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Kazakhstan as a Business Opportunity - Industrial Clusters and Regional Development

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Contents

1 The not-so-bad-decade – Kazakhstan's economy ten years later

Kazakhstan was the last of the former Soviet republics to declare independence in December 1991, and is the most ethnically heterogeneous, comprising some 130 different nationalities. Nevertheless, it has been extremely successful since the collapse of the Soviet Union in maintaining political stability, harmonious interethnic relations and, more recently, in achieving sustained economic growth. Indeed, it is the only one of the five central Asian republics that has not been the site of serious ethnic, religious, or political violence in the post-Soviet period.

This relative stability and economic development can be attributed to two main factors. The first is the rich oil and natural gas reserves in the west of the country, and offshore in the Caspian Sea, which have attracted some $34 billion in Foreign Direct Investment since 1991, and which have therefore inspired Kazakhstan's recent economic boom. The second is the pragmatic manner in which President Nazarbayev has overseen the country's transition towards a secular, capitalist society whilst maintaining a relatively high level of social cohesion.

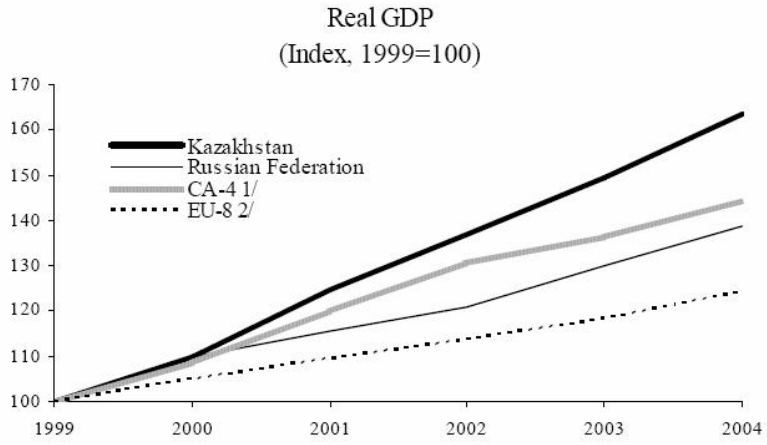
However this pragmatic approach in economy was combined with political strategy effectively repressing political opponents of the president: well-publicized crackdowns on media outlets, opposition groups, and non-governmental bodies that have been critical of government policies and corruption. New legislation, such as the 2003 Law on Political Parties, has made it more difficult for opposition parties to operate legally. The law obliged all parties to re-register, whilst raising the registration threshold to 50,000 signatures, and representation in all 14 districts of Kazakhstan. In January 2005, the crackdown on opposition groups was taken a step further by the banning of the Democratic Choice of Kazakhstan. It has also been expanded to deal with other potential voices of discontent such as the media and foreign NGOs. In May 2005, Kazakhstan's Ministry of Culture, Information and Sports ordered the closure of the independent newspaper 'Respublika', the source of frequent articles critical of government policies, whilst tax charges were filed against the Soros-foundation Kazakhstan (*OSCE, 2005*).

2 Kazakhstan's economy at a glance

2.1 Economic development

Kazakhstan's considerable natural resource endowment has helped underpin rapid economic growth over the past half-decade. Driven by an expansion in hydrocarbon production, real GDP grew at an average rate of nearly 10 percent a year, while employment— which had declined sharply in the 1990's—recovered. Inflation moderated to single digit levels and confidence in the banking system strengthened, leading to rapid remonetisation and significant de dollarisation. The budget has remained in surplus and a sizable portion of the oil revenue has been saved (IMF 2005).

Figure 1 1999 – 2004 GDP growth in Kazakhstan against selected countries and regions



Sources: FSU; and AMECO databases.

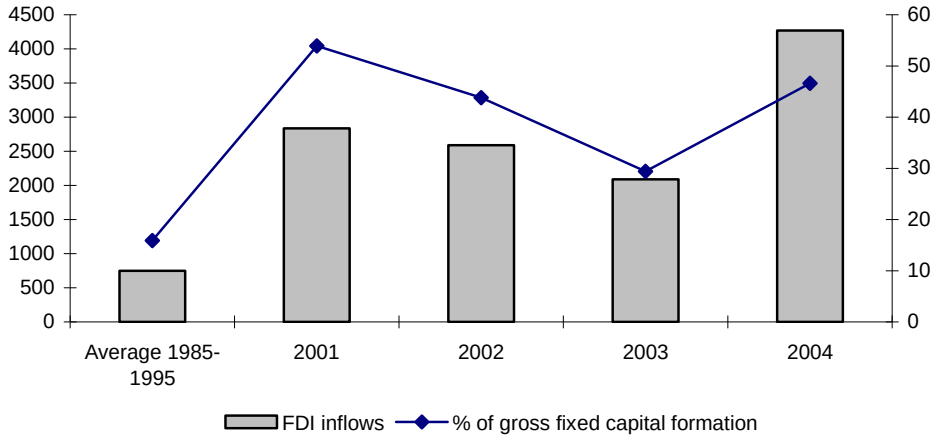
1/ CA-4 comprises the Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan.
2/ EU-8 comprises the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, the Slovak Republic, and Slovenia.

Sources: FSU, AMECO databases 2005.

2.2 Foreign direct investment

Kazakhstan has attracted the second-largest foreign direct investment (FDI) flows among the CIS economies after Russia. When measured by FDI per capita terms, Kazakhstan is an indisputable leader in the region. Figure 2 depicts the inward FDI developments in Kazakhstan.

Figure 2 FDI inflows in Kazakhstan and percentage of gross fixed capital formation, *$ mln*



Source: UNCTAD 2005.

The FDI are heavily concentrated on the natural resource-based sectors, with the oil and natural gas sector alone being responsible for over 80% of FDI inflows in the country. The tendency is also indicated in the UNCTAD FDI index rankings (Table 1). Kazakhstan has succeeded in attracting vast amount of resource-bound FDI and, hence, performs exceptionally well in the FDI Performance Index Ranking (11th place in worldwide comparison). However, due to the high dependency on its natural resource-based industries, the future FDI potential ranking of the country remains relatively low (59th in worldwide comparison).

Table 1 Inward FDI Performance and Potential Index Rankings for Kazakhstan and peer group of countries

FDI Performance Index Rankings	2000	2003	2004	FDI Potential Index Rankings	2000	2002	2003
Hong Kong, China	2	8	7	Thailand	52	53	55
Singapore	6	6	8	Panama	47	54	56
Mongolia	63	17	9	Iran	57	59	57
Congo	14	29	10	Philippines	61	56	58
Kazakhstan	**23**	**7**	**11**	**Kazakhstan**	**84**	**64**	**59**
Bulgaria	29	16	12	Jordan	60	61	60
Georgia	39	25	13	Bulgaria	67	63	61
Cyprus	22	10	14	Ukraine	81	69	62
Trinidad and Tobago	13	11	15	Dominican Republic	53	58	63

Source: UNCTAD FDI Statistical Database.

3 Structural development of the Kazakh economy

In the current chapter, we provide some brief insights into structural development of the Kazakh economy and the related political aspects, to serve as a background for the analysis of industrial sectors presented in Chapter 4.

The high degree of natural resource orientation and low competitiveness of the processing industries of Kazakhstan are essentially results from the structural changes brought about by the collapse of the USSR. In their initial phase of economic restructuring, the newly independent states (NIS) were force to build on their specific industrial potential. Among the former Soviet republics, Kazakhstan was the one accommodating considerable oil and gas resources and power utilities. Ranking second in the amount of oil and gas reserves among the former Soviet states and among the 10 largest countries in the world when measured by primary energy resources, Kazakhstan was destined to base its economic reformation upon its massive natural resources. In the beginning of economic transition (and even up to date in the case of many CIS economies), the short-term profit orientation through development of extracting industries was viewed as the most feasible (or the only) path of economic reform. Similar developments could, and, in a great extent, still can be observed in case of other CIS countries endowed with considerable natural resources, including Russia, Turkmenistan, and Azerbaijan.

Along with the development of the natural resource-based sectors, large efforts were put on initiating reforms targeted to attract foreign investments into the resource sectors. Along with the increasing investments both foreign and domestic, the resource orientation became even more important. Besides foreign strategic investors, the sector also attracted increasing domestic investors interested in short-term profits (asset stripping). In addition, instead of contributing developed business practices, the international companies in control of a large part of the country's natural resource assets often adapted to the corrupted system and reinforced the disastrous practices.

A major problem often connected with the natural resource orientation is the looming "Dutch disease" resulting from the influence of export revenues on the exchange rate of

the national currency and on the competitiveness of the manufacturing and other sectors of the economy. For the time being, Kazakhstan has been able to maintain a relatively stable exchange rate by low inflation through the interventions of the National Bank.

Throughout the transition period, Kazakhstan has practiced relatively liberal economic policy. Among the main elements of the institutional reform were large-scale privatisation, reform of the natural monopolies, and the banking reform (Libman et al. 2006). Designed to attract considerable foreign capital, Kazakhstan's privatisation program targeted foreign investors as a priority group. In many occasions, extensive guarantees were offered to the foreign investors and even the most attractive natural resource assets were opened up for foreign equity participation. In the same vein, the natural monopolies such that in the electricity sector, were broken, and the access was granted for private investors. Similarly, the banking sector witnessed considerable liberalisation compared to many other CIS, including the privatisation of nearly all banking structures.

Despite the liberal economic measures, the political regime in Kazakhstan has remained practically authoritarian. The concentration of political power in the hands of a small group of people contributed to establishment of a so-called clan economy comprising *"a small group of business structures with dominating positions in the economic system and crucial dependence from political support"* (Libman 2006). Extensive natural resource rents are an essential part of such clan economy, because they create significant incomes for a small politically and economically influential group without high investment risks. Due to high level of corruption, the government does not need to carry out reforms for long-term development, and the inefficient system remains in function. Hence, the inefficient institutional and political system of Kazakhstan supporting the clan economy reinforces the resource-oriented economic structure.

The major elements of the developed clan economy in Kazakhstan include the deficit of law and high level of concentration of economic power. The main result of these features is the dominance of informal institutional frameworks. These features are also illustrated by the Index of Economic Freedom (2006), stating the Kazakh economy (ranked 113th worldwide) is characterised the low level of property rights protection, high level of

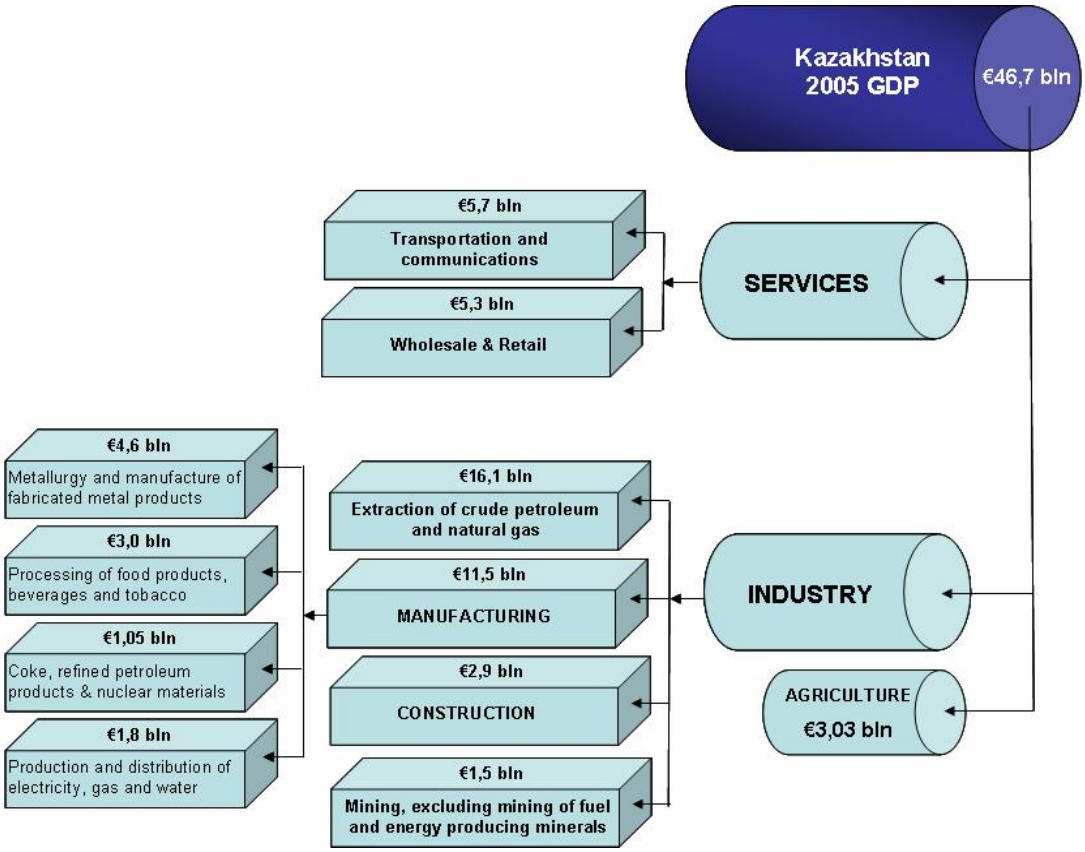
administrative barriers, and high level of shadow economy. In the same vein, the level of corruption in the country is notably high. According to the Transparency International (2006), Kazakhstan ranks 107 in the worldwide comparison of Corruption Perception Index.

Hence, similar to many other CIS, the Kazakh government gained considerable leverage over the business structures mainly due to the dubious nature and outcomes of the privatisation process, and the resulting popular resistance towards the leading business magnates. Since 2000, even more visible shift of power from the companies to the government has been witnessed in Kazakhstan. Compared to other CIS with comparable natural resource endowments, however, Kazakhstan stands out in one respect – the most profitable sectors of oil and natural gas were under the control of multinational corporations and not local business groups or the government.

4 Kazakhstan's industrial structure

In 2005, the Gross Domestic Product of Kazakhstan grew 9,4% and reached 7453 billion KZT (€46,6 billion). The contribution of different sectors is shown in Figure 2.

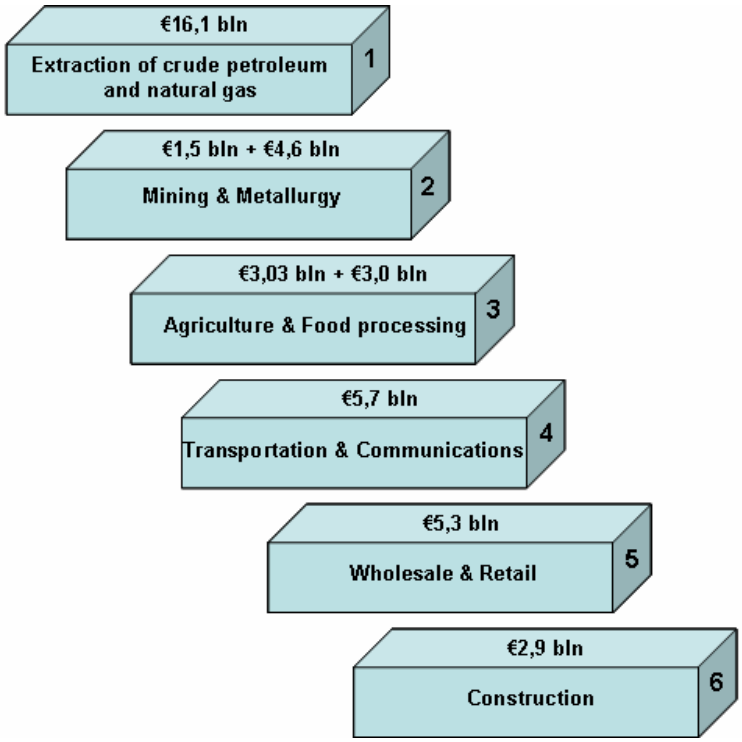
Figure 3 Volume and Structure of Structure of Kazakhstan's GDP in 2005



Sources: Authors' calculations, based on Central Bank of Kazakhstan 2006; Statistical Agency of Kazakhstan 2006; FINPRO 2006.

One of the main characteristics and simultaneously the main problem for the Kazakhstan's economy is its relative absence of diversification. As seen in Figure 2, the two leading as contribution to the country GDP industries are extraction of crude petroleum and natural gas 34,5% and manufacturing with 24,6% of which 40% belongs to metallurgy. Therefore undoubtedly the two leading industrial clusters are identified as extraction of crude petroleum and natural gas that together with mining and metallurgy. The 6 leading economic clusters in Kazakhstan are presented in Figure 3.

Figure 4 Leading economy clusters of Kazakhstan



Sources: Kazakhstan Central Bank 2006; KazStat 2006; FINPRO 2006.

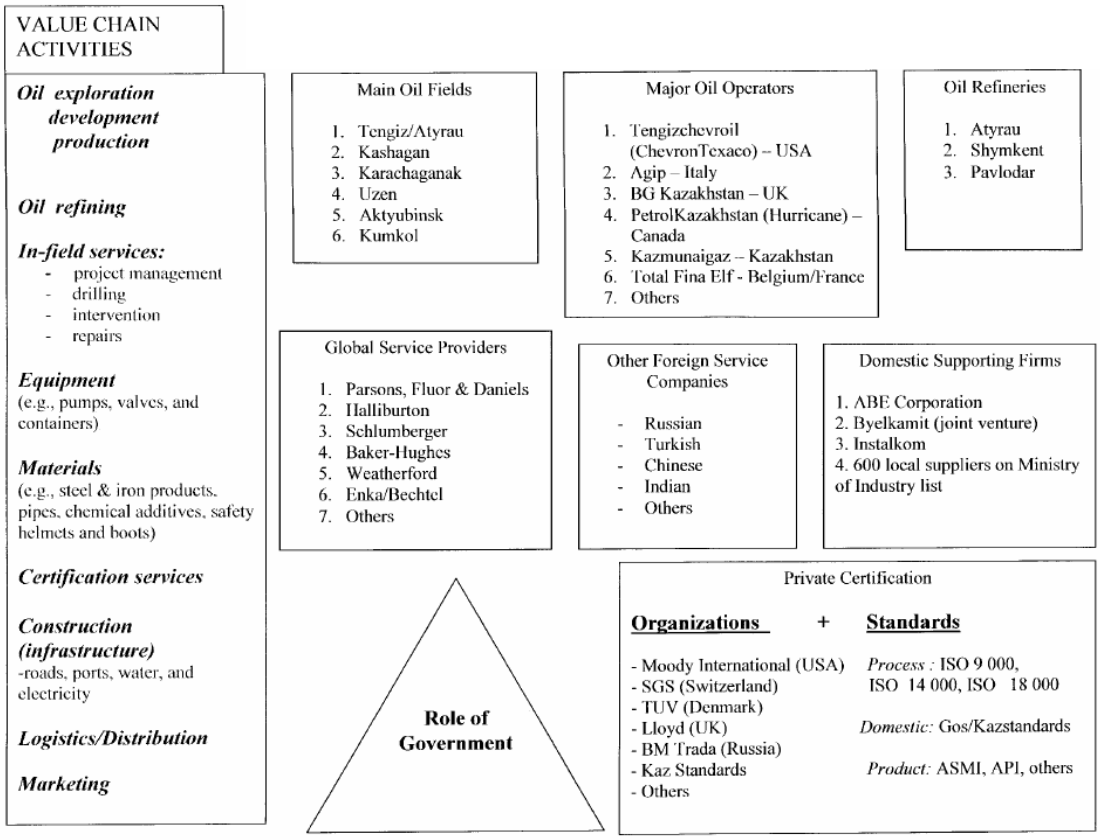
As the focus of this article is on the leading industrial clusters of Kazakhstan, we would provide an overview of 1) extraction of crude petroleum and natural gas, 2) mining and metallurgy, 3) food processing and finally 4) construction. The latter one is of particular interest because it had the largest contribution (27,1%) to the 2005 GDP growth against only 14% for the industry.

4.1 Extraction of crude oil and natural gas

Representing more than 2% of the world's proven oil reserves, Kazakhstan is the second largest oil producer among the former Soviet Republics after Russia, producing nearly 950 thousand barrels per day (bpd). Kazakhstan has proven oil reserves of 16 billion barrels and may have, according to the Government of Kazakhstan's (GOK) optimistic projections, a further 60 billion barrels both onshore and under its portion of the Caspian seabed.

Perhaps the easiest way to demonstrate the value chain of this leading for Kazakhstan industrial cluster is to present the main players as they are positioned in the process value chain activities. Such figure was offered by the World Bank experts in 2005 and is illustrated below.

Figure 5 Key players in oil & gas value chain in Kazakhstan



Source: World Bank 2005.

The National oil and Gas Company KazMunaiGaz (KMG) was created by presidential decree on February 20, 2002 through the merger of national companyes Kazakhoil and TransNefteGas. It is largely responsible for arranging the tenders of oil and gas properties still to be privatized, although actual licensing for projects is issued by the State Agency for Investment. It also plays a role in practically all contracts with foreign oil and gas companies. Kazakhstan's share of the Caspian Pipeline Consortium (CPC) is also included in KMG's portfolio. KMG holds stakes in 47 enterprises conducting

petroleum operations, pipeline and sea transportation of hydrocarbons and water as well as services. In 2004 KMG produced about 9 mln tons of oil and gas condensate, 6,7 mln tons were exported and 2,9 mln tons (2,1 mln tons were provided by KMG) were processed at the Atyrau refinery owned by the KMG.

4.1.1 The largest oil extraction consortia

The main oil fields in Kazakhstan are listed in Table 1. Three key oil extraction consortia operate the three biggest fields.

Table 2 Main oil fields in Kazakhstan – reserves and shareholders

Fields	**Oil and gas condensate reserves,** *mln tons*	**Shareholders**
Tengiz	1440	TCO (ChevronTexaco Overseas (50%),ExxonMobil (25%), KazMunai Gas (20%), LUKArco (5%)
Karachaganak	1200	*Karachaganak Integrated Organizatio* - British Gas (32,5%), Eni (32,5%), ShevronTexaco (20%), Lukoil (15%).
Kashagan	1650	Eni Agip (16,6%), British Gas (16,6%), ExxonMobil (16,6%), Shell (16%), Total Fina Elf (16%), Inpecs Development (8,3%), Phillips Petroleum (8,3%)
Emba Uzenmunaigas	275	Oil Company KazMunaiGas"
Kalamkas Zhetybai	182	MangistauMunaiGas
Karazhanbas	48	Nations Energy Company Ltd (Canada) - 94,6 %
Zhanazhol Kenkiyak	132	AktobeMunaiGas
Severnye Buzachi	70	Nelson Resources - 50%, Chinese National Oil Company - 50%.
Kumkolskaia gruppa	80	PetroKazakshtan (Canada) - 50%, Lukoil - 50%
Alibekmola, Kozhasai	67	Kazakhoil-Aktobe (Nelson Resources Ltd (Canada) - 50%, "KazMunaiGas - 50%

Source: Expert 2005.

TengizChevrOil (TCO)

Tengiz, one of the largest discoveries in the world over the past 30 years, holds an estimated nine billion barrels of recoverable reserves. The Tengiz project is the largest Western-run oil producer anywhere in the former Soviet Union and by 2006 it will produce 460 thousand barrels a day. Most of the oil is exported to the Black Sea through a US$2,7-billion pipeline run by the Caspian Pipeline Consortium.

Karachaganak Integrated Operation (KIO)

Reserves at the Karachaganak field, which is being developed under a PSA, are estimated at 1,2 billion tons of oil and condensate and 1,35 trillion cubic meters of gas. This project is expected to run through 2036, with oil and gas production capacity peaking at 12 million tons per year and 25 billion cubic meters per year, respectively. In 2004 KIO produced 9 billion cubic meters of gas and 62,3 million bbl of liquid hydrocarbons including 39 million bbl of condensate. The plan is to increase condensate production at Karachaganak to 12 million tons per annum by 2008. A gas processing plant and petrochemical facilities, part of phase three of the Karachaganak gas condensate field's development in West Kazakhstan is estimated at about $2 billion. The KIO shareholders will provide 40% of the capital and the Kazakh government it is expected to raise the remainder. In 2003 the Karachaganak-Atyrau export pipeline was launched, which stretches 650 kilometers and is linked to the Caspian Pipeline Consortium pipeline.

Agip Kazakhstan North Caspian Operating Company (Agip KCO)

Agip exploration drilling in the Kazakh sector of the Caspian started since 1999. According to Agip KCO, recoverable reserves at the Kashagan field are 11.2 billion bbl. The consortium will start to produce oil at this field around October 2008 and commercial production will begin in 2009. Total development costs for the deposit are approximately US$29 billion. Agip was chosen to operate the 11-block Kashagan production sharing contract area by project partners Royal Dutch/Shell Group, BG PLC, ExxonMobil Corp., ConocoPhillips , and Inpex Masela Ltd. in February 2001. US$7 billion dollars are expected to be invested in the exploitation of Kashagan from 2003 to 2006, and the consortium has already invested $1.2 billion in developing the field. With the Kashagan oilfield discovery, Kazakhstan hopes to triple its oil output in 15 years from its current level of 900,000 barrels per day to between 2 million and 3 million barrels a day.

4.1.2 Transportation

The Kazakhstani National Oil Transportation Company, KazTransOil, is part of the KazMunaiGas. The company has a monopoly on oil pipeline transportation and transports about 80% of the oil produced in Kazakhstan. It manages all of Kazakhstan's domestic oil pipelines, and maintains more than 6,400 km of main oil pipelines. The company plans to increase its capacity to 70 million tons by 2010.

The Atasu-Alashankou oil pipeline linking Kazakhstan with China will start in 2006 with oil supplies planned to start in early May 2006. The transit capacity of the oil pipeline will make 20 ml tons a year with the first stage capacity being 10 ml tons; pipeline's length is 962 km, diameter – 813 mm.

KazTransGaz is also part of KazMunaiGas and controls the main network of gas pipelines in the republic, stretching 9,000 km, 26 compressor stations on which 308 gas-transferring devices are established. The company includes 12 affiliated and dependent organizations working in Kazakhstan and abroad. The annual capacity of the pipelines is up to 190 billion cubic meters.

Kazakhstan has three oil export routes northward (via the Russian pipeline system and rail network); westward (via the Caspian Pipeline Consortium Project and barge to Azerbaijan); and southward (via swaps with Iran). Connections to ports on the Black Sea and the Persian Gulf have allowed some Kazakhstani oil (or proxy oil from Iran) to be traded on the world market. Efforts are underway to expand the country's export infrastructure to keep pace with rising production.

Caspian Pipeline Consortium (CPC) connects Kazakhstan's Caspian Sea area oil deposits with Russia's Black Sea port of Novorossiysk. In 2002, CPC transited roughly 260,000 bbl/d, or one-third of Kazakhstan's exports. Most of this oil came from the Tengiz field. The total volume of crude oil shipped by CPC in 2004 has amounted to 22,5 million tons. The multinational ownership in the CPC is as follows: Russian Federation – 24%, the Republic of Kazakhstan – 19%, the Sultanate of Oman – 7%, Chevron Caspian Pipeline Consortium Company – 15%, LUKARCO B.V. – 12.5%, Rosneft/Shell Caspian

Ventures Limited – 7.5%, Mobil Caspian Pipeline Company – 7.5%, Agip International (N.A.) NV – 2%, BG Overseas Holding Limited – 2%, Kazakhstan Pipeline Ventures LLC – 1.75%, and Oryx Caspian Pipeline LLC– 1.75%.

Atyrau-Samara is the other major oil export pipeline link to the Russian distribution system, Atyrau-Samara. Before the CPC pipeline was completed at the end of 2001, almost all of Kazakhstan's exports went through this system. In June 2002, Kazakhstan and Russia signed a 15-year oil transit agreement under which Kazakhstan will export at least 350,000 bbl/d of oil annually via the system. As CPC grows with Kazakhstan production, absolute volumes though Atyrau-Samara are expected to grow, but this pipeline will become relatively less significant. In 2004 exports through this line comprised 15 million tons of transported oil.

Besides the CPC and Atyrau-Samara, Kazakh exports are sent for swaps in Iran, via rail to Russia, and across the Caspian by barge. Other export routes reportedly under consideration are a possible line to China, and a subsea trans-Caspian pipeline connecting to the Baku-Tiblisi-Ceyhan project.

4.1.3 Refining

Kazakhstan has three major oil refineries supplying the northern region (at Pavlodar), western region (at Atyrau), and southern region (at Shymkent), with total refining capacity of 427,000 bbl/d. The refinery at Pavlodar is supplied mainly by a crude oil pipeline from western Siberia, since Russian reserves are suited geographically and chemically to serve that refinery. The Atyrau refinery runs solely on domestic crude from northwest Kazakhstan, and the Shymkent refinery currently uses oil from Kazakh fields at Kumkol, Aktyubinsk, and Makatinsk, although it is linked by pipeline to Russia. Reconstruction of the Atyrau refinery has been started in 2004 and is carried out by the Marubeni Corporation (Japan).

4.1.4 Production and distribution of natural gas

In August 1999, the Kazakh government passed a law requiring subsoil users (such as oil companies) to include natural gas utilization projects in their development plans.

According to the 15-year strategy of the Kazakhstani Ministry for Energy and Mineral Resources, the country plans to increase its natural gas production to 506 billion cubic meters by 2010, and to 561 million cubic meters by 2015. Most of Kazakhstan's natural gas reserves are located in the west of the country, with roughly 25% of proven reserves situated in one field, Karachaganak. The Karachaganak oil and gas condensate field reportedly has proven natural gas reserves of 4880 billion cubic meters.

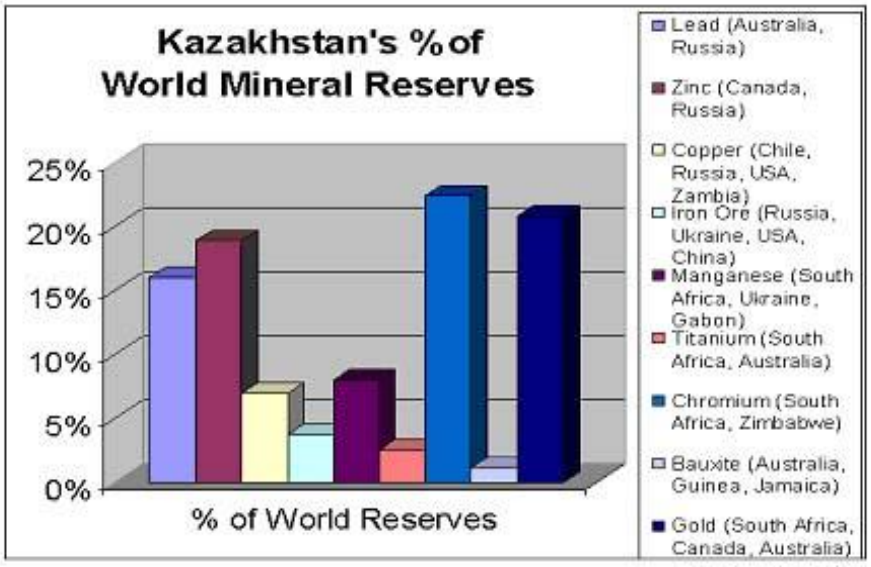
Another important natural gas field, Amangeldy, is situated in the south of the country, near Zhambul. Exploratory drilling in 2001 indicated reserves of up to 549 billion cubic meters. The field is being developed by KazMunaiGas in conjunction with Repsol-YPF (Spain). The Amangeldy fields that have been developed are producing approximately 268 million cubic meters per year.

4.2 Mining and metallurgy

In 2004 mining provided 30% of Kazakhstan's export earnings, 16% of GDP, and 19% of industrial employment. Some 233 mining enterprises produce a wide variety of commodities: coal, iron ore, chromites ores and ferroalloys, alumina, copper, lead, zinc, steel, titanium sponge, uranium, barites and others. Figure 5 illustrates the immensity of Kazakhstan's mineral reserves.

The metals sector is Kazakhstan’s second largest industrial sub sector after the oil and gas, and the second largest recipient of foreign direct investment (FDI). Metals are also the second largest export after crude oil. Foreign investors have taken charge of some of metals industry improving quality and targeting export markets.

Figure 6 Kazakhstan's share of the world's mineral reserves



Countries in parentheses represent countries with similar reserves of the specified metals

Source: Mining Journal Annual Review 2005.

Overall, ferrous metal output rose by 5.1% year on year during first three quarters of 2004. Iron ore output reached 32,6 mln tones, a 104.1% rise in Jan-Sept 2004, and flat rolled steel production was 3 mln tones, up by 105%. The output of non-ferrous metals (copper, lead and zinc) rose by 3.1% year on year in January-September 2004. One result of the recovery in metals has been to stimulate electricity production. Kazakhstan produced 66.4bn kwh during 2004.

In reserves of iron ore Kazakhstan is on the eighth place in the world. Well-known iron-ore sites of Kazakhstan are the Turgai Bulge, particularly Kacharskoe, Sokolovskoe, Saribai, Korjinkol fields are rich with magnetite ores. Sokolov and Saribai mining companies supply around 60% of all iron ore produced in Kazakhstan. 81% of the ferrous metals total production comes from the Aksu ferroalloys company. Large deposits of lead, copper, zinc, manganese ore and rare metals are concentrated in Central Kazakhstan. Chromium fields are located in the western part of Kazakhstan. On the reserves of manganese ore Kazakhstan is on the 3rd position in the world with the

largest fields located in West Karajal and Ushkatyn III. The main reserves of chromium are concentrated in the Kempirsai field, Aktobe region.

Table 3 Production of metals in Kazakhstan, 2005

Product	**Volume,** *'000 tn*
Iron ores	19445
Raw steel	4452
Flat-rolled products	3196
Ferro-alloys	1530
Aluminium, unwrought; alumina	1505
Refined copper in intermediates, except for goods sintered, rolled, extruded or forged	419
Zinc, unwrought	357

Source: Central Bank of Kazakhstan 2006.

Aluminum of Kazakhstan, one of the top ten producers of alumina (the main component of aluminum) in the world, unites the Pavlodar Aluminum Plant, (the head enterprise), the Torgay and Krasnooktyabr bauxite ore mines, and the Keregetas lime mine as well as TETS-1 power plant. The company is controlled by the Eurasian Bank financial-industrial group. Since April 2003, a 31,8% stake in Aluminum of Kazakhstan has been owned by Switzerland-based Corica AG. the Eurasian Bank financial-industrial group incorporates KazChrome, Aluminum of Kazakhstan, Sokolov-Sarbay Mining and Metal-Enriching Company, Eurasian Bank, etc. Eurasian Industrial Association is the core of so-called Eurasian Group - one of the largest financial-industrial groups in Kazakhstan.

KazChrome comprises the Donskoi Mining and Processing Enterprise, the Aksu Ferroalloys Works, the Aktyubinsk Ferroalloys Works as well as several manganese-mining assets in Kazakhstan. It is the third largest company in the world producing ferro-chrome for mass production. KazChrome supplies chrome ore mainly to the ferro-alloys, refractories and chemical industries of Kazakhstan and Russia, while ferro-alloys are supplied to all the main world markets, including China and Russia. Aluminium of Kazakhstan supplies 1.4m tpy of high-grade alumina, mainly to Russian aluminium smelters. The Eurasian Energy Corporation (EEC) supplies coal and electrical power, mainly to Kazakhstan, but also to Russia.

Ispat-Karmet annually produces about 4-5 million tonnes of steel, which is exported to ore than 60 countries. Just 8% of the steel production is used domestically. Ispat

International, a division of the international group LNM (Mittal Steel Group), has owned Ispat-Karmet, formerly the Karaganda metal works, since 1995, which is the largest steel maker in Kazakhstan. Over a nine-year period, Ispat-Karmet has invested about $1 billion for the development of industry and social life. LNM administration has reviewed an offer proposed by the Kazakh government to construct a section-rolling plant in Temirtau for the construction industry.

In 2004 *Kazakhmys* planned to produce 425,000 tones of refined copper and 70,000 tonnes of zinc. In addition, the Corporation planned to produce 432,300 tones of copper in concentrate and 80,000 tonnes of zinc in concentrate. The 2005 refined copper output were expected to remain at 2004 levels as well, and zinc production to increase to 90,000 tones. In 2003 Kazakhmys produced 1,5 tonnes of gold and 607 tonnes of silver. The Corporation's profit before loan-interest payments, depreciation and taxes (EBIDTA) totaled USD 385 Million, and it was expected to reach US$700 million in 2005. South-Korean Samsung Corporation is one of the main shareholders of Kazakhmys.

4.3 Agriculture and food processing

Gross agricultural output was about €3,03 billion, with grain's share approximately 25%. The country's large agricultural sector is centered on grain and livestock production. Kazakhstan’s economic development has led to the country’s division into 5 large economical and geographical regions: Western Kazakhstan, Southern Kazakhstan, Central Kazakhstan, Northern Kazakhstan and Eastern Kazakhstan, each of those specializing in certain sub-sectors: fish industry and animal husbandry in Western Kazakhstan; irrigated agriculture and viticulture, and sheep breeding in Southern Kazakhstan, food processing industry in Eastern Kazakhstan, and grain, milk and meat production in the largest agrarian area of Northern Kazakhstan.

Unlike Russia more than 90 % of agriculture in Kazakhstan is in private hands. In 2003, a land reform bill allowing for private land ownership for the first time in the country’s history as an independent state was passed. Though it sets forth restrictions on foreign ownership of land in Kazakhstan (only 10-year leases, and no right to own agricultural

land), foreign companies and individuals may still gain control of agricultural land through a Kazakhstan-registered company and invest in agricultural production.

The government strongly supports the development of the agricultural sector and is promoting a policy of export orientation that has replaced its import substitution strategies implemented at an earlier stage in 1999-2002. Furthermore, 44% of the country's population lives in rural areas, making the government intensify its efforts in addressing social aspects of rural citizens´. To make domestic producers more competitive, a 6-year state strategy has been introduced that includes various programs for agri-food sector and development of rural areas some 58 billion tenge has been allocated for the 2005 budget to further develop the agricultural sector.

4.3.1 Grain Production

Kazakhstan is the sixth-largest grain producer in the world. In 2003 Kazakhstan harvested 17,6 million metric tons of grain. Wheat is the principal crop and a major source of hard currency rank among the leading export commodities in Kazakhstan's trade generating up to US$300-400 million in grain export earnings per annum. Wheat is grown mainly in the northern-central regions. Kazakhstani wheat is high in quality and protein. Traditionally, CIS countries are major importers of Kazakhstani grain, with Russia consuming the bulk of these exports. However, Kazakhstan has been actively expanding international markets and apart from its traditional ones, the country is a grain exporter to Austria, the UK, Turkey, Switzerland, Netherlands, Saudi Arabia, Iran, China, Korea and Mongolia. The Middle East is targeted as another export region for Kazakhstan. A new grain terminal was recently built on the Caspian to increase the country's shipment capacities. In 2005, Kazakhstan plans to complete a 26 million dollar project on the construction of another grain terminal with an annual capacity of 2,5 million tons in Ventspils/Latvia fitting it with modern transshipment and storage facilities. This will be the first Kazakh grain terminal in the European Union, occupying a territory of 7 hectares.

Another trend that is enthusiastically supported by the government and local development institutions and suggests new opportunities in the grain processing industry

is the development of modern technologies for the production of hi-tech products, such as bio-ethanol, high-octane fuel accelerator, or high-quality gluten for the food industry and enriched yeast for cattle feeding. One such project is to be implemented soon in Northern Kazakhstan by a local company.

Multiple wholesale markets, commodity exchanges, credit associations, associations of agricultural commodities producers and other service organizations are widely represented in Kazakhstan. The Grain Union of Kazakhstan unites 34 grain-producing member companies that own elevators and grain processing facilities and aims to coordinate grain market activities. Railways and roads have always been the political investment priorities and now remain in reasonable operational condition.

4.3.2 Animal husbandry and stock breeding

Stockbreeding and animal husbandry are another dominant activities in the agricultural sector that accounts for approximately 46% of total agricultural output. Traditionally, farmers raise sheep and cattle. However, raising pigs, horses and camels is also well developed in Kazakhstan. Chief livestock products are dairy goods, meat, leather and wool. There were 2,3 million of dairy cattle in 2003 with the largest share in Almaty, East Kazakhstan, South Kazakhstan and Kostanai Oblast in the North. Development of livestock breeding and improvement of selective qualities of the livestock population are also highlighted in the national strategy amongst the government's long-term priorities. There were plans to allocate $7,7 million for pedigree cattle and other livestock breeding development in 2005.

Based on the Ministry of Agriculture's estimates, almost 85% of the machinery currently being used in Kazakhstan is at least 12 years old and needs to be replaced, requiring up to $320 million of investments for renovation. The lack of modern agricultural machines and equipment is considered one of the major constraints preventing the sector's effective development.

There are 130 plants in Kazakhstan producing over 390 various items of agricultural machinery, equipment and parts. In 2003 import of machinery and equipment totaled

US$133 million. About 50% of imports are from CIS suppliers, mostly Russia, Belarus and Ukraine. Other suppliers of agricultural machinery and equipment include USA, Germany, Italy and Canada. Grain harvesting combines, wheel tractors, sprayers, seeding and grain cleaning equipment are among the commodities in greatest demand in this sector.

4.3.3 Food processing

The food-processing industry is now among the leading and most rapidly developing sectors in Kazakhstan. Food consumption has steadily been increasing by 20% a year since 2002. Kazakhstan's fast-growing economy enabled a sustainable increase in consumer spending as well as a growing demand for high-quality processed and packaged goods, making local food manufacturers striving for improvements in the quality and presentation of their products. Food producers and manufacturers of the relevant equipment and packaging react very quickly to current demand, changes in preferences and needs of consumers.

Milk and meat processing industries are well developed in Kazakhstan. However, a sizable potential for further expansion exists and might be based on the manufacture of brand new dairy and meat products (e.g. cheese, sour cream, dried or concentrated milk, diet products, and other goods). Annual milk consumption is going up (from 235 kg in 2000 to 265 in 2003) while a sizable portion of dairy products is being imported to Kazakhstan (in 2003, 39% of butter; 18% of cheese; 88 % of condensed milk, and 83% of dried milk have been imported).

In 2004 there were 3700 food processing companies operating in Kazakhstan, which were estimated to produce US$1,5 billion worth of products in 2004. The vast majority of them require modern and quality equipment and technologies to be competitive. Mostly all machinery and technologies as well as supplies are imported as the local industry for manufacturing of food processing and packaging equipment is non-existent and is not likely to develop within the near future. Germany, Turkey, Italy and Russia are major suppliers of food processing equipment in Kazakhstan. A local government-owned financial institution Kazagrofinance has plans to support such incentives and will allocate

up to $1 billion in 2005 to assist farmers lease food-processing and packaging equipment.

4.4 Construction

In 2005 the volume of construction reached €4,8 billion (*KazStat, 2005*). Predictably the construction sector is very dependent on the success or failure of the oil industry. The direct demands of the oil companies include construction works in the oil fields, as well as office buildings in the capital. There are also several infrastructure projects in the country directed at the needs of this sector, for instance the new oil port in Aktau. The interest for oil has also meant an increased need for banks, hotels and other buildings in businesses servicing the oil companies. However this situation is slowly changing. The move of the administrative capital from Almaty to Astana certainly offered more opportunities.

There is a growing demand for all types of construction services: construction, renovation and conservation of industrial and public utilities and residential buildings; Design and assembly services. There is a need for the full range of civil engineering, construction and engineering activities including: research and development, all aspects of design, design and build, management contracting, construction management, turnkey projects etc. Many opportunities exist in the continuing expansion of the new capital city, Astana, and in strengthening and diversifying the country's infrastructure: there are plans for upgrading, expanding or building new ports, airports, roads and power distribution grids.

In 2004 only 47% of the construction materials used in Kazakhstan were available domestically (*Bisnis, 2004*). Locally produced materials included cement, bricks, wooden doors, windows, steel doors, and soft and iron roofs. All other materials are imported, mainly come from Turkey, China, and Germany. The industry enterprises manufacture asbestos-cement pipes, soft roofing materials, linoleum, Dutch sanitary ware, finish ceramic tiles for flooring and building finish, boards and other structures for large-panel housing construction, kaolin for the paper industry, radiators, convectors and a number of other kinds of building materials and structures.

Table 4 Distribution of constructed housing among Kazakhstan regions.

Region	Share of total, %
Almaty city	**12,2**
Karagandinskaya	4,6
Eastern-Kazakhstanskaya	4,0
Pavlodarskaya	2,2
Aktubinskaya	5,7
Southern-Kazakhstanskaya	**15,0**
Atyrauskaya	**8,5**
Astana city	**22,0**
Almatinskaya	5,2
Western-Kazakhstanskaya	3,5
Kostanaiskaya	2,2
Mangistauskaya	4,5
Kyzylordinskaya	2,2
Akmolinskaya	2,0
Northern-Kazakhstanskaya	2,3
Zhambylskaya	4,3

Source: Authors' calculations, based on Statistical Agency of Kazakhstan 2006.

The republic has sufficient reserves of various raw materials for production of building materials. By the end of 2005 Kazakhstan it was expected that the market for imported building materials, products and structures will exceed US$1 billion (*Ibid.*).

In 2004 the Government has made a decision to embark on the Housing Development Program in Kazakhstan. In 2005 around 5 million square meters of housing were build that was almost double compared with 2004. Table 3 shows the output of constructed housing as distributed across different Kazakhstan regions. In 2004 there were 3614 companies involved in construction of which 81 were foreign owned. The share of the latter in the total construction output is approximately 26% (*Spiridovitsh, 2006*).

5 Conclusions

As suggested by the above description of the industrial clusters, significant regional disparities exist when it comes to the business potential of different regions in Kazakhstan. Therefore one may conclude that investors would have to accommodate these disparities and made a careful examination of where their investments would yield a higher return. Table 5 and Map 1 summarize the findings of this report by building some integrated rating of investment attractiveness of different regions. The rating is build as the average of five different indicators that to various extents signify the potential of given region.

With no surprise the former capital Almaty is leading at number 1 position. That is a logical consequence of city that has been the capital of Kazakhstan for most of its history with the consecutive development of its infrastructure and industry and continuing conglomeration of people. Investors could be equally interested in the opportunities to enter the Kazakhstan market in Karagandinskaya and Eastern-Kazakhstanskaya regions. The other regions need not be neglected. Astana city being the new capital is set to keep an intensive growth pace. As also seen in Table 5 the other regions have their particular strengths and weaknesses and thus their potential must be reviewed and further analyzed on basis of investors' particular interests.

Table 5 Rating of Kazakhstan's regions

	Population	Volume of output *(goods & services)*	Average monthly nominal earning	Retail volume	Registered active small businesses	Integrated
Almaty city	5	9	4	1	1	**1** / 4,2
Karagandinskaya	4	3	9	2	5	**2** / 4,6
Eastern-Kazakhstanskaya	3	8	10	3	4	**3** / 5,6
Pavlodarskaya	9	6	6	7	7	**4** / 7,0
Aktubinskaya	11	5	7	4	9	**5** / 7,2
Southern-Kazakhstanskaya	2	12	14	8	3	**6** / 7,8
Atyrauskaya	14	1	1	13	10	**7** / 7,8
Astana city	15	15	3	5	2	**8** / 8
Almatinskaya	1	11	12	10	6	**9** / 8
Western-Kazakhstanskaya	12	4	5	6	15	**10** / 8,4
Kostanaiskaya	6	10	11	9	8	**11** / 8,8
Mangistauskaya	16	2	2	16	13	**12** / 9,8
Kyzylordinskaya	13	7	8	15	14	**13** / 11,4
Akmolinskaya	8	14	16	12	11	**14** / 12,2
Northern-Kazakhstanskaya	10	16	13	11	12	**15** / 12,4
Zhambylskaya	7	13	15	14	16	**16** / 13,3

Source: Authors' calculations, based on Statistical Agency of Kazakhstan 2006.

Map 1 Kazakhstan's Regions

There are plenty of opportunities for generating successful business in Kazakhstan. A combination of high oil and metals prices, a willingness of the government to purposefully diversify the economy and significant governmental development programs are providing considerable opportunities. There is an apparent need for future

reformation of the current natural resource-based and concentrated economic structures, in order to create a broader base for economic development in the country. Reportedly, the current focus is on formation of various industrial clusters in the country, including oil and gas machine building, petrochemical cluster, textile industry, metallurgy, food industry, and tourism, among others. The implementation of the cluster mechanism is hoped to advance efficient distribution of investment resources and promotion of innovative technologies, eventually leading to higher value added production. In addition, authorities are basically quite friendly and welcoming towards foreign investments as a vital ingredient in the process of economic diversification.

The risk side of the medal is more in a long term perspective. The presidential regime is not based on democratic principles and the opportunity for cronyism and mismanagement of governmental funds, programs and initiatives is immense. In addition no one may forecast reliably how long the oil and metals prices will be at these exceptionally high levels. To some extent, the ruling political elite are still interested in preserving the industrial status quo and securing the short-term revenues from the energy sector on the expense of long-term structural development.

Neither of these should really mean that Kazakhstan is not a good business opportunity. Quite the opposite – the country has never been so attractive from foreign investor's point of view. Interestingly it is mostly US investors who have noticed it and are trying to increase their presence at the market. EU companies in general and Finnish companies in particular are still to discover Kazakhstan as a market opportunity. There are significant arguments to predict that those engage in a coherent and sustained effort to enter the market could be richly rewarded.

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