	11.2 13.2	12.7 14.3	13.6 14.9	Horizon: 2050 Horizon: 2075	9.0 10.6	10.2 11.5	10.9 11.9

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⁷ Collier and others, 2009 argue that capital-scarce developing economies should prioritize domestic investment, rather than smoothing consumption as suggested by the permanent income hypothesis.

- 20. The actual annual spending of oil revenues could be set at a level lower than \$10-11 billion for the moment, to allow spending to grow in line with GDP. Real GDP is projected to grow at a 4-6 percent rate in the medium term, and setting the annual spending amount relatively low initially would allow it to grow subsequently, in line with the economy. In fact, the \$8 billion per year ceiling set in the new NFRK concept could be a good starting point in 2010, but could be allowed to grow in later years in line with GDP. This would keep expenditure constant as percentage of GDP, and over the next decade would produce total expenditure equivalent to the \$10-11 billion per year suggested by staff calculations.
- 21. The suggested ceiling on spending out of oil revenues could be usefully complemented by a numerical target for the non-oil fiscal balance. The amounts that can be spent out of oil revenues discussed above are equivalent to 6-7 percent of GDP. Setting this as an explicit ceiling for the non-oil deficit (implying a zero overall balance) would create a clear and transparent fiscal framework that would ensure sustainability of the public finances in the medium and long term. This level of non-oil deficit is higher than what was achieved as recently as in 2007, when the overall non-oil deficit was less than 5 percent of GDP. As mentioned above, however, the current level of non-oil deficit is substantially higher than the suggested target (11 percent of GDP in 2009, and expected to reach 14 percent in 2010). The deficit target will therefore need to be complemented by a clear and transparent medium-term plan showing the composition of the necessary fiscal adjustment.
- 22. In the case of Kazakhstan, focusing on the non-oil balance would be preferable to other possible fiscal targets. Given the current low level of public debt, any rule based on debt variables would not be appropriate, since it would either not bind, or constrain public debt at an unreasonably low level.

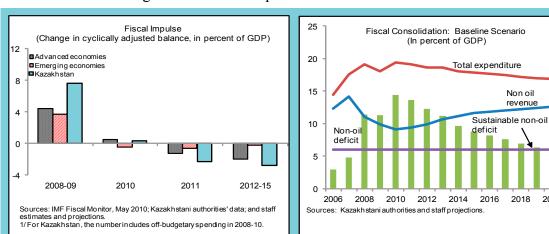


Figure II.4. Fiscal Impulse and Fiscal Consolidation

⁸ This target appears more realistic than the target of 3 percent of GDP for the non-oil deficit by 2020, set in the new NFRK concept. The concept does not set any intermediate targets for the non-oil deficit, and does not specify the size and composition of the fiscal adjustment needed to reach the target.

A simple rule based on the non-oil balance would also be preferable to a structural balance target (along the lines of Chilean example in Box II.1). The main reason is that a fiscal rule based on the structural balance would be more complicated and would rely on the accurate calculation of structural balance, which may undermine credibility of the rule in the eyes of the public. Besides, choosing the appropriate long term level for the price of oil (as was done for prices of copper and molybdenum in the case of Chile) would be difficult, and may result in frequent revisions to the rule, also undermining its credibility.

- 23. The timing of the introduction of the fiscal rule has to be carefully considered. As mentioned above, empirical studies indicate that fiscal rules can contribute to the success of fiscal consolidations. On the other hand, credibility is a key factor in the success of any rule, and some prior fiscal consolidation makes the adoption of rules more credible. In fact, many countries have chosen to adopt a rule to lock in fiscal adjustment gains. Given the gap between the current fiscal position and the desired steady state, it would probably be sensible to first put in place a clear and credible medium-term consolidation plan, and to have a one or two year record of successful implementation of that plan.
- 24. Making recommendations on the exact composition of the required fiscal consolidation is beyond the scope of this chapter. Nevertheless, given the need to diversify the economy, the brunt of the consolidation effort is likely to fall on the expenditure side of the budget. Some reduction of expenditures will occur naturally, as temporary anti-crisis spending measures are phased out. Prioritization of existing current expenditures to ensure that the quality of public spending is consistent with growth objectives would be the natural next step. A possible strategic goal would be to freeze per capita spending in real terms over the medium term. In the case that these expenditure measures would turn out to be insufficient to achieve the long-term objectives, revenue measures can be used as well. The possibilities here include (1) strengthening broad-based taxes on relatively immobile bases, such as VAT; (2) increasing externality-reducing taxes, for example on alcohol, tobacco, fuel, property; (3) strengthening tax compliance. Discussions with the authorities suggest that there is scope for increasing revenues by strengthening tax administration and reducing tax evasion. Figure II.4 shows an illustrative scenario of fiscal consolidation over the medium term, with the main effort taking place on the expenditure side.
- 25. A number of additional technical issues would need to be resolved, if the authorities decide to adopt the explicit deficit target. Procedural issues, such as the need to specify a preannounced set of steps to follow if a deviation from the target happens (including various sanctions), as well as the possible need for an independent fiscal agency, will be important. Decisions on the timing of implementation are also crucial. In the case of Kazakhstan, an issue of utmost importance would be to ensure that the fiscal rule (irrespective of the target chosen) encompasses the consolidated fiscal sector, including any off-budget transaction by government owned companies. These and other technical issues could be the subject of technical assistance from the Fund, if requested by the authorities.

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III. FINANCIAL MARKET DEVELOPMENT IN KAZAKHSTAN 1

Kazakhstan is well placed to leverage from existing institutions to promote deeper and more sophisticated domestic financial markets. Advancement in this direction would encourage tenge-based intermediation and the mobilization of domestic savings, and would contribute to a decline in dollarization and the associated balance sheet risks. In this regard, the authorities have a significant role to play since capital market development is tightly linked with a sound medium-term fiscal framework, supportive monetary and exchange rate policies, and overall financial sector reform. Moreover, given limited private initiative in key markets—namely those in forward foreign exchange—it may be appropriate for the authorities to take a direct, but temporary and well-defined, role in market making activity

A. Introduction

- 1. The ongoing crisis has exposed significant gaps and weaknesses in the structure of the banking sector. In particular, the funding structure of banks that was heavily reliant on foreign borrowing has proved to be a significant vulnerability. This led to a high dollarization of banks' liabilities which, although falling, remained elevated due to insufficient policy credibility, hysteresis effects, and continued limitations in the domestic financial markets. Amid regulatory shortcomings, banks largely traded direct currency risk for the associated credit risk through lending in foreign currency to unhedged corporations and households. The resultant mismatches on corporate and household balance sheets ultimately proved unsustainable, and became evident when the financial system was suddenly exposed to a stop in foreign capital inflows, domestic currency depreciation, and recession.
- 2. In the aftermath of the crisis, macroeconomic and financial policies should focus on promoting confidence in the tenge. Domestic savings should replace foreign borrowing to minimize the risks of boom/bust cycles and place the banking system on a sounder footing. In tandem, the enhancement of regulatory and legal and macro-prudential frameworks are essential to eliminating the risks associated with currency mismatches. As part of this process, the development of deeper and more liquid domestic financial markets, including those in forward foreign exchange, has a central role to play. In this effort, financial market incentives must be suitably aligned with available instruments to facilitate a smooth adjustment of domestic balance sheets.
- 3. Looking ahead, the authorities have a role to play in the development of well functioning domestic financial markets. In particular, capital market development is tightly linked with a sound medium-term fiscal framework (centered on the prudent saving of future oil revenues); monetary and exchange rate policies geared toward controlling inflation and

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¹ Prepared by Ali Al-Eyd (MCD) and Neil Saker (MCM).

increasing exchange rate flexibility; and overall financial sector reform. This policy mix will facilitate a gradual decline in dollarization and the associated balance sheet risks, leaving the financial system more resilient to future external shocks.

4. **Beyond the implementation of sound policies, there is a need to upgrade market infrastructure to develop local currency and forward foreign exchange markets**. To this end, the NBK may consider taking a direct, but temporary and well defined, role in market making activity, as has successfully been the case in other emerging economies in the past.² While domestic financial market development will take time and will need a comprehensive and coordinated approach to gradually build capacity, this seems to be an opportune moment to initiate the process given the current confluence of positive factors—including rising global commodity prices and supportive exchange rate expectations.

B. Vulnerabilities in the Structure of Banks' Balance Sheets

Liability Dollarization, Currency Mismatches and Credit Risk

Low and dollarized deposit base

- 5. The deposit base in Kazakhstan is much lower than what might otherwise be expected given its level of economic development. Figure III.1 shows that deposits both in domestic and foreign currencies were about 30 percent of GDP in 2008, declining slightly from 2007 despite a marked rise in GDP per capita. Against this, strong economic growth during the middle part of this decade propelled high loan growth, driving the loan-to-GDP ratio to a peak of nearly 60 percent of GDP in 2007, just above what might be expected given the prevailing income level, before declining following the crisis in 2008.
- 6. **The low domestic deposit base is more pronounced when broken down by currency.** As the crisis struck in 2007, foreign currency deposits amounted to around 20 percent of GDP, about double the figure for tenge-denominated deposits. Notwithstanding factors such as inflation or a lack of monetary policy effectiveness, the combination of a relatively small deposit base and significant deposit dollarization can be interpreted as insufficient confidence in the tenge in the years preceding the crisis.

High reliance on foreign funding

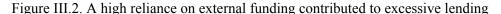
7. Over 2002–07, banks were able to sustain rapid expansion of their balance sheets through high levels of foreign borrowing. Banking sector external debt, facilitated by high economic growth and a burgeoning oil sector, grew to about 44 percent of GDP by 2007

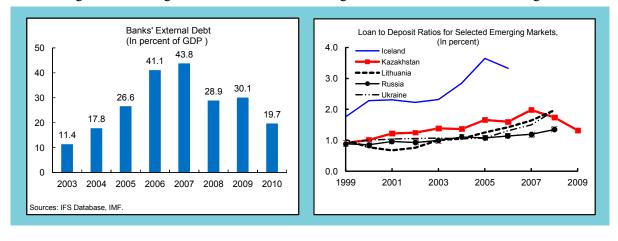
² For example, the Bank of Israel successfully issued foreign exchange options directly to the market as a means of initiating activity in this class of instrument, while the National Bank of Poland was the sole market maker in foreign exchange in the interbank market until the forward market developed, further encouraging the development of other derivatives and hedging instruments in foreign exchange.

(nearly \$45 billion) from around 6 percent in 2002. During this period, the loan to deposit ratio nearly doubled, peaking above 200 percent in 2007, among the highest relative to comparable countries. Limited (tenge) deposits—as well as a lack of tenge term liquidity—encouraged banks to take advantage of cheap foreign capital, which was largely channeled to risky sectors, and to borrowers without foreign currency income streams.

Deposits and Level of Development Assets and Level of Development 1/, 2008/09 120 140 • CHN* Loans/GDP, 2008/09 (in percent) 100 Deposits/GDP, 2008/09 (in percent) 120 THI 100 80 80 60 60 40 RUS TRK CZE COL 40 *LTV BEL RUS MEX 4. POLBEL 20 20 ARG* AZE 0 0 0 12,000 4,000 8,000 12,000 16,000 20,000 GDP per capita, 2008 (US\$) GDP per capita, 2008 (US\$) Sources: National authorities; IFS database, IMF; and staff calculations. 1/Countries with an asterisk represent 2009 data 80 Foreign currency Deposits and Exchange Rate Commercial Banks' Deposits, in percent of GDP 70 180 20 60 150 50 15 Foreign exchange 40 120 10 30 20 C Deposits / Total Deposits, in percent (LHS) 90 5 10 KZT/USD (RHS) 60 2001 2003 2005 2007 2009 Apr-98 Apr-02 Apr-06 Apr-10 Sources: National authorities: IES database. IME: and staff calculations

Figure III.1. A low and dollarized deposit base limited tenge-based intermediation





Trading currency risk for credit risk

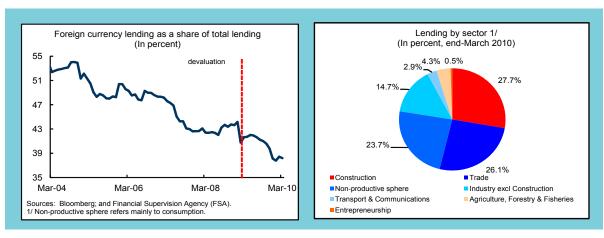
8. Prudential regulations on open currency limits encouraged banks to match their liabilities by lending in foreign currency, creating persistence in credit dollarization.

This was exacerbated by limited mechanisms through which to hedge foreign currency exposures. Banks have relatively little exposure to economic sectors that generate income in foreign currency, notably the oil and gas and other minerals sectors, which are largely self-funding, receive FDI, or borrow directly in global capital markets. As much of bank lending went to unhedged borrowers in sectors such as construction, real estate, and retail, banks ended up trading currency risk for credit risk, and this has been reflected in the rapid rise in NPLs since the start of the crisis.³

Addressing the Banking Sector Vulnerabilities

- 9. There is a clear need to restore confidence in the financial system while withdrawing public sector support. A more stable and sustainable financial system should rely more on private domestic savings—rather than on external borrowing or public sector resources—and may also have greater foreign participation. The FSA's actions in enforcing regulations, taking corrective action, monitoring external borrowing carefully, and paying greater attention to effective corporate governance are crucial.
- 10. Deepening the domestic markets will supplement the role of sound macroeconomic policies and regulation in spurring lending in domestic currency. Deep domestic financial markets will also promote risk diversification and the development of hedging tools.

Figure III.3. High levels of foreign currency lending is concentrated in unhedeged sectors



³ In the absence of appropriate foreign currency hedging instruments, prudential regulations that require banks to match foreign currency liabilities and assets can encourage credit dollarization (see Calvo (2001, 2002) and Luca and Petrova (2008)).

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C. Development of Domestic Financial Markets

11 Kazakhstan has in place much of the foundation needed for developing broader and deeper domestic markets.⁴ Therefore, the current strategic focus should be on (1) increasing market activity and depth; (2) broadening investor participation; and (3) expanding the types of instruments traded. This process should begin with the deepening and further development of the domestic money and bond markets, including the establishment of a government benchmark yield curve. Here, there is scope to leverage upon existing institutions, including the pension fund system and the Kazakhstan Stock Exchange (KASE), and existing strategic targets, such as those detailed in the Kazakhstan 2020 Development Plan. As tenge-based markets begin to evolve, incentives for private sector innovation should spur the development of derivatives markets (forwards, futures, swaps, options), creating a more balanced financial infrastructure and additional alternatives to diversify risk.

Money and Bond Markets

12. A deep and liquid money market typically serves as the basis for the development of sound bond (both government and corporate) and derivatives markets.

The money market in Kazakhstan is relatively thin and underdeveloped, which has encouraged banks to seek liquidity adjustment in the foreign exchange market.⁵ A broadening of available instruments and lengthening of maturities could be conducted within the context of a clear and cohesive set of guidelines for liquidity and public debt management. This should be accompanied by the use of a well defined and fully market based interest rate structure. Another important reform would be adopting a government bond issuance schedule that comprises less frequent, but larger auctions of standard longer-term paper. The issuance schedule should be set for a reasonable period of time in advance and be made transparent to the market 6

13. Coordination between the government and the NBK on liquidity management is **crucial to this undertaking.** There is a need for the government to continue to increase its share of domestic securities in the market as the NBK reduces its direct presence, and gains

⁴ See Dowers et al. (2003), and Carmichael and Pomerleano (2002) for a detailed discussion of "first and second generation" reforms to market development. In general, the former pertain to the foundations of market development—the underlying regulatory, legal and infrastructural frameworks—while the latter focus on increasing market activity, liquidity, and instruments traded. Given the existing underlying market foundations in Kazakhstan, the strategic focus should be on promoting "second generation" reforms, with continued enhancements to legal and regulatory frameworks.

⁵ See World Bank (2009).

⁶ Recent analysis in the IMF's 2008 FSAP for Kazakhstan finds that a domestically-derived yield curve should be of a minimum duration of 7 to 10 years.

greater policy traction through the use of indirect policy instruments.⁷ This would enable the NBK to adequately transmit signals to the market so that interbank and deposit/lending rates respond more effectively to the NBK's refinancing rate.

The fiscal needs associated with the anti-crisis measures have encouraged a larger medium-term market in securities issued by the Ministry of Finance (MoF). In the aftermath of the crisis, pension funds were required to hold at least 30 percent of their portfolios in official domestic securities. As in the case of Chile, the pension system in Kazakhstan can provide a stronger basis for increasing domestic liquidity through increased institutional participation. Nevertheless, trading volumes of MoF securities remain relatively low, and appear concentrated at the shorter tenors, underscoring the need for a more vibrant primary market. This lack of secondary market activity is mirrored in the corporate bond market, which remains dominated by financial sector issuers. Indeed, the non-financial corporate sector remains a small player and may benefit over the medium-term from more effective regulation—including enhanced corporate governance, and a sound framework for credit rating and evaluation.

14. Deeper and more liquid domestic bond markets will bring several benefits to the economy. These include a well-defined benchmark yield curve, immediate sources of domestic funding, and avenues for greater monetary transmission.

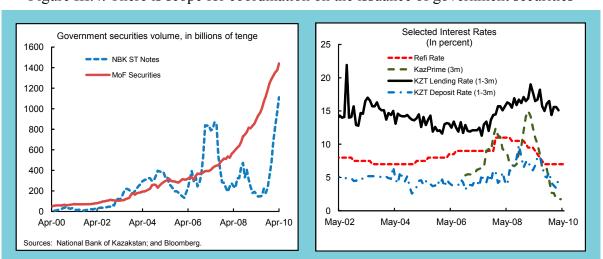


Figure III.4. There is scope for coordination on the issuance of government securities

⁷ In this case, the government should provide clarity as to whether government securities will become the main tool for liquidity management.

⁸ Major pension system reforms were conducted in Chile during the early 1980s, with a focus to gradually increasing investment activity in both domestic and foreign assets.

Moreover, increasing the choice of tenge-denominated securities may contribute to a decrease in the incidence of dollarization since these instruments would facilitate additional tenge lending and provide flexible, alternative investments to U.S. dollar deposit accounts.

15. Looking ahead, the government's medium-term targets provide a natural focus for the development of alternative (domestic) sources of funding. In particular, the planned development of a medium-term fiscal strategy centered on the prudent saving of oil revenues should be marked by a shift toward market-oriented funding of government operations. This requires efforts to deepen and broaden tenge-denominated markets, which may also be supported by international financial institutions—the Asian Development Bank has already issued tenge denominated bonds and there are similar plans reported by the European Bank for Reconstruction and Development.⁹

Derivatives Markets

- 16. The development of the derivatives markets is part of an encompassing mediumterm financial sector reform agenda. In various forms, derivatives provide hedging and price discovery opportunities, helping to boost liquidity and transparency in underlying markets, including those in fixed income and foreign exchange. This has clear implications for the transmission of monetary policy and the costs of government financing. Lessons from the experiences of other countries suggest that derivatives markets must be supported by well functioning domestic money and bond markets, and they must be set within the context of dynamic regulatory, legal and tax frameworks.
- 17. **A key underlying market that may be suitable for developing derivatives operations is the foreign exchange market**. Volatility, market size, and participatory structure are crucial factors to consider. In particular, a high incidence of two-way exposure is a key prerequisite for the success of derivatives activity since it encourages the demand for sound risk management practices. The authorities' commitment to greater exchange rate flexibility and thus domestic market development will facilitate this task. Of course, this must be accompanied by an alternative nominal anchor and appropriate intervention strategy. In the success of derivatives activity since it encourages the demand for sound risk management practices. The authorities' commitment to greater exchange rate flexibility and thus domestic market development will facilitate this task. Of course, this must be accompanied by an alternative nominal anchor and appropriate intervention strategy. In the success of derivatives activity since it encourages the demand for sound risk management practices.

⁹ In an effort to promote the local currency bond market, the ADB issued \$50 million of tenge-denominated (6 billion tenge) bonds in 2007 on the Luxembourg Stock Exchange. The ADB was the first supranational issuer of tenge-denominated bonds.

¹⁰ See Corcoran et al. 2003 and Otker-Robe et al. 2007 for emerging economy experiences, including that of Brazil, a commodity exporter.

¹¹ See Corcoran et al. 2003 for a detailed discussion of the characteristics of underlying markets in derivatives.

¹² See Otker-Robe et al. 2007 for a detailed discussion on the institutional and operational aspects of moving toward greater exchange rate flexibility.

- 18. Beyond the need for greater exchange rate flexibility, key questions revolve around how to initiate productive private sector activity, and in which types of instruments. The central banks of Israel, Chile, and Poland, among others, took various active roles in fostering derivatives market activity in foreign exchange.¹³ However, it is crucial to note that these moves were aimed at stimulating market development, not as direct policy responses to currency mismatches on the balance sheets in the domestic corporate and household sectors. Although the literature details the benefits of exchange rate hedging—including the often consequent decline in credit dollarization—this is typically a positive byproduct of coordinated macro-prudential policies and domestic financial market development.¹⁴
- 19. **The development of traditional** *outright forward markets* is the most appropriate starting point. This is particularly true if there is insufficient market initiative, perhaps resulting from long experiences with heavily managed or fixed exchange rate regimes. Forward operations are conducted over the interbank market, and typically do not require up front margin costs or significant volumes, which facilitates transactions compared to other more complex operations that often develop over time.
- 20. Following the above mentioned country experiences, the NBK could initially be directly involved in the development and operation of forward exchange markets. Given that Kazakhstan is "long in U.S. dollars" from its oil and commodity income, the NBK (or Samruk-Kazyna, or the NBK with funding from Samruk-Kazyna) may be suitably placed to promote greater forward market activity in foreign exchange. The NBK could act as a broker to forward transactions between parties, or as an operator through a commercial bank (providing an advisory role). When deciding on these various potential levels of involvement, the NBK and the government need to consider several factors, including (1) the trade-off between developing the markets and bearing any direct exchange rate risk; (2) the balance between the initial public sector role in the foreign exchange market and the need to foster private sector ownership and innovation, with the latter eventually giving rise to increasingly complex market instruments that are both beyond the scope and desirability of the official sector to develop; and (3) the establishment of a clear exit strategy.
- 21. Initial policy steps typically involve the capitalization of a fund to provide exchange cover to importers to build confidence in the liquidity of the system. The fund is then replenished over time by purchases of forward foreign exchange from exporters. It would be critical, however, that the NBK pre-commit to certain levels of exposure and to the phasing out of its participation over a specific time period, during which it will pass all operations to a commercial bank(s) or suitable market maker (e.g. an large international insurance company). In this respect, the NBK should not "crowd out" competitive private

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¹³ See Otker-Robe et al. 2007 for detailed country experiences.

¹⁴ See Calvo, 2002, 2002, and Luca and Petrova, 2008.

sector behavior, and its operations should be fully transparent and preannounced, as necessary.

22. **Monetary and exchange rate policies should also be supportive of a transition to forward market development.** In particular, exchange rates and interest rates that are significantly out of equilibrium preclude the transition to forward exchange rates on commercial terms. ¹⁵ This underscores the need for highly liquid interbank spot and interest rate markets, and the importance of continuous monitoring of domestic monetary and financial market conditions, especially relative to international market developments. During the early stages of market development, the NBK must also take the lead in providing continuous training to domestic market participants on the functioning and operations of forward and other derivatives market activities.

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D. Coordination Among Policymakers

23. The proliferation of well-functioning domestic financial markets in Kazakhstan requires a high degree of official coordination. This includes coordination through forward-looking fiscal strategies, supportive monetary and exchange rate policies, and enhanced legal, regulatory, and macro-prudential frameworks. Although each agency (MoF, NBK, and FSA) has a respective role to play in the development of a sustainable market infrastructure, there are key areas where enhanced coordination can improve this adjustment and thus help to mitigate the risks associated with foreign currency mismatches on domestic balance sheets.

Developing Local Markets and its Benefit for Monetary Transmission

- 24. **As identified above, the government bond market is the backbone of a deep and liquid domestic fixed income market.** For Kazakhstan, a key medium-term fiscal policy issue relates to the prudent saving of a share of future oil revenues as a means to insulate the economy from global commodity cycles. In this regard, any additional needs for budgetary financing could be covered by domestic debt (rather than from extraordinary oil fund transfers). The increased issuance of domestic government debt, in turn, will provide greater traction for indirect monetary policy instruments as a market determined yield curve develops. This benchmark would also set the basis for encouraging additional markets for domestic debt, particularly for non-bank entities.
- 25. In this setting, a degree of coordination between the NBK and the MoF is required to efficiently balance the market for domestic paper. Importantly, the synchronization of the government's funding needs, debt management strategy, and central bank monetary operations will improve the NBK's position to effectively manage domestic liquidity. High frequency information sharing in areas such as government cash flow

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¹⁵ (Quirk et al., 1988)

projections and deposit access at the central bank are critical for accurate liquidity forecasting and management.

26. The FSA can also play a supportive role by facilitating the participation of domestic institutional investors, namely pension funds, in the markets. This can be achieved through improved prudential regulations geared toward the promotion of diversified asset structures both domestically and abroad. For example, the FSA could apply modern valuation methods and consider whether it is appropriate and timely to grant pension funds permission to participate in derivatives markets, and eventually relax crisis-induced measures—including the minimum portfolio requirement on holding government securities. The concurrent development of liquid foreign exchange forwards markets means that any resultant foreign exchange exposure could be effectively hedged.

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27. Coordination across agencies will promote financial market depth and thus form the basis for gradually enhanced exchange rate flexibility. As such, the NBK will need to upgrade its monetary policy framework, including by reestablishing an effective interest rate corridor and day-to-day liquidity management operations—repo operations, standing facilities (with appropriate penalty rates), reserve requirements, and deposit facilities.

E. Strengthening Regulation

- 28. **High levels of financial dollarization create certain risks that may not be directly addressed in current internationally accepted regulatory standards**. ¹⁶ Therefore, macroprudential frameworks must be adapted to account for the management of exchange rate risk throughout the market, including the ability to *limit, monitor, and measure* such risks. ¹⁷
- 29. **A host of FSA measures, both current and under consideration, seeks to address these challenges**. In particular, the new regulations will aim to directly discourage banks from assuming foreign currency liabilities and assets. These measures will be effected through various forms—NPL reclassifications (and the consequent provisioning effects), changes to capital adequacy ratios, and additional shareholder requirements for deposit taking institutions. While these measures are more geared toward *limiting* foreign exchange risks, further attention must be given to *monitoring* and *measuring* existing (and pending) exposures.
- 30. On *monitoring*, the FSA has begun to collect data on the sources of foreign currency funding that is intermediated domestically. However, increased monitoring of

¹⁶ For example, the Basel Core Principles for Effective Banking Supervision and the Basel Accord for Capital Adequacy provide substantial frameworks for countries with significant foreign currency exposure. However, added vulnerabilities for countries with high levels of dollarization warrant adaptations and enhancements to mitigate these specific and associated risks on a case-by-case basis.

¹⁷ See Duttagupta et al. 2004 for a thorough exposition of these risks and related country experiences.

the corporate and household sectors is required to get a better handle of the indirect exchange rate risks to banks. This can be achieved through regular surveys of these sectors, including information on the sources and currency composition of incomes and other foreign debts, or hedging operations (as in the case of commodity exporters).¹⁸

31. On *measuring*, there is a need to use forward-looking risk management techniques to complement current standard measures of currency exposure—net and gross open positions. This may require the development of standardized models of risk for application across the financial sector, and optimally should be coordinated with the gradual move to increased exchange rate flexibility. Similarly, banks' internal risk procedures should be enhanced to better account for exchange rate exposure, and would be bolstered by improved governance standards.

F. Conclusion

- 32. The global financial crisis has exposed weaknesses in financial sector and regulatory frameworks in many advanced and emerging economies. As a result, the authorities are seeking to strengthen and develop existing frameworks to better insulate domestic financial systems from future shocks. In this regard, Kazakhstan is well-placed to benefit from an encompassing reform agenda geared toward the development of domestic financial markets. In doing so, there is scope for Kazakhstan to effectively leverage from existing frameworks and institutions to minimize the risks associated with foreign currency mismatches on the domestic balance sheets. The key challenge for the authorities in developing a dynamic regulatory framework is to strike the right balance between effective regulation and market development and innovation. This would require careful planning and an effective and transparent communication strategy.
- 33. However, the development of domestic financial markets per se is not a sufficient policy response to reduce credit dollarization and the resultant currency mismatches on domestic balance sheets. Rather, the development of such markets must be accompanied by a sound macro-prudential framework that delivers low and stable inflation and be tightly linked with overall financial sector reform, the design of a medium-term fiscal framework, and the development of monetary and exchange rate policies geared toward lower inflation and increased currency flexibility. This process should be driven by effective communication and close coordination among policymakers.

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¹⁸ Duttagupta et al. 2004.

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