

Kazakhstan Country Diagnostic Study

HIGHLIGHTS

August 2018



BACKGROUND

Kazakhstan is endowed with extensive natural resources per worker and reliant largely on revenues from the export of primary commodities, particularly petroleum and natural gas. The country's oil and gas sector generated 21% of Kazakhstan's gross domestic product (GDP) at its peak in 2005 (World Bank 2017), contributing a major part of public revenues. With more than 70% of export revenues from the oil and gas sector, Kazakhstan was able to achieve fast paced development and growth, which in turn uplifted the social conditions of its people: reducing poverty, improving access to primary education, and promoting gender equality and women empowerment.

However, the relatively large oil sector has led to slower growth in other tradable sectors, which has adversely affected economic diversification and the evolution of non-oil sectors. The downturn of oil and other commodity prices in 2014 exposed the country's vulnerability to external shocks and constrained government revenue, underlining the need

for the government to chart a transformation policy to foster more diversified growth in the economy so as to reduce its dependence on oil and gas.

To manage the impact of the oil boom, the government set aside most of the oil and gas revenue in the National Fund of the Republic of Kazakhstan, established to accumulate a part of oil revenue windfalls for future generations and support stabilization policies during economic downturns. Likewise, the government has initiated a series of programs aimed at reviving the agro-industrial sector and gearing it towards the production of high value-added goods and associated services.

This study presents an in-depth analysis of the sectors that show the largest potential for supporting the country's quest for economic diversification. The study identifies key opportunities in the agriculture, manufacturing, oil and gas, and transport-logistic sectors, and analyzes key areas in which specific reforms can best contribute to economic diversification. The study also presents evidence-based policy suggestions to support future government plans and strategies.

Photos: PAGE 1: Top (Clockwise from left): Locomotive assembly plant in Astana City, Kazakhstan (photo by Andrey Terekhov); Grain terminal “AkBidai” is one of the three dry terminals in the Aktau port (photo by Igor Burgandinov); Workers carefully select the quality of apples before being juiced in a plant just outside the city of Almaty (photo by Ariel Javellana). **PAGE 2:** Top: A man selling dried fruits, nuts, and delicacies at the green market in Almaty City, Kazakhstan (photo by Andrey Terekhov); Fresh apple juice are packaged in tetra paks by RG Brands in Almaty (photo by Ariel Javellana); Bottom: Cattle breeding farm near Almaty (photo by Elmira Dautova). **PAGE 3:** Aktau port is Kazakhstan’s main seaport on the Caspian Sea (photo by Igor Burgandinov).



KEY MESSAGE

Oil rents have driven Kazakhstan’s growth so far, but reliance on oil alone will not produce a long-run level of growth close to Kazakhstan’s potential. While maintaining the competitiveness of the oil and gas industry, the country could benefit from being more diversified in order to stabilize its growth cycle. Modernization and more efficient use of public resources in agriculture will increase productivity and contribute to diversification. Diversifying and transitioning manufacturing towards high-potential exports will help the country’s industrial development and create more and better jobs. Upgrading innovation of the oil field service sector through research and development, together with formation of joint ventures with the private sector, will allow skills and technology transfer to improve competitiveness. Improving transport and logistics will help local products penetrate and exploit global value chains.

KEY FINDINGS



a. Agriculture

- Kazakhstan has a potentially strong comparative advantage in agriculture, being endowed with one of the world’s highest arable land masses per capita and having sufficient fiscal resources to invest in the sector’s development, as well as having political commitments to supporting it. However, the country remains a net food importer, and agriculture remain a small contributor to GDP (average of 5% during 2012–2016) owing to challenges such as inefficient farm size, highly variable cropping conditions, water scarcity, poor public infrastructure, and fragmented value chains.

- Agricultural output picked up a positive trend in the beginning of the 2000s.

Despite the highly volatile annual growth rate driven by fluctuating grain yields and export prices, agricultural output continues to recover.

- Technical efficiency of spring wheat production is high, which implies that new technologies are needed to improve productivity substantially.
- Technical efficiency of beef production is low, and production is highly responsive to hay area, raw materials

(including feed), other material input, and water input costs. Also, analysis suggests that beef production is scale neutral, with no inherent advantage for large farms.

- Individual farmers have significantly higher technical efficiency than enterprises, which suggests the former make better use of inputs and are more productive.
- Value chains are typically dominated by a small number of processors sourcing from large agricultural enterprises, and are concentrated in commodities with little processing and value addition.
- Value-chain integration is hampered because production and quality standards are not established or enforced, and quantities and qualities offered by farmers do not match the demands of processors and marketers.
- Improved cattle and dairy value chains are required to access high-value markets for processed livestock products. Both beef and dairy value chains are subject to a bifurcation that prevents the integration of small-scale producers with high-value processing and outlets.
- Many small agricultural producers are locked into saturated local markets or dependent on monopsonistic trading arrangements, refraining their integration into value chains and restricting farmers to subsistence production.

b. Manufacturing

- Kazakhstan’s exports between 2000 and 2015 were concentrated in mineral fuels such as crude petroleum, liquefied petroleum gas, and coal. There have also been increases in exports of chemicals and manufactured goods (copper, ferroalloys, and silver). However, Kazakhstan’s competitiveness in producing and exporting these products has decreased relative to other countries.
- Between 1995 and 2015, overall diversification deteriorated, as the total number of products with comparative advantage fell from 82 in 1995 to 45 in 2010, and had only slightly picked up to 60 by 2015.
- The manufacturing sector has potential for growth to enable greater economic diversification, and to expand international trade, lower volatility, and improve macroeconomic stability.
- Kazakhstan’s manufacturing remains a small component of the overall economy and employment (comprising only around 6%–7% of the total labor force), contrary to industrial strategy goals.
- The country has a below-average economic complexity index, given its current GDP per capita of \$8,710 (World Bank 2017). Its export space is dominated by products in the periphery, which tend to be isolated and involve

capabilities that cannot be easily redeployed. This poses a potential challenge to diversification and increasing market sophistication.

- Results of product space analysis show Kazakhstan has a strong potential in food processing (oil cakes, sunflower seed oil, and tea), basic chemicals (nitrogen fertilizers), and basic precious and nonferrous metals.
- Kazakhstan has very strong potential to further develop manufactured basic metal products, basic chemicals, food processing products, textiles, and leather products. Similarly, refined petroleum products, dairy products, more sophisticated metals, chemicals, food processing products, and textiles are other candidates for government-private sector collaboration to tap for increased competitiveness

c. Oil and gas

- While jobs in the oil and gas sector itself have been few (accounting for less than 1% of employment because of the high capital intensity of its production processes), the spending of the resource rents from oil and gas have supported the growth of jobs in labor-intensive services, such as oil field service (OFS) companies.
- OFS is a big industry in Kazakhstan, constituting around 1,000 firms and employing an estimated 160,000 people.
- The local OFS market is composed mostly of small specialized firms that may not have access to new technologies, credit, and large contracts from petroleum products.
- Therefore, in light of the recent global decline in oil prices, it is vital to ensure the competitiveness of the country's oil and gas industry by maintaining the effectiveness of OFS companies.

d. Trade and transit services

- Global value chains are increasingly important in the world economy. Kazakhstan is still a long way behind comparator countries in terms of exploiting benefits from global production networks.
- While tariffs have been coming down in Kazakhstan, to an average of 9%, nontariff barriers are still high, which are an important constraint on trade. For instance, it takes 7 days to clear exports and 12 days to clear imports in Kazakhstan, compared with 4 days and 6 days, respectively, in Uzbekistan.
- In terms of infrastructure and logistics performance, Kazakhstan still has considerable room for improvement. Its World Bank infrastructure index is 2.76 on a scale of 5, with 5 the highest performing. The People's Republic of China scores 3.75 on this index. A similar index of logistics performance indicates 2.8 for Kazakhstan, compared with Singapore's 4.2.



- Transit trade is still a very small fraction of Kazakhstan's total trade, which suggests this segment can potentially grow a great deal in view of the Belt and Road Initiative, provided constraints related to the above are removed.
- Using firm-level data for Kazakhstan, analysis shows that a 10% increase in the efficiency of transport infrastructure would generate a 0.9% increase in the productivity of firms operating in other sectors of the economy. For manufacturing firms this productivity improvement impact would be even higher at 1.1%. Hence, the transport-logistic sector should not be seen as just an additional input in the production process, but rather as a sector that can generate positive spillovers to the rest of the economy.
- Targeting on transitioning to high-potential manufacturing export products could help the country's industrial development and facilitate transport growth.

e. Economy-wide analysis

- A *status quo* scenario of continuing to rely on the oil and gas sector would not produce as much economic growth for Kazakhstan as in the recent past, assuming the price of oil increases by only 1.6% annually from its current relatively low level (the World Bank's latest price projection) and labor productivity improves at the same rate as in the past. In that case, GDP growth is projected to average only 2.3% annually from now until 2030.
- By contrast, reforms in key sectors to improve the business climate, enhance competitiveness, and increase private sector participation would improve the country's growth rate by about 1.2 percentage points annually, thereby bringing GDP growth to 3.5% (still below the 4% forecast of the International Monetary Fund and Kazakhstan 2025 Strategic Plan's target of 5%, as the simulation in the study used more conservative policy shocks and included only a selection of policy reform initiatives).

KEY RECOMMENDATIONS

a. Agriculture

- Government support to agriculture would be more effective if it is redirected to the provision of public goods (water management, rural road connectivity, agricultural research, and extension) that can improve long-term productivity and competitiveness.
 - Private sector investments in agriculture should be encouraged, and the business environment should be enhanced. This should be encouraged by (i) introducing more flexibility to land markets to ensure that land is allocated to its most efficient uses, (ii) having more stable and transparent agricultural policies to reduce investment risks, and (iii) streamlining governance in agriculture by decreasing the considerable fragmentation and eliminating overlapping mandates.

- Agriculture can benefit from broader financial sector reform. Plans to increase public agricultural lending through private bank intermediaries will increasingly link the fate of farms with the banking system.
- The capacity for innovation and knowledge management should be enhanced by investing in agricultural research and extension, and developing knowledge partnerships with the private sector and other research networks for improved knowledge and technology transfer.
- The formation of agricultural cooperatives could be a cornerstone of agricultural policy. However, it is necessary to improve the enabling environment for agricultural cooperatives (e.g., the legal framework; and training in management, planning, and finance) so that cooperatives can thrive and become financially independent and able to provide a sustainable form of local credit.

b. Manufacturing

- Policy priorities need to be tackled within the context of a diversification plan that is flexible and responds to changes.
- The government and the private sector should work together to identify new economic opportunities in structural transformation and address obstacles to exploiting possible opportunities for growth.
- Improvement in the quality of education, on-the-job training skills, and apprenticeships is crucial to address the current shortage of highly skilled professionals and workers needed by manufacturing companies. Improved collaboration between industries and universities needs to be enhanced to align training with skills needed by emerging industries.
- Small and medium enterprises (SMEs) could be important innovation incubators, but the government must act as a catalyst to establish SME networks that serve as the foundation for innovative value chains. Links among SMEs and between SMEs and larger companies (both public and private) need to be built.
- Infrastructure bottlenecks in transportation, logistics, and energy systems need to be removed for Kazakhstan to

achieve increased competitiveness and diversification. Modern and improved infrastructure can help integrate domestic markets, provide a link to unexploited external markets, reduce transport costs, and support the production of tradable goods.

c. Oil and gas

- As the local OFS market is currently fragmented, providing incentives for firms to form cooperatives and enter joint ventures, as well as setting up a legal framework for the formation and dissolution of such cooperatives, would address market fragmentation.
- Maintaining the competitiveness of OFS and the oil and gas sector entails strengthening research and development (R&D) and improving the quality of the physical sciences, engineering, and other relevant disciplines to grow indigenous knowledge.
- While local R&D is being strengthened, Kazakhstan could benefit from the formation of joint ventures and consortia between local and foreign OFS firms to promote the transfer of technologies and skills.

d. Trade and transit services

- There is a need to address gaps in transportation and logistics to help “high-potential” sectors producing tradables to enter and exploit global value chains and contribute more to national economic growth and export diversification

e. Economy-wide analysis

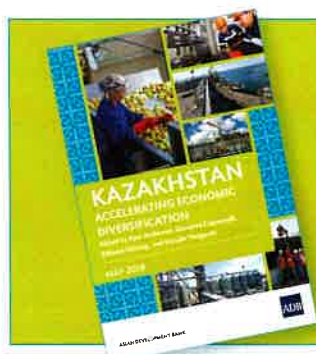
- Accelerating reforms towards economic diversification and taking advantage of the country's large export potential are key for Kazakhstan to achieve the envisaged growth potentials. Strong political will to support and implement reforms policies and programs aimed at improving the country's business climate, trade innovation and competitiveness, and economic integration, as well as to increase private participation are all crucial in achieving a more diversified economy overtime.

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