# **Czech University of Life Sciences Prague**

# **Faculty of Economics and Management**

# **Department of Economics**



# **Bachelor Thesis**

The role of foreign investments in the economic development of Kazakhstan

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# CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE

Faculty of Economics and Management

# **BACHELOR THESIS ASSIGNMENT**

Adiya Kuzhaniyazova

**Economics and Management** 

Thesis title

The role of foreign investments in the economic development of Kazakhstan

#### Objectives of thesis

The main goals of research is to analyze the activity of foreign capital, its impact on the economic development of Kazakhstan. To study the attraction of foreign investment and the need for their use, relying on the theory of behavioral economics. The bachelor thesis is devided by two parrts: the first theoretical part describe the economical situation in Kazakhstan. The second practical part includes analysis of Kazakhstan's economical data as export, unemployment rate, exchange trade, GDP and FDI.

#### Methodology

The part will consist of sythesis, deduction, extraction, abstraction. Methodology also will contain literature review. Practical part will be done by using regression analysis methods and other methods of qulitative and quantitative data analysis.

#### The proposed extent of the thesis

40 pages

#### Keywords

 $Investments, for eign\ capital, Kazakhstan, economy.$ 

#### **Recommended information sources**

Arystanbayeva S.A. Foreign investments as structure-forming factor of economy. (2008)Almaty, page 53. Harald Weinrich.Investment analysis. (1998), page 18.

Nurlanova N.K. Forming and use of investments in economy of Kazakhstan: strategy and mechanism.(1998) Almaty. Galym, page 192.

Paul Theodore Heyne. The Economic Way of Thinking. page 574.

Rymalov V. World economy and international relations. (1996), No. 3, page 27-28.

Tleuova D. Investments as form of attraction of the equity: determination of a role and essence. Al-Pari, (2009), No. 4, page 97.

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Declaration I declare that I have worked or in the economic development of mentioned at the end of the the thesis does not break copyrigh	of Kazakhstan." by esis. As the author of	myself and I lof the bachelor	have used only	the source
In Prague on 14th March 2018			Adiya Kuzhan	iyazova
			-	-

# The role of foreign investments in the economic development of Kazakhstan

# Role zahraničních investic v oblasti hospodářského rozvoje Kazachstánu

#### **Abstract**

Foreign investment plays a very important role in the economy of each state. Therefore, the purpose of this thesis is to study and analyse the foreign direct investment and its impact on the economy of Kazakhstan.

According to a goal the following main objectives are solved:

- theoretical concepts of investments are analysed;
- the economic essence of foreign investments is stated;
- the role of foreign investments in economic development of Kazakhstan is shown;
- features of activity of the foreign capital in Kazakhstan are shown;
- creation of conditions direct foreign investments.

For the analysis of FDI in the economic development of Kazakhstan, the indicators for exports, GDP, unemployment and exchange rates are taken.

The thesis is divided into two parts: Theoretical and Practical. The Theoretical part describes types and classifications of investments, as well as investments of the Republic of Kazakhstan.

The following Practical part describes the analysis of Kazakhstan's Foreign Direct Investments.

The data about exports, GDP, unemployment, and the exchange rate is also to be analysed. Analysis of these data was completed by using regression analysis and using statistical

program Gretl. And according to the findings of the analysis, all the data is interrelated,

namely the increase of exports, exchange rate, and GDP boosts the FDI, while the increase

in unemployment levels causes the FDI to decrease. Based on the conducted analysis, it

can be noted that foreign investments contribute to the integration of receiving economy

into the world economy, also acting as a mechanism for launching and stimulating

investment processes of Kazakhstan economy.

Attraction of foreign investments into the Kazakhstan economy on a large scale pursues

long-term strategic goals of creating a civilized, socially oriented society that is

characterized by a high quality of life of the population, which is based on the economy

that presumes not only mutual effective functioning of various forms of property, but also

internalization of the market, labour force and capital.

The structure of the thesis includes introduction, three main chapters, the conclusion and

the list of literature.

**Key words:** Investments, Goreign capital, Kazakhstan, Economy.

Souhrn

Zahraniční investice hrají velmi důležitou roli v ekonomice každého státu. A tudíž, cílem

mé práce je studování a analyzování přímé zahraniční investice a jejich dopad na

ekonomiku Kazachstánu

Podle cíle jsou řešeny tyto hlavní body:

- analyzování teoretických pojmů investic;

- uvedení ekonomické podstaty zahraničních investic;

- role zahraničních investic v hospodářském rozvoji v Kazachstánu;

- aktivita zahraničního kapitálu v Kazachstánu;

- vytvoření podmínek pro přímé zahraniční investice.

7

Pro analýzu PZI v ekonomickém vývoji Kazachstánu se analyzují ukazatele vývozu, HDP,

nezaměstnanosti a směnných kurzů.

Práce je rozdělena do dvou částí: Teoretické a Praktické. Teoretická část popisuje typy a

klasifikace investice a také investice Kazachstánské Republiky. Následující praktická část

popisuje analyzování přímých zahraničních investic v Kazachstánu. A také analyzování

údajů o vývozu, HDP, nezaměstnanosti a směnném kurzu. Analýza těchto dat byla

dokončena pomocí regresní analýzy a pomocí statistického programu Gretl. Podle zjištění

analýzy jsou všechny údaje vzájemně propojeny. Růst vývozu, směnný kurz a HDP zvyšují

PZI, zatímco růst nezaměstnanosti způsobuje pokles PZI. A na základě provedené analýzy

lze poznamenat, že zahraniční investice přispívají k integraci přijímající ekonomiky do

světové ekonomiky a působí také jako mechanismus pro zahájení a stimulaci investičních

procesů kazašské ekonomiky.

Přivádění zahraničních investic do ekonomiky Kazachstánu ve větším měřítku sleduje

dlouhodobé a strategické cíle k vytvoření civilizované, sociálně-orientované společnosti

charakterizované vysokou životní úrovni obyvatelstva, která je založena na ekonomice s

předpokladem vzájemné efektivní fungování různých forem vlastnictví a také

internalizace trhu, pracovní síly a kapitálu.

Práce se skládá z úvodu, třech hlavních kapitol, závěru a seznam použité literatury.

Klíčová slova: Investice, Zahraniční kapitál, Kazachstán, Ekonomika.

8

# **Contents**

1. Intro	oduction	11
2. Obje	ective and Methodology	11
2.1.	Objective	11
2.2.	Methodology	12
3. Theo	oretical part	13
3.1.	The theoretical concepts and the classification.	13
3.1	.1. Main groups of investments	14
3.1	.2. The relationship between the type of investment and the level	of risk 15
3.1	.3. The essence of the category of investment	16
3.1	.4. Investment in Kazakhstan.	17
3.2.	Technological, reproductive, sectoral and territorial structures of in	vestments.18
3.3.	Economic essence of investment and investment process	19
3.3	3.1. Investment	20
3.3	3.2. Investment activities.	21
3.3	3.3. Groups	22
3.3	3.4. Process of investments	23
4. Prac	ctical part	24
4.1.	A role of foreign investments in the Kazakhstan's economy	24
4.2.	Foreign Direct Investment of Kazakhstan	26
4.2	2.1. Changes of Foreign Direct Investments	26
4.2	2.2. Allotment of FDI	27
4.2	2.3. Leaders of FDI in Kazakhstan.	28
4.2	2.4. Export	29
4.2	2.5. GDP of Kazakhstan.	30
4.3.	Regression Analysis.	31
4.3	3.1. Data	31
4.3	3.2. Ordinary Least square method	34
4.3	3.3. Statistical significance. P-value	36
4.3	3.4. Estimation of parameters	37
4.3	3.5. Autocorrelation	38
4.3	3.6. Heteroskedasticity test.	39
5. Cond	clusion	42
6 Rihli	iography	43

List of graphs and table
Graph 4-1 Foreign Direct Investment of Kazakhstan (milliard US)
Graph 4-2 Investments in fixed assets in Kazakhstan.(million US)
Graph 4-3 Structure of Foreign Direct Investors by country
Graph 4-4 Export of Kazakhstan (million US)
Graph 4-5 Gross Domestic Capita of Kazakhstan (per capita)31
Graph 4-6 Foreign Direct Investment (billion US)
Graph 4-7 GDP(thousand US), Unemployment; Export (billion US); Exhange KZT to USD
33
Table 4-1 Data
Table 4-2 Solution of ModeNo.1 of OLS
Table 4-3 Solution of Model No.2 of OLS.
Table 4-4 Heteroskedasity Test of Model No.1
Table 4-5 Heteroskedasity test of Model No.2

7. List of online references.......44

# 1. Introduction

The current level of economic development of Kazakhstan objectively requires foreign investments. At present, international monopoly (IM) play a decisive role in world economy and politics, because they have more than 80% of the industrial production of capitalist countries. The increased level of concentration and centralization of capital and production has created the necessary conditions for economic expansion of these monopolies. Moreover, the recent expansion is based mainly on the export of capital. About 75% of this capital is exported within the developed capitalist countries, while the remainder is in developing countries, including Kazakhstan.

Activities of foreign capital has far-reaching consequences for the socio-economic development of Kazakhstan, exerting a significant influence on the stage of the reproductive process in a mixed economy in a way that known the advantage received the development of capitalist relations of production to preserve raw materials and export orientation of the economy of Kazakhstan, its dependence on modern foreign technology.

# 2. Objective and Methodology

# 2.1. Objective

The accelerated development of capitalist relations of production in Kazakhstan has allowed foreign capital to transform capitalist way in dominating, and then integrate Kazakhstan into the world capitalist system in as a relatively developed, but dependent parts.

Kazakhstan lacks productive capital, modern technology, technical knowledge and experience.

The aim of the research is to analyze the activity of foreign capital, its impact on the economic development of Kazakhstan in the context of globalization of the world economy. Globalization is characterized by the fact that is combined with another new phenomenon, breaking the so-called "theory of a product's life cycle. the industrialized countries in the past have been firmly believe its monopolistic position in the most advanced manufacturing technologies (with high added value, stable wages and well-being).

In accordance with the target set covers the following main tasks: -set out the economic essence of foreign investment and the investment process;

- analyzed the theoretical concepts of investments;
- -shows the work of IM in Kazakhstan;
- -peculiarities of foreign trade expansion of foreign capital;
- -shows the controversial activities of foreign capital in Kazakhstan. The theoretical and methodological Foundation for that work have served as works of foreign experts on the export of capital.

# 2.2. Methodology

The diploma thesis is divided into literature review and theoretical part. The data and information are obtained from books, scientific articles, and Internet sources focused on mentioned topic. In first part, the literature review is conducted by using methods of synthesis, induction, deduction, and extraction. Second part of the diploma thesis is analytical section. The data about exports, GDP, unemployment, and the exchange rate is also to be analysed. Analysis of these data was completed by using regression analysis and using statistical program Gretl.

# 3. Theoretical part

# 3.1. The theoretical concepts and the classification

The term "investment" is derived from the Latin word invest, which means "nest". The original condition of capital investment-receiving future economic benefits in the form of cash income, sufficient to recover the cost of capital invested initially, during the period of implementation of the investment project. In a broad interpretation of the investment can be defined as a long-term investment with a view to its subsequent increase, i.e. a profit exceeding the initial amount of the investment. To judge the attractiveness of investment, consider the four elements:

-costs - investment (investment);

-the potential benefits in the form of cash income from economic activities (operating cash flows);

- the economic lifetime of the investment, i.e. the period during which the project will be invested to generate income (economic life);

-any release of capital at the end of the term of the economic lifecycle of investment-resale value (terminal value).

The economic analysis of these four elements allows you to rate the attractiveness of the investment project.

One of the most important spheres of activity of any enterprise is investment, i.e. operations associated with investment funds in projects, which will provide enterprise benefits during a certain period time.

Depending on the goals of the investment classification could be held on the following grounds.

In commercial practice adopted to distinguish the following types of investments: investment in fixed assets; investments in intangible assets; -investments in monetary assets.

Under the monetary assets are understood to be entitled to receive moneys from other physical and legal persons, such as bank deposits, bonds, shares etc. Investments in fixed assets and intangible assets commonly referred to as investment in real assets.

Investments in real assets significantly depend on what sorts of these investments, i.e. which of the challenges facing enterprise challenges need to be addressed. (Igonina L.L 2004)

# 3.1.1. Main groups of investments

Based on appointments investment real investments can be grouped into the following main groups:

- -"Forced investment necessary to comply with environmental legislation Wednesday, occupational safety, security of goods or other activities which cannot be achieved only by improving governance;
- -Investments to improve efficiency. Their purpose is primarily to create conditions to reduce the cost of the company due to the replacement of equipment, training or relocation of production facilities in regions with more favorable conditions production;
- -Investment in expansion of production. The task of such investment is empowering release for previously established markets within existing industries;
- -Investment in the creation of new industries. These investments provide the creation of new businesses, which will release not previously made by the enterprise (or provide a new type of service) or allows the company to attempt to exit from the previously manufactured goods new markets for it;
- -Investments in research and innovation.

14

<sup>&</sup>lt;sup>1</sup> Igonina L.L. Investments. Moscow. Economist, 2004, page 117

# 3.1.2. The relationship between the type of investment and the level of risk

The logic of such a dependency between investment type and their level of risk is obvious: it is determined by the degree of danger does not guess the possible reaction of the market to change the results of the company upon completion of the investment. From this perspective, research and innovation, coupled with a very high degree of uncertainty, while improving the efficiency (cost reduction) in the production of market goods already adopted carries minimal risk of negative consequences investing. Relationship between the type of investment and the level of risk is shown in Fig. 1.

Investments Cash investments Fixed asset investments Intangible Fixed investment investments Sequence Alternative Independent investment investment investment "Compelled" investments Investment in efficiency gains Investment in production Active Passive expansion investment investme nt Active Investment in new production investment **Passive** facilities Investments in research and innovation

Figure 1 Classification of risk investment

Source: Drawing table And. Economic mechanisms. The lane with pp. Moscow, "Progress", 1993, page 56

Investments in real assets can also be represented as follows:

*Independent investment* when the investment is made independently of each other, i.e. one investment project choice does not exclude the selection of any other.

Alternative investments. Investment linked in such a way that selecting one of them will exclude another. Usually this occurs when there are two alternative ways to solve the same problem. This fact is important in an environment of limited sources of financing investment.

Consistent investment. Large investments in plant or equipment normally give rise to subsequent investments within a few years, that should be considered in case of adoption of the investment decision.<sup>2</sup> (V. Vaynrikh 1998)

# 3.1.3. The essence of the category of investment

It is generally known that investments are the most important economic category and play an exceptional role at the macro, meso and micro levels, and primarily for simple and expanded reproduction, acceleration of technological progress, structural transformations and solving social problems. The investment effectiveness largely depends on their nature, forms and structure. The structural transformations across the country, the active market movement and the radical renewal of property relationship, have necessitated a theoretical rethinking of the essence of the category of investments and related concepts. Paul Heine provide a more accurate definition for modern conditions: "Investing means buying some goods for the income expected to get in future. Consequently, the company invests through purchasing machines, the same as you invest, acquiring shares." Having analyzed a variety of options for determining the meaning of a category "investment", we can highlight the following: In the framework of centralized planned system a concept of "investments" is equated with a concept of "capital investments" and is an important economic indicator of the building complex performance.

Capital investments in the planned view are considered as an economic category, which represents value of the society's aggregate labor (living and materialized labor), aimed at

16

<sup>&</sup>lt;sup>2</sup> V. Vaynrikh. Investment analysis. The lane with it., 1998, page 15

continued growth of the productive apparatus, production capacity and construction, as well as non-productive asset. With the development of market relations scientific views in respect of assessment forms, methods and principles of investing have changed. Thus, L. J. Gitman, M.D. Joehnk gave the following definition of investments "method of placing capital, which should ensure preservation or increase of capital cost and bring a positive value of income".

Yu.A. Matkin(1990) by investment means investment of financial resources and facilities, equipment, and other resources, both within the country and abroad to obtain social, economic and environmental benefits. This definition corresponds to the notion of investment used in Western economic literature, where investment is understood as a set of values and benefits invested in business activities to obtain the maximum profit in the future. In addition to the above, there is another understanding of investment. According to V.D. Milovidov investments are an investment of free cash in the various forms of financial and material assets, i.e. assets. The above definition explains the tendency of redistribution of funds to those who need them. It is possible to talk about the availability of supply and demand, that would have been accumulated these funds over the period.<sup>3</sup>

# 3.1.4. Investment in Kazakhstan

The Law of RK "On Investments" No. 373-II dated January 8, 2003 provides the following definition: "Investments - all types of property (other than goods intended for personal consumption), including items of financial leasing from the date of a lease agreement, as well as the rights to use them, invested by an investor to the registered capital of a legal entity or an increase of fixed assets used for business activities". (The law RK of January 8, 2003 No. 373-11 "About investments"). Grounded in scientific terms the classification of investments not only allows them to correctly consider, but also to analyze the level of their use on all sides and on this basis to obtain an objective information to implement effective investment policy. To identify the possibilities of domestic use, the classification of investments outlined in foreign sources, as well as their summary were considered as being of scientific and practical interest to specialists. (Tleuova D. 2009)

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<sup>&</sup>lt;sup>3</sup> Matkin Yu.A. "The invested activity in the conditions of transition to adjustable market economy to the USSR. Construction economy" 1990, No. 11, page 20.

<sup>&</sup>lt;sup>4</sup> The law RK of January 8, 2003 No. 373-11 "About investments"

<sup>&</sup>lt;sup>5</sup> Tleuova D. Investments as form of attraction of the equity: determination of a role and essence. Al-Pari, 2009, No. 4, page 97

# 3.2. Technological, reproductive, sectoral and territorial structures of investments

The *technological structure* refers to part of the cost of construction any object on the types of costs and their share in the total estimated estimated cost, i.e. what percentage of capital investments in their total value directed to the construction and installation work (SMR) for the purchase of machinery, equipment and their installation, the design and survey and other costs.

Technological structure of capital investments has a very significant impact on the effectiveness of their use. Improvement of the structures is to increase the share of machinery and equipment at an estimated cost of project to the optimum level. In fact, the technological structure capital investment generates the ratio between active and passive fixed assets of the future enterprise. Increase the share of machinery and equipment, i.e. active fixed productive assets of the future enterprise, contributes to its production capacity and, consequently, reduce capital investment per unit of output. Economic efficiency is achieved at the expense increasing the level of mechanization and automation of labor and reduces the conditional fixed cost per unit of output.

Reproductive structure of capital investments also has a significant impact on the effectiveness of their use. Reproductive structure of capital investments refers to distribution and the ratio of the total estimated cost of the forms of reproduction of fixed assets, i.e. what percentage of capital investments in their total value is directed to a new construction, reconstruction and technical re-equipment of existing production, production expansion, modernization.

Improvement of the reproductive structure involves an increase in equity contributions directed to the reconstruction and technical re-equipment of the existing production.

The industrial structure refers to the distribution and the ratio of industries and the economy. Its developments are to ensure proportionality and a more rapid development of those industries, which provide the acceleration of the scientific and technical progress (the STP) throughout the national economy.

The territorial structure of capital investments refers to distribution and the ratio of the total aggregate of economic regions and regions of the republic. Improvement of the territorial structure of capital investments is to obtain maximum economic and social outcomes depending on regional specific features. The structure of investment by funding and ownership has a great importance for the effectiveness of investments in the economy.

The structure of investment by ownership refers to distribution and the ratio of ownership in their total amount, i.e. to which they belong: the state, municipalities, legal entities or individuals, or to a mixed form of ownership. It is believed that increasing the share of private investment in the total amount is positively affect the level of their use, and hence on country economy.

The efficiency of investments at the enterprise is the equally important, since its financial condition also depends on its structure. <sup>6</sup>(Arystanbayeva S.A 2008)

The analysis of the structure investments in various fields has the scientific and practical importance. Practical significance of this analysis is that it allows to determine the trend of changes in investment patterns and on this basis to develop a more effective and efficient investment policy. Theoretical significance of analyzing the investment structure lies in the fact that based on this analysis identifies new factors not previously known, that affect investment and its efficiency. (Igonina L.L.)

# 3.3. Economic essence of investment and investment process

The definition of the role and opportunities of implementation of an investment policy at the current stage of the national economy remains relevant today. Having announced the attraction of foreign capital as one of the strategic objectives, Kazakhstan has consistently pursued targeted measures to create legislative base for further integration into the global economy and development of an open economic system. The implementation of this policy involves the activation of the investment sector, based on a different economic mechanism of reproduction and legal support of investments There is no doubt that the role and

 $<sup>^6</sup>$  Arystanbayeva S.A. "Foreign investments as structure-forming factor of economy". Almaty, 2008, page 53

<sup>&</sup>lt;sup>7</sup> Igonina L.L. "Investment"s.

importance of the investment component need to be studied. Investment activity in Kazakhstan is aimed at activating the production process through internal and external sources of funding. <sup>8</sup>(.Nurlanova N.K,1998)

The state has pursued policy to fully attract foreign capital, by creating factors for this complex. In addition to the rich natural resources, the agrarian and industrial potential, the qualified specialists and cheap labor force, the favorable geopolitical situation, the stable political environment and interethnic relations are especially noted. The country has expanded its investment activities. Foreign investors showed increased activity: the volume of foreign direct investments increased by USD 880.9 billion in 2008. The volume of fixed capital investments was KZT 3836, 1 billion, which is 4.6% more than in 2007. Leading rating agencies have conferred on Kazakhstan a sovereign rating. In the structure of fixed capital investments, the equity capital was equal to 42.7% (48.8%), foreign investments - 23% (18.4%), budget funds - 19.9% (15.8%), and borrowed funds - 14.4 (17%). <sup>9</sup>(Nurlanova N.K.1998)

#### 3.3.1. Investment

The word "investment" comes from Latin "invest" that means to put. Investment presents itself in a general view capital investment and its return. Practically this capital utilization connected with an object for receipt of independent results, that is long-term binding of the equity in any object. "In the most extended sense the word "investment" means: to leave money today to receive their large sum in the future". Two factors are usually connected with this process - time and risk. It is necessary to give money in a certain quantity now. Remunerations arrives later if at all arrives, and its size is in advance unknown In the Law of the Republic of Kazakhstan "About investments" of 08.01.2003 the following concept of investments is this, to investing activities: "Investments - all types of property (except the goods intended for private consumption), including objects of financial leasing from the moment of leasing signing of the contract and also the right to them put by the investor

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<sup>&</sup>lt;sup>8</sup> Nurlanova N.K. "Formation and use of investments in economy of Kazakhstan: strategy and mechanism". Almaty. Galym, 1998, page 75

<sup>&</sup>lt;sup>99</sup> Nurlanova N.K. "Formation and use of investments in economy of Kazakhstan: strategy and mechanism". Almaty. Galym, 1998, page 87

in authorized capital the legal entity or increase in the fixed assets used for business activity. <sup>10</sup>(The Law of The Republic of Kazakhstan "About investments" of 08.01.2003)

#### 3.3.2. Investment activities

Investment activities - activities of physical persons and legal entities for participation in the authorized capital of the commercial organizations, or for creation or increase in the fixed assets used for business activity. Differentiate two real investments:

- investments in creation new, reconstruction
- modernization of the existing entities and financial (portfolio) investments in share purchase and securities of the state, other entities, investment funds.

In the first case, the entity investor making investments increases the production equity - the fixed business assets and current assets, necessary for their functioning. In the second case, the investor increases the financial capital, receiving dividends - income on securities. The investment of a money in creation of productions at the same time is performed by other entities and the organizations which issued shares for attraction of financial resources on implementation from investment projects. Besides, differentiate direct and indirect investments.<sup>11</sup>

In the Law of the Republic of Kazakhstan "About the state support of direct financial investments" allocate:

*Direct investments* - all types of investments, except for connected by sovereign guarantors the Republic of Kazakhstan and entering a framework of an official technical assistance or the grants provided by the Republic of Kazakhstan.

*Indirect investments* are investments in a portfolio, in other words, a set of securities or property. Main types of investments. One of the most important fields of activity of any firm are investment transactions, i.e. transactions connected with an investment of a money in projects implementation which will provide firm of benefits during the period exceeding

11

<sup>&</sup>lt;sup>10</sup> The Law of the Republic of Kazakhstan "About investments" of 08.01.2003

year. In commercial practice, it is accepted to differentiate the following types of investments: investments into physical assets; investments into cash assets; investments into intangible assets. Under physical assets process buildings and constructions and any kinds of machines and the equipment with service life more than one year, any other property used in production or having liquidity mean. Cash assets are understood as the rights to sums of money from other physical persons and legal entities. These are deposits in bank, the bond, shares, the credits, loans, pledges, etc. Intangible assets are understood as the values purchased by firm because of carrying out programs of retraining or advanced training of personnel, development of trademarks, acquisition of licenses for assignment of rights of an industrial property - patents for inventions, certificates on useful models and industrial designs, certificates on products and the production technology and also the land use right, etc. All types of investments are of great importance for viability of firm and its development. Classification of investments into real assets. Preparation and the analysis of investments into real assets significantly depend on what sort these investments i.e. what of the tasks facing the entity needs to be solved with their help. 12 (The Law of the Republic of Kazakhstan "About the state support of direct financial investments")

### **3.3.3.** Groups

From these line items, all possible kinds of investments can be reduced to the following primary groups:

- a) investments into increase in efficiency. Their purpose is first creation of conditions for cost reduction of firm due to change of the equipment, personnel training or moving of production capacities to regions with more advantageous conditions of production;
- b) investments into production expansion. A task of such investment is expansion of opportunities of release of goods for earlier created markets of already existing productions;
- c) investments into creation of new productions. Such investments will provide creation of new entities which will issue the goods which were earlier not produced by the entity (or to

<sup>12</sup> The Law of the Republic of Kazakhstan "About the state support of direct financial investments"

render new type of services), or to allow, to firm to undertake, attempt of an exit with earlier already being issued goods to the markets, new to it;

d) investments to meeting requirements of state bodies, managements. This version becomes necessary if the entity appears before need to meet requirements of the authorities or regarding environmental standards, either safety of products, or other conditions of activities which can't be provided due to only enhancement of management. As economic category of investment performs the major functions without which normal, cost-efficient development of the country is impossible. Investments considerably create the future of the country in general, its certain regions, each accounting entity - the investments made today are a basis of tomorrow's welfare.<sup>13</sup> ("World economy and international relations" magazine, 1967)

#### **3.3.4.** Process of investments

Investment process is the sequence of stages, actions, procedures and transactions on implementation of investing activities. The specific course of investment process is determined by an investment object and types of investment (real or financial investments).

It is extremely important to understand that as investment process, investment relates to long-term investments of economic resources for creation and receipt of benefit in the future, the main aspect, essence of these investments consist in transformation of own and borrowed funds of the investor to assets which in case of their use will create new cost. As the main stages of investment process three stages are allocated.

At the first (preparatory) stage decisions on investment within its first phase are made, create the investment purposes. In the second phase determine the direction of investment. In the third phase, there is a choice of specific objects for investment, preparation and the conclusion of the investment agreement. By signing of the investment agreement, the put material and non-material benefits are given the status of investments.

23

<sup>&</sup>lt;sup>13</sup> "World economy and international relations " magazine, 1967, No. 8, page 73

The second stage of investment process - the implementation of investments, practical actions for implementation of investments given a legal shape by the conclusion of various agreements. The agreements connected with a cession of property can be them; the agreements directed to performance of works or rendering services, license and other civil agreements. The second stage comes to the end with creation of an object of investment activities.

The third (operational) stage - the stage connected with operation of the created object of investment activities. Within this stage production of goods, performance of works, rendering services will be organized; the system of marketing and sale of new goods is created. During an operational stage, there is compensation of investment costs, income from implementation of investments is generated. This stage matches a payback period of investments. <sup>14</sup>(Hetman L.J., Dzhonk M.D., 1997)

# 4. Practical part

# 4.1. A role of foreign investments in the Kazakhstan's economy

Nowadays, the main method of foreign economic expansion of international monopolies is still the export of capital. The export of capital represents the dominant form of monopolization of production and circulation in the post-Soviet countries that have entered the world capitalist system. The penetration of international monopolies intensifies based on the increased export of capital. At the present stage of capitalism development, the export of capital is the main instrument of the imperialist monopolies expansion. Export of capital to Kazakhstan represents an economic basis which ensures and preserves republic's economic dependence on foreign industrial, raw material and banking monopolies. Developing countries "are entangled in networks of financial dependence". The export of capital provides imperialist powers with monopolistically high profit income flows from

24

<sup>&</sup>lt;sup>14</sup> Hetman L.J., Dzhonk M.D. "Investment bases". - Moscow, Business, 1997, page 93

countries that have achieved state independence, but still occupy an unequal position in the capitalist system of world economy. Disclosure of the socio-economic function of exporting capital is an important object of research in economic literature. Not only the quantitative side of the export of capital is investigated, but also the movement of the masses of value between the exporting country and the importing country, which expresses the scale of the capital movement. <sup>15</sup>(Obminsky E.E.,1994)

A qualitative analysis of the export of capital is conducted on the export of capital; its role and significance as a source and mediator of capitalist production relations, as well as an instrument of the direct export of these relations to the republic. The importance of this approach to the export of capital was first emphasized by Soviet literature author V.G. Solodovnikov. He had reasonably pointed out that reducing the purposes of capital investments "for a sole purpose of obtaining high profits makes it difficult to understand the role of capital export in the economy and politics of modern imperialism as a mean of survival and development of the very system of capitalist production relations itself. Previously it has already been noted that nowadays the bulk of the capital of economically developed countries is exported abroad by international monopolies. Therefore, it is intended to conduct a retrospective analysis of the export of French private capital to developing countries in this paragraph, and to consider changes that have occurred in it. In modern times, while remaining one of the main means of imperialist exploitation the export of private capital acquires many additional forms.

One of these forms is direct private investment, which refers to direct investment and the creation or expansion of enterprises. These enterprises sell their goods to countries that have invested, as well as to other countries. For Kazakhstan, this is especially characteristic. Capital investments of parent companies can take the form of patents, licenses to produce certain products and goods, as well as raw materials. The structure of direct investments includes the profits received, which again must be invested in this enterprise. In this case, it will already be re-investment. Currently, direct investment is the most attractive way for monopolies to place capital. This is explained by the fact that in this case they provide themselves with full control over the economy of the young states,

<sup>&</sup>lt;sup>15</sup>Obminsky E.E. "Developing countries and international division of labor". M, 1994, page 86

they have an opportunity to come into direct contact with the markets for their products, with sources that are of interest to them for raw materials, with the spheres of application of own capital. In addition, this way the highest profits are ensured, as foreign enterprises use cheap labor on the spot, as well as cheap raw materials.<sup>16</sup> (Foreign investments in RK., 2000)

# 4.2. Foreign Direct Investment of Kazakhstan

# **4.2.1.** Changes of Foreign Direct Investments

Inflow of direct foreign investments in 2016 unexpectedly grew after three years of reducing. For last year the amount of a gross inflow of PII in RK made \$20,6 billion against \$14,8 billion which were attracted in 2015.

Thus, last year it was succeeded to increase inflow of direct foreign investments by 40%, or almost for \$6 billion.

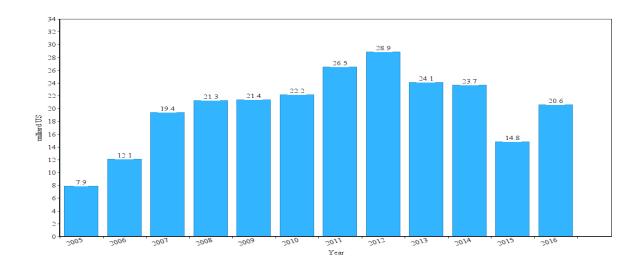
Growth of an indicator gives certain signals of return of interest of foreign investors to Kazakhstan which weakened in 2013-2015 against the background of untwisting of the crisis phenomena in local economy.

Gross inflow of direct foreign investments to RK which progressively grew since 2007, in 2013 was reduced by 17%, then reducing was slowed down for 2% in 2014 and in 2015 the sharp failure for 38% was fixed again. (Graph No.4-1)<sup>17</sup>(Analysis of investments in fixed assets in the Republic of Kazakhstan and the EEA member countries.,2013)

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<sup>&</sup>lt;sup>16</sup> Foreign investments in RK. Almaty, 2000.

<sup>&</sup>lt;sup>17</sup> Analysis of investments in fixed assets in the Republic of Kazakhstan and the EEA member countries. JSC "Kazakhstan Institute of Industry Development". Astana, 2013. -16 sec.



Graph 4-1 Foreign Direct Investment of Kazakhstan (milliard US)

Source: own work, adopted from natinaolbank.kz;

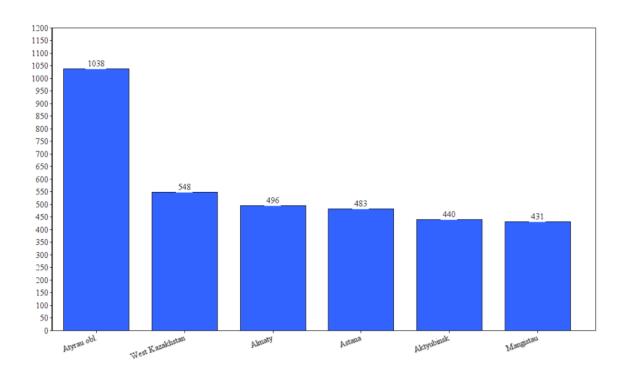
# 4.2.2. Allotment of FDI

Inflow of investments is the share of the western regions of Kazakhstan: 62% of all foreign investments are the share of a share of the Atyrau, West Kazakhstan, Aktyubinsk and Mangystau regions.

In addition to them more than 200 million dollars in a quarter were attracted only by Almaty and the East Kazakhstan region. (Graph No.4-2)

Graph 4-2 Investments in fixed assets in Kazakhstan.(million US)

Investments in fixed assets in the Republic of Kazakhstan for 2013



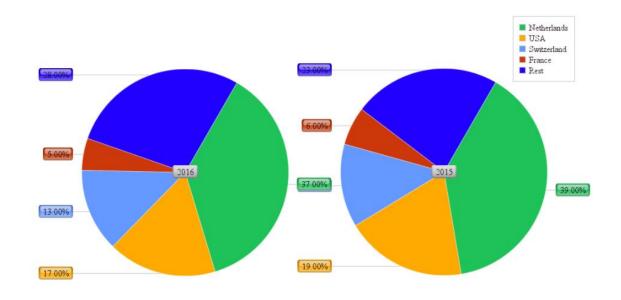
Source: own work, adopted from regnum.ru

### 4.2.3. Leaders of FDI in Kazakhstan

Leaders in direct investments to Kazakhstan following the results of 2015-2016 are the Netherlands, the USA, Switzerland and France. In spite of the fact that the Netherlands in 2016 has increased inflow of direct investments to Kazakhstan by 33% (1,9 bln. dollars of the USA), their share in structure of direct foreign investors was reduced by 2% and following the results of 2016 has made 37%. Also, direct foreign investments from other countries, behind exception TOP-4, as in a quantitative ratio (growth by 71% or 2,4 bln. dollars of the USA), and in a specific ratio to the total amount of PII (growth by 5%) have considerably increased. (Graph No.4-3)

**Graph 4-3 Structure of Foreign Direct Investors by country.** 

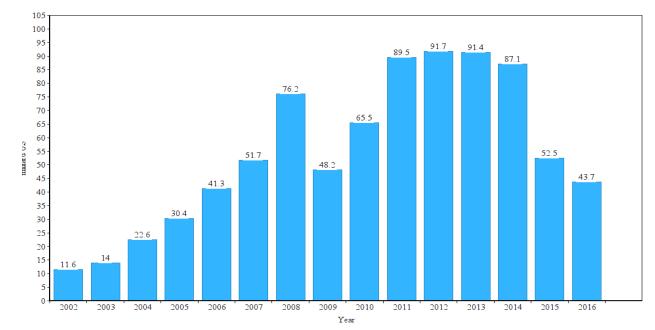
Structure of foreign direct investors by country.



Source: own work, adopted from 365info.kz

# **4.2.4.** Export

Judging by data of the statkomitet, the cost of export goods in Kazakhstan for January-October 2016 fell really by 8% in relation to 2015. However, this indicator rather modest in comparison with decline in the rate scales. Besides the tendency of gradual rise in price of export is noticeable. For example for the period January-May export was 14% cheaper in comparison with the same period of 2015. (Graph No.4-4)

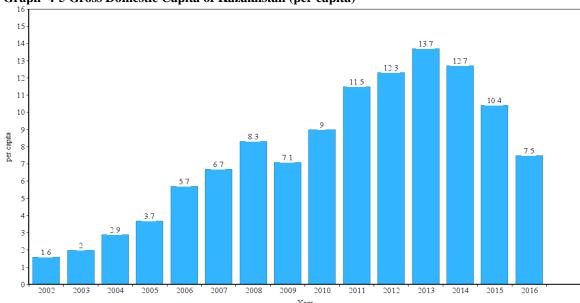


**Graph 4-4 Export of Kazakhstan (million US)** 

Sources: own work, adapted from tradingeconomics.com

## 4.2.5. GDP of Kazakhstan

During the period from 2002 to 2011 the gross domestic product (GDP) of Kazakhstan grew more than seven times - about 3 trillion 776,2 billion tenges to 27 trillion 334 billion tenges, reports the business magazine "Vlast" with reference to the Agency of the Republic of Kazakhstan according to the statistics. On average, annually GDP increased by 1,2-1,3 times. In 2015 GDP per capita constituted 1650741 tenges that is 650 percent more, than in 2002, notes the edition. (Graph No.4-5)



Graph 4-5 Gross Domestic Capita of Kazakhstan (per capita)

Sources: kazakhstan GDP.

#### 4.3. **Regression Analysis.**

Simple linear regression analysis examines the relationship between two variables in this case it will realationship between FDI and export,GDP and unemployment rate. This analysis will help to explain how these variables affect each other.

## 4.3.1. Data.

For the analysis, the following data will be taken the next variables: Foreign Direct Investment(FDI), Gross Domestic Product(GDP), Unemployment rate, Export and Exchange Rate. All this data will be taken from 2002-2016 years. Information for 14 years will give more detailed and good models of this analysis. (Table 4-1)

Table 4-1 Data

Years	y1t* Foreign direct investment net	X1t** GDP per capita	X2t*** Unemployment rate	X3t**** Export of goods and services	X4t***** Exchange rate to US dollar for KZT
2002	4,106	1,657	9,300	11,577	149,498
2003	4,624	2,062	8,800	14,929	153,649
2004	8,273	2,863	8,400	22,655	138,245
2005	7,916	3,753	8,100	30,387	132,887
2006	12,066	5,261	7,800	41,292	126,089
2007	19,418	6,733	7,300	51,704	122,554
2008	21,301	8,349	6,600	76,257	120,299
2009	21,437	7,117	6,600	48,243	147,496
2010	22,246	9,005	5,800	65,502	178,424
2011	26,467	11,553	5,400	89,503	174,627
2012	28,885	12,300	5,300	91,747	176,826
2013	24,098	13,789	5,200	91,381	179,831
2014	23,726	12,712	5,100	87,109	181,687
2015	14,752	10,435	5,000	52,582	241,651
2016	20,637	7,511	5,000	43,758	338,831

Source: Data from (<u>FDI</u>, 2018)\*, (<u>Kazakhstan GDP</u>, 2018)\*\*, (<u>World Bank</u>, 2018)\*\*\*, and (<u>Data.worldbank.org</u>, 2018)\*\*\*, own table processing Gretl

## **Econometric model:**

Where:

Dependent variable: y1t

Independent variables: x1t, x2t, x3t, x4t

y<sub>1t</sub> – Foreign Direct Investment in Kazakhstan in billion dollars;

x<sub>1t</sub> – Gross Domestic Product in Kazakhstan, thousand dollars per capita;

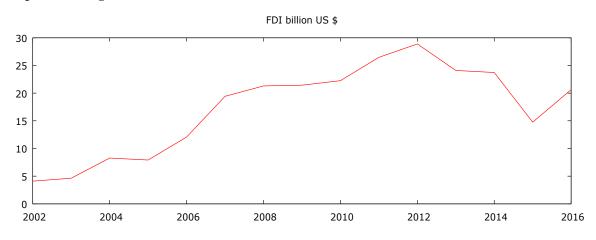
x<sub>2t</sub> – Unemployment rate in Kazakhstan, %;

x<sub>3t</sub> – Export of goods and services in Kazakhstan, billon US dollars;

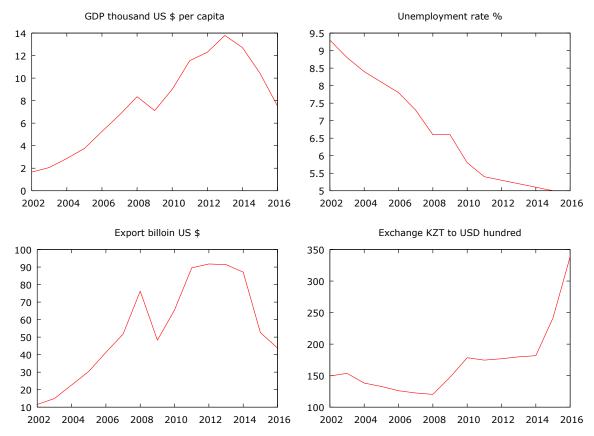
x<sub>4t</sub> – Exchange rate to US dollar for Kazakh Tenge, hundred tenge;

# Graphs

**Graph 4-6 Foreign Direct Investment (billion US)** 



Source: owen work by Gretl.



**Graph 4-7 GDP(thousand US),Unemployment;Export (billion US);Exhange KZT to USD** Source: owen work by Gretl.

On these graphs clearly show changes in the data by year. For example it is possible to see clearly that since 2010-2014 there is FDI, GDP and export increase. The same time it is possible to notice that data on unemployment go down, and exchange trade remains stable.

# 4.3.2. Ordinary Least square method

In this part will be using Ordinary Least Square (OLS) method. This part will be done by 2 models. In the first model will show relationship between FDI and Export, Exchange rate. On the second methods will illustrate relationship between FDI and GDP, unemployment.

## 1st model

Table 4-2 Solution of ModeNo.1 of OLS

Model 1: OLS, using observations 2002-2016 (T = 15) Dependent variable: **Foreigndirectinvestmentnet** 

	Coefficient	Std. Error	t-ratio	p-value	
const	-0.797094	2.85448	-0.2792	0.7848	
Export	0.263039	0.0287084	9.162	< 0.0001	***
ExchangeratetoUS	0.0220783	0.0143006	1.544	0.1486	
dollarfor					

Mean dependent var	17.33013	S.D. dependent var	8.093833
Sum squared resid	107.1374	S.E. of regression	2.987995
R-squared	0.883183	Adjusted R-squared	0.863714
F(2, 12)	45.36258	P-value(F)	2.54e-06
Log-likelihood	-36.02954	Akaike criterion	78.05908
Schwarz criterion	80.18323	Hannan-Quinn	78.03645
rho	0.083013	Durbin-Watson	1.768073

Source: by owen work by Gretl

R<sup>2</sup> –coefficient of determination shows how close the data 88%.

Correlation Matrix for the first model-multicollinearity check.

Correlation coefficients, using the observations 2002 - 2016 5% critical value (two-tailed) = 0.5140 for n = 15

Foreigndirecti nvestmentnet	Export	Exchangerat etoUSdollarf or	
1.0000	0.9274	0.2568	Foreigndirec tinvestmentn et
	1.0000	0.1137	Export
		1.0000	Exchangerat etoUSdollarf or

There is **no multicollinearity** in the first regression model.

# 2<sup>nd</sup> model

Table 4-3 Solution of Model No.2 of OLS.

Model 2: OLS, using observations 2002-2016 (T = 15) Dependent variable: **Foreigndirectinvestmentnet** 

	Coefficient	Std. Error	t-ratio	p-value	
const	15.4547	16.5563	0.9335	0.3690	
GDPpercapita	1.36049	0.671288	2.027	0.0655	*
Unemploymentrate	-1.28847	1.75262	-0.7352	0.4764	

Mean dependent var	17.33013	S.D. dependent var	8.093833
Sum squared resid	175.5644	S.E. of regression	3.824966
R-squared	0.808574	Adjusted R-squared	0.776670
F(2, 12)	25.34377	P-value(F)	0.000049
Log-likelihood	-39.73375	Akaike criterion	85.46749
Schwarz criterion	87.59164	Hannan-Quinn	85.44486
rho	0.335037	Durbin-Watson	1.311258

Source: by owen work by Gretl.

R2 – coefficient of determination shows how close the data 81%.

Correlation Matrix for the second model- multicollinearity check.

Correlation coefficients, using the observations 2002 - 2016 5% critical value (two-tailed) = 0.5140 for n = 15

	i varae (two ta	1100) - 0.5110	101 11 10
Foreigndirect	GDPpercapit	Unemploym	
investmentne	a	entrate	
t			
1.0000	0.8944	-0.8620	Foreigndirec
			tinvestmentn
			et
	1.0000	-0.9241	GDPpercapa
		1.0000	Unemploym
			entrate

There is **no multicollinearity** in the second regression model.

# 4.3.3. Statistical significance. P-value

Hypotheses:

- H0: parameter is not statistically significant
- H1: parameter is statistically significant

If p-value  $\leq \alpha$  then, reject H0  $\alpha = 0.05$  and  $\alpha = 0.01$ 

## *The first model (FDI, Export and Exchange rate)*

- Constant equal to 0.7848; > than 0.05 and 0.1,

H0 accepted, constant is statistically insignificant (SI) at a 5% and 10% level of significance

- Export = <0.0001; <0.05 and <0.1

H0 rejected, export is **statistically significant** (**SS**) at a 5% and at a 10% level of significance

- Exchangerate to US dollar for = 0.1486; > than 0.05 and 0.1,

H0 accepted, Exchange rate to Us dollar for is statistically insignificant (SI) at a 5% and 10% level of significance

## The second model (FDI, GDP and Unemployment rate)

- Constant equal to 0.3690; > than 0.05 and 0.1,

H0 accepted, constant is statistically insignificant (SI) at a 5% and 10% level of significance

- GDPpercapita = 0.0655; > 0.05 and < 0.1

H0 accepted at 5% level of significance

- statistically insignificant (SI)

H0 rejected at 10% level of significance

## - statistically significant (SS)

- Unemploymentrate= 0.4764; > than 0.05 and 0.1,

H0 accepted, Unemployment rate is statistically insignificant (SI) at a 5% and 10% level of significance

# 4.3.4. Estimation of parameters

## The first final estimation model

 $y_{1t} = -0.797094 + 0.263039x_{t1} + 0.0220783x_{t2}$ 

*If all variables are equal to zero, foreign direct investment is - 0.797094 billion dollars.* 

The interpretation doesn't make sense case. In general, if it's no export or exchange rate there is no foreign direct investment.

Relationship between *export services and goods* and *foreign direct investment* explained by following function:

 $y_{1t} = 0.263039x_{t1}$ 

If the export services and goods increase by 1 unit, the foreign direct investment will increase by 0.263039 billion dollars. And vice versa.

It means that if Export will increase FDI will increase too and this variable affect unemployment.

Relationship between *exchange rate to US dollar* and *foreign direct investment* explained by following function:

 $y_{1t} = 0.0220783x_{t2}$ 

If the exchange rate to US dollar increase by 1 unit, the foreign direct investment will increase by 0.0220783 billion dollars. And vice versa.

By this function shows the same variant as in a previous function

## The second final estimation model

 $y_{1t} = 15.4547 + 1.36049x_{t1} - 1.28847x_{t2}$ 

If all variables are equal to zero, foreign direct investment is 15.4547 billion dollars. Relationship between gross domestic product and foreign direct investment explained by following function:

 $y_{1t} = 1.36049x_{t1}$ 

If the gross domestic product increase by 1 unit, the foreign direct investment will increase by 1.36049 billion dollars. And vice versa.

In this case can see that if GDP will increase, FDI will increase too.

Relationship between *unemployment rate* and *foreign direct investment* explained by following function:

```
y_{1t} = -1.28847 x_{t2}
```

If the unemployment rate increase by 1 unit, the foreign direct investment will decrease by 1.28847 billion dollars. And vice versa.

This step of models shows that If unemployment will increase, FDI will decrease.

#### 4.3.5. Autocorrelation

Autocorrelation test for the first regression model between FDI, Export and Exchange rate.

Breusch-Godfrey test for first-order autocorrelation OLS, using observations 2002-2016 (T=15) FDI, Export, Exchange rate Dependent variable: uhat

Table 4-4 Table of autocorrelation test of Model No.1

	coefficient	std. error	t-ratio	p-value
const	-0.0978713	2.98445	-0.03279	0.9744
Export	-0.00427864	0.0328144	-0.1304	0.8986
ExchangeratetoUS~	0.00204776	0.0162372	0.1261	0.9019
uhat_1	0.113329	0.360922	0.3140	0.7594

Source:own work by Gretl

```
Unadjusted R-squared = 0.008884
```

```
Test statistic: LMF = 0.098596,
```

with p-value = P(F(1,11) > 0.0985958) = 0.759

Alternative statistic: TR^2 = 0.133254,

with p-value = P(Chi-square(1) > 0.133254) = 0.715

 $R^2$  is 0.00884 and followed p-value 0.759 are greater than significance level  $(0.05) \rightarrow No$  **Autocorrelation** 

In alternative, critical value for Chi-square(1) is consider as;

 $TR^2 = 0.133254$ , p-value  $0.715 > 0.05 \rightarrow No$  Autocorrelation

Chi-square(1) right-tail probability = 0.05 complementary probability = 0.95

Critical value =  $3.841 > TR^2 = 0.133254 \rightarrow No$  Autocorrelation

That means there is no correlations in the first model.

Autocorrelation test for the second regression model between FDI, GDP and unemployment rate.

Breusch-Godfrey test for first-order autocorrelation

OLS, using observations 2002-2016 (T = 15) FDI, GDP, Unemployment rate

Dependent variable: uhat

Table 4-5 Table of aotocorrelation test of Model No.2

	coefficient	std. error	t-ratio	p-value
const	17.4402	19.3855	0.8997	0.3876
GDPpercapita	-0.745140	0.800800	-0.9305	0.3721
Jnemploymentrate	-1.75617	2.01821	-0.8702	0.4028
uhat_1	0.531455	0.346657	1.533	0.1535

Unadjusted R-squared = 0.176052

Test statistic: LMF = 2.350359,

with p-value = P(F(1,11) > 2.35036) = 0.153

Alternative statistic:  $TR^2 = 2.640782$ ,

with p-value = P(Chi-square(1) > 2.64078) = 0.104

Observed R<sup>2</sup> is 0.176052 and followed p-value 0.153 are greater than significance level  $(0.05) \rightarrow \text{No Autocorrelation}$ 

In alternative, critical value for Chi-square(1) is consider as;

 $TR^2 = 2.640782$ , p-value  $0.104 > 0.05 \rightarrow No$  Autocorrelation

Chi-square(1) right-tail probability = 0.05 complementary probability = 0.95

Critical value =  $3.841 > TR^2 = 2.640782 \rightarrow No$  Autocorrelation

That means there is no correlations in the first model.

## Collinearity test.

Variance Inflation Factors Minimum possible value = 1.0 Values > 10.0 may indicate a collinearity problem

Export 1.013
ExchangeratetoUSdollarfor 1.013

GDPpercapita 6.848 Unemploymentrate 6.848

In the output of above calculation means that there is no collinearity problem, as all variables less than 10.0.

## 4.3.6. Heteroskedasticity test.

Breusch-Pagan Test for *the first model* with variables as FDI, Export and Exchange rate.

Breusch-Pagan test for heteroskedasticity OLS, using observations 2002-2016 (T = 15) Dependent variable: scaled uhat^2

Table 4-6 Heteroskedasity Test of Model No.1

	coefficient	std. error	t-ratio	p-value
const	0.968191	1.45807	0.6640	0.5192
Export	-0.000762555	0.0146642	-0.05200	0.9594
ExchangeratetoUS~	0.000429794	0.00730474	0.05884	0.9540

Source:by own work.

Explained sum of squares = 0.0129093

Test statistic: LM = 0.006455,

with p-value = P(Chi-square(2) > 0.006455) = 0.996778

Chi-square(2)

right-tail probability = 0.05

complementary probability = 0.95

Critical value = 5.911

P value 0.996778 > 0.05

Null hypothesis "Accepted" Heteroskedasticity NOT present

Critical value = 5.911 > LM = 0.996778

Null hypothesis "Accepted" Heteroskedasticity NOT present

Breusch-Pagan Test for <u>the second model</u> with variables as FDI, GDP and Unemployment rate.

Breusch-Pagan test for heteroskedasticity OLS, using observations 2002-2016 (T = 15)

Dependent variable: scaled uhat^2

Table 4-7 Heteroskedasity test of Model No.2

	coefficient	std. error	t-ratio	p-value
const	5.89022	6.56970	0.8966	0.3876
GDPpercapita	-0.105058	0.266373	-0.3944	0.7002
Unemploymentrate	-0.614455	0.695458	-0.8835	0.3943

Source: by own work

Explained sum of squares = 4.60868

Test statistic: LM = 2.304339,

with p-value = P(Chi-square(2) > 2.304339) = 0.315951

Chi-square(2)

right-tail probability = 0.05

complementary probability = 0.95

Critical value = 5.911

P value 0.315951 > 0.05

Null hypothesis "Accepted" Heteroskedasticity NOT present

Critical value = 5.911 > LM = 2.304339

Null hypothesis "Accepted" Heteroskedasticity NOT present

White Test for *the first model* with variables as FDI, Export and Exchange rate.

White's test for heteroskedasticity first model OLS, using observations 2002-2016 (T = 15)
Dependent variable: uhat^2

Table 4-8 White test's table of Model No.1

	coefficient	std. error	t-ratio	p-value
const	-66.1100	108.024	-0.6120	0.5557
Export	1.19876	1.32938	0.9017	0.3907
ExchangeratetoUS~	0.534284	0.907870	0.5885	0.5707
sq_Export	-0.00857510	0.00521785	-1.643	0.1347
X2_X3	-0.00199584	0.00878200	-0.2273	0.8253
sq_Exchangeratet~	-0.00101729	0.00126251	-0.8058	0.4411

Source : own work by Gretl

Unadjusted R-squared = 0.268073

Test statistic:  $TR^2 = 4.021095$ ,

with p-value = P(Chi-square(5) > 4.021095) = 0.546383

Chi-square(5)

right-tail probability = 0.05

complementary probability = 0.95

Critical value = 11.07

Null hypothesis "Accepted" Heteroskedasticity NOT present

**White Test** for the <u>second model</u> with variables as FDI, GDP and Unemployment rate. White's test for heteroskedasticity second model

OLS, using observations 2002-2016 (T = 15)

Dependent variable: uhat^2

Table 4-9 White Test's table of Model No.2

	coefficient	std. error	t-ratio	p-value
const	-1143.95	844.334	 -1.355	0.2085
GDPpercapita	132.283	70.8415	1.867	0.0947
Unemploymentrate	213.473	202.015	1.057	0.3182
sq_GDPpercapita	-3.18502	1.57480	-2.022	0.0738
X2_X3	-12.8974	7.92220	-1.628	0.1380
sq_Unemploymentr~	-9.78157	12.2125	-0.8009	0.4438

Source: by own work by Gretl

Unadjusted R-squared = 0.413311

Test statistic: TR^2 = 6.199660,

with p-value = P(Chi-square(5) > 6.199660) = 0.287273

Chi-square(5)

right-tail probability = 0.05

complementary probability = 0.95

# 5. Conclusion

The Republic of Kazakhstan is of great interest to foreign investors. The investment attractiveness of the Kazakhstan market is guaranteed due to its market size, an access to natural resources, and the strategically-favorable geographic location of the country. One of the priority tasks that Kazakhstan is facing is its integration into world economic system. The foreign equity inflow plays an essential role in implementation of structural transformations in economy aimed to ensure the production of competitive products, to develop the export base, and to enhance the infrastructure for entrepreneurship.

The main conditions for attracting foreign equity are as follow:

- creation of the stable and developed regulatory framework for activities of investors in Kazakhstan;
- launching a stable taxation system;
- strengthening of institutes of property;
- forming of system of insurance and mortgage forms for foreign investments;
- development of an investment cooperation with international banks and financial organizations;
- Kazakhstan needs to create investment attraction especially preferential conditions for them at the beginning;
- development of the export potential;
- development of import-substituting productions;

As of today, it is safe to claim that Kazakhstan is a reliable partner and an economically stable state, as it has proven itself to be over the last decade.

Economists, speaking about the favorable investment climate and image of Kazakhstan, note that our economy substantially needs inflow of direct foreign investments that is caused, first, by the opportunities of the state budget limited because of crisis and private investors and also big depreciation of the available equipment. For a program

42

implementation of diversification of economy of one state resources it isn't enough, attraction of direct foreign investments is necessary.

Based on data on inflow of foreign investments to economy of Kazakhstan researchers emphasize that the problem of creation of the favorable mode for foreign investments and creation of all necessary conditions for increase in inflow of foreign investments to economy of our country is still not solved.

# 6. Bibliography.

- 1. Tleuova D. "Investments as form of attraction of the capital: definition of a role and essence." Al-Pari, 2009, No. 4, page 97
- 2. Hayne P., "Economic mentality", page 574
- 3. "Construction economy. Reference book". I.G. Galkin, V.A. Balakin, etc., under the editorship of I.G. Galkin. Moscow, Stroyizdat, 1989. page 71-78
- 4.Hetman L.J., Dzhonk M.D. "Investment bases". Moscow, Business, 1997, page 93
- 5.Matkin Yu.A. "The invested activity in the conditions of transition to adjustable market economy to the USSR. Construction economy" 1990, No. 11, page 20
- 6.Milovidov V. D. "*The share invested funds*". Moscow. Ankal, INFRA-M, 1996, page 7 7.The law RK of January 8, 2003 No. 373-11 "About investments"
- 8. Nurlanova N.K. "Formation and use of investments in economy of Kazakhstan: strategy and mechanism". Almaty. Galym, 1998, page 192
- 9.V. Vaynrikh. "Investment analysis."., 1998, page 15
- 10."Drawing table And. Economic mechanisms". Moscow, "Progress", 1993, page 56
- 11. Sharp U.F., etc. "Investment"s. Moscow, Business, 2008, page 132
- 12.Law of RK "About the State Support of Direct Financial Investments", 2003 on January
- 13.Igonina L.L. "Investment"s. Moscow. Economist, 2004, page 117
- Al-Pari No. 1-2, 2009 magazine, page 13, 137
- 14." World economy and international relations "magazine, 1967, No. 8, page 73
- 15.Law of RK "About Foreign Investments" of December 12, 1994.
- 16. "Kazakhstan of 1991 2002" Almaty, 2002, page 438, 439, 445, 445, 448
- 17.Marx To, Engels F. of t.23, page 319, t.25, p.1, page 260, t.26, the p. 3, page 104, 105, t.27, page 359, 383 of t.29, page 295
- 18. Rymalov V. "World economy and international relations", 1996, No. 3, page 27-28

- 19. "External economic sphere of capitalism: new stage of development. World economy and international relations." 1996, No. 5, page 76
- 20." Tiere Monde" P., 1996, No. 1, river 17, 196
- 21."Developing countries: accumulation and economic growth". Moscow, 1997, page 137
- 22. "World economy and international relations". Moscow, 2001, No. 3, page 27
- 23. "Developing countries: accumulation and economic growth". Moscow, 1997, page 130
- 24. Tyulpanov S.I. "Sketches it is watered. economies (developing country)". 1969, page 133, 287
- 25.Obminsky E.E. "Developing countries and international division of labor". M, 1994, page 86
- 26.Tekenova U.A. "About regional policy developed and developing countries", Almaty, 2008, page 17
- 27. Arystanbayeva S.A. "Foreign investments as structure-forming factor of economy". Almaty, 2008, page 53
- 28. "Foreign investments into RK". Almaty, 2000.

# 7. List of online references

- 1.https://365info.kz/2017/07/inostrannye-investory-vozvrashhayutsya-v-kazahstan/
- 2.https://regnum.ru/news/2264580.html
- 3. https://articlekz.com/article/13958
- 4. <a href="http://rfcaratings.kz/6579">http://rfcaratings.kz/6579</a>
- 5.https://forbes.kz/finances/investment/pryamyie\_inostrannyie\_investitsii\_v\_ekonomike\_k azahstana/
- 6.https://kazdata.kz/04/2017-07-export-import-kazakhstan.html