

Czech University of Life Sciences Prague

Faculty of Economics and Management

Department of Economics (FEM)



Bachelor Thesis

**The determinants of foreign trade development in the
Republic of Kazakhstan**

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BACHELOR THESIS ASSIGNMENT

Adilkhan Tishpayev

Economics and Management

Thesis title

The determinants of foreign trade development in the Republic of Kazakhstan

Objectives of thesis

The main aim of the present Bachelor thesis is to identify the determinants of foreign trade development in the Republic of Kazakhstan. Being the first former Soviet Republic to repay all of its debt to the International Monetary Fund, 7 years ahead of schedule (State.gov. US State Department, 2016), it has the largest and strongest performing economy in Central Asia. In this light it becomes interesting to investigate how foreign trade has been contributing to economic growth in Kazakhstan over the last 30 years. To achieve the formulated main goal the following partial research questions will be stated and gradually answered:

1. Which countries were the main trade partners for Kazakhstan in the beginning of the analysed period and which of them became key partners at the end (both importers and exporters)?
2. What goods constitute the bulk of foreign trade turnover in Kazakhstan?
3. Trade in what items had demonstrated a revealed comparative advantage over the analysed period?
4. What is the dynamics of associated macroeconomic indicators in Kazakhstan?
5. What are other factors, that play an important role in economic development of Kazakhstan?

Methodology

The theoretical part of the Bachelor thesis will be mainly based on a relevant literature review (represented by printed literature, scientific articles, surveys, web sources) and the research of similar studies, using methods such as abstraction, inductive reasoning, analysis, synthesis, and deduction.

The practical part will contain descriptive statistical analysis and qualitative thematic synthesis of the main economic indicators and selected for the analysis variables. Own research work will be mainly based on RCA index analysis (Balassa, Vollrath, Lafay) along with comparative techniques and statistical inference.

The results of the conducted analysis will be discussed and complemented with the author's corresponding recommendations.

The proposed extent of the thesis

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Keywords

Kazakhstan, Foreign trade, RCA, Economic growth, Economic development

Recommended information sources

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Declaration

I declare that I have worked on my bachelor thesis titled " The determinants of foreign trade development in the Republic of Kazakhstan " by myself and I have used only the sources mentioned at the end of the thesis. As the author of the bachelor thesis, I declare that the thesis does not break any copyrights.

In Prague on 2022

Acknowledgement

I would like to thank my supervisor Mgr. Elena Kuzmenko, Ph.D., for providing guidance and feedback throughout this project. Thanks also to my friends, and for providing guidance and a sounding board when required.

The determinants of foreign trade development in the Republic of Kazakhstan

Abstract

The purpose of this thesis is to identify the determinants of foreign trade development in the Republic of Kazakhstan. The development of a young state that was able to create a market economy from the ground up and become a full participant in the global economy. Kazakhstan's economic transformation route is not unique, but it has resulted in the establishment of a national economy that has surmounted several hurdles and survived the terrible years of global crises. Based on this idea, it was interesting to investigate how foreign trade has been contributing to economic growth in Kazakhstan over the last 30 years. This study investigates relationship in foreign trade between Kazakhstan's and other trade partners, investigates foreign trade turnover and it's revealed comparative advantages on group products, dynamics of associated macroeconomics indicators. Our results in the study of bachelor thesis shows an influence of Kazakhstan's trade partners on economic development, the country's dependency on oil macroeconomic dynamics and key determinants in economic development of Kazakhstan.

Keywords: Kazakhstan, Foreign trade, RCA, Economic growth, Economic development, Foreign trade investment, Export, Import, Foreign trade turnover, Trade balance, Unemployment, Inflation

Determinanty vývoje zahraničního obchodu v Kazašské republice

Abstrakt

Cílem této práce je identifikovat determinanty vývoje zahraničního obchodu v Republice Kazachstán. Rozvoj mladého státu, který dokázal od nuly vytvořit tržní ekonomiku a stát se plnohodnotným účastníkem globální ekonomiky. Cesta ekonomické transformace Kazachstánu není ojedinělá, ale vedla k vytvoření národního hospodářství, které překonalo řadu překážek a přežilo hrozná léta globálních krizí. Na základě této myšlenky bylo zajímavé prozkoumat, jak zahraniční obchod přispěl k hospodářskému růstu v Kazachstánu za posledních 30 let. Tato studie zkoumá vztah zahraničního obchodu mezi Kazachstánem a ostatními obchodními partnery, zkoumá obrat zahraničního obchodu a identifikuje komparativní výhody ve skupině zboží, dynamiku souvisejících makroekonomických ukazatelů. Výsledky našeho bakalářského výzkumu ukazují vliv obchodních partnerů Kazachstánu na ekonomický rozvoj, závislost země na ropě, makroekonomickou dynamiku a klíčové determinanty ekonomického rozvoje Kazachstánu.

Klíčová slova: Kazachstán, Zahraniční obchod, RCA, Ekonomický růst, Ekonomický rozvoj, Investice zahraničního obchodu, Export, Import, Obrat zahraničního obchodu, Obchodní bilance, Nezaměstnanost, Inflace

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1 Introduction

Kazakhstan was the only republic that managed to retain stability in the aftermath of the Soviet Union's demise, despite full political and economic disarray. In little than a decade, it was able to transform itself into a state that demands well-deserved respect across the globe and where inhabitants may live in relative comfort.

Nursultan Nazarbayev became president of the nascent country on December 1, 1991, inheriting an outstanding legacy. With the fall of the Soviet Union, the republic was confronted with a slew of new problems. Kazakhstan's industrial output half between 1990 and 1994, with coal, mining, and other businesses shuttering their doors. Coal output has reduced dramatically, while oil production has plummeted as a result of long-running miners' strikes. The country's population composition also posed certain conflict concerns. In a multinational society, the most important responsibility was to maintain peace and harmony.

Kazakhstan became an independent country and embarked on a post-communist development road under extraordinarily tough conditions. The Soviet economy he inherited was in "fast collapse" - in 1991, the decrease in the Soviet Union's GDP growth varied from 2% to 17% ¹, according to various estimates - and the newly sovereign republic faced a difficult task of economic reform and constructing a new state in general. The economy of Kazakhstan and surrounding countries suffered a significant recession due to a chronic scarcity of national capital, the collapse of the previous trading network. The ensuing crisis highlighted the need for substantial and long-term economic changes while also posing additional challenges; fact, trying to modernize the economic system under such circumstances was more like to trying to modernize a ship in the middle of roaring seas.

¹ International Monetary Fund, *Kazakhstan: Recent economic development. 1997 p. 1.*

2 Objectives and Methodology

2.1 Objectives

The theoretical part of the Bachelor thesis will be mainly based on a relevant literature review (represented by printed literature, scientific articles, surveys, web sources) and the research of similar studies, using methods such as abstraction, inductive reasoning, analysis, synthesis, and deduction.

2.2 Methodology

The practical part will contain descriptive statistical analysis and qualitative thematic synthesis of the main economic indicators and selected for the analysis variables. Own research work will be mainly based on RCA index analysis (Balassa, Vollrath, Lafay) along with comparative techniques and statistical inference.

3 Literature Review

3.1 Foreign trade

International trade is the product of the division of labor on a global scale². Practically, every country currently is based on international division of labor, which happens when industries specialize and collaborate in the manufacturing process. These economic relations lead to financial interdependence, with the focus on governments' reciprocal reliance on one another in economic cooperation. Integration - the joining of pieces into a higher stage – is another effect of international division of labor. The process of ongoing reciprocal linking, adaptation, and converging of single country economies into regional economic complexes is known as international economic integration. The exchange of commodities and services within a collection of nations in an international economic arrangement, such as Eurasian Integration, is referred to as international commerce.

The most essential aspect of international economic ties is international trade. The importance of international trade in terms of the national economy may be observed primarily in sectors where international commerce allows for the import of products, services, and capital that the country cannot create for various reasons. As a result, a country may participate in the international division of labor to a significant extent, allowing it to specialize in the industry for which it has the finest circumstances. Gaining knowledge about goods and services produced in other countries allows one to compare the level of one's own output to that of the rest of the world. International commerce expands the marketplace, and owing to international trade, a country's consumer options can increase while using the same inputs of production, as the theory of comparative advantage suggests.

Consumers and countries are given the opportunity to be surrounded by things that are not available in their own country when commodities and services are traded internationally. Global commerce allows countries to employ their resources more efficiently, allowing them

² Marius-Răzvan Surugiu, International Trade, Globalization and Economic Interdependence between European Countries: Implications for Businesses and Marketing Framework. 2015, p. 1.

to sell them at lower prices than other countries. To put it another way, if a country is unable to manufacture things effectively, it can obtain them through trade with another country. This is referred to as specialization. Absolute advantage refers to a country's ability to produce more items or better goods and services than anybody else.

On the other side, nations may profit from comparative advantage, which refers to a country's capacity to produce products and services at a lower opportunity cost, however this does not have to be with a greater volume. David Ricardo, an English economist, is credited with developing this idea of comparative advantage³.

Despite the benefits of increased production efficiency, nations that trade worldwide may be able to stimulate foreign direct investment, which is the amount of money invested in foreign enterprises and other assets. It is a method through which foreign capital and expert knowledge may enter a country's economy, allowing it to expand more effectively, become more competitive on the market, and result in increased employment, GDP growth, and income generation.

3.2 Consequences of the collapse of the USSR

Kazakhstan suffered significant economic and social consequences as a result of the disintegration of the Soviet Union. In the early 1990s, demand and supply networks built on free transportation soon disintegrated. While the transition to market prices for natural resources was theoretically favorable to Kazakhstan and other energy exporters, the country's substantial reliance on Russian pipelines prevented it from benefiting quickly from changing economic circumstances. Russia, in reality, took advantage of its monopoly by restricting trade and imposing hefty taxes on Kazakh goods. In the first decade after independence, the routes for Kazakh oil and gas remained largely unchanged, with very modest volumes of oil being delivered over the Caspian Sea and the majority being sold through Russia⁴.

³ Ruffin, R. *David Ricardo's Discovery of Comparative Advantage. History of Political Economy.* 34. 727-748. 2002, p. 1.

⁴ Pomfret, R. *Central Asia since 1991: the experience of the new independent states.* 2003, p. 9

Kazakhstan, like other Central Asian republics, has experienced supply chain disruptions and higher import prices. Falling productivity and rising prices hinted at an impending economic collapse in 1991, but the situation grew worse when the breakdown of the USSR swept out the residual centralized entities that had administered the Soviet economic sphere.

Kazakhstan had a significant brain drain upon independence, which harmed the country's economic performance. Germans and many professional Russians among the highly skilled minorities who chosen to leave the nation⁵. Nearly 1.5 million individuals had fled Kazakhstan by the end of the 1990s, accounting for more than 10% of the country's population during the Soviet era.

Kazakhstan has been one of the CIS's most aggressive reformers. Price liberalization was nearly complete in 1993–94, and most limitations on foreign commerce were removed, as well as the introduction of a new currency with a single rate.

Table 1 Social and demographic indicators, 1997

Area	2,727,900 km ²
Population	16,472 thous.
Rate of population growth	-0.8 percent
Life expectancy at birth (1994–95)	64.9 years
Infant mortality rate (per 1,000 births)	24.25
Hospital beds (per 10,000 inhabitants)	85.5

Source: (Fund, 2017)

⁵ François-Olivier S. *Les dynamiques démographiques au Kazakhstan, un modèle spécifique depuis l'indépendance*. 2009, p. 5

Table 2 Economic Indicators, 1997

(In percent of GDP unless otherwise indicated)					
	1992	1993	1994	1995	1996
Real GDP (percent change)	-2,9	-10,4	-17,8	-8,9	1,1
Nominal GDP (in billions of US\$)	5,5	15,8	11	16,6	20,9
End-year inflation (percent change)	2,962.68	2,169.1	1,160,3	60,4	28,6
External current account balance	...	-2,8	-8,2	-4,3	-3,7
Gross official reserves (months of imports)	...	1,5	3,2	3,2	3,4
Government Budget					
Revenue	24,5	23,9	18,8	17,5	15,3
Expenditure	31,8	25,2	25,9	19,9	18,5
Balance	-7,3	-1,3	-7,2	-2,5	-3,1

Source: (Fund, 2017)

On the table 2, Real GDP increased by 1.1 percent in 1996 after a cumulative decline of around 35 percent during 1992–1995. Three major causes of growth were identified:

- Price and trade liberalization, as well as privatization, were among the structural reforms that boosted private company activity, notably in the trade sector and domestic industrial output.
- Foreign investment, particularly in the fuel and nonferrous metallurgy industries, helped to reinvigorate businesses.
- After a poor performance in 1995, the grain crop has recovered.

3.3 First steps in CIS Trade

After the fall of the Soviet Union and the abolition of the central planning system, a considerable decline in commerce in the CIS nations occurred, which should be examined in terms of changes occurring, first, in trade with the rest of the world and, second, in interstate trade.

The CIS states' commerce with the rest of the world did not fall sharply after their independence, and trade did not decline at all in Azerbaijan, Kyrgyzstan, Moldova, Uzbekistan, and Kazakhstan in 1991-1993, when international economic activity was at its

lowest. The reason for this is that in the planned economy, former republics did not deal directly with other nations since all contracts were made through Moscow's union ministries. At the same time, it should be highlighted that, due to the USSR's low level of external economic openness, the insignificant amount of commerce with other nations especially in comparison to intra-republic trade. Second, CIS nations, particularly those with energy resources and raw materials, soon began to shift their exports outside the area, first and foremost to economically developed countries, in order to generate hard currency revenue. As a result, as previously stated, exports to the rest of the world expanded faster than intraregional exports for both the CIS as a whole and most of its member nations. At the same time, it should be highlighted that the implementation of trade obstacles slowed the expansion of commerce beyond the CIS. Export restrictions, such as quotas, licenses, and duties, as well as the sale of foreign exchange earnings at below-market rates, the compilation of lists of authorized export agents, particularly for the most important types of export products, and various measures to protect the domestic market from imports, have become commonplace.

Almost all CIS nations used export restrictions extensively between 1992 and 1995 to manage and maintain low local pricing. It should also be mentioned that for countries exporting energy and raw resources, export levies were a significant source of revenue. In general, export limits, which were abolished by most CIS nations in 1995, had a detrimental influence not only on the amount of international commerce, but also on the economy's overall development.

As previously established, the CIS nations' interstate commerce has seen the largest fall. The former USSR's production structure, which was based on a planned system of placing production capacities, is far from always based on economic expediency and considers comparative or local advantages, predetermined close economic relations, and intensive trade between republics, primarily among themselves. As a result, the reduction in interstate commerce was partially attributable to improved resource allocation and the closure of unproductive sectors as a result of growing market processes.

The removal of the system of centralized resource allocation and the trade policies adopted by newly independent nations were the primary causes of the drop in trade. Strict state supervision of international trade activities, the imposition of export limitations, and

the containment of imports resulted in the disintegration of economic linkages, a fall in output, and a worsening of interstate commerce.

3.4 Regional cooperation

3.4.1 Central Asian Union

The desire to preserve or restore existing economic ties, as well as the desire to stay on traditional export markets and fence off from outside competition, became the motive for the emergence of regional trade associations or something that would even remotely be similar to them in the vastness of the newly created Commonwealth Independent States. The first attempt at trade integration should include the creation by Kazakhstan, Kyrgyzstan and Uzbekistan on September 23, 1993 of the Central Asian Union (CAU), which, according to the agreements of February 10, 1994, was to turn into a single economic space. In 1998, Tajikistan joined the CAC. Despite the adoption of more than two hundred treaties, most of the measures envisaged by them remained unrealized. The participating countries increasingly reoriented their trade to the states of the rest of the world, which was largely due to the similar structure of exports, and actively used protective measures against each other, including in the form of high customs duties.

3.4.2 Eurasian Customs Union

The CIS states started forming a free trade zone in 1994. However, despite over a decade of discussions, several dispute problems have not been resolved due to the countries' radically divergent tactics. The CIS agreed to shift to a multi-level, multi-speed integration approach in 1995. Russia started the process of forming a customs union based on this notion. Belarus and Russia signed a Customs Union agreement on January 6, 1995, which was later joined by Kazakhstan, Kyrgyzstan, and Tajikistan. The contracting parties defined the Eurasian Customs Union as an economic association of states based on the following principles: the existence of a single customs territory for members of the Eurasian Customs Union; the presence of the same type of economic regulation mechanism, based on market principles of management and unified legislation.

The Eurasian Customs Union (Belarus, Russia, Kazakhstan, Kyrgyzstan, and Tajikistan) was renamed the Eurasian Economic Community (EurAsEC) in 2001, and the number of members increased to include Moldova and Ukraine as observer nations. It should be underlined that the construction of a customs union inside the EurAsEC framework was still a long way off. The participating nations failed to completely implement the free trade system, unify foreign trade regulation, and establish a unified customs tariff, resulting in variations in customs duties, excises, and value added tax levels. Without previous coordination of interests, tariff and non-tariff policy measures were devised independently. Despite the major challenges that existed at the time, the EurAsEC was the only true economic association in the CIS.

3.4.3 Kazakhstan's accession to the World Trade Organization (WTO)

The process of Kazakhstan's accession to the World trade organization (WTO) began on January 26, 1996 years from the submission to the WTO Secretariat of an official application for Kazakhstan's accession to the WTO. In February 1996, Kazakhstan was given the status of an observer country in the WTO.

Kazakhstan completed most market reforms in the second half of the 2000s, completing the transitional stage of transitioning its economy into a market economy. Kazakhstan has been recognized as a market economy by the European Union and the United States. The required degree of economic openness was accomplished with minimum government involvement; foreign commerce was practically liberalized; 80 percent of the country's property was privately owned; macroeconomic stability was established; and the tenge exchange rate was stable. Thus, the country was ready to join the WTO in the pre-crisis period based on the primary economic development requirements.

The coordination of this procedure with neighboring countries with which Kazakhstan had a trade turnover and through whose territory transit export routes traveled was crucial in the process of entering the WTO. There were several responses to this issue, but in any event,

the EurAsEC nations' WTO membership process should not conflict with the process of regional economic integration.

Kazakhstan's accession to the WTO is one of the most important tasks of the strategic course towards integration into the world and regional economy. Under the conditions of the Customs Union of the Republic of Kazakhstan, the Russian Federation and the Republic of Belarus in 2010, the issue of joining the WTO moved into the plane of joint, coordinated actions of the Union countries. Kazakhstan aims to expand its foreign trade potential as a market economy on its way to reaching a strong place in the international community. Membership in the WTO is seen as the most important component in improving Kazakhstan's access to global markets, competitiveness, domestic company development, investment, and economic growth stability.

The main positive aspects of Kazakhstan's accession to the WTO

- Kazakhstan is automatically accorded the most favored nation treatment in all contacts with all nations because it is regarded as a country with an open economy, unified in the global economy, and participating in world frameworks that encourage its growth.
- Given Kazakhstan's significant engagement in global exports of oil, oil products, natural gas, power, and coal, the WTO's need for non-discriminatory trade between WTO members (a favorable system for admitting items to the market) would be critical. Kazakhstan's accession to the WTO will provide a variety of benefits in the areas of export licensing, standards, and the application of anti-dumping and countervailing tariffs, as well as contribute to the expansion of the country's international economic activities in general.
- Kazakh customers would profit from the growth as a result of more competition in terms of product choice and quality, as well as cheaper pricing. Prices will be reduced not just for finished imported products and services, but also for local goods and services that require imported components in their manufacturing. At the same time, there will be equivalent changes in consumption volumes and structure, which will

approach developed-country norms. An rise in effective demand will have a favorable impact on output growth, indicating that the population's socioeconomic status is improving.

- Producers would gain from improved access to global markets for goods, services, and money, as well as internationally recognized rights to preserve national economic interests in these markets. Commercial risks will be reduced as a result of the formation of a more stable trade system, and transportation costs will be reduced as a result of ensuring the freedom of passage of commodities through the territory of WTO member nations. All of these will help lower the cost of Kazakhstani goods in general.
- The establishment of civilized competition conditions and a clear legislative framework would encourage a broad acceleration of structural changes and accelerate the development of a competitive economy. This will be made easier by aligning national law with WTO rules and regulations (particularly in the areas of taxes, customs regulation, standardization and certification, service sector regulation, competition policy, and intellectual property protection).
- End-products with a high level of research intensity and added value, as well as high and medium manufacturability, will have their development expedited. Kazakhstan's access to the overseas market, which compensates for the "narrowness" of the home market and restricted domestic demand, can only encourage development in the production of such items. The implementation of international quality standards, as well as the expansion of the presence of modern technologies, commodities, services, and investments in the domestic market, would provide favorable conditions for improving the quality and competitiveness of national products.
- Kazakhstan's accession to the WTO will provide it access to a unified international legal environment, ensuring stable and predictable circumstances for both exporters and importers. Kazakhstan granted the ability to participate in the formation of international trade norms that are driven by national interests. Furthermore, current

information on the international economic policies and intents of the governments of WTO member nations will be available, allowing for the development of more effective trade and economic policies.

- In February 1996, a working group on Kazakhstan's WTO admission was formed, consisting of 50 WTO members and Kazakhstan's significant economic partners (USA, EU, Canada, Japan, Australia, Switzerland, China, Republic of Korea, etc.).

Kazakhstan having been a member of the World Trade Organization for five years on November 30, 2020. Kazakhstan joined the WTO as a full member in 2015, after 19 years of intensive bilateral and international negotiations. During this time, the country's trade legislation was completely aligned with the WTO agreements' norms and regulations. Kazakhstan's conditions for joining the World Trade Organization are aimed at improving domestic entrepreneurs' competitiveness, diversifying the national economy, creating a favorable environment for investment in the manufacturing and service sectors, and taking into account transition periods for sensitive sectors of the economy. At that time, Since Kazakhstan's membership to the WTO, non-primary sectors had drawn about half of all foreign investment, with the service sector (30%) and manufacturing industry accounting for the majority of it (18 percent). At the time, 164 WTO members accounted for 98% of global commerce.

3.5 Revealed comparative advantage

The Balassa Index Calculation, which serves to disclose the country's comparative trade advantages, is one of the most often used methodologies for assessing the competitiveness of commercial items in the global market. The coefficient of revealed comparative advantage' (RCA) was introduced by Bela A. Balassa in 1965 to analyze the pattern of exports for industrial goods (Balassa, 1965). The estimate is based on existing statistical data for a country's or group of nations' exports of products (Razumnova and Prusova, 2009). Authors can decide if the entire country revealed comparative advantages or not based on the computation of this index. This index is calculated using the following formula:

$$RCA1 = (X_{ij} / X_i) / (X_{wj} / X_w),$$

Where X_{ij} is the export product j of the country i ; X_i is the total exports of the country i ; X_{wj} is the global export of the product j ; X_w is the gross export of the worldwide (Balassa, 1965).

Several researchers, like Leishman et al. (2013), used this approach using providing metrics to analyze the worldwide competitiveness of Australian agriculture, Utkulu and Seymen (2004) investigated at the competitiveness of Turkish goods on the European market, Bhattacharyya (2011) researched on the competitiveness of Indian horticulture goods on the global market, in the study of the export competitiveness of dairy products from European Union nations on worldwide markets, Bojnec and Ferto (2014), and Khatibi (2008), who examined at Kazakhstan's competitiveness in comparison to the EU-27 countries.

Balassa later changed the approach for calculating the Index of Comparative Advantages (Liesner, 1958). This change was introduced to allow for the examination of the UK's comparative advantages in trade with Common Market nations (Liesner, 1958). The index is calculated using the following modified formula:

$$RCA2 = X_{ij} / X_{nj},$$

where X_{nj} is the export of goods j for n -number of countries

According to Utkulu and Seymen (2004b), the Index of RCA is not quite authentic, because it does not take imports into account, especially in those cases when its value is significant. To address this shortcoming, an alternative option of the index is calculated as:

$$RCA3 = (X_{ij} - M_{ij}) / (X_{ij} + M_{ij})$$

where M_{ij} is the import of j goods into i country.

According to the formula, the value of this index might vary from -1 (when $X_{ij} = 0$, a revealed comparative 'drawback' occurs) to +1 (when $M_{ij} = 0$, a Revealed Comparative Advantage exists). Furthermore, there are doubts regarding zero values (Greenaway and Milner, 1993). The concerns with logarithmic transformation have been highlighted by critics of the RCA Index, as well as the significance of considering the import side simultaneously (De Benedictis and Tamberi, 2004).

As a result, Vollrath (1991) proposed a slightly alternative competitiveness-measurement approach, in which three RCA values are supposed to be calculated. Relative trade advantage (RTA), the logarithm of relative export advantage (ln RXA), and revealed competitiveness were the metrics used in this method (RC). We'll refer to them as RCA4, RCA5, and RCA6 in order to facilitate systematic material disclosure. The difference between the Relative Export Advantage (RXA), which is similar to the Balassa index (RCA1), and the Relative Import Advantage (RMA) is used to construct the Relative Trade Advantage (RCA4):

$$RCA4 = RTA = RXA - RMA,$$

$$RXA = RCA1 = (X_{ij} / X_{it}) / (X_{nj} / X_{nt}),$$

$$RMA = (M_{ij} / M_{it}) / (M_{nj} / M_{nt}),$$

Therefore,

$$RCA4 = RTA = RXA - RMA = (X_{ij} / X_{it}) / (X_{nj} / X_{nt}) - (M_{ij} / M_{it}) / (M_{nj} / M_{nt}),$$

The formula for calculating the Logarithm of the Relative Export Advantage (RCA5) is as follows:

$$RCA5 = \ln RXA = \ln RCA1$$

The third index of Revealed Competitiveness (RCA6) is determined using the following formula:

$$RCA6 = RC = \ln RXA - \ln RMA,$$

In research of the competitiveness of Russian products on the global commodities market, Razumnova and Prusova (2009) produced these three indicators. It was also used to analyze the dynamics of change in the nations' comparative advantages on an interregional market within the BRIC countries. Razumnova and Prusova (2009) picked a technique to measure competitiveness based on Vollrath's (1991) approach because it considers the import indicator, characterizes the global dimension of the nations' trade system, and eliminates duplicate counting.

Daniela Marconi (2006) examined the RCA's strengths and weaknesses in details. The original Balassa Index, she argues, is still the strongest indication of revealed comparative advantage. 'Forced symmetry,' according to Marconi, could only complicate the RCA's dynamic analysis. Further usage may result in a forced connection with the distribution's extreme values. The difficulty with using these or comparable RCA indexes in practice is

that government intervention, like as import restrictions, export subsidies, and other government protection programs, can undercut genuine trade regulation.

In the framework of macroeconomics, economic science therefore provides a variety of approaches for evaluating product marketability. All of the approaches under consideration are based on index computations, and each method has its own set of benefits and drawbacks. Scientists frequently use a single technique, however some researchers use a multi-method strategy. The purpose, territorial scope of the research, and statistical data availability all influence the technique application.

4 Practical Part

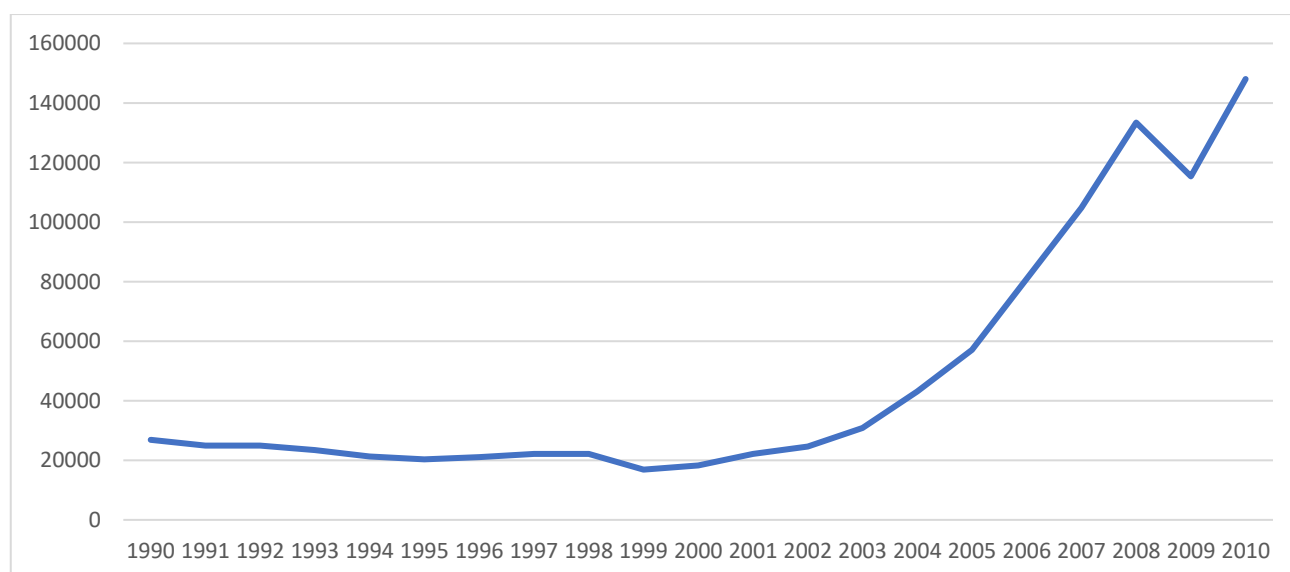
4.1 Economic development of Kazakhstan

The first decade after independence saw a poor macroeconomic performance. Kazakhstan faced major recessions in the early half of the 1990s after hastily transitioning to a market economy. After a brief period of recovery in 1995-97, the country was once again devastated by the Russian crisis in 1998. Kazakhstan's economy has risen significantly since 2000, fuelled by exports and aided by currency devaluation. Revenues from oil and other commodities have increased dramatically.

The first decade of the twenty-first century, on the other hand, saw significant GDP growth, fuelled by oil and commodities exports. Kazakhstan's government has proposed an ambitious strategy to diversify the economy and reduce reliance on oil exports by utilizing budget surpluses. Kazakhstan has made significant investments in its global economic integration, including the adoption of international standards in major production, financial, and administrative sectors.

Between 2000 and 2010, Kazakhstan's GDP per capita rose dramatically, and the country saw huge reductions in poverty and considerable increases in social development indices.

Figure 1 GDP of Kazakhstan, 1990-2010 (million US dollars)

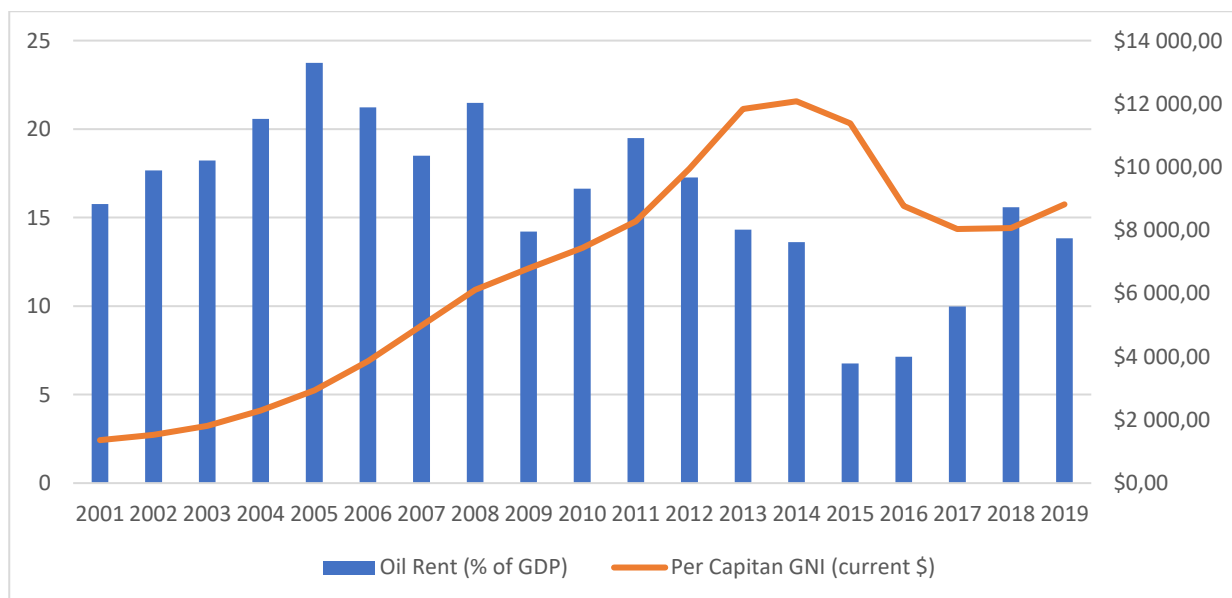


Source: (World Bank, 2020)

The commodity price bubble and subsequent fall, as well as the economic situations of key trading partners, particularly the Russian Federation, have had a significant impact on Kazakhstan's economy during the last decade. Since oil and gas have accounted for more than 70% of export revenues in recent years, the price of oil is a crucial driver. The historical and political ties between Kazakhstan and the Russian Federation include

- Kazakhstan's purchases of Russian consumer goods
- Their comparable reliance on oil and gas price swings owing to similar export structures
- Kazakhstan's imports of Russian consumer goods.

Figure 2 Per Capitan Gross National Income and Oil Rent, 2001-2019 (million US Dollars)



Source: (World Bank, 2020)

The drop in worldwide oil prices, along with the depreciation of the Russian ruble, resulted in a significant slowdown in Kazakhstan's economic development. In light of the low oil prices, the administration is considering policy alternatives for boosting and diversifying the economy in order to achieve long-term and fair growth.

Kazakhstan's economic change will be more difficult in the future than in the past. Prices of commodities, particularly fossil fuels, are expected to continue low. It is critical to minimize the non-oil deficit and increase non-oil income to maintain the necessary level of fiscal spending in order to weather the negative effects of extended poor external

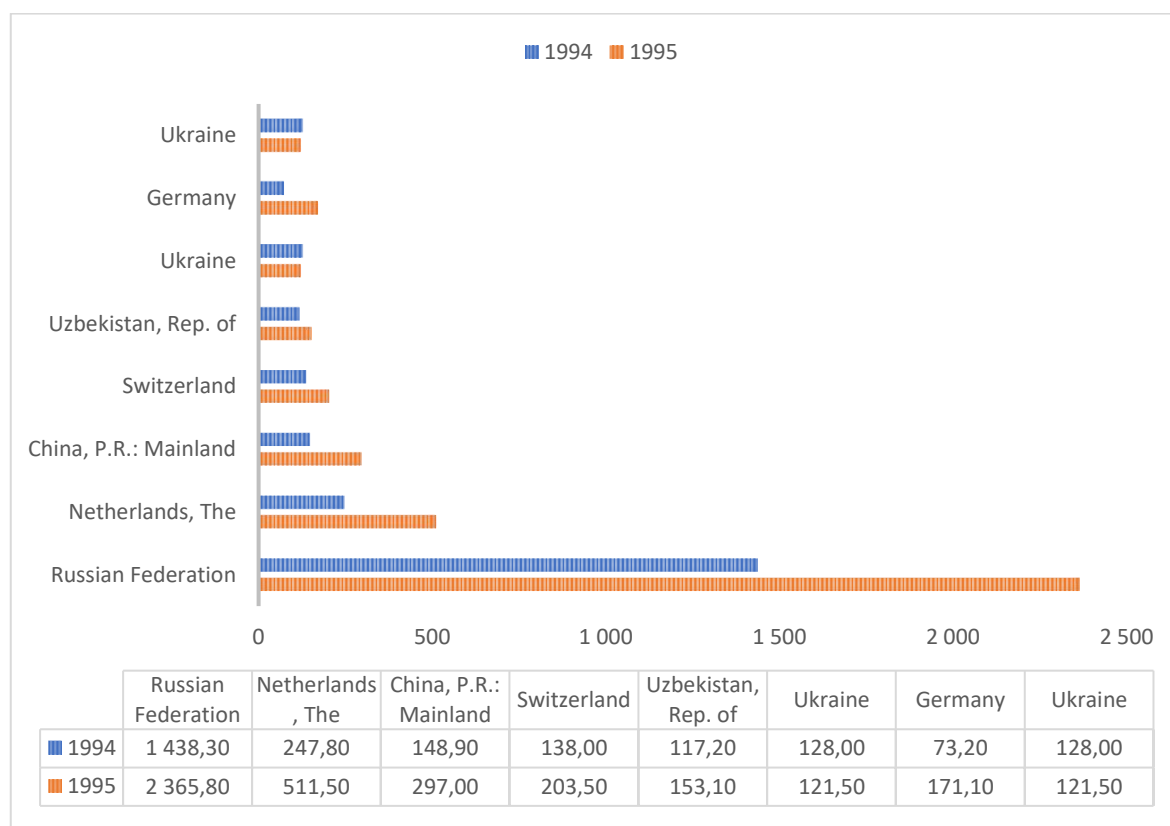
circumstances. This will necessitate sensible macroprudential measures as well as other policy changes.

Kazakhstan reached the upper-middle income group in 2006, and it nearly broke into the high-income group in 2014, making it a Central Asian economic and political force. However, since 2014, the drop in oil and other commodity prices has resulted in lower per capita income as well as a lower percentage of oil and gas earnings in the country's GDP and exports.

4.2 Main trade partners

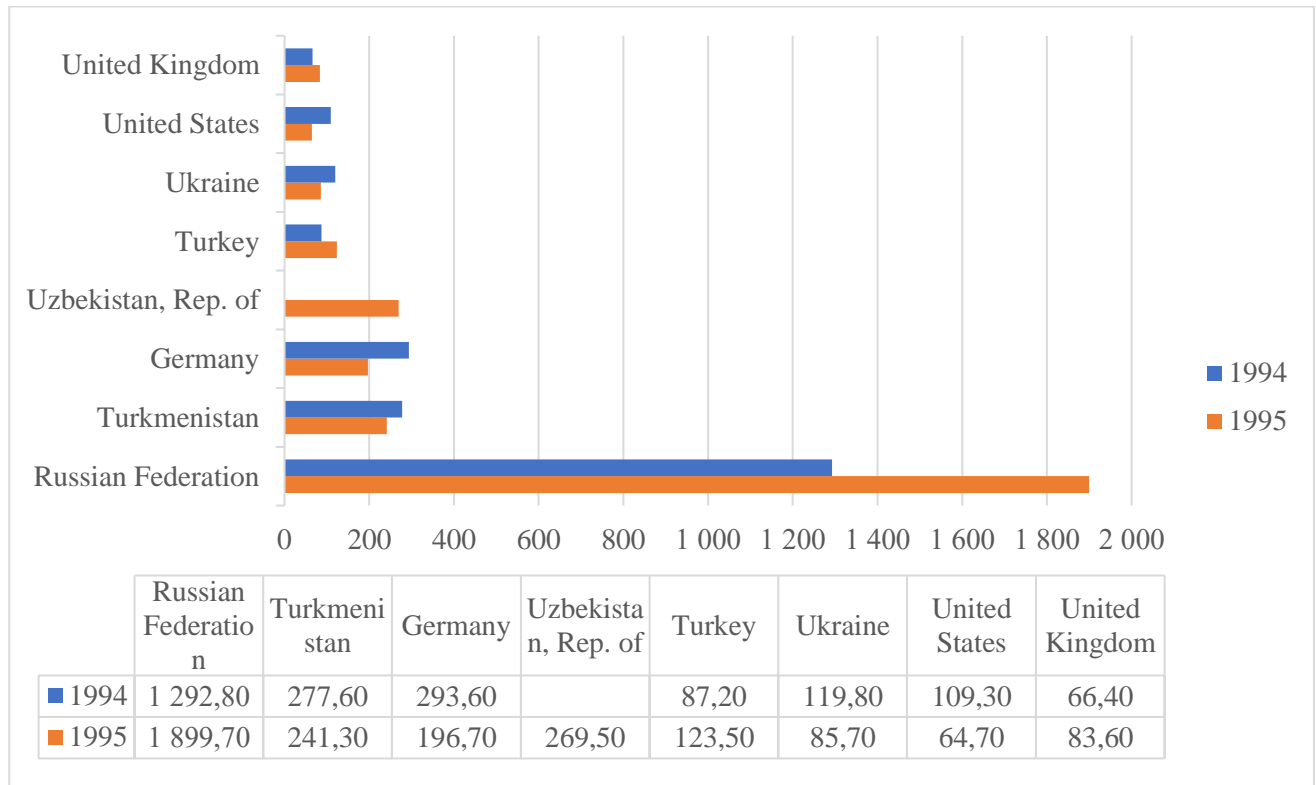
In this part of the thesis, we explore the economic trade relations of Kazakhstan and its partners, with which countries economic relations have been built since the beginning of the analysed period and its end.

Figure 3 Export to partner countries, 1994-1995 (million US dollars)



Source: (International Monetary Fund, 2020)

Figure 4 Imports from partner countries (million US dollars)



Source: (International Monetary Fund, 2020)

On the figure 3, we can highlight that the most exported country from the beginning of analyzed period was - the northeast neighbour of Kazakhstan, Russian Federation has historically been its main trading partner with 1438,30 and 2365,80 US million dollars in 1994 and 1995 respectively, which consists of 45,01% of total export in 1995 in Kazakhstan, while attaining only 4,74% in 2010. The Russian Federation also shows huge domination in import sector which increased from 1292,8 to 1899,7 million US dollars in the same period. The Kazakhstan's export to Russian Federation by product group from 2012 to 2021 we see on the table 3.

Table 3 Export of classified product groups, 2012-2021(million US dollars)

HS-2 Code	Product group	Export, mil \$	Share
26	Ores	12681	23.6%
72	Black metals	9976,8	18.6%
27	Fuel	7284,6	13.5%

Source: (Development bank of Kazakhstan, 2021)

Ores, black metals and fuel the most exported product groups from Kazakhstan to Russian Federation, these products comprise more than half of the total Kazakhstan's export. In the same period, on the table 4, we could observe Chinese top 4 exported products to Kazakhstan are fuel, copper, ores, products of inorganic chemistry, only they have more than 10% of total export share and contain 83% of total share.

Table 4 Import of classified product groups, 2012-2021(million US dollars)

HS-2 Code	Product group	Export, mil. \$	Share
27	Fuel	37810,9	43.4%
74	Copper	13874,5	15.9%
26	Ores	11090,7	12.7%
28	Products of inorganic chemistry	9625,8	11.0%

Source: (Development bank of Kazakhstan, 2021)

Other important foreign trade partners have always been Netherlands and the China in export, while next best importers for Kazakhstan were Turkmenistan and Germany. On the table 5, we spectate top exporters for Kazakhstan in different periods like 1995,2010,2020. We see that there are highly advanced,share a border with Kazakhstan (Russian Federation, China, Uzbekistan), many of them are along with Kazakhstan member of WTO (Russian Federation, China, Netherlands, Switzerland, Italy, France, Germany).

Table 5 Dynamics of Kazakhstan's export share by countries in 1995, 2010,2015 (share of total export)

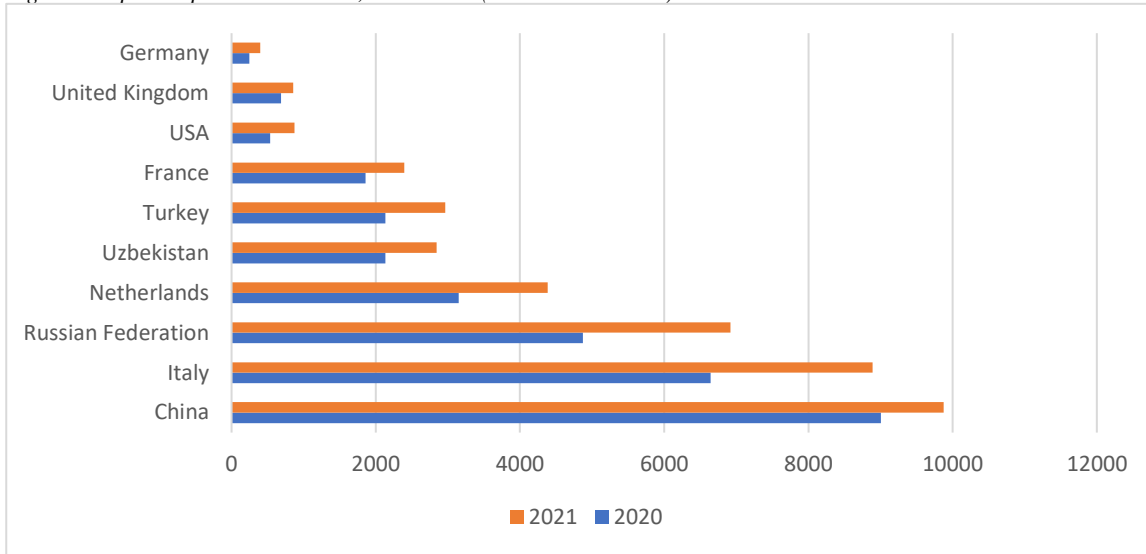
1995		2010		2020	
Russian Federation	45,01%	China, P.R.: Mainland	17,77%	China, P.R.: Mainland	19,19%
Netherlands, The	9,73%	Italy	16,82%	Italy	14,16%
China, P.R.: Mainland	5,65%	France	7,78%	Russian Federation	10,44%
Switzerland	3,87%	Netherlands, The	7,30%	Netherlands, The	6,71%
Germany	3,25%	Russian Federation	4,74%	Uzbekistan, Rep. of	4,55%

Source: (Development bank of Kazakhstan, 2021)

As we spectate, the cooperation of China and Russia with Kazakhstan, which showed high rates in the export of Kazakhstan at the beginning of the analyzed period didn't stop. China is top exporter with 17,77% and 19,19% in 2010 and 2020 respectively. While the ratio of Kazakhstan's export to Russian Federation is continually decreasing, the highest difference we see between 1995 and 2010 years, the share of total export to Russian Federation dropped from 45,01% to 4,74% in different period respectively. On the other

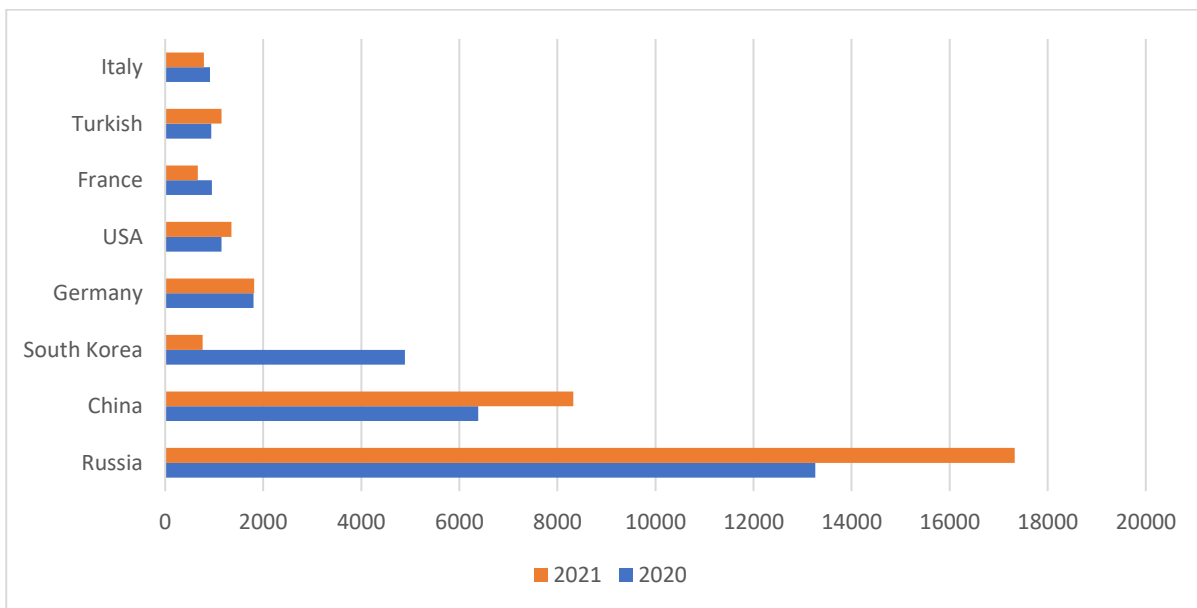
hand, on the table 5, we could see the Russian Federation has biggest import to Kazakhstan in last years, contained 13257,7 million US dollars in 2020 year, which has been increased to 17326,3 million US dollars in 2021. The most imported product group to Russia was “Mechanical equipment and machinery, computers” contained 24,5% and 17,6% accordingly.

Figure 5 Export to partner countries, 2020-2021 (million US dollars)



Source: (World Bank, 2020)

Figure 6 Import to partner countries, 2020-2021 (million US dollars)

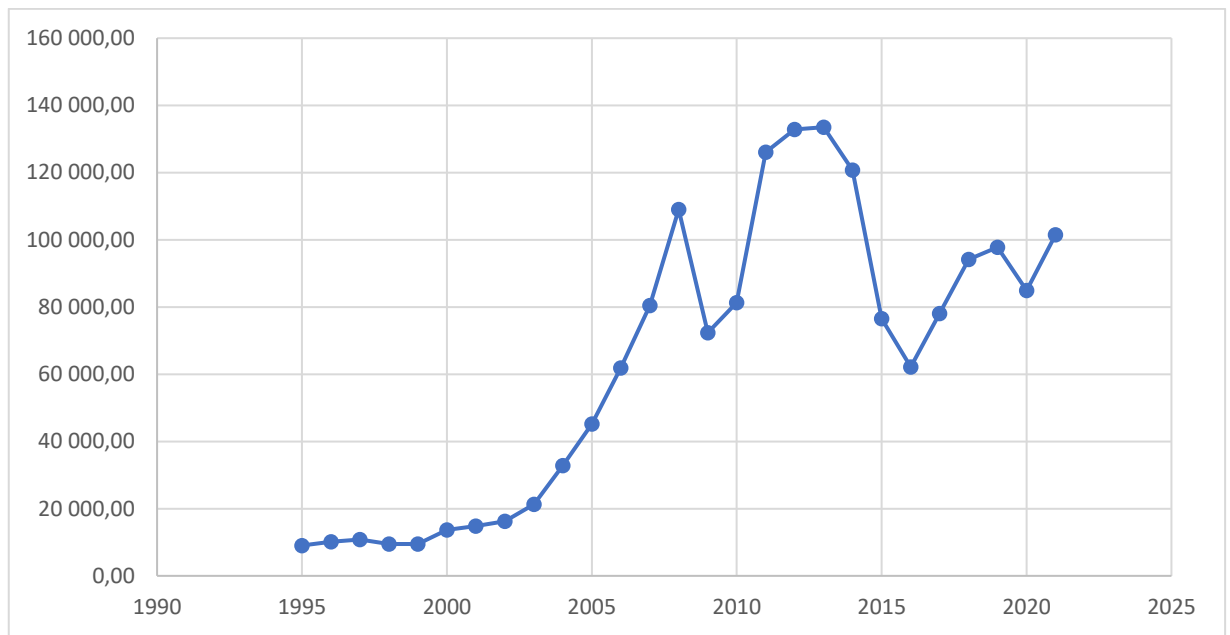


Source: (World Bank, 2020)

4.3 Foreign trade turnover in Kazakhstan

In this chapter, we would observe foreign trade turnover and what kind of goods constitute the bulk of it in Kazakhstan. Foreign trade turnover is the total amount of exports and imports for a year or another specified period, measured in monetary terms.

Figure 7 Foreign trade turnover, 1990-2021 (million US dollar)



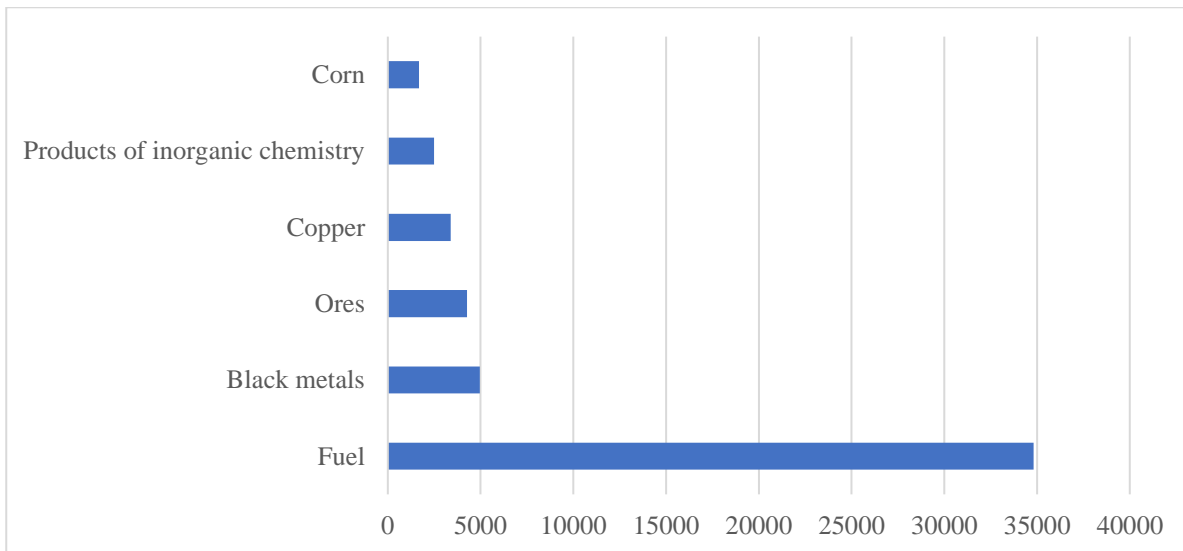
Source: (World Integrated Trade Solution, 2021)

On the figure 7, we could spectate time series of foreign trade turnover of Kazakhstan starting from 1995 to 2021 year. From the beginning of the analysed period, we see strictly increasing until 2008 year, which contains 108987,33 million US dollars of Kazakhstan's foreign trade turnover. After that, it decreases by -33,6% in 2009 and soon it starts peaking the maximum point in 2013, which has 133506 million US dollars. In consequence, the trend of the line starts to be unstable, we could highlight the big decreasing by -42,2% in 2015 year, however at the end of analyzed period the foreign trade turnover grew up to 101513,40 million US dollars, having passed only small decreasing in 2020 by -4,2%.

Fuel, black metals, ores, copper, products of inorganic chemistry and corn appear in Kazakhstan's export to be of particular importance. As one could notice in Figure 8 , the fuel export has incredible domination among other export products, it is close to reach 35000 million US dollars from 2012-2021, while the next biggest export product in the same period,

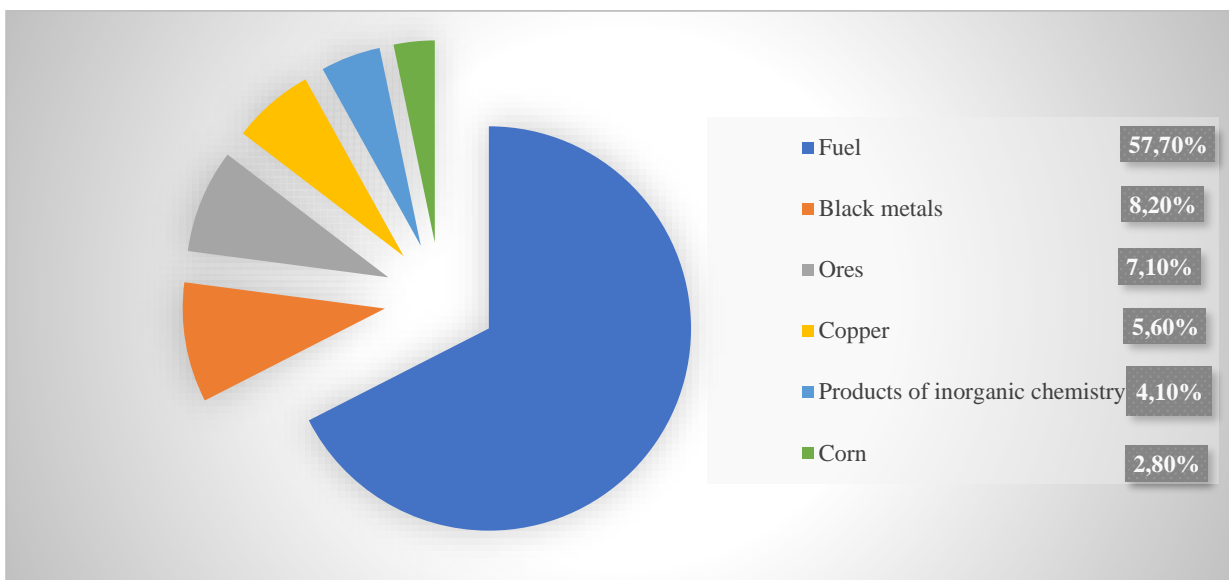
which is black metals group contains only 4968 million US dollars. In the analysed period, the total share of export of fuel and black metals are 57,7% and 8,2% respectively. While, ores share is 7,1%, copper has 5,6% of share, products of inorganic chemistry are 4,1% and corn shows only 2,8%

Figure 8 Export by product group of Kazakhstan, 2012-2021 (million US dollars)



Source: (Development bank of Kazakhstan, 2021)

Figure 9 Share of export by product, 2012-2021 (% of total export)

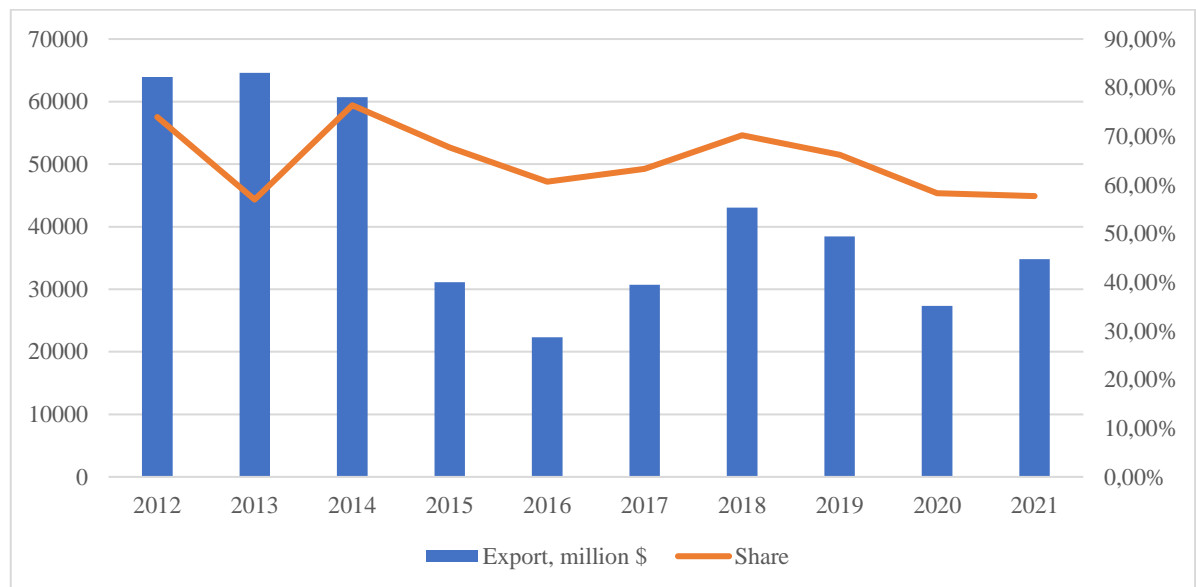


Source: (Development bank of Kazakhstan, 2021)

On the figure 10, we could see dynamics of fuel export in the last decade. The most exported product group trend had the significant decreasing in 2015 by losing -49% of previous yearly result, the decreasing continued in 2016 too, the export of fuel decreased for

8814,1 million US dollars. The most significant fuel exports were in 2012-2013 years, more than 60 million US dollars were exported, on the other hand we could see that the share of fuel export from all total export of Kazakhstan were unstable, despite on positive results of exports, the trend of share of the good product were decreased from 74% to 57%, in consequence the trendline increased again to 76,4%, which is the maximum point, after all we could spectate slightly decreasing at the end of the analyzed period.

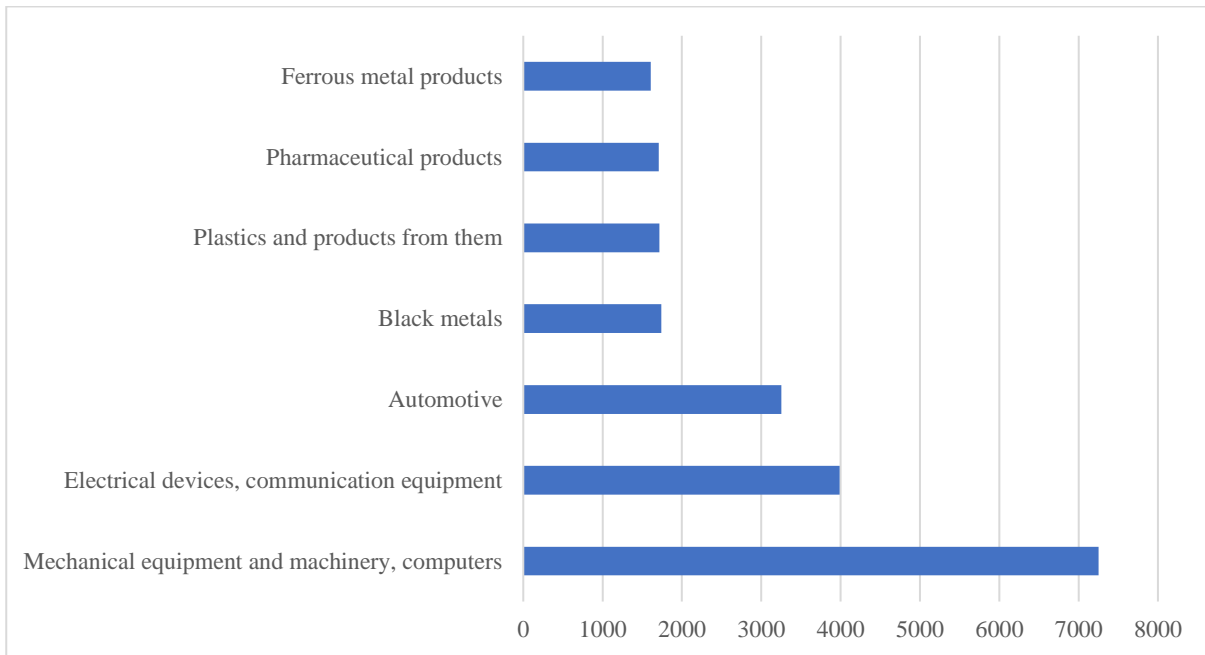
Figure 10 Fuel export dynamics, 2012-2021 (million US dollars and share of total export)



Source: (Development bank of Kazakhstan, 2021)

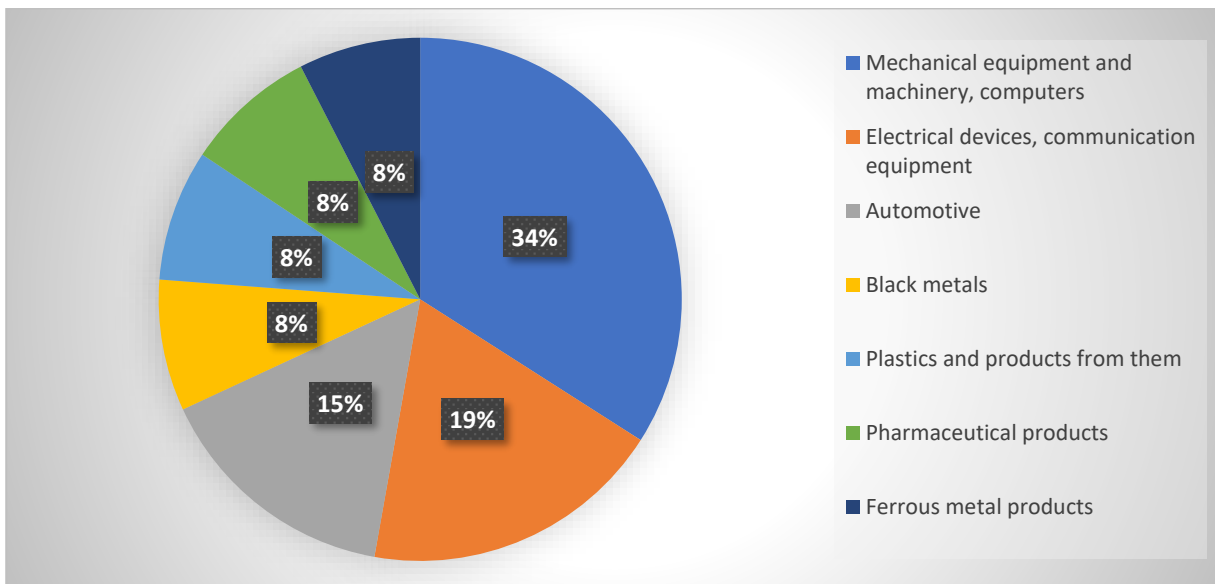
Kazakhstan exported fuel to such countries as Italy, China, Russia, the Netherlands, France. The figure 11, which shows us import of group products to Kazakhstan in million US dollars from 2012 to 2021 period. There are: Ferrous metal products, pharmaceutical products, plastics and their products, black metals, automotive, electrical devices and communication equipment, mechanical equipment, and machinery and also computers. The biggest import product group is Mechanical equipment and machinery, computers which was imported for 7252,6 million US dollars and contains 34% share of total import in analyzed period. The next two follower groups are Electrical devices with communication equipment and Automotive imported 3985,8 and 3251,4 million US dollars, which have 19% and 15% of total import share respectively.

Figure 11 Import by product group of Kazakhstan, 2012-2021 (million US dollars)



Sources: (Development bank of Kazakhstan, 2021)

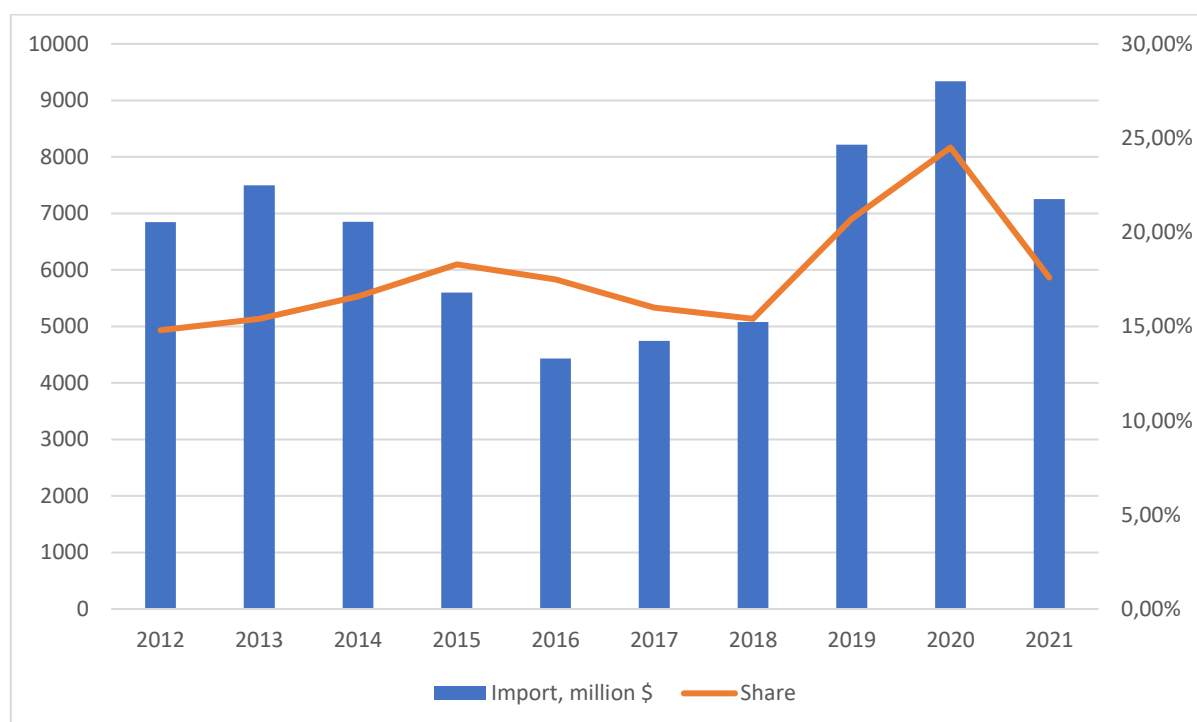
Figure 12 Share of import by product, 2012-2021 (% of total import)



Sources: (Development bank of Kazakhstan, 2021)

On the figure 13, we could see dynamics of import product groups which contains mechanical equipment and machinery, computers in the last decade. The most imported product group trend had the significant decreasing from 2013 to 2018, the exported changed from 7497,6 to 5076,5 million US dollars. In consequence, the trend has slightly increasing in period from 2018-2019, the export increased by 61,88% ,at the same time share of this product group was increased too.

Figure 13 Dynamics of Mechanical equipment and machinery,computers product group, 2012-2021 (million US dollars and share of total import)



Sources: (Development bank of Kazakhstan, 2021)

In the start of analysed period the product group of mechanical equipment and machinery with computers more exported in countries such as China, Russia and Germany. In 2019 and 2020, the most products of this group were exported to South Korea. The other important exporters were countries like USA, Italy.

4.4 Kazakhstan's revealed comparative advantage

To assess a country's export potential, revealed comparative advantage (RCA) measures have been utilized. In contrast to instances where the number of items that may be competitively exported is static, the RCA reveals if a country is in the process of expanding the products in which it has a trade potential.

The RCA index of country *i* for product *j* is frequently calculated by comparing the product's percentage of the country's exports to its share of global trade: $RCA_{ij} = (x_{ij}/X_{it}) / (x_{wj}/X_{wt})$, where x_{ij} and x_{wj} are the values of country *i*'s product *j* exports and global exports of product *j*, respectively, and X_{it} and X_{wt} are the nation's and world's total exports, respectively. If the value is less than one, the country has a clear comparative disadvantage in the product. On the other hand, if the index is more than one, the nation has a revealed comparative advantage.

For the purposes of this study, Kazakhstan's exports were taken to be products listed under the SITC REV2 groups. Some of these categories has several products groups, there are more than 20 product groups were considered in this study. The following categories were therefore selected at the SITC REV2 groups:

In the first group of textiles export includes 26,85 and 84 product codes, such as textile fibres, yarn and clothing. In the second group contain live animals (0); meat and meat preparations (1); oil seeds, oil nuts and oil kernels (22); cereals and cereals preparations (4); In the third group in our table, which is manufactures comprises material (5,60,61,62,63,64,65,66,67,69,7,8) products group. Inside chemical exports we explore chemical products, which is the same with fuel. The next product group is ores and metals, which include three type of products, such as crude fertilizers (imports only), except those of division 56, and crude minerals (excluding coal, petroleum and precious stones) (27); metalliferous ores and metal scrap (28); nonferrous metals (68); The next big category is agricultural raw materials which includes 7 product codes (20,21,23,24,25,26,29). The last group category is machinery and transport equipment which contains only itself (7).

4.4.1 Kazakhstan's RCA Time series

On these three tables (6,7,8) we could analyse RCA time series starting from 1995 to 2002:

Table 6 RCA index by product group, 1995-2002

Product Group	1995	1996	1997	1998	1999	2000	2001	2002
Textiles	1,42	0,44	0,42	0,35	0,29	0,22	0,24	0,2
Food	0,34	1,28	1,52	1,05	0,94	1,1	0,64	0,53
Manufactures	0,47	0,37	0,34	0,33	0,33	0,28	0,25	0,25
Chemical	0,94	0,58	0,46	0,38	0,38	0,41	0,37	0,28
Fuel	1,38	3,34	3,62	4,87	4,97	4,42	4,58	5,19
Ores and Metals	10,2	7,92	7,85	9,56	9,25	7,5	8,61	8,2
Agricultural Raw Materials	4,22	1,34	1,28	1,28	1,15	0,88	1,09	0,79
Machinery and Transport Equipment	0,02	0,12	0,09	0,1	0,1	0,04	0,03	0,02

Source: (Development bank of Kazakhstan, 2021)

Table 7 RCA index by product group, 2003-2010

Product Group	2003	2004	2005	2006	2007	2008	2009	2010
Textiles	0,26	0,22	0,15	0,17	0,13	0,09	0,08	0,04
Food	1,03	0,64	0,37	0,43	0,61	0,63	0,35	0,35
Manufactures	0,28	0,24	0,2	0,17	0,18	0,2	0,18	0,14
Chemical	0,29	0,22	0,17	0,21	0,23	0,18	0,33	0,36
Fuel	4,48	4,84	4,44	4,26	4,29	3,61	4,67	4,2
Ores and Metals	6,75	5,7	5,4	4,9	4,43	3,76	4,13	2,78
Agricultural Raw Materials	0,9	0,67	0,49	0,46	0,37	0,24	0,23	0,11
Machinery and Transport Equipment	0,02	0,02	0,03	0,02	0,02	0,03	0,02	0

Source: (Development bank of Kazakhstan, 2021)

Table 8 RCA index by product group, 2011-2019

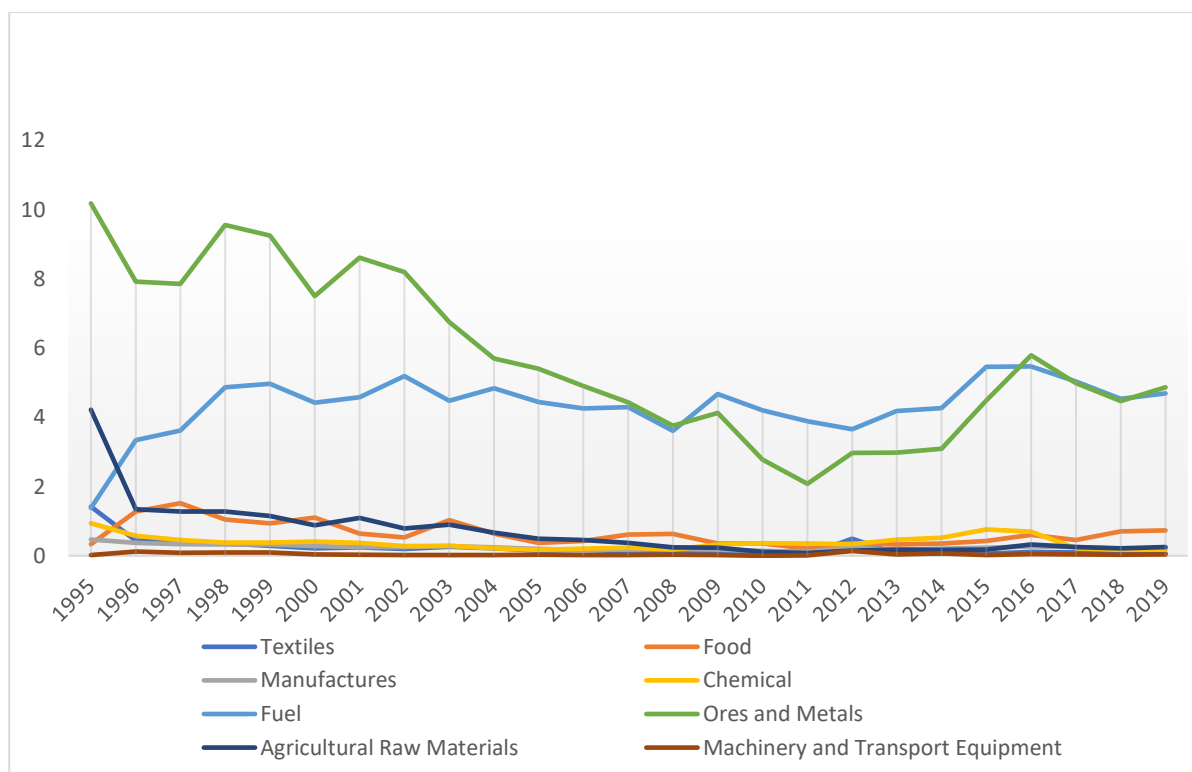
Product Group	2011	2012	2013	2014	2015	2016	2017	2018	2019
Textiles	0,03	0,49	0,06	0,07	0,06	0,11	0,1	0,06	0,07
Food	0,21	0,36	0,33	0,35	0,43	0,6	0,46	0,71	0,73
Manufactures	0,12	0,24	0,17	0,21	0,23	0,27	0,25	0,21	0,21
Chemical	0,35	0,34	0,47	0,52	0,76	0,7	0,22	0,17	0,18
Fuel	3,89	3,66	4,18	4,27	5,46	5,47	5,03	4,53	4,69
Ores and Metals	2,08	2,97	2,98	3,09	4,49	5,79	4,99	4,47	4,87
Agricultural Raw Materials	0,08	0,15	0,18	0,17	0,18	0,33	0,25	0,22	0,25
Machinery and Transport Equipment	0,01	0,14	0,04	0,07	0,02	0,05	0,04	0,03	0,04

Source: (Development bank of Kazakhstan, 2021)

4.4.2 Changing trend of Kazakhstan's Revealed comparative advantage

This section takes a look at how the sectors for which Kazakhstan has a comparative advantage have evolved since 1995. Figure below plots the RCA index over time. A glance at Figure below reveals that Kazakhstan's most competitiveness over time have ores and metals with fuel. The interesting fact is that in the beginning of analysed period ores and metals and fuel had big differences in RCA index with 10,2 and 1,38 respectively. In 2008, we see that indexes changed to 3,76 and 3,61, which are very close to each other. In consequence, the trendline of ores and metals started to slightly decrease until 2011 year, after what it started to increase until 2016, which was the highest RCA index of ores and metals in last decade. On other hand, the RCA index of fuel hadn't any significant increases after 2009, however comparing to ores and metals, the trendline of fuel hadn't such of decreasing.

Figure 14 Dynamic of RCA indexes by product groups, 1995-2019



Source: (Development bank of Kazakhstan, 2021)

4.5 Dynamics of macroeconomic indicators in Kazakhstan

In this chapter, we would observe dynamics of macroeconomic indicators such as Trade balance, foreign trade turnover, export and import, trade as share of gross domestic product.

4.5.1 Macroeconomic indicators time series

On the figure below, we see the concrete information about foreign trade of Kazakhstan from the 1995 to 2021. In first four columns, we see how many millions were exported and imported, what is total yearly foreign trade turnover, means what is the sum of export and import in million US dollars, on the other hand we see the total trade balance, which is the difference between export and import.

Figure 15 Macroeconomic indicators time series, 1995-2021

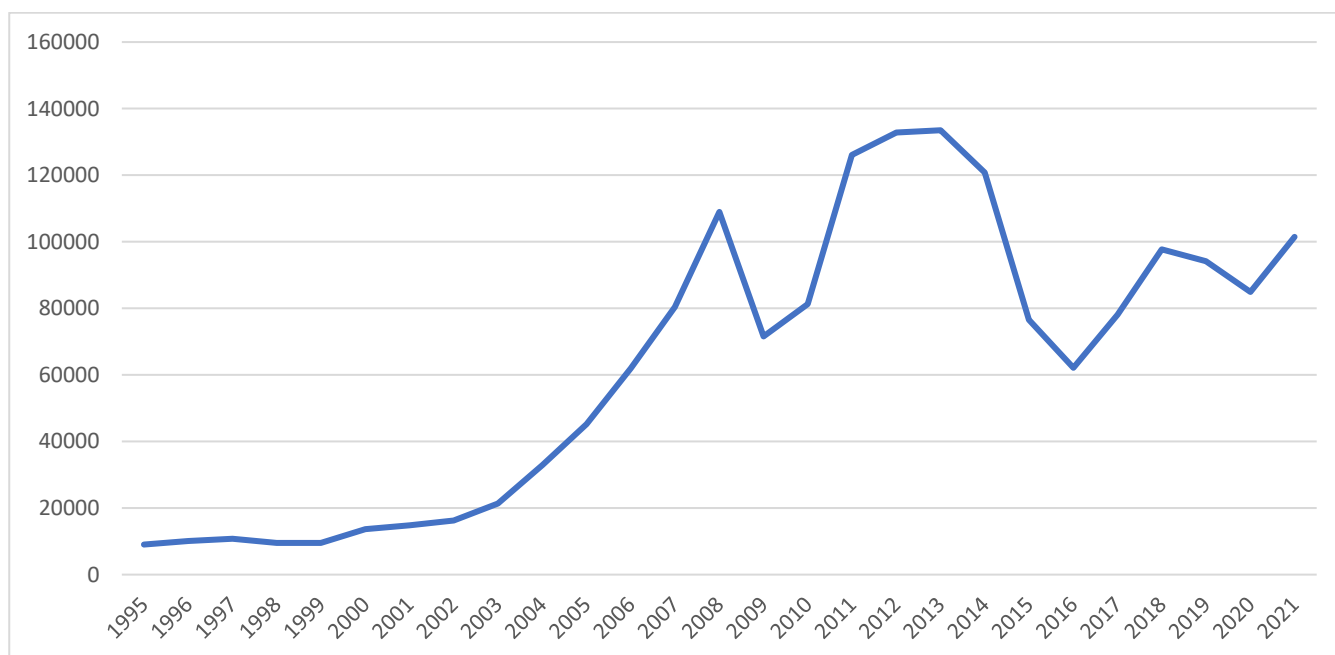
Year	Export	Import	Turnover	Trade balance	Export growth	Import growth	Turnover growth	Trade balance growth
1995	5 226,72	3 805,12	9 031,84	1 421,60				
1996	5 896,83	4 238,59	10 135,42	1 658,24	12,8%	11,4%	12,2%	16,6%
1997	6 486,65	4 298,61	10 785,26	2 188,03	10,0%	1,4%	6,4%	31,9%
1998	5 206,92	4 293,19	9 500,11	913,73	-19,7%	-0,1%	-11,9%	-58,2%
1999	5 871,27	3 639,17	9 510,45	2 232,10	12,8%	-15,2%	0,1%	144,3%
2000	8 679,36	4 987,04	13 666,40	3 692,32	47,8%	37,0%	43,7%	65,4%
2001	8 485,52	6 280,20	14 765,72	2 205,31	-2,2%	25,9%	8,0%	-40,3%
2002	9 642,68	6 581,12	16 223,81	3 061,56	13,6%	4,8%	9,9%	38,8%
2003	12 915,95	8 402,00	21 317,95	4 513,95	33,9%	27,7%	31,4%	47,4%
2004	20 079,04	12 773,47	32 852,52	7 305,57	55,5%	52,0%	54,1%	61,8%
2005	27 846,08	17 333,16	45 179,24	10 512,93	38,7%	35,7%	37,5%	43,9%
2006	38 244,42	23 660,99	61 905,42	14 583,43	37,3%	36,5%	37,0%	38,7%
2007	47 747,90	32 686,61	80 434,52	15 061,29	24,8%	38,1%	29,9%	3,3%
2008	71 171,96	37 815,37	108 987,33	33 356,58	49,1%	15,7%	35,5%	121,5%
2009	43 915,76	28 408,68	72 324,44	14 787,03	-38,3%	-24,9%	-33,6%	-55,7%
2010	57 244,06	24 023,63	81 267,69	33 220,44	30,3%	-15,4%	12,4%	124,7%
2011	88 107,93	38 010,24	126 118,17	50 097,70	53,9%	58,2%	55,2%	50,8%
2012	86 448,90	46 358,70	132 807,60	40 090,20	-1,9%	22,0%	5,3%	-20,0%
2013	84 700,40	48 805,60	133 506,00	35 894,80	-2,0%	5,3%	0,5%	-10,5%
2014	79 459,90	41 295,50	120 755,40	38 164,40	-6,2%	-15,4%	-9,6%	6,3%
2015	45 955,80	30 567,80	76 523,60	15 388,00	-42,2%	-26,0%	-36,6%	-59,7%
2016	36 736,90	25 376,70	62 113,60	11 360,20	-20,1%	-17,0%	-18,8%	-26,2%
2017	48 503,30	29 599,60	78 102,90	18 903,60	32,0%	16,6%	25,7%	66,4%
2018	61 268,80	32 928,70	94 197,50	28 340,10	26,3%	11,2%	20,6%	49,9%
2019	58 065,60	39 695,20	97 760,80	18 370,40	-5,2%	20,5%	3,8%	-35,2%
2020	46 916,40	38 037,90	84 954,30	8 878,40	-19,2%	-4,2%	-13,1%	-51,7%
2021	60 339,60	41 173,80	101 513,40	19 165,80	28,6%	8,2%	19,5%	115,9%

Source: (World Integrated Trade Solution, 2021)

4.5.2 Trade balance

A country's net export is computed by subtracting the country's total imports from its total exports. Positive net exports occur when the volume of foreign expenditure on a country's products and services exceeds the country's spending on foreign goods and services, resulting in a trade surplus or deficit. Because one of the four calculation factors of GDP is the balance of trade, it has an impact on the macroeconomic indicator.

Figure 16 Trade balance, 1995-2021 (million US dollars)



Source: (World Bank, 2020)

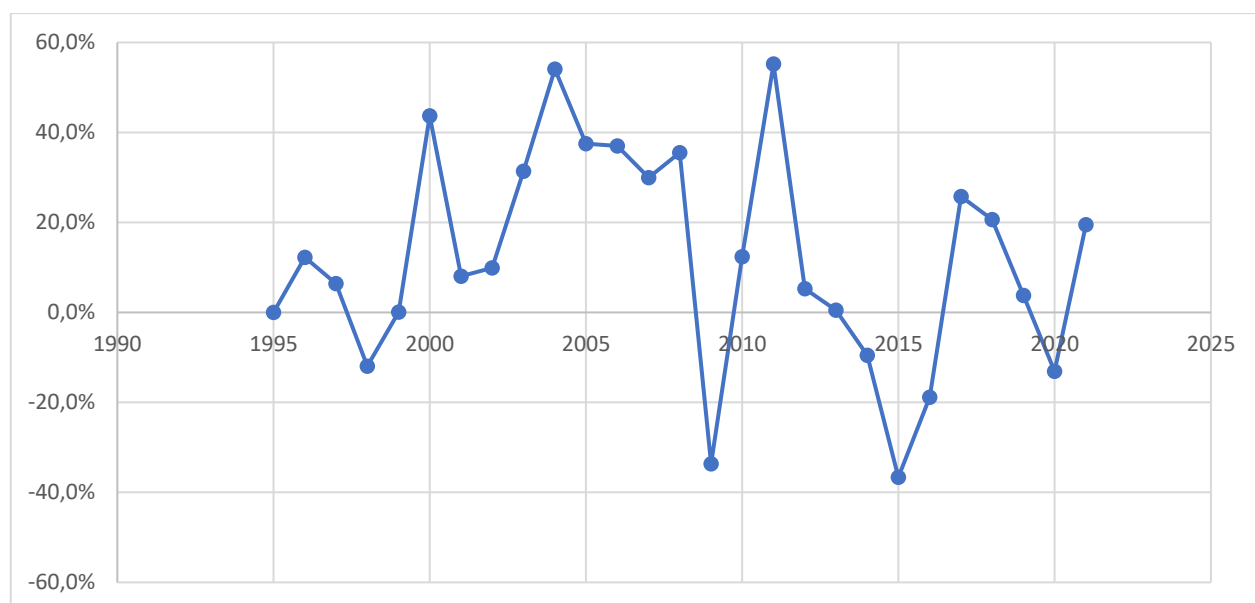
From the figure 16 it is clear, that total balance of trade of Kazakhstan was for all years in positive net export numbers and was, it means that Kazakhstan exported more than imported. The republic banking sector's external borrowing sources were stopped in the fall of 2008, and hydrocarbons prices plummeted sharply, from USD 140 to USD 40- 50 per barrel, affecting one of Kazakhstan's most rapidly expanding businesses. Kazakhstan's economy had to respond to a major terms-of-trade shock in the face of weakening local and international demand. Oil prices remained low in 2015, averaging around \$53 per barrel from January to October, following a significant decrease in the second half of 2014, with negative repercussions for both domestic consumption and investment confidence.

4.5.3 Foreign trade turnover

Gaining independence by Kazakhstan stimulated the growth of economic as well as foreign trade relations with the neighboring countries and also with the countries of the world. Measures in the field of foreign trade made foreign trade sector in the country one of the leading branches of economy and led to the expansion of foreign trade relations. The free economy in the country, development of private sector, both the political and economic influence of the republic and a favorable geographic location created a great opportunity for increase in the volume of external trade relations and its range. At present, the interest in the products produced in Kazakhstan is increasing in the world market and number of countries receiving these goods is also increasing. Likewise changes occurred in the structure of foreign trade, as well as the composition of its trading partners has changed, too. Previously, if Kazakhstan's main trading partners were the CIS countries, but now we can spectate how Kazakhstan trades among the worlds. Among the CIS countries Kazakhstan has the big trade turnover with Russian Federation and Uzbekistan.

On figure 17, we could mention that there are only six times in analyzed period, when dynamic of growth of foreign trade turnover were decreased. The same crises influenced on dynamics of foreign trade turnover in Kazakhstan in 2009 and 2015.

Figure 17 Dynamic of Foreign trade turnover, 1995-2021 (in percentage)

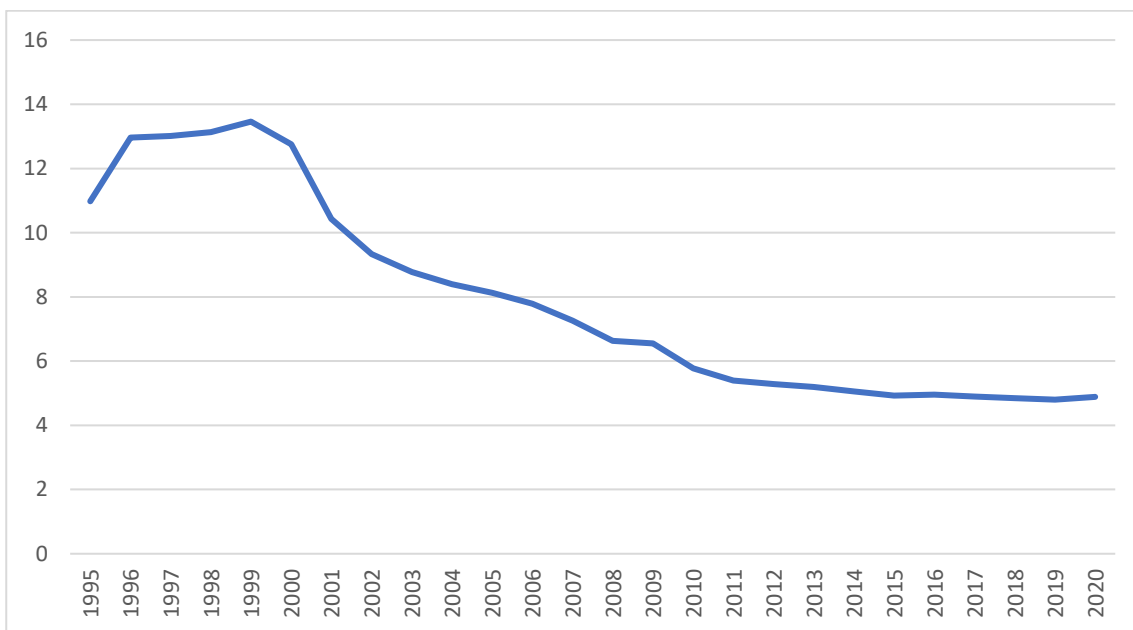


Source: (World Bank, 2020)

4.5.4 Unemployment rate

Unemployment is a social-economic phenomenon, which represents the result of the unbalance on the labour market between the supply and demand. It is a serious economic problem because it represents the lost potential value of the whole economy. The consequence of the high unemployment is the large volume of unproduced or lost GDP

Figure 18 Dynamics of unemployment rate, 1995-2020 (in percentage)



Source: (World Bank, 2020)

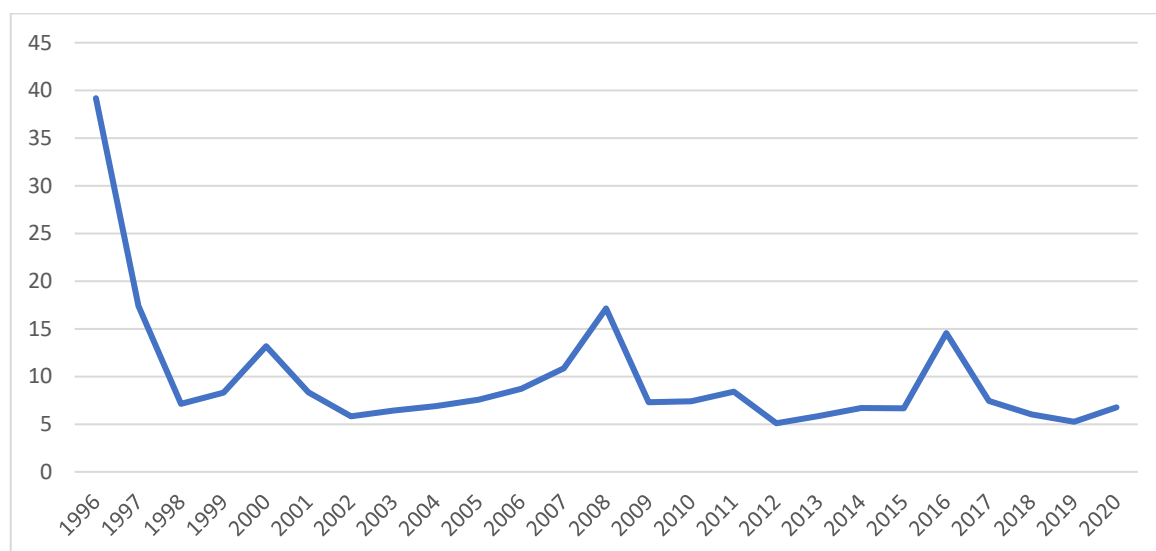
On the figure 18, there is a description of the total development of the unemployment in Kazakhstan for the period 1995 – 2020. The highest unemployment rate was reached in years 1996 – 1999 and the number of the unemployed people was progressively declining until the today.

4.5.5 Inflation

It's a general rise in the cost of goods and services. It is a process characterized by a disruption in the balance of microeconomics and macroeconomics, as well as in the

monetary and real economies. The general increase in prices must be understood to mean that not all prices are rising, but that certain prices may remain steady, even though overall prices are falling. The CPI index, or consumer price index, is one of the most widely used for estimating inflation. It is used to calculate and express the impact of changes in the price level of household products and costs on the price level. It must include the typical household expenditures to give the adequate information. The most important thing is to select a representative basket of commodities and services that would be valued by market production prices in the base year. Inflation affects the whole national economy and the lives of all citizens by rising costs and lowering living standards.

Figure 19 Dynamics of Inflation rate (in percentage)



Source: (World Bank, 2020)

On the figure 19, Since 2000, the Real effective Exchange rate's relative stability and the progressive appreciation of the real USD exchange rate have generated a favorable disinflationary environment. Indeed, the period from mid-2002 to mid-2007 was the longest stretch of consistent single-digit inflation, with annual rates averaging 6.7 percent.

The National Bank of Kazakhstan kept its controlled exchange rate system while prepared to deploy its inflation forecast-targeting regime. However, the tenge appreciated dramatically from 155 to 120 tenge per US dollar throughout the six years from 2002 to 2008. This, combined with a drop in oil prices (\$154 to \$47 per barrel of West Texas Intermediate between June 2008 and January 2009), a sharp depreciation of the Russian

ruble, and global financial turmoil emanating from the United States, forced the tenge to depreciate back to its previous 150 range, where it remained for the next five years.

Kazakhstan has seen a broad-based economic downturn, as well as adjustments in income and domestic prices, as a result of the adverse external environment..

As China's development slowed and Russia's crisis deepened, falling export oil prices created a significant terms-of-trade shock, reducing both external and domestic demand.

4.6 Foreign Direct Investment

Foreign direct investment (FDI) is one of the most important forms of capital inflows and drivers of economic growth in many countries. In particular, developing countries and emerging market economies have recognized the critical importance of FDI in expanding economic opportunities.

Kazakhstan has attracted over US\$370 billion in foreign direct investments since it gained independence in 1991, President Kassym-Jomart Tokayev told representatives of leading investment companies.

"We became the largest economy in Central Asia and one of the fastest expanding in the post-Soviet region as a result of systematic and comprehensive effort in this field.⁶" We have garnered more than \$370 billion in foreign direct investment throughout our independence years. The government has made it a priority to assist investors. Tokayev, who directly leads the Foreign Investors Council, a major venue for contact with investors, stated, "We have adopted the notion of personalised and complete support for every investor."

The Kazakh government has also prioritized the growth of the securities market and recruiting international portfolio investors. Kazakhstan, according to Tokayev, has the region's largest capital market.

"As a significant financial regulator, the National Bank is aggressively trying to promote debt and securities markets. Kazakhstan's legal and physical infrastructure is well-

⁶ Astana Times, *Akorda meeting 2021*, p. 1

developed. Kassym-Jomart Tokayev noted, "The country maintains two stock exchanges: KASE in Almaty and the Astana International Financial Center."

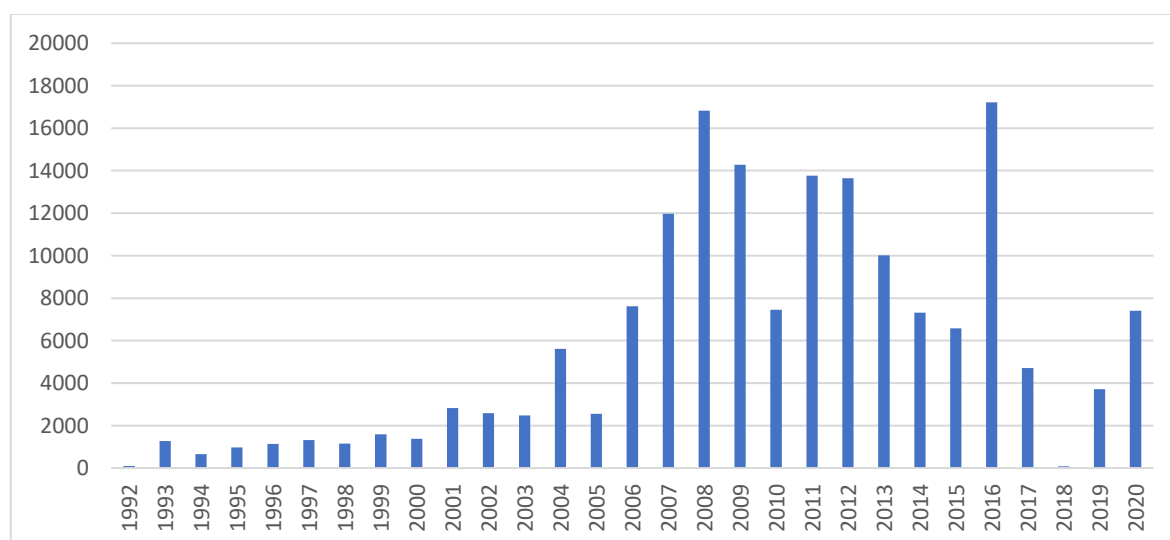
He cited the IPOs of Kazatomprom, the world's largest uranium mining business, and Kaspi.kz, a regional fintech leader, as examples of how they have enhanced the capital market's vitality and liquidity. Kazatomprom sold 15% of its shares in an initial public offering (IPO) in 2018, valued at \$3 billion, as part of the country's larger privatization initiative.

Kaspi.kz, which has evolved from a modest second-tier bank to a fintech business that invests extensively in digital and fintech, astonished many when its IPO in October 2020 became the second largest of the year on the London Stock Exchange and the fourth largest in Europe. Its initial public offering (IPO) was priced between \$28.50 and \$33.75, giving it a market capitalization of \$6.5 billion.

"A massive drive to privatize more than 700 state-owned firms in various areas of Kazakhstan's economy, including oil and gas, energy, and infrastructure, is under ongoing."

"Floating shares of the major firms on national stock markets is desirable to us," Tokayev remarked.

Figure 20 Foreign direct investment net inflows, 1992-2020 (million US dollars)

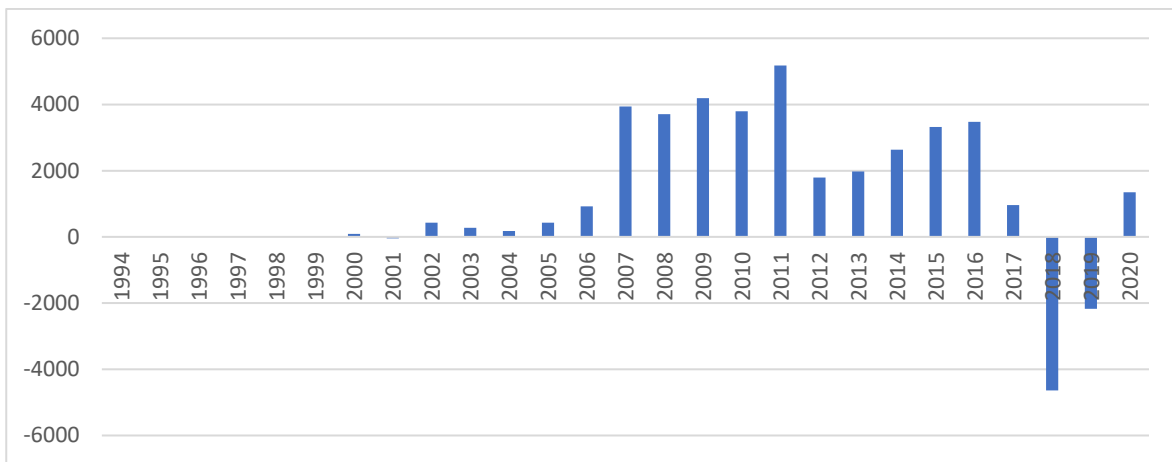


Source: (World Bank, 2020)

Kazakhstan is a leader in attracting foreign investment in the Central Asian region and is in second place after Russia in the CIS. The favorable investment climate in the country is confirmed by various indicators, such as the Global Competitiveness Index, the

Ease of Doing Business Index, the Index of Economic Freedom, etc. Despite this, the pandemic and the decline in oil prices negatively affected the dynamics of FDI in the economy of Kazakhstan in 2020. According to the data which shown in Figure 20, last year the inflow of FDI to Kazakhstan increased by 99,17% compared to 2019 and amounted to 7,4 billion USD. Over the past 10 years, on average, Kazakhstan has attracted 8,3 billion USD annually, despite on the largest fall in 2018, the inflow of FDI to Kazakhstan decreased by -98,23% compared to 2017 and amounted to 83 million USD.

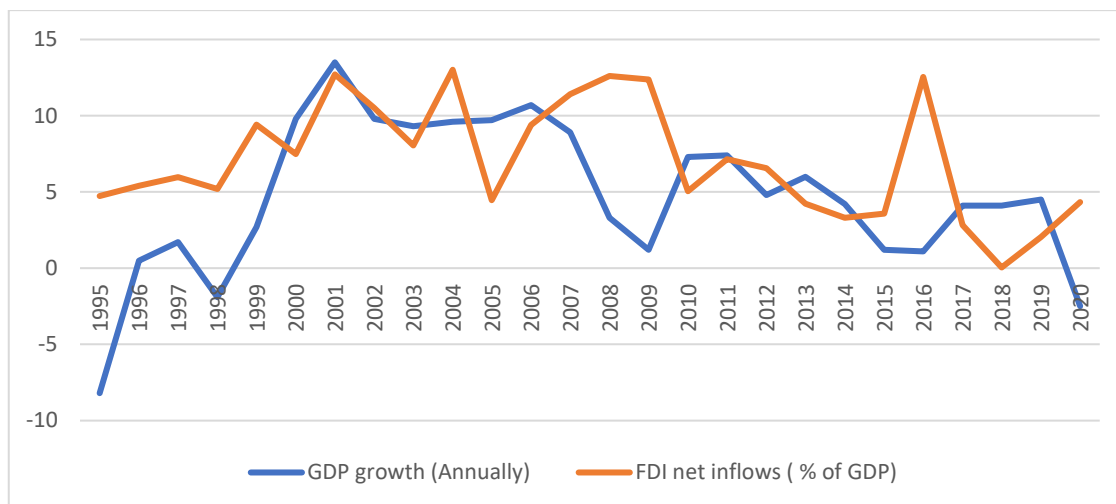
Figure 21 Foreign direct investment net outflows, 1992-2020 (million US dollars)



Source: (World Bank, 2020)

The top five inward direct investments sources to Kazakhstan are Netherlands, United States, France, China, and Japan. On other hand, the most important countries in outward direct investment are United Kingdom, Bahamas, Cayman Islands, Netherlands and Russian Federation too.

Figure 22 Dynamics of GDP and FDI net inflows, 1995-2020 (FDI net inflows % of GDP)



Source: (World Bank, 2020)

These variables represent the provision of external finance resources in the form of direct foreign investor investments in the reporting economy and domestic investor investments in external economies. Negative FDI net inflows for a given year indicate that foreign investors' disinvestment was greater than the value of capital newly invested in the reporting country. Negative FDI net outflows indicate that the value of domestic investors' direct investment in foreign economies was smaller than the value of repatriation (disinvested) direct investment from those economies. On the figure 22, we see the relationship between GDP annually growth and FDI net inflows as percent of GDP, in most period of times we could highlight that if FDI net inflows is growing up, then it strongly positively effects on annual GDP growth, on the other hand we see how it works in another way, after the crisis time, there was decreasing of foreign direct investments inflows from 12,5 to 2,82 percent of GDP, while gross domestic product was increasing from 1,1 to 4,1 percentages.

5 Results and Discussion

The beginning of the 1990s was marked by significant changes carried out in the context of state creation and the recovery from a severe economic downturn. To create a new economic reality based on market principles, new systems were required: budgetary relations, banking, tax, customs, pensions, and so on. However, the most important goal was to foster the creation of vital market entities, such as autonomous corporate leaders or owners.

This was facilitated by large-scale privatization in the country. The Decree of the First President of the Republic of Kazakhstan N.A. Nazarbayev approved the National Program for the denationalization and privatization of state property in the Republic of Kazakhstan for 1993-1995. It was during this period that the first institutions of property in the form of Investment Privatization Funds (IPF) were laid down and privatization investment coupons (PIC) were distributed among the population. However, this mechanism did not give the expected results. Despite the "failure" of mass coupon privatization, however, it was a kind of invaluable experience that allowed further privatization and denationalization processes to be carried out in a more efficient manner.

Large-scale reforms in the financial sector, liberalization of foreign economic activity, the practical implementation of market pricing principles, and the formation of a price structure that meets supply and demand occurred concurrently with the formation of the institution of property and entrepreneurship.

Legalization procedures, such as the liberalization of international economic activity, aided active market building and helped to attract foreign investment. The Law on Foreign Investments was passed in 1994, ensuring that investors' rights and interests were protected. The Republic of Kazakhstan's economy has benefited from the stability of its investor-friendly legislation, which has allowed international investors to actively participate in the extractive sectors.

The fundamental challenge in our nation's early years of independence was not only the transition to new market principles of economic management, but also the fact that our country was extremely dependent on changes in the political and socio-economic situation in Russia and other former union republics. The Kazakh economy was only able to chart its own growth path with the establishment of its own national currency and the execution of an autonomous monetary policy. As a result, the country's inflation rate dropped from over 2000% in 1993 to 11% in 1997, with further drops in subsequent years, relative stabilization of the tenge exchange rate, the emergence of positive trends in the foreign trade balance, and a consistent increase in gold and foreign exchange reserves.

Thus, during these years, a mixed economy with specific problems was formed, the foundation for effective owners was laid, and the necessary market infrastructure was created.

The beginning of the country's second decade of independence is marked by strong economic growth. Kazakhstan's economy grew at an average rate of 7.5-8 percent, and the country's economic development trajectory was maintained until 2008-2009.

The main driver of positive economic dynamics was the extractive sector due to the development of the largest oil fields in the Caspian Sea. Between 2000 and 2004, gross direct investment in the sector more than doubled. In general, over the indicated ten-year period, the share of oil in the economy of the Republic of Kazakhstan doubled, and its share in exports exceeded 60%. As a result, the increase in oil production and the increase in export deliveries had a significant impact on the increase in the GDP of the Republic of Kazakhstan against the backdrop of a gradual increase in oil prices on the world market.

At the same time, rising population incomes, the state's ability to perform numerous social commitments and programs, and the adoption of more reforms can all be seen as positive aspects of the current scenario. In addition, rising household incomes, increased investment, increased exports, and income from raw material exports stimulated the development of the economy's service sectors, such as retail trade, transportation, banking, and telecommunications services. Construction has progressed significantly.

The foundation of the National Fund (National Fund), which was formed in 2000 in line with the Decree of the President of the Republic of Kazakhstan dated August 23, 2000 "On the National Fund of the Republic of Kazakhstan," is one of the steps to counteract the "resource curse." With the adoption of the Concept for the formation and use of funds from the National Fund of the Republic of Kazakhstan for the medium term in 2005, the final conceptual design was completed. The National Fund's revenue has increased dramatically as a result of full statutory registration. According to the Ministry of Finance, the National Fund received around 3 billion US dollars, or 385.4 billion tenge, in 2005, accounting for 18.4 percent of budget income. The National Fund increased from 5.1 to 8 billion US dollars in 2005, a gain of 1.71 trillion tenge, or 156.9%. The establishment of the National Fund allowed the state's financial system to be greatly strengthened and surplus money supply to be sterilized, avoiding uncontrollable inflation.

The National Fund's finances were critical in helping Kazakhstan's economy recover from the global financial crisis of 2008-2009, as well as in succeeding crisis years. The first targeted transfer of USD 10 billion was made in 2009 in response to the slowing of economic development and was intended to be used to conduct anti-crisis measures. Simultaneously, a substantial portion of the cash, totalling \$4 billion, was intended to help the banking industry. Between 2014 and 2020, the following big transfers were made. The National Fund's finances were critical in helping Kazakhstan's economy recover from the global financial crisis of 2008-2009, as well as in succeeding crisis years. The first targeted transfer of USD 10 billion was made in 2009 in response to the slowing of economic development and was intended to be used to conduct anti-crisis measures. Simultaneously, a substantial portion of the cash, totalling \$4 billion, was intended to help the banking industry. Between 2014 and 2020, the following big transfers were made.

The Kazakhstan position on global market has been in an uncertain state for the previous ten years. Global economic growth has slowed to 2.5-3.5 percent as a result of the global financial crisis, cutting demand for raw commodities. Despite the fact that Kazakhstan experienced the least losses during the global financial crisis of 2008-2009, the economy felt its effects at the start of the third decade.

The challenges that occurred in the midst of the crisis highlighted the economy's flaws and aided the acceleration of industrial and inventive growth. A new State program of formed industrial and innovative development for 2010-2014 was developed, taking into consideration the shortcomings in the previous strategy's execution. The major focus was not on material incentives and investment project assistance, but on raising worker productivity and delivering high-value-added end goods. Conditions were also improved, and an environment for doing business, expanding entrepreneurial activities, and creating new jobs was created. As a result, Kazakhstan's economic development peaked in 2012-2013, against the backdrop of rising oil prices and a reasonably stable global environment.

At the same time, the world economy's developing slowdown, the volatility of global raw material prices, and the deterioration of the geopolitical situation between Russia and the West did not pass Kazakhstan by. As a result, another dip in global oil prices in 2014 caused another blow to the national economy, lowering growth to 1.1 percent in 2015. The Russian economy's stagnation, exacerbated by Western sanctions and internal factors, necessitated the depreciation of the ruble, which also harmed the stability of the Kazakh national currency, resulting in its depreciation, despite earlier actions by the National Bank of the Republic of Kazakhstan.

The worldwide crisis that developed as a result of the coronavirus epidemic impeded the positive dynamics that were gaining traction in 2018-2019, with an economic growth rate of 4-4.5 percent. It was feasible to survive another shock collapse in world oil prices and a long-term global lockdown as a consequence of President K.K.Tokayev's rapid reaction measures in March 2020.

"We will have to take a new look at the future structure of the Kazakh economy," the Head of State said in light of the current situation. Determine the importance of each of the country's major sectors: manufacturing, energy, agriculture, and service. To put it another way, we urgently require the build of a new economic framework."

In the analyzed period, starting from the moment of independence, Kazakhstan acquired such key trading partners as China, Russia and the Netherlands, with which it continues to trade to this day. In February 2022, the invasion of the Russian Federation into the territory of Ukraine began. Russia has been subjected to sanctions as a result of its invasion of Ukraine, the full scope of which is still unknown. Only that the country is in a state of financial, technological, and economic isolation, which is far from complete. It has been shut off from international financial markets almost completely, the Central Bank's assets in the West have been blocked, and key Western companies are fleeing Russia and refusing to export their products, including passenger planes and replacement parts for them. The selling of high-tech items to Russia, particularly semiconductors not manufactured in the nation, is prohibited. Therefore, in this light, it becomes interesting to explore how this will affect the economy of Kazakhstan in the future, since Russia has been and is one of the significant partners for Kazakhstan.

In our practical part, we also discovered that most imported products are - mechanical equipment and machinery, computers, electrical devices, communication equipment and automotive. While the most exported products are fuel, black metals and ores. The same products export from Russian nowadays. Fuel, black metals and ores are in top 10 product groups represent the highest dollar value in Russian global shipments in 2021. In this case, after all sanctions, like a disconnecting Russian trade with majority countries in the world, interesting to know how it would affect on Kazakhstan's trade, because Kazakhstan's export has similar products and they have highest indexes in revealed comparative advantage such as ores, metals and fuel.

6 Conclusion

The aim of this thesis was to identify the determinants of foreign trade development in the Republic of Kazakhstan, export and import of products goods, this has been carried out on the basis descriptive statistical analysis and qualitative thematic synthesis of the main economic indicators. We found out which countries were the main trade partners for Kazakhstan in the beginning of the analysed period and which of them became key partners at the end. We have explored this issue from both theoretical and empirical point of view. First, we studied the consequence collapse of the USSR, and first steps in CIS trade of Kazakhstan, we explored regional cooperations in 90s, like Central Asian Union, Eurasian Central Union and finally joining of the Republic of the Kazakhstan into the World Trade Organization in 2015. Using statistical analysis of export and import in the analysed period, we found main key partners for Kazakhstan.

In the practical part, we investigated what kind of goods constitute the bulk of foreign trade turnover in Kazakhstan, using comparative methods, we revealed the most exported (fuel, black metals, ores) and imported (mechanical equipment and machinery, computers; electrical devices, communication equipment, automotive) products and their shares in the analysed period.

In the theoretical part, we studied about revealed comparative advantages, its destination in usage and different methods of calculating RCA indexes. In the practical part we were focusing on what items (ores and metals and fuel) had demonstrated a revealed comparative advantage over the analysed period using Bela A. Balassa method.

We have also estimated dynamics of associated macroeconomic indicators such as unemployment rate, inflation and foreign direct investment, we mentioned that foreign direct investment is one of drivers of economic growth, Kazakhstan is a leader in attracting foreign investment in the Central Asian region and it is in second place after Russia.

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