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# **Staff Country Reports**

## **Republic of Kazakhstan: Selected Issues**

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INTERNATIONAL MONETARY FUND

REPUBLIC OF KAZAKSHTAN

**Selected Issues**

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June 2, 2011

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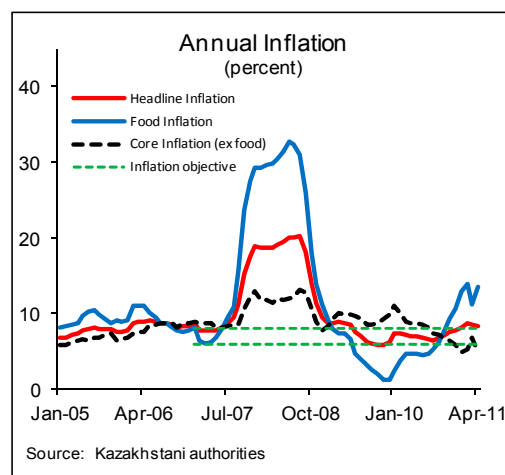
## I. KAZAKHSTAN: RESPONDING TO INFLATION<sup>1</sup>

*Inflationary pressures in Kazakhstan have intensified with the rise of global commodity prices. Given the additional risks to prices from the rapid pace of economic recovery, planned public expenditure increases, and strong capital inflows, a comprehensive policy response is needed to control inflationary pressures. In this regard, the NBK should continue to gradually withdraw monetary accommodation, and clearly communicate the causes and outlook for inflation. In addition, hard-to-reverse fiscal outlays—particularly higher wages—should be avoided, while administrative measures to control inflation should be used cautiously and phased out over time in favor of existing social safety nets. Further ahead, efforts should be undertaken to strengthen the transmission of monetary policy, improve social safety nets, and enhance the economy’s supply response.*

### A. Background

1. **The surge in global commodity prices has revived concerns about inflationary pressures in Kazakhstan.** Annual headline inflation increased to about 8½ percent in April, exceeding the official objective range of 6-8 percent for the fourth consecutive month. The increase in inflation is largely attributable to the pass through of surging global food prices despite the wide use of administrative measures. Domestic food prices grew by 13½ percent year-on-year in April, up markedly from 4¾ percent in July 2010 when the global food price shock began to emerge. Alternative measures of core inflation suggest, on balance, that high food prices have been the main driver of inflation.

2. **Looking ahead, the risks of more broad-based price pressures developing are elevated.** Although demand-led price pressures currently appear contained, Kazakhstan’s economy is recovering faster than anticipated, and the base of growth is beginning to broaden; monetary policy remains accommodative; and short-term capital inflows have recently increased. Moreover, large planned increases in public wages and pensions, and the need to harmonize various tariffs—related to transportation, utilities, and services—with those in the customs union with Russia and Belarus, pose additional risks to inflation and inflation expectations. In addition, while global commodity prices have eased from recent highs, the present context points to a sustained period of volatility of food and oil prices.

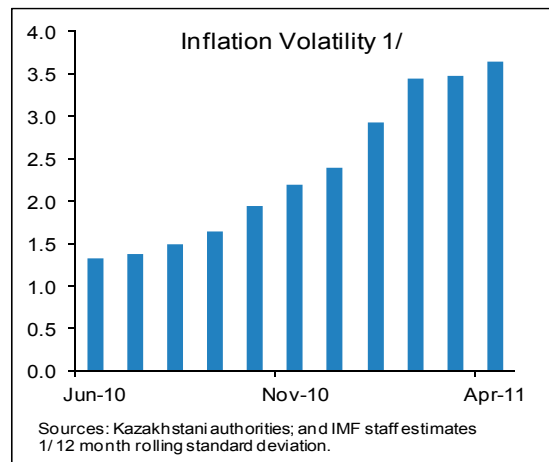


<sup>1</sup> Prepared by Ali Al-Eyd (MCD).

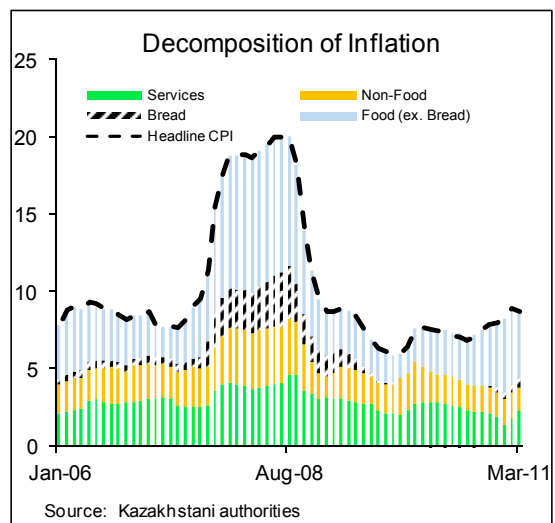
3. **Against this background, this chapter examines the short-term drivers of inflation in Kazakhstan.** In particular, a small dynamic model capturing both supply (food price shocks) and demand factors is estimated. The findings suggest that shocks to food prices have considerable effects on headline inflation, while the impact from traditional demand factors is also significant, if somewhat less pronounced. Moreover, evidence of second round price effects is detected through both the impact of lagged core inflation and the transmission of food price effects to core inflation. The findings presented in this chapter underscore the need for a comprehensive policy response to control inflationary pressures.

## B. Inflation Developments: A Large Role for Food

4. **Inflationary pressures began to emerge following the unexpected surge in global wheat prices in mid-2010.** Although headline inflation averaged about 7 percent year-on-year during the second half of 2010, domestic food inflation more than doubled to 10½ percent over this period. This resulted in a marked rise in the volatility of food inflation—driven by key staple items, notably bread products—and thus an increase in the volatility of headline inflation. As the prices of other major commodities began to increase, the pressure on headline inflation intensified, causing it to exceed the upper bound of the 6-8 percent objective range by January 2011.

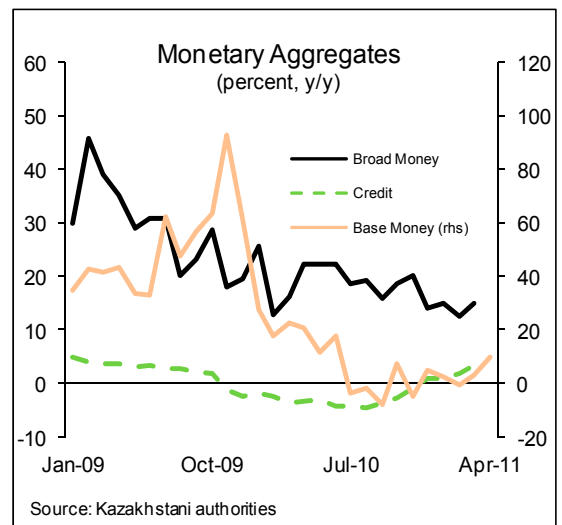
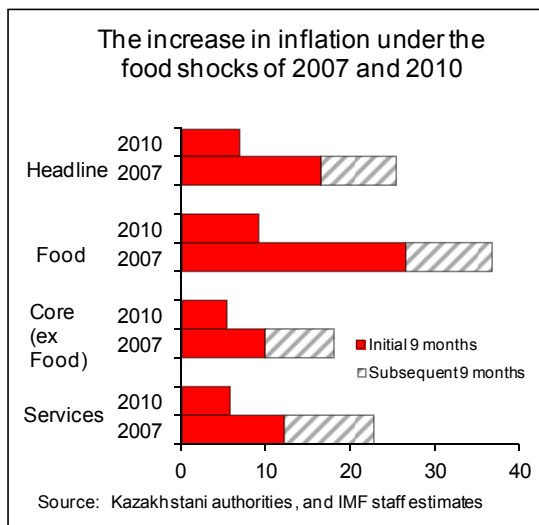


5. **The link between global food prices and headline inflation appears strong.** As in other emerging and developing economies, food accounts for a large share of the consumption basket in Kazakhstan (38.8 percent). Bread products alone account for nearly 9 percent, providing a strong, direct channel from the spike in global wheat prices to headline inflation and inflation expectations. A decomposition of the factors contributing to headline inflation shows the relatively high contributions of food and bread (or wheat-related) products. Indeed, domestic food prices appear to adjust quickly and in line with changes in global food prices. Non-food and services prices also tend to rise over the same periods, signaling the onset of second-round effects, although their response is somewhat more contained.



6. **Although the current global food shock appears less pronounced than during 2007-08, the risks to global commodity prices remain to the upside.** A comparison of the inflation effects during the initial nine months of the two global food shocks suggests that the current shock is more moderate. The cumulative increase in headline inflation is less than half of that experienced during 2007-08, while the impact on food inflation is about one-third. Nevertheless, the current global commodity shock remains persistent, with only modest declines in the prices of major commodities from recent highs. Moreover, the combination of low global food inventories, ongoing risks to oil prices, and supportive global demand conditions underscore the prospects for continued volatility of commodity prices.<sup>2</sup>

7. **Demand factors do not appear to have contributed meaningfully to the recent pickup in inflation.** The economic recovery in Kazakhstan has largely been driven by extractive industries and a few related sectors, such as transportation and communications. Key domestic drivers of pre-crisis growth—such as construction, real estate, and investment—remain subdued, reflecting the ongoing difficulties in the banking system and private sector deleveraging. As a result, domestic credit growth contracted through most of 2010, and remains negative in real terms, while the growth of monetary aggregates remains contained despite the continued large increases in public wages.



<sup>2</sup> See World Economic Outlook, April 2011 for a detailed discussion on the commodity price outlook.

### C. Estimating Short-Run Drivers of Inflation

8. **The role of non-monetary factors—namely food price shocks—in contributing to inflation in Kazakhstan appears to be significant.** A small dynamic model for inflation is estimated with quarterly data to capture both supply and demand factors. In addition, an alternative model is specified to explore the potential impact of food price shocks on core inflation. The combined results help to determine the key short-term drivers of inflation in Kazakhstan, and also shed light on the prospects for second round price effects, underscoring the implications for macroeconomic policies. The first model takes the following form:

$$\pi_t = \beta_0 + \beta_1(L)\pi_{t-1} + \beta_2(L)\hat{O}_t + \beta_3(L)\Delta m_t + \beta_4(L)\Delta u_t + \beta_5(L)\Delta e_t + \beta_6(L)(\pi f_t - \pi_{t-1}) + \varepsilon_t. \quad (I.1)$$

9. **The underlying specification given in (I.1) is common in the literature.** In particular, it can be traced to a standard augmented Phillips curve, reflecting the combination of a wage equation and price markup equation, as in Gordon (1985).<sup>3</sup> Here,  $\pi_t$  is quarterly inflation,  $\hat{O}_t$  is the output gap,  $m_t$  is broad money, and  $u_t$  are unit labor costs. Lower case letters denote logarithms,  $\Delta$  is the difference operator,  $(L)$  is the lag operator, and  $\varepsilon_t$  is an *iid* error term. Following Mohanty and Klau (2001), the model is augmented with supply-side variables: the change in the nominal Tenge/\$ exchange rate,  $\Delta e_t$ , to capture import price effects (where a rise indicates depreciation), and a food price shock (or supply shift factor),  $(\pi f_t - \pi_{t-1})$ , where  $\pi f_t$  is domestic food inflation. All parameters ( $\beta_1 \dots \beta_6$ ) are expected to be positive.

10. **The preferred model shows that food prices are the main short-term determinant of inflation (Table I.1).** The sample period covers 2002Q2-2010Q3, and the standard tests for robustness are confirmed.<sup>4</sup> Model [1] finds that both demand and supply factors are significant, but it is clear that food price shocks dominate. The variable capturing food prices is significant at the 99 percent level, and has a magnitude of 0.51, suggesting that about half of a food price shock passes through to headline inflation over the near-term.<sup>5</sup> In

<sup>3</sup> The wage (or unit labor cost equation) is assumed to be a function of lagged inflation, the unemployment rate, the productivity gap, and supply shift factors. The price markup equation is similarly defined (see Appendix).

<sup>4</sup> The Breusch-Godfrey test confirms no serial correlation up to the fourth order, White's test does not indicate heteroskedasticity, and the Chow Breakpoint test shows no parameter instability at the midpoint of the sample. As a further test for parameter stability, a recursive one-step-ahead forecast test was conducted and the residual plot indicates that the estimates exceed the standard error bands in the first two quarters of 2006. However, the remainder of the sample is well within the tolerance bands.

<sup>5</sup> A term capturing energy price shocks was also considered, but found to be insignificant in the estimation. This likely reflects the fact that Kazakhstan is an energy producer, and also that it maintains various price regulations on energy products, which together limit the impact of rising global oil and energy prices on inflation.



addition, the exchange rate, while significant at only the 10 percent level, has a large magnitude impact as well. Unit labor costs, also appear important, but impact with a lag of about one year. Given the weight that food carries in the consumption basket, as well as the direct role that food prices and the exchange rate have on inflation expectations, it is not surprising to find these as important drivers of short-run inflation in Kazakhstan, as is commonly found in other emerging economies (see BIS, 2001).

Table I.1: Short-term Drivers of Inflation in Kazakhstan

	[1]	[2]	[3]
	Inflation	Inflation	Core Inflation 1/
L1 Inflation	0.47 [0.033]*		
L1 Core Inflation		0.55 [0.124]*	0.19 [0.088]*
L2 Core Inflation			0.20 [0.086]*
Output Gap	0.02 [0.007]**	0.03 [0.016]**	
LD4 Unit Labor Costs	0.03 [0.016]**		
LD1 Exchange rate	0.04 [0.013]**		
Food Price Shock	0.51 [0.023]*	0.50 [0.056]*	0.36 [0.037]*
Constant	0.01 [0.001]*	0.01 [0.002]*	0.01 [0.002]*
Observations	34	34	35
SE Regression	0.002	0.004	0.004

1/ Excluding food.

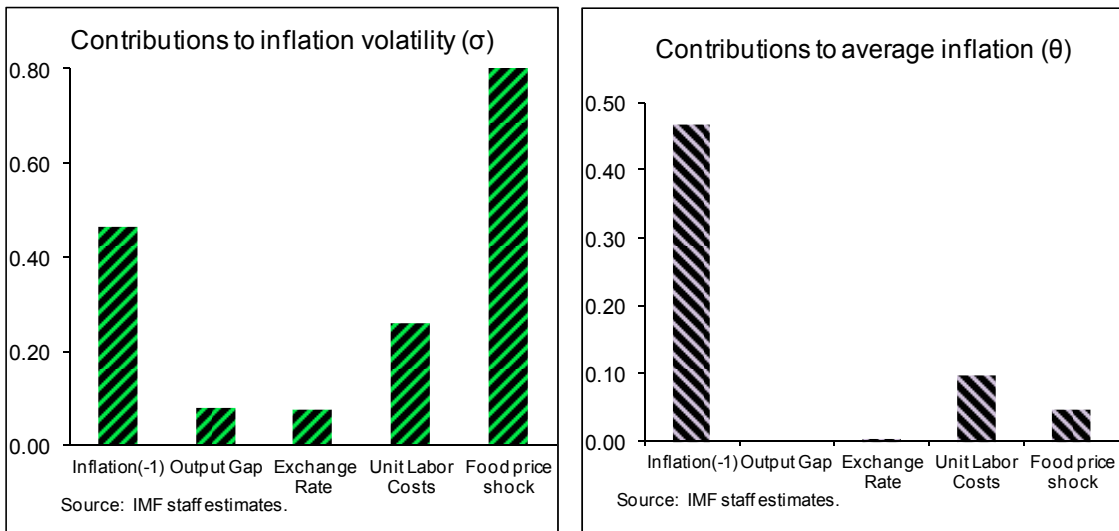
Robust standard errors in brackets.

\* significant at 1%; \*\* 5%; \*\*\* 10%

11. **The role of demand factors in short-run inflation dynamics is rather limited.** The level of significance and magnitude of the output gap in Model [1] are weak as compared against the supply variables. This is likely attributable to a combination of factors, including the measurement errors associated with output gap estimates, as well as the known difficulty of adequately capturing demand dynamics through the output gap in emerging economies. Perhaps surprisingly, money growth was not found to be significant in the final model. However, given the relatively high degree of dollarization, the early stages of financial market development, and uncertainty over stability of money demand, the link between

monetary variables and inflation could be blurred in the short-run, and thus not readily captured in this model specification.

**12. Assessing the contributions of demand and supply factors to inflation further underscores their relative importance.** Using the results from Model [1], the contributions of the estimated determinants to inflation dynamics are measured. Two metrics are considered: contributions to the volatility of inflation ( $\sigma$ ), and contributions to the mean value of inflation ( $\theta$ ).<sup>6</sup> It is clear from the figures that the output gap (the demand factor) has a limited role in contributing to the volatility of inflation or average inflation. The food price shock, however, shows a marked contribution to inflation volatility, but much less to average inflation, as might be expected given its definition as a shock variable. Unit labor costs and inflation persistence (denoted by lagged inflation) are important drivers of inflation volatility and average inflation, while the exchange rate is rather limited across measures.



**13. In order to explore the scope for second round inflationary effects, additional exercises were considered.** First, Model [2] was estimated by replacing lagged inflation in Model [1] with lagged core inflation (excluding food).<sup>7</sup> The results in Table I.1 underscore the presence of feedback effects running from core inflation to headline inflation, and reinforce the persistence of inflation observed previously.<sup>8</sup> Indeed, the impact of core

<sup>6</sup>As in Mohanty and Klau (2001),  $\sigma$  is calculated as the ratio of the standard deviation of each determinant multiplied by its coefficient estimate to the standard deviation of inflation, while  $\theta$  is calculated as the ratio of the mean of each determinant multiplied by its coefficient estimate to the mean rate of inflation.

<sup>7</sup> See Habermeier et. al (2009) for a similar exercise conducted for a panel of emerging economies.

<sup>8</sup> Note, given that the food price shock is defined using lagged inflation, in general it may not be possible to take the coefficient on lagged inflation as an unbiased estimate of inflation persistence. However, alternative exercises were conducted using a simple autoregressive model for inflation, confirming the relative magnitude of inflation persistence found in Model [1].

inflation is notably larger in Kazakhstan than found in similar studies for other emerging economies, suggesting that the emergence of second round price effects could prove challenging to quickly reverse (see Habermeier et. al, 2009). Second, given the strong role of food prices observed in Model [1], a simple AR model was specified to shed light on the potential transmission from food price shocks to core inflation.<sup>9</sup> The results for Model [3] suggest that domestic food prices have a significant effect on core inflation, reinforcing the risks to inflation persistence identified in Model [2].<sup>10</sup> However, as might be expected, the impact is somewhat less (about two-thirds) than observed for headline inflation. In practice, however, the transmission from food price shocks to core inflation is likely to be blurred by the use of administrative measures.

**14. On balance, the results underscore the importance of supply factors in determining short-run inflation, and suggest several directions for policy.** First, food price shocks (driven by external factors) tend to dominate inflation dynamics, and can thus cause a large short-run divergence between headline and core inflation. This suggests that monetary conditions could become distorted if policy were to focus solely on core inflation, leaving room for inflation expectations to become decoupled from policy objectives, and ultimately requiring a tightening of monetary policy that could negatively affect output growth. As such, there is scope for monetary policy to respond to rising headline inflation when there is a large externally-driven divergence between core and headline inflation. In addition, this suggests that greater exchange rate flexibility, coupled with efforts to enhance the economy's supply response, would help facilitate adjustment to external shocks. Second, wages appear to have a significant role, particularly with regard to contributions to average inflation. This underscores the need to promote productivity and labor market flexibility, particularly given the prospect for additional public wage increases. It also highlights the importance of avoiding further excessive wage increases.

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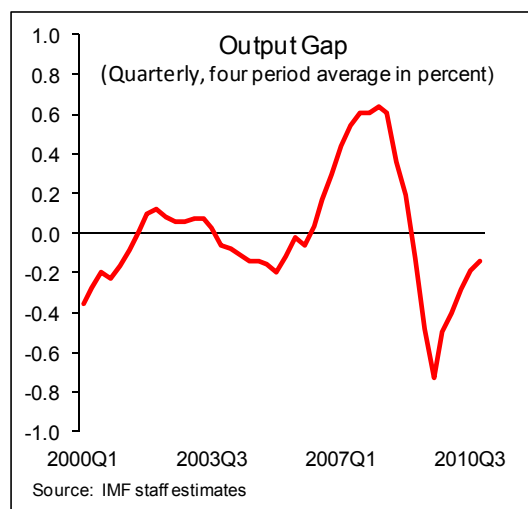
<sup>9</sup> Model [3] was found to comply with the standard robustness tests discussed above.

<sup>10</sup> Additional exercises were conducted to establish the potential impact of food price effects on core inflation. First, using Model [1], headline inflation was replaced with core inflation as the dependent variable. The estimation confirmed strong food price effects on core inflation, with a magnitude of around two-thirds of that observed for headline inflation. Second, using Model [3], the food price shock ( $\pi f_t - \pi_{t-1}$ ) was replaced with headline inflation,  $\pi_t$ . The results are quite similar to those of Model [3], showing a large, significant impact of headline inflation on core inflation. While these additional exercises suggest the transmission of food price shocks to core inflation, both directly and via headline inflation, additional research along this avenue would be warranted.

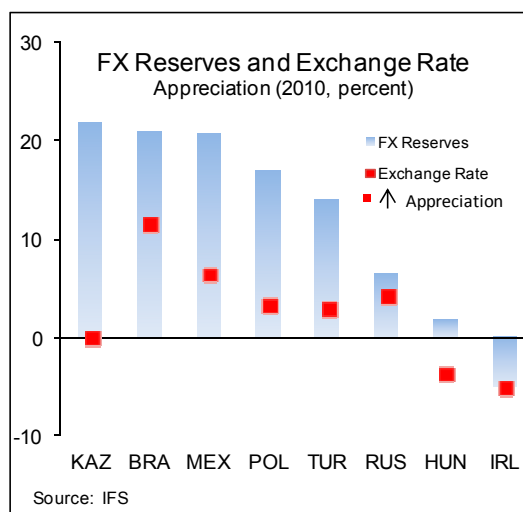
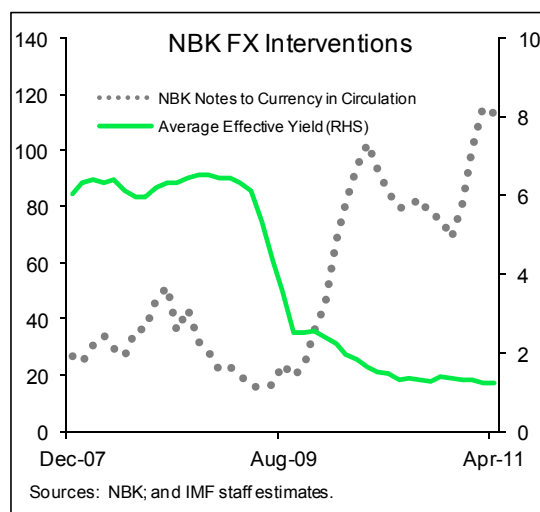
## D. Mounting Inflation Risks

### 15. Current economic conditions point to more pronounced effects on inflation.

Kazakhstan's economy has rebounded sharply, growing by 7 percent in 2010 from 1¼ in 2009, suggesting that the output gap is quickly closing. While this is largely driven by extractive industries, the base of growth is becoming more broad based, the authorities are implementing their ambitious development plans, and targeted support to hard hit sectors continues. Moreover, incomes have increased in the wake of the crisis and official data suggest that the labor market is tightening, with unemployment at an historic low of 5½ percent (compared to about 7½ percent prior the crisis).

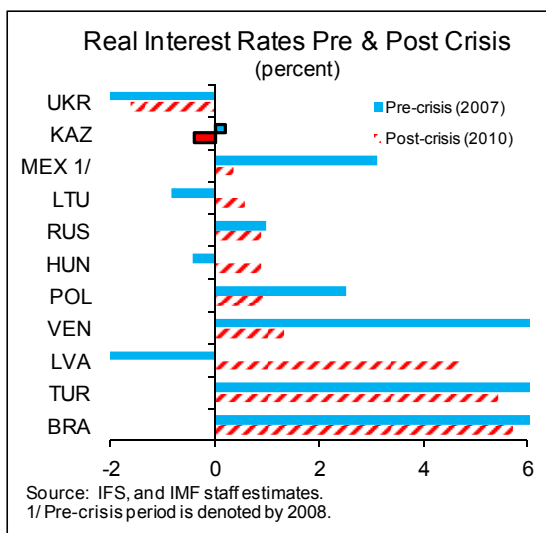


**16. Short-term capital inflows have increased recently.** The rebound in global oil prices and associated appreciation of the Russian ruble has contributed to increased foreign exchange inflows and speculative appreciation pressures on the tenge. The NBK engaged in heavy sterilized intervention during the early part of 2011 to maintain the relative stability of the tenge, mirroring the situation of early 2010, and resulting in a large build-up of FX reserves. While the tenge has gained little more than 1 percent (in nominal terms) against the U.S. dollar since January, the amount of outstanding NBK short-term notes has surged, increasing by nearly \$4 billion to almost \$10 billion (or 113 percent of currency in circulation) in the year through April. As a result, the growth of monetary aggregates has remained somewhat contained, but it could prove challenging to maintain the current pace of intervention despite the declining yield on these notes.



## E. Ongoing Policy Response

17. **Macroeconomic policies remain supportive of growth.** Despite the recent 50 bp hike in the policy rate to 7.50 percent, the monetary stance remains accommodative. Real interest rates<sup>11</sup> are negative, declining since the start of the crisis, and reserve requirements on both domestic and foreign currency deposits are at historic lows. Domestic market rates are also low relative to pre-crisis levels, with the three-month interbank rate hovering around 1.7 percent, and the (average weighted) deposit and lending rates at 3.6 and 12.4 percent, respectively. At the same time, banks remain flush with liquidity, holding approximately \$11-12 billion in correspondent accounts at the NBK. While the authorities plan a gradual fiscal consolidation from 2011, public wages and pensions will be increased by 25-30 percent (for the third consecutive year), and increased expenditure on the development program is under way.



18. **The authorities have relied mainly on administrative measures to limit the impact from higher global commodity prices.** The swift adoption of targeted administrative measures—export bans, moral suasion, signed memoranda with producers, and the activation of the state grain reserve, among others—mitigated the immediate pass-through to headline inflation as food prices increased in mid-2010. However, such measures are unsustainable, undermine the role of market forces, and present undue fiscal costs. Moreover, these measures have had only a limited effect as headline inflation has recently become elevated and food prices have continued to rise.

19. **A combination of factors, including structural and institutional features, has conditioned this policy response.** First, so far, there has been little observed pass-through from rising global food prices to core inflation. Second, the heavy reliance on administrative measures in general reflects the limited traction of monetary policy (caused by high dollarization and low financial market development), and thus a legacy of heavy government intervention. Third, it also reflects a lack of domestic competition and productive capacity across industries, notably in agriculture and food production. Finally, institutional shortcomings limit the efficient administration of targeted social assistance.

<sup>11</sup> The real interest rate measured using the policy rate and headline inflation is negative.

## F. Policy Considerations and Conclusions

**20. Kazakhstan is facing increased challenges from higher global commodity prices.** While the signs of second round inflationary effects are currently limited, the marked rise in food prices and headline inflation pose risks to inflation expectations. This comes as the economic recovery is gaining speed, spending on the development plan is accelerating, and macroeconomic policies remain in an accommodative mode. However, this also comes at a time when the difficulties in the banking and corporate sectors remain significant and call for continued post-crisis support. The authorities have relied mainly on administrative measures to mitigate the effects from rising global food prices. Nevertheless, such policies are not sustainable, could create market distortions, and are unlikely to prove effective in the context of prolonged commodity price volatility and increasing scope for demand-led price pressures.

**21. Against this background, an encompassing policy response is needed to control inflation and mitigate the scope for second round price effects.** In the near term, policymakers should consider the following measures:

- *Gradually remove the accommodative bias in monetary policy that was necessary during the crisis.* Monetary policy needs to be well positioned to respond to more broad-based price pressures, underscoring the need to establish a neutral, if not slightly restrictive, monetary stance. The NBK's readiness to manage a possible increase in the inflow of short-term capital would benefit from enhanced liquidity management (in coordination with the Ministry of Finance) and implementation of the announced macro-prudential enhancements, including graduated provisioning requirements against lending in foreign currency to unhedged borrowers.<sup>12</sup>
- *Improve the communication of monetary policy.* NBK policies would be better supported by anchored expectations. Monitoring inflation closely, clearly communicating the current and expected causes of inflation, and reinforcing the commitment to maintaining the current objective range, are key steps in this regard.
- *Establish a prudent fiscal stance.* Fiscal policy should support price stability and guard against procyclicality, while balancing the need to maintain essential support to vulnerable sectors of society. To this end, existing social safety nets should be employed.
- *Use administrative measures cautiously.* Given the near-term impediments to administering well-targeted social assistance, administrative measures have provided some relief from rising prices. However, such measures should remain selective and time bound.

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<sup>12</sup> Regulatory and prudential responsibilities now reside with the NBK following the recent integration of the Financial Supervision Agency.

22. **Looking further ahead, structural reforms efforts would enhance Kazakhstan's resilience to external shocks.** The aim should be to reduce the economy's dependence on administrative measures through the following actions:

- *Improve monetary policy efficiency.* This involves strengthening the monetary toolkit, including by promoting the development of domestic financial markets and competition in the banking sector. In addition, greater exchange rate flexibility would enhance the traction of monetary policy and economy's ability to adjust to external shocks.
- *Develop adequate social safety nets.* Current institutional arrangements would benefit from proper identification and timely provision of well-targeted assistance to the most vulnerable in society.
- *Enhance the economy's supply response.* Continued implementation of structural measures aimed at improving competitiveness, promoting agricultural productivity, and labor market flexibility, some of which are embedded in the Development Plan, would help prevent inflationary shocks in the future.

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## ANNEX I.1 MODEL AND DATA SPECIFICATIONS

### *Model and data specifications*

The equation given by (1) reflects the combination of standard wage and price markup equations, and has been augmented here to better account for features of emerging economies (see Mohanty and Klau, 2001). In particular, productivity growth was excluded due to data limitations, the output gap was used as a proxy for labor market conditions, and money growth was introduced to better account for demand developments.

Apart from the output gap, the data used in equation (I.1) are quarterly changes in the variables, ensuring stationarity. The data are seasonally adjusted, and the period covers 2002Q1—2010Q3. Inflation,  $\pi_t$ , is defined as the (log) quarterly change in the CPI, while core inflation is similarly defined using CPI-excluding food. The output gap,  $\hat{O}_t$ , is defined as the deviation of actual output from potential output. Potential output is estimated using the common Hodrick-Prescott filter. Unit labor costs,  $u_t$ , are derived using average nominal wages, employment, and output.

The food price shock ( $\pi f_t - \pi_{t-1}$ ) is defined as the difference between domestic food price inflation and headline inflation from the previous period. This avoids any potential endogeneity problems arising from regressing inflation on its components. A similar term was defined for energy price inflation, but was not found significant in the final model specification.

## II. TRADE IN KAZAKHSTAN: RECENT TRENDS AND THE CUSTOMS UNION<sup>1</sup>

*During the last two decades Kazakhstan has become more open to international trade, as tariff and non-tariff barriers have been lowered. Exports are dominated by fuel and energy, while imports consist primarily of machinery and food. China, Russia and the EU are the key trading partners, while trade with Central Asia remains low. The recently created customs union with Russia and Belarus can bring benefits from greater access to markets, but can also lead to trade diversion, as tariffs have been increased. The remaining impediments to trade are mainly institutional in nature, and need to be addressed as a matter of priority.*

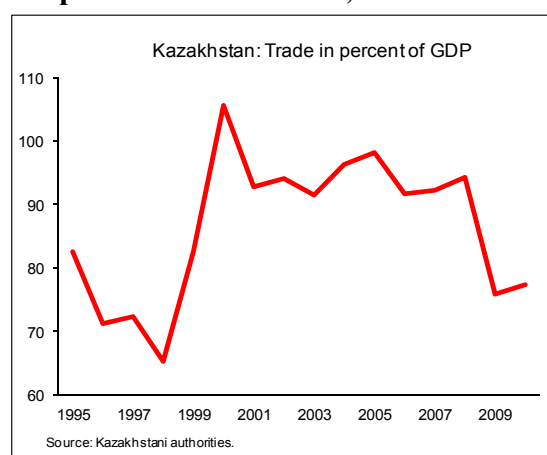
### A. Introduction

1. **The radical transformation that followed the break-up of the Soviet Union had a large impact on trade between the former soviet republics and with the outside world.** The old trade mechanisms such as the Council of Mutual Economic Assistance (CMEA) were dismantled, and payment and clearance procedures discontinued (Elborgh-Woytek, 2003, IMF, 1991). The newly independent states had to integrate themselves into the world economy, create new currencies, and establish new trade patterns. Trade was also initially undermined by a severe recession.

2. **This chapter looks at Kazakhstan's trade 20 years after its independence.** It first looks at the increase in openness achieved during that period. It then turns to the structure and geographical pattern of Kazakhstan's trade and discusses the recent trends. With this background, the chapter discusses the developments and possible implications of the recently created customs union between Kazakhstan, Russia and Belarus. Finally, some suggestions are made on ways to further encourage trade and make it more efficient by removing remaining impediments, which appear to be mainly of institutional nature.

### B. Growth in Trade

3. **In the almost two decades since the break-up of the Soviet Union, Kazakhstan has gradually become more open to international trade.** The increase in openness has not been linear, and was interrupted by various adverse events. The standard indicator of trade openness (measured as the ratio of total trade in goods and services to GDP), which dropped from around 80 percent in mid-1990s to slightly over 60 percent in the aftermath of the 1998 financial crisis, rebounded strongly in



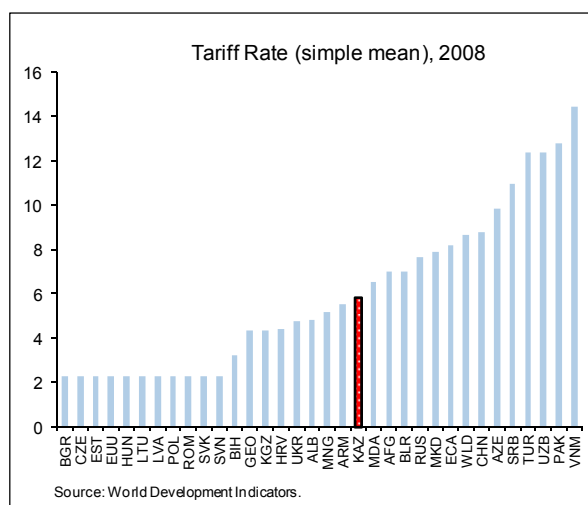
<sup>1</sup> Prepared by Dmitriy Rozhkov (MCD).

the 2000s, and remained between 90 and 100 percent for most of the decade. This increase was mainly driven by exports, which reached 56 percent of GDP in 2008.

4. **As in the rest of the world, Kazakhstan's trade contracted significantly during the 2008-09 financial crisis.** The crisis in Kazakhstan started early relative to the rest of the world, and had a significant negative impact on the banking system. Empirical evidence shows that in such events, trade of the crisis economies (especially imports) tends to fall substantially in the short term – beyond what would be expected from the decline in output – and then stay depressed through the medium term (IMF, 2010). In line with this tendency, Kazakhstan's trade contracted markedly during the crisis, but is now starting to gradually recover, although not yet to the pre-crisis levels. Given the severity of the crisis, however, this contraction does not change the overall perception of the increasing trend in openness.

5. **The increase of trade openness in 2000s coincided with Kazakhstan becoming a major oil producer and exporter.** Oil production started in 2000, and by 2010 it exceeded 82 million tons per year (about 1.7 million barrels a day). Therefore, a big share of the increase in trade was driven by oil exports, as well as increased exports of gas, metals, and several other commodities. In value terms, exports of oil increased from 43 percent of total exports in 2002 to 57 percent in 2010.

Nevertheless, the increase has also likely reflected the genuine tendency toward trade liberalization. Both tariff and non-tariff barriers were reduced, and the index of trade freedom increased significantly, outpacing the increase in the index of overall economic freedom (Table II.1).<sup>2</sup> Before the creation of the customs union in 2010 (section D), Kazakhstan's average tariff rate was relatively low at around 5 percent, and compared favorably with many other transition and emerging economies.



<sup>2</sup> The Heritage foundation index of trade freedom (Table II.1) is calculated using a combination of measures on trade-weighted average tariff rates and the existence of non-trade barriers. The latter include quantity and price restrictions; regulatory restrictions such as licensing; investment restrictions, including exchange and other financial controls; customs restrictions; and direct government intervention, such as subsidies and other aid. The overall index of economic freedom combines indices of business, trade, fiscal, monetary, investment, financial, labor freedoms, as well as indices of government spending, property rights and corruption.

6. **Further efforts in the direction of trade liberalization are under way.** Along with other Central Asian countries, Kazakhstan participates in the Central Asian Regional Economic Cooperation Program (CAREC), where the members have undertaken mutual commitments to further reduce and simplify trade tariffs, and significantly reduce or eliminate non-tariff barriers. Under the CAREC Program, these measures are seen as steps toward eventual WTO membership for all members.<sup>3</sup> Kazakhstan aims at becoming a member in 2012. Furthermore, like in many other countries in the region, the authorities pursue an economic development policy that encourages export promotion and supports exports through tax exemptions.

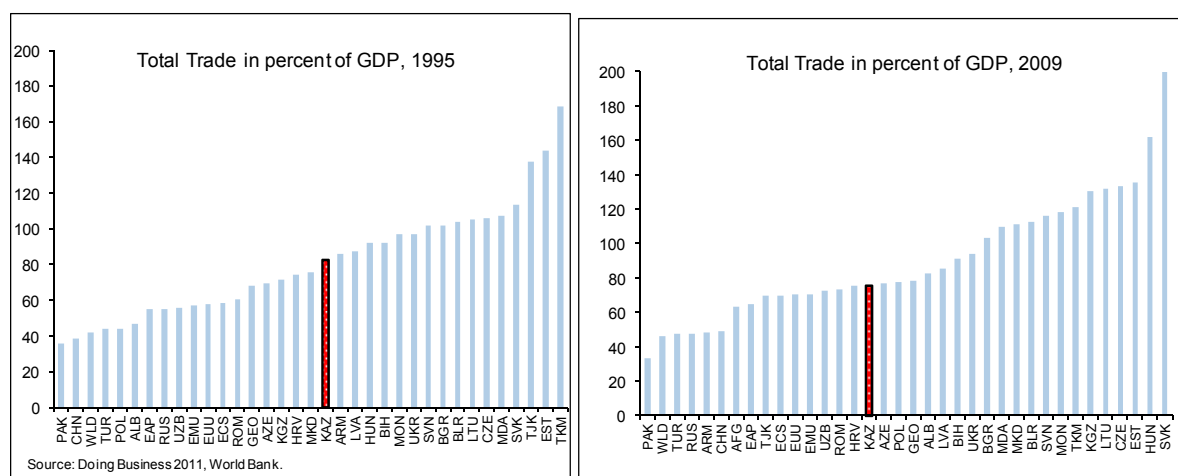
Table II.1. Indicators of Trade and Economic Freedom

	Trade freedom index		Trade freedom rank	Economic freedom index		Economic freedom rank	Trade to GDP ratio (percent)	Average tariff	WTO membership
	2000	2011	2011	2000	2011	2011	2009	Latest	
<b>CCA</b>									
Armenia	77.0	85.5	43	63.0	69.7	36	48.4	2.8	Yes
Azerbaijan	55.0	77.1	90	49.8	59.7	92	77.3	8.9	No
Georgia	69.0	89.2	6	54.3	70.4	28	78.5	1.3	Yes
<b>Kazakhstan</b>	<b>67.0</b>	<b>80.9</b>	<b>74</b>	<b>50.4</b>	<b>62.1</b>	<b>78</b>	<b>75.8</b>	<b>5.9</b>	<b>No</b>
Kyrgyz Republic	65.2	63.2	147	55.7	61.1	83	130.6	4.6	Yes
Tajikistan	75.0	82.5	64	44.8	53.5	128	69.8	7.9	No
Turkmenistan	25.0	79.2	82	37.6	43.6	168	121.4	n.a.	No
Uzbekistan	50.0	66.2	140	38.1	45.8	164	72.8	15.9	No
<b>Selected CEE</b>									
Czech Republic	72.0	87.6	12	68.6	70.4	29	133.3	2.3	Yes
Estonia	85.0	87.6	12	69.9	75.2	14	135.8	2.3	Yes
Hungary	76.6	87.6	12	64.4	66.6	51	161.7	2.3	Yes
Latvia	81.0	87.6	12	63.4	65.8	56	85.3	2.3	Yes
Lithuania	81.0	87.6	12	61.9	71.3	24	131.9	2.3	Yes
Poland	74.8	87.6	12	60.0	64.1	68	77.7	2.3	Yes
Russia	52.4	68.2	134	51.8	50.5	143	48.1	7.7	No
Ukraine	70.0	85.2	46	47.8	45.8	163	94.3	4.8	Yes

Source: Heritage Foundation; World Development Indicators.

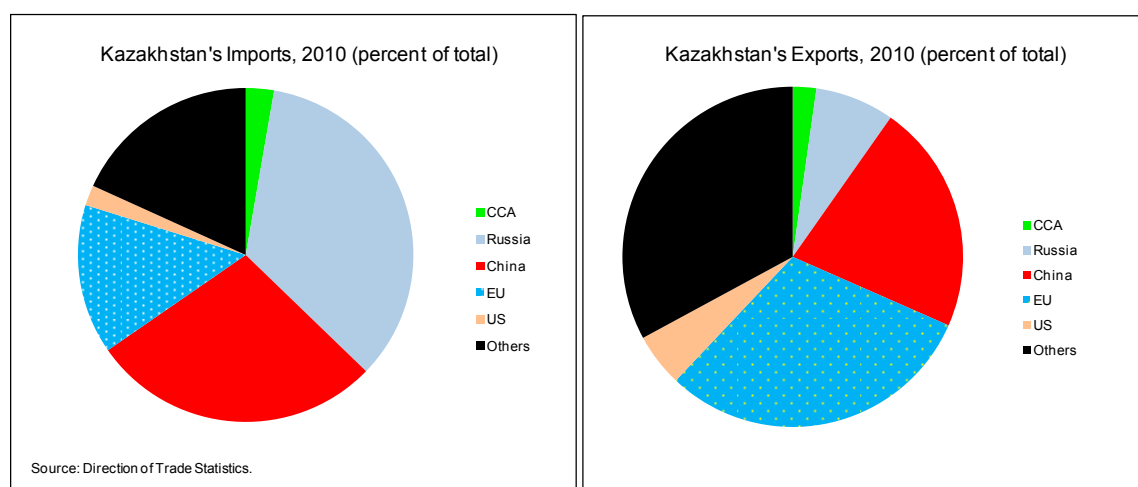
7. **The increase in trade openness during 2000s was not unique to Kazakhstan.** Similar trends were exhibited by other transition economies, including the CCA countries. As a result, the relative position of Kazakhstan in trade openness among economies in transition was roughly the same in 2008 as in 1995, and then deteriorated slightly in 2009, when both exports and imports fell sharply during the crisis.

<sup>3</sup> Among the Caucasus and Central Asia (CCA) countries, the Kyrgyz Republic became a member of the WTO in 1998, Georgia in 2000, and Armenia in 2003. All other CCA countries except Turkmenistan are in the process of negotiating the membership, albeit with the different degree of intensity.



### C. Composition and Direction of Trade

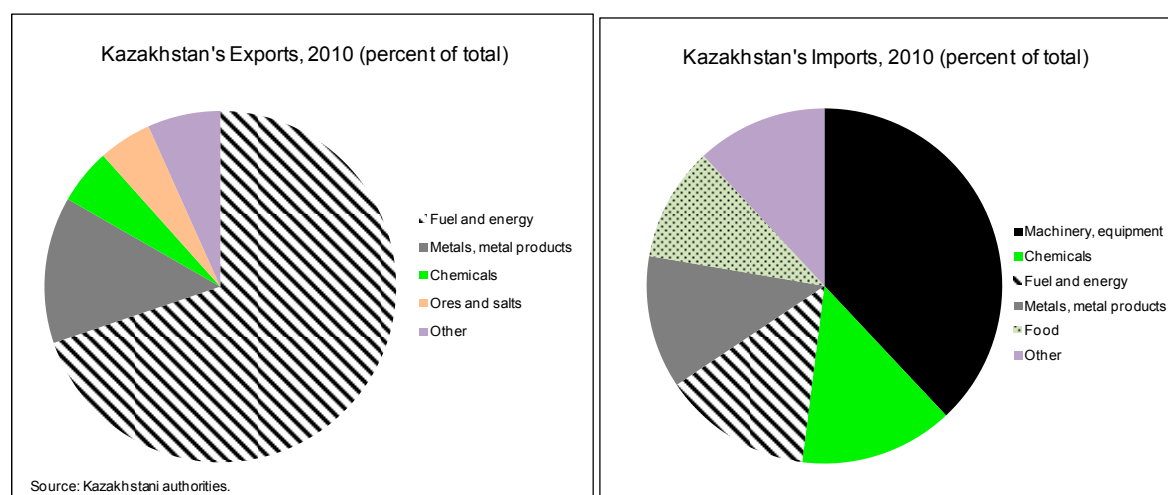
8. **The geographical pattern of Kazakhstan's trade has also undergone significant changes in the last decade.** The most visible trend is the rapidly growing importance of China, especially for imports. Given the proximity of China and its increasing role in the global economy, this trend is not surprising. In fact, the same trend is visible in virtually all Central Asian countries, and in Central and Eastern Europe as well. For energy producers in the region (Kazakhstan and Uzbekistan), China has also become the major destination for their exports (primarily oil and gas). At the same time, the relative weight of Russia as a trading partner continued to decline, especially as a destination for exports. Nevertheless, Russia and the EU, along with China, remain the key trading partners for Kazakhstan.



9. **Another prominent feature in Kazakhstan's trade is the very low share of CCA countries among its trading partners.** In 2010, this share was about 3 percent for both exports and imports. The possible explanations include the high share of fuel and energy in Kazakhstan's exports (with supplies directed primarily toward Europe and China), and the higher per capita income of Kazakhstan in relation to the other CCA countries, which

explains the large share of machinery and food in Kazakhstan's imports and skews these imports in favor of China, Europe and Russia.

**10. The relatively low trade with other CCA countries makes Kazakhstan an outlier from the overall CCA pattern.**<sup>4</sup> In general, trade between CCA countries has been picking up during the last decade, in line with the overall growth of trade, although it still remains somewhat below the level that could be expected, given the small size of these economies and their geographical proximity to each other. Following the period of breakdown of traditional centrally planned trade flows between the republics of the Soviet Union, trade between these countries is now probably settling at new equilibrium levels. Statistics in this area are not totally reliable, since part of the trade between CCA countries, especially those with common borders, happens through informal channels and is therefore not registered. Statistics can also be somewhat obscured by re-exports of goods, primarily from China, by some Central Asian countries.



**11. The product structure of Kazakhstan's trade has remained more or less unchanged since early 2000s.** Kazakhstan remains an exporter of fuel and energy and an importer of machinery and food products (although domestic agriculture also accounts for a substantial share of GDP, and Kazakhstan is an important exporter of wheat). The new Development Plan to 2020 envisages an increase in the share of manufacturing in GDP, as well as measures to increase productivity in agriculture. Efforts will be directed to improving the business environment, modernizing enterprises, creating new high value added export-oriented sectors, and providing selective support to key industries, including telecommunications and transport. The impact of these measures on the structure of Kazakhstan's trade remains to be seen.

<sup>4</sup> Another notable outlier is Azerbaijan, also a large energy producer and exporter. When Kazakhstan and Azerbaijan are excluded, intra-CCA trade accounts for about 15 percent of total exports and imports of the region, still a relatively low number, but significantly above that for Kazakhstan.

## D. The Customs Union with Russia and Belarus

12. **In November 2009, the governments of Belarus, Kazakhstan and Russia signed an agreement to create a customs union.** The authorities see it as the first step to a single economic space, which they plan to create by 2012.<sup>5</sup> While driven primarily by political considerations, this new arrangement is intended to maximize the benefits of the already strong trade relationship and an enlarged market. The agreement came into force in January 2010, when the three countries eliminated most duties on mutual trade, and moved to harmonize customs rules. In July 2010, member countries adopted a common customs code, finalized customs rules, and began to redistribute collected duties.<sup>6</sup>

13. **As noted above, Russia is already a key trading partner of Kazakhstan, accounting for about 20 percent of total trade.** The customs union should allow Kazakhstan to benefit from greater access to the large Russian market and the eventual free movement of labor and capital. In particular, agricultural and commodity exports should benefit from the removal of customs duties. At the same time, the potential increase in these exports, and the possible exposure of the manufacturing sector to competition from more established Russian companies, could affect Kazakhstan's plans for economic diversification. In addition, trade diversion may arise since—as part of the agreement—Kazakhstan's import tariffs on most goods from outside the union were increased to Russia's levels.<sup>7</sup> The Ministry of Economy estimates that Kazakhstan's average tariff rate for industrial products increased from 4.6 to 8.5 percent, and for agricultural products from 12.1 to 16.7 percent.<sup>8</sup> Higher tariffs provide a boost to fiscal revenues through Kazakhstan's share of customs duties—the authorities estimate the impact at additional 0.3 percent of GDP in revenues in 2010.

14. **A number of issues still need to be resolved to achieve free trade of goods and services within the borders of the union.** While member countries have agreed on mutual recognition of import certificates from other countries, in practice these agreements still need to be fully implemented. Registries of suppliers from other countries reportedly still need to be synchronized. In addition, transport tariffs differ significantly between the members of the

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<sup>5</sup> A single economic space is intended to provide for the free movement of all factors of production and set the basis for coordination of macroeconomic policies across member states. The authorities of Kazakhstan and Russia envisage the creation of several supra-national bodies by 2013-14, although the details have not been announced yet.

<sup>6</sup> Kazakhstan's share of total customs duties collected in the customs union has been set at 7.3 percent. Russia's share is 88 percent, Belarus's is 4.7 percent.

<sup>7</sup> According to WTO, the average tariff rate in Russia is currently around 10½ percent. Jandosov and Sabyrova (2011) estimate a significant increase in Kazakhstan's indicative aggregate level of tariff protection after entering the customs union.

<sup>8</sup> These are simple (not trade-weighted) averages of tariff rates with countries outside of the customs union.

union, and are subject of intense negotiations. These issues will need to be resolved to ensure achievement of the full benefits of free trade between the member countries.

**15. Since the customs union has been in operation for less than a year, it is too early to evaluate the impact on the direction of Kazakhstan's trade.** Some trade diversion effects could be expected in the long term, as higher import tariffs may induce Kazakhstani importers to start switching to suppliers within the customs union. These effects are likely to be small, however, since trade with other CCA countries is already minimal, while China holds a large cost advantage compared to alternative suppliers, and trade with it is not likely to be affected by an increase in tariffs.

**16. The impact of the customs union on some of the small neighboring countries could be more significant.** Apart from the increased official tariff rates, a relatively liberal regime for shuttle or "suitcase" border trading has been replaced with more restrictive rules (Kaminski and Mironova, 2011).<sup>9</sup> This could adversely affect trading through non-standard channels, which consists mainly of (a) consumer products imported from outside Central Asia, primarily China, Turkey, India, Iran and South Korea; and (b) locally produced agricultural and industrial goods, including clothing manufactured in Kyrgyz Republic and Tajikistan. This trade is not very significant relative to Kazakhstan's total volume of trade, but it is an important source of income in some neighboring Central Asian countries. Possibly in response to this adverse impact, the Kyrgyz Republic and Tajikistan announced that they are interested in joining the customs union in the near future.

**17. International experience of successful trade agreements shows that regional integration works better if conceived as a stepping stone toward multilateral trade liberalization.** To succeed, the integration process needs to ensure continued reduction in external tariffs; design and implementation of simple and transparent rules with comprehensive product coverage; and effective implementation of the regional agreements. In that regard, it is encouraging that the Kazakhstani government continues to pursue WTO accession negotiations, albeit from a harmonized position with the other customs union members. The authorities view the WTO accession as a key economic priority, and accession negotiations have continued after the creation of the customs union.<sup>10</sup>

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<sup>9</sup> Prior to July 2010, the simplified regime was based on a single customs fee (including VAT) of €0.6 per 1 kg for the light industry goods and 13 percent of value for fruits and vegetables. This was replaced by a general regime with ad valorem tariff rates of 10 to 20 percent, but not less than € 1-4 per kg depending on the product (Kaminski and Mironova, 2011).

<sup>10</sup> The negotiations are mainly focused on the conditions of access to Kazakhstan's markets for goods and services and on agricultural issues. The authorities expect to conclude bilateral negotiations with most partners by end-2011.



## E. How to Further Improve Trade

18. **It is generally accepted that growth prospects for developing countries are enhanced by an outer-oriented trade regime.** Outer-oriented trade policy is an important component in the set of policy prescriptions for development (Krueger, 1997). This consensus is based both on economic research<sup>11</sup> and on the empirical evidence of many countries that achieved fast economic development through outward oriented policies.

19. **With traditional tariff and non-tariff barriers substantially reduced, the main remaining impediments to further expansion of Kazakhstan's trade are institutional in nature.** In recent years, researchers and policymakers have come to recognize that inadequacies of the institutional market environment have become increasingly important determinants of trade openness.<sup>12</sup> The literature suggests that improving the institutional quality could have a significant positive impact on trade.<sup>13</sup> This impact is likely to be especially important for landlocked countries, whose relative geographic isolation makes trade more expensive. Improving the quality of trade-related institutions in these countries provides them an opportunity to compensate somewhat for the geographic disadvantages. Furthermore, there are indications that the impact of institutional improvements is the greatest for exports of highly sophisticated, more differentiated and high technology products.<sup>14</sup> This is important for countries like Kazakhstan that are aiming to reduce the dependence on exports of natural resources and diversify their manufacturing base.

20. **In Kazakhstan, progress in improving the quality of trade-related institutions has been slower than desired.** While improvements in the general business environment, in particular simplifying procedures and reducing costs of starting a business, have been achieved, in the area of trading across borders progress has been rather limited. As a result, compared to other transition economies, Kazakhstan ranks rather poorly on indicators of the ease of trading across borders. As the figures in Annex II.1 show, the large number of documents required for exporting or importing, and the long time required for preparation of those documents are the key factors that differentiate Kazakhstan (as well as other CCA countries) from the most dynamically developing countries of Central and Eastern Europe, as well as East Asia. This is due in some cases to slow procedures and to the large number of

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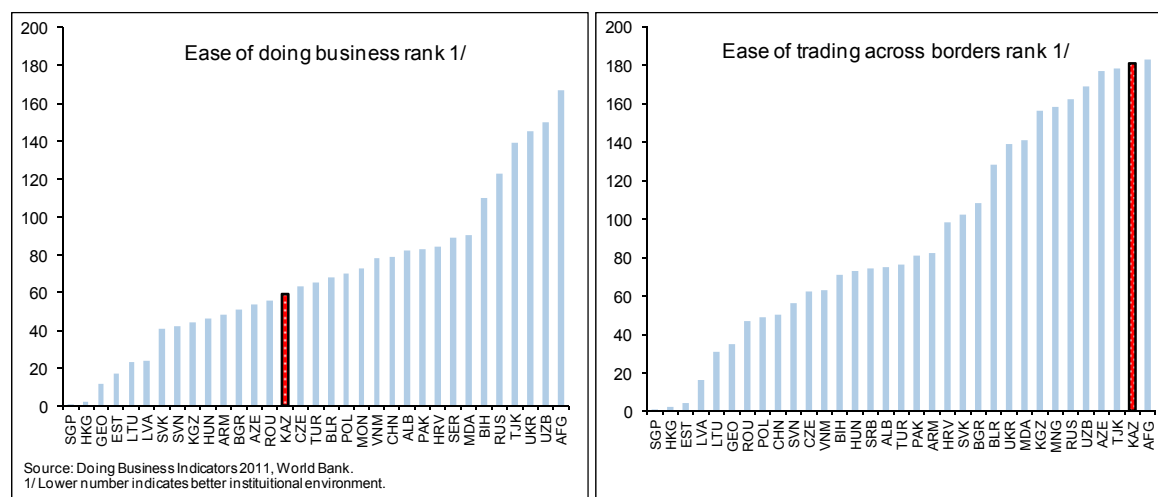
<sup>11</sup> See Srinivasan (2001) for a summary. Other key studies include Berg and Krueger (2003) and Dollar and Kraay (2002).

<sup>12</sup> Havrylyshyn (2010) summarizes existing literature on the importance of institutional impediments to trade, and assesses the relative position of CAREC countries with respect to the quality of institutions.

<sup>13</sup> For example, Hoekman and Nicita (2008).

<sup>14</sup> Felipe and Kumar (2010) show it for the Central Asian countries. They also show that there are significant potential gains from improving trade facilitation in these countries.

agencies that must approve such documents. As a result, costs of exporting or importing goods remain high, and prevent trade from expanding further.



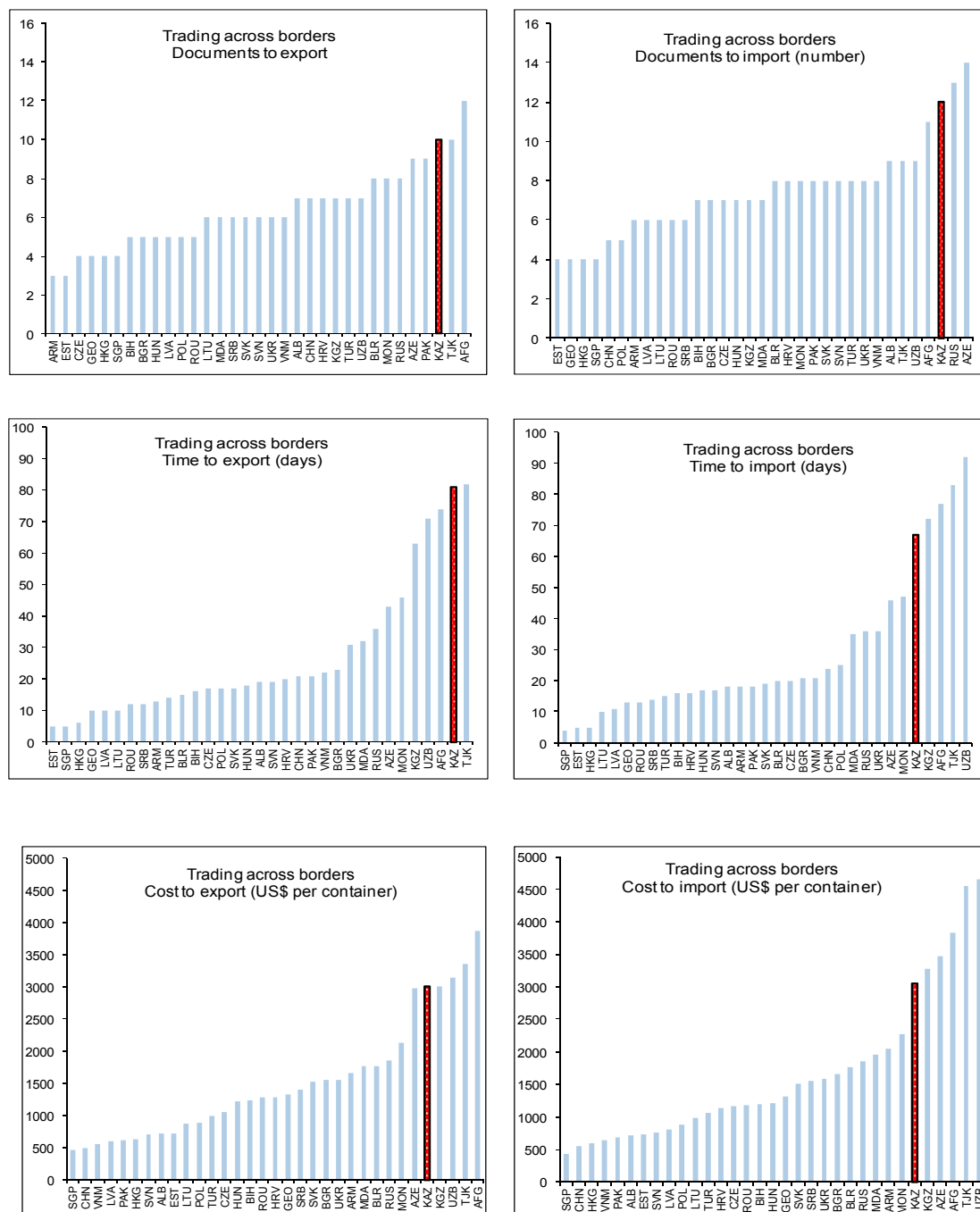
21. **The authorities recognize the need to improve the institutional quality in the trade area, and have started to take steps in that direction in recent years.** In particular, progress has been achieved in simplification of customs procedures, customs modernization, and customs data exchange with neighboring countries. Kazakhstan also has ongoing pilot programs on Joint Customs Control with China and Kyrgyz Republic. Many of these measures have been taken in the context of the trade facilitation program under CAREC. Reduction of institutional impediments to trade has also become one of the main priorities of trade policy work under the CAREC program. However, further improvements are clearly needed with special emphasis on reducing the costs of exports and imports, by further simplifying procedures, and cutting the number of documents required to export or import, as well as the number of clearing agencies.

22. **At the same time, further steps to reduce traditional tariff and nontariff barriers would also be useful.** It is important to ensure that the tariff increase resulting from the customs union does not slow Kazakhstan's progress in liberalizing its trade regime. Further steps could be taken to eliminate remaining export and import restrictions, simplify the tariff structure, and gradually reduce the non-tariff barriers (including all export and import restrictions, and all forms of government subsidies), possibly in coordination with other members of the customs union.

## ANNEX II. 1. TRADING ACROSS BORDERS INDICATORS

The set of charts below shows the relative position of Kazakhstan compared to other economies in transition for various components of the Ease of Trading Across Borders indicator.

### Annex 1. Kazakhstan: Trading Across Borders Indicators



Source: Doing Business Indicators 2011.

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### III. OIL WEALTH AND DEVELOPMENT: WHAT DOES THIS MEAN FOR KAZAKHSTAN?<sup>1</sup>

*Kazakhstan's oil sector plays a significant role in the economy and will continue to be a main driver of growth. A key challenge is ensuring that the benefits from the oil wealth are shared by the population as a whole. This would require that a higher proportion of the oil sector value added is used to for medium-term development of non-oil activities. This objective critically depends on a well designed strategy that encourages economic diversification based on Kazakhstan's comparative advantages, and on improved prospects for long-term foreign investment. Advancement in these directions requires a multi-faceted reform agenda that includes upgrading the investment and business climates. The framework would also benefit from flexible rules governing the transfer of oil revenues to the budget.*

#### A. Introduction

1. **Efficient management of the oil wealth is crucial in supporting medium-term growth and development in Kazakhstan.** This chapter looks at the impact of oil on the economy, lays out a development framework for economies rich in mineral resources, and describes the key institutional arrangements to manage oil resources. Drawing lessons from the literature and empirical findings from other countries' experiences, the analysis aims at identifying 1) improvements to the current framework to manage oil resources, 2) potential areas of comparative advantage that could support economic diversification, a key medium-term priority for the authorities, and 3) enhancements in the business environment.

#### B. Oil and the Kazakhstani Economy

2. **Kazakhstan has a large and significant extractive industries sector, with oil playing a major role.**<sup>2</sup> With nearly 40 billion barrels in reserves and 2 percent of global production, Kazakhstan has the world's ninth largest proven reserves (3 percent of global reserves), and is among the 20 largest oil producers.<sup>3</sup> Oil sector value added accounted for 11½ percent of GDP in 2010, while oil exports represented nearly 57 percent of total exports of goods and services. The bulk of foreign direct investment (FDI) in recent years has flowed to the extractive industries sector (75¼ percent in 2010), with oil taking the largest share. Crucially, the government depends on oil for the largest part of its revenues—in 2010, about 46½ percent came from extraction and exports of oil. With significant new discoveries in

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<sup>1</sup> Prepared by N. Raman (SPR).

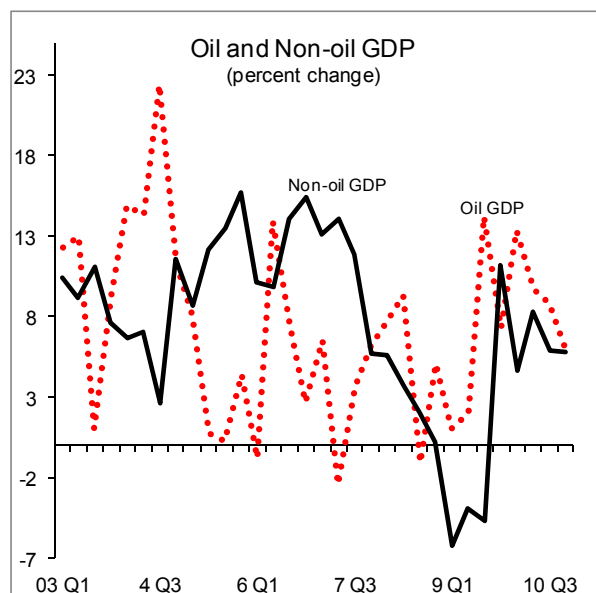
<sup>2</sup> SM/10/158, 6/28/2010. In particular, see Box 3.

<sup>3</sup> BP Statistical Review of World Energy June 2010 (<http://www.bp.com/statisticalreview>).

recent years, most notably the development of the Kashagan oil field, the key role of oil in the economy is likely to persist over the medium and long term.<sup>4</sup>

**3. Oil and oil-related investment flows support domestic economic development in diverse ways.** Kazakhstan has attracted the highest levels of FDI in the CIS in per capita terms (Bayulgen, 2010), and given the sector's bright potential, it is likely to continue attracting significant new investments and reinvestments. These investments generate substantial export and fiscal proceeds that can be deployed to support non-oil activities, catalyze activity in oil-related services such as transportation, and provide some employment and income opportunities for the Kazakhstani population. Moreover, oil activity results in important inflows to the economy both to the private sector (intermediated through the financial system) and the public sector, and can thus be a valuable spur for growth. Finally, Kazakhstani oil companies—most notably the national oil and gas company KazMunaiGaz (KMG)—participate directly in the oil sector. In particular, KMG is involved in all aspects of exploration and extraction through profit sharing arrangements and equity partnerships with foreign investors.<sup>5</sup>

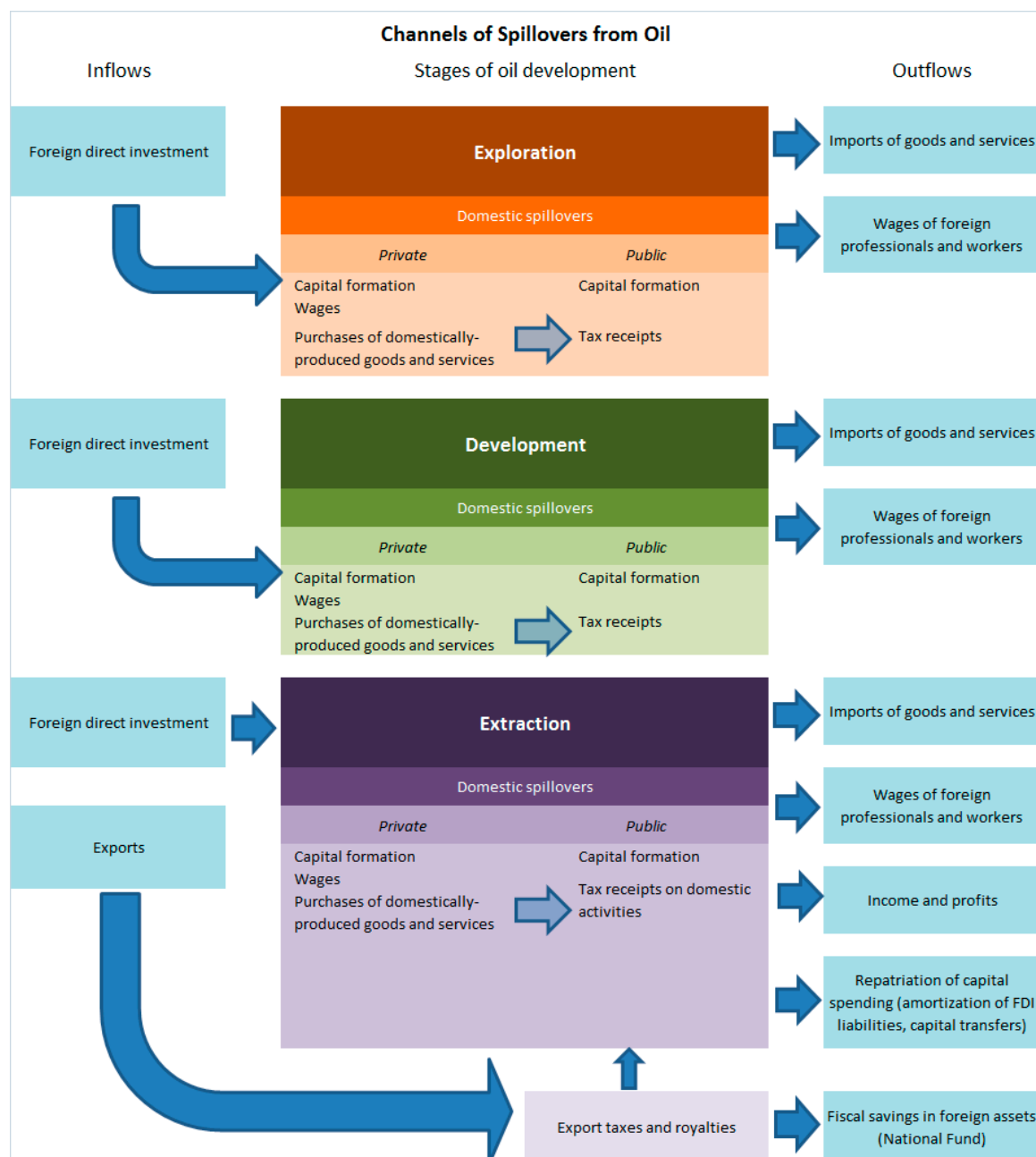
**4. Nevertheless, the direct impact of the oil sector activity on non-oil growth is rather limited.** While the link between the oil and non-oil sectors appears to have strengthened since 2009 (Figure 2), the direct benefits of stronger oil activity are only shared by a few related sectors, such as transportation and communications. Other key domestic drivers of growth—including manufacturing, construction, real-estate, and various other services—do not appear to benefit directly from oil sector activity. In particular, given the pattern of financing in the oil sector, where companies generally bring their own funds into the country for investment, there is a limited role for the domestic financial system.



<sup>4</sup> This point has been acknowledged by the authorities. For instance, it was noted in a 2010 essay by current Minister of Economy and the former head of Samruk Kazyna. ([http://www.samruk-kazyna.kz/page.php?page\\_id=2869&lang=3&article\\_id=3327](http://www.samruk-kazyna.kz/page.php?page_id=2869&lang=3&article_id=3327)).

<sup>5</sup> Participation of a state-owned oil and gas company in developing the oil resources of a country is not unusual in many developing countries; indeed many countries explicitly use some version of the model pioneered by Statoil in Norway.

## How oil influences the Kazakhstani economy



5. **Moreover, oil-related outflows through the balance of payments are significant.** These include imports of capital equipment needed to develop oil fields, income repatriated to foreign investors, amortization of FDI liabilities, and outflows arising from the overseas investments of the National Fund of the Republic of Kazakhstan (NFRK). Notwithstanding the data limitations, there are indications that the total repatriation of investment income in 2010 amounted to nearly 30 percent of oil exports. To some extent, these outflows are the

natural consequence of the heavy participation of foreign investors in the oil sector, which in turn enhance the levels of Kazakhstan's capital stock and potential growth. In addition, investment of the NFRK abroad accounted for 34 percent of gross outflows in the financial account of the balance of payments. The marginal outflow<sup>6</sup> is even more significant, with the increase in NFRK outflows accounting for about 70 percent of the increase in gross outflows, and 84 percent of the increase in oil exports.

**6. The dependence on oil poses challenges to macroeconomic and structural policies.** As in other commodity exporters, the oil sector is not a main source of employment opportunity in Kazakhstan as it is a more capital than labor intensive industry, and as such even a significant expansion is unlikely to lead to a similar increase in job creation. On the other hand, volatility of oil prices presents macroeconomic challenges as global price changes are unlikely to be fully addressed by domestic policies. For example, when prices fall, counter-cyclical fiscal action may be constrained by the lack of other sources of revenue, although Kazakhstan's prudent policy of saving the bulk of the oil proceeds somewhat mitigates this risk. Oil price changes also cause exchange rate volatility, which could encourage undue short-term capital flows; and actions to limit this volatility could result in a pro-cyclical monetary policy stance. More generally, the effectiveness of macroeconomic policy is hampered by the limited ability of the small non-oil sector to counteract swings in oil prices in response to policy actions.

**7. The unique features of the oil industry in Kazakhstan amplify these risks.** The nature of Kazakhstan's oil resources may lead to greater sensitivity of the sector to oil price changes. In particular, price declines could hinder exploration and development activities in new wells. Key oil reserves are located offshore in the Caspian Sea, where the weather is subject to considerable seasonal variation due to its desert environment. Moreover, the geological conditions can affect both the accessibility to exploration and the quality of production, due to the existence of a significant layer of sediment covering the oil deposits, highly pressurized wells, and the potential for salt and other impurities to be mixed in with the deposits. Planned activity in the new Kashagan oilfield—where the bulk of Kazakhstan's proven oil reserves is located—could be particularly affected by price variations.

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<sup>6</sup> This is defined as the change in the investment abroad by the NFRK as a percentage of the change in the increase in foreign assets in the financial account in 2010.



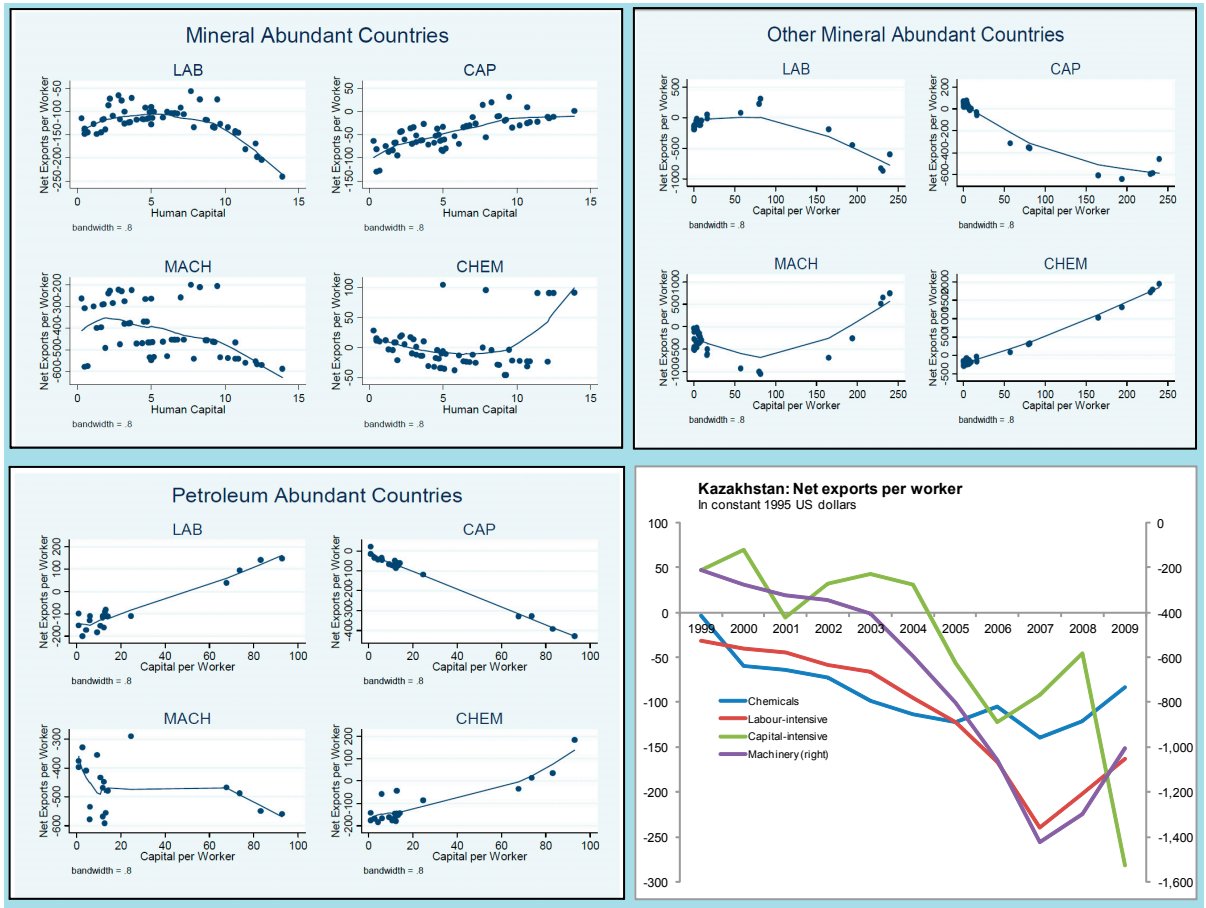
### C. Lessons from Commodity Exporters

8. **The literature finds that the presence (or absence) of natural endowments influences the likely development path for a country.** Leamer (1987) notes that in a standard two factor model of production (i.e., with capital and labor), countries will follow development paths that first specialize in labor intensive industries, followed by a period of capital accumulation, and finally graduate to a state where production of capital goods takes root in the economy. However, when a third factor—natural resource endowments—is added to the framework, the prediction changes substantially. In such a world, countries do not need to follow the described development path. Álvarez and Fuentes (2006) extend Leamer’s framework to show that the presence of different types of natural endowments (agriculture, forestry and extractive industries) influence development paths in different ways according to the nature of such endowments. In particular, the existence of mineral resources seems to limit industrialization.

9. **Natural endowment can affect a country’s development through a combination of factors.** Álvarez and Fuentes posit that two factors may explain why mineral wealth limits industrialization. First, a mineral-rich country experiences an appreciation of the real exchange rate that prevents it from reducing its net imports and moving up the industrial ladder (a Dutch disease argument). Second, because mineral extraction is a capital-intensive process, a country without a deep industrial base will find its (initially) scarce physical capital diverted to mining, and hence will lack the necessary resources to deepen capital levels in the industrial sector. Klein (2010) also suggests that countries with a lower “oil intensity”—defined as the share of oil in GDP (Table 1)—have incentives to build better fiscal institutions, and thus enjoy the positive spillovers from superior governance.

10. **Experience suggests that mineral exporters can develop a comparative advantage in other fields.** For example, the positive impact of mineral endowments on the development of a chemicals industry is related to the availability of natural resources, though other factors (e.g., the existence of relatively few transport connections that impede trade) may also play a role. Nevertheless, this channel is weaker for oil exporting countries than other mineral producers.

## Predicted Development Paths and Experience in Kazakhstan<sup>1/</sup>



Sources: Álvarez and Fuentes (2006), UNCTAD, authorities' data, WEO and IMF staff calculations.

<sup>1/</sup> The categories of goods examined here ("labor intensive manufactured goods", "capital intensive manufactured goods", "machinery" and "chemicals") are based on Leamer's classification scheme (see Leamer, 1984). The three charts that show net exports and capital intensity are taken from Álvarez and Fuentes (2006) and trace the development paths taken by countries with mineral resource endowments as domestic capital stock deepens (proxied here by net exports). The stronger net export performance in 2008-09 seen for Kazakhstan for labor-intensive manufactured goods and machinery (bottom right panel) should be interpreted with some caution. This was mainly due to a sharp decline in these imports due to the banking crisis-induced downturn. In other respects, Kazakhstan's experience seems to mirror Álvarez and Fuentes' prediction.

Table III.1: Selected Oil Exporters -- Oil Intensity (1985–2009)

		Average	Min	Max	2009
High	Libya	0.62	0.52	0.71	0.52
	Qatar	0.50	0.40	0.58	0.50
	Kuwait	0.48	0.28	0.64	0.36
	Equatorial Guinea	0.46	0.00	0.84	0.58
	Oman	0.45	0.33	0.52	0.34
	Nigeria	0.45	0.34	0.57	0.34
	Angola	0.44	0.15	0.57	0.40
	Congo, Rep. of	0.34	0.28	0.47	0.31
	Azerbaijan	0.33	0.20	0.49	0.49
Medium	Saudi Arabia	0.33	0.23	0.39	0.28
	Algeria	0.32	0.27	0.36	0.27
	United Arab Emirates	0.31	0.18	0.52	0.18
Low	Gabon	0.30	0.22	0.37	0.22
	Syria	0.26	0.12	0.36	0.12
	Venezuela	0.23	0.17	0.33	0.22
	Turkmenistan	0.22	0.11	0.30	0.11
	Bahrain	0.20	0.12	0.25	0.12
	Iran	0.13	0.09	0.17	0.09
	Yemen	0.13	0.08	0.16	0.08
	Cameroon	0.11	0.05	0.17	0.05
	Indonesia	0.11	0.07	0.14	0.07
	Kazakhstan	0.10	0.08	0.11	0.11
	Chad	0.07	0.00	0.32	0.21

Source: WEO, IMF staff calculations.

This table updates Table 1 in Klein (2010). Oil intensity is defined as real oil GDP/real GDP. As in Klein, the countries are sorted according to their average level of oil intensity, and some of the average values are based on a different sample lengths, depending on data availability. Countries defined as having high oil intensity have an oil share in GDP that exceeds the median for this sample (about 0.31), while those having a low intensity fall below the median. Countries with a medium oil intensity have an oil share in GDP close to the median.

11. **While the existence of mineral wealth can lead to identifiable comparative advantages, the surpluses generated by the sector can also inhibit the industrialization process.** The key question is whether surpluses from the mineral sector can be distributed to other sectors, both through public sector investment and financial intermediation. If mechanisms to support capital formation and productivity are available, and assuming that excessive real exchange rate volatility can be avoided, mineral export proceeds could support industrialization. Conversely, if mineral wealth is used to raise consumption, or if the real exchange rate is excessively volatile, then industrialization efforts may be limited. As Klein (2010) and many others show, the empirical evidence in many emerging markets and developing countries is that oil wealth has not been used effectively to catalyze development.

## D. Fiscal Institutions and Oil Wealth in Kazakhstan

12. **The NFRK is the cornerstone to managing oil wealth.** Oil revenue, in the form of taxes and royalties (Box III.1), is managed in the context of a number of institutional structures dedicated to preserving the oil wealth. The NFRK is the repository of the bulk of the fiscal revenues arising from oil, and is managed by the central bank. The transfers to the NFRK are in both domestic and foreign currency, but the proceeds are then invested in foreign assets, primarily in liquid instruments such as G3 sovereign debt securities. The government budget is allocated a fixed transfer from the fund of \$8 billion annually, with the caveat that the NFRK is not allowed to fall below 20 percent of GDP. The authorities have shown discipline in adhering to the set targets for transfers from the NFRK. As a result of these efforts, and benefitting from high oil prices, the NFRK has increased from US\$22 billion at the end of March 2009 to over US\$36 billion in April 2011.

### Box III.1. Taxation Regime for the Oil Sector in Kazakhstan<sup>1/</sup>

The tax regime for the oil sector in Kazakhstan consists of a number of taxes, the most important of which are the corporate income tax, rent tax on exports, and volume-based royalties. In addition, mining companies are expected to pay bonuses when commercial discoveries are made.

- Corporate income tax: Applicable to all companies operating Kazakhstan, and currently set at 20 percent of eligible income. This is expected to be lowered gradually to 15 percent by 2014.
- Rent tax on exports: A tax on the value of exports that comes into effect when global oil prices exceed \$40 a barrel. The tax rate varies between 7-32 percent depending on the export proceeds.
- Mineral extraction taxes: A volume-based royalty tax applicable to the extraction of oil, condensates, and natural gas. The tax rate escalates as volumes rise, and varies depending on the nature of what is extracted, and whether it is exported or sold domestically.
- Excess profit tax: Essentially a “super tax” that is applicable on income after paying the corporate income tax and is based on the excess profits over allowed deductible expenses. The rates depend on the levels at which this income exceeds allowable expenses.
- Crude oil export duty: Since the beginning of 2010, a crude oil export duty of \$20 per ton of crude oil has been levied, which was raised to \$40 in 2011. This rate remains well below that in neighboring Russia (US\$453.70 per metric ton in May 2011), though there have been some discussions on whether the rates should be harmonized under the terms of the customs union between the two countries.

Stability of the tax regime. While the taxes described above apply in general to all companies operating in the oil sector, a number of production sharing agreements signed before January 1, 2009 are exempt from changes. These agreements, which are termed to have been “stabilized”, must have undergone a “tax expert evaluation” to ensure that the terms of the agreements did not violate tax laws at the time they came into effect. The excess profit tax, however, cannot be stabilized, and stabilized contracts can be changed by mutual agreement between the parties.

1/ Source: Ernst & Young 2010 Kazakhstan Oil and Gas Tax Guide.

**13. The framework on which the NFRK operates aims at balancing the needs to facilitate capital formation, preserve macroeconomic stability, and save for future generations.<sup>7</sup>**

- ***Facilitating Capital Formation.*** Public sector investment is supported by the oil wealth in Kazakhstan. However, limits in the absorptive capacity of the economy prevent further use of oil resources on investment for development. Indeed, the current limit placed on transfers from the NFRK to the federal budget indirectly results in ceilings on the level of public investment in health and education, and also in infrastructure to further support oil and non-oil activities. Kazakhstan's investment in health and education lags behind that in many emerging markets<sup>8</sup>, suggesting the need for additional public resources to be devoted to these sectors.
- ***Ensuring Macroeconomic Stability.*** The NFRK helps to insulate the economy from swings in capital inflows generated by global oil price fluctuations. In the current circumstances, savings in the NBRK help contain real exchange rate appreciation arising from oil-related inflows. Investment of the fund in foreign assets reflects the economy's current lack of absorptive capacity to accommodate the investment needs and limits spillovers to the domestic economy and financial system. The lack of inward investment by the NFRK may also explain why public and quasi-public enterprises have played a prominent role in providing credit to the non-oil sector.
- ***Safeguarding Future Generations.*** While Kazakhstan is expected to generate substantial oil revenues for approximately the next 40 years<sup>9</sup>, it is crucial that oil wealth continue to support capital investment for future generations. Continued saving of oil fund revenues will ensure that the oil wealth is equitably shared inter-generationally.

## **E. Implications for Kazakhstan**

### **Enhancing the Role of Oil and the Oil Fund**

**14. The rules governing the NFRK have provided a clear basis for managing oil wealth, though in the context of a rigid framework.** While useful in preserving oil revenue, this mechanism provides relatively little flexibility over the size of the transfer of these funds to the budget, particularly when oil revenues turn out to be much larger or lower than anticipated. Furthermore, the basis for setting the annual transfers at \$8 billion does not

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<sup>7</sup> For more details on the operation of the NFRK, see Box II.2 of Chapter II of the 2010 Selected Issues Paper for Kazakhstan (SM/10/161, 6/29/2010).

<sup>8</sup> The 2011 World Competitiveness Yearbook, compiled by IMD, ranks Kazakhstan 55<sup>th</sup> out of 59 economies on health and environment, and 41<sup>st</sup> on education.

<sup>9</sup> See Lucke (2010).

seem to reflect the calculation of optimal savings or to be linked to any intermediate targets for reducing the non-oil deficit.<sup>10</sup> The authorities have continued to borrow to fund fiscal expenditures, in spite of the fiscal balance returning to surplus in 2010.<sup>11</sup>

**15. Flexibility in the size of the transfers would be important to support domestic capital formation and maintain macroeconomic stability within the context of a medium-term fiscal framework.** Previous analytical work conducted by staff suggests that a rule based on intermediate targets for the non-oil deficit over the medium term may provide greater fiscal flexibility.<sup>12</sup> Clearly, any changes in transfer rules should be assessed carefully, given the uncertainties over the long time horizons. However, taken alongside efforts to attract long-term FDI, there appears to be scope for an increase in well-targeted public expenditure in high priority areas—including health, education, and infrastructure—beyond that detailed in the Development Plan 2020.

### **Attracting Foreign Investment**

**16. Measures to catalyze private investment, both in the oil and non-oil economy, should be pursued to encourage a sustainable investment outlook.** It is clear that the public sector on its own cannot completely fund the economy's full capital formation needs.<sup>13</sup> Therefore, Kazakhstan needs to continue to ensure sustained private investment. This encompasses multi-faceted reforms that include preserving macroeconomic stability, improving access to financing, and upgrading the investment and business climate. Recent work also suggests that addressing trade and other distortions has an especially significant effect on sustaining high rates of growth (Duttagupta and Mlachila, 2008).

### **Ensuring Clarity in the Operating Environment of the Extractive Sector**

**17. Clear rules and stability, rather than the political framework, are crucial to ensuring continued investments.** The authorities have recently tried to rebalance the benefits accruing from the oil wealth.<sup>14</sup> Steps taken include renegotiations of profit sharing

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<sup>10</sup> The authorities' long-term aim is to reduce the non-oil deficit to 3 percent of GDP by 2020, but no intermediate targets have been determined.

<sup>11</sup> Except for the US\$8 billion that is transferred to the budget from the NFRK, the authorities exclude revenues from oil in their calculation of fiscal revenues. As such, by the authorities' definition, they continue to record fiscal deficits that need to be financed by borrowing.

<sup>12</sup> See Chapter II of SM/10/161 (6/29/2010).

<sup>13</sup> For instance, KMG estimates that up to \$136 billion is needed to fully develop the first phase of the Kashagan oil field. See <http://www.kmg.kz/en/manufacturing/upstream/kashagan/>

<sup>14</sup> Bayulgen (2010) notes that this assertiveness is a common feature in oil-producing countries. As the public sector develops expertise, national governments revise what could be considered unbalanced agreements.

contracts, higher taxes, changes to laws that privilege the public and quasi-public entities,<sup>15</sup> and stronger enforcement of local content regulations in all spheres. In general, the repeated revisions of the rules have raised some concerns as the large scale of investments and the long time horizon on which they are implemented lead investors to place a considerable premium on certainty.

18. **Therefore, reforms to the investment regime should be predictable and well communicated, allowing companies the time to comply with new requirements.** While so far the changes in the rules do not appear to have had a meaningful adverse impact on the willingness of foreign investors to continue to invest in Kazakhstan, there is a need for more predictability and transparency in the operating environment to improve investors' capacity to plan.

### **Enhancing the Investment Climate and Economic Diversification**

19. **Kazakhstan has made significant progress in improving the investment environment.** In the 2011 Doing Business rankings compiled by the World Bank, its position improved by an impressive 15 places, the fastest improvement in the region (Table 2). In particular, Kazakhstan scores well in terms of registering property (28th) and has significantly improved on the ease of starting a business (from 85th in 2010 to 47th in 2011). Other surveys point to strengths in public finance, infrastructure and labor market flexibility.

20. **However, a number of areas for improvement stand out (Table 3).** First, Kazakhstan fares poorly in trading across borders. It falls well into the bottom half of the countries in the sample, with the World Bank's Doing Business index ranking it close to the bottom 1 percent. Second, the World Bank notes that in terms of access to credit, Kazakhstan slipped by 3 places in its latest survey. In part, this weaker performance reflects the financial sector problems it continues to face. Third, in spite of its relatively high per capita income, Kazakhstan lags on health and education indicators, reflecting, as mentioned above, its relatively low spending in these areas. Finally, in some aspects of public administration, including efficiency of the bureaucracy, there is room for improvement. The surveys indicate aspects of public administration that hinder the capacity of business to invest and expand.

21. **Improvements in the business environment are key to support the authorities' diversification strategy.** Investments in non-oil activities need to achieve a level of productivity that would allow them to compete successfully. The chemical industry could be an area of competitive advantage in Kazakhstan as shown by experiences in other oil producing countries. In general, the international experience suggests that, in addition to

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<sup>15</sup> The most recent example being the new Law on Subsoil and Subsoil Use enacted in 2010. This law strengthens the public sector's rights over hydrocarbon and other mineral resources.

macroeconomic stability, mechanisms to support capital formation—including a healthy business environment—are needed to promote any industrialization strategy.

Table III. 2. Ease of Doing Business Rankings

Ease of doing business				Ease of doing business			
	Rank in 2010	Rank in 2011	Change in rank		Rank in 2010	Rank in 2011	Change in rank
<i>Caucasus and Central Asia 1/</i>				<i>Selected emerging markets</i>			
Armenia	44	48	-4	Thailand	16	19	-3
Azerbaijan	55	54	1	Malaysia	23	21	2
Georgia	13	12	1	Taiwan	34	33	1
Kazakhstan	74	59	15	South Africa	32	34	-2
Kyrgyz Republic	47	44	3	Mexico	41	35	6
Tajikistan	149	139	10	Peru	46	36	10
Uzbekistan	150	150	0	Colombia	38	39	-1
<i>Other former Soviet Republics</i>				Chile	53	43	10
Belarus	64	68	-4	Botswana	50	52	-2
Estonia	17	17	0	Kazakhstan	74	59	15
Latvia	27	24	3	Czech Republic	82	63	19
Lithuania	26	23	3	Poland	73	70	3
Moldova	87	90	-3	China	78	79	-1
Russian Federation	116	123	-7	Indonesia	115	121	-6
Ukraine	147	145	2	Brazil	124	127	-3
				India	135	134	1

Source: World Bank

1/Turkmenistan was not ranked in the survey



**Table III.3. Key Areas for Reform in Kazakhstan**  
(Identified by major competitiveness indicators)

	<i>Rank 1/</i>	<i>Percentile 1/</i>
<i>World Competitiveness Yearbook (2011)</i>		
Finance	51	13.6
Health and environment	55	6.8
Education	41	30.5
International trade	39	33.9
Bureaucracy	39	33.9
<i>Doing Business Survey 2011</i>		
Finance: availability of credit	72	60.7
Trade: Trading across borders	181	1.1
Dealing with construction permits	147	19.7
<i>Global Competitiveness Index 2010-11</i>		
Finance: Financial market development	117	15.8
Finance: Soundness of banks	131	5.8
Health	100	28.1
Education: Primary	77	44.6
Education: Higher education and training	65	53.2
Trade: Prevalance of trade barriers	116	16.5
Public institutions	91	34.5

*Sources: World Bank, IMD, World Economic Forum*

1/ A higher rank score (and percentile score) is better.

## **F. Conclusion**

**22. Kazakhstan's oil sector will continue to play a significant role in the economy and it will be important to ensure that oil wealth benefits are widely shared.** Kazakhstan's oil wealth has been prudently managed and has brought significant improvements in economic development and the wellbeing of the population. Nonetheless, there is a need to ensure that the oil sector contributes to achieving medium-term development objectives. In doing so, a strategy that focuses on improving the investment climate to facilitate private sector activity would spur development, especially in areas of comparative advantage, such as the chemicals sector. This will also result in enhanced absorptive capacity for further public investment. Progress in these directions will require structural reform efforts to reduce trade distortions, and ensure a predictable operating and tax setting in the extractive sector. These efforts should be set against finding the optimal balance between the use of commodity revenues and their accumulation in the NFRK within a consistent medium-term fiscal framework.

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