

**Czech University of Life Sciences Prague**

**Faculty of Economics and Management**

**Department of Economics**



**Diploma Thesis**

**Foreign direct investments in Russian Federation**

**Tatiana Khvostova**

## DIPLOMA THESIS ASSIGNMENT

Tatiana Khvostova

Economics and Management

Economics and Management

Thesis title

**Foreign direct investments in Russian Federation**

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### Objectives of thesis

The main objective of this diploma thesis is to provide a comprehensive overview of the foreign direct investment (FDI) inflows into the Russian Federation from the perspective of its determinants. Furthermore, the thesis focuses on the analysis of the key attractiveness factors influencing the Russian foreign direct investment inflows and estimates which factors affect FDI inflows into Russian Federation.

### Methodology

The methods of analysis at the macroeconomic level, descriptive and comparative methods, trend analysis, statistical hypothesis testing and econometric model were used to achieve the objective of the thesis. The trend analysis is used for each macroeconomic indicator and estimates the future values of all indicators. The econometric model examines which factors affect FDI inflows into the country.

## **The proposed extent of the thesis**

40 – 60 pages

## **Keywords**

Foreign direct investment in Russian Federation, Russian Federation, Economic Attractiveness of Russian Federation, Economic growth in Russian Federation, Investment incentives in Russian Federation, GDP in Russian Federation, Inflation rate in Russian Federation, Unemployment rate in Russian Federation, Exchange rate in Russian Federation, Openness of the economy in Russian Federation.

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## **Recommended information sources**

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Dunning J., Lundan S.(2008), *Multinational Enterprises and the Global Economy*. Edward Elgar Publishing Limited, Cheltenham. ISBN 1848441320  
Linder P. (1992) *Economics of world economic relations – M .: Progress*, p. 466-468. ISBN 0-691-086761

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## **Declaration**

I declare that I have worked on my diploma thesis titled “Foreign direct investments in Russian Federation” by myself and I have used only the sources mentioned at the end of the thesis. As the author of the diploma thesis, I declare that the thesis does not break copyrights of any their person.

In Prague on 6<sup>th</sup> April

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Tatiana Khvostova

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# Foreign direct investments in Russian Federation

## Abstract

The thesis focuses on the analysis of the key attractiveness factors influencing FDI inflow into the Russian economy and provides overview of FDI from the perspective of its determinants.

The theoretical part of the thesis is dedicated to the main aspects of FDI, such as definition and types, positive and negative impact of FDI, positive and negative effects of the activities of transnational corporations in developing countries, sectoral structure of Russian Federation and the main determinants of attracting FDI.

Practical part starts with analysis of the impact of FDI on the economic development of Russian Federation. Moreover it focuses on challenges in attracting FDI to the Russian economy and analysis of the global investment trends. Also analysis of Russian economy transformation and attraction of FDI by sectors of the economy was performed. Furthermore, the thesis deals with main attractiveness factors influencing FDI inflow into Russia and the development of selected macroeconomic indicators. In addition, an econometric model examines which factors have an impact on the FDI inflow into Russian Federation. Correlation analysis was also carried out with purpose to evaluate the strength of relationship between selected variables. In conclusion, the results of the thesis are presented.

**Keywords:** Foreign direct investment in Russian Federation, Russian Federation, Economic Attractiveness of Russian Federation, Economic growth in Russian Federation, Investment incentives in Russian Federation, GDP in Russian Federation, Inflation rate in Russian Federation, Unemployment rate in Russian Federation, Exchange rate in Russian Federation, Openness of the economy in Russian Federation.

# Přímé zahraniční investice v Rusku

## Abstrakt

Práce se zaměřuje na analýzu klíčových faktorů přitažlivosti ovlivňujících příliv PZI do Ruské ekonomiky a poskytuje přehled FDI z pohledu jejích determinant.

Teoretická část práce je věnována hlavním aspektům přímých zahraničních investic, jako jsou definice a typy, pozitivní a negativní dopady přímých zahraničních investic, pozitivní a negativní účinky činnosti nadnárodních společností v rozvojových zemích, odvětvová struktura Ruské federace a hlavní determinanty přitahování FDI.

Praktická část začíná analýzou dopadu PZI na ekonomický vývoj Ruské federace. Kromě toho práce se zaměřuje na výzvy při přilákání PZI do ruské ekonomiky a na analýzu globálních investičních trendů. Rovněž byla provedena analýza transformace ruské ekonomiky a přitažlivosti PZI podle sektorů ekonomiky. Analýza trendů se používá pro každý makroekonomický ukazatel a odhaduje budoucí hodnoty všech ukazatelů. Ekonometrický model navíc zkoumá, jaké faktory ovlivňují příliv PZI do země. Korelační analýza byla také provedena s cílem vyhodnotit sílu vztahu mezi vybranými proměnnými. V závěru jsou prezentovány výsledky diplomové práce.

**Klíčová slova:** Přímé zahraniční investice v Ruské federaci, Ruská federace, Ekonomická přitažlivost Ruské federace, Hospodářský růst v Ruské federaci, Investiční pobídky v Ruské federaci, HDP v Ruské federaci, Míra inflace v Ruské federaci, Míra nezaměstnanosti v Ruské federaci, Směnný kurz v Ruské federaci, Otevřenost ekonomiky v Ruské federaci.

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# 1. Introduction

The question of FDI is becoming increasingly significant in the scientific economic literature. Sustainable development of the national economy is usually positively influenced by foreign direct investment. Large number of states pursue policies to increase country's attractiveness and to raise encouragement for foreign direct investment. (Omoniyi, et al., 2011) Actually, foreign direct investment has both negative and positive aspects for developing economies, but there are still more positive ones.

Foreign direct investment is the main source of capital in developing countries. Economic theory declares that the inflow of international capital facilitates the efficient redistribution of resources, which in turn enhances economic growth. Therefore, FDI should be seen as an accelerator in the transfer of technology to developing countries from more developed countries.

In the economic articles FDI is considered as a factor that has a positive impact on economic performance in the host country. This impact is carried out through the development of new types of products, the entry of foreign technology, the introduction of new processes of foreign organizations, personnel training and the establishment of links between foreign and local markets.

Some studies have mentioned that foreign direct investment, combined with other factors, has a positive effect on the growth of economic indicators, while other studies have not found any significant impact, and some scientists supposed that foreign direct investment could have a negative impact on the state economy. (Letto-Gillies, 2005) In order to understand the concept of FDI, it is necessary to review their implications.

Economic growth and continuing development of the country are impossible without an effective investment policy, which involves not only domestic but also effective foreign investment. Foreign direct investment can be considered as foundation of economic development. It contributes to increasing the competitiveness of domestic production, accelerating economic and technological progress, expanding the country's export potential, increasing the output of high-tech and innovative products. Foreign capital can deliver to the country the achievements of scientific and technological progress and advanced managerial experience.

It contributes to the training of personnel who meet the requirements of a market economy and to the creation of new jobs. It is also helps to increase the level of employment and the removal of social tension. Therefore, in modern conditions it is important to stimulate the inflow of FDI,

which can help solve two problems: to reduce the deficit of capital within the country and facilitate the introduction of advanced technologies in production.

Since Russia joined the WTO (World Trade Organization), it has gained prospects for bringing domestic goods to foreign markets. In this regard, a number of problems appear. One of the most significant is the problem of investment policy. This means that the Russian Federation should focus on increasing the interest of foreign investors in expanding investments in domestic production. This will help to solve a number of problems related to improving adaptation to conditions in the foreign market, increasing the international competitiveness of Russian companies and increasing the welfare of citizens of the Russian Federation. From this it follows that the improvement and adjustment of the investment policy of the Russian Federation is a priority in terms of investment development. Foreign investment plays a significant role in financing the socio-economic development of Russia and the formation of investment potential.

The relevance of the topic is explained by the fact that attracting foreign investment is an objective necessity. Foreign investment plays an important role in the economy of any country, as it is caused by the international division of labor, by the development of international relations and by the integration of the state economy in the world economy. The attraction and effective use of foreign material and financial resources, advanced equipment, technology and managerial experience in the Russian economy is a condition for its stable functioning and development. The importance of the study is justified by Russia's need for the import of capital and technologies and their transfer to the real sector of the economy, as well as the fact that Russia has not yet developed effective mechanisms for modernizing national industry through FDI.

In the modern world, in conditions of growing instability of the external environment, Russia faced serious macroeconomic problems that require the formation of a new investment policy, the modernization of the material and technical base and the country's involvement in the world capital export market.

The work consists of introduction, theoretical and practical part and conclusion. The introduction presents the relevance of the study, objectives and research questions, methodology and research limitations. Theoretical part of the work is devoted to the disclosure of the concept of foreign direct investment. Practical part is devoted to the analysis of the influence of foreign direct investment on the economic development of Russia. Trend analysis of the main macroeconomic factors and statistical analysis of FDI inflows is also carried out. In conclusion, the results of the thesis are presented.

## **2. Objectives and Research Questions**

The main objective of this diploma thesis is to provide a comprehensive overview of the foreign direct investment (FDI) inflows in the Russian Federation from the perspective of its determinants. Furthermore, the thesis focuses on the analysis of the key attractiveness factors influencing the Russian foreign direct investment inflows and estimates which factors affect FDI inflows into Russian Federation.

Building on present work following research questions arised:

- What are the key attractiveness factors influencing Russian FDI inflow?
- How the development of macroeconomic indicators such as GDP growth, inflation rate, exchange rate, unemployment rate, trade balance and political stability index affect FDI inflows into the Russian economy?

The object of research is foreign direct investment of the Russian Federation as accelerator for the process of economic transformation.

The subject of the study is a system of economic relations arising in the process of attracting foreign direct to the Russian economy.

### **2.1 Methodology**

The diploma thesis is divided into the theoretical part, practical part and conclusion. The methods of analysis at the macroeconomic level, descriptive and comparative methods, trend analysis, statistical hypothesis testing and econometric model were used to achieve the objective of the thesis. The theoretical part provides a background for a practical implementation of knowledge reached during the selective research of secondary data. The main aspect of FDI, such as definition and types, positive and negative impact, and the main determinants of attracting FDI into the host countries, are reviewed within this chapter. The following part contains of a brief description of global investment trends and the transformation of the Russian economy. Based on the solid theoretical background, the practical part is build up. Secondary data are used in the study. The evolution of FDI inflows and analysis used annual data for the period 1998-2018. Furthermore, the thesis deals with key attractiveness factors influencing Russian foreign direct investment and the development of selected macroeconomic indicators. The trend analysis is used for each macroeconomic indicator and estimates the future values of

all indicators. In addition, the econometric model examines which factors affect FDI inflows into the country. Programs Gretl and Excel are used as the main statistical tools. The econometric model describes the progress of the relationship between economic indicators. The basis of regression analysis is the estimation of the coefficients of econometric models with a technique called Ordinary Least Squares (OLS). The degree of dependence is measured by correlation index. The aim of the correlation analysis is to evaluate the strength of relationship between selected variables. These economic indicators are then taken into account for deduction of a general conclusion, whether the decision-making of investors in the implementation of FDI influence these economic indicators used in the model or if other factors are important for them.

## **2. 2 Research limitations**

During my work on the thesis, the following research limitations arised:

- The diploma thesis does not examine the foreign direct investment outflows;
- The research study is conducted for a sample of 21 years;
- The model does not evaluate all determinants, which can influence the FDI inflow and investor's decision-making;
- Statistical analysis also includes only the basic statistical methods.
- The study doesn't evaluate the policies put in place by the government in the Russian Federation in order to attract FDI into the country.

## **3. Theoretical Part**

### **3.1. Definition and role of Foreign Direct Investment**

From a macroeconomic point of view, FDI is a special form of cross-border capital flows from one state to another, and flows are reflected in the balance of payments. From the microeconomics point of view, there are attempts to explain the reasons for the movement of investments across national borders from the perspective of the economic condition of the investor. These studies examine the consequences for investors on the activities of multinational companies, both in the country of origin of the investment and in the host country. (Dinkar ,et al.,2014)

According to the OECD benchmark definition, (OECD, 2009) foreign direct investment is a type of international investment made by a resident in one country (direct investor) in order to realize his long-term interest in an enterprise (an enterprise that is a recipient of direct investment), which is a resident of a country other than country of location of direct investor. The motivation of a direct investor is the establishment of long-term relations with a direct investment recipient company so that a direct investor can have a significant impact on the management of this enterprise. Long-term interest is shown when a direct investor owns at least 10% of the voting shares (or the equivalent giving the right to a similar share in the voting) at the recipient direct investment company. The direct investment process also allows to directly access the financial resources of the recipient company. The goals of direct investments differ from the goals of portfolio investments, in which investors usually do not seek to influence the management of the enterprise.

The share of FDI in the world economy changed significantly in the 70–90s of the 20<sup>th</sup> century - from 6% in the 1970–1974 to 31.3% in 1994. On average, in the modern economy, about 20–25% of the total investment flow is accounted for by FDI. (UNCTAD, 1999) Changes are associated with a number of factors, for example, with the development of the stock market. In the 1990s investments in the form of FDI were mainly received in Russia. Currently, as the stock market and financial sector develop, most of the investments are made in other forms. The jump in the share of FDI in the 1990s is probably connected with the inclusion in the investment market of the economies of the former socialist countries with their undeveloped stock markets. Although these investments often relate to cases where a non-resident investor or jointly acting investors acquire a resident enterprise (in whole or in part) to sell non-profit assets or restructuring with the subsequent sale of the enterprise. (OECD, 2009) However, from an OECD perspective, these actions are related to FDI.

Investments are an integral part in the development of the national economy; therefore, their scientifically based interpretation has significant theoretical and practical significance. A certain role in the classification of investments is occupied by foreign investments, which are one of the main forms of international capital flows. National economies of the countries of the world are not capable of balanced and efficient development without the participation of foreign investment. For quite some time now, the global political climate of trade and investment is far from being as favorable as during a period of rapid growth and development based on export expansion. In 2018, global flows of foreign direct investment decreased by 13% to \$ 1.3 trillion. (UNCTAD, 2019) Since the global financial crisis, this is the lowest level, indicating a lack of

growth in international investment in this decades. Demand for investments remains as high as ever, supply is reduced, and the market situation is much more tense than before.

A key characteristic of the modern global economy has been the movement of capital between countries and counterparties. Historically, the economy of each country in the world has its own characteristics, which allow, for example, to produce one type of product or service in some country cheaper or more efficiently than in others. Features of national economies are formed due to the features of legislation, the level of real effectiveness of laws, the socio-demographic situation in the country, etc. Given the free movement of capital among countries, companies, seeking to optimize their production, reinforce their positions, get into new markets, reallocate their capital and invest it in economic agents in other countries.

### **3.1.1 Types of Foreign Direct Investment**

Accordingly, investments are divided into domestic - made within the framework of 1 country, and foreign – made among countries. The identical countries can simultaneously make investments within the variety of foreign investments in other countries and accept them. Accordingly, there's an inflow of foreign investment and an outflow. There's the concept of netflow, which is that the difference between inflow and outflow. The value of foreign investment is employed in calculating the country's GDP.

In the formula  $Y = C + I + G + NE_{xp}$  (GDP = Consumption + Investments + Public Expenditures + Net Export) the amount of investment (I) is equal to the sum of domestic investment and external investment. Most states seek to attract and encourage foreign investment in order to strengthen productive capacities and sustainable development. At the same time, many countries are currently strengthening regulation of foreign investment, making greater use of industrial policies in strategic sectors, tightening screening and monitoring procedures, and thoroughly checking international companies. There remains a risk that some of these measures are taken for protectionist purposes. (Blonigen, et al., 2007)

Researchers distinguish the following types of FDI: (Baltagi, et al., 2007), (Hobdari, et al., 2009)

- Horizontal FDI - occurs when a company from an investing country acquires or invests in an enterprise of the same type and level in the technological chain in another country in order to increase its capacity;

- Platform FDI - occurs when FDI is produced with the aim of creating an enterprise that resales to third countries, i.e., such investments are made in order to optimize costs;
- Vertical FDI - occurs when a company from an investing country acquires or invests in an enterprise higher or lower level in the technological chain in another country.

Recently, states became more selective in issuing FDI permits for international mergers and acquisitions. UNCTAD (UNCTAD, 2013) analyzed 211 cereals most international transactions with a value of a minimum of \$500 million, which were canceled in the period 2008–2012. For the most part, transactions were stopped for economic reasons, but a significant number were also canceled due to regulatory issues, including competition, analysis of economic benefits and verification of compliance with national security requirements or for political reasons. The total gross value of these transactions was approximately \$265 billion. The share of these transactions among all canceled international mergers and acquisitions in 2012 amounted to about 22%, and in 2010 it reached a peak level of more than 30%. The most target industry during which transactions were canceled for regulatory or political reasons was mining.

According to the time of investment and placement of funds, one can distinguish short-term investments (investment for a period of up to at least one year), medium-term and long-term investments (investment period of more than 1 year). Most often, short-term investments contain investments in financial assets placed on the foreign stock market. Long-term investments involve investments in capital assets. (Abdel-Kader, et al., 1996)

According to the investment risk criterion, direct investments are divided from low-risk investments (guaranteed minimum income with a minimum risk level) to high-risk investments (maximum profitability related to high level of risk, frequently income generation is associated with speculative operations). (White, et al., 2006)

The direction of capital investment distinguish among direct investment and portfolio investment. Direct investment for the host have several advantages over portfolio investment. (Ekholm, et al., 2007) First, private sector activity is intensifying. Host companies receive a new impetus in their activities and complementary resources, and due to the multiplier effect they spread it to their counterparties within the country. Secondly, in some cases, access to new markets is simplified. Host companies get the chance to use the help of the investing company within the distribution of products. Thirdly, access to new technologies and management methods is facilitated. An investor company is usually interested in modernizing production and standardizing enterprise management technology. When receiving direct investment, the chance of reinvesting profits within the country is higher. Within the implementation of portfolio



investments - on the contrary, the probability of exporting profits to the country of origin is higher.

An additional positive effect for the host party is that the increase in entrepreneurial capital does not affect the volume of external borrowing.

The presence as a motive of a significant influence on the management of an enterprise or control over its activities is the main thing that distinguishes direct investments from international portfolio investments. The latter are characterized by attention of the investor mainly on the income received as a result of the acquisition and sale of shares and other securities, while it is about the impact on the management or control over the activities of the enterprise that is the subject of these investments. Direct investment relationships can cause long-term and stable financing and technology transfer so as to extend corporate production over time and maximize revenue. Portfolio investors do not seek to establish long-term relationships. The main factor determining making transactions on the acquisition or sale of securities is their profitability.

An important role within the the investment strategy is played by an affordable choice of investment areas. The implementation of long-term investment projects forms a promising macroeconomic structure of the country, changes in the internal (regional and sectoral) and external division of labor, corresponding to the country's niche in the global market structure.

In this regard, the future economic development of each separately taken country of the world should be considered in the context and tendencies of development of the world economic system.

### **3.1.2 Determinants of FDI inflows**

There are several views on the factors that attract FDI. According to the British economists D. Dunning and S. Lundan, the choice of investors a suitable "place" for investing their capital, explaining certain goals that can be combined by common characteristics in 4 groups: 1) Obtaining strategic assets of a given country. 2) Entering the market of the country that is the recipient of the investment. 3) Gaining access to its resources. 4) Increasing production efficiency. (Dunning, et al., 2008)

Investing in order to *obtain strategic assets*, first of all, makes it possible for the investing company to borrow innovative technologies from the recipient country. This can be done in two

ways: the acquisition of a high-tech enterprise or the organization of joint production with it. (Avdokushin, et al., 2007) Due to this, the investor acquires specific advantages over competitors or strengthens existing ones.

The second reason - *entering a new market* - is carried out with the aim of the closest possible location of production to the final consumer in order to avoid transport costs with overcoming customs barriers, as well as to adapt the characteristics of the goods to the preferences of customers. At the same time, thanks to foreign investment, dealer networks and firms are being created. The determining factors for attracting such investments are: the level of the economy and the income of the local population. The level of FDI in a given region depends on how high these indicators are. If these indicators are unattractive, the investor will prefer to directly export his goods. (Blonigen, 2005)

Investing in order to gain *access to the country's resources* is also one of the successful ways to minimize production costs. In fact, it looks like this: the investing party is involved in the development of a separate stage of the production process in the state, which has a resource comparative advantage, which is scarce for the investor. This can be both material and technical resources (mineral fuel, ores, structures, components, agricultural production), and labor resources (highly qualified, with special knowledge / cheap labor). A country with a large list of comparative advantages claims to attract large amounts of FDI.

The *increase in production efficiency* is achieved by the above methods, as well as by using an investment strategy - geographical diversification - in order to expand the company's activities, its presence in other countries and the possibility of using offshore preferences.

OECD experts in a study on the impact of FDI on development in the recipient country, identify 2 groups of factors that attract investors: 1) the expected return on projects; 2) favorable climate of the host country. (OECD, 2002)

The first group of factors mainly includes economic indicators, by which the investor can determine the possible profitability of the enterprise. First of all, what investors pay attention to is *the size of the market*. The fact that the business will be aimed at the wide available market opportunities, especially attracts investors. The larger the market, the higher the probability of sales. Typical indicators are usually production volumes and potential demand. The study also examines the GDP indicator of the recipient country, which can be used to determine the size of the domestic market.

The next indicator is *the cost of production factors*. The inflow of investments into the country is inversely related to the cost index, since when the cost of labor rises, the expectation of profitability of an enterprise with foreign capital decreases.

Another important variable in the investment sphere is labor productivity, which is usually calculated using the classical ratio of output to the number of employees (it means the amount of time spent and expenses on employee benefits). (Shash, et al., 2015) Some economists have noticed a significant impact of this factor on investor decision-making in favor of one or another country. (Woodward, 2001)

*The inflation rate* shows the state of the country's economy. According to its indicator, the investor can make an approximate forecast on how much his capital will depreciate in the event of investment, determining macroeconomic instability.

The second group of factors is a combination of political, economic and social conditions, on the development of which the duration and scale of the projects depends. (Zakirova, 2016) There are special indices that evaluate the investment climate on the other hand: *the index of perception of corruption, political stability, the index of ease of starting a business, the level of education and development of human capital*.

The annual statistics on *the corruption perception index* by region calculated by a group of economists from the Asian and African development banks. Based on this indicator, the investor can assume how diligently subsidiaries will operate or funded projects will be implemented. Unfortunately, it was revealed that not a single country approached the ideal score (100) of the corruption perception index in 2016. The world average score is 43, which indicates corruption in the public sectors of countries.

Potential risks in the recipient country for the investor can be determined using the euromoneycountryrisk tool. Based on political, economic, structural conditions, as well as access to capital, credit ratings, a rating is compiled. With euromoneycountryrisk, an investor can protect himself from any risks. (Euromoney Country Risk, 2019)

The Human Development Index - The Human Development Index will tell the investor whether he should make expensive, high-quality investments in a particular country. This index reflects the prevalence of the assessment of human capabilities over the indicator of economic growth, as the final criterion for assessing the development of the country. The human development index shows the general “picture” of the country on key aspects of human development: standard of living, duration and quality of education and GDP per capita. Arithmetically represents the

geometric mean of the normalized indices for each of the three dimensions. The higher the level of development of human capital in the country, the higher the quality of the country's labor resources, and therefore the higher the quality of investments.

A detailed idea of the investment climate and attractiveness of the country is formed by the "Doing business" report published annually by the World Bank, which presents the aggregate rating of the countries of the world in the sphere of creating favorable conditions for entrepreneurship by the authorities. The analysis is based on a set of indicators obtained by measuring and comparing legal norms, applied to domestic small and medium enterprises during their life cycle. (Doing business, 2017)

Thus, high economic indicators, but low institutional and infrastructural conditions and poor qualifications of local labor resources will attract low-quality investments, since in this case investors are only interested in cheap labor, lower costs and the possibility of marketing in a large market.

### **3.2 Positive and negative features of FDI**

Compared with local companies, the investor company benefits from foreign direct investment in the markets of the host country:

According to the eclectic paradigm of J. Dunning, this is due to the geographical location of its production in the host country, the absolute advantage in costs due to low prices of production factors, occupation of the market share in the country due to circumventing trade barriers and due to the effect of scale;

According to the theory of monopolistic advantages of Stephen Hymer and Charles Kindleberger, due to the specific advantage of the investing company, in order to overcome the advantages of domestic enterprises in the host country: marketing knowledge, access to financial resources, managerial knowledge, synergy of vertically integrated structure;

According to G. Johnson due to the technological knowledge and experience of the company; (Johnson, 1970)

According to R. Caves due to product differentiation; (Caves, 1971)

According to the theory of internalization described in the works of P. Buckley and M. Casson (Buckley, et al., 2009), D. Tees, S. Meiji, A. Rugman, due to savings in transaction costs

associated with the search for partners in transactions, the conclusion of transactions and the monitoring of their execution. (Rugman, 1980)

Thus, the cumulative effect of direct foreign investment can lead to an increase in the economic potential of a country, to its participation in international competition and to consolidation of its position in the world market.

Along with the positive effects of using foreign direct capital, the following losses are possible:

According to the Markusen – Horstmann – Venables model, (Markusen, 2004) with the decline in the welfare of national companies and their subsequent displacement from the market, since the domestic economy is small, which means that national enterprises cannot provide lower average costs due to economies of scale compared with multinational corporations (MNCs);

According to empirical research by J. Konings, (Konings, 2000) S. Dyankova and B. Hoekman, (Djankov, 2000) with the absence the positive effects of technology transfer and reduced productivity in national companies: foreign companies are pulling the most skilled workforce out of national companies, and the technological level of national companies is at such a low level that does not allow to effectively use advanced technology companies with FDI;

According to an empirical study by Beata Smarzynska, (Smarzynska, 2002) which confirms the fact that investors who enter the markets of host countries do not have high technologies, are not high-tech industries, and use standard, well-established technologies with which they find markets, crowding out national companies from the market;

According to the work of S. Kadochnikov and the results of empirical studies of B. Aitken and A. Harrison, (Aitken, et al., 1999) M. Haddad and A. Harrison, (Haddad, et al., 1993) which conclude that most companies investing in the host economy are not focused on reducing production costs and subsequent export of products, but on conquering the local market;

According to an empirical study by A. Kokko, (Kokko, 2004) which does not confirm the hypothesis of R. Findley about the high growth rate of technological progress in the importing country in case of technological separation of the investor from local companies.

According to the conclusions of Stephen Hymer, a foreign investor in the host country is most often an oligopolist or monopolist in any market that carries out FDI with the goal of stifling competition and maintaining market control. (Linder, 1992)

### 3.3 Balance of payments

It will be beneficial to characterize the relevance of direct investment within the general economic accounts of a country, within the balance of payments. The balance of payments is a statistical system through which economic transactions taking place within certain periods of time among the economy and the rest of the world can be systematically summarized.

The concept of the balance of international operations is most often found in the works of American economists as well as in IMF publications.

For example, in the fundamental work of M. Wasserman and R. Weir, the balance of payments is defined as “a statistical report on economic transactions between residents of one country, residents of other countries, a group of countries and international organizations.” (Wasserman, et al., 1965)

Currently, payment balances in most countries of the world are compiled in accordance with the recommendations developed by the specialists of the International Monetary Fund, which are issued in the form of the “Balance of Payments Manual“. According to the "Balance of Payments Manual" balance of payments is „Statistical statement that summarizes transactions between residents and nonresidents during a period.“ (IMF, 2009) It consists of the goods and services account, the primary income account, the secondary income account, the capital account, and the financial account.

The balance of payments records the payment transactions of the domestic economy with foreign countries in a given year. It compares incoming and outgoing payments and is based on the territorial principle.

According to IMF, the balance of payments is divided into three parts:

- Current account - exports and imports of goods and services, pensions paid abroad and abroad, unilateral transfers (gifts, inheritance),
- Financial account - import and export of capital,
- Change in international reserves.

Since mid-2014, new balance of payments regulations have been in force in EU countries. The revision was affected by three main themes: globalization, more detailed balance sheet processing and financial innovation. The audit guarantee coherence between external and domestic macroeconomic statistics.

The sixth edition of the 2008 PB is currently in force - the Guide to the Balance of Payments and the International Investment Position. This new edition has replaced the previous manual, which has been in force since 1993. The manual serves as a standard framework for collecting statistics on transactions and stocks between a specific domestic economy and the rest of the world.

The financial account of the balance of payments shows direct investments that reflect both investments abroad and foreign investments in the domestic economy, and which determine the degree of control and management of the company. In addition to 10% or more, reinvested earnings and other capital are included.

**Table 1. Conversion from BPM5 to BPM6**

	<i>BPM6</i>	<i>BPM5</i>
Current and capital accounts	Both credits and debits are registered with positive sign	Credits with positive sign and debits with negative sign
Financial account	Increases in assets and liabilities with positive signs, and decreases in assets and liabilities with negative signs	Increases in assets and decrease in liabilities with negative signs, and decreases in assets and increase in liabilities with positive signs
Financial account balance (so-called “net lending (+)/net borrowing (-)” in <i>BPM6</i> )	Is calculated as change in assets minus change in liabilities	Is calculated as change in assets plus change in liabilities

(Source: IMF, 2015)

The names of the financial account have been revised from “credits and debits” to “net acquisition of financial assets” and “net incurrence of liabilities” in BPM6, which means that independently for financial assets and liabilities all changes due to credit and debit entries are noted on a net basis. A negative sign shows a decrease in assets or liabilities and positive sign specify an increase in assets or liabilities. The financial account eliminates the balance of payments practice of presenting growth in assets as a negative entry (debit) in BPM6 and it is currently successive with the SNA and the Government Finance Statistics presentations. In

addition, in the current and capital accounts, gross credit and gross debt entries are filed with positive signs in the appropriate column. In BPM5, all debits were filed with negative signs.

### **3.4 Basic concepts of international capital flows**

FDI inflows can help the economy move from import substitution for stable growth, through the development of not only industries dependent on imported equipment supplies, but also related to them. In this occasion, the state should follow balanced foreign economic policy, when protectionism does not encounter with the development of the national economy.

The existing model of high-tech specialization is based on the fact that industrialized countries specialize in the production and export of high-tech goods, and developing countries predominantly resource intensive. With this specialization, investments are made in related sectors of the economy, which ultimately stimulates the flow of foreign investment in high-tech industries. In the framework of the theory of the international FDI movement, S. Hymer developed a model of monopolistic advantages (the theory of “protective investment”), which was later developed by Ch.P. Kindleberger, R.E. Caves, J.G. Johnson, R. Lacroix.

The theory of “defensive investment” by S. Hymer explains the reasons for foreign companies investing in obviously low-profit production under conditions of increased risk. It is assumed that the risks of a foreign investor are higher than those of domestic companies, since he works in a foreign country, where he does not fully know the specifics of the market, does not have a large number of connections, and may incur higher costs. Defining the competitive advantages of the company in the investment sphere as prerequisites for FDI, S. Hymer considers a foreign investor as a monopolist or oligopolist in a particular market. (Dunning, et al., 2008) Thus, through FDI, foreign investors seek to weaken competition and gain control in the markets of presence.

The eclectic model "eclectic paradigm" or the concept of OLI Paradigm (Ownership - Location – Internalization) of J. Dunning includes assumptions from other economic models that have been confirmed in practice. In accordance with this model, TNCs are profitable to carry out FDI if there are three main groups of advantages: “O-benefits” associated with the internal potential of the investing company, first of all, ownership of intangible assets that can be transferred within TNCs with minimal costs; "I-benefits" caused by the use of their own networks for promoting goods to foreign markets, including the spread of their own know-how and technologies without



going beyond the company; “L-benefits” provided by the recipient country (preferential taxation, stable legal system, developed infrastructure, etc.). (Dunning, 1988)

With the benefits of owning property (O) and internalization (I), the key for the company in deciding on the implementation of FDI will be the L-benefits that it can get outside its home country. Thus, in this model, the determining factor are the benefits that TNCs receive.

Turning to theoretical aspects in the study of ways to attract foreign capital, it should be noted quickly the growing role of knowledge capital. The knowledge capital model is considered in the works of J. Markusen in conjunction with the analysis of vertical and horizontal FDI. (Markusen, 1996) In accordance with the provisions of this model:

1. The creation of knowledge capital can be carried out in the parent company, while the transfer of knowledge to foreign units does not entail significant costs;
2. The creation of knowledge capital requires more skilled labor than the production of goods and services;
3. Knowledge capital can be simultaneously used in several divisions of the company (both in the country of origin of the investment and in the host country), which does not increase the cost of goods / services.

For vertical FDI, i.e. FDI implying geographical fragmentation of the production process, characterized by 1 and 2 positions. For horizontal FDI related to the production of similar goods both in the TNC-based country and in its foreign units, points 1 and 3 are characteristic.

The most detailed competitive advantages of TNCs were examined by M. Porter. Porter identified and classified the key success factors of TNCs in world markets (Competitive diamond): strategy, structure and rivalry of firms; demand conditions; factors of production conditions. (Porter, 1990) A combination of these factors can guarantee the success of capital expansion.

Additional factors are state policy and case. According to M. Porter, the advantages of TNCs that are not related to its core business, which provide supporting and related industries, are of particular importance. M. Porter determined clusters as “a group of geographically neighboring interconnected companies (suppliers, service providers, firms of related industries) and associated institutions (for example, universities, standardization agencies, trade associations) operating in a certain area, competing, but also cooperating with each other ”. (Porter, 2000) The development of a company within a cluster (interconnected industries) can cause a positive multiplier effect on investments.

TNCs have competitive technologies on the world market becoming an important factor affecting export investment. In his works, M. Porter repeatedly emphasizes the importance of the home country (country of origin) of TNCs engaged in the export of investments. From his point of view, the high level of economic development of the country stimulates the development of the company's competitiveness. Strong competition in the home country, work with world-class suppliers and consumers gives the company the opportunity to gain competitive advantages, which will be used in foreign markets. (Porter, 1990)

For Russia, the possibility of creating an innovative economy at the present stage under the conditions of sanctions is complicated by restrictions on borrowed capital against the background of an internal financing gap, as well as the difficulties of introducing own innovations to foreign markets. An important factor that can ensure the influx of FDI is the development of the cluster. Moreover, if the development of clusters in the country-innovation leader gives a synergistic effect, then for the recipient country, effective cluster development, on the one hand, is a prerequisite for increasing investment attractiveness, on the other hand, it should become part of an effective industry development strategy.

### **3.5 Transnational corporations (TNCs) as the main participant of the processes**

The term "multinational corporation" or "multinational company" as generally accepted began to apply only since the 1960s. One of the first who examined the TNC phenomenon in detail was Kh.V. Perlmutter (Perlmutter, 1969) (Chakravarthy, et al., 1985) and R. Vernon. (Behrman, 1971) (Schlunze, 1995)

Today, there are more than 20 definitions of TNCs, which makes it extremely difficult to objectively evaluate this phenomenon. Even in the official documents of the UN (United Nations) for a long time there was no clarity on this issue.

According to the definition of the United Nations Conference on Trade and Development (UNCTAD, 2009), TNC is a commercial organization that includes business entities located in two or more countries, connected to each other through a property structure or otherwise, but in so doing, that one or more of them can have a significant impact on the activities of others, in particular, due to the redistribution of knowledge, resources and separation of responsibilities. The definition of TNC does not depend on the country of origin, form of ownership (private, public or mixed) and the scope of the organization. (UNCTAD, 2000) Management practice of

TNC implies the presence of a common strategy and the implementation of a coherent policy by all the components of such an organization through one or more decision centers. The simpler and more concise working definition of UNCTAD is as follows: TNC is a commercial organization that controls assets abroad. (UNCTAD, 2001)

According to UNCTAD and OECD methodological documents, the structure of TNC should at least include two main elements: a parent company and a foreign branch. (UNCTAD, 2009), (UNCTAD, 2007) In addition, there are three principles of integration when creating TNC:

- 1) Horizontal integration - a combination of enterprises, producing the same product (Coca-Cola, Microsoft);
- 2) Vertical integration - an association of companies manufacturing products that are technologically interconnected: from the extraction of raw materials to the production of finished products (IKEA, oil companies);
- 3) Diagonal integration - the union of enterprises producing diverse products (General Electric) is the most common type of integration.

As mentioned above, the concept of foreign direct investment is closely related to the activities of TNCs. There are two main types of foreign direct investment that provide investors with access to foreign markets: 1) mergers and acquisitions; 2) greenfield investment.

In the first case, a foreign investor acquires an existing company (or a significant share in it). In the second case, he creates a business from the very beginning. (UNCTAD, 2008)

It is the “greenfield” investments that play the most important role at the beginning of the 21st century: on average, in 2003-2010, they account for 68% of the total global flow of foreign direct investment. Carrying out investments from scratch, TNCs expand the base of international production, which creates a platform for their further territorial expansion. Through mergers and acquisitions, the assets of the companies are redistributed and adapted to globalization conditions, but in the short term, they do not entail any direct increase in the accumulated capital in the host country. In general, the choice of a particular investment method is determined by the long-term strategy of each particular company, however, in one and the other case, a significant transformation of the global economic landscape is taking place. (UNCTAD, 2006)

The transnationalization of the world economy is a complex, multifaceted and largely contradictory process. It manifests itself in the increasing role of TNCs. Placing their production in different countries, TNCs: 1) facilitate themselves access to the markets of these countries, overcoming protectionist restrictions; 2) minimize transport costs, bringing production closer to

the main consumer; 3) provide themselves with access to natural resources; 4) reduce production costs (in one country - cheaper labor, in another - electricity); 5) provides a diversification of risks (crises with different powers take over different countries, somewhere there may be a strike, etc. - but, in general, this does not affect on the production process within the framework of TNCs) 6) extend the life cycle of their products. In turn, this allows to optimize logistics on a global scale and minimize the negative consequences of currency fluctuations.

In other words, the development of transnational business is at the same time the answer to the challenges of globalization, and the most important part of the globalization process itself.

Actually, the number of TNCs in the world increased from 35 thousand in 1990 to 53 thousand in 1996, then to 63 thousand in 2000 and to 82 thousand in 2009, and the number of their foreign branches increased from 147 thousand in 1990 to 450 thousand in 1996, to 622 thousand in 2000 and to 807 thousand in 2009. (UNCTAD, 2009)

If in 1990 each “parent company” had on average 4 foreign branches, now there are 10 of them. Obviously, this is due to the fact that the number of branches of each individual TNC is growing, which contributes to the formation of a transnational production network. In the process of its development, it covers an increasing number of countries, regions, industries, which in turn contributes to the international movement of goods, services and, of course, investment.

### **3.6 Negative effects of the TNCs activities in developing countries and the ways to minimize it**

The main task of the state is the development of the country's economy, therefore, the priority direction of investment regulation will be the impact on the effects of economic development.

Determining the degree of influence of international companies that are the main subjects of foreign direct investment on the development of countries requires the introduction of basic criteria. These criteria can be used to assess the relative level of well-being and its dynamics as a result of the influence of foreign investment.

The choice of certain parameters by which to assess its condition depends on the priorities of the leadership of a particular country. In other words, the state should clearly understand the priorities of economic policy.

Most of the negative general economic effects of foreign investment are associated with the destructive influence of their main subject (international corporations) on the structure of the

national economy and the labor market. The possibility of such an effect follows from two key features of these companies compared to local (Shenkar, et al., 2014):

- Possession of technologies providing higher labor productivity (Dinkar, et al., 2014);
- Difference in labor costs for the home country of the transnational corporation and the developing country.

These features give international companies the opportunity to win competition in costs and competition in the labor market with local manufacturers. In the absence of proper regulation, the processes of inflow of foreign capital can lead to negative consequences, therefore, the state's tasks to minimize the negative effects of foreign direct investment can be presented in the following form.

### **3.6.1 Income Differentiation**

The differentiation of incomes usually follows the growth of salaries of highly skilled workers and the incomes of company management. The effect may occur for some industries if the share of foreign capital and employed in these industries is significant in the national economy.

Many researchers focus on social stratification as one of the most significant destructive effects of the activities of international corporations. Since the supply of skilled labor in developing countries is generally not flexible, foreign direct investment in a relatively short period has a positive effect on the wages of skilled workers, leaving the unskilled labor market almost unchanged. In addition, income differentiation is increasing due to the growth of management income of foreign companies. (Xue, 2012)

Reduction of property stratification can be achieved by restructuring internal taxation, introducing a progressive tax scale. The obvious disadvantages of this approach include the growth of social tension and the growth of tax on economic agents, which may cause international companies to stop investing in their projects in this country.

The problem of property stratification is based on the problem of disproportionate development of economic sectors caused by the activities of transnational companies. One of the alternative ways to solve the problem of income differentiation is to stimulate domestic demand for the products of companies in the intermediate industries. (Industrial Development Report, 2018) By stimulating domestic demand, the state can achieve greater inclusion of national industries in

economic activity and increase their production volumes, which will lead to higher wages and redistribution of income in society.

### **3.6.1 Elimination of monopolization of the domestic market**

The effect of monopolization is characteristic of both portfolio investments and investments in new production oriented to the domestic market. UNCTAD in its report notes that the possibility of monopolizing the domestic markets of developing countries due to the underdevelopment of their antitrust institutions is one of the main reasons for foreign direct investment. (UNCTAD, 2012)

After gaining monopoly power, companies tend to set the price and output at a level that ensures monopoly profit, which, in conditions of average elasticity of demand, leads to a reduction in output and an increase in the price of products. Thus, the negative effect of such activities of TNCs will be expressed in displacement national companies from the market, increasing prices and reducing the supply of products.

To counter this effect, the state, using an anti-dumping policy, must ensure the establishment of minimum prices at the cost level of national producers. This will give them the opportunity to compete with an international company, gradually increasing their own labor productivity due to technological exchange from foreign companies to national ones. (United Nations, 2006)

The fight against the monopolization of the domestic market, in addition to legislative measures, may include stimulating internal competition (providing preferential credit and leasing conditions to national economic agents, state participation in property). In addition, more advanced institutions reduce barriers to entry into the industry and make the competitive environment more transparent, minimizing the risk of monopolies.

### **3.6.2 Issues of environmental degradation**

The environmental standards of developing countries are usually less well-developed, which pushes international companies to over-exploit natural resources, if it brings additional benefits. (List, et al., 2000)

If a company in a developing country exploits natural resources, then a set of legislative measures can be applied. Tighter regulation of environmental management will lead to the fact

that when organizing new production, the company will have to follow environmental safety standards, which will entail an increase in production organization costs for it. At the same time, the penalty for violation of environmental standards by an international company, multiplied by the probability of detecting a violation, should equal the costs of the company to introduce a more environmentally friendly way of production.

In addition to the difficulties of regulating companies' compliance with environmental standards, the discovery of the fact of violations is associated with certain difficulties and requires significant costs from regulatory authorities. Thus, the disadvantages of legislative control over compliance with standards are the high costs associated with the institutional support of legal regulation of environmental protection. (OECD, 2000)

### **3.6.3 Threats of economic and political independence**

Large corporations are increasingly acting as a real subject of economic policy. If the budgets of corporations are comparable with the budgets of the countries in which they conduct business, and if the employment of the population in these companies is a socially significant percentage, then they to some extent determine the policies of these countries.

The loss of independence by the state in economic decision-making is an indirect effect that must be mentioned, proceeding from its importance for theoretical research in the field of development economics and from its role in practical decision-making by the regulatory authorities of a country. (Griffin, et al., 1985) The possibility of its action is determined by the scale of investment.

### **3.7 Positive effects of the activities of international corporations in developing countries and the ways to maximize it**

It is also necessary to identify a group of parameters that state agents are able to maximize. These are the effects of economic development, such as the growth in the number of highly qualified personnel and the associated technological exchange, the development of infrastructure and the substitution of imports. (Dunning, et al., 2008) A more detailed study of the positive effects of economic development due to foreign investment and the possibilities for influencing them is presented below.

### **3.7.1 Infrastructure development**

Infrastructure development is usually the result of investments in new production. It affects industries related to direct production and processing and, in part, the service sector (transport services, energy supply, utilities)

In order to make maximum use of the positive effect of the growth of infrastructure, the state must create conditions for the costs of international companies to organize production and create infrastructure to be provided by products and services of local companies. Thus, it is possible to achieve significant development of several sectors of the economy at once (energy, construction, information and services). (United Nations, 2008) In addition, through legislative regulation of infrastructural development (stringent environmental standards, quality, functionality, and the possibility of reuse), the state can achieve a positive social effect.

### **3.7.2 Technological exchange and growth**

Technological exchange also acts as the effect of changes in profitability and as the effect of economic development. In the latter case, it finds its expression in the advanced training of personnel, and, consequently, in labor productivity, through the involvement of individual workers in the production process of a foreign company and their assimilation of the most advanced achievements. Technological exchange depends on the stage of production and industry. For low-tech industries, it can be insignificant, and for high-tech (when there is a significant technological gap between the host country and the home country) it is not feasible. (Pyka, et al., 2013)

As mentioned earlier, technological exchange can occur at two stages of the production process. Accordingly, the state can also participate in stimulating technological exchange at both stages.

As directions of stimulating technological exchange, one can propose a reduction in potential technological distance by investing in science, stimulating the growth of related high-tech industries.

Acceleration of technological exchange can be achieved due to the participation of the state in improving the skills of the workforce through the mechanisms of vocational education. It is also possible to create an effective system of knowledge transfer, training and research, including the involvement of foreign companies.



Similar conclusions regarding technological exchange were made by H. Wang. (Wang, et al., 2012) Using the oligopoly market model and the theory of cooperative and non-cooperative games, it was found that government intervention can accelerate the evolution of the market structure and increase public benefit. with proper intervention, a foreign investor may agree to an investment that maximizes technology exchange. The actions of the government, according to the authors, should be as follows:

- Direct stimulation of technological exchange by providing certain benefits to a foreign supplier
- Investment in R&D to maintain the domestic supplier at a high technological level

### **3.7.3 Salary growth in specific sectors**

The effect is typical for most developing countries for investments in industries with intensive use of skilled labor. This effect is practically not directly amenable to state regulation. The only thing that can be offered in this situation is an additional incentive for foreign companies to create highly paid jobs for citizens of a developing country. Accordingly, as measures to increase the wages of skilled workers, one can propose the acceleration of technological exchange, leading to an increase in labor productivity, in such amounts that would reduce the additional costs of the company due to an increase in the cost of labor. (Dachs, 2018)

This effect is directly related to the negative effect of the growth of property stratification, considered earlier, therefore, the optimization mechanisms for them should be considered jointly by the state.

### **3.7.4 Saturation of the domestic market and import substitution**

The effect is characteristic of investments in new production oriented to the domestic market. Foreign companies, opening the production of certain products within a developing country, can create a positive effect of import substitution. The actions of the regulator to maximize this effect may include both customs regulation in the direction of increasing import duties and tax regulation in the direction of softening the conditions of economic activity of companies arising to saturate the domestic market. (Helleiner, 1976)

If a branch of a multinational company is created to enter the domestic market, it is necessary to clearly distinguish between import substitution and the desire to monopolize the domestic

market. (Hitiris, et al., 1996) As mentioned earlier, foreign companies have a number of competitive advantages that allow them to monopolize the domestic markets of developing countries. In the second case, it is desirable to support domestic producers and restrict the activities of an international company, otherwise negative social effect can be achieved.

Thus, depending on the structure of national industry markets and the prospects for changing the competitive environment under the influence of international companies, directly opposite methods of state regulation can be applied.

### **3.7.5 Development of related industries**

If a foreign company uses intermediate products that can be produced by national enterprises, then its activity can serve as an impetus to the development of these enterprises.

As practical implementation measures, the following can be proposed:

- Reduction of tax burden for domestic suppliers (OECD, 2014)
- Counter investments in the development of intermediate manufacturers 200
- Contracts with international corporations. Such a contract may include the obligation of a multinational company to purchase a certain set of goods and services from local manufacturers when creating a new production in the developing country or an agreement on the supply of raw materials and equipment of local manufacturers for a certain time.

A separate measure to promote the products of domestic producers is customs regulation. (OECD, 2005) Import tariffs should be selected so that the costs of a foreign company for domestic raw materials are no more than the cost of importing these types of raw materials. Such regulation is complicated if the company is vertically integrated, since in this case even economically disadvantageous imports of raw materials from the company's own branches can be carried out. The entry of a foreign company into the national market can also serve as a source of development for industries located downstream of the vertical production chain. If the international production in question replaces the import of intermediate products into a given country, then the positive general economic effect is obvious.

### **3.7.6 Job creation**

Direct stimulation of technological exchange by providing certain benefits to a foreign supplier, investment in R&D to maintain the domestic supplier at a high technological level. On the one hand, FDI represents additional capital that can increase the demand for labor.

The main direct effect on employment as a result of an increase in the number of direct investors is the creation of jobs directly at enterprises with foreign investment. (OECD, 2002)

On the other hand, capital inflows in the form of FDI can lead to job cuts when it acts as a substitute for labor. The effect of labor substitution can occur, for example, as a result of the use by foreign investors in the production of high-tech equipment, the maintenance of which does not require a large number of employees.

### **3.8 Sectoral structure of the Russian Federation**

Modern Russia is an industrial and agrarian country with a mixed economy, which is a complex economic mechanism that has been formed on the basis of socio-economic development, the inter-district territorial division of labor and integration processes. The single economic complex of the country is represented by sectoral and territorial structures.

Sectoral structure is a set of branches of the economic complex, characterized by certain proportions and relationships. In the sectoral plan, the structure of the economic complex is represented by two areas - material production and non-production sphere. (Brealey, 2008)

The basis of the economic complex is the sphere of material production, which employs more than 2/3 of the total population employed in all spheres of economic activity.

The production sphere includes:

- industries creating wealth, industry, agriculture, construction;
- industries delivering material benefits to the consumer, - transport and communications
- industries related to the manufacturing process in the field of circulation, - trade, catering, logistics, marketing, procurement (Akopian, 1992)

Non-production sphere is a conditional name of sectors of the economy, the results of which take mainly the form of services. The International Monetary Fund allocates the following types of services: freight, other transport services, tourism and other services. Moreover, other services include relatively new types of business services related to entrepreneurship (professional, managerial, informational, personal, operational, banking, insurance, etc.) (IMF, 2003)

In Russia, in connection with its relatively recent entry into the path of market transformation, a slightly different classification applies. Non-production sphere includes:

- housing and communal services and public services,
- public transport; communication;
- health care, physical education:
- social security;
- education;
- science and scientific services;
- culture and art;
- lending, financing and insurance;
- public administration;
- defense and public order (Cornia, 2000)

In the sectoral structure of the economy, imbalances remain. Resource sectors of the economy are of great importance. Fuel sectors remain priority, while infrastructure and agro-industrial complexes are experiencing serious difficulties in their development. High concentration and monopolization of production remains. (Malle, 2013)

For the modern structure of the country's economy, a characteristic feature is the presence of not only industry, but also intersectoral complexes. Increasingly, there is a process of strengthening production ties and the integration of different stages of production. Intersectoral production arise and develop both within a single industry, and between industries with close technological ties. At present, such intersectoral complexes have developed, such as fuel and energy, metallurgical, machine building, chemical forestry, construction, agro-industrial, and transport. (Akopian, 1992) A more complex structure is distinguished by agro-industrial and construction complexes, including various sectors of the economy.

In the conditions of formation and development of market relations, infrastructure is becoming increasingly important. It plays a huge role not only in the design of the production process, but also in the development of the social sphere of the population, as well as in the development of the complexity of the economy and in the development of new territories. Depending on the functions performed, production and social infrastructure are allocated.

The manufacturing infrastructure continues the manufacturing process in the circulation sector and creates new value. It includes transport, communications, warehousing and packaging,

logistics, engineering structures, heating mains, water supply, communications and networks of gas and oil pipelines, irrigation systems, etc.

Social infrastructure includes passenger transport, a communication system for servicing the population, housing and communal services and household services for urban and rural settlements. (Frolova, 2016)

The structure of any national economy is subject to change and transformation. Russian industry structure is also changing over the years. The reasons for this can be both external and internal factors.

An important condition for the development of the Russian economy is foreign direct investment. Their influx helps to increase the technical level of production, attract foreign technologies, use world experience in management and marketing, integrate the Russian economy into the world economy, expand the tax base, and diversify export production. Foreign direct investment plays a significant role in financing the socio-economic development of Russia and the formation of investment potential.

Any modern state not only makes investments in various industries, but also tries to attract large international investors by all available means. And foreign investors must be sure that the recipient country has a favorable investment climate before choosing the form of capital investment.

## **4. Practical part**

### **4.3 Attraction of FDI by sectors of the economy**

According to numerous expert estimates, the change in the foreign direct investment indicator is explained by both the Russian foreign economic situation and the instability of a number of macroeconomic indicators of the domestic economy. (Asongu, et al., 2018) To identify factors that explain the movement of international capital in the Russian Federation, it seems necessary to analyze foreign financial flows by key sectors of the Russian economy.

#### **4.3.1 Mining sector**

Foreign investments in the Russian oil and gas industry represent vertical FDI in one of the stages of production. (Heinrich, et al., 2002) In this case, a foreign investor finances projects for further import of products into his country or to third countries. In the case of the Russian mining economy, such foreign investors include companies such as: Total (France), Eni Group (Italy), Sinopec (China), Royal Dutch Shell (Netherlands, UK), Statoil Hydro (Norway), Exxon Mobil (USA). (UNCTAD, 2007) It must be clarified that the listed companies simultaneously with vertical investments aimed at exporting petroleum products from the Russian Federation also make horizontal investments when delivering their products to Russian markets as well.

Despite the fact that the fuel and energy complex is the largest sector of the Russian economy and one of the most attractive from the point of view of investments and return on investment, the tough position of the government regarding foreign investments in the oil and gas industry significantly limits the flow of FDI in this area. (Watson, 1996) Over the past years, the industry has not risen above fourth in the overall ranking in terms of attracted foreign direct investment.

Despite the change in the political and economic conditions for doing business in 2014, most foreign oil and gas companies continued to invest in Russia. Due to the specifics of production cycles in the oil and gas sector, companies cannot sharply change their plans under the influence of political events and de-invest capital, which is currently concentrated in large projects.

A similar situation has developed in other oil and gas projects in the Russian Federation, in which foreign companies participate. So, Shell is a shareholder of Sakhalin Energy. The company's share is 27.5%, Gazprom has 50%, and Mitsui and Mitsubishi Corporation own 12.5

and 10% of the shares, respectively. (Owen, 2019) According to analysts, the matter is to suspend or delay the development of projects, but not to completely close them.

Sanctions against Russia also pose risks for Western companies in the oil and gas sector. Moreover, the US company Exxon Mobil may suffer serious losses associated with the delay in the implementation of the project with Rosneft for energy production in the Arctic. (Scheyder, et al., 2018) Serious delays in oil and gas production on the West Alpha platform in the Kara Sea may reduce both expected Exxon Mobil production and expected profit margins.

### **4.3.2 Financial sector**

Despite the high degree of protection against foreign investor interventions, the financial and insurance services sector has remained the largest recipient of foreign investment over the past years.

Despite the fact that since 2005 the volume of foreign capital inflows into the Russian banking sector has grown by more than 15 times, the industry as a whole remains highly risky. Among the key risk factors for a foreign investor can be identified as the lack of practice by most banks in publishing reports in accordance with international standards, the imperfection of the legal framework that fully protects the rights of creditors and owners, and the binding of corporate clients to certain banks. (Kuznir, 2016)

Moreover, the possibilities for foreign control over credit organizations of the Russian Federation remain limited through the establishment of a quota for non-residents to participate in the authorized capital, approval by the Bank of Russia of non-resident purchases of shares in Russian banks. The need for control over financial institutions is determined by the connection of certain banking institutions with industrial groups, individual companies, in particular, from the oil and gas sector. Often, such banks perform cash settlement functions for the structures to which they relate.

In general, foreign financial institutions and international banking groups, which for many years sought to establish themselves in the Russian market, faced serious restrictions that arose in the Russian market, despite the fact that the financial industry changed and became more accessible after Russia's accession to the WTO. Thus, according to estimates by Deutsche Bank, losses of European banks can reach 7.5 billion euros. At the same time, financial institutions such as UniCredit Bank, Raiffeisenbank, and Societe Generale, which have most actively developed

their business in Russia and may lose up to 1 billion euros, are in a particularly vulnerable position. (The Moscow Times, 2020)

### **4.3.3 Sectors that attract horizontal investment**

By definition, horizontal FDI is directed to exactly the same industry abroad, in which the investing firm operates in its own country. (Aizenman, et al., 2004) This definition forms the model of behavior of foreign investors in the Russian Federation. Often in such cases, a foreign investor duplicates his production in Russia and serves the Russian market using similar production methods.

In the mid 2000s the foreign direct investment segment related to horizontal investments began to expand gradually in new sectors of the Russian economy, especially those related to the service sector. In particular, investor activity in the wholesale and retail trade increased due to the vigorous activity of international retail chain operators such as Auchan, Metro, IKEA, REWE. (Deloitte, 2019) Since 2010, this sector has become the largest in terms of attracted foreign investment, taking second place in the overall ranking of sectors of the Russian economy for this indicator.

Other areas of the Russian economy that have attracted a significant portion of incoming horizontal FDI are real estate, the information and communication technology (ICT) sector, construction, and a number of high-value-added sectors, such as machinery and equipment, and healthcare. (UNCTAD, 2018)

It should be noted that the automotive industry is associated simultaneously with vertical and horizontal foreign investments made by foreign manufacturers such as Ford, Nissan, BMW. Despite the focus of their production on the Russian market, these manufacturers export products also to the markets of the CIS countries. It is this specificity of investment activity that led to a sharp decline in activity in the industry and in the manufacturing sector as a whole.

In general, the consequences of changes in foreign policy conditions cannot be equally interpreted for all sectors of the Russian economy where foreign direct investment is attracted. Thus, changes in the ruble exchange rate negatively affected the investment activity of companies such as Carlsberg, which froze investments in expanding new capacities and in building new factories in Russia due to a weakening Russian currency. (Carlsberg Group Annual Report, 2018) It was the sharp weakening of the Russian ruble that made Walmart finally abandon its network development plans in Russia.



At the same time, the current situation related to foreign policy instability and volatility of the ruble exchange rate did not affect the interest in the Russian markets of some foreign manufacturers of food products and equipment. So, in the Novosibirsk region, the arrival of new residents of the industrial and logistics park was recorded. It was the American company Mondelz International - the world leader in the production of chocolate, biscuits, candies and chewing gum, the British company Rexam PLC - the world's largest manufacturer of packaging for consumer goods, and also the Italian holding ARNEG - the largest manufacturer of equipment for retail. (Liuhto, et al., 2016)

#### **4.3.4 Venture capital investments.**

The indicator of the competitiveness of the national economy has always been the level of development of high technologies and attention to them from the investor. (Ford, et al., 2008) The increase in funding for this sector is associated not only with the revitalization of domestic venture investors, but also with the participation of foreign capital.

A high assessment by foreign investors of the risks of venture investment has limited the volume of financing projects at the seed stage (2%). Foreign investors continued to implement projects that were already at the expansion stage, where 78% of the total venture financing was directed. (De Mello, 1997)

#### **4.4 Trend analysis of macroeconomic factors**

The Russian economy continues to be in the process of transformation. At the same time, the consequences of the financial and economic crisis had a significant impact both on the dynamics and structure of the economy, as well as on the directions and applied set of instruments of economic policy. Under these conditions, the results of scientific developments quickly become obsolete and cannot be used for a long time in the analysis and forecast of current economic processes, which creates the need for constant close attention to the formation of new macroeconomic trends.

The Russian economy depends on many factors, both internal and external. Usually, the value of the gross domestic product is used to determine the potential of the economy and its development prospects for the future, therefore, each country should conduct statistical calculations in order to identify the dynamics of the gross domestic product.

### 4.4.1 Economic growth

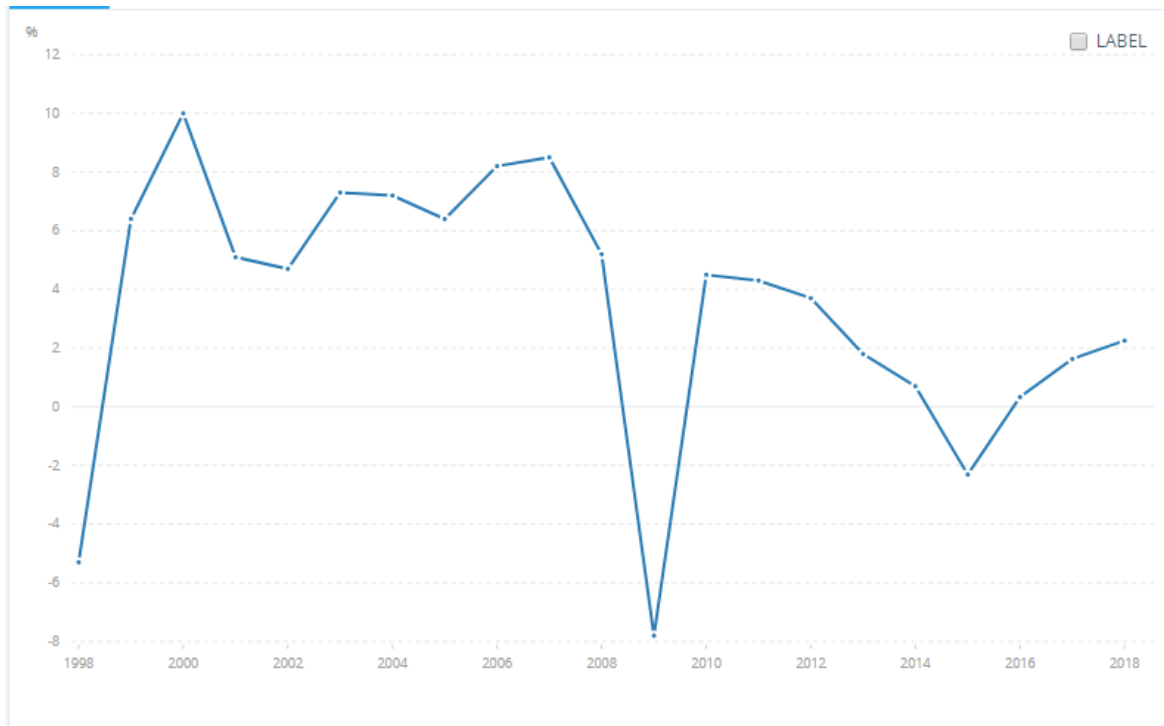
The growth rate of the gross domestic product of the Russian Federation for 1998-2018 is shown in Figure 4.

After the financial crisis of 1998, Russia's GDP began to grow steadily. Despite this, the nominal GDP of Russia in US dollars remained below its historical maximum until 2006. Real GDP did not reach 1990 until the end of 2007. (World Bank, 2015)

In August 2008, the global financial crisis hit Russia. Despite the fall in GDP in the IV quarter, overall growth of the GDP by 5.2% was achieved over the year. (Vedomosti Journal, 2010) However, in 2009, for the first time since the 1998 crisis, GDP fell immediately by 7.9%. (MK. Russian Weekly Journal, 2010)

In the next nine years, Russian GDP has not returned to pre-crisis growth rates. On the contrary, after some recovery from the crisis, the growth rates began to decline year by year: in 2010 - GDP growth of 4.5%, 2011 – 4.3 %, 2012 - 3.7%, 2013 - 1.8%, 2014 – 0.7 %, 2015 - -2.3 %, 2016 – 0.3 %, 2017 – 1.6 %, 2018 – 2.2 %.

**Figure 5. Annual GDP growth rate 1998-2018 [%]**



(Source: World Bank, 2020)

In the medium term until 2024, GDP growth is estimated by the expert community, the Ministry of Economic Development of Russia and the Bank of Russia positively, although estimates of independent institutions are more restrained: in 2020–2024, economic growth will not exceed 2.5%.

One of the most important factors for economic growth in the medium term is the increase in gross fixed capital formation. In order to increase investment activity and create favorable investment conditions, the Government of the Russian Federation developed and approved an Action Plan to accelerate the growth rate of investment in fixed assets and increase to 25% their share in gross domestic product by 2024, supplemented by a section on industry measures. (Action plan to accelerate investment growth in fixed assets and increase to 25%, 2018)

If the situation in Russia until recently remained favorable in terms of GDP growth rates, then per capita GDP was extremely low.

From table 2 it can be seen that over the period from 1998 to 2018 in Russia it grew by 6.2 times.

**Table 2. Total GDP per capita 1998-2018 [USD]**

Year	1998	1999	2000	2001	2002	2003	2004
GDP	1.835	1.331	1.772	2.100	2.378	2.975	4.102
Year	2005	2006	2007	2008	2009	2010	2011
GDP	5.323	6.920	9.101	11.635	8.563	10.675	14.351
Year	2012	2013	2014	2015	2016	2017	2018
GDP	15.435	16.007	14.101	9.314	8.745	10.751	11.289

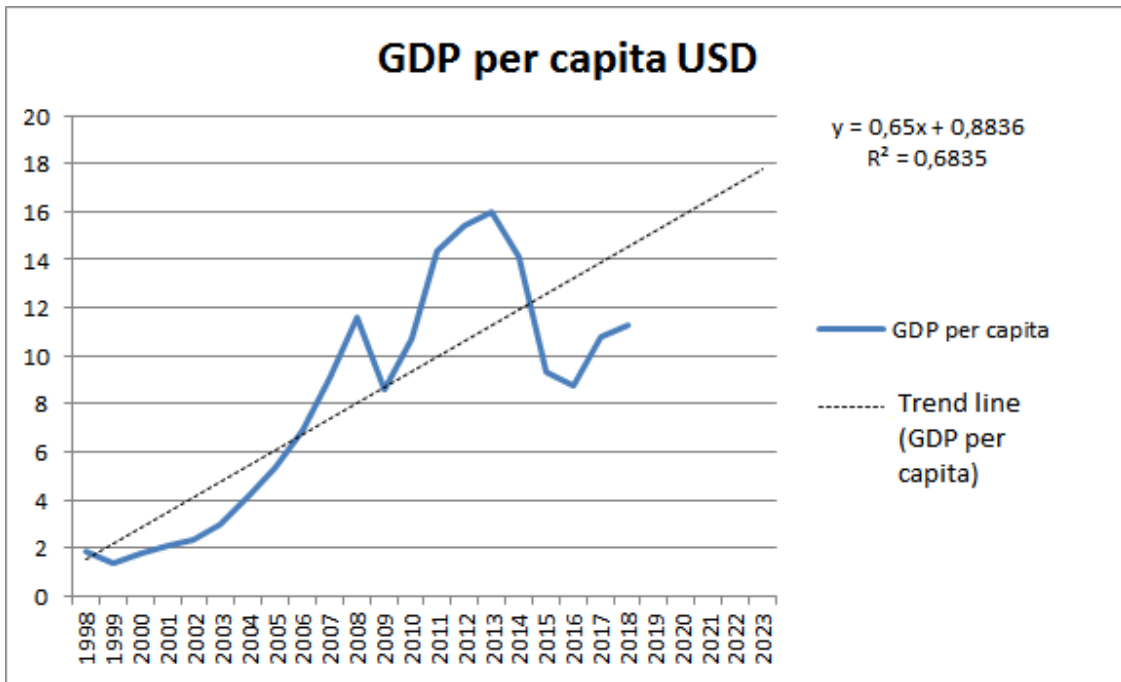
(Source: Data provided by Macrotrends, 2019)

A trend in exchange trading is called price movement over a certain period of time. In other words, a trend is a graphically depicted plot of rising or falling prices. (Lawrence, et al., 2009)

In this case, the trend line is used to predict future growth of GDP per capita in Russia.

Calculations are based on data from a table 2. R-squared is used to show how close the data are to the fitted regression line. If the  $R^2$  value equals to one, the regression line perfectly fits the data.

**Figure 6. Trend analysis of GDP per capita [USD]**



(Source: Data provided by Macrotrends, 2019)

The figure 6 shows the equation  $y = 0,65x + 0,8836$  and a  $R^2$  value of 0.6835. It can be concluded that 68 percent of variability of these values can be explained by this model. The model shows a tendency to unstable growth, but indicates moderate economic growth between 2019 and 2023. (Table 3)

Large infrastructure projects are projected to stimulate both public and private investment. Exports will decline as external demand weakens, but imports will recover in 2020. Unemployment is projected to increase, as demand for employment will only partially correspond to an increase in labor supply after raising the retirement age. Economic growth will remain stable, as private consumption will benefit from rising wages, household loans and employment that will follow a bold pension reform. (OECD, 2018)

**Table 3. Estimated future amount of GDP per capita [USD]**

year	2019	2020	2021	2022	2023
GDP per capita	15.183	15.833	16.483	17.133	17.783

(Source: Own calculation)

#### 4.4.2 Inflation

In general, inflation is considered to be a disturbance of the balance of basic macroeconomic variables, which is manifested primarily in price increases. It is therefore such an increase in the price level that results in a reduction in the purchasing power of money, that is, the purchasing power of money varies inversely in proportion to the price level. (Jurečka, et al., 2004) Because of these negative phenomena of inflation brings not only uncertainty in the price area, but people are afraid of it because it lowers the standard of living, so that incomes rise more slowly than prices.

In 2008-2009, Russia was in crisis, the forerunner of which was the American mortgage crisis. The peculiarity of this crisis was that it mainly concerned the banking sector. However, experts say that Russia is in a situation of a systemic crisis, which is a combination of economic, financial, institutional and social crises that have affected inflation. (Veslopolova, 2017)

Political events of 2014 gave a new direction to the development of inflationary processes in the country. (Kolesova, 2015)

2014 turned out to be a time when massive sanctions against Russia caused a depreciation of the national currency, which negatively affected the price level (not only for imported goods), but also the level of people's well-being. (Gurvich, et al., 2015)

The table 4 shows that in the period 1998–2016 in Russia there was a significant excess of the inflation rate relative to the norm even for developing countries.

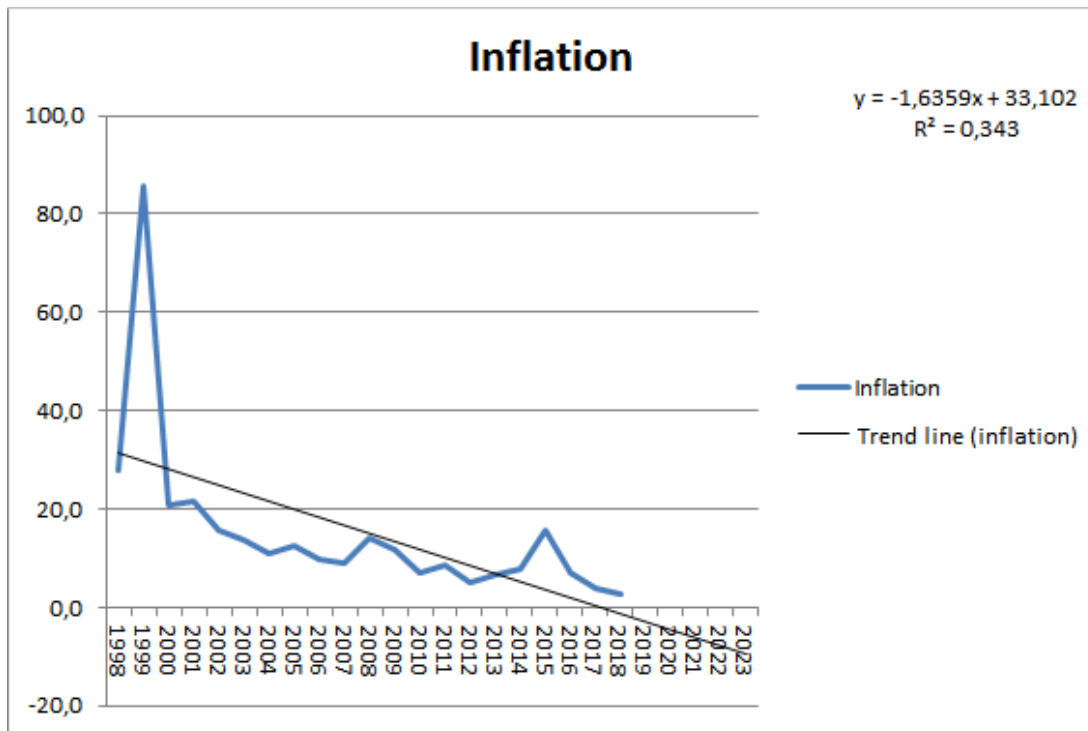
**Table 4. Annual inflation growth rate 1998-2018 [%]**

Year	1998	1999	2000	2001	2002	2003	2004
Inflation	27.7	85.7	20.8	21.5	15.8	13.7	10.9
Year	2005	2006	2007	2008	2009	2010	2011
Inflation	12.7	9.7	9	14.1	11.6	6.8	8.4
Year	2012	2013	2014	2015	2016	2017	2018
Inflation	5.1	6.8	7.8	15.5	7	3.7	2.9

(Source: Data provided by World Bank, 2019)

A linear trend line can be determined as a best-fit straight line which is utilized with simple linear data sets. R-squared will give information about how value measures the trend line reliability - the nearer  $R^2$  is to 1, the better the trend line fits the data. The calculation is based on data from table 3.

**Figure 7. Trend analysis of inflation rate [%]**



**(Source: Data provided by World Bank, 2019)**

The figure 6 shows the equation  $y = -1,6359x + 33.102$  and a  $R^2$  value of 0.343. It follows that only about 32 percent of variability of these values can be explained by this model and there is a lot of variability thus the deviation of the real data from the model can be up to 68 percent.

**Table 5. Estimated future inflation rate.**

Year	2019	2020	2021	2022	2023
Inflation	-2.8	-4.5	-6.1	-7.7	-9.4

**(Source: Own calculation)**

An important role in eliminating inflationary processes in the economy is played by price regulation, which is implemented through a number of mechanisms. The first mechanism is the need to control the production costs of natural monopolies, limiting the growth of tariffs on natural monopolies. The second mechanism is the importance of stimulating competition and modernizing the fuel industry, which leads to lower prices for fuels and lubricants. And the last third mechanism is to stimulate the supply of products, which leads to lower prices for them.

(Smalyuga, 2015)

The fiscal anti-inflation strategy developed by the Government of the Russian Federation for 2014-2018 was aimed at modernizing and improving the stability of the banking system of the Russian Federation, at social development and investment in human capital, updating the defense complex, innovative development of economic sectors, and inflation targeting. (Decree of the Government of the Russian Federation, 1995) The Central Bank of the Russian Federation pursues a monetary policy aimed at neutralizing the factors affecting the formation and development of inflationary processes in the state. Its task is to restrain the ruble against the dollar and the euro, both upward and downward. The main objective of the monetary policy of the central bank is to strengthen the influence of the national currency on international economic markets. (Smirnov, et al., 2015)

#### **4.4.3 Unemployment rate**

The unemployment rate in the country is an objective reflection of the state of the economy of the state and the prospects for its development. The smaller the numerical indicator of people without official work, the more stable the political situation, the more effective the functioning of social institutions.

As the transition to a market economy, labor market supply began to significantly exceed demand, the unemployment rate began to increase rapidly and reached 6-10% in the 1990s. However, the 1998 financial crisis exacerbated the situation and the number of unemployed in the country amounted to 8,902 people or 13.2%. (Gimpelson, 2019)

In the early 2000s, the unemployment rate in the Russian Federation, despite the relatively high rates of economic growth, was characterized by a downward trend. Negative consequences of the global economic crisis of 2008 led to an increase in unemployment to 8.3 in 2009.

In 2014 and 2017, a historically minimal unemployment rate of 5.2% of the economically active population was recorded, which in 2018 fell even lower to 4.7%.

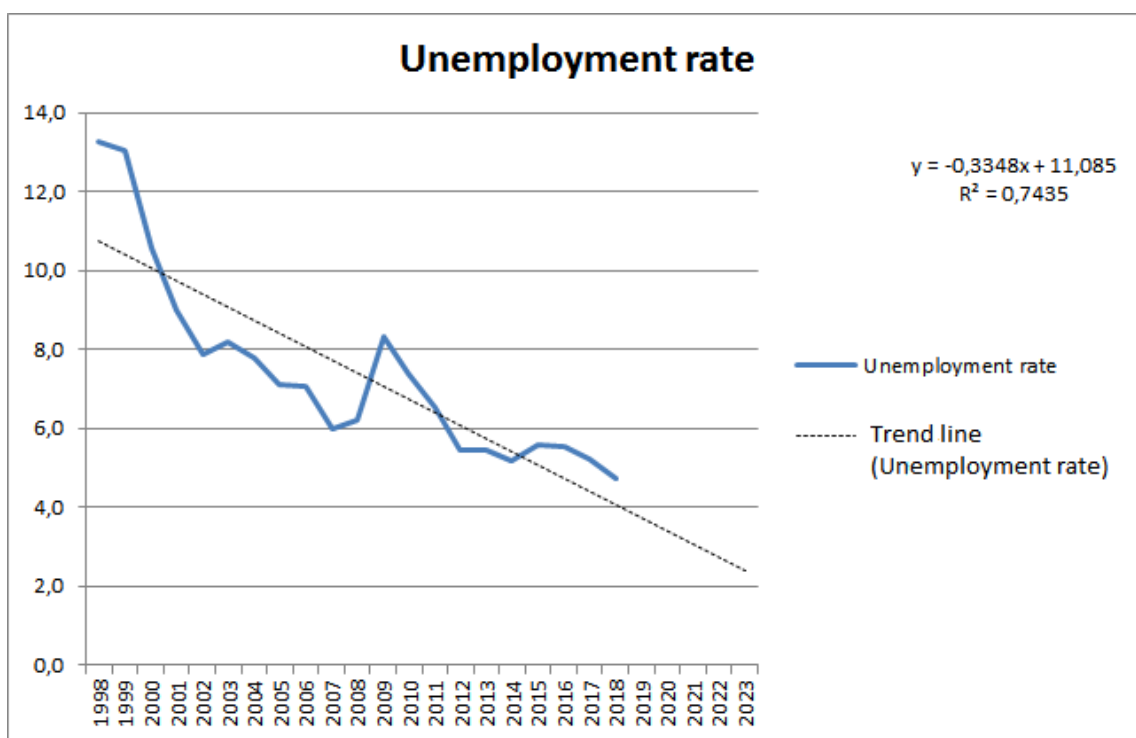
**Table 6. Annual average of general unemployment rate 1998-2018 [%]**

Year	1998	1999	2000	2001	2002	2003	2004
Unemployment rate	13.3	13	10.6	9	7.9	8.2	7.8
Year	2005	2006	2007	2008	2009	2010	2011
Unemployment rate	7.1	7.1	6	6.2	8.3	7.4	6.5
Year	2012	2013	2014	2015	2016	2017	2018
Unemployment rate	5.4	5.5	5.2	5.6	5.6	5.2	4.7

(Source: Data provided by World Bank, 2019)

Using the Excel, I created an unemployment trend line based on the data from the table 5.

**Figure 8. Trend analysis of general unemployment rate [%]**



(Source: Data provided by World Bank, 2019)

The figure 8 shows the equation  $y = -0,3348x + 11,085$  and a  $R^2$  value of 0.7435. It means that about 74 percent of variability of these values can be explained by this model. The model shows a decreasing trend.



**Table 7. Estimated future unemployment rate [%]**

Year	2019	2020	2021	2022	2023
Unemployment rate	3.7	3.4	3	2.7	2.4

(Source: Own calculation)

#### **4.4.4 Exchange rate**

In Russia, the growth of the ruble against the US dollar was observed over the past 10 years. During this time, it increased 2.5 times.

From an analysis of the dynamics of the ruble against the dollar, we can conclude about its sharp non-cyclical fluctuations. A significant increase in the value of the dollar in 2015 indicates instability of the national exchange rate and a change in the trends that took place before that time.

The maximum rate of the US dollar over the past 10 years was 01/22/2016 and amounted to 83.5913 rubles per \$ 1. The maximum value of the dollar for 2017 was fixed on 08/04/2017 and amounted to 60.75 rubles per \$ 1, and the minimum was 26.04 .2017 55.84 rubles per \$1. (Pound Sterling Live, 2019)

During times of crisis in the economy, the ruble showed a sharp change in one direction.

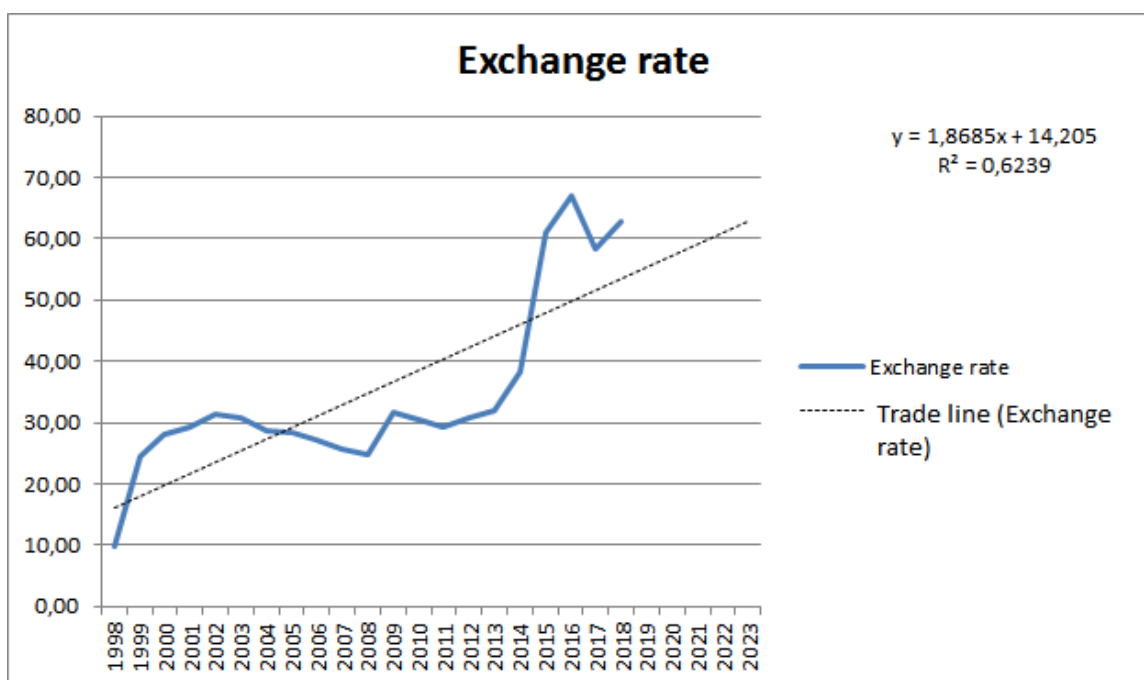
So in 2015 there was a situation characterized by a sharp devaluation of the ruble, accompanied by a weakening of the country's economy. The reasons for the fall of the ruble at this time were the fall in world oil prices, as well as the lifting of sanctions from Iran and the return of Iranian oil to the world market. (Vilisova, et al., 2017) The value of the national currency of the Russian Federation was affected by conflicts in Ukraine and Syria, which undermined the confidence in Russia from many developed countries and, consequently, caused the ruble to fall.

**Table 8. Average annual Exchange rate 1998-2018 [USD]**

Year	1998	1999	2000	2001	2002	2003	2004
Exchange rate	9.71	24.62	28.13	29.17	31.35	30.69	28.81
Year	2005	2006	2007	2008	2009	2010	2011
Exchange rate	28.28	27.19	25.58	24.85	31.74	30.37	29.38
Year	2012	2013	2014	2015	2016	2017	2018
Exchange rate	30.84	31.84	38.38	60.94	67.06	58.34	62.67

(Source: Data provided by World Bank, 2020)

**Figure 9. Trend analysis of average annual Exchange rate [USD]**



(Source: Data provided by World Bank, 2019)

**Table 9. Estimated future Exchange rate [USD]**

Year	2019	2020	2021	2022	2023
Exchange rate	55.31	56.34	58.96	62.40	66.54

(Source: Own calculation)

## 4.5 Statistical analysis of FDI inflows

The main goal of this chapter is to analyze the development of selected macroeconomic indicators for the influx of PSI into Russia based on an econometric model. Following indicators will be used for research: FDI net inflow, GDP growth, inflation rate, unemployment rate, exchange rate, trade balance and political stability index.

**Table 10. Relations between variables in the model**

	Name of the variable	Type of the variable	Unit
y1	FDI net inflows	endogenous	billion USD
x1	GDP growth	exogenous	%
x2	Inflation rate	exogenous	%
x3	Unemployment rate	exogenous	%
x4	Exchange rate	exogenous	LCU per US\$
x5	Trade balance	exogenous	% of GDP
x6	Political stability index	exogenous	-

(Source: Own elaboration)

The economic model based on the data presented is the following:

$$y_{1t} = f(x_1, x_2, x_3, x_4, x_5, x_6)$$

Based on economic model, econometric model is as follows:

$$y_{1t} = \gamma_{11} x_{1t} + \gamma_{12} x_{2t} + \gamma_{13} x_{3t} + \gamma_{14} x_{4t} + \gamma_{15} x_{5t} + \gamma_{16} x_{6t} + u_{1t}$$

where:

- $y_t$  – endogenous (or dependent variable) which will be explained with the use of exogenous variables
- $x_{1t}, x_{2t}, x_{3t}, x_{4t}$  – exogenous variables in time (or regressors) which will be used to explain the values of  $y_t$
- $u_t$  – stochastic variable (or residual term) that includes all variations of  $y_t$  which cannot be explained by the included exogenous variables

- $\gamma$  – parameter of the exogenous variables that represents a quantitative relationship between  $y_t$  and  $x_{it}$

The data set chosen for econometric analysis is the time-series data for the period from 1998 to 2018.

**Table 11. Data set**

Year	GDP growth (annual %)	Inflation (annual %)	Unemployment rate (%)
Variable	x1	x2	x3
1998	-5.3	27.7	13.3
1999	6.4	85.7	13
2000	10	20.8	10.6
2001	5.1	21.5	9
2002	4.7	15.8	7.9
2003	7.3	13.7	8.2
2004	7.2	10.9	7.8
2005	6.4	12.7	7.1
2006	8.2	9.7	7.1
2007	8.5	9	6
2008	5.2	14.1	6.2
2009	-7.8	11.6	8.3
2010	4.5	6.8	7.4
2011	4.3	8.4	6.5
2012	3.7	5.1	5.4
2013	1.8	6.8	5.5
2014	0.7	7.8	5.2
2015	-2.3	15.5	5.6
2016	0.3	7	5.6
2017	1.6	3.7	5.2
2018	2.3	2.9	4.7

**Table 11. Data set**

Year	Exchange rate (LCU per US\$)	Trade balance (% of GDP)	Political stability index
Variable	x4	x5	x6
1998	9.71	6.67	-1.09
1999	24.62	17.05	-1.4
2000	28.13	20.03	-0.72
2001	29.17	12.68	-1.4
2002	31.35	10.78	-0.72
2003	30.69	11.37	-1.19
2004	28.81	12.25	-1.51
2005	28.28	13.69	-1.27
2006	27.19	12.73	-0.91
2007	25.58	8.62	-0.86
2008	24.85	9.24	-0.75
2009	31.74	7.44	-0.97
2010	30.37	8.08	-0.93
2011	29.38	8.05	-1
2012	30.84	6.66	-0.82
2013	31.84	5.39	-0.74
2014	38.38	6.42	-0.94
2015	60.94	8.06	-1.03
2016	67.06	5.17	-0.95
2017	58.34	5.34	-0.67
2018	62.67	9.97	-0.82

**(Source: Data provided by World Bank, 2020)**

File with the source data from Microsoft Excel was imported into Gretl to examine the degree of correlation between the variables. To do this, correlation matrix was created. The correlation matrix is given in the table 11.

The diagonal of the correlation matrix consists of units that indicate the relationship of each variable with itself. Each row of this matrix contains information on the relationship of the corresponding variable with other variables. The closer the correlation coefficient to unity, the

stronger the correlation dependence between the variables. The presence of significant correlation coefficients, in absolute value exceeding 0.8 or -0.8, indicates the presence of multicollinearity.

**Table 12. Correlation matrix**

	y1	x1	x2	x3	x4	x5	x6
y1	1	0.0203	-0.3958	-0.5144	-0.0985	-0.4971	0.4522
x1		1	0.1112	0.0168	-0.2516	0.6415	-0.1067
x2			1	0.7622	-0.3328	0.5393	-0.4741
x3				1	-0.6188	0.5574	-0.4574
x4					1	-0.3416	-0.2626
x5						1	-0.3655
x6							1

**(Source: Calculation provided by Gretl, 2019)**

Based on the obtained model, it can be argued that there is a strong dependence between y1 and some variables such as: y1 and x2, y1 and x3, y1 and x5, y1 and x6. This dependence can be explained by the fact that these indicators are important for decisions of investors. For example, the relationship between the variables y1 (FDI inflow) and x2 (inflation rate) is an inverse relationship, which means the lower the inflation, the higher FDI and vice versa. The relationship between y1 (FDI inflow) and x6 (political stability index) is considered as a direct relationship, that is, the higher FDI, the higher political stability index. In the constructed correlation matrix there are no variables higher than 0.8 or -0.8 from which it follows that multicollinearity between the variables was not revealed in the model.

In order to estimate the unknown parameters in a linear regression model Ordinary least squares (OLS) method will be used. Parameters are estimated by Gretl and by the formula  $(X^T X)^{-1}X^T y$ .

**Table 13. Matrix X and vector Y**

X	x1	x2	x3	x4	x5	x6	y	y1
	-5.3	27.7	13.3	9.71	6.67	-1.09		2.761
	6.4	85.7	13	24.62	17.05	-1.4		3.309
	10	20.8	10.6	28.13	20.03	-0.72		2.678
	5.1	21.5	9	29.17	12.68	-1,4		2.847
	4.7	15.8	7.9	31.35	10.78	-0.72		3.473
	7.3	13.7	8.2	30.69	11.37	-1.19		7.928
	7.2	10.9	7.8	28.81	12.25	-1.51		15.402
	6.4	12.7	7.1	28.28	13.69	-1.27		15.508
	8.2	9.7	7.1	27.19	12.73	-0.91		37.594
	8.5	9	6	25.58	8.62	-0.86		55.873
	5.2	14.1	6.2	24.85	9.24	-0.75		74.782
	-7.8	11.6	8.3	31.74	7.44	-0.97		36.583
	4.5	6.8	7.4	30.37	8.08	-0.93		43.167
	4.3	8.4	6.5	29.38	8.05	-1		55.083
	3.7	5.1	5.4	30.84	6.66	-0.82		50.587
	1.8	6.8	5.5	31.84	5.39	-0.74		69.218
	0.7	7.8	5.2	38.38	6.42	-0.94		22.031
	-2.3	15.5	5.6	60.94	8.06	-1.03		6.852
	0.3	7	5.6	67.06	5.17	-0.95		32.538
	1.6	3.7	5.2	58.34	5.34	-0.67		28.557
	2.3	2.9	4.7	62.67	9.97	-0.82		8.784

(Source: Own elaboration)

New econometric model is:

$$y_{it} = UV + \gamma_2 x_{2t} + \gamma_3 x_{3t} + \gamma_4 x_{4t} + u_{it}$$

Estimated econometric model is:

$$y_{it} = 171.660 + 0.6384x_1 - 0.537x_2 - 8.636x_3 - 1.127x_4 - 2.614x_5 + 26.25x_6 + u_{it}$$

### 4.5.1 Statistical verification

Checking statistical significance will help to ensure that the data is not misleading. From a mathematical point of view, it will show whether the difference is significant enough.

For example, a significance level of 0.05 means that no more than a 5% probability of error is allowed. If the p-value is less than a given level of statistical significance, it can be concluded that the null hypothesis is incorrect, and proceed to consider an alternative hypothesis.

**Table 14. OLS, using observations 1998-2018 (T=12), Dependent variable: y1**

	Coefficient	Std. Error	t-ratio	p-value	
const	171.660	30.9329	5.549	<0.0001	***
x1	0.638472	1.32507	0.4818	0.6374	
x2	0.537058	0.328999	1.632	0.1249	
x3	-8.63621	3.46134	-2.495	0.0257	**
x4	-1.12731	0.350044	-3.220	0.0062	***
x5	-2.61462	1.73861	-1.504	0.1548	
x6	26.2508	15.9790	1.643	0.1227	
Mean dependent var.	27.40738		S.D. dependent var.	23.46188	
Sum squared resid	3173.313		S.E. of regression	15.05540	
R-squared	0.711758		Adjusted R-squared	0.588226	
F(6, 14)	5.761714		P-value(F)	0.003334	
Log-likelihood	-82.48680		Akaike criterion	178.9736	
Schwarz criterion	186.2853		Hannan-Quinn	180.5604	
rho	0.132775		Durbin-Watson	1.699441	

**(Source: Calculation provided by Gretl, 2019)**

The results from Gretl output estimation confirm relations between the chosen parameters for the model and foreign direct investment inflow in Russian Federation. There are not all variables statistically significant in the model. Statistically significant variables are: constant with p-value less than 0.05 (tested at a significance level of 5%), explanatory variable  $x_3$  with p-value 0.0257 and explanatory variable  $x_4$  with p-value 0.0062. According to F-statistic and a p-value, the model as whole is also statistically significant.

$R^2$  is used to understand how well our data fits the econometric model or how well the regression line approximates the real data points. It is an important statistic that confirms our model's *goodness* of fit. The rule states: the higher the R-squared, the better model fits the data. In



accordance with our result for  $R^2 = 0.711758$  we may conclude that 71.18% of the variation of  $y$  (FDI inflow) is explained by the regressors  $x_{it}$ .

#### 4.5.2 Econometric verification

The objective of econometric verification is to test normality and heteroscedasticity. The level of significance is  $\alpha = 0.05$ .

##### Test for normality of residual:

Normality test is used to check the normality of the distribution, i.e. that a random variable at the base of the data set will be normally distributed.

Hypothesis of test for normality of residual:

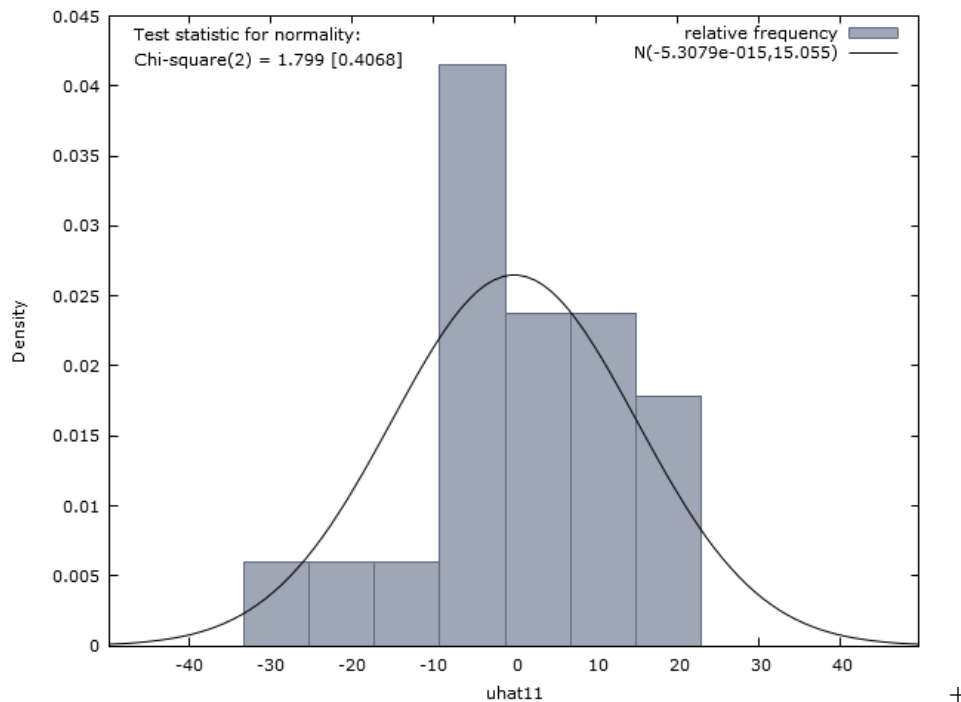
$H_0$  – normal distribution of residuals

$H_1$  – residuals are not normally distributed

p-value = 0.4068 > 0.05

Accepted  $H_0$  – random variables has normal distribution in the model.

**Figure 10. Test for normality of residuals.**



(Source: Calculation provided by Gretl)

### Heteroscedasticity (Breusch-Pagan test):

Breusch-Pagan test is one of the statistical criteria for checking for heteroskedasticity (i.e., variable variance) of random errors in a linear regression model.

Conditions of the test:

if  $p\text{-value} > \alpha$  then  $H_0$ : hypothesis holds – heteroscedasticity not present

if  $p\text{-value} < \alpha$  then  $H_1$ : hypothesis holds – heteroscedasticity present

$p\text{-value} = 0.781374$  and  $\alpha = 0.05 \Rightarrow p\text{-value} = 0.781374 > 0.05$

Conclusion: Accepted  $H_0$ , Homoscedasticity exists, the values confirm constant and finite variance.

**Table 15. Breusch-Pagan test for heteroskedasticity**

*OLS, using observations 1998-2018 (T = 21)*

*Dependent variable: scaled uhat^2*

	coefficient	std. error	t-ratio	p-value
const	4.46900	3.35232	1.333	0.2038
x1	-0.0861690	0.143603	-0.6000	0.5581
x2	0.0140894	0.0356550	0.3952	0.6987
x3	-0.158767	0.375120	-0.4232	0.6785
x4	-0.0158821	0.0379358	-0.4187	0.6818
x5	0.0229537	0.188420	0.1218	0.9048
x6	1.90891	1.73171	1.102	0.2889

*Explained sum of squares = 6.43069*

*Test statistic: LM = 3.215343,*

*with p-value = P(Chi-square(6) > 3.215343) = 0.781374*

(Source: Calculation provided by Gretl)

## 4.1 Analysis of the impact of foreign direct investment on the economic development of Russia at the present stage

The decrease in foreign direct investment in 2014 drew the attention of experts to the theoretical aspects of the impact of FDI on the development of the Russian economy. According to the results of theoretical studies, subject to the relevant policies of the recipient country of the investment and a sufficient level of economic development, FDI stimulates the attraction of new technologies and know-how, helps the formation of human capital, creates a more competitive business environment, and strengthens the development of entrepreneurship, a more socially responsible corporate policy. (OECD, 2002) These factors, in turn, contribute to economic growth, increase trade flows and strengthen the economic integration of countries, as well as the development of large companies and the opening of new industries. (De Mello, 1997)

The relationship between foreign direct investment and economic growth is complex and is often explained as a result of other factors, including those listed above. It can be distinguished three directions of the impact of foreign direct investment on economic growth: through the relations between FDI and foreign trade flows, side effects and other externalities for business in the recipient country, as well as a direct effect on the structural factors of its economy. (Bevan, et al., 2004)

Since the economic effects of foreign direct investment vary significantly depending on the sectors of the Russian economy, the relationship between foreign direct investment and trade needs to be considered in a broader context, and not focus only on an analysis of the impact of investment on export and import. The main advantage of foreign direct investment related to trade is the long-term effect of closer integration of the Russian economy into the global economy. In other words, trade and investment mutually reinforce each other and stimulate cross-border economic activity. In order to integrate into the global economy, the inflow of foreign direct investment is of particular relevance to developing countries, which, along with integration into the global economy, increase trade flows. (Makki, 2004)

The ability of the Russian economy to take advantage of foreign direct investment as a means of increasing exports in the short and medium term depends on the environment. The most obvious examples of FDI boosting exports are where foreign investment helps local markets capitalize on the current investment climate. Targeted measures in the form of creating special export zones, which allow taking advantage of foreign direct investment in the form of the country's integration into international trade flows, are receiving increasing attention. In many cases, these zones entail an increase in imports and exports. However, it is not clear whether the benefits of special export zones are superior to government spending on them, as well as the risks creating

unequal conditions for local and foreign business and increasing competition between states for the creation of these zones.

Nevertheless, the direct connection between the growth of foreign direct investment and the growth of trade flows remains unobvious, and the fact that foreign direct investment can be used as a substitute for imports is not confirmed. Certainly, FDI causes import growth, which is often justified by the fact that local companies acquire new skills for production, including through participation in value chains. (Froot, et al., 1991)

As for the externalities for business in Russia, as well as the effects that affect the structural factors of its economy, the growth of competition, the formation of new competencies, as well as the transfer of technologies and corporate practices can primarily contribute to their emergence. (Pessoa, 2007)

After the collapse of the USSR until 1998, the volume of foreign direct investment entering Russia did not exceed \$ 1.4 billion per year. The situation began to change dramatically as a result of the economic recovery of the 2000s, when the flow of FDI into Russia began to increase rapidly. Already in 2008, according to UNCTAD, Russia ranked sixth in the world in terms of attracted foreign direct investment and eighth in terms of GDP. The global economic and financial crisis of 2008-2009 changed the situation, displacing Russia from the position of a key global recipient of foreign investment. Foreign direct investment growth after the crisis wave resumed, and in 2013 Russia entered the top twenty countries - the largest recipients of FDI, taking third place (\$ 94 billion) after the United States (\$ 159 billion) and China (\$ 127 billion). (UNCTAD, 2008)

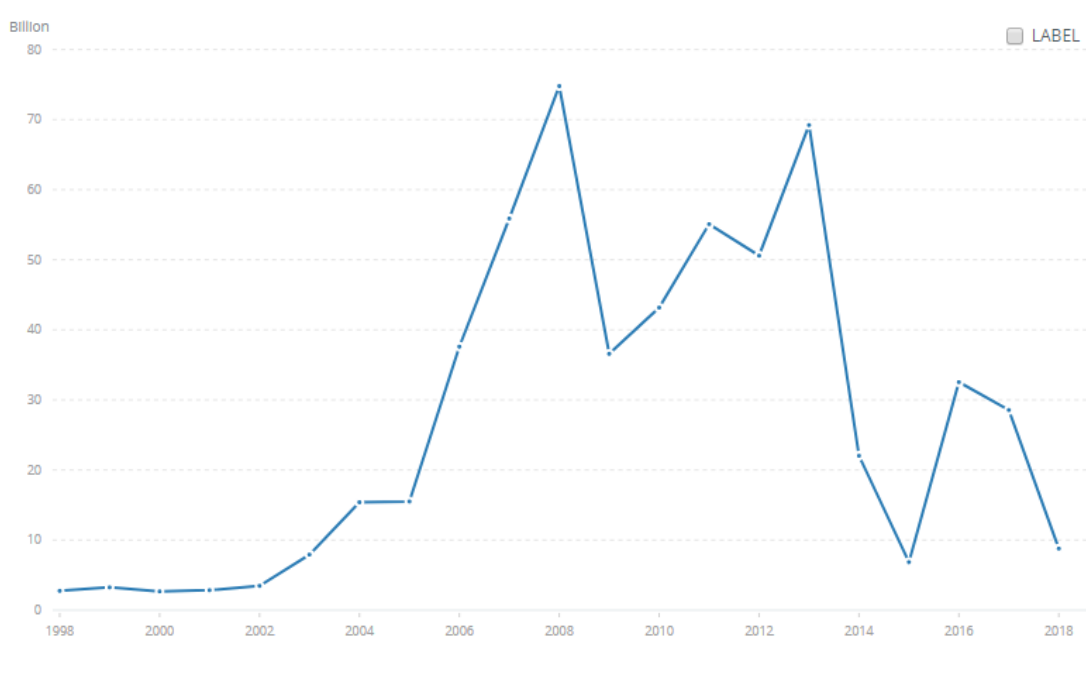
The increase in the level of foreign direct investment entering Russia until 2013 is primarily due to the increase in the volume of transactions related to mergers and acquisitions, in particular, the acquisition by “BP” of an 18.5% stake in “Rosneft” as part of the transaction related to the acquisition of “Rosneft” TNK-BP worth \$ 57 billion owned by the company in the British Virgin Islands. At the same time, the growth of foreign capital in Russia was recorded against the background of a general increase in interest in countries with rapidly growing economies (BRICS), the level of FDI in which amounted to 322 billion dollars in 2013, which is 22% higher than in the pre-crisis period (2008– 2009) This surge in investment activity is largely due to cross-border mergers and acquisitions.

However, according to the Bank of Russia, in the first quarter of 2014, foreign direct investment in the Russian Federation decreased by more than 3.2 times compared to the same period of 2013.

In accordance with the report published by UNCTAD, Russia was in tenth place in the world in terms of the volume of foreign investment received in 2016. (UNCTAD, 2017)

FDI flow into the Russian Federation in 2018 drops to \$13 billion. This was due to investors' concerns about the tense geopolitical situation and the slowdown in GDP growth. Russia is pursuing a policy of increasing investment in new types of economic activity, but the prospects for FDI growth by the end of 2020 are rather weak and do not exceed 2 percent. (UNCTAD, 2019).

**Figure 1. Trend of FDI inflow in Russian Federation.**



(Source: World Bank, 2020)

## 4.2. Key challenges in attracting FDI to the Russian economy

The intensification of foreign direct investment inflows in the country is the most important link in the implementation of the program to modernize the economy of the Russian Federation and attract new production and management technologies. In addition, the main goal of attracting FDI to modernize the country's economy is, first of all, to ensure their inflow into key industries for their structural renewal and sustainable development. Analysis of statistical data on the

volume of FDI, their structure and industry orientation showed that at present, the desired result has not been obtained both because the interests of foreign investors and the country do not coincide, and because of macroeconomic, political, and international factors that influence to attract FDI.

Despite the presence of rich natural resources in Russia, it has not been included in the list of the most attractive countries for investors for highly qualified personnel, a large-scale consumer market since 2014. (Kearney Foreign Direct Investment Confidence Index, 2017) In 2013, Russia ranked 11th in this ranking (see Table 2). According to the authors of the rating, Russia has lost attractiveness to foreign investors as a result of unpredictable government policies and government intervention in the country's economy. This rating is published annually by the international consulting company A.T. Kearney and compiled according to the calculated "index of confidence in foreign direct investment"

**Table 2. Ranking of countries according to A.T. Kearney index of confidence in foreign direct investment from 2013-2019**

country	Rank						
	2013	2014	2015	2016	2017	2018	2019
United States	1	1	1	1	1	1	1
Germany	7	6	5	4	2	3	2
Canada	4	3	4	3	5	2	3
United Kingdom	8	4	3	5	4	4	4
France	12	10	8	8	7	7	5
Japan	13	19	7	6	6	6	6
China	2	2	2	2	3	5	7
Italy	-	20	12	16	13	10	8
Australia	6	8	10	7	9	8	9
Singapore	10	9	15	10	10	12	10
Russia	11	-	-	-	-	-	

(Source: Kearney, 2020. Own processing)

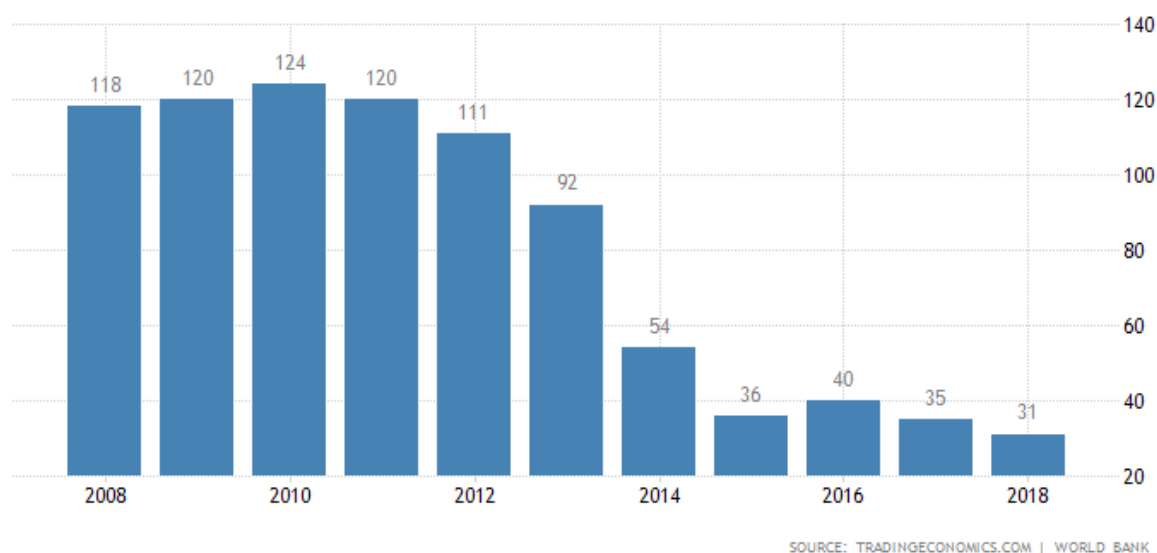
The question arises: why do foreign investors not invest their capital in the Russian economy? In order to answer this question, it is necessary to identify barriers to foreign business and consider the reasons for the unattractiveness of our country for foreign investors.

In recent years, the Russian economy has been developing under conditions of shortage of foreign direct investment due to the lack of a favorable investment climate for the entire economic space of the country. Consequently, foreign investors, considering the issue investing

in the country's economy, face a number of problems of a political, economic and legislative nature, instability of investment activity and high risks.

According to the authoritative rating of ease of doing business, in 2019 Russia took 31<sup>th</sup> place, having risen 4 positions in the ranking compared to 2018, and 89 positions compared to 2010. (World Bank, 2019)

**Figure 2. Dynamics of Russia's place in the Doing Business ranking for 2007-2018.**



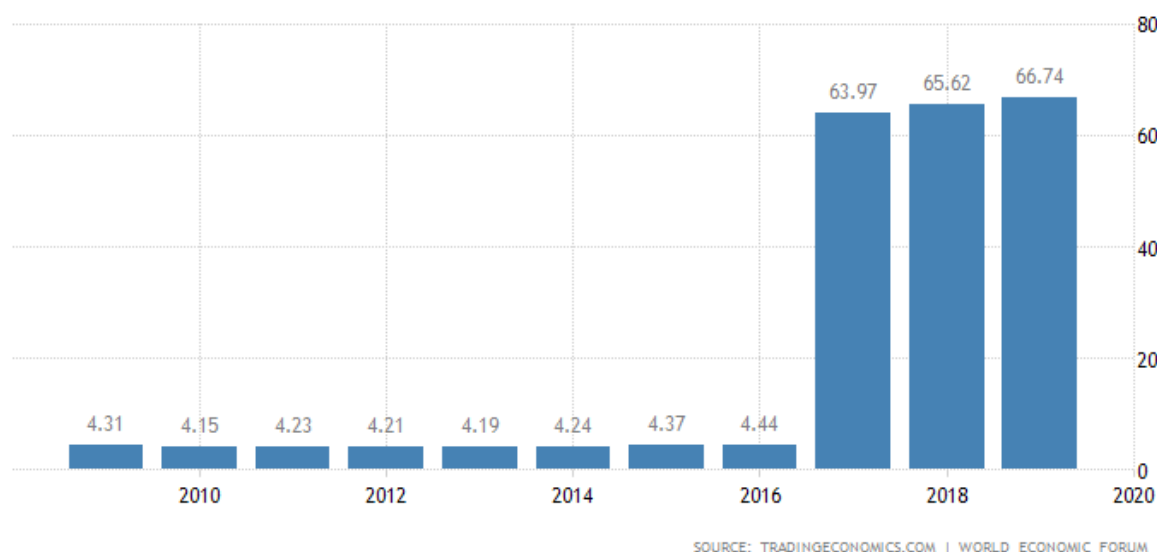
(Source: World Bank, Trading Economics, 2020)

It is also necessary to consider in detail the international rating compiled annually according to the Global Competitiveness Index. For 2019, Russia ranks 43<sup>rd</sup> out of 141, showing the highest position in the ranking over the past 10 years. (World Economic Forum, 2019)

The business comfort rating is evaluated by several indicators, including the following: ease of starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting minority investors, paying taxes, trading across borders and enforcing contracts.

The best conditions in Russia are created in business, related to the getting electricity (7<sup>th</sup> place in the world), registering property (12<sup>th</sup> place), enforcing contracts (21<sup>th</sup> place), getting credit (25<sup>th</sup> place) and dealing with construction permits (26<sup>th</sup> place). But in terms of ease of trading across borders Russia takes 99<sup>th</sup> place, in protecting minority Investors – 72<sup>th</sup> place, in paying taxes- 58<sup>th</sup> place, in resolving insolvency - 57<sup>th</sup> place and in starting a business- 40<sup>th</sup> place. (World Bank, 2020)

**Figure 3. The dynamics of the place of Russia in the ranking of The Global Competitiveness Report for 2009-2019**



**(Source: World Bank, Trading Economics, 2020)**

Despite the fact that Russia has risen in the ranking to 43rd place from 63rd in 2009-2010, the country's position in the global economy in conditions of low quality regulation, as well as imperfections of institutions remain at a low level. (World Economic Forum, 2019)

According to the rating, Russia's indicators differ significantly in different directions. The state took 43rd position mainly due to the fact that the macroeconomic environment (43rd place) significantly improved by 12 places, public finances remain stable (43rd place), innovation capability pillar improves significantly (+2.2 points, 32nd place), the quality of research institutes is increasing (9th place), due to constant R&D expenditure (1.1% of GDP, 34<sup>th</sup>) and especially the rapid spread of the Internet (39th place).

However, the country is hampered by the fact that the labour force in Russia is decreasing (-0.2 points, 54th place), although the level of education remains relatively high (38th -0.1 points) - the quality of education does not meet the needs of the modern economy, the financial system is also underdeveloped (55.7, 95th place). (World Economic Forum, 2019)

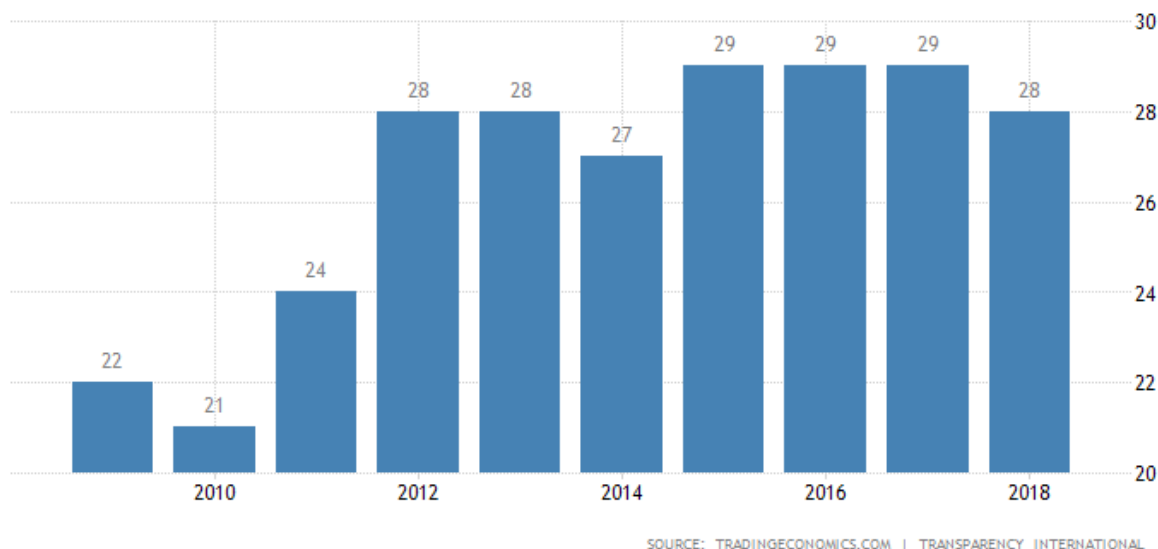
The factors listed above do not contribute to effective distribution of Russian resources and hinder the increase in the country's competitiveness in the world arena. National competitiveness is defined as the ability of a country and its institutions to create stable and sustainable rates of economic growth. The index is compiled according to the methodology of the World Economic Forum on the basis of statistics and the results of a global survey of leaders.



Thus, the complication of international relations in recent years (the imposition of sanctions, a decrease in world oil prices), the deterioration of the macroeconomic situation in Russia (rising inflation, unstable ruble exchange rate, high interest rates, restrictions on foreign trade in industry markets), Russia's low international position in authoritative ratings, inconsistency of the economic policy pursued at the national level - all this in recent years has affected the reluctance of foreign investors to invest in the country's economy, reducing investment projects and reducing the attractiveness of the domestic market. High investment risks and a low credit rating of Russia also negatively affect the investment climate in the country and hamper the flow of foreign direct investment.

An important issue affecting the size of the flow of foreign investment is the abuse of government officials and corruption. According to data from Corruption Perceptions Index in 2018 year, in terms of perception of corruption, Russia out of 176 places is at 131st. Russia in 2018 scored 28 points out of 100, which means high corruption in the state and economic sectors of the country.

**Figure 4. Russia's place in the ranking of Corruption Perception Index from 2009 to 2018**



**(Source: World Bank, Trading Economics, 2020)**

Russia has firmly established itself at the bottom of this rating of the countries of the world, which negatively affects the prospects for economic growth and increased investment attractiveness of the country. In addition to the barriers to foreign investment in the Russian economy considered, there are some problems that arise for foreign investors in the process of interaction with Russian business partners. Firstly, this is a low level of trust in foreign companies, which determines the effectiveness of communications, and the associated increase

in time spent on resolving issues. Secondly, this is a mismatch between the foreign and Russian style of doing business (the orientation of Russian entrepreneurs on a short-term result, the opacity and inconsistency of the decision-making process, the complexity of the internal decision-making process). To solve these kinds of problems, investors are introducing partner training systems, certification, verification systems, and monitoring the fulfillment of obligations, establish external control services, which leads to an increase in time and money costs.

Thus, in the Russian Federation there are many unsolved problems that complicate the prospects for the country to participate in the international exchange of capital in the context of increasing the efficiency of attracting and using foreign investment. In order for FDI to enter the domestic market, it is necessary to eliminate such problems as administrative barriers and corruption of state bodies, low efficiency of courts and state institutions, poor quality of roads, poor development of the financial market, insufficient innovation potential, trade barriers, lack of transparency in the interpretation and application of laws, low degree protection of property rights underdeveloped infrastructure, the elimination of which will ensure the influx of direct investment inward investment in the economy. (OECD, 2013)

## 5. Conclusion

The question of the study of factors affecting FDI remains relevant. Russia is now noticeably lagging behind in attracting FDI compared to the previous period of development, which is due not only to the dynamics of economic indicators of the country's development, but also to the aggravation of international relations. This study covers the period from 1998 to 2018 and considers factors that can influence the attraction of FDI in the Russian Federation.

In accordance with the target setting, the first section provides an exhaustive classification of the main types of investments and their types, defines the main functions of investments and their determinants, assesses the impact of FDI on the Russian economy, and considers the basic concepts of international capital flows. The role of transnational corporations as the main participant in the process was also considered and the effects of their influence were determined.

Based on the analysis of empirical studies in the work it was established the existence of relationship between FDI and the economic environment. In accordance with this statement, the effects of economic development and the effects of changes in the profitability of FDI in developing countries were determined, and during the study the effects of positive and negative direction within each group were identified.

The effects of economic development include institutional and general economic. Within the framework of the general economic effects, the positive effects of FDI were distinguished. It includes: infrastructure development, technological exchange, growth in the number of highly qualified personnel, import substitution, development of related industries and others. Negative general economic effects were also distinguished. It includes: an increase in the differentiation of incomes of the population, monopolization of the domestic market by transnational companies, irrational environmental management and environmental degradation.

Among the effects of changes in profitability, positive effects such as accumulation of investments and technological exchange and negative effects such as displacement and substitution of investments were distinguished.

It was concluded that the most attractive for foreign capital sectors of the Russian economy are the fuel and energy industry, trade, commercial activities and the food industry. Despite the growth of FDI in the service sector, the problem of the existence of a deformed structure of FDI towards the fuel industries remains, which contributes to the consolidation of the existing raw

material structure of both export and the entire economy. In addition, financial and insurance services sector has remained the largest recipient of FDI over the past years.

Other areas of the Russian economy that have attracted a significant portion of incoming horizontal FDI are real estate, the information and communication technology (ICT) sector, construction, and a number of high-value-added sectors, such as machinery and equipment and healthcare.

In relation to the Russian economy, which is characterized by a deformed sectoral and spatial structure of the distribution of FDI, special attention should be paid to the importance of local advantages as factors determining the decisions of investors regarding the directions and scale of investment.

One of the reasons for preserving structural imbalances is the lack of government measures, including regional, economic policies that prioritize the development of the Russian economy and implement a differentiated approach to attracting FDI.

Among the most attractive factors for foreign investors were distinguished presence of rich natural resources (oil, gas and metals), large market capacity, cheap and well-educated labor force and technology.

Moreover, the influx of foreign investment was affected by increase in the volume of transactions related to mergers and acquisitions.

The best conditions in Russia are created in business, related to the getting electricity, registering property, enforcing contracts, getting credits and dealing with construction permits.

However, there are a number of problems that impede the flow of foreign direct investment in Russia. The following problems include: low level of state and local government, inefficient legislation, corruption and economic crime, high monopolization and excessive administrative, technical and information barriers, unstable investment climate and many sectors closed to foreign investment.

The study made it possible to clarify the methodological tools, including a system of indicators and econometric models, to assess the contribution of foreign direct investment to the Russian economy, as well as evaluate the role of FDI as a factor in economic development in the national and regional economy.

Based on the trend analysis, predictions were made for the future development of GDP growth, inflation rate, unemployment rate and exchange rate. The analysis showed a trend in increasing the exchange rate, lower unemployment, lower inflation and stable GDP growth.

The statistical analysis examines the dependency of increase in FDI inflow to the GDP growth, inflation rate, unemployment rate, exchange rate, trade balance and political stability index.

Based on statistical analysis, only unemployment rate and exchange rate turned out to be statistically significant variables in the model. From this we can conclude that investors pay more attention to these factors when choosing a location for their investment.

The conducted correlation analysis showed strong dependence between FDI inflow and variables such as: inflation rate, unemployment rate, trade balance and political stability index.

Relationship between FDI and inflation rate, unemployment rate, trade balance can be considered as an inverse relationship and relationship between FDI and political stability index as direct one. As was mentioned above trend analysis showed a trend towards a decrease inflation rate and unemployment rate. According to the fact that inflation and unemployment are inversely related to FDI, it can be concluded that in the future FDI in Russia will have an increasing trend.

According to the results of calculations using an econometric analysis, it can be affirmed that random variables has normal distribution in the model and the values confirm constant and finite variance.

The use of qualitative, quantitative, statistical and econometric analysis helped in understanding this topic that is based on theory and observation.

The results obtained during the econometric analysis will be useful since they can be used to develop strategies aimed at attracting foreign direct investment in the regional economy.

According to the results of the thesis, the following conclusion can be drawn: the attraction and use of foreign direct investment is an objective necessity of each state. For the effective development of the country's economy, the use of only national funds is insufficient, therefore, in any case, the country will face the need to attract foreign investment.

As a result, Russia is still inferior to many countries with economies in transition in terms of attracting FDI, and differs from other transition economies in terms of attracted investments, but also in the deformed structure of these investments.

As a rule, it is stated that various indicators of economic development, such as, for example, market size, labor costs, access to raw materials and infrastructure development, are the most important cross-country factors for FDI.

Thus, to summarize, first of all, the urgent need for foreign direct investment for the Russian economy should be noted. The created difficult geopolitical situation in the world directly affects the world economy and slows down its development. This cannot be ignored when studying the problems of incoming investments of foreign investors and their future prospects, however, it can not also be argued that the current situation in the Russian Federation is fully related only to economic sanctions. To increase, or perhaps increase direct foreign investment in the Russian economy, first of all, it is necessary to solve the problems associated with the investment attractiveness of the country. As barriers are removed and the investment climate improves, the situation in the Russian economy will begin to change.

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