

# **Analysis of factors influencing foreign direct investment in Ukraine**

## **Introduction**

The relevance of the topic of bachelor thesis is due to the fact that in today's world foreign direct investment (hereinafter FDI) plays an important role in Ukraine's economy, as they not only transfer technology and capital, but also determine the dynamics, depth of economic growth and show the speed of economic ecosystem transformation nationally and globally.

Scientists such as Borenstein E., Mason D., Chakrabarti A., Dhirifi A., Ivashko O., Tsymbaliuk I. and many others have made a significant contribution to the study of foreign direct investment.

Despite the research of scientists and the benefits of investing in Ukraine, FDI inflows to Ukraine are not as large as in other countries in the region. Also, after analyzing the literature, it became clear that in the context of Ukraine there is insufficient research on various factors influencing FDI inflows.

## **Setting objectives**

The purpose of this bachelor thesis is to systematize the theoretical foundations, scientific and practical methods and tools for the analysis of factors influencing foreign direct investment in Ukraine.

In accordance with the goal, the following tasks were identified:

- consider and systematize the economic essence of foreign direct investment, their types, forms and significance for the state;
- analyze, based on foreign experience, economic, institutional and other factors influencing FDI;
- reveal the features of the investment position of Ukraine for the period 2012-2021;
- assess the dependence of foreign direct investment inflows in the context of Ukraine;

- substantiate the prospects and forecast of future investment income in Ukraine.

The object of study of the qualification work is foreign direct investment.

The subject of the research are methodological, theoretical and practical approaches and tools for the analysis of factors influencing the inflow of FDI to Ukraine.

### **Research methods**

The study used such research methods as analysis, synthesis (in the study of the economic essence of FDI), induction, deduction (at the stage of analysis of factors influencing FDI), as well as economic and mathematical methods, respectively (estimating the dependence of FDI inflows).

The practical significance lies in the identification and systematization of knowledge about foreign direct investment; assessing the impact of various factors on FDI inflows to Ukraine; forecasting future foreign investment inflows into Ukraine.

### **Results of the bachelor thesis**

The results of the analysis conducted during this qualification work allowed to determine the relevance of FDI in the context of Ukraine, to consider and systematize the economic essence of foreign direct investment, their types, forms and significance for the state. Thus, foreign direct investment is a category of cross-border investment in which a resident investor in one economy shows long-term interest and a significant degree of influence on the enterprise in the financial or nonfinancial sectors of the economy located in another economy. "Long-term interest" means the existence of a long-term relationship between a direct investor and a direct investment enterprise and a significant degree of influence on the management of the latter. Evidence of such a relationship is the possession of 10 percent or more of the company's voting rights or other equivalent assets, if the company operates in another legal entity [6].

FDI is divided into several types: by investor specialization (horizontal and vertical), by invested capital (share capital, reinvested earnings and other capital according to the balance of payments methodology), in terms of time (total volume for a

certain date and outflow or inflow during a certain period) and ownership (capital directly owned by foreign residents and capital controlled by foreign companies, the ultimate owners of which are residents of the domestic economy).

As for the importance of the country's economy, thanks to FDI, the recipient state receives technology transfer and know-how, increases average wages, stimulates economic growth, and creates a positive image on the world stage and more. However, there is also a negative impact on FDI, including an increase in regional imbalances, the displacement of domestic savings and a negative impact on the current account balance.

Also, based on foreign experience, economic, institutional and other factors influencing FDI were studied, which gave an understanding of the general problems of FDI, and further consolidate the theoretical material to find relevant factors of influence in practice. Thus, the work highlights the factors influencing the inflow of FDI into the country's economy and describes their impact in terms of theory, which will be further assessed in the context of Ukraine.

Among the factors influencing the inflow of FDI are the following:

1. Market size: the higher the market volume, the more effective investment in the country [8];
2. Regional trade agreements: new free trade areas can sometimes have a negative impact on attracting investment. The main reason for this situation is that new international trade relations lead to increased trade due to comparative advantages and increased cross-border investment, but to reduce the inflow of foreign direct investment between the parties to the agreement [7];
3. Exchange rate: it has been proven that the exchange rate plays an important role, as exchange rate fluctuations allow foreign investors to buy cheap assets and technologies of another country when its currency is weak [4];
4. Tax conditions (corporate income tax, personal income tax): investors prefer countries with a lower tax burden;
5. Labor costs: labor as one of the factors of production affects the overall (production) costs of the enterprise, so it is clear that the investor benefits from having a skilled workforce with low wages;

6. Institutional component of the state: investors are interested in the transparency of the rules of the country in which they want to invest, so less regulation by the authorities, confidence in protecting their rights and in case of conflict - trust in a fair court [2];
7. Other factors (corruption, living standards and human potential): it has been proven that the higher the standard of living, the more profitable to invest in this country, because then the population is happier and more motivated, which means people will work more productively [5].

In order to create a model of dependence and analyze the impact of each of the factors, some of them need to be displayed in numerical format, for this it was necessary to establish the following indicators that will reflect the numerical data of factors (see table 1).

Table 1 - Factors influencing FDI inflows and their corresponding numerical indicators

<b>Factor influencing FDI</b>	<b>Relevant indicator</b>
Market volume	the level of nominal GDP of Ukraine
Impact of the regional trade agreement	changes in the volume of trade between Ukraine and the EU after the creation of a free trade area in 2016
Exchange rate	exchange rate of hryvnia to dollar
Tax conditions	personal income tax and corporate income tax
Labor costs	average salary
Institutional component	World Justice Project (WJP) Rule of Law Index and ease of doing business index
The level of corruption	Transparency International Corruption Perceptions Index
Indicator of living standards and human potential	human development index

Source: formed by the author

The second section also graphically analyzed the factors influencing FDI inflows to Ukraine over the past 10 years, which allowed to systematize a large amount of research data and became the basis for further analysis of Ukraine's investment position. Regarding tax conditions, for the analyzed period of time, corporate income tax, as well

as the level of taxation of individuals have not changed significantly, so these indicators will not be analyzed in this work [3].

According to Figure 1, during 2012-2021, FDI inflows varied from year to year. After 2014, FDI inflows increased as a result of the signing of the Association Agreement with the EU, high inflation rate and sharp depreciation of the hryvnia, despite falling GDP and deterioration of other indicators.

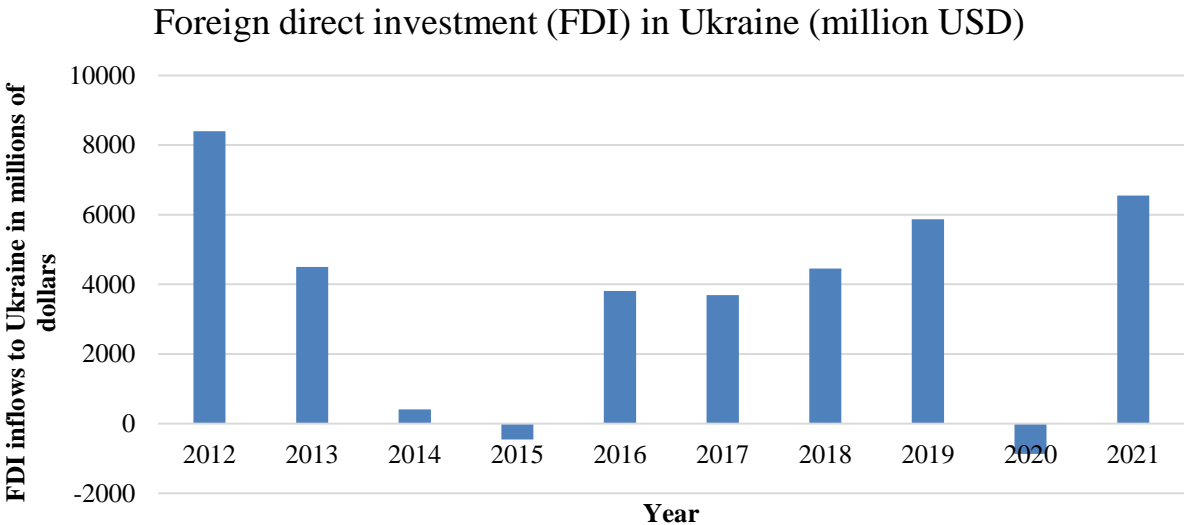


Figure 1 - Foreign direct investment (FDI) inflows to Ukraine (million USD). Source: [1]

After that, certain factors began to develop positively, which should have a positive impact on FDI inflows as well, but in 2017 there was a rapid decline in FDI inflows to Ukraine due to the newly created free trade area, which increased trade between Ukraine and EU countries. but at the same time negatively affected FDI flows.

Among the peculiarities of Ukraine's investment position, it is worth highlighting its positive and negative sides. The main advantages were low labor costs, skilled labor, fertile land and mineral wealth, the disadvantages of investing in Ukraine include the unstable political situation, high levels of corruption, the influence of the oligarchy, the monopolization of some sectors of the economy, and after February 24, 2022 war with Russia.

According to the results of the graphical analysis, the relevant conclusions were drawn, which show that several factors are important for estimating FDI inflows to Ukraine, including: GDP, exchange rate, regional trade agreement between Ukraine and the EU, average wages. While others do not show significant impact or are not confirmed by the relevant theory.

The last section initially created a model of multicollinear dependence of foreign direct investment inflows on factors of influence in the context of Ukraine, but some criteria were not met, which meant that the cumulative effect of explanatory variables on the dependent variable is insignificant. Therefore, regression equations were constructed for each of the influencing factors and the coefficients of determination were determined (see Table 2).

Table 2 - Dependence of FDI inflows to Ukraine on influencing factors

<b>Factor influencing FDI</b>	<b>Relevant indicator</b>	Regression equation	Coefficient of determination	Influence of the factor	Confirmation with theory
Institutional component	World Justice Project (WJP) Rule of Law Index	$Y = 2739,1255 + 4,0084 \cdot x$	56%	Positive	Yes
Impact of the regional trade agreement	changes in the volume of trade between Ukraine and the EU after the creation of a free trade area in 2016	$Y = 5967,34 - 0,094 \cdot x$	64%	Negative	Yes
Exchange rate	exchange rate of hryvnia to dollar	$Y = 1648,88 + 27,1 \cdot x$	54%	Positive	Yes
Labor costs	average salary	$Y = -0,323 + 1,84 \cdot x$	24%	Positive	No
Indicator of living standards and human potential	human development index	$Y = 194,58 - 228,9 \cdot x$	4%	Negative	No
Market volume	the level of nominal GDP of Ukraine	$Y = -2726,16 + 0,0448 \cdot x$	51%	Positive	Yes
The level of corruption	Transparency International Corruption Perceptions Index	$Y = 4282,48 - 65,61 \cdot x$	5%	Negative	No

Source: formed by the author

Thus, in the context of Ukraine, the following factors were statistically significant: institutional indicators, nominal GDP, which measured market potential, the US dollar exchange rate, and the factor of the regional trade agreement, which was measured by trade between Ukraine and the EU.

At the end of the third section, the prospects and forecast of future investment income were described. To my mind, in the event of a successful end of the war with Russia, Ukraine will have a nice chance to return to the radar of foreign investors and become a cluster for future FDI inflows, which can be a significant driver of postwar recovery and rapid economic growth.

As an example, it was used Israel, which after a grueling and destructive war for its independence also underwent a process of reconstruction, with its military-industrial complex became one of the main areas of filling the budget.

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