Study on China's Investment in Central Asia

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Abstract

The article is devoted to the current topic of today - politics and the economy of China with the countries of Central Asia. The paper poses the problems of China's interests in Central Asia, as well as the prospects for cooperation between these countries. China's role in development of the modern economy is steadily increasing, and therefore the vector investment cooperation with this country is one of fundamental for the countries of Central Asia, which, in addition, are neighbors of China. For China, which has a very limited stock of natural resources, countries rich in oil, gas, and other resources become of strategic importance. The purpose of the study is to identify the results of a comparative analysis of the main interests of the PRC in the Central Asian region, namely in Kazakhstan and to determine the effect of three economic data on Chinese direct investment. To achieve this goal, the ''Kao Residual Cointegration Test'' and the "Pooled Least Squares" method were used. The research work is using the EViews software and the Pool Least Squares method. The main results were identified and shown in schematic form. The interests and volume of investments of the People's Republic of China in Central Asia were identified in this area. The article has practical value and can be offered for reading to a different target audience.

Key words: China, Central Asia countries, investment, EViews, Cointegration test, Pooled Least Squares.

1. INTRODUCTION

The People's Republic of China (PRC) is today one of most important countries of the world in the political and economic arena. China like known to be the most populous state in the world, according to an estimate at the end of 2018, China's population was 1.401295 billion people. Over the year, China's population increased by approximately 7193567 people, given that China's population at the beginning of the year was estimated at 1.394102 billion people, an annual increase of 0.52%[12]. China has become a leader in the global economy. By 2007, the country became the largest exporter of finished products: the volume of Chinese merchandise exports in 2014 was almost 60% more than in the United States, and 75% in Germany, ranking second and third in the list of countries - world exporters. In terms of imports, China is the second largest world importer after the US. Since China is the first industrial producer in the world, the level of

industrial goods production by this country is 19.8%. In addition, the country is firmly in first place in terms of gold and foreign exchange reserves as of September 2018 (US $ 3,361 billion)[13]. For comparison, it should be noted that Japan ranks second (1313 billion dollars) by a large margin from China, Russia is in 7th place (459 billion dollars), and the United States is on the 19th line (123 billion dollars).

Despite the above achievements of the country, it has a limited supply of resources. In turn, the neighboring countries of Central Asia, which include Kazakhstan, Turkmenistan, Uzbekistan, Kyrgyzstan, Tajikistan, are rich in resources and useful in connection with which the Beijing authorities are pursuing an active investment policy in the region.

Meanwhile, China's growth factor is also important for Central Asia. China is ready to invest in these countries, since 1992 a huge number of various contracts have been concluded, so, during the SCO summit in Astana on June 8-9, 2017, the parties signed 22 commercial agreements totaling $ 7 billion[1]. Earlier, in mid-May, Beijing signed a package of economic agreements with Uzbekistan in the amount of $ 20 billion[5]. Also, as a result of Xi Jinping's visit to the countries of Central Asia, many new investment projects were launched in the fall of 2013. China invests in the development of these countries, thereby supporting and boosting their economies.

In this paper, we analyze investment in China's trade with the countries of Central Asia, identify their volumes and, on the basis of this, identify prospects for China's further investment policy in Central Asia and precisely in Kazakhstan. This topic attracted the interest of many economists, analysts and scientists, for example, Doctor of Economics and Professor of the University MGIMO Zakharova A., Turaeva M.O. being members of the Russian Academy of Sciences.

2. RESEARCH DESIGN AND INVESTMENT

China and Central Asian countries

The independence of Central Asian countries in 1991 meant a fundamental change for China's own geopolitical environment: small sovereign countries, internal and external course, and prospects whose development has not yet been clear. The Chinese government was confident that this region would play an important role for the PRC. Five countries of Central Asia (CA) - Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, with independence, expanded the space for mutual cooperation with China. Since 1992, many intergovernmental agreements on investment and trade cooperation have been signed.

China, as is known, being the most populous state in the world, has extremely limited reserves of resources. In turn, the Central Asian countries are rich in resources and minerals. The use of these resources will help China to compensate for the internal deficit and achieve economic benefits. In this connection, China's investments in this region have geopolitical and economic factors. Therefore, China, developing trade and economic cooperation, accelerates the implementation of the government strategy of "going abroad" and increases the scale of direct investment. With the creation of the Shanghai Cooperation Organization (SCO), favorable conditions have been created in the field of investment, and Central Asia has become a "hot" region for Chinese investment.[2]

It should be noted that the idea of forming "One Belt, One Road", put forward by the President of the PRC Xi Jinping and sounded for the first time during his speech in Astana, is also closely connected with China's

investments in this region in the framework of the state visit to Kazakhstan in September 2013. As Xi Jinping noted, China and the countries of the Central Asian region have a common strategic goal consisting in the stable development of the economy, prosperity and the power of states. The Chinese leader stressed the need to "comprehensively strengthen practical interaction" and "convert the benefits of political dialogue, geographic proximity and economic complementarity into cooperation, sustainable growth, creation of community of interests on the basis of mutual benefit and common gain." The "One Belt, One Road" policy is directed to improve existing and create new trade, transport routes, as well as economic corridors connecting more than 60 countries of Central Asia, Europe and Africa. Creating this path is the main goal of China's foreign economic strategy, and Central Asia plays a key role in it due to its convenient geographical location.

Today, China mainly purchases oil in the Middle East. Saudi Arabia is the largest oil exporter to China, supplying 370 million barrels per year (15% in China's oil imports). It is followed by Iraq - 235 million barrels (10%), Oman - 235 million barrels (10%), Iran - 198 million barrels (8%), Kuwait - 106 million barrels (4%) and the United Arab Emirates - 92 million barrels (4 %)[3]. But instability in the Middle East has a direct impact on Beijing's policies in the region. Due to the fact that the US Navy controls the transportation routes for oil from the Persian Gulf, including in the direction of the South China Sea, China does not feel comfortable, because blockade, China may lose supplies Middle Eastern oil and gas. In this regard, China seeks to find alternative sources of oil imports, which are the countries of Central Asia.

In implementing its regional projects, Beijing uses a wide range of instruments, channels and financing schemes. Most of the funds are allocated on a bilateral basis (direct investment, loans, concessional loans, grants), and other financial resources are allocated through international financial institutions and organizations (ADB, SCO, ABII).

Another priority for China is energy security. That is why Kazakhstan and Turkmenistan, rich in energy resources, are of great importance for the state. China is pouring large sums into the energy sector, which includes minerals, oil, gas, oil exploration and prospecting, pipelines, roads, routes, etc. For Beijing, which seeks to diversify its sources of resources, Central Asia is growing in importance as one of its reserves of raw materials [4].

As can be seen from the above, Central Asia is extremely important for China in strategic and economic terms. Consider the economic transactions and the volume of Chinese investment in these countries.

3. RESEARCH MAIN FINDINGS

Industries and volumes of China's investment in the Central Asia Countries

China's economic presence in the countries of Central Asia is becoming increasingly complex. The situation in the countries of Central Asia is directly related to the interests of the PRC. China borders with three Central Asian countries - Kazakhstan, Kyrgyzstan and Tajikistan, the total length of the border with which exceeds 3000 km.

The countries of Central Asia are China's closest neighbors, so the development of cooperation with them is extremely important for this country. Central Asia can become a new market for Chinese goods and services, at the same time it is an important source of raw materials, which can bring real economic benefits

to the country, accelerate the economic development of Western China and solve the problem of internal inter-regional disparities. Rich in oil and gas resources, Central Asia is recognized as one of the main suppliers of non-renewable resources. Energy cooperation is beneficial for both partners. Central Asia is able to meet China's growing energy demand. The Chinese market allows the countries of Central Asia to increase the volume of exports of oil and gas resources, solve the problem of regional export diversification and gain greater economic benefits.

China's investment activity in Central Asia is multifaceted and dynamic. Beijing uses a wide range of instruments, channels and financing schemes for regional projects. The main part of the funds is allocated on a bilateral basis, these include direct investments, loans, soft loans, grants, and the rest - through the international financial institutions and organizations (SCO).

In the late 1990s, PRC's direct investments in the region did not exceed $ 1 billion and were limited to the oil and gas sector. After 10 years, their volume increased by more than 20 times, turning Beijing into the main financial donor of the Central Asian countries.[14] The influence of China became especially noticeable after the 2008 crisis, when the traditional sponsors of the region (Russia, USA, Europe) faced their own budget problems. In the second decade of the XXI century. Cooperation more widely spread not only to the fuel and energy complex, but also to other sectors of the economy: infrastructure, construction, assembly plants, and agriculture.

It is worth noting that, within the framework of the Shanghai Cooperation Organization (SCO), China has managed not only to gain trust from the countries of Central Asia, but also to establish truly friendly relations with them.

Over the past few years, China has become the main importer in three of the five Central Asian countries: Kyrgyzstan, Tajikistan and Uzbekistan. So, in 2015, 56% of all imports to Kyrgyzstan came from China. A similar situation exists in Tajikistan, in which the PRC imports accounted for 41% [15]. China is also the leader in imports to Uzbekistan - about 20%. As a result, by the end of 2015, accumulated Chinese direct investments in Kazakhstan, Uzbekistan and Turkmenistan exceeded Russian 11 times. The main direction of investment is the mineral resource complex. It is here that 95–98% of Chinese foreign direct investment in the region of Central Asia is concentrated. Consider the investment structure and economic policy of China in each of the countries of Central Asia.

Kazakhstan

Kazakhstan for China is a kind of gateway to Central Asia, as the main energy and transport corridors pass through this country, with which the Silk Road Economic Belt will be connected. The country is interesting as a rich source of natural resources, a profitable market for Chinese goods. Kazakhstan is the leader among XUAR 10 trading partners, which, of course, makes it very attractive for China. According to the EDB (The Eurasian Development Bank) Center for Integration Research, by 2015 out of $ 27 billion in Chinese direct investment accumulated by major CIS economies, Kazakhstan accounted for 23.6 billion dollars[5].

Table 1

Chinese direct investment and trade turnover of Kazakhstan and China for 2015 – 2018

Kazakhstan and China. US$ million				
	Chinese direct investment	**Trade turnover**	**Export**	**Import**
2015	838,4	10 567	5 480	5 087
2016	974,7	7 896	4 228	3 668
2017	1 082	10 469	5 777	4 692
2018	1 153	11 657	6 272	5 384

As can be seen from table 1, from 2015 to 2018, the volume of foreign direct investment of China in Kazakhstan almost constantly grew, China is not the main investor of Kazakhstan. The trade turnover between the countries is the largest among the countries of Central Asia, in 2016 there is a decrease in this indicator. Foreign trade turnover between Kazakhstan and China for 2016 amounted to $ 7,896 million, a decrease of 26% for the same period in 2015. Experts, the main reasons, apart from the devaluation of the tenge, which reduced the solvency of the currency, see a decline in prices for exported raw materials and a downturn in the economy, which caused a decrease in demand.

The most attractive for Chinese investments are the oil and gas and transport and logistics sectors of Kazakhstan's economy. Oil reserves in Kazakhstan are estimated at 5.5 billion tons, and natural gas - at 1.8–2.4 trillion cubic meters. In 1997, between the Ministry of Energy and Mineral Resources of Kazakhstan and the largest Chinese the state oil and gas company China National Petroleum Corporation (CNPC) signed an agreement on cooperation in the field of oil and gas, as well as agreement on the construction of an oil pipeline from Kazakhstan to China. In the total amount of Chinese FDI accumulated by Kazakhstan, the development of the fuel and energy complex and pipeline transportation account for $ 21.2 billion. In addition, in mining and processing 81% of investments were directed to energy resources, 19% - to transportation of oil and gas. According to the information of the National Company KazMunai Gas JSC, at present China controls up to 30% of all oil production in Kazakhstan. CNPC - China's largest oil company, ranked 4th in the ranking of the best Fortune Global 500 13 companies - is the main foreign player in the oil market in Kazakhstan. The company bought out LUKOIL's stake in Kazakhoil - Aktobe, and in 2013 acquired $ 8.33% of shares in the Kashagan field for $ 5 billion.[19]

An important area of cooperation between countries is the implementation of a number of joint transport and logistics projects that significantly expand opportunities for economic cooperation between countries. For Kazakhstan and China, a very important event was the commissioning in 2013 of the Zhetygen – Korgas railway line (293 km) with the Khorgos junction and Altynkol station serving it. The launch of the new railway line made it possible to reduce the distance from China to the southern regions of Kazakhstan and the Central Asian countries by about 550 km. By According to expert estimates, by 2020, two thirds of all trade flows from China to Europe will pass through "Khorgos" - Eastern Gate, with an increase in

their volume in 2010–2020. by 45%, which again brings us back to the idea of "One Belt - One Road" and allows us to the conclusion is that Kazakhstan will truly become the gateway to this path.

Kyrgyzstan

China's investment plays a huge role in the economic development of Kyrgyzstan, which makes it one of the main trade and economic partners of the CIS republic. In Kyrgyzstan, Chinese investments include such areas as light and food industry, processing of agricultural products, planting and planting of agricultural crops, development of mineral resources and metallurgy, construction contracts, communication and transportation services, real estate development, food industry.

Table 2

Chinese direct investment and trade turnover of Kyrgyzstan and China for 2015 – 2018

Kyrgyzstan and China/ US$ million				
	Chinese direct investment	Trade turnover	Export	Import
2015	474,4	1 095	60	1 035
2016	301,3	1 563	80	1 483
2017	303,0	1 591	97,5	1 493
2018	123,2	1 812	13	1 799

As follows from the table above, Chinese direct investment in 2018 declined by almost 56% to $ 123 million. This is due to the fact that, firstly, the Kyrgyz population does not engage in dialogue with foreign investors. Secondly, the monitoring policy in China's financial market has intensified. Trade turnover between the countries slightly but increases. Almost 95%, a huge volume of trade is import of goods in Kyrgyzstan.

Kyrgyzstan exports most of its products to the markets of the EEU (Eurasian Economic Union), mainly to Russia and Kazakhstan. China is the second largest trading partner Kyrgyzstan after Russia. Chinese investors are active in Kyrgyzstan. Major investment projects are the repair of the road plot located on the Kyrgyz-Chinese border area, oil exploration and production in the Alai Kyrgyzstan, exploration and mining of minerals (iron ore, tin, gold deposits), etc.

According to official data from the Ministry of Industry and Trade of Kyrgyzstan, the interest of Chinese companies is primarily focused on chemical industry, as well as enterprises engaged in the extraction and processing of rare earth metals. The main investors are large state companies and investment funds that buy real estate available on the market, and also invest in the creation of joint Chinese-Kyrgyz enterprises. "If earlier China was not very active in the region, and expansion was observed in the form of a stream of Chinese goods, now we see a vigorous activity Chinese companies in Kyrgyzstan. They show interest in all spheres, and the projects are already of a state scale, "political scientist Azamat Temirkulov notes. "As a result, China will gain access to many fields."

  Over the past few years, the Chinese side has allocated a number of grants to Kyrgyzstan for the

development of infrastructure and the social sphere. In 2008, the PRC government allocated a grant of 50 million yuan for the development of transport and maintenance economic stability in Kyrgyzstan. In 2011, the Kyrgyz and Chinese governments signed an agreement on technical and economic cooperation, in under which Beijing has pledged to grant Bishkek a grant of 30 million yuan for the development of innovation and the strengthening of the country's economy.

Uzbekistan

The rapidly growing economy of Uzbekistan, its favorable geographical location in the center of the region, modern transport communications, a reliable strategy to attract investment increase interest in cooperation among representatives of the Chinese business community. Over the past years, China has become one of the key economic partners of Uzbekistan, a major investor and an interested participant of the programs on structural transformation and modernization of the economy being implemented in Uzbekistan.

Table 3

Chinese direct investment and trade turnover of Uzbekistan and China for 2015 – 2018

Uzbekistan and China. US$ million				
	Chinese direct investment	**Trade turnover**	**Export**	**Import**
2015	480,8	3 495	1 267	2 228
2016	529,5	3 614	1 607	2 007
2017	502,2	4 120	1 400	2 720
2018	240,1	6 428	2 869	3 559

Looking at table 3, it can be said that Chinese direct investment in Uzbekistan is approximately 500 million each year, the volume of investment for 2018 is presented only in 3 quarters, the trade turnover between the countries increases from year to year, this suggests that China is becoming a strong partner of Uzbekistan. During the visit to the PRC 11- On May 15, 2017, President of Uzbekistan Shavkat Mirziyoyev held talks with the leadership of Beijing. During the state visit the country signed 105 cooperation documents totaling about $ 23 billion.[16]

In particular, the parties will develop cooperation in the field of transport, technology, hydropower, oil and gas industry and in the humanitarian sphere. As Shavkat Mirziyoyev noted at these negotiations, "at present, China is one of the leading states making major investments in the economy of Uzbekistan. The country has more than 700 companies and enterprises with the participation of Chinese capital. Over the past years, Chinese investors invested in the economy of Uzbekistan about 7.8 billion dollar investment."

At the end of 2016, the volume of mutual trade turnover between the countries amounted to 4.25 billion dollars. China's demand for goods produced in Uzbekistan increases textile, agricultural products, plastic products. The Chinese side praised the dynamics of the economic development of Uzbekistan and large-scale structural changes and expressed interest in the development of cooperation in the field of high technologies, in particular, through the creation of industrial and technological parks.

At the expense of Uzbekistan, China seeks to strengthen its geopolitical influence in Central Asia. Chinese companies are showing interest here in the oil and gas, electric power, chemical industries, developing fields in the Fergana Valley and at the bottom of the Aral Sea, are building gas processing plants. According to CNPC management, "by the end of 2019, the Chinese company plans to mine in Uzbekistan up to 1 billion cubic meters gas per year. In the period 2014-2019 $ 277 million will be additionally invested in gas production"

Tajikistan

China has become the leader in terms of direct investment in the economy of Tajikistan, as reported by Xinhua. For the first quarter of 2017, the total size Chinese accumulated direct investment amounted to $ 76.6 million, representing 58.2% of the total foreign investment in the country. According to the head of the State Committee on Investments and State Property Management of Tajikistan, Faiziddin Kahhorzoda, "in just the first 3 months in 2017, $ 131.5 million has been transferred to the economy of Tajikistan". Cash went to support the activities of 339 Tajik enterprises.

Table 4

Chinese direct investment and trade turnover of Tajikistan and China for 2015 – 2018

Tajikistan and China. US$ million				
	Chinese direct investment	Trade turnover	Export	Import
2015	272,6	792,9	29,1	763,9
2016	312,5	885,1	44	841,1
2017	303,2	591,6	35,4	556,2
2018	321,2	655,3	32,7	622,6

As can be seen from table 4, Chinese direct investment from 2015 began to grow. The trade turnover between the countries varies within 800 million and most of them are Chinese exports to Tajikistan.

Investment in Tajikistan covers telecommunications, textile industry, agriculture, construction of power lines and electrical substations, the development of road transport and others. Basic Chinese investment projects include the construction and reconstruction of the Dushanbe highway Kettle-Khujand, the construction of high-voltage power line 500 kV transit South-North and Lolazol-Khatlon, construction of the Shar-Shar tunnel on the Dushanbe-Kulyab road, reconstruction of the highway in the border areas of Tajikistan and Kyrgyzstan. Since the establishment of diplomatic relations, the government of Chinaallocated to Tajikistan financial assistance in the amount of more than 404 million yuan (not including concessional loans from the Chinese government to the SCO partner countries [4, p. 39].

In general, Tajikistan, which does not possess significant reserves in demand PRC resources difficult to offer anything to Beijing: exporting its own products to China does not play a significant role for the country, and the balance of foreign trade with China sharply negative.

"China will not refuse to give countries such as Tajikistan a loan or a grant, and may even sacrifice the interests of their investors in order to keep small countries on a leash. In China, they are well aware that, having received the requested support, these countries automatically become obliged to him and, in turn, will no longer refuse to provide any services will be required, "said political scientist Sobir Khamidov.

On the example of Tajikistan, a political scientist pointed out that practically all the rich The republic's gold deposits are being developed by Chinese companies. Chinese farmers receive land for agricultural purposes. Chinese companies are allowed to place enterprises in the territory of the republic that cause environmental damage (cement plants), which the PRC due to a sharp deterioration ecological condition in the country plans to fully withdraw for its repartition.

Turkmenistan

China pays special attention to increasing the import of natural gas from Turkmenistan. This Central Asian country reportedly possesses fourth-largest gas reserves in the world, and in 2016, Turkmenistan supplied about 30 billion cubic meters of "blue fuel" to China. (Given the closed nature of the political system of Turkmenistan, there are no accurate data in the public domain). In Turkmenistan, China exported from the country in 2014 to China. This was largely due to the opening of the Central Asia-China gas pipeline in 2009, built mainly for Chinese loans; now its fourth branch is passing, which is supposed to pass from Turkmenistan through the territory of Uzbekistan, Tajikistan and Kyrgyzstan.

Figure 5.

Structure of foreign trade turnover of Turkmenistan for 2014 - first half of 2017
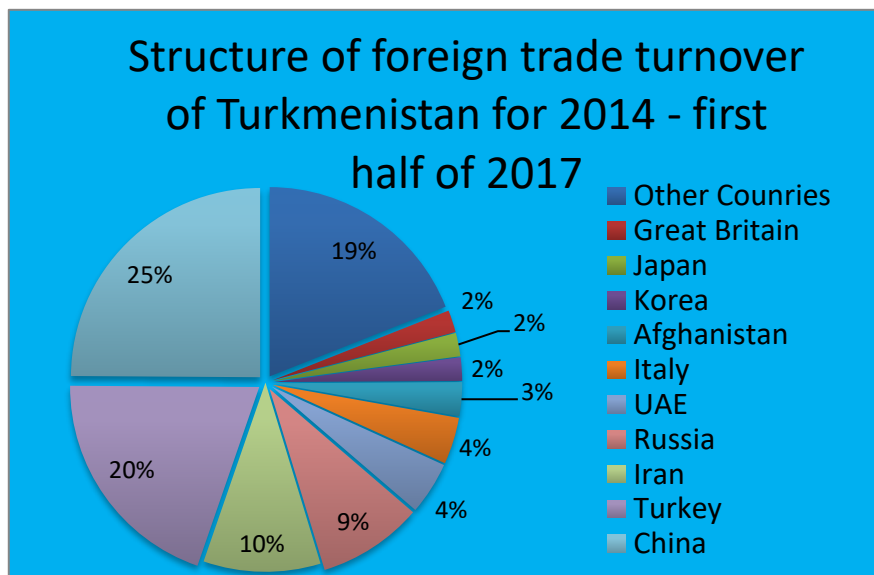
Based on figure 5, it can be said that China is one of Turkmenistan's major partners, for 4 years China has taken the first place in the state's foreign trade, in percentage terms it is 25%.

According to the forecasts of the International Energy Agency, the demand for gas in China will grow by 8.7 percent per year until 2022. China's own energy reserves are insignificant, so it needs to expand access to international sources. In addition, Beijing pays special attention to the buildup of land supply routes to

reduce reliance on maritime shipments through the Strait of Malacca, which can easily be blocked in case of potential conflict.

As noted by Sun Weidong in the first 9 months of 2018, the volume of trade between the countries reached 6.85 billion US dollars and grew by 16.2% over the same period last year. China has been Turkmenistan's largest trading partner for 8 years in a row. The China-Turkmenistan main pipeline is a symbolic bridge of traditional friendship between the two nations.

In 2009, the China Development Bank provided Turkmenistan with the initial $ 3 billion loan to develop the Galkynysh gas field (also known as South Yolotan-Osman), and two years later, Ashgabat received an additional tranche of $ 4.1 billion.

In addition, a consortium led by the China National Petroleum Corporation (CNPC) concluded in 2009 a production sharing agreement (PSA) at the field Galkynysh worth $ 10 billion. By that time, the CNPC portfolio already had a similar agreement on the Baghtyyrlyk oil and gas project covering several fields, including Saman-Depe and Altyn Asr. According to the Galkynysh agreement, Turkmenistan has pledged to annually supply 30 billion cubic meters of gas to China for 30 years. But Beijing and Ashgabat intend to increase annual exports to China to 65 billion cubic meters - 30 billion from Galkynysh, and the rest should be covered by Bagtyyrlyk and other deposits. [5]

The main obstacle to the realization of this goal is the lack of sufficient capacity to export products. The existing network of pipelines in China is working at the limit of its capabilities, and the expansion of the network suspended. At the same time, the economy of Turkmenistan faced the problem of a sharp declining export earnings caused by low energy prices.

4. STATISTIC METHODS AND ANALYSIS

Above, we have considered the investments and economic activities of China in Central Asian countries. And as can be seen from the above, Kazakhstan is one of China's major partners in the field of investment and in money transfers. Using the example of Kazakhstan, we will consider direct Chinese investments and the three main indicators of the state, gross domestic product, commodity turnover between the two countries and the National budget deficit of Kazakhstan. To achieve this goal, the Eviews software was used. Detailed information is provided below in table 6.

Table 6.

Economic data of Kazakhstan for 2009 - 2018.

Year	Chinese direct investment US$ biillion Y	GDP US$ billion x1	Trade turnover between Kazakhstan and China US$ billion X2	National budget deficit US$ billion X3
2009	0,936	115,30	9,458	1,349
2010	1,717	148,00	14,080	1,465
2011	1,693	192,60	19,700	1,520
2012	2,414	208,00	21,670	2,349
2013	2,246	236,60	22,730	1,895
2014	1,861	221,40	17,150	2,854
2015	0,838	184,40	10,560	2,407
2016	0,974	137,30	7,896	2,384
2017	1,082	159,40	10,490	1,526
2018	1,153	184,20	11,650	1,425

First, the study examines whether the gross domestic product, turnover, and the state budget deficit affect foreign investment in a given country. For this, Chinese direct investment was taken as "Y", GDP as "X1", Trade turnover as "X2" and National budget deficit respectively. We do cointegration test by using the "pool" method so as to find the relationship between explanatory variables and Chinese direct investment. Panel (data) analysis is a statistical method, widely used in social science, epidemiology, and econometrics to analyze two-dimensional (typically cross sectional and longitudinal) panel data. The data was collected over time and for the same persons, and then regression is performed on these two dimensions.

Table 7

Kao Resiadual Cointegration test with pool method

	t-Statistic	Prob.
ADF	-6.554779	0.0000

Residual variance	5.77E+16
HAC variance	1.79E+16

The Kao test specifies cross-section specific intercepts and homogeneous coefficients on the first-stage regressors. In the bivariate case described in Kao (1999), we have $y_{it} = a_i + bx_{it} + \varepsilon_{it}$ for $y_{it} = y_{it-1} + u_{i,t}$, $x_{it} = x_{it-1} + \epsilon_{i,t}$ for $t = 1, \ldots, T; i = 1, \ldots, N$. More generally, we may consider running the first stage regression $y_{it} = a_i + \delta_i t + \beta_{1i} x_{1i,t} + \beta_{2i} x_{2i,t} + \cdots + \beta_{Mi} x_{Mi,t} + \varepsilon_{i,t}$ requiring the a_i to be heterogeneous, β_1 to be homogeneous across cross-sections, and setting all of the trend coefficients γ_1, to zero. Kao then runs either the pooled auxiliary regression, $\varepsilon_{it} = \rho \varepsilon_{it-1} + v_{it}$ or the augmented version of the pooled specification, $\varepsilon_{it} = \tilde{\rho} \varepsilon_{it-1} + \sum_{i=1}^{p} \psi \Delta \varepsilon_{it-j} + v_{it}$. Under the null of no cointegration, Kao shows that following the statistics,

$$DF_p = \frac{T\sqrt{N}(\hat{p}-1)+3\sqrt{N}}{\sqrt{10.2}},$$

$$DF_t = \sqrt{1.25}t_p + \sqrt{1.875N},$$

$$DF_p^* = \frac{\sqrt{N}T\,(\hat{p}-1)+3\sqrt{N}\hat{\sigma}_v^2/\hat{\sigma}_{0v}^2}{\sqrt{3+36\hat{\sigma}_v^4/(5\hat{\sigma}_v^4)}},$$

$$DF_p^* = \frac{t_p + \sqrt{6N}\hat{\sigma}_v/(2\hat{\sigma}_{0v})}{\sqrt{\frac{\hat{\sigma}_{0v}^2}{(2\hat{\sigma}_{0v}^2)} + 3\hat{\sigma}_v^2/(10\hat{\sigma}_{0v}^2)}}$$

Table 8

Method: Panel Least Squares.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RESID?(-1)	-2.035734	0.248934	-8.177801	0.0000
D(RESID?(-1))	0.298400	0.134809	2.213503	0.0329
R-squared	0.855085	Mean dependent var		-17248963
Adjusted R-squared	0.851271	S.D. dependent var		2.73E+08
S.E. of regression	1.05E+08	Akaike info criterion		39.83035
Sum squared resid	4.21E+17	Schwarz criterion		39.91480
Log likelihood	-794.6071	Hannan-Quinn criter.		39.86089
Durbin-Watson stat	1.381490			

A common panel data regression model looks like $y_{it} = a_i + bx_{it} + \varepsilon_{it}$ where *y* is the dependent variable, x is the independent variable, a and b are coefficients, i and t are indices for individuals and time. The error ε_{it} is very important in this analysis. Assumptions about the error term determine whether we speak of fixed effects or random effects. In a fixed effects model, ε_{it} is assumed to vary non-stochastically over i or t making the fixed effects model analogous to a dummy variable model in one dimension. In a random effects model, ε_{it} is assumed to vary stochastically over i or t requiring special treatment of the error variance matrix. Clearly shows that t-Statistics are more than 1.95 and the probability is equal to 0.0329 which is lower than 0.05.Considering the above, as well as based on the results, we accept no

cointegration. Since there is no cointegration we use pooled Least Squares to compare the influence of X1, X2 and X3 respectively.

Then estimate a pool specification using the common regressor list: X1, X2 and X3 where the latter pool series expression refers to a set of 10 implicit series containing dummy variables for group membership. The implicit series associated with the identifiers "X1", "X2", and "X3" will contain the value 1, and the remaining seven series will contain the value 0.

The results from this estimation are given by:

Table 9

Pooled Least Squares.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
X1	-0.003600	0.001069	-3.367873	0.0015
X2	0.120412	0.008123	14.82325	0.0000
X3	0.197374	0.054085	3.649307	0.0007
R-squared	0.913765	Mean dependent var		1.49E+09
Adjusted R-squared	0.910095	S.D. dependent var		5.47E+08
S.E. of regression	1.64E+08	Akaike info criterion		40.72690
Sum squared resid	1.26E+18	Schwarz criterion		40.84162
Log likelihood	-1015.172	Hannan-Quinn criter.		40.77058
Durbin-Watson stat	3.118263			

It is crystal clear that all the parameters are correct, but it is worth noting that X2 (trade between the two countries) gives the smallest probability that means the effect of this parameter on Y more than others. The difference is statistically significant at conventional levels.

The basic class of models that can be estimated using a pool object may be written as:

$$Y_{it} = \alpha + X_{it}'\beta_{it} + \delta_i + \gamma_t + \epsilon_{it}$$

where Y_{it} is the dependent variable, and X_{it} is a k -vector of regressors, and ϵ_{it} are the error terms for $i = 1, 2, \dots, M$ cross-sectional units observed for dated periods $t = 1, 2, \dots, T$. The α parameter represents the overall constant in the model, while the δ_i and γ_t represent cross-section or period specific effects (random or fixed). Identification obviously requires that the β coefficients have restrictions placed upon them. They may be divided into sets of common (across cross-section and periods), cross-section specific, and period specific regressor parameters.

$$Y_{it} = -0,003600 * X1 + 0,120412 * X2 + 0,197374 * X3$$

Estimation command can be clearly described in the form of the following model.

Estimation Command:

========================

LS Y X1 X2 X3

Estimation Equations:

========================

Y = C(1)*X1 + C(2)*X2 + C(3)*X3
Y = C(1)*X1 + C(2)*X2 + C(3)*X3
Y = C(1)*X1 + C(2)*X2 + C(3)*X3
Y = C(1)*X1 + C(2)*X2 + C(3)*X3
Y = C(1)*X1 + C(2)*X2 + C(3)*X3

Substituted Coefficients:

========================

Y = -0.00360025850883*X1 + 0.120411780486*X2 + 0.197373622896*X3
Y = -0.00360025850883*X1 + 0.120411780486*X2 + 0.197373622896*X3
Y = -0.00360025850883*X1 + 0.120411780486*X2 + 0.197373622896*X3
Y = -0.00360025850883*X1 + 0.120411780486*X2 + 0.197373622896*X3
Y = -0.00360025850883*X1 + 0.120411780486*X2 + 0.197373622896*X3

5. CONCLUSION

This article has demonstrated that the economic activities of China in the countries of Central Asia play an important role for both China and the Central Asian region. Thus, we have traced that China's investments in Central Asian countries are growing and play a large role in the economy of both parties. As for the future prospects of the development of the Chinese economy, Xi Jinping in September 2016 in the city Hangzhou during the G2016 summit declared China's intention to play a key role in global governance and called on the world community to create a new political and economic architecture of the planet - a community with a single fate, where the role of leader China will be allocated with its economic power and resources. By 2020 the country must turn from a regional power into a global one. Similar bold the statement could not be made without justification: according to calculations based on the forecast of China 2030 China's expected economic dynamics will be as follows: by 2020, China's share in world GDP will increase to 22.3%, and by 2030 - to 26.1%.[17]   Similar growth It is planned to be implemented using such mechanisms as the transition from the model of priority development of industry to the growth of the economy through the strengthening of services, that is, to make the final transition to the post-industrial stage development. China's investment in Central Asian countries, which are an important source of energy and a sales market for China, will also play a primary role in this. In addition, in accordance with the pooled least squares, the study showed that trade has an important role in direct investment. In order to increase the amount of investment in the countries with the least data, our proposal is the following, need to rationalize the geopolitical situation between the countries and consider questions about trade turnover.

6. ACKNOWLEDGMENTS

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[17] World economy and international economic relations. Full course: textbook / a team of authors; by ed. A.S. Bulatov. - 3rd ed., Sr. - Moscow: KNORUS, 2017, p. 487

[18] Xinjiang Uygur Autonomous Region (XUAR) is a region in northwestern China. The largest territorial administrative unit of China. In ancient times, the Silk Road passed through XUAR.

[19] http://fortune.com/global500/ (Global 500)