

Kazakhstan Country Economic Memorandum

BEYOND OIL:

Kazakhstan's path to greater prosperity through diversifying

(IN TWO VOLUMES) VOLUME I: OVERVIEW

June 2013

Poverty Reduction and Economic Management Unit
Europe and Central Asia Region



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Report No. 78206-KZ

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Contents

Acknowledgments	iv
Overview	I
Why Diversification Is Important for Development	4
Oil Wealth, Volatility, and Macroeconomic Management	9
Gaps and Opportunities for Human Capital Development	13
The Institutions that Matter for Diversification	19
Options to Increase Competitiveness in the Short Term	24
Notes	29
References	30

Acknowledgments

This report was written by a team led by Francisco Carneiro, Lead Economist, Europe and Central Asia Region at the World Bank. Daniel Lederman, Lead Economist and Deputy Chief Economist, Latin America and the Caribbean Region, provided insightful advice on the concept and structure of the report and contributed substantive inputs at various stages.

The team is grateful to the government of Kazakhstan for its support to this work since its early stages. The high-level brainstorming on economic diversification held in Astana on April 16, 2013, with senior Kazakh authorities provided useful insights. The team also benefited immensely from early interactions and guidance received from Yerbol Orynbayev, Deputy Prime Minister; Kairat Kalimbetov, Deputy Prime Minister; Madina Abylkassymova, Vice-Minister of Economic Development and Trade; government officials from the Ministry of Finance, Ministry of Labor and Social Protection, and the National Bank of Kazakhstan; and representatives from the Economic Research Institute. The team also met with the private sector and civil society organizations in Almaty and Astana at different stages and thanks them for their time and thoughtful views on the scope of this work.

The report uses the analytical framework of the World Bank's Flagship Report on growth and diversification in Eurasia. The team benefited immensely from very insightful discussions with Indermit Gill, Chief Economist, Europe and Central Asia Region at the World Bank, and his team, in particular Kazi Matin, Ivailo Izvorski, and Willem van Eeghen, who were kind enough to brainstorm with the core team on different

stages of preparation. The team is grateful to the Macroeconomics and Growth Research Group (DECMG), the International Trade Research Department (PRMTR), and the Economic Policy and Debt Department (PRMED) for their support during the preparation of this report.

The core team included Dorsati Madani, Ilyas Sarsenov, Evgenij Najdov, Esther Naikal, Sarosh Sattar, Igor Kheyfetz, Samuel Maimbo, Aziz Atamanov, William Battaile, Ervin Dervisevic, Havard Halland, Rinaldo Pietrantonio, Jose Molinas, and Emanuel Salinas. Prof. Eduardo Engel (Yale University and National Bureau for Economic Research) and Constantino Hevia (DECMG) prepared background papers on optimal fiscal rules and resource administration. Alain D'Hoore and Enrique Blanco Armas were the peer reviewers and provided useful guidance to the team. Naotaka Sugawara prepared several of the figures used in the text. Sarah Nankya Babirye provided superb editorial assistance. Gulmira Akshatyrova and Xeniya Novozhilova, from the Astana country office, and Oxana Shmidt, from the Almaty country office, supported the team during the several missions associated with this task. The work was carried out under the overall supervision of Ivailo Izvorski, Sector Manager, Poverty Reduction and Economic Management Sector Unit: Macro Economics 1 (ECSP1), and Yvonne Tsikata, Sector Director, Poverty Reduction and Economic Management Sector Unit (ECSPE). Saroj Kumar Jha, Country Director for Central Asia, and Sebnem Akkaya, Country Manager for Kazakhstan, provided guidance and supported the team.

Overview

Kazakhstan aspires to become one of the world's 30 most developed economies by 2050. The government's recently announced 2050 Strategy outlines how the country would refine its long-term socioeconomic strategy to achieve this goal. The focus is on laying the basis for the accelerated diversification of the economy through industrialization and infrastructure development—and by enhancing human capital to drive innovation and economic efficiency. Horizontal policies to improve the overall business environment are a core part of that strategy. The government is also focused on several vertical policies, as articulated in the Industrial Acceleration Plan 2010–14. Like many other successful resource-rich countries, Kazakhstan has a real chance of fulfilling its ambitious objective, but many perils lie ahead. This report addresses some of the main questions likely to confront the authorities in the pursuit of the country's aspiration (see spotlight 1).

The world's wealthiest countries have enjoyed rising living standards, and many of them have increased their wealth and prosperity on the back of abundant natural resources. The United States, Canada, and Norway are well endowed with natural resources and have used this abundance to create other forms of capital. But their success is not the norm. Many other countries that started with sizable natural resource endowments have not become more developed or diversified. And still others have fallen prey to the middle-income trap. What are the main

determinants of these divergent trajectories? More often than not, the successful countries used their endowments more efficiently and focused their policies on reducing volatility, enhancing productivity, and creating the conditions for employment growth.

This report adopts an analytical framework, used in the World Bank's Eurasia Flagship Report,¹ to look into options that could help the authorities to think about diversification across three dimensions: diversification of endowments, diversification of products and services, and diversification of economic partners. Endowments are classified as endowments that the country already has, such as natural capital, and endowments that can be created and further developed, such as physical, human, and institutional capital. Diversification of a larger and more diverse basket of products and services—for domestic consumption and for exporting to a more diverse pool of trade partners—should be the outcome of the structural transformation that the economy will need to go through. In line with this approach, the objective of policy should be to reduce economic volatility, promote productivity growth, and create employment.

Further structural transformation and economic development in Kazakhstan will require a sharper focus on the country's less abundant endowments. In this context, this report looks at the quality and provision of human capital and the gaps and opportunities for improving the quality of institutions. While diversifying these endowments,

especially institutions, is a long-term proposition, this report argues that there can be some quick wins. Consider fixing the education system, or improving the business environment further, or giving people more economic freedom, or enabling innovative finance through nonbank financial institutions, or even accepting the idea that a “business failure” is not an economic disaster but a market signal about allocative efficiency.

If Kazakhstan uses the right policy levers well, it could move forward fast and become a model of economic development and diversification in Eurasia.

The region is blessed with natural resources, but it could do much to better convert resource rents into resource revenues. Subsoil assets per capita in Eurasia are at least three times higher than in Latin America and at least two times higher than in the Middle East and North Africa.² Despite that abundance, the wealthiest countries in Eurasia, including Kazakhstan, have a weaker track record in converting their natural capital into other forms of capital. Table 1 outlines the reform priorities for Kazakhstan over the medium and long term. Spotlight 1 sums up the main questions and answers—that each chapter discusses.

Table 1 What should the reform priorities be?	
Strengths	Shortcomings
Resource wealth	
Resource wealth can be an important source of revenues and financing for development.	It can be a source of macroeconomic volatility, create Dutch disease, and offer few links to the rest of the economy.
Macroeconomic management	
Macroeconomic management has been prudent and consistent; there are clear rules for the management of oil revenues.	Excessive reliance on oil revenues can lead to macroeconomic imbalances; recent changes in the fiscal rule governing the oil fund create expectations of future relaxation of fiscal discipline; the level of nonperforming loans is one of the world's highest.
Trade	
Exports have increased significantly since independence; there has been some diversification and experimentation; there are several emerging champions where Kazakhstan has recently become competitive and also promising new opportunities.	Oil exports have risen faster than nonoil exports leading to growing export concentration; while there has been experimentation with new exports, survival rates remain low.
Labor	
Economic growth has generated a substantial number of jobs; employment and real wage growth have led to substantial poverty reduction; there has been a reduction in self-employment in favor of wage employment over the last decade.	Kazakhstan spends relatively little on education (3% of GDP); the quality of education is perceived as low; there is a perception that the workforce lacks adequate skills.
Institutions	
Kazakhstan ranks 49th in the 2013 Doing Business survey; there have been recent efforts to improve governance institutions; taxes are perceived as low.	Corruption is perceived as high and anticorruption institutions as ineffective; there are limits on property ownership by foreigners and enforcement of contracts; credit availability to the private sector is seen as limited.

Source: Authors.

Questions	Answers
Why diversification is important for development	
How rich and abundant Kazakhstan is on natural resources?	Kazakhstan is rich in natural resources, but it has not yet accumulated as much wealth as the richest countries in the world.
How well has this wealth been used?	On the back of natural resource abundance, poverty has been halved in a decade, and the country has moved fast from low incomes at independence to an upper middle-income country today. In the absence of major shocks, Kazakhstan can achieve high-income status by the end of this decade.
How Kazakhstan can become a more developed economy?	The path to increased wealth, prosperity, and diversification in Kazakhstan will be paved with policy options that strengthen fiscal discipline, harness the skills of its labor force, and reshape the institutions that regulate the activities of public and private agents.
Oil, diversification, and volatility	
Have Kazakhstan's exports become more concentrated?	Kazakhstan has increased the number of products that it exports, but oil exports have grown faster, and many new export products do not survive long enough. There has thus been a growing export concentration and dependence on oil.
How does dependence on natural resource exports affect macroeconomic volatility?	Dependence on natural resource exports can create volatility in trade, which can transmit volatility to the rest of the economy. Kazakhstan is susceptible to these transmission channels but has avoided them with prudent fiscal policy management.
What are the potential welfare gains from various fiscal rules?	An optimal fiscal rule could bring savings of close to 25 percent of GDP over the next 25 years but would be difficult to implement. A simpler rule with an exit clause for periods of severe private sector downturns could yield similar benefits.
What are the lessons for the future?	Beyond prudent macroeconomic management, Kazakhstan could diversify its export basket by solving private sector market failures that have thus far hampered its ability to produce and export new products to new markets.
Human capital for diversification	
Where are the jobs in Kazakhstan?	Mining and oil, the drivers of growth, employ very few people. Manufacturing also generates little employment. Most jobs are in the service sector; the public sector is also an important employer.
Do Kazakh workers have the skills demanded by the market?	Each year, more than 300,000 workers enter the labor force in Kazakhstan, but young workers often lack adequate basic skills despite having formal credentials from the country's education system.
What will need to change to reduce the mismatch in the labor market?	Addressing mismatches between the supply and demand for labor is a priority. This will require understanding the exact skills necessary for the country's economic development and aligning the quantity of graduates to the needs of the economy.
The institutions that matter for diversification	
Does Kazakhstan have a strong governance and regulatory environment?	Kazakhstan's institutions have improved since independence but their performance remains mixed. There are many good laws, but they are not always implemented. Corruption is a recurring problem.
Are market institutions well developed in Kazakhstan?	The country is well ranked on most indices of the strength of market institutions. However, major constraints such as market contestability, the major role of the government in the economy, and an underdeveloped financial sector hold back private sector growth.
What will need to change to strengthen Kazakhstan's institutions?	Greater efforts will be required to respect the rule of law to improve the quality of service delivery; make room for the private sector and encourage competition; make the public sector more efficient or smaller; get the financial sector in order; and commit to efficiency and reward excellence in the public sector.
Options to increase competitiveness in the short term	
Where are Kazakhstan's comparative advantages?	Kazakhstan has comparative advantages in products with low technological content, such as mining, iron and steel, and animal leather.
Has Kazakhstan faced excessive trade barriers?	Important trade partners like China, the EU, Japan, and the Republic of Korea impose higher tariff protection for food products. Kazakhstan faces more difficulties to reach new markets due to the lack of competitiveness of its nonoil exports.
How could better logistics help?	With exports projected to increase by 50 percent by 2020, and additional freight capacity service on the main export routes to the Russian Federation, China, and Korea, Europe and Central Asia will require much improved transport corridors.
When can industrial policy be useful?	Sector-specific policies need to promote productivity and not shield stagnant sectors. But such policies can be highly detrimental if they entrench interests among the beneficiary firms and end up making such arrangements permanent.
What can be done to help diversification?	In the long run, improvements in education, productivity, and institutions will be necessary for diversification. As an intermediate step, however, increased multilateralism beyond Central Asia will help, but it would be equally important to undertake reforms to reduce nontariff barriers and reduce the costs of trading across borders.

Why Diversification Is Important for Development

Kazakhstan is rich in natural resources, but it has not yet accumulated as much wealth as the world's richest countries. Kazakhstan's total wealth in 2008 was estimated at \$1,177 billion. Sizable, but Kazakhstan still has a long way to catch the world's richest countries. Its total wealth per capita at \$75,112 is lower than the average for upper middle-income countries (\$105,000 per capita) and Europe and Central Asia (\$110,000 per capita). In addition, the country has not been very successful in converting its natural capital into other forms of capital, a warning sign that growth may falter if the oil runs out. With the vast majority of Kazakhstan's wealth embedded in its nonrenewable natural resources, the country faces the challenge of managing them effectively and recovering their resource rents for investments in other forms of capital, such as education and infrastructure.

Natural capital is sizable, and progress in increasing physical capital per capita has been impressive, but the gap with the wealthiest countries remains wide. Kazakhstan is the third wealthiest country in natural capital and oil and natural gas in Eurasia, but it is far from the per capita levels observed in other resource-rich countries like Kuwait, Norway, and Saudi Arabia (table 2). For physical capital, the story is not very different. Kazakhstan increased its physical capital per capita from \$6,800 in 2000 to \$13,100 in 2010 (table 3). It is now the fourth wealthiest in Eurasia in per capita physical capital, but it is still far from the developed countries. For example, Norway, Australia, and the United States had

stocks well in excess of \$100,000 per capita in 2010.

Having benefited from a favorable external environment, high oil prices, and fast productivity growth, Kazakhstan enjoyed steady economic growth and outstanding poverty reduction in fewer than 10 years. With improving terms of trade and rising oil prices, the Kazakh economy outgrew those of its peers in the region and brought the country to the group of upper middle-income countries. The share of the population living in poverty (as measured by the PPP-corrected \$2.50 per capita a day) fell from 41 percent 2001 to 4 percent in 2009. If the external demand for oil and other commodities remains strong and oil prices are not disrupted by other unexpected economic or political factors, Kazakhstan's current income per capita could double by 2020, placing it among the high-income countries.

Kazakhstan's performance on the World Bank's indicator of shared prosperity shows significant progress. The shared prosperity indicator is the growth of consumption per capita of the bottom 40 percent of the population. In Kazakhstan, the average consumption growth for all households was about 7 percent over 2001–09, while that of the bottom 40 percent was about 11 percent. Only Moldova did better among Europe and Central Asian countries (figure 1).

Growth has been pro-poor, and poverty responded more to nonoil growth. There is a strong correlation between economic growth and the

Table 2 Natural capital per capita in Eurasian countries and other selected countries, 2005

2

(thousands of 2005 US\$)

	Natural capital	Land and forest	Coal and minerals	Oil and natural gas
Russian Federation	31.3	7.1	1.0	23.2
Kazakhstan	23.9	3.6	3.1	17.2
Azerbaijan	11.7	2.5	0.0	9.2
Uzbekistan	7.7	2.3	0.0	5.4
Ukraine	6.9	4.9	0.6	1.4
Belarus	6.0	5.2	0.0	0.8
Moldova	4.1	4.1	0.0	0.0
Georgia	3.3	3.2	0.0	0.1
Armenia	3.1	3.0	0.1	0.0
Kyrgyz Republic	3.0	2.9	0.0	0.1
Tajikistan	1.8	1.7	0.0	0.0
Turkmenistan	1.0	1.0	0.0	0.0
Eurasia	20.2	5.4	0.8	14.0
Comparators				
Kuwait	213.1	1.1	0.0	121.0
Norway	110.2	10.5	0.0	99.7
Saudi Arabia	97.0	10.4	0.0	88.6
Australia	40.0	19.7	10.7	9.7
Canada	36.9	24.3	1.1	11.5
Chile	18.9	9.3	9.3	0.3
Brazil	15.0	12.7	0.9	1.5
United States	13.8	10.3	0.5	3.0
Malaysia	12.7	2.6	0.0	10.1
Germany	5.7	5.2	0.1	0.4
Korea, Rep.	2.6	2.6	0.0	0.0
Singapore	0.0	0.0	0.0	0.0

Source: World Bank (2011).

decline in poverty during 2001–09 (figure 2). The sensitivity of poverty reduction is strongest to changes in nonoil growth rather than total growth, as seen in their respective elasticities of 4 percent and –0.1 percent.³ This reflects the fact that nonoil growth is shared by a higher portion of the low-income groups in the short term, most likely through labor market channels. But rural poverty was almost four times higher than urban poverty in 2011. Persistent higher poverty in rural areas can be explained by larger families with more children, poor infrastructure and access to markets, and a lack of human and financial resources in local governments.⁴

If Kazakhstan has promoted pro-poor growth, why should it be concerned with diversification? In many resource-rich countries, an obvious concern is what the sources of growth will be when oil runs out. A resource-rich economy that

diversifies its economic structure, its products, and its partners—and that becomes less reliant on its most abundant endowment—is also less sensitive to macroeconomic shocks transmitted through large fluctuations in commodity prices. And with resource extraction highly capital-intensive, diversification creates additional sources of employment for the labor force. Indeed, recent research finds a positive association between rising economic diversification and rising per capita income for countries with per capita income of up to \$20,000. Beyond that level, economies tend to reconcentrate, though high-income countries do not reach the concentrations usually found in low-income countries.

Kazakhstan has grown more and more dependent on oil. Kazakhstan's exports have grown very fast and have helped the economy to grow equally fast. With the commodity boom in the second

Table 3 Capital stock per capita in Eurasian countries and other selected countries, 2000, 2005, and 2011

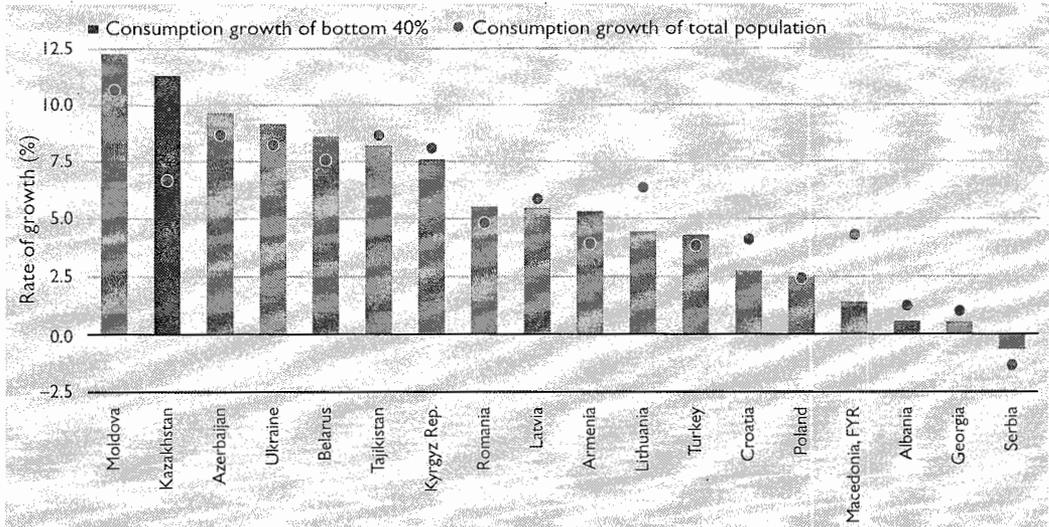
3

(thousands of 2005 US\$)

	2000	2005	2010
Russian Federation	13.5	14.3	17.2
Turkmenistan	12.2	11.4	16.8
Belarus	7.6	8.7	14.0
Kazakhstan	6.8	8.4	13.1
Ukraine	5.6	6.0	6.9
Armenia	2.5	3.4	5.7
Azerbaijan	2.6	4.3	5.6
Georgia	3.5	4.3	4.9
Moldova	2.5	2.7	3.4
Uzbekistan	1.8	1.8	2.2
Kyrgyz Republic	1.2	1.2	1.5
Tajikistan	0.9	0.9	1.0
Eurasia	9.3	9.8	12.1
Comparators			
Norway	169.6	176.4	191.3
Australia	117.5	123.6	135.8
United States	114.3	119.9	122.7
Germany	116.8	116.7	120.1
Canada	90.8	96.5	105.1
Singapore	112.9	110.1	105.0
Korea, Rep.	87.2	87.6	90.8
Kuwait	44.6	44.4	58.9
Saudi Arabia	27.6	25.9	30.4
Malaysia	32.5	27.1	24.5
Chile	19.6	20.2	23.5
Brazil	15.0	14.1	14.8

Note: Capital stock is computed by the perpetual inventory method (with depreciation rate of 5 percent) with data for 1995–2010.
Source: World Bank (2011).

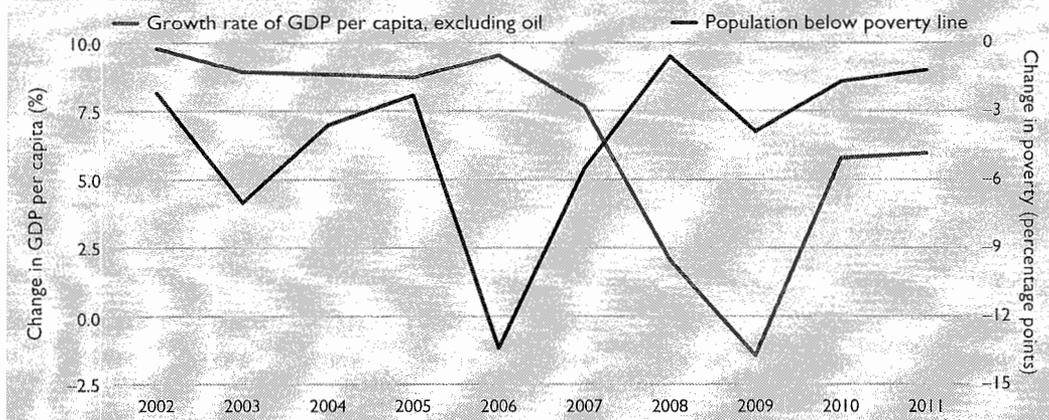
Figure 1 Shared prosperity indicator for selected Europe and Central Asian countries



Source: World Bank staff estimates based on the PovcalNet expenditure data as of April 2013.

Figure 2 Changes in GDP per capita and poverty

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Note: GDP per capita in 2005 US\$ PPP. GDP per capita without oil is calculated by subtracting oil rents.
Source: World Bank staff estimates based on ASRR data.

half of the 2000s, higher oil production and rising oil prices allowed Kazakhstan to increase its oil exports and collect more oil revenues. But this success has been marked by an increasing dependence on oil, manifest in the rising share of oil revenues in the government's budget, an increasing concentration of exports around oil products, and a rising share of the oil sector in the economy. The share of oil revenues in the total budget has remained roughly steady since 2009 in the range of 22–25 percent, while projections through 2020 based on current and future oil production suggest that it is likely to remain in that same range (figure 3).

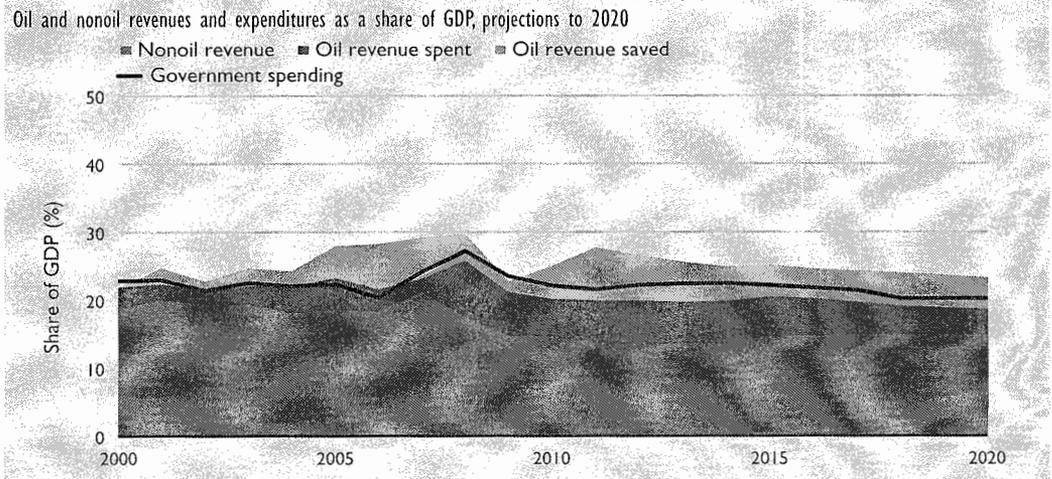
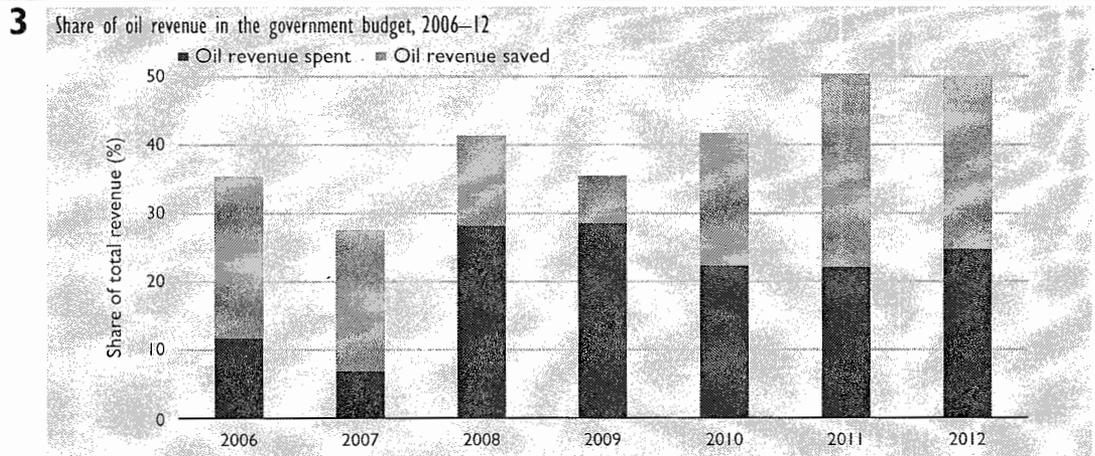
Resource-rich economies, especially those excessively reliant on oil, face several challenges. Many of these challenges have been articulated in the Paradox of Plenty, otherwise known as the curse of natural resources. In many oil-dependent economies, one of the main features of this paradox is the volatility of oil revenues. If not properly addressed, volatility makes economic management difficult, especially as cyclical swings are not typically predictable. The difficulties are compounded by the common correlation between fiscal revenues and expenditures. Volatility in revenues, associated with volatility in aggregate public and private expenditures, creates real exchange rate volatility. That can make profits in the tradable sector very unstable and risky, creating further disincentives to

invest. Exchange rate volatility can also encourage short-term capital flows, and actions to limit it could result in procyclical monetary policy. The Kazakh authorities have been particularly attentive to these challenges and created credible rules for their oil fund to avoid volatility.

Further progress will require a different economic development model. The stylized facts reviewed so far tell a success story of a country that started from a very low base and, blessed by its resource abundance, joined the upper middle-income countries in a decade. As one of the world's top oil producers, Kazakhstan has been successful in avoiding the perils of resource abundance.

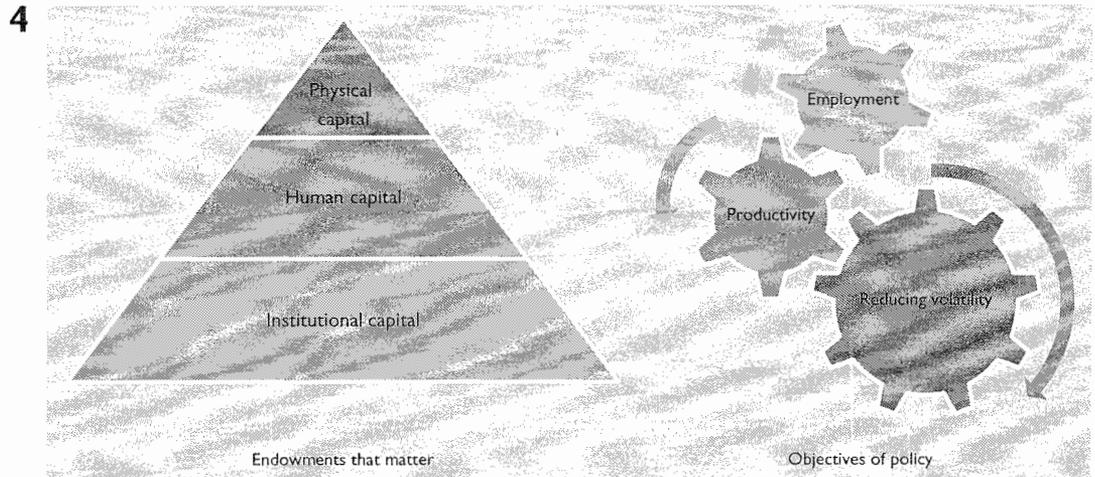
The path to increased wealth, prosperity, and diversification in Kazakhstan will be paved with policy options that protect the economy from volatility, harness the skills of its labor force, and reshape the institutions that regulate public and private agents. Looking forward, Kazakhstan's development objective of becoming one of the top 30 most developed countries by 2050 will require a steady hand at macroeconomic management to avoid volatility associated with oil dependence, substantial improvements in governance and transparency, a business-friendly regulatory environment, better skills for its labor force, and social policies that improve the living standards of Kazakh citizens (figure 4).

Figure 3 Addition to oil



Source: World Bank staff estimates based on Ministry of Finance of Kazakhstan data.

Figure 4 Endowments and policy objectives that matter for development and diversification



Source: Authors.

Oil Wealth, Volatility, and Macroeconomic Management

Kazakhstan's exports have increased sharply since independence, but the country has exported more of the same to old partners. The value of Kazakhstan's total exports has increased from \$6 billion in 1996 to \$49 billion in 2010 (in constant 2005 prices), more than an eightfold increase. Nonoil exports have increased in value, and new products have been added to the export basket, but oil exports have grown faster, so Kazakhstan has increased its export concentration even more than other resource-dependent countries (figure 5).

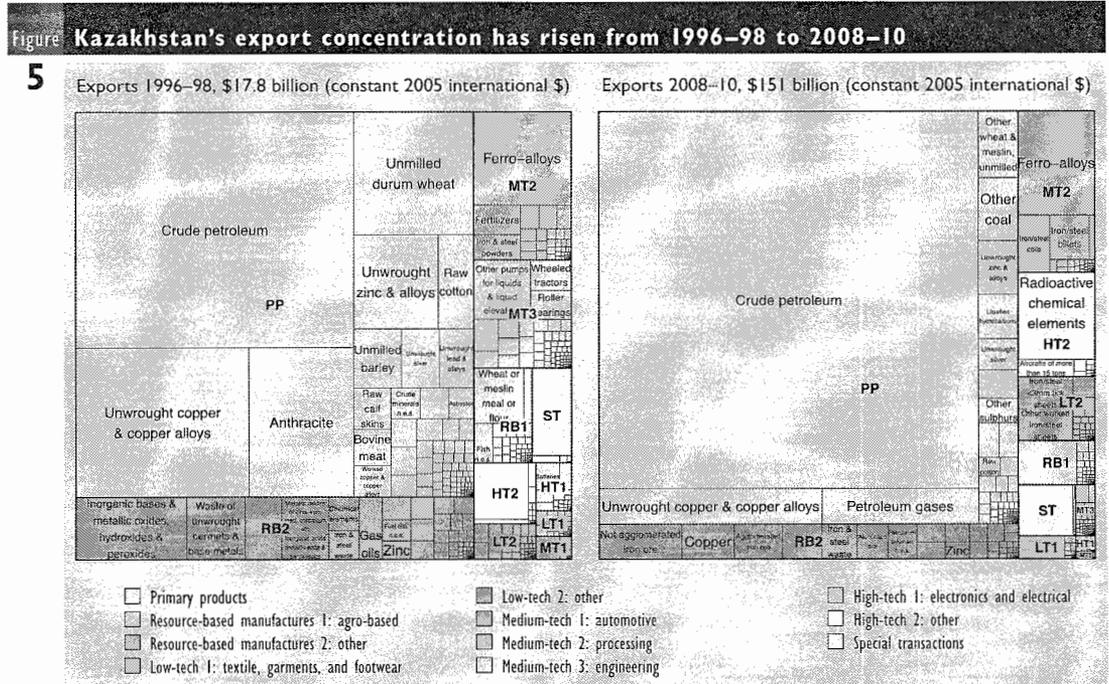
Kazakhstan has exported more of the same to old markets. The larger contribution to export growth is from the growth of exports of old products in old markets and, to a lesser extent, old products in new markets, consistent with earlier findings of little export diversification (figure 6). Kazakhstan has diversified its trade partners somewhat, but this had a declining impact on export growth, especially in the second half of the 2000s. There has also been a growing extinction of products, which probably demonstrates higher "experimentation."⁵

Kazakhstan's nonoil exports to most of its major trading partners have grown over time. Exports to its largest trade partner, China, have grown at close to 20 percent a year, higher than world exports to China, so Kazakhstan gained market share there. Kazakhstan exporters also gained market share in the U.S., Japanese, Turkish, and Italian markets. The exceptions are markets in the Russian Federation and Islamic Republic of Iran.

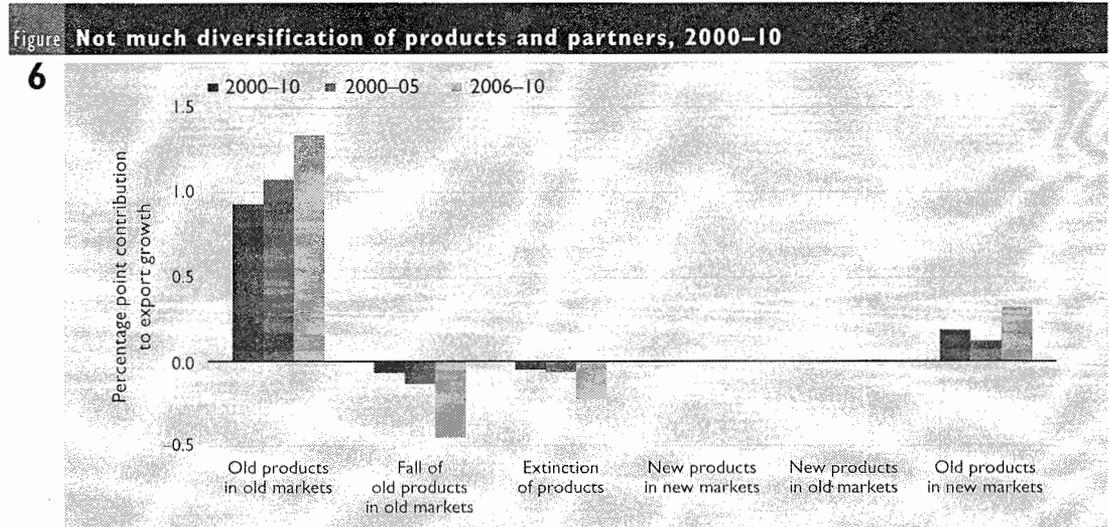
Despite growing experimentation, survival rates were low across the board. The survival rate at the end of the 2000s was 79 percent for existing products but only 27 percent for new products.⁶ The experimentation rate—or the share of potential additional products in a broad product category that appeared in the export basket at one time or another—was high, particularly in metals, textiles, and manufactured goods. The highest survival rates were for some foods, chemicals, minerals, and some electrical and manufactured products. Survival rates were low in textiles, some apparel, wood-based products, animal-based products, some manufactured products, and (surprisingly) metals. These low rates offset the contribution of experimentation to the net growth of exports and hint at difficulties in the business environment, the competitiveness of exports, protectionist practices against Kazakhstan, or a combination of all three.

Fiscal rules for managing volatility

Dependence on oil is associated with export concentration and terms of trade volatility, which can bring about domestic macroeconomic volatility. Net exports of natural resources are usually associated with macroeconomic volatility, but this does not happen linearly. The transmission channel is multifaceted and involves volatility in a country's terms of trade. That is, net exports of natural resources (particularly oil) are associated with export concentration that can then lead to volatility in terms of trade.



Source: World Bank staff estimates based on Comtrade data.



Source: World Bank staff estimates based on Comtrade and World Development Indicators data.

Volatility in terms of trade can then cause domestic macroeconomic volatility. Evidence suggests that this sequence of effects is statistically meaningful both across countries and for Kazakhstan. In this context, the use of fiscal rules for managing the volatility of oil export revenues becomes an important tool for policymaking.

If oil export revenues were stable, fiscal rules would be unnecessary. Indeed, when economies

discover or begin to exploit oil reserves, it would be optimal for society to consume more and reduce the share of investment in GDP. The economy has become richer, so the incentive to save would be reduced. The problem for policymakers is that such a world does not exist. Saving too little today to fund current consumption can be both risky from a debt management view and from a national welfare view. The volatility of consumption directly reduces household welfare, and

macroeconomic volatility hampers private investment.

The best fiscal rules explicitly include an element of countercyclicality. An optimal fiscal rule could bring savings of close to 25 percent of GDP over the next 25 years. But it would be difficult to implement because of the need to rely on numerous economic parameters while deciding what to do with current oil revenues. Econometric simulations suggest that a simple rule based on a standard permanent-income approach—with an exit clause for periods of severe private sector downturns—could yield benefits similar to the optimal (and extremely complex) rule. An additional advantage is that it could provide discretion to the fiscal authority to tap the oil fund in severe transitory recessions (a 30 percent drop in private income).⁷

Kazakhstan's fiscal rule performs well against other types of rules. Several criteria can assess the robustness of a given fiscal rule, and this report considers those of Kopits and Symansky (1998) to test how well the current rules in Kazakhstan perform. These criteria include several aspects that would be expected in any fiscal rule, but the most important is that fiscal rules should be simple and transparent for reasons of credibility and enforceability. Kazakhstan does well on both criteria (and in many others).

The fiscal rules in Chile and Norway highlight differences with those in Kazakhstan. The differences do not, however, mean that the Kazakh rule is inferior. Chile's fiscal policy is anchored on a structural balance target that depends on the long-term price of copper while Norway's follows a complex structural deficit rule that depends on the nonoil deficit. While these rules have desirable properties in theory, they are very hard to implement and not entirely transparent. And if they are too difficult to implement, they can undermine the credibility of the government in financial markets. Simple, effective, and transparent, the Kazakh rule has dealt with transitory shocks in a satisfactory way.

A bird-in-hand rule would not be a good replacement for the current Kazakh fiscal rule either. As in

Norway, applying the bird-in-hand rule over the life of the extraction cycle implies higher saving and lower transfers to the budget in the earlier years because the principle driving this rule is the uncertainty about future revenues. Such an approach is appropriate for mature producers with large accumulated financial reserves and an extraction cycle close to the end. Current projections for Kazakhstan show that the annual transfers from the oil fund to the budget are expected to surpass its investment income only by 2025. So, adopting this type of rule in Kazakhstan could reduce the nominal amount transferred to the budget significantly until at least 2025.

A simple fixed transfer rule with an escape clause allows nearly as much gain in welfare as does a theoretically optimal rule. That is, a fixed rule with clear criteria to allow for a deviation from the fixed amount to be transferred to the budget every year for a limited period (the escape clause) performs as well as an optimal and very complex rule. The countercyclical policy stance adopted to cushion the effects of the 2008–09 economic crisis was a de facto implementation of such a rule. For the future, this approach could be codified—specifying the threshold for triggering an escape clause and the number of years for such an alternative regime to remain in effect before assuming that the shock is chronic rather than transitory.

There are three main recommendations to deal with transitory shocks within the current fiscal rule.

- First, consider revisiting the \$8 billion base amount that has been in effect since the inception of the rule in 2010 and that has not been reevaluated since that time. Applying the growth of nonoil GDP would adjust the base to about \$11 billion. That should preserve the nondistortionary characteristics of the original \$8 billion base while allowing for the greater absorptive capacity of the now-larger domestic economy. For the future, periodic adjustment of the base might be desirable. In principle, the goal would be to use trend growth in nonoil GDP, something that could be calculated only over longer periods—four to five years, if not longer.

- Second, confirm the current fixed rule but add two limiting factors for implementing any 15 percent deviation. One factor is to specify the size of the shock that would trigger such a deviation, and the other is to impose a time limitation on how long such additional transfers could be used (say, two years).
- Third, implement “automatic stabilizers” to the extent possible. That is, use

the structure of the tax code (by doing such things as making taxes conditional on income or profits) and the structure of expenditure programs (by doing such things as making poverty or other assistance programs conditional on income or employment status) to make countercyclical revenue and expenditure changes as automatic as possible.

Gaps and Opportunities for Human Capital Development

Economic diversification will require a highly skilled labor force and productivity and job creation in the nonoil sector. According to the World Economic Forum's classification of different stages of development, Kazakhstan's GDP per capita of \$11,000 places the country in the group of economies transitioning from an efficiency-driven stage of development to an innovation-driven stage of development (figure 7). The relevant question, however, is whether Kazakhstan has the characteristics typical of an efficiency-driven economy: good higher education and training, efficient goods markets, efficient labor markets, to name a few.

Each year more than 300,000 new workers enter the Kazakh labor force. In 2011, 160,000 students graduated from public and private universities. Another 184,000 completed vocational secondary education in colleges and professional lyceums.⁸ Thousands more entered the labor force with general secondary education or less. Among young workers ages 16–24 not enrolled in school, about 41 percent enter the labor market with general secondary education or below, 36 percent with vocational secondary education, and 23 percent with higher education degrees.

In international terms, Kazakhstan fares poorly when it comes to providing adequately trained workers to the labor market. The new entrants to the labor market often lack adequate levels of basic skills when entering the labor force despite having formal credentials from the country's

education system. In 2009, Kazakhstan participated for the first time in the Programme for International Student Assessment (PISA) that assesses functionality of students in mathematics, reading, and science. The PISA results suggested that Kazakhstan students underperformed on these assessments compared with their peers in other income comparator countries (figure 8). In particular, students underperformed compared with other countries at similar levels of development, scoring an average of 40 exam points lower on the PISA reading scale—equivalent to about one year of schooling—than the level predicted by the country's GDP per capita (figure 9).

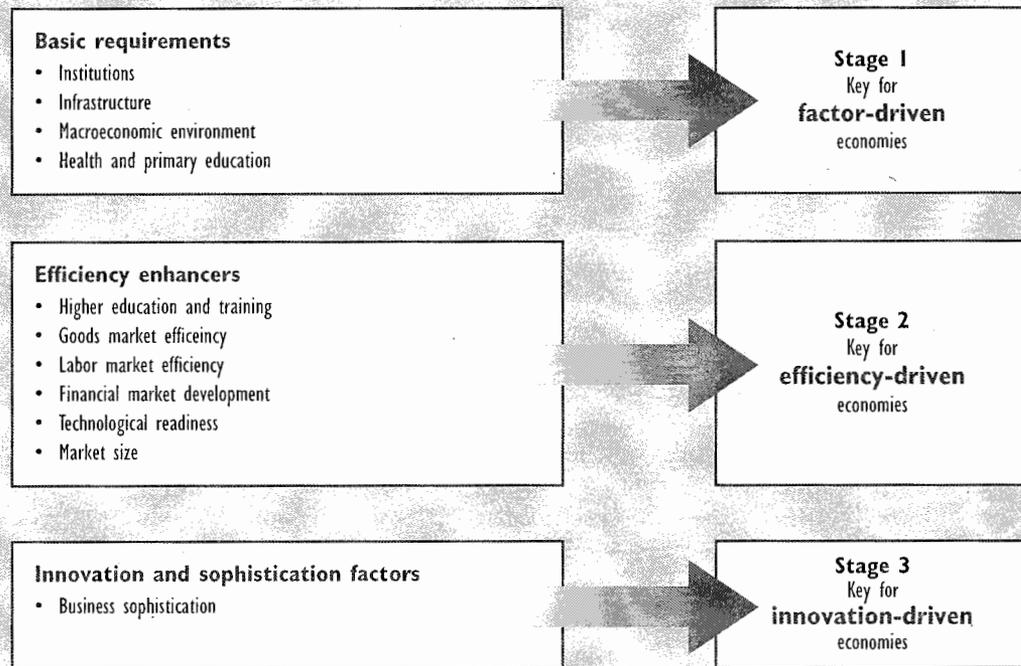
There are, however, two bright spots on Kazakhstan's record of cognitive skill provision, as measured through international student assessments. The first is the aspect of gender differences. In the PISA 2009 round of assessments, Kazakhstan's 15-year-old girls scored significantly better than boys on the reading portion of the assessment and slightly better than—though not statistically differently from—boys on the mathematics and science assessments. In math in particular, Kazakhstan's gender-balanced performance stood in stark contrast to most of the comparator countries and the Organisation for Economic Co-operation and Development (OECD), where girls typically underperformed in relation to boys.

The second bright spot is the possible improvement of Kazakhstan's performance over time in these

Figure 7 **Competitiveness and different stages of development**

7 (percent, unless otherwise indicated)

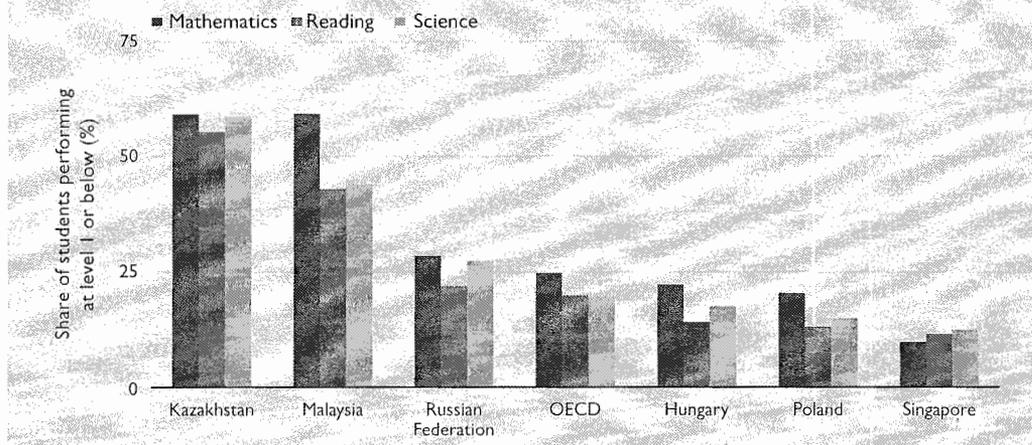
	Stages of development					
	Stage 1: factor-driven	Transition from stage 1 to stage 2		Stage 2: efficiency-driven	Transition from stage 2 to stage 3	
GDP per capita thresholds	<\$2,000	\$2,000	\$2,999	\$3,000–\$8,999	\$9,000–\$17,000	>\$17,000
Weight for basic requirements subindex	60	40–60		40	20–40	
Weight for efficiency enhancers subindex	35	35–50		50	50	
Weight for innovation and sophistication factors subindex	5	5–10		10	10–30	



Source: World Economic Forum (2012).

Figure 8 **Students in Kazakhstan underperformed in PISA tests compared with their peers**

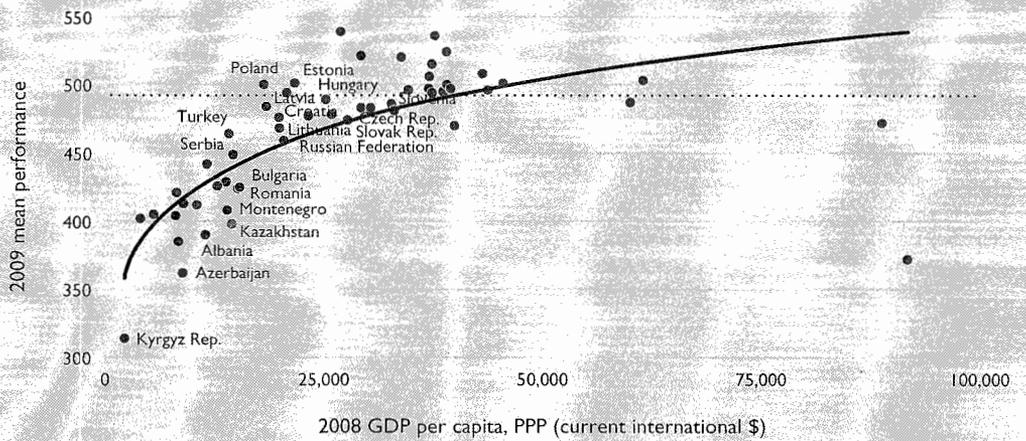
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Note: Malaysia's students were assessed in 2010 as part of the PISA 2009 Plus round of assessments. Source: World Bank staff estimates based on data from OECD (2010) and Walker (2011).

Figure 9 The average reading score is relatively poor in Kazakhstan

9



Note: The best-fit line represents a regression of countries' predicted PISA scores based solely on GDP per capita. The dotted line represents the OECD mean reading score. Source: Sondergaard and Murthi (2012).

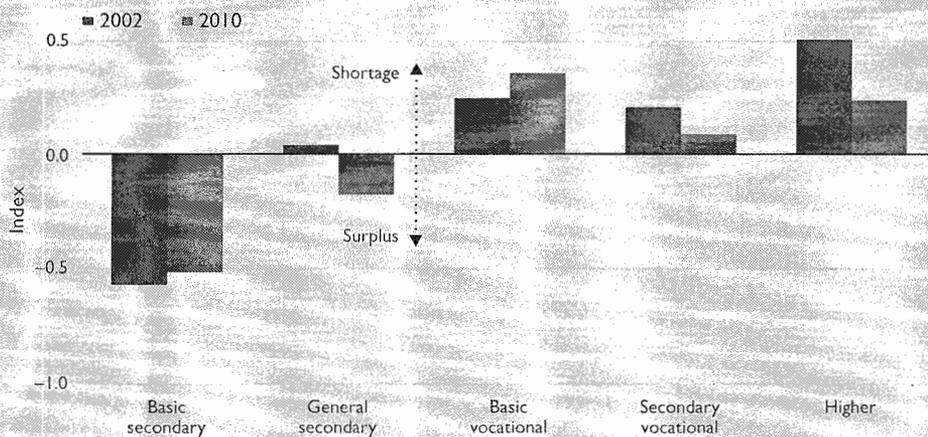
international benchmarking exercises. The recently released 2011 results of the Trends in International Mathematics and Science Study (TIMSS) indicate that Kazakhstan's students performed closer to—though still slightly behind—their peers in comparator countries than they did in PISA 2009.⁹ The results were particularly encouraging for Kazakhstan's fourth graders, who scored significantly higher than their counterparts in Poland on the TIMSS 2011 mathematics assessment. However, it is not possible to draw conclusions about trends in performance across different types of assessments. Policymakers should therefore keep a close eye on the forthcoming

results of the PISA 2012 round, which will for the first time allow Kazakhstan to examine its performance over time in a comparable manner.

There is excess demand for workers with higher and vocational education and excess supply of workers with general secondary education and below. Workers with basic vocational skills are in higher shortage than workers with higher education (figure 10). In fact, for men a basic vocational degree was highly valued in the labor market in 2010, while higher education degrees were in demand for both men and women. Over 2002–10, there was a substantial

Figure 10 Labor shortages and surpluses by education attainment, 2002 and 2010

10



Note: The index is calculated as $(e/u - 1)$, where e and u are respectively employment and unemployment shares of a given occupational group. Positive values of index indicate shortages of particular occupational group, while negative values indicate a surplus. Source: World Bank staff estimates based on ASRK data.

reduction in the shortage of workers with secondary vocational and higher education, but a slight increase for workers with basic vocational education.

*Most employers place a high value on skills and training, but they do not always pay for it.*¹⁰ Firms place high requirements for formal educational qualifications on the workers they expect to hire—when hiring specialists and managers, more than two-thirds of all employers prefer candidates with higher education degrees. For most other positions, vocational or specialized secondary education is preferred—a general secondary diploma is not enough. When asked to rate skills based on importance for their specialists, 500 employers put the ability to work independently at the top of the list, followed by time management. Communication, analytical thinking, problem solving, and customer relations were also important for at least three-quarters of employers. The main reason firms find it difficult to fill vacancies for specialists (the most demanded occupation) is the low quality of local training, cited by 63 percent of employers. While less than half of Kazakh employers provide opportunities for worker training or retraining, the likelihood of receiving training tends to increase with the level of skill (specialists receive training in more than 40 percent of surveyed firms).¹¹

The key question for Kazakhstan: is the country's education sector producing the right kinds of workers? Between 2007 and 2011, the country's labor force added almost 550,000 net jobs that were filled by graduates of higher education institutions. Another 390,000 net jobs went to workers with vocational secondary degrees, while those with general secondary education or below faced a net loss of 265,000 jobs. Not surprisingly, the vast majority of jobs gained by those with university degrees (81 percent) were in services. Among vocational education graduates, 69 percent of the net job gains were in services and a further 24 percent in industry and construction. The losses for those without specialized degrees came mainly in agriculture. Higher education graduates now make up 43 percent of the workforce in services,

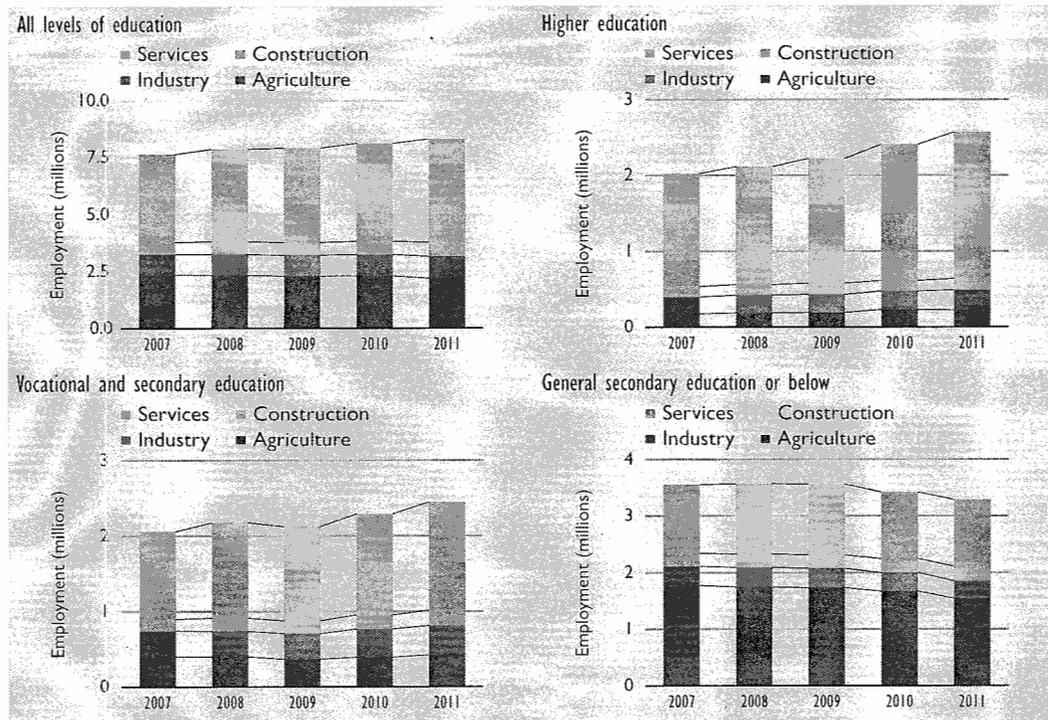
the fastest growing sector, up from 38 percent four years earlier, and 31 percent of the overall workforce, up from 26 percent in 2007. These gains—as well as the modest gains by vocational graduates—have come at the expense of those who receive no specialized vocational training at the secondary or postsecondary level (figure 11).

Despite continuing employment growth, the education system produces more graduates in some sectors than the labor market can absorb. Although there has been no net job creation in agriculture in recent years, Kazakhstan's vocational education institutions continue to produce thousands of agriculture specialists. Industry- and construction-related specializations also receive more technical and vocational education (TVE) graduates each year than the number of jobs created. Only in some parts of the service industry does job creation keep up with the number of graduates.¹² And although large quantities of graduates enter the labor force each year, they may still lack the appropriate quality and mix of skills that employers demand.

A two-pronged approach could better align secondary education needs with market needs. This would involve improving access to labor market information to facilitate the matching of skills and needs—and encouraging closer collaboration between educational and research institutions and private firms to foster sector-specific research and human capacity. Kazakhstan's vocational and higher education institutions train more skilled specialists in some sectors (such as agriculture) than the labor market demands. TVE can be improved by enhancing the TVE curriculum content, upgrading the qualification system to better match labor market demand, and deferring early tracking from secondary to postsecondary.

Managing the flow of students into higher education is also important. The stated goal of bringing the share of workers with higher education degrees to 50 percent by 2020—from 30 percent in 2010—should be considered in line with projected economic demand. If

Figure Structure of total employment in Kazakhstan by sector and level of education, 2007–11



Source: World Bank staff estimates based on ASRK data.

not done carefully, the expansion of higher education can impair the quality of graduates and exacerbate the mismatches in the labor market. The tertiary education gross enrollment rate in Kazakhstan in 2010 was 24.8 percent, lower than the 40 percent for Russia and the 31 percent for OECD countries. While this would indicate room to expand, access to higher education institutions should not become an entitlement.

The government's main policy objectives focus appropriately on skills development. These objectives are stated in the Strategic Plan for Development of

the Republic of Kazakhstan until 2020,¹³ the State Program on Development of Education of the Republic of Kazakhstan for 2011–20,¹⁴ and the Employment Program 2020,¹⁵ among others. The Strategic Plan, "Investing in the Future," sets out goals for the education system and labor force by 2020—enhancing the quality of skills possessed by graduates at each level of education (box 1).

Gaps remain between the stated objectives and the policy needs for achieving the country's long-term development aspirations. First, a thorough understanding is needed of the skills required

Box Selected strategic goals for education and labor force development by 2020

- General secondary schools will provide academic knowledge and develop the skills for promoting the formation of an educated, ethical, critically thinking, and physically and spiritually developed citizen, seeking self-development and creativity.
- Pupils in general secondary schools will achieve high results on international comparative assessments, such as PISA, TIMSS, and the Progress in International Reading Literacy Study.
- High-quality knowledge and skills of technical and vocational education graduates will be recognized by employers.
- The quality of higher education in Kazakhstan will correspond to the best global practices.
- The graduates of domestic higher education institutions will be in demand by employers.
- The share of highly skilled workers in the working population will increase to 50 percent.

Source: GoRK (2010a).

for the country's economic development. Rapidly expanding the domestic pool of highly trained specialists, while simultaneously increasing reliance on foreign labor (including the lower skill categories)—also envisioned by the Strategic Plan—has risks. To counter these risks, in-depth studies of the labor market demand in the medium and long terms should be considered. Information needs to be gathered to identify which skills are important to employers and where the skill gaps exist. Building this knowledge base through skill measurement studies that can inform education and training policies is critical to aligning government policy with the country's development needs.

The authorities could consider several policy options to improve the quality of education in Kazakhstan:

- Improve planning to address more efficiently perceived gaps in the education environment.
- Improve teacher effectiveness and focus on teacher policies, including teacher training (pre- and in-service), teacher pay, and incentives to attract the most qualified.
- Provide in-service support to schools and teachers, equipping them with innovative and effective tools for curriculum development.
- Continue with phasing-in per capita financing as it has the potential to reform education systems through enhanced efficiency, equity, transparency, and accountability.
- Deepen school autonomy and accountability so that schools can redefine their incentive structure to create better conditions for learning and teaching; create accountability mechanisms through community participation for school autonomy and accountability.
- Improve monitoring and evaluation systems to identify gaps and respond on time to student and school needs.
- Put in place a well-articulated early childhood development program for children ages 0–3 years, emphasizing the most vulnerable groups.
- Build job-relevant skills by offering training and tertiary education and promoting improvements in technical and vocational education to improve the relevance of its curriculum and match it to labor demand.

The Institutions that Matter for Diversification

The institutions that matter for diversification manage volatility, regulate the business environment, and provide public services. The government faces uncertainty of how much revenue will be available to finance investments and provide public services. Private agents and investors become increasingly wary of taking risks and may decide not to start new businesses or undertake new investments. The quality of public service delivery affects the functioning of markets, the speed of economic transactions, and even national competitiveness. A court system that does not work well reduces the enforceability of contracts, the application of the rule of the law, and the respect of property rights. An education system that does not prepare students for a competitive market limits the capacity to innovate. These conditions limit the prospects for developing the nonresource sectors and make economic policymaking more complex.

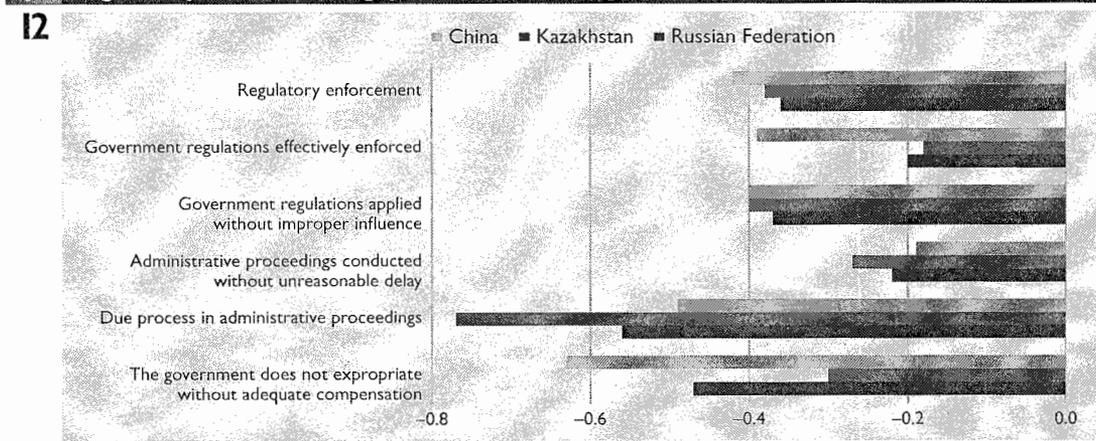
The quality and coverage of regulatory institutions have improved, but gaps remain in implementing regulations effectively and without discrimination. Kazakhstan has a regulatory enforcement gap with OECD countries—especially for due process in administrative proceedings, suggesting that respect for the rule of the law is not guaranteed (figure 12). Half the respondents in a recent survey felt that legal and regulatory transparency and predictability are insufficient (Ernst and Young 2012). The main concerns are inconsistency in the interpretation of laws and their selective application, overregulation and onerous local

content requirements, perceived corruption, and an insufficiently independent court system.

Corruption remains an important concern and is a bigger problem in Kazakhstan than in comparator countries. According to the 2012 World Justice Project, corruption is much more prevalent in Kazakhstan than in OECD countries, with the legislative and judicial branches being the most affected. A significantly higher percentage of companies indicate that informal gifts are requested or expected at various stages of the business cycle in Kazakhstan than in OECD countries. The prevalence of corruption is confirmed by the low ranking of Kazakhstan on the 2012 Transparency International Corruption Perception Index (ranked 133 of 176 countries) and other global indicators such as the 2012 Worldwide Governance Indicators Control of Corruption and the 2012–13 World Economic Forum Global Competitiveness Indicators (WEF-GCI), where corruption is listed as the second most problematic factor for doing business (figure 13).

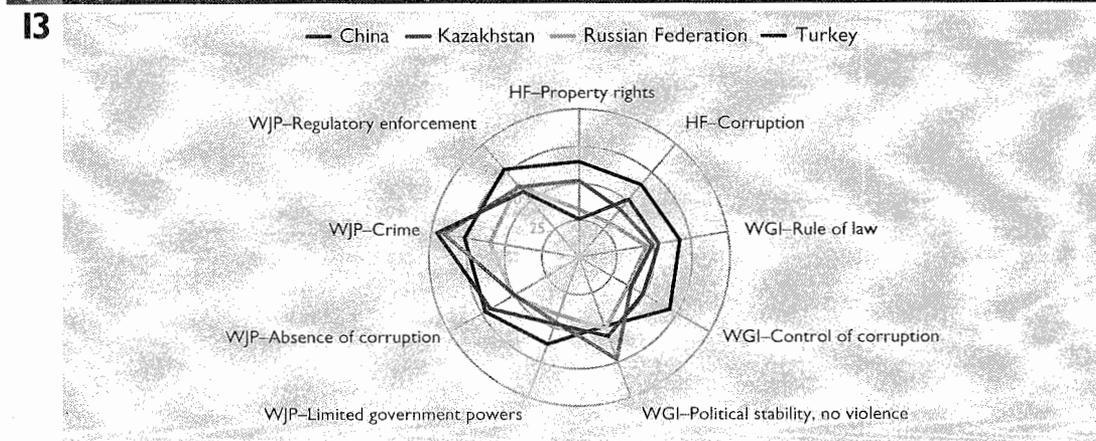
Markets develop and private businesses flourish when the behavior of those who govern is not arbitrary. Clear rules and a level playing field encourage competition in well-functioning markets that thrive with the appearance and disappearance of opportunities. By contrast, excessive transaction costs due to burdensome procedures and regulation, incomplete definition and enforcement of contracts and property rights, and barriers to entry for new market participants limit

Figure 12 Regulatory enforcement gap with OECD average



Note: Data are calculated from the formula $[(Country\ score - OECD\ average\ score) / OECD\ average\ score]$, based on a score of 0 to 1, with 1 the highest possible score. Source: World Justice Project: Corruption and transparency.

Figure 13 Selected indicators of institutional quality for Kazakhstan and comparators, 2012



Source: World Bank staff estimates based on Heritage Foundation (HF), Worldwide Governance Indicators (WGI), and World Justice Project (WJP).

opportunities and discourage new investments. Kazakhstan has done well in several areas important for the functioning of markets, but it has room for improvement in others.

Key legislation prescribes well defined and sound property rights. The constitution guarantees property rights, and this principle is included in key laws and regulations. Kazakh and foreign individuals may establish and operate businesses in most sectors and acquire, register, use, and sell most assets. Land ownership by private entities is allowed, but only 0.9 percent of agriculture land has been privatized, and some restrictions continue on the ability of foreigners to own agriculture land. The legal framework generally protects intellectual property rights, but some aspects need to be

strengthened and implementation arrangements effectively enforced. The country ranks 92 on the 2012–13 WEF-GCR intellectual property rights indicator.

The government has taken important steps recently to establish a new model of civil service based on meritocracy. In March 2013, new amendments to the legislation on the civil service came into effect. The amendments provide financing for the Corps A and include annual performance appraisal of administrative civil servants among other measures. The new model aims to achieve five objectives: strengthen the principles of meritocracy in selection and promotion of human resources; create a managerial Corps (called Corps A); introduce elements of anticorruption into the civil service framework

including a code of conduct, standards of ethics, and other elements of reducing corruption in the system; improve mechanisms of human resource management; and increase the status of human resource services. Written tests for civil service appointments have been computerized to minimize manipulation. Interview processes and procedures have been tightened up. And committees are used to ensure that the selection of candidates is objective.

These efforts are contributing to reduce the role of patronage in the civil service. Civil servants with financial assets need to place them in trusts when taking office, and a vetting of civil servants on observance of anticorruption legislation for certain position is being proposed. The number of political civil servants is being reduced, and clear guidelines have been set out for hiring the Corps A civil servants. This is to encourage transparent, merit-based selection and to reduce political influence peddling in the civil service. Finally, the annual performance appraisal is being introduced to administrative civil servants.

While trust in political institutions is high, satisfaction with institutions that citizens are more likely to interact with on a daily basis—such as public health services and the courts—is mixed. Kazakhstan ranks in the bottom third of Europe and Central Asian countries in the satisfaction of its citizens with public service delivery—from a low of 27 percent in the courts, to 40 percent in traffic police, to a high of 69 percent in primary and secondary education. The reported prevalence of unofficial payments to receive public services correlates negatively with the satisfaction about the public service received. While these negative correlations are insufficient to establish causality, reducing corruption could improve the quality of services and strengthen the trust in institutions.

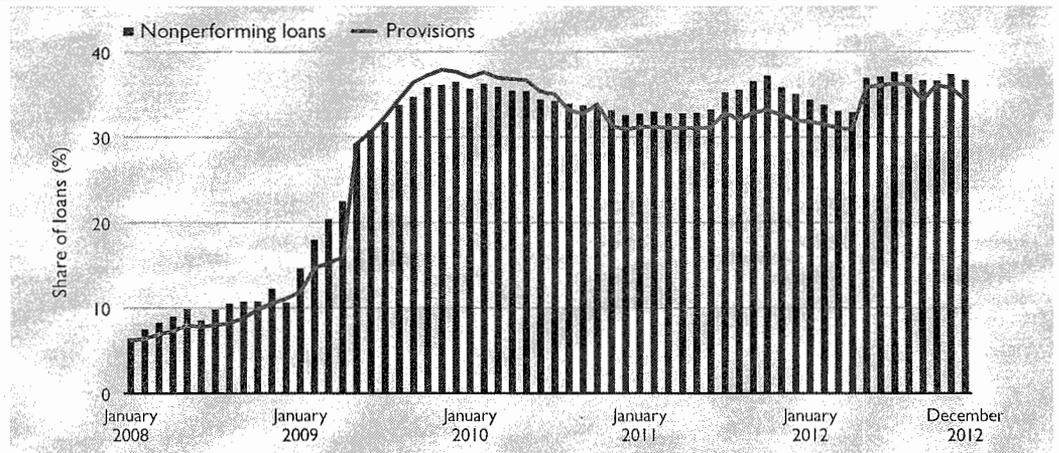
Kazakhstan has recently emphasized improving its position on the Doing Business protecting investors indicator. But note that the Doing Business indicator measures the degree of protection for minority shareholders in a joint-stock company and does not give a full picture of the

corporate governance situation in a country. The Company Law of Kazakhstan provides a broad measure of direct voting rights by international standards. Further, recent improvements include the introduction of manager's personal liability for related party transactions (an unintended consequence of this is that qualified managers are discouraged from applying), ability of shareholders to file an action, and compulsory market valuation for larger transactions.

The banking sector is still recovering from the financial crisis. Reported capital adequacy appears healthy and bank liquidity is ample, but the industry still has depressed profits due to the lack of business opportunities for banks and the modest recovery in the nonoil economy. Nonperforming loans remain high at 37 percent of total loans (figure 14). They are well provisioned (93 percent of total) but keep a third of bank loan portfolios idle and not working for the economy. The authorities have been supporting the banking sector through interventions, restructurings, and extensive liquidity provision, but reforms need to bear fruit in the near future for the sector to recover.¹⁶

Adopt a more proactive approach to business environment reforms

Kazakhstan has enjoyed a great improvement in indicators such as Doing Business over the past five years, with its overall position improving from 89 to 49 in the global ranking of ease of doing business. These impressive results highlight the commitment of authorities to business environment reform and the decisiveness of these efforts. To a large extent, the definition of the reform priorities has been guided by those areas in which Kazakhstan ranked lower than its peers in global indicators. This first generation of business environment reforms provides a solid foundation for a conducive business environment, but it is not enough. Priority areas that deserve the attention of the authorities include: guiding future reforms by a close and consistent Public-Private Dialogue that creates well-structured communication channels for enterprises of all sizes and industries—this

Figure 14 Problem loans are well provisioned but constrain banks' lending expansion

Source: National Bank of Kazakhstan.

process should not be bound to areas covered in global indicators such as Doing Business; reforming laws and regulations to address the specific obstacles facing enterprises in different sectors; and emphasizing adequate implementation and evaluation of reforms. Even though there is no formal assessment, the gap between laws and practice is significant and varies widely across the country.

Respect the rule of the law and improve the quality of service delivery

Four main areas should be considered when designing reforms to improve the quality and effectiveness of service delivery. First, it is necessary to improve and implement key elements of the legal framework. This can help develop and implement key laws to reduce the role of the state in private sector functioning, promote self-regulation in the private sector (through codes and laws for registration and licensing), and reduce clogged court dockets by moving certain disputes to administrative resolution mechanisms. Second, the Ministry of Justice needs to improve the quality and responsiveness of its services. This can be done by improving operational effectiveness in such areas as enforcement of judicial decision and improvement in information systems and monitoring and evaluation. Third, strengthened judicial professionalism and quality is key to the success of the reform program. To achieve this, the Supreme Court and the judiciary will need to undertake a number

of reforms, including simplifying and streamlining court procedures to eliminate delays in case processing and improve access to justice. Fourth, judicial training needs to be professionalized. It should include an institutional and functional assessment of the Institute of Justice and the subsequent preparation of a costed and sequenced Medium Term Training and Infrastructure Needs Assessment action plan. It is also necessary to modernize training curriculum for judges and judicial staff with attention to specialized training such as new criminal and economic legislation.

Make room for the private sector and encourage competition

There are several sectors and products in which Kazakhstan has an inherent comparative advantage. Yet the private sector has not moved in that direction. Two plausible reasons for that are not enough incentive for competition, and the heavy footprint of the state in the economy. For example, while the country is ranked in the top third in the Doing Business indicators, competition policy and market orientation are seen as weak and incipient. There are several restrictions to market entry in a number of sectors keeping significant parts of the economy inaccessible to the private sector. But the importance of the public sector in the economy remains high, and many private activities companies in other countries, such as transport and storage of oil, gas, water, and sewer systems

and management of airports, are considered strategic in Kazakhstan and remain under the responsibility of the state.

Make the public sector more efficient, or make it smaller

The most effective response to a market failure is not necessarily government provision. International experience shows that it is better to let the private sector in while the government sets the standards and regulates. In that context, it may be advisable for Kazakhstan to reassess the strategic areas and monopolies that exist with a view to reducing the footprint of the state in the economy. At the same time, there is a need to improve efficiency, particularly in public procurement where existing legislation seems appropriate but does not cover a significant part of the public sector (for example, government holdings and state-owned enterprises).

Get the financial sector in order

The financial sector in Kazakhstan is still suffering the hangover of the 2008–09 crisis. The level of nonperforming loans in the country is one of the world's highest. The lack of a concrete resolution can hinder the performance of the economy and the prospects for diversification. There should also be more active steps to strengthen the country's payment system by improving the legal and regulatory framework, raising awareness by consumers and businesses about payment services, reducing the cost and tax disincentives for the use of electronic services, improving the capacity of service providers to market their payment services, and strengthening payment system infrastructure. Reforms to modernize and reform the retail payment system will benefit small and micro

enterprises as well as households that lack access to banking and other financial services. They will enhance competition in the payment services industry and allow the entry of innovative approaches to meet the transaction service needs of the economy as a whole. If successful, reforms in that area will also strengthen the financial management in the public sector by facilitating electronic delivery and collection of government payments. Kazakhstan should also consider using factoring, leasing, and micro-finance to help small and medium-size enterprises finance assets and obtain faster access to working capital. Getting these instruments right would go far in increasing the depth and coverage of the financial sector.

Commit to efficiency and reward excellence

Kazakhstan needs to make faster progress in institutionalizing a professional and merit-based civil service. The importance of a highly qualified and motivated cadre of civil servants cannot be overemphasized. Many of the institutions that support markets are provided by the public sector. The ability of the state to provide these institutions is thus an important determinant of how well individuals behave in markets and how well markets function. In Kazakhstan, there is a lack of clear criteria for merit-based competition, career progression, and remuneration for administrative positions, as well as loopholes allowing noncompetitive selection. This encourages inefficiency and corruption, hurting public sector credibility. There are also gaps in terms of insulating public administration staff from political pressures and influence. Such a separation exists in other countries and is encouraged in order to separate professional civil servants from political staff.

Options to Increase Competitiveness in the Short Term

Product space analysis can frame a dialogue between the government and the private sector. Sectors with emerging comparative advantage outside oil include mining, iron and steel, and animal leather. But because the private sector has not taken up these products, important bottlenecks and barriers may need to be removed first. This is corroborated by the high experimentation and low survival rates of new exports. The concentration of Kazakhstan's existing products is in the periphery of the product space, with few products in the "core." This implies that it would be difficult and risky to shift into more sophisticated, high-tech, and better connected products without investments in endowments that would make the Kazakh exports more competitive.

Static product space maps for Kazakhstan show a sharp decline in competitively exported products, especially more sophisticated and capital-intensive ones. Product space maps show a decline in the number of competitively manufactured products over time (figure 15). The decline occurs in many parts of the network, but most significantly in the core of the network including machinery and other capital-intensive goods, consistent with increasing export concentration over time. The pattern is similar in Russia.

The current export structure shows the prevalence of primary products and resource-based agricultural or other products. The limited number of medium- or high-tech products reveals the lack of sophistication in Kazakhstan's export basket (figure 16).

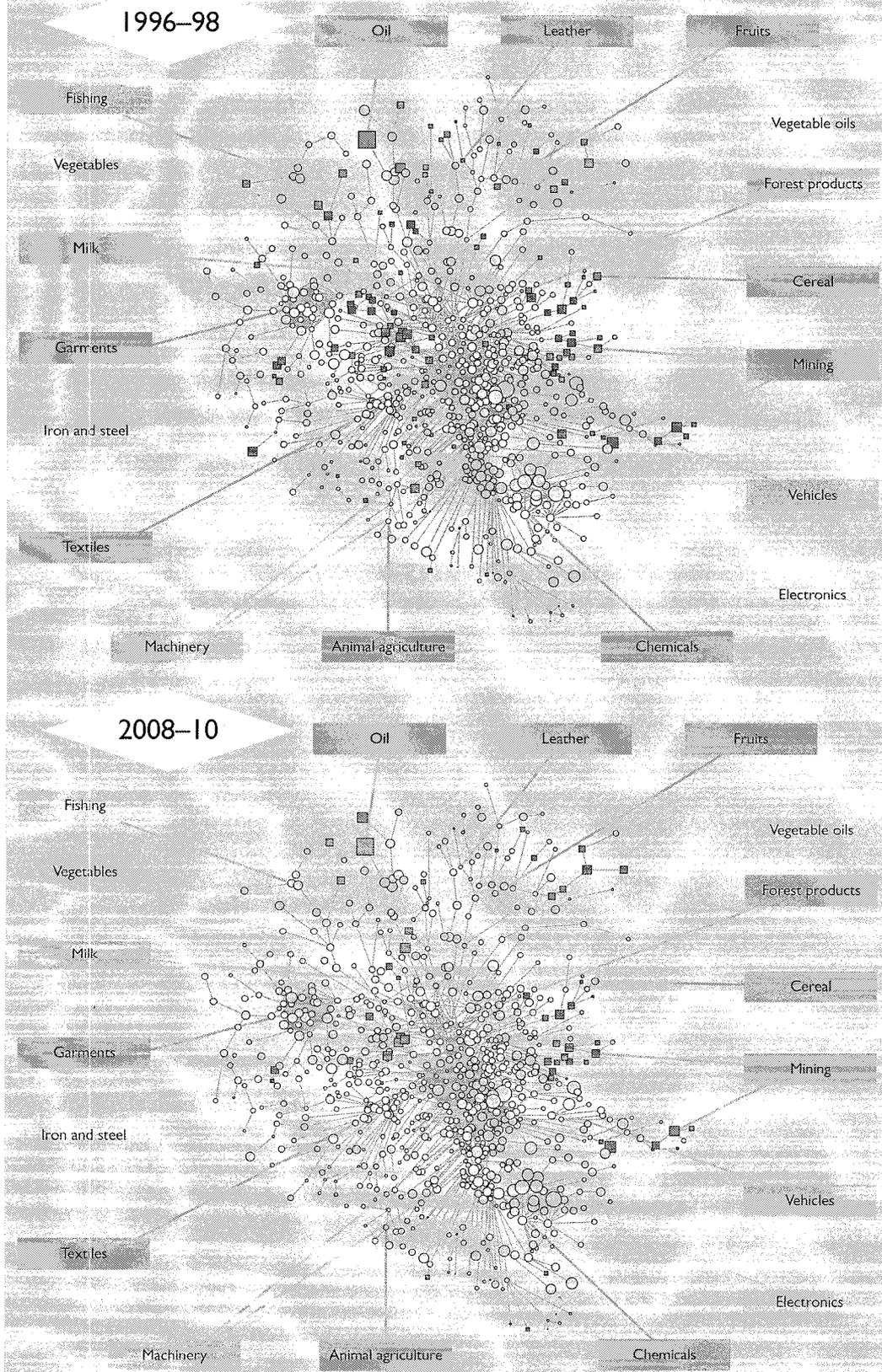
Using each product's revealed comparative advantage over time, Kazakhstan's exports can be divided into four categories: "classics," "emerging champions," "disappearances," and "marginals" (box 2). Classics and emerging champions were competitively exported in the most recent time period, while disappearances and marginals were not. Emerging champions have recently gained competitiveness while disappearances have recently lost it. It is easy to see the high number of disappearances across most product categories, where competitiveness has been lost in the most recent time period. But apart from oil, the dominant classic export with sustained competitiveness, some groups of products have either maintained their competitiveness or appear as emerging champions. This includes mostly oil-based or metals-based products but also some agricultural products such as wheat and animal skins.

The growing number of disappearances may indicate unaddressed barriers to private sector development. In the absence of a high revealed comparative advantage, it may be riskier to invest in this type of products. The declining competitiveness may reflect weakening capabilities and severe obstacles to production at an efficient scale—such as lack of adequate technology, unavailability of skilled labor, excessive regulatory barriers, and rising competition in global markets.

One strategy is to look at new products that are close to currently competitive exports and that offer income potential, strategic links to more sophisticated

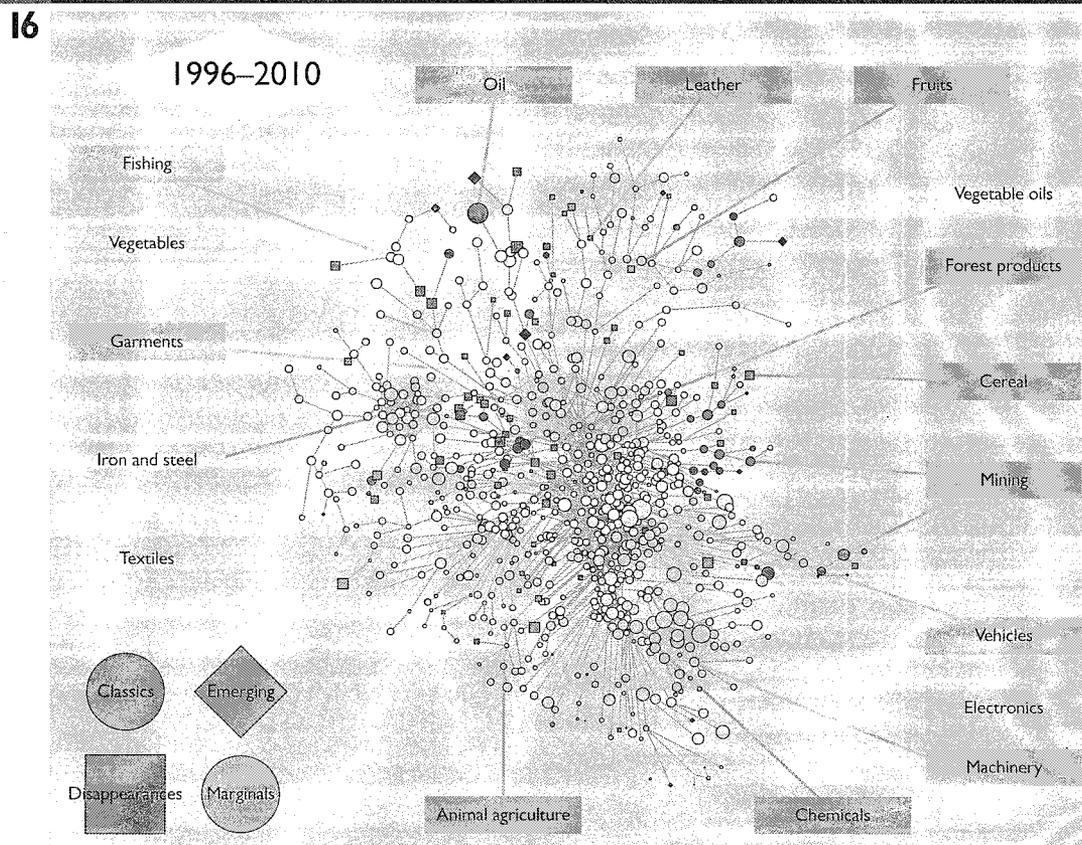
Figure 15 Kazakhstan's competitive exports, 1996-98 and 2008-10

15



Note: Products exported competitively are marked in red and are identified as those with a revealed comparative advantage of greater than 1.
Source: World Bank staff estimates based on Comtrade data.

Figure 16 Classics, emerging champions, disappearances, and marginals



Box 2 Defining classics, emerging champions, disappearances, and marginals

2

- Classics are products with demonstrated competitiveness over time where it would be less risky to invest.
- Emerging champions are products in which Kazakhstan has increased its comparative advantage in global markets.
- Disappearances are products that were competitive in the past but have lost that competitiveness recently.
- Marginals are products in which Kazakhstan had a low comparative advantage in the past and that remains low.

products, and large market opportunities. This strategy considers new products or “marginals” that are income-enhancing and that are close to Kazakhstan’s current location in the product space only. Grouping these products into sectors, they can be sorted for their market potential, measured by the volume of world trade in these products. They can also be sorted in terms of strategic value, indicating their potential for further movement in the product space to more centrally located products. Large volumes of trade would indicate large international markets, while high strategic value indicates possibilities for better diversification in the medium to long term.

Tapping the potential competitiveness of new products with higher technological content requires upgrading the country’s physical, human, and institutional capital. Kazakhstan’s exports have a much larger gap in their human capital content when matched with the imports from comparator countries. The emerging message is that diversification across both products and markets in the long term will depend on how well Kazakhstan can harness its endowments. In addition, dynamic and rich-country markets in the EU and East Asia import goods that are exported intensively by countries with relatively strong general institutional settings, high financial development, and high capital to labor ratios.

Without addressing these gaps, current efforts to diversify the economy will yield limited results.

Greater multilateralism could help Kazakhstan reach new markets. The lack of competitiveness of local products, the ineffective use of the country's most critical endowments (human capital and institutions), and an underdeveloped business environment are all internal reasons that might explain why Kazakhstan has not diversified its products and services or its trading partners. The lack of a broader multilateral trade policy is the external part of this story. Evidence shows that Kazakhstan has placed a greater emphasis on intraregional trade arrangements, for political or historical reasons, limiting its exposure to the rest of the world. As the country aspires to reach new markets, it will need to adopt a more multilateral trade policy.

Reduce fragmentation and inefficiencies

Geography and history constrain supply chains in Kazakhstan. Transit is operated over long distances, generally with many transport providers. Borders, especially with China, disrupt the supply chains. Further, the legacy design of the supply chain from the breakup of the Soviet Union implies separate interventions, such as customs brokers, and the obligation of going through a bonded warehouse. So supply chains are especially fragmented and vulnerable. Shippers and consignees have limited control on the supply chain, including tracking goods in transit (reflected in the World Bank's Logistics Performance Index scores). Fragmentation can happen because there are many interventions in the supply chain. For example, independent controls (roads and customs in Kazakhstan and third countries) and trade clearance procedures are operational constraints that prevent providers from achieving high service quality.

Remove constraints to trade facilitation and border management

Trade facilitation is changing fast in Kazakhstan, with some positive impacts. The private sector is

very satisfied with a strong commitment from key government agencies like the Customs Control Committee. But the organization of supply chains and clearance procedures still depends on a multitude of private bonded "warehouses." Another limiting factor is the dependence on international and national transit. Given the country's size, geographical position, and landlocked status, it depends on transit through third countries, and its imports are preferably cleared (about 93 percent) after transiting through different countries. Optimizing the transit regime is thus critical to reducing logistics costs and encouraging transit through Kazakhstan. The transit regime under the Customs Union of Belarus, Kazakhstan, and Russia is much more complex and less friendly than the one in place for decades in the EU.

Improve transport corridors

Kazakhstan's exports are projected to increase 50 percent by 2020, requiring additional freight capacity on the main export routes to Russia, China, Korea, Europe, and Central Asia. Trade among neighboring countries is also expected to increase by about the same amount, creating the possibility of substantial transit traffic through Kazakhstan. The 2050 Strategy aims to develop Kazakhstan as the preferred Central Asian trade, logistics, and business hub. The objective to double the capacity for transit traffic by 2020 remains very ambitious. The main focus is upgrading the infrastructure along the main transit corridors (at an estimated cost of \$8 billion for the Western Europe–Western China road corridor alone). But the government recognizes that investment alone would not achieve the objectives in the 2050 Strategy, and it is ready to introduce policy measures and investments beyond infrastructure. For services, the strategy calls for simplifying custom activities and border management procedures in view of the creation of the Customs Union, Single Economic Space, and accession to the World Trade Organization. The various agencies involved are also asked to reach international standards for safety, speed, and modernization of the aircraft fleet, among others.

Following the physical upgrade of the transport corridors, the government should promote operation and maintenance. The government should also foster a client-oriented culture, ensuring that the expectations of the transport industry are met for quality of service, deregulation of tariffs, and access to infrastructure. While supporting the modernization of international transport corridor and associated services, the government should not forget to distribute the dividends of increased trade traffic; the gap in quality of intercity public transport and rural accessibility should also be addressed.

It is not always what a country exports that matters. Countries that develop their export basket toward increased similarity with the export basket of high-income countries grow more rapidly.¹⁷ In this sense, countries may “become what they export,” converging to the incomes of their competitors. Others contend that the type of good matters less than the way that the good is produced.¹⁸ If a country produces a high-quality class of good, or produces at the technology frontier, it will capture more technological spillovers and higher value added than if it produced a lower quality of the same good, or at a lower level of productivity. Identical goods can thus be produced with very different levels of productivity, quality, and technical sophistication. For example, when Korea produces computers, it uses frontier technology, which generates high levels of technological knowledge. Mexico also produces computer components, but at a lower technological level where advanced technological learning is less likely. While “picking winners” is risky, there are arguments for subsidizing exports that may raise the country’s returns to schooling and make private agents invest more in education.¹⁹

Industrial policy can help diversification in the short term, but it needs to be used wisely. If sector-specific policies are to be used, they need to promote productivity and not shield stagnant sectors. Badly designed and implemented vertical policies can work against the diversification they intended to encourage. As a matter of principle, companies need, in the medium and long term, to pass the test of international competitiveness. In that context, specific studies look at the barriers to the development of sectors with potential for growth. The recent OECD report identified obstacles and opportunities to promoting access to finance in the agribusiness sector, foreign direct investment in the agribusiness value chain, and information and communication technology development through public-private partnership.²⁰ Such studies can provide valuable insights for the focus of useful horizontal policies.

Smart industrial policies could correct distortions in the economy and generate positive externalities. A smart industrial policy would attempt to correct an economy wide market failure that prevents the private sector from producing a good for which the country has an inherent comparative advantage. It would be wise to promote self-discovery and experimentation based on existing capabilities. This is important because the process of finding out which of the many potential products can be profitably produced could generate information about technology and markets available for that product and benefit many other producers. Finally, the best outcome for smart industrial policy is to raise the country’s returns to schooling and making private agents invest more in education. This could be done by placing greater emphasis on how the new product is produced rather than on which type of product is to be produced.

Notes

1. See World Bank (2013a).
2. Eurasia covers the countries that used to be part of the Soviet Union excluding the Baltics (Estonia, Latvia, and Lithuania); Azerbaijan, Kazakhstan, Russia, Turkmenistan, and Uzbekistan (the resource-rich countries in the group) plus Armenia, Belarus, Georgia, the Kyrgyz Republic, Moldova, Tajikistan, and Ukraine (the countries in the group that do not export hydrocarbons).
3. This elasticity is calculated as the negative ratio between changes in poverty the rate of growth in GDP per capita with and without oil rents. The reported coefficients of elasticity are averages for 2002–11. The negative elasticity of poverty to total GDP per capita is driven by strong poverty reduction in 2008 under negative growth of GDP per capita.
4. GoRK (2010b).
5. A higher experimentation rate for Kazakhstan's exports has also been found in World Bank (2012).
6. World Bank (2012).
7. The discussion here draws on World Bank (2013b).
8. ASRK.
9. For the past 20 years, TIMSS has measured trends in mathematics and science achievement at grades 4 and 8. Kazakhstan first participated in the quadrennial assessment in 2007. However, its first internationally comparable assessment of fourth and eighth graders took place in 2011.
10. Ivaschenko (2008) is based on a skills and labor demand survey conducted in 2008 to shed more light on the specific worker skills being sought by Kazakh employers.
11. Please see annex 1 for a more complete list of key results from this survey.
12. Because many vocational graduates choose to continue their studies in higher education institutions, it is not possible to calculate the exact labor market absorption levels for Kazakh graduates with the data currently available.
13. GoRK (2010a).
14. GoRK (2010b).
15. GoRK (2011).
16. As discussed in World Bank (2013c), to address the nonperforming loan (NPLs), the regulator established a national and private asset management companies and provided additional incentives for NPL write-offs. For resolving NPLs and releasing their provisions, the National Bank of Kazakhstan is following its initial strategy of setting up a national asset management company (the Problem Loans Fund was established in April 2012 and started buying problem loans [with a discount] from banks on a pilot basis) and private bank-specific asset management companies (four banks have already set up special purpose vehicles [SPVs] for this purpose and are expected to start transferring bad loans to their respective SPVs). As part of the required incentives for NPL write-off, the authorities came up with two new initiatives: extended tax exemptions for NPL write-offs until the end of 2013 and imposed ceilings for NPLs (over 90 days overdue) at 20 percent of a loan portfolio in 2013 and 15 percent in 2014.
17. Hausmann and others (2012).
18. Lederman and Maloney (2012).
19. Lederman and Maloney (2012).
20. OECD (2013).

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