

Czech University of Life Sciences Prague

Faculty of Economics and Management

Department of Economics



Diploma Thesis

**Analysis of Foreign Direct Investment in the Czech
Republic**

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CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE

Faculty of Economics and Management

DIPLOMA THESIS ASSIGNMENT

Sandra Kalinová

Economics and Management

Thesis title

Analysis of Foreign Direct Investment in the Czech Republic

Objectives of thesis

The main objectives of the diploma thesis are to analyse foreign direct investment in the Czech Republic and to provide a comprehensive overview of the FDI inflows from the perspective of its determinants. Furthermore, the thesis focuses on the analysis of the key attractiveness factors influencing the Czech foreign direct investment inflows and estimates which factors affect FDI inflows into the Czech Republic.

Methodology

The methods of analysis at the macroeconomic level, descriptive and comparative methods, trend analysis, statistical hypothesis testing and econometric model are used to achieve the objective of the thesis. The theoretical part of the thesis is based on the descriptive and comparative methods of research. The main techniques used for the practical part of the thesis are qualitative and also quantitative approach such as the basic statistical methods and a trend analysis. The trend analysis is used for each macroeconomic indicator and estimates the future values of all indicators. The basis of regression analysis is the estimation of the coefficients of econometric models with the Ordinary Least Squares technique.

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Declaration

I declare that I have worked on my diploma thesis titled "Analysis of Foreign Direct Investment in the Czech Republic" 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 person.

In Prague on 30th March 2017

Sandra Kalinová

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Analýza přímých zahraničních investic v České republice

Souhrn

Hlavním cílem diplomové práce je poskytnout ucelený přehled o přílivu přímých zahraničních investic (PZI) v České republice a to z pohledu jejich determinant.

V první části práce jsou předloženy obecné definice PZI, popsány jsou také možné pozitivní a negativní dopady na hostitelskou zemi, které s sebou PZI nesou. Dále se práce zabývá determinanty definující atraktivnost země pro zahraniční investory. Následuje stručný popis globálních investičních trendů a transformace České ekonomiky. Na základě teoretických poznatků je vystavena druhá část diplomové práce.

Druhá část práce je zaměřena na analýzu vývoje přílivu přímých zahraničních investic v České republice na základě země původu investora a sektoru. Dále se práce zabývá klíčovými faktory ovlivňujícími příliv PZI do České republiky a vývojem vybraných makroekonomických ukazatelů. Následuje ekonometrický model, který zkoumá, jaké faktory mají vliv na příliv PZI do země. V závěru jsou prezentovány výsledky práce.

Klíčová slova: přímé zahraniční investice, Česká republika, atraktivnost, ekonomický růst, investiční pobídky, HDP, inflace, nezaměstnanost, směnný kurz, otevřenost ekonomiky

Analysis of Foreign Direct Investment in the Czech Republic

Summary

The main objective of this diploma thesis is to provide a comprehensive overview of the foreign direct investment (FDI) inflows in the Czech Republic from the perspective of its determinants.

The first part presents the general definitions of FDI and its possible positive and negative impacts on the host country. Furthermore, the thesis deals with the determinants defining the attractiveness of the country for foreign investors. The following part contains a brief description of global investment trends and the transformation of the Czech economy. Based on the theoretical background, the second part of the thesis is built up.

The second part focuses on analysis of FDI inflows in the Czech Republic based on the country of origin of the investor and the sector. Furthermore, the thesis deals with key attractiveness factors influencing Czech foreign direct investment and the development of selected macroeconomic indicators. Moreover, the econometric model examines which factors affect FDI inflows into the country. In the final conclusion, the results of the diploma thesis are presented.

Keywords: foreign direct investment, Czech Republic, attractiveness, economic growth, investment incentives, GDP, inflation rate, unemployment rate, exchange rate, openness of the economy

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1 Introduction

Foreign direct investment (FDI) has become a major phenomenon that marks the quality and character of the market environment of the host countries. The direct and indirect effects of FDI have been the subject of many studies that more or less agree on the positive effect of investment on the host economy. Foreign direct investment can be considered as the driving force of progress and development and it is the main reason why the FDI are at the centre of interest of all countries in the world. The Czech Republic is no exception and is fully aware of the importance of these investments and trying to attract investors through a variety of tools and favouring promotions. FDI has been the symbol of economic restructuring and success in the transition countries of Central and Eastern Europe, and the Czech Republic in particular has often been appraised as a successful example of FDI inflows. (Novotný, 2015)

The year 1990 was an important milestone for the FDI inflow into the Czech Republic because the country launched the transformation process of transition from a centrally planned economy to a market system, and the capital flows were liberalized. In 2004, the Czech Republic joined the European Union and has become part of an open economic system. This system is related to the four fundamental freedoms: the free movement of people, goods, services and capital. Especially free movement of capital allows the inflow of foreign direct investment and brings other benefits such as higher labour productivity, technological and managerial know-how, development of knowledge about economy and access to contracts with new investors and companies. Foreign direct investment helps improve export performance and finances the current account deficit, thus contributing to the improvement of external balance and stability of the currency. (Židek, 2006)

Nowadays, countries all over the world and their governments seduce the competitive struggle for attraction of foreign investors. These efforts are supported by government through investment incentives that investors perceive as certain discounts and benefits in case they will decide to invest in a given country. Investment incentives were introduced in 1998 in the Czech Republic as a response to an active policy in the field of other neighbouring countries, such as Poland and Slovakia. The government tried to start up the economy through investment incentives and established the Business and Investment Development agency CzechInvest. The main aim of the agency is attracting foreign

investment and developing domestic companies through its services and development programmes. CzechInvest also provides current data and information on business climate and investment opportunities to potential investors. From 1998 to 2014, investors committed to investing more than \$29.2 billion and created approximately 170,000 new jobs. (CzechInvest, 2015)

The movement of foreign direct investment can be seen as an element, which links an economic life of the country. The FDI is an important factor in each country, not only because of the tangible capital inflows, but also because of the possibility of understanding foreign cultures and gaining new experiences and skills.

2 Objectives and Methodology

2.1 Research questions

The aim of the diploma thesis is to answer to the following research question.

⇒ What are the key attractiveness factors influencing Czech FDI?

The aim of the thesis is to describe the significance of foreign direct investment in the Czech Republic, in particular determine the key attractiveness factors influencing Czech FDI and based on these factors estimate the future development of FDI in the Czech Republic.

2.2 Objectives of the thesis

The main objective of the diploma thesis is to analyse foreign direct investment in the Czech Republic and to provide a comprehensive overview of the FDI inflows from the perspective of its determinants. Furthermore, the thesis focuses on the analysis of the key attractiveness factors influencing the Czech foreign direct investment inflows and the econometric model examines which factors affect FDI inflows into the country. To fulfil the main aim is also necessary to evaluate selected macroeconomic factors that most contribute to the foreign direct investment inflows.

In the theoretical part of the thesis, the general definitions of FDI and its possible positive and negative impacts on the host country are included. Furthermore, the thesis deals with the main determinants defining the attractiveness of the country for foreign investors. The following part contains of a brief description of global investment trends and the transformation of the Czech economy. The theoretical part is based on the study of secondary data such as scientific resources, books and internet articles from relevant and valid websites dealing with the area of foreign direct investment. All data are selected according to their relevance to the main objective of the diploma thesis.

2.3 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 such as scientific resources, books and internet articles from relevant and valid websites dealing with the area of foreign direct investment. 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 Czech economy.

Based on the solid theoretical background, the practical part is build up. Secondary data are used in the study. The main data and information are obtained from the Czech Statistical Office, which collects and publishes the largest volumes of data; the Czech National Bank, Organisation for Economic Co-operation and Development, and Eurostat. First, it focuses on analysis of FDI inflows in the Czech Republic based on the country of origin of the investor and the sector. The evolution of FDI inflows and analysis used annual data for the period 1993-2015 for the Czech Republic.

Furthermore, the thesis deals with key attractiveness factors influencing Czech foreign direct investment and the development of selected macroeconomic indicators. The macroeconomic factors, such as economic growth, inflation, unemployment and exchange rate, are briefly analysed in period from 2004 to 2015. The trend analysis is used for each macroeconomic indicator and estimates the future values of all indicators.

Moreover, the econometric model examines which factors affect FDI inflows into the country. Programs Gretl and Excel are used as the main statistical tools. The explanatory variables of the model are chosen based on the information from theoretical part related to a global perspective. 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).

For correct econometric modelling, relevant data are necessary. They are collected in the form of time series. The degree of dependence is measured by correlation index. The aim of the correlation analysis is to determine whether there are links between the 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. Graphs and charts are used to present the results, followed by the final conclusion, where the results of the diploma thesis are presented.

2.4 Research limitations

The scope and depth of the study in the diploma thesis is limited to the analysis of foreign direct investment inflows in the Czech Republic. The diploma thesis does not examine the foreign direct investment outflows.

The research study is conducted for a sample of 12 years and as such may not be considered as an exact representative one. Based on the size of the sample, it was difficult to find significant relationships from the data, as statistical tests require a larger sample size to ensure a representative distribution of the variables. Furthermore, the limitation is also on the side of variables. The model does not evaluate all determinants, which can influence the FDI inflow and investor's decision-making. The statistical analysis also includes only the basic statistical methods, such as OLS, and the scope of the study does not extend to the further statistical analysis.

Possible bias in research may occur when the researcher does not take into account all of the possible variables. The results of the research could be subject to design and sampling bias whereby the process of sampling introduces its own bias into the study.

3 Theoretical Part

This chapter provides an overview of theoretical approaches concerning foreign direct investment (FDI) based on scientific literature, articles and other electronic resources. The first section describes the terminology connected with this concept, identifies the types of FDI, and explains the OLI framework. Secondly, it describes the potential positive and negative impact of FDI on the economy of a host country and the factors determining the attractiveness of a particular country for investors. Thereafter, the global investment trends, together with a brief description of the transformation of the Czech economy, are described within this chapter.

3.1 Definition of Foreign Direct Investment

The investment is defined as an economic activity with the idea that the asset will provide income in the future or will be sold at a higher price for a profit. The main forms of investments are investments into tangible and intangible capital. Foreign direct investment (FDI) is defined as a category of international investment that reflects the objective of establishing a lasting interest by a resident in one economy in an enterprise resident in an economy other than that of the direct investor. (OECD, 2008) The key aspect is that it represents the concept of one enterprise in one country having a degree of control over another enterprise in a different country. The FDI is not based on the nationality or citizenship of the direct investor. The FDI is based on the residence of the direct investor. (Patterson, et al., 2004)

A foreign entity that makes the investment is defined as a foreign direct investor. A direct investor could be: an individual; a group of related individuals; an incorporated or unincorporated enterprise; a public or private enterprise; a group of related enterprises; a government body; an estate; trust or other societal organization; or classified to any sector of the economy. (OECD, 2008) The enterprise in which direct investment is made is defined as a direct investment enterprise. The long-term relationship between the direct investor and the direct investment enterprise and the significant voice in the management of an enterprise are expected. A direct investment relationship is established when the direct investor has obtained 10% or more of the voting power of an enterprise resides abroad. The direct

investment includes not only the initial transaction but all subsequent capital transactions between them and among affiliated enterprises resides in different economies. Therefore, the direct investor does not need to hold the majority share of ownership in the direct investment enterprise, only the amount that is necessary to connect to an effective voice in the management. (Patterson, et al., 2004)

The main attribute of FDI is the lasting interest of a direct investor in an enterprise; it means that only capital that is provided by the direct investor should be classified as FDI. The simplified relation can be written then as $FDI = \text{equity capital} + \text{reinvestment of earnings} + \text{other capital}$. (IMF, 1993)

- ⇒ Equity capital includes equity in branches, all shares in subsidiaries and associates and other capital contributions. Ownership of equity is usually evidenced by shares, stocks, participations, depositary receipts or similar documents.
- ⇒ Reinvested earnings consist of the direct investor's share of earnings not distributed as dividends by subsidiaries or associates and earnings of branches not remitted to the direct investor.
- ⇒ Other capital covers the borrowing and lending of funds, including debt securities and suppliers' credits, between direct investors and subsidiaries, branches, and associates. Both loans to subsidiaries from direct investors and loans from subsidiaries to direct investors are included.

The direct investment includes directly and indirectly owned affiliates, which are based on the percentage of the investor's share capital or voting power. A subsidiary is an enterprise in which an investor owns more than 50% of the voting power. An associate is an enterprise in which an investor owns directly between 10% and 50% of the voting power, and branches are 100% owned permanent representation offices, lands and structures directly owned by non-residents. (ČNB, 2015)

Foreign direct investment flows are based on the investment transactions, which implies their market valuation. If we should have direct investments at market value, it would be necessary to regularly overestimate foreign individual shares in all individual companies. To

determine the value of the FDI, one must look at the value of equity in the accounting valuation. This value is represented by the sum of the items capital and reinvested earnings. (ČNB, 2015)

3.1.1 Types of Foreign Direct Investment

There are two types of foreign investments: portfolio investment and direct investment. Portfolio investment covers transactions of financial assets (bonds, stocks). Investors lend their capital with the aim of maximizing profits and minimizing risks. The aim of this investment is not to take control over the management of the company, as in the case of direct investment, but to only temporarily diversify a portfolio. These investments are mainly implemented through financial institutions such as banks and investment funds. On the other hand, direct investments are related to investments directly to the enterprise, land or capital, which means that the capital and management come directly under the control of the investor. How the investor will enter the host country is a major strategic decision. A foreign investor can enter through greenfield investment, brownfield investment or in the form of mergers and acquisitions (M&A). (Lacina, 2001)

The greenfield investment lies in the overall construction of the new entity. FDI of this type allows implementing the project according to investor's intentions. However, the investor must consider the additional costs from production delays caused by the construction of new stores or hiring and training new employees. This form of investment is used by multinational companies that want to utilize the locally available production factors in the host country. The capital investment in an existing entity is an immediate takeover of its market share, production capacity, assets and liabilities. This form of the investment is typical when the takeover entity includes a competitive advantage (e.g. technology, distribution channel, well-trained employees) and investment in its creation would be more challenging than only the capital input. (Srholec, 2004)

The M&A is a method of entry into existing entity and describes the fusion of two or more companies into one. The investor takes over the entire market share, production capacity and assets of the old company. Furthermore, the investor will create the new company based on the current company or will continue with business under the name of one of the original

companies. There are other forms of foreign direct investment as well. For instance, investments in the brownfields: old and inadequately used industrial zones and residential buildings. The FDI can be as well as a foreign branch, a foreign subsidiary, licenses, joint ventures and franchising. By selling the license, the owner passes the know-how in the form of the transfer of technical documentation, technical assistance and training of employees. It is mainly about linking domestic and foreign activities without any equity participation. At present, it is often used as a concept called franchising. This method is basically a form of rent where the business will allow someone to sell their product and use the name of a specific company or entity on a specific territory. (Lacina, 2001)

Other aspects are the motive of direct investors which leads them to enter a particular enterprise, the share of assets they want to control and the specialization of mother company (Table 1).

Table 1 Classification of FDI based on four fundamental aspects

CRITERION	TYPES OF FDI	MAIN CHARACTERISTICS
Degree of control	Enterprise with minor foreign share (associate)	⇒ Share from 10 up to 50 percent of equity capital or voting rights
	Enterprise under foreign control (subsidiary)	⇒ Control share of ownership
Motive of entrance	Market seeking	⇒ The main goal is to increase market share and decrease production costs ⇒ They edge the homeland production out of the market
	Efficiency seeking	⇒ The main goal is to optimize the production at lower costs of production
	Asset seeking	⇒ The main goal is to gain specific assets as patents, technologies or trademarks
Means of entrance	Greenfield investment	⇒ Investment into new assets

	Brownfield investment	⇒ Change of ownership structure of an existing enterprise and investment into new or enlarged production
	Mergers and acquisitions	⇒ Capturing of existing assets with an interest to combine (acquisition) or fuse (merger) two companies into one
Specialization of mother company	Vertical FDI	⇒ Product specialization ⇒ Different stages of production chain in particular subsidiaries/associates
	Horizontal FDI	⇒ Process specialization ⇒ Similar stages of production chain in particular subsidiaries/associates

(Source: Adapted from Srholec, 2004)

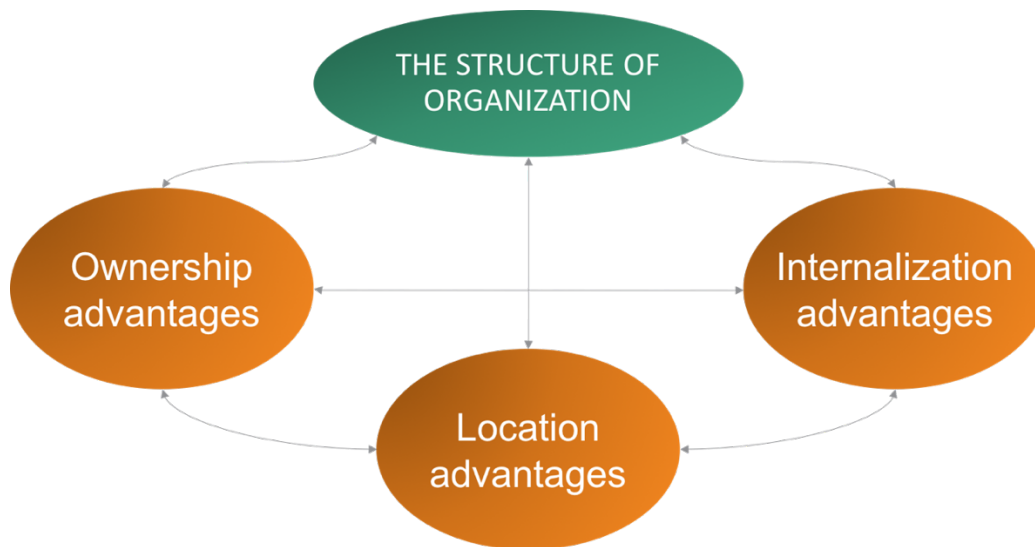
3.1.2 The OLI Framework

The decision to invest abroad is driven by a range of factors depending on the underlying motive for undertaking the investment. Firms face many options when they extend operations abroad. They can choose FDI, exporting, licensing or entering into a joint venture or strategic alliance. The OLI Framework (Figure 1) explains why multinational corporations (MNEs) choose the foreign direct investment. The OLI approach was developed by John H. Dunning and stands for Ownership, Location, and Internalization: three potential sources of advantage that may underlie a firm's decision to be a multinational. (Denisia, 2010)

The first is the ownership advantage (O) to investment, which means that the firm controls some specific asset (one that is not generally available to its competitors) and allows it to generate positive profits. These firm specific advantages are usually intangible and, as a result of having them, the firm could have lower costs (e.g. brand name, technology, benefits of economies of scale) or charge higher prices than other firms can and potentially make

higher incomes. These assets can be applied to production at different locations without reducing their effectiveness. (Dunning, 2000)

Figure 1 The OLI framework



(Source: Adapted from Dunning, 2000)

The second is the location advantage (L) of alternative countries or regions, for undertaking the value adding activities of MNEs. These advantages for each country are the key factors to determining who will become the host country and can be divided into the following categories (OECD, 2002):

⇒ **The economic benefits** - quantitative and qualitative factors of production, costs of transport, telecommunications, market size, etc. Host countries with larger market size, faster economic growth and a higher degree of economic development will provide better opportunities for enterprises to exploit their ownership advantages and create possibilities for economies of scale. FDI attracted by these advantages is called “market-oriented”.

⇒ **Natural and human resource endowments** – including the cost and productivity of labour. Factor cost advantages and the availability of natural and human resources are a driving force behind FDI. FDI oriented towards exports (to the home country or to third countries) and seeks to use those comparative advantages related to low labour costs or

abundant natural resources. Attention has shifted recently from natural endowments of resources and labour to acquired endowments of resources, such as the availability of intermediate goods and skilled labour. The availability of strategic assets, such as technological and innovative assets (e.g. brand names), has become another important determinant in the location decisions of MNEs.

- ⇒ **Physical, financial and technological infrastructure** - differences in infrastructure, transportation, the quality of highways, railways, seaports and airports, and the level of telecommunication services has gained increasing importance. High-level local technological capabilities are an important factor in attracting FDI in high-value-added activities.
- ⇒ **Openness to international trade and access to international markets** - economic reforms, open-door policies and other efforts to promote trade (such as the lowering of tariff barriers). Attractive and strategic geographic positions, adjacent to potential importing countries and providing access to regional and global markets, are also significant factors in attracting FDI, especially FDI flows aimed at exports.
- ⇒ **Political advantages** - general economic, political and social stability forms the background of a host country's FDI policy. A transparent and well-functioning legal framework and business environment are very important, because based on them the (political) risk of doing business in an unfamiliar environment can be lower. Rules and regulations regarding the entry and operations of foreign firms, and standards of treatment of foreign firms, are particularly relevant in this respect. Good corporate governance and fair business practices are equally important. Also important are policies that affect the functioning and structure of markets, such as policies concerning trade, competition, mergers and acquisitions (M&A), and privatization.

The last strand of Dunning's theory is internalization advantage (I), which is often seen as the most important. Generally, this advantage offers a framework for assessing different ways in which the company will exploit its powers from the sale of goods and services to various agreements that might be signed between the companies. As cross-border market

internalization benefits increases the more the firm will want to engage in foreign production rather than offering this right under license, franchise. (Dunning, 2001)

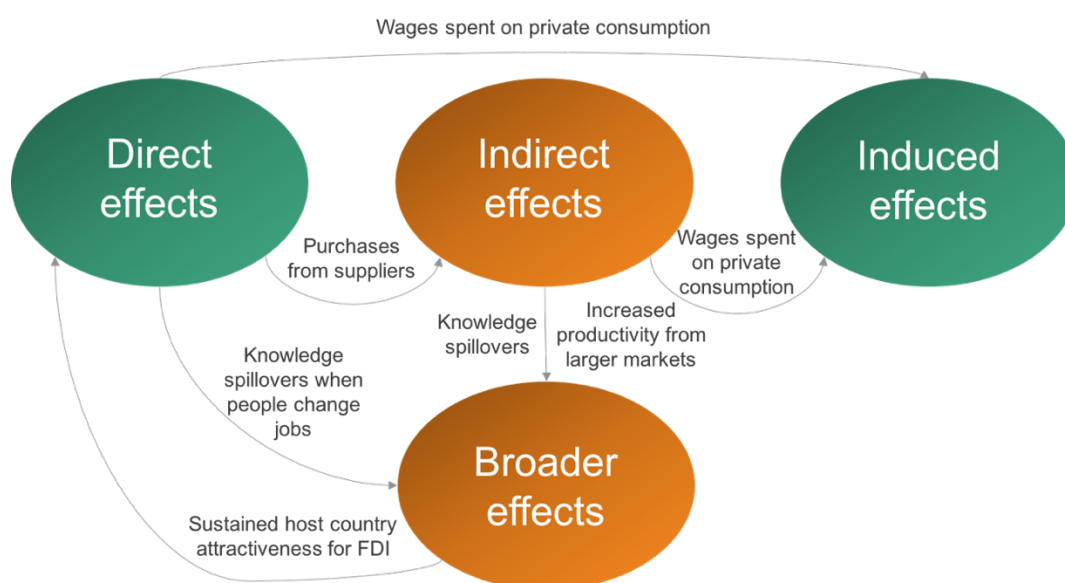
The OLI parameters are different from firm to firm and depend on context and reflect the economic, political, social features of the host country. Therefore, the objectives and strategies of the firms, the magnitude and pattern of production will depend on the challenges and opportunities offered by different types of countries. It may be hypothesized that some sectors are likely to generate more FDI than others, because the characteristics of the former generate a unique ownership advantages, because of their locational needs production outside their home countries, or because the net benefits of internalizing cross-border intermediate product markets are greater. It is possible to predict that the significance of outward FDI will be greater for some countries than for others, because of their economic histories, the core competencies of their indigenous firms, the size of their home markets, their experience in foreign markets, and the locational attractions of their immobile resources and capabilities, relative to those of other countries. (Dunning, 2000)

3.2 Positive and negative impact of FDI

Foreign direct investments in any particular country are considered as a sign of its economic stability and prosperity. They are referred to as key tools for economics growth in developed and developing countries and are also known as the main indicators of future perspectives of a particular country. Nevertheless, FDI is certainly not a cure for all economic problems and must be implemented very sensitively with regard to the specific economic characteristics of any particular country. (Srholec, 2004)

Foreign direct investment is considered to have a positive impact on the host country, mainly in the area of contribution towards economic growth, a productivity of domestic companies, employment level, and foreign trade. The inflows of FDI entails a number of direct and indirect positive and negative impacts on the host country (Figure 2) and is an important element of economic development in all countries. The direct effects are related to the economic activities in the foreign-owned companies itself. Indirect effects arise when the foreign-owned companies purchase inputs for production from local suppliers, e.g. intermediate goods or business services. (Sunesen et al., 2016)

Figure 2 Types of effect from inward FDI



(Source: Adapted from Sunesen et al., 2016)

The impact of FDI depends on macroeconomic factors such as the investment balance of the host country, and on its degree of integration into the international financial system. The domestic companies are exposed to strong competitive pressure, which leads to increased productivity. FDI would bring new technologies, managerial skills, know-how, international production networks, reduce unemployment, connect the host country with the world market and international currencies, and improve trade statistics. Other motivation for domestic companies would be increasing salaries and better political environment because FDI will help to reduce a public debt. (OECD, 2002)

Another positive side of FDI is that by raising wages and living standards in the domestic economy, a large stock of FDI makes it more attractive for other foreign investors to establish themselves in the country in order to serve the local market. As well by increasing the size of the local market and enabling local suppliers to benefit from economies of scale, foreign multinational companies can lower the unit costs of inputs and improve the attractiveness of the country as a location for other foreign companies that use the same production factors. However, benefits of FDI do not increase automatically and equally across countries, sectors and local communities. These benefits vary from one country to another and are difficult to be separated and measured. (Sunesen et al., 2016)

On the other hand, the FDI may also have a negative impact on economic development of the host country. The foreign investors do not enter the host country as an "employer" but their main goal remains to achieve a profit. There is also a risk of an outflow of labour from domestic enterprises to foreign competition, which for instance offer a better work conditions for employees. Increasing productivity and introducing new technologies may reduce the need for labour and may lead to an increase in unemployment. The FDI may affect growth negatively because it can destroy domestic competition and harm the entire development path of the country, which is in their own interest. (OECD, 2002)

Another potential negative impact is the growth of foreign debt of the state when the companies provide foreign loans for their businesses. The most common form of FDI are mergers and acquisitions, carried out by multinational corporations. The advantages of this form are a potential increase of business performance and its competitiveness, based for example on a change in management or access to the new markets. They can bring the negatives as well, such as the monopolization of the market and an increase in unemployment (by increasing efficiency and redundancy). The relative size of the costs and benefits of inward FDI is likely to depend on characteristics of the domestic economy, the sectors, the time and other factors. (OECD, 2002)

Along with international trade, FDI is potentially the most important tool for the transmission of international technology for firms. It also may be the cheapest way of technology transfer, because the recipient firm normally does not have to finance the acquisition of new technology. The transfer of new technology via FDI is faster than licensing, agreements or international trade. FDI inflows create the potential for skill spillover to the local workforce. At the same time, the level of human capital in the host country determines how much can attract FDI and whether companies are able to absorb any spillover benefits. The host country with high levels of human capital can attract a large number of technologically demanding foreign investors, who will bring the important financial contribution to the further development of work skills. On the other hand, the weaker economies are able to attract FDI companies using simpler technology, and local education and skills development contribute only marginally. (Dyker, 2006)

Spillover can be divided into horizontal and vertical. Imitation is the classic mechanism for horizontal spillover by which domestic firms can gain knowledge of multinational firms. Vertical spillover is related to the entire production chain, from inputs to outputs. The investor can improve the productivity of their suppliers by supporting through strategic cooperation and training. They can also simultaneously diversify supply, so domestic suppliers are more productive. The multinational companies can as well outsource the production volume to domestic companies, which are already able to produce within their limited abilities. (Dyker, 2006)

Foreign direct investments are largely supported by the government. There are investment incentives, which are certain advantages for an investor who will decide to invest in the particular country. These incentives are provided mainly in connection with a greenfield investment, which should lead to the new job positions and economic development of the region. These include tax relief, financial support for job creation, grants and land sales for a discounted price. The main important factors for investor's decision are the size of the tax burden in the country, labour cost, education and qualification of employees, and also macroeconomic and political stability of the country. (Gray, 2002)

Table 2 summarizes the potential positive and negative impacts of inflow of FDI into a host country.

Table 2 Potential impact of inflow of FDI into a host country

POSITIVE IMPACTS	NEGATIVE IMPACTS
<ul style="list-style-type: none"> • Economic growth • Increase in productivity • Transfer of technology, know-how and managerial skills • Reducing unemployment • Access to international markets <ul style="list-style-type: none"> • Increase of exports • Increase in competitiveness <ul style="list-style-type: none"> • Capital inflow 	<ul style="list-style-type: none"> • Crowding-out effect • Appreciation of domestic currency <ul style="list-style-type: none"> • Increase in domestic wages • Increase in inflation • Increase of imports • Increase of unemployment due to crowding-out effect • Hostile take-over of domestic firms

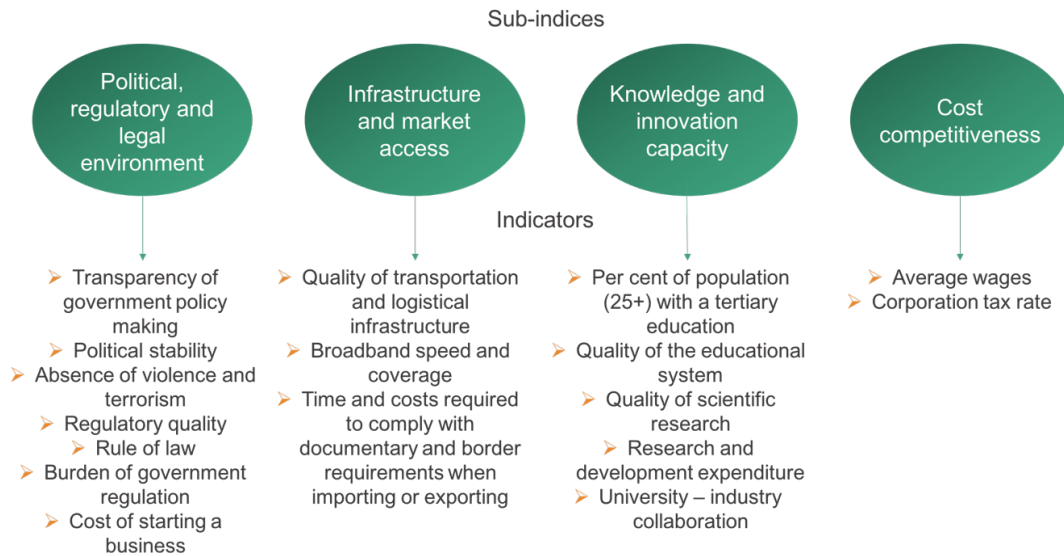
(Source: Adapted from Kurtishi-Kastrati, 2013)

The net benefits from foreign direct investment do not accrue automatically, and their importance differs according to host country and condition. The factors that hold back the full benefits of FDI in some developing countries include the level of general education and health, the technological level of host-country enterprises, insufficient openness to trade, weak competition and inadequate regulatory frameworks. To gain the maximum benefits from foreign corporate presence a healthy enabling environment for business is important and provides incentives for innovation and improvements of skills and contributes to a competitive corporate climate. (Kurtishi-Kastrati, 2013)

3.3 The attractiveness of the country

The locational characteristics of a particular country can have the main influence on the investor's decision to invest in the country. The attractiveness of the country may also vary from one company to another depending on its organizational context. Increasing international competition encouraged governments to make their tax systems more attractive to investors. Foreign investors are very cautious when entering a national economy because the macroeconomic stability is creating an interest in investing in a country. The attractiveness of the country focuses on four different aspects of the investment climate: political, regulatory and legal environment, infrastructure and market access, knowledge and innovation capacity, and cost competitiveness (Figure 3). It can be traced through a series of relevant macroeconomic indicators: inflation rate, unemployment rate, GDP level per capita, external debt, as well as many other indicators, depending on the nature and goals of individual investments. (Škuflić et al., 2013) (Sunesen et al., 2016)

Figure 3 The FDI attractiveness indicators



(Source: Adapted from Sunesen et al., 2016)

3.3.1 The political, regulatory and legal environment

A transparent and stable political, regulatory and legal environment reduces the risk of investing in the country and gives the safety and certainty for an investor with the investments in a particular country. The most important location factors for international investors are stability and transparency of a market’s political, regulatory and legal environment. These factors have increased in priority over the last few years. It is important to measure the transparency of government policy making, political stability, regulatory quality and rule of law in the country. Although a transparent and stable environment provides investors with security, a lot of regulations which are required from investors can also become burdensome for future business and as well as increasing the cost of establishing and running this business. Basically, the investors would like to see more business-friendly reforms in a host country. (Sunesen et al., 2016)

Investment incentives are usually used as a policy instrument to attract FDI. The main purpose is to increase benefits from FDI for a host country. Each country has its specific system of investment incentives. Countries which have better financial resources mainly encourage investors through direct investment incentives, which means an application of

financial benefits for investing into the host country. The Czech Republic provides benefits mainly by a non-financial (indirect) form of investment incentives. There are two types of incentives: location and behavioural. The location incentives are based on the interest of the investor in terms of a country's location. On the other hand, the behavioural incentives are based on the steps that require government, such as training and education for employees, cooperation with domestic suppliers, research and development. (UNCTAD, 2004) It is possible to divide the investment incentives according to the type and method (Table 3).

Table 3 The types of investment incentives

BY TYPE			BY MANNER	
Financial	Fiscal (based on)	Other	Direct support	Indirect support
Government grants	Profit	Regulatory	Capital construction	Tax relief
	Capital investments		Purchase of technology	
Subsidize and grant loans	Work	Subsidize services	Research and development	Tariff concessions
	Sale			
Government insurance with better rates	Import	Market advantages	Creation of new job positions, requalification of employees	
	Export			
	Other specific costs	Exchange advantages	Purchase of land and infrastructure deployment	
	Value added		Getting a loan with lower interest rates and longer due date	
			Regulatory relief	

(Source: Adapted from UNCTAD, 2004)

- ⇒ Financial incentives – form of direct investments, which usually provide by financially strong countries (outright grants and loans at concessionary rates)
- ⇒ Fiscal incentives (for example reduces tax rates)

⇒ Other incentives (including regulatory concessions, subsidized infrastructure or services, preferential government contract, etc.)

An increasingly important factor in investment policies is national security considerations. Tax burden is one of the determining factors for investors when deciding which country to choose for their investment. Countries can use different concepts of national security, which allow them to take into account key economic interests in the investment screening process. There always has to be a balance between government's space for applying national security regulation needs and investor's need for transparent and predictable procedures. (UNCTAD, 2016)

3.3.2 Quality of infrastructure and market access

A high quality of the physical and digital infrastructure is important, because it integrates a country with the rest of the world and makes the country more attractive for multinational companies. The physical infrastructure was found to be important in chemical, pharmaceutical and automotive sectors. On the other hand, the digital infrastructure was identified as a particularly important factor in the IT and the software industry. The strong quality of infrastructure offers easy access to imports and exports, facilitates integration in global value chains, and provides access to export markets. The transport and logistics infrastructure is ranked as the third most important location factor for international investors. The level of infrastructure, good internal rail and road network, as well as easy connections to the European-wide transportation network, are also key factors that attract foreign investors. (Sunesen et al., 2016)

3.3.3 Knowledge and innovation capacity, cost competitiveness

A country with a highly-qualified labour force with innovative competences will attract companies that compete in global markets and are dependent on continuously improving their competitiveness. The skills of the local labour force and a focus on public research and development, including strong ties between industry and universities, are important factors mainly in the chemical or pharmaceutical sectors. It can be traced through a series of indicators such as the percent of the population with a tertiary education, the quality of the educational system as well as the quality of scientific research. Some industries require

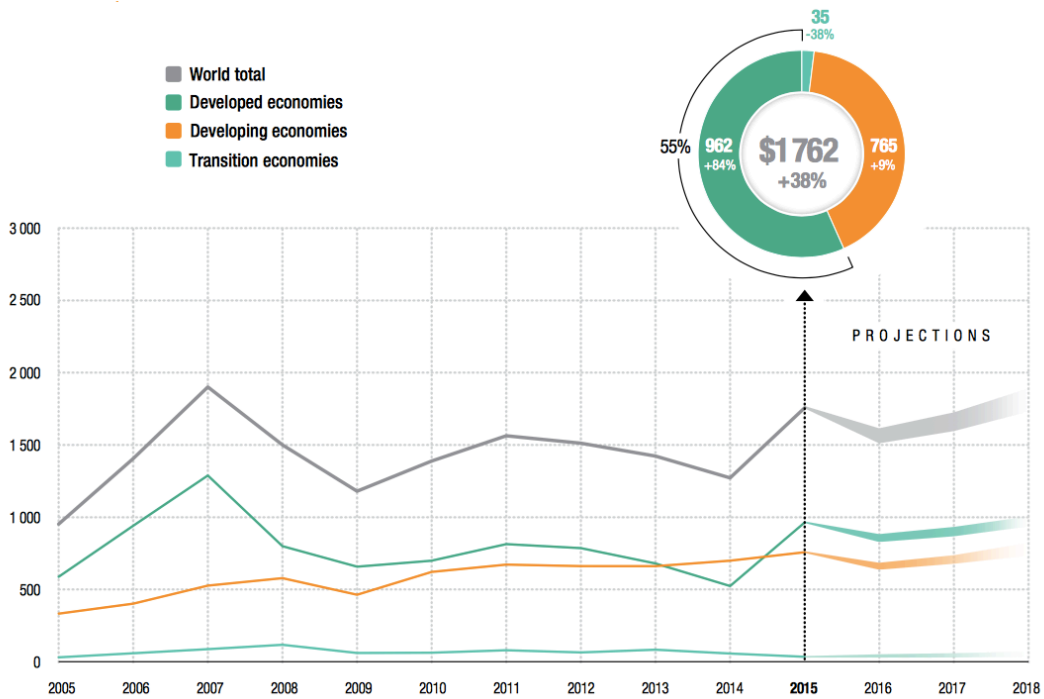
higher skilled labour (for instance pharmaceuticals), however, multinationals will invest in those countries with a good combination of low wages, but high labour productivity and skills. Another example is that countries with access to the sea are at an advantage to landlocked countries, who will have higher costs to ship their goods. (Sunesen et al., 2016)

It is necessary to offer products and services that generate profit and repay its liabilities in conditions of continuous market changes at least as good or even better as its competition for surviving on a market. If relative costs are too high, the ability to compete internationally can be jeopardized. On the other hand, successful economic performance can lead to an exchange rate appreciation and to higher relative costs or prices. However, having the lowest costs is not a guarantee of market success. The cost competitiveness includes average wages and corporation tax rates. (Sunesen et al., 2016)

3.4 Global investment trends

There was a large increase in FDI flows over the last 20 years and are nowadays an important indicator of the health of national economies. The recovery of FDI was strong in 2015: the global foreign direct investment increased by 38 percent to \$1.76 trillion and it is the highest level since the global economic and financial crisis of 2008-2009 (Figure 4). However, it is still about 10 percent less than in 2007. This growth was related to the global macroeconomic environment, which was dominated by slowing growth in emerging markets and a sharp decline in commodity prices. The global FDI are projected to resume growth in 2017 and to overcome \$1.8 trillion in 2018. (UNCTAD, 2016)

Figure 4 Global FDI inflows by group of economies, in trillion [USD]

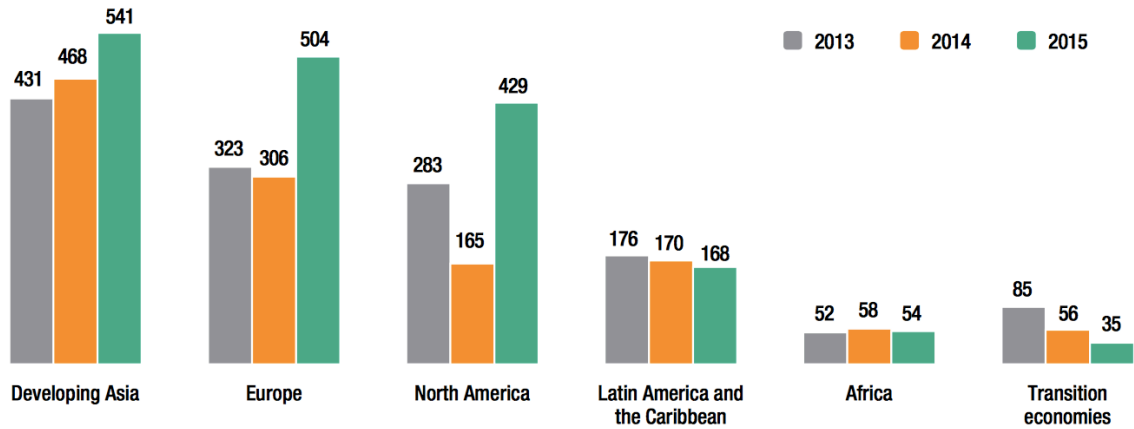


(Source: Adapted from UNCTAD, 2016)

The main factor behind the global rebound was a surge in cross-border mergers and acquisitions to \$721 billion, from \$432 billion in 2014. These acquisitions were partly driven by corporate reconfigurations (for example, changes in legal or ownership structures of multinational enterprises including tax inversions). The value of announced greenfield investment project stayed at a high level and reached \$766 billion. This value is 8 percent more than in 2014. (UNCTAD, 2016)

The amount of FDI into developed economies almost doubled to \$962 billion. The largest recipient of FDI flows is Asia, with FDI inflows surpassing half a trillion dollars. However, the strong growth in inflows was reported in Europe and FDI increases during the year 2015 by 65 percent, to \$504 billion (Figure 6). The services sector is very important and accounts for almost two-thirds of global FDI stock. The services accounted for 64 percent of total global FDI, followed by manufacturing (27 percent) and the primary sector (7 percent), with 2 percent unspecified investments. (UNCTAD, 2016)

Figure 5 FDI inflows by region, in billion [USD]



(Source: Adapted from UNCTAD, 2016)

3.5 Transformation of Czech economy

For future analysis and understanding, the flow of FDI into the Czech Republic is important to remain the main points of development of the Czech economy. The first stage of transformation was between years 1990 and 1997, and applies to general transformation processes, such as liberalization, stabilization and structural reforms. This stage also includes opening the economy to foreign direct investments and decisions about new legal framework and institutions responsible for regulations in accordance with the European principle of non-discrimination. (Žídek, 2006)

The transformation is a change of the whole system of the economy and in the Czech Republic was about the change from a centrally planned economy to a market economy. The official process of transformation started in September 1990 as a combination of two plans designed by František Vlasák and Václav Klaus. The transformation process brought the significant decline in real wages in all countries during, mainly based on the decline of production and labour productivity, and the bad terms and conditions of a trade from abroad. There was also a separation of the Czechoslovak State Bank from commercial banks. Moreover, the Czech crown was undervalued at the beginning of the transformation. A milestone in the liberalization of prices and foreign trade date was on 1st January 1991, when the state relinquished interference in pricing. (Žídek, 2006)

An extensive stabilization program was launched in 1991 in line with International Monetary Fund guidelines and included measures such as currency devaluation, price and foreign trade liberalization, a tight monetary policy and privatization of state-owned assets. (OECD, 2001) The process of privatization also began in 1991 and the massive entry of foreign capital through privatization was one of a big success. Privatization in Czechoslovakia was based on a good knowledge of privatization techniques used in other countries (especially in the United Kingdom). However, there was a difference between privatization in countries with the infrastructure of institutions for a market economy and privatization in a country without the infrastructure and the need to build it, as the Czech Republic. The whole privatization process involved two waves of voucher privatization through the National Property Fund created in 1991 and the direct sales of certain state assets. The voucher method accounted for 36.5 percent of the nominal value of the assets privatized up to mid-2000s in the large-scale privatization program. Another 63.5 percent of the assets were sold to local and foreign investors by auction and public tender. (OECD, 2001) (Ježek, 2006)

The period from 1994 to 1996 can be considered as the most successful in the whole transformation process. The economy reached high growth rates, as well as stable inflation and low unemployment rates. The structure and development of FDI in the Czech Republic were similar to developments in other countries. The foreign investors were mainly interested in sectors oriented to the domestic market (for instance, food industry, financial services, construction and engineering). The period of internationalization was since 1998. The Czech authorities began to loosen monetary and fiscal policies and to advance with the restructuring of the banking and corporate sectors. The recession continued into the first half of 1999 when there were signs of a recovery reflected in modest GDP increases. In 1999 FDI has increased substantially, accounting for almost 10 percent of GDP and reinforcing the solid balance of payments position. These rising inflows of FDI were one of the most positive indicators of good future growth of the Czech economy. (OECD, 2001) The government of Josef Tošovský led the country to early elections, which won the social democracy. From this point, the investors again saw the confidence in the Czech economy based on the fact that the institute of investment incentives was reinforced by the government. (Žídek, 2006)

Another very important date of this period is the 1st May 2004, when the Czech Republic joined the European Union and opened its borders to foreign countries and investments from abroad. At present, the Czech Republic is already in the completion stage. On 17th May 2012, Václav Klaus signed the legislation about using the investment incentives in the Czech Republic, not only by investors production or expanding production in the manufacturing industry, but also by technological centres and strategic services. This legislation also extended the deadline for using income tax from 5 to 10 years and introduces the institute of strategic investments. This legislation can help improve the competitiveness and attractiveness of the Czech Republic for foreign and as well as domestic investors. It means that besides the great location of the Czech Republic in the middle of Europe, quality infrastructure and skilled workforce, the country can offer to investors another important benefit. Furthermore, this legislation is a signal to investors that the Czech Republic is interested in new investments from abroad. (Klaus, 2006) (Zahradník, 2003)

3.6 Literature Review

Foreign direct investment in the country is considered by economists as a sign of its economic stability and prosperity. They are also referred to as a key tool for growth of national economies and one of the main indicators of future prospects of the economy. There are several studies investigating the benefits and also negative impacts for domestic companies from FDI.

The impact of FDI on the sales of domestic firms in the Czech Republic was examined by Stančík, (2009). His analysis is based on the data from the period 1995 - 2005 and is related to horizontal and vertical spillovers, mainly for acquisitions and investments in greenfield. The results indicate that the growth rate of sales of domestic enterprises is reduced with the presence of foreign firms. The larger negative impact of the investment is on greenfield. It can be explained by the fact that both types of investments tend to import their supplies from abroad instead of using domestic suppliers. As a result, the company would lose its domestic sales. The question is whether to support greenfield investments, while it would have a negative impact on sales of domestic enterprises, but on the other hand, would create new jobs.

According to Srholec et al., (2004), the FDI represents capital inflows into the country, increase employment and purchasing power of the population, thus the market demand for goods and services, leading to overall economic development in the region. Furthermore, FDI may introduce new manufacturing sectors and support productivity based on the arrival of skilled professionals with the necessary know-how. Another positive impact is on the environment through the development of new technologies.

The negative effect of FDI was examined by Kalínská, (1999). In case of employment, there is a risk of outflow of workers from domestic enterprises to foreign competition, which for example offers better working conditions. The labour productivity and new technologies reduce the need for more workers and may lead to an increase in unemployment.

FDI are largely supported by government through investment incentives. These incentives are provided mainly in connection with a greenfield investment, which should lead to job creation and economic development of the region. These include tax rebates, financial support for job creation grants and land sales for a discounted price. According to Gray, (2002), investors are mainly interested in factors such as the size of the tax burden in the country, labour cost, education and qualification and also macroeconomic and political stability of the country.

4 Practical Part

The main objectives of this chapter are based on the development of FDI inflows in the Czech Republic. This chapter focuses on evolution of FDI inflows in the Czech Republic, and the analysis of factors driving Czech foreign direct investment, such as transport infrastructure network, education, labour cost, market size, risks and other determinants influencing the FDI. Secondly, the macroeconomic factors are briefly analysed in period from 2004 to 2015, and the trend analysis is used for estimation of future values of all factors. Thereafter, the statistical analysis of FDI inflows is described within this chapter.

4.1 Evolution of FDI inflows in the Czech Republic

The Czech Republic is a fully fledged parliamentary democracy, with an open, export-driven economy and it has been a popular destination for foreign capital since the 1990s. The Czech Republic is one of the most successful Central and Eastern European countries in terms of attracting foreign direct investment and is doing decently well in terms of GDP and competitiveness. The main reasons are the new investment incentives, skilled workforce and as well as the locational advantages of the country. Over 173,000 firms across all sectors are supported by foreign capital. The country fully complies with European Union law and OECD standards for the equal treatment of foreign and domestic investors. The growth across various sectors of the economy, including renewed merges and acquisitions activity is expected. The open investment climate of the Czech Republic is a key element of its economy. (CzechInvest, 2016)

The growth of the Czech economy continues dynamically and began to be driven by foreign trade, which brought an unexpected increase in export performance and a slowdown of the growth of domestic demand. In early 1990s the Czech Republic adopted far-reaching stabilization, liberalization and privatization programs, as well as implemented the EU rules and regulations which has also helped to improve the business environment and attract FDI. Furthermore, the Czech Republic has consistently attracted a high rate of FDI per capita since 2000, which makes the country strongly attractive for foreign investors. (KPMG, 2014)

FDI inflows in the Czech Republic (Table 4) record the value of cross-border transactions related to direct investment during a year. Until 1997, data include only FDI in equity capital. The data from 1998 consist of equity capital, reinvested earning and other capital. FDI flows are measured in USD. FDI inflows have been variable over the years, mainly depending on opportunities to acquire shares in larger state enterprises. The important transactions involved the sale of a stake in Škoda Automobile to Volkswagen and part of the state tobacco enterprise to Philip Morris in the early nineties. A few years later another important privatization transaction in the banking sector which have increased inflows of FDI were the sale of Československá Obchodní banka to the Belgian Bank and KBC and the acquisition of the state's 52 percent share in Česká Spořitelna by the Austrian Erste Bank. (OECD, 2001)

Table 4 Inflow of FDI in the Czech Republic, in million [USD]

Year	1993	1994	1995	1996	1997	1998	1999	2000
Flow	654	869	2,562	1,428	1,300	3,718	6,324	4,986

Year	2001	2002	2003	2004	2005	2006	2007	2008
Flow	5,641	8,483	2,101	4,974	11,658	5,459	10,436	6,465

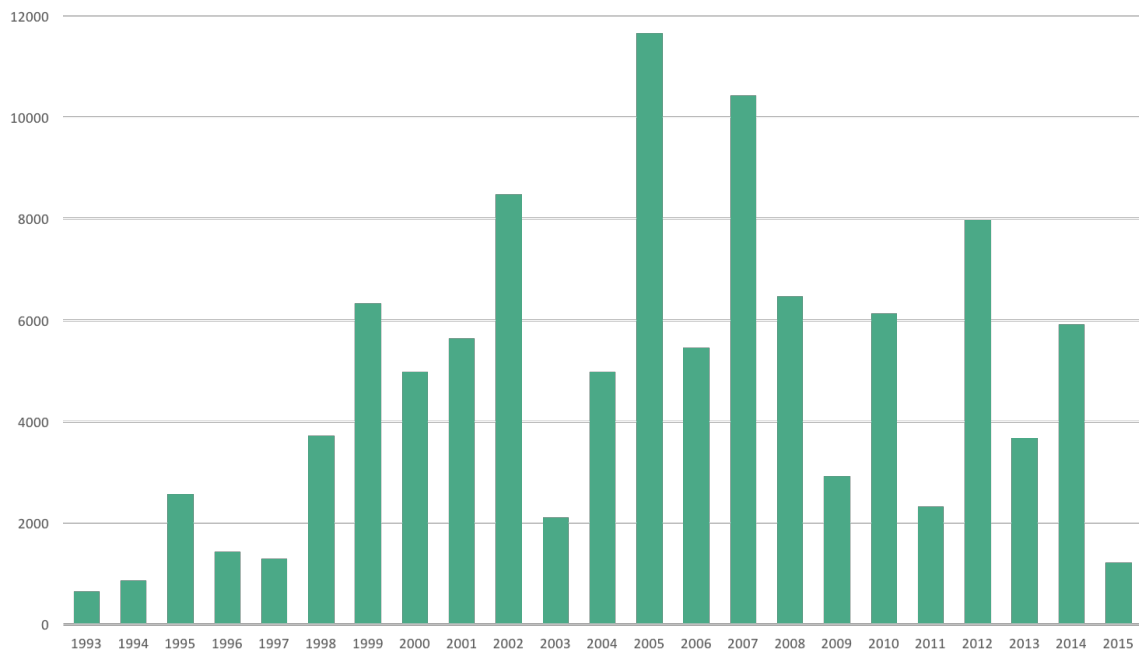
Year	2009	2010	2011	2012	2013	2014	2015
Flow	2,928	6,137	2,319	7,982	3,676	5,912	1,223

(Source: Data provided by the Czech National Bank, 2015)

The Czech Republic has been recording a large inflow of investments from abroad since 1998. However, in 2003 there was a significant decline in the inflow of FDI, nearly by 80% from the previous year in 2002. There was no profit growth: basically the volume of total FDI inflows corresponded only by volume of reinvested profits. Furthermore, this situation could be the consequences of stagnation in Western Europe and the lower ability of entrepreneurs to invest abroad or the beginning of the economic recovery, when investors prefer to invest in the home country. The development of FDI inflow was interesting between the years 2004 and 2015. The foreign direct investment irregularly increased and declined as well. There was a visible improvement in the flow of foreign capital in 2004, based on the entry of Czech Republic into the European Union. In the next year, the FDI inflow increased by 100% compared to the previous year. (Plchová et al., 2013)

Another considerable decrease in inflow was especially in times of the financial and economic crisis. During the financial and economic crisis in 2009, FDI inflows dropped to \$2.9 billion, however, inflows increased again to \$6.1 billion in 2010. (Figure 6). Between years 2010 and 2014, the Czech Republic had registered a massive inflow of FDI which was mainly attracted by high educated workforce, low labour costs, strategic location in Europe, the government incentives and developed industrial sector. The investors mainly invested into the new retail networks, warehouses, extension of the existing companies and into building new business and factories as well. The average growth for the whole time series is \$4,662 million. (Plchová et al., 2013)

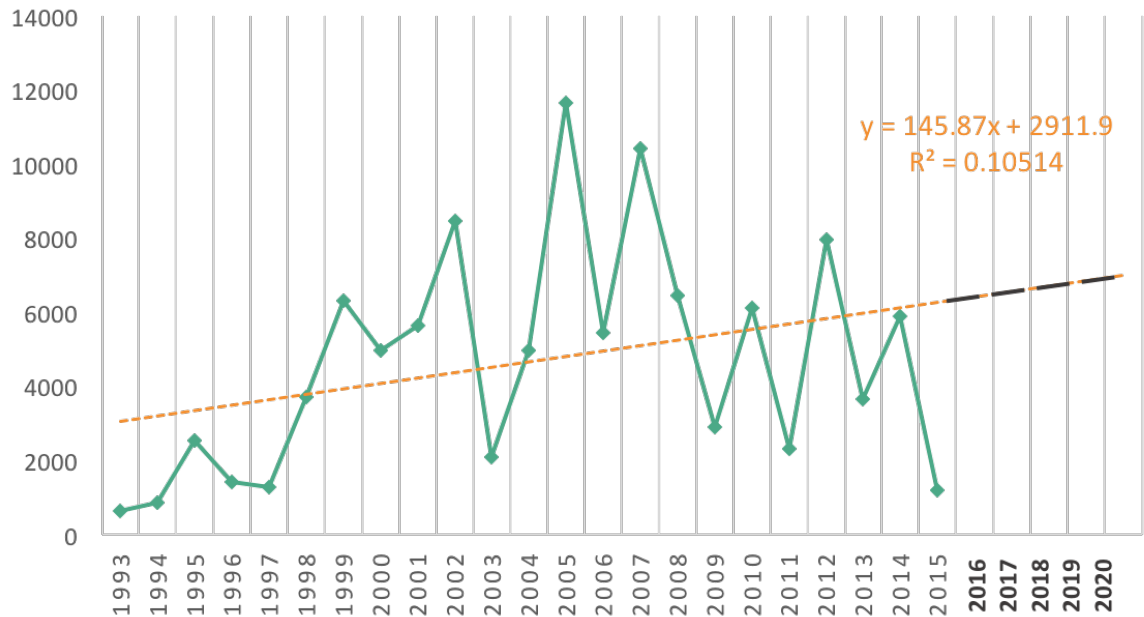
Figure 6 Inflow of FDI to the Czech Republic, in million [USD]



(Source: Data provided by the Czech National Bank, 2015)

The trend analysis is used for the estimation of future FDI inflows. The calculation is made in the program Excel by Trendline, based on data from table 4. Furthermore, the least square method is used to find a line that matched the best point. The coefficient of determination R^2 will give information about the goodness of fit of a model. If the R^2 value equals 1, the regression line perfectly fits the data.

Figure 7 Trend analysis of FDI inflow in the Czech Republic, in million [USD]



(Source: Data provided by the Czech National Bank, 2015)

The figure 7 shows the equation $y = 145.87x + 2911.9$ and a R^2 value of 0.10514. It follows that only about 10 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 90 percent. The model shows an increasing trend, which is desirable in case of FDI inflows (Table 5). An increase in FDI will increase the demand for the currency of the receiving country, and raise its exchange rate. In addition, an increase in a country's currency will lead to an improvement in its terms of trade, which are the ratio of export to import prices.

Table 5 Estimated future FDI inflow, in million [USD]

Year	2016	2017	2018	2019	2020
Inflow of FDI	6,412.87	6,558.75	6,704.62	6,850.49	6,996.37

(Source: Own calculation)

FDI stocks measure the total level of direct investments at a year and are measured in USD. Since 1995, the stocks of FDI have shown considerable growth, rising from \$7,350 million in 1995 to \$21,644 million by the end of 2000 (Table 6). The increase in FDI stocks in 1998

which were almost double than the 1997 volume was based on factors such as privatization of state-owned enterprises, especially in the financial and telecommunications sectors, expansion of foreign supermarket chains and increases in the equity of existing foreign-owned companies. The new investment incentives supported as well several greenfield investment projects. The total stock of all form of foreign capital in 2012 reached \$136 billion and an important fact is that 58 percent of this capital came in the form of foreign direct investment. (OECD, 2001)

Table 6 FDI stocks in the Czech Republic, in million [USD]

Year	1993	1994	1995	1996	1997	1998	1999	2000
Stock	3,423	4,547	7,350	8,572	9,234	14,375	17,552	21,644

Year	2001	2002	2003	2004	2005	2006	2007	2008
Stock	27,092	38,669	45,287	57,259	60,662	79,841	112,408	113,173

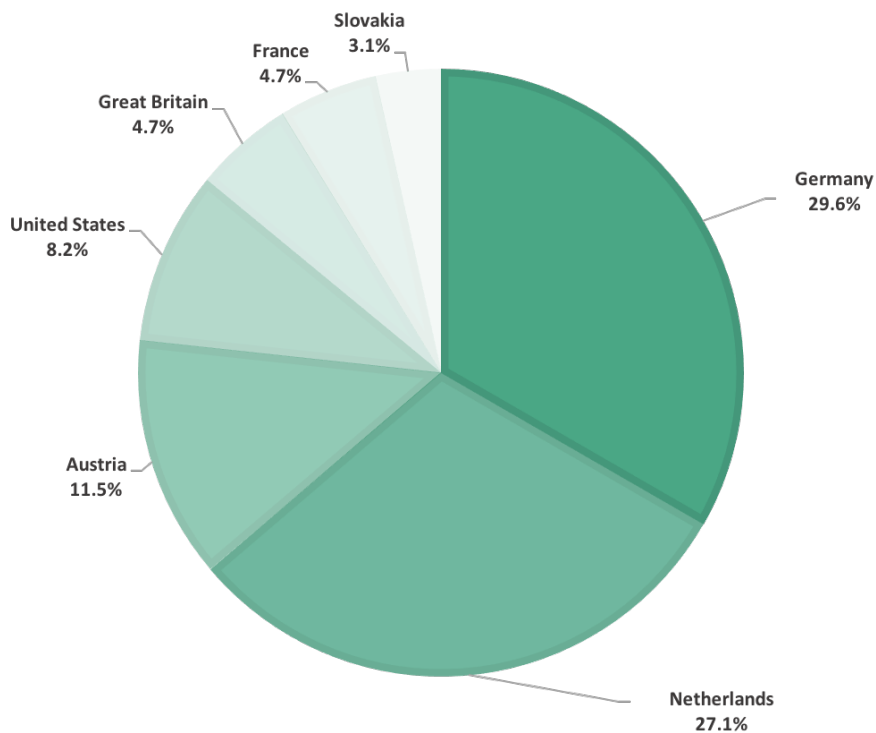
Year	2009	2010	2011	2012	2013	2014	2015
Stock	125,829	128,505	120,569	136,494	134,085	121,512	113,057

(Source: Data provided by the Czech National Bank, 2015)

4.1.1 Analysis of FDI by country of origin of the investor

The highest volume of FDI inflows into equity in the history of the Czech Republic reached \$4,877 million in 1999. The total inflows in 1999 were almost 50 percent higher than those of 1998 and accounted for almost 10 percent of GDP. Based on the territorial structures of FDI inflows in 1998 the largest investor was Germany accounting for 29.6 percent of the total investment, followed by the Netherlands, Austria, United States, Great Britain, France and Slovakia (Figure 8). (OECD, 2001)

Figure 8 FDI in the Czech Republic in 1998 – territorial breakdown [%]



(Source: Data provided by the Czech National Bank, 2001)

One year later, the largest investor in terms of volume of investment was the Netherlands (30.7%), which is still at the first place in these days. This fact confirmed the trend of multinational companies relocating their headquarters to the Netherlands probably based on tax reasons from the United States, Ireland or Australia. The next country was Germany (26.6%), followed by other important investors like Austria (10.1%), United States (6.7%) and Great Britain (5.1%). The new investor was Belgium, based on the privatization of the state's share in Československá obchodní banka by KBC Bank. (CNB, 2001)

The amount of FDI inflows reached \$11,658 million in 2005, which was the largest increase in inflows in the Czech Republic. Mainly based on the investment in equity, for example the sales of the state owned stakes in Český Telecom and Unipetrol. The Netherlands (28%) was still the largest source of foreign direct investment in 2005, followed by Germany (20%), Austria (11%) and France (6%). The new country was Spain, as a result of its investment in telecommunications. Behind Spain were the United States, Belgium and the United Kingdom. (CNB, 2007)

Netherlands, Germany and Austria accounted for more than 55 percent of total FDI stocks at the end of 2012 (Table 7). Most of the FDI inflows to the Czech Republic came from Netherlands, followed by the Czech Republic’s neighbours such as Germany and Austria. This part of FDI is clearly linked to the integration of the Czech economy in production networks centred in Germany. Over 38 percent of FDI stocks took the form of reinvested earnings, which confirms the profitability of FDI related activities and strong vote of confidence by investors with first-hand experience of the Czech economic market. (KPMG, 2014)

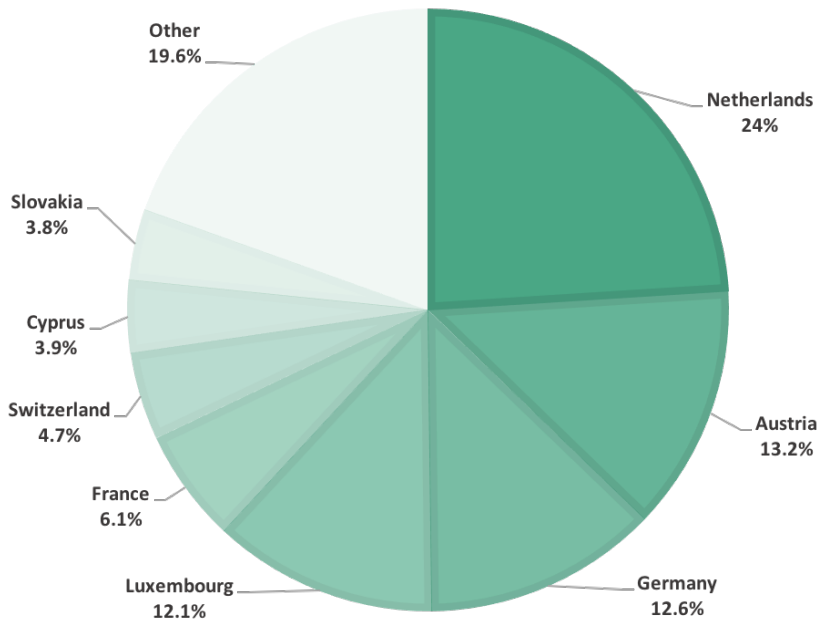
Table 7 Top 10 source countries, end of 2012, in million [USD]

No.	Country	Total
1	Netherlands	27,458
2	Germany	14,937
3	Austria	13,177
4	Luxembourg	6,160
5	France	5,244
6	Switzerland	4,845
7	Cyprus	3,629
8	United States	3,379
9	Spain	3,165
10	Belgium	3,131

(Source: Data provided by the Czech National Bank, 2012)

At the end of 2014 the total amount of stock of FDI reached \$121,512 million. The greatest share of capital invested in the Czech Republic came from the Netherlands, followed by Austria, Germany, Luxembourg, France, Cyprus, Switzerland and Slovakia (Figure 9). Based on the analysis, Germany occupied first place in the position of investors in the Czech Republic in 1998. However, from 1999 to the present, Netherlands is still in the first place among the investing countries, followed by Austria and Germany. Almost 93% of FDI in the Czech Republic is from Europe, the rest of the foreign capital comes from countries outside Europe and the most significant investor is the Republic of Korea. (CNB, 2016)

Figure 9 FDI in the Czech Republic in 2014 - territorial breakdown [%]

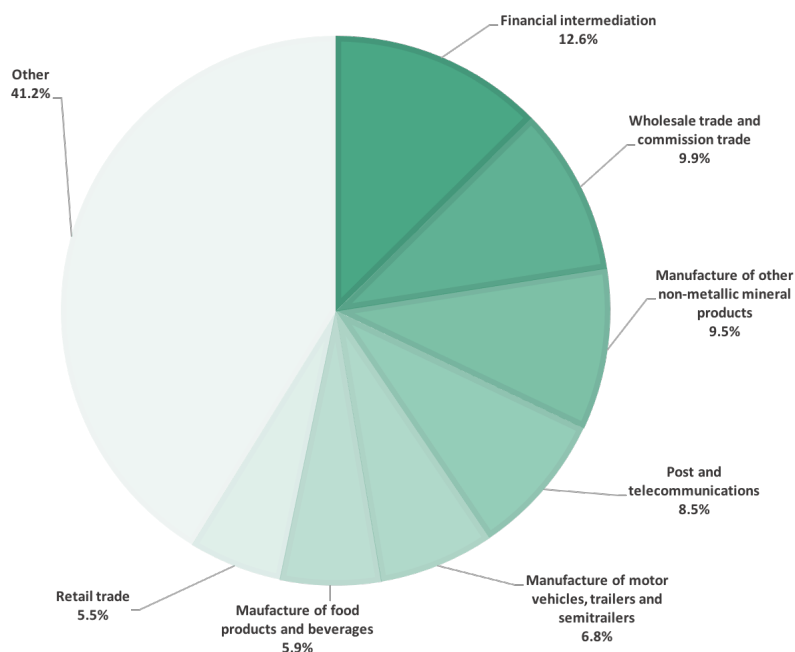


(Source: Data provided by the Czech National Bank, 2016)

4.1.2 Analysis of FDI by sector

The most interesting sectors in the Czech Republic for foreign investors are services and manufacturing. On the other hand, the lower inflow of FDI reached for example the energy sector, construction or agriculture sector. In 1998 the largest shares of FDI went into financial intermediation, followed by wholesale and commission trade, manufacture of other non-metallic mineral products, post and telecommunications, manufacture of motor vehicles, trailers and semitrailers, manufacture of food products and beverages and retail trade (Figure 10). The other industry (41.2%) includes the investment into electricity, gas, steam and hot water supply, manufacture of electrical machinery and apparatus, real estate activities and manufacture of fabricated metal products. (CNB, 1999)

Figure 10 FDI in the Czech Republic 1998 - breakdown by industry [%]



(Source: Data provided by the Czech National Bank, 2001)

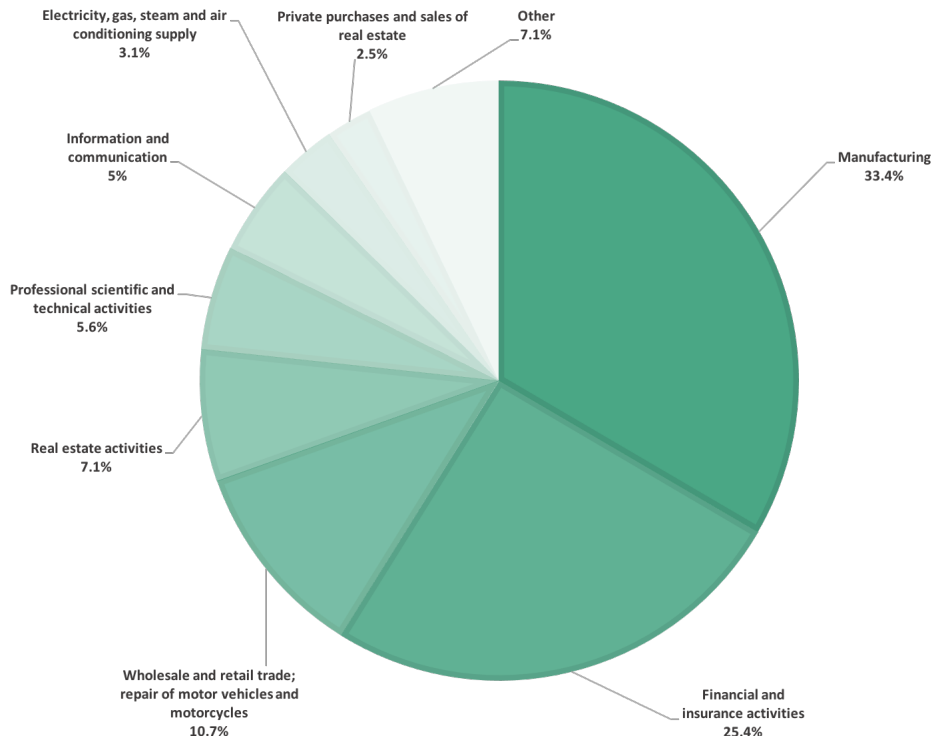
The sector who received the largest amount of foreign direct investment in 1999 is the service sector, with 60% of the total FDI volume. The largest FDI increases were registered in communications, business services and retail trade. The expansion of the supermarket network continued to stand at the centre of foreign investor interest. On the first place of the overall FDI volume by sector was trade and repairs (15.8%) and thanks to the privatization of ČSOB, the financial intermediation was on the second place with 15.1% of the total. Based on the foreign investments in companies operating cable and telephone networks, transport and communications received 12.2% of the total. Manufacturing accounted for 39% of the overall FDI inflow in 1999. The most important parts of the manufacturing industry were in the manufacture of non-metal mineral products (8.4%) and food, beverages and tobacco (6.4%). The last 1% of FDI went into the primary sectors of agriculture and mining and quarrying. (CNB, 2001)

In 2005 the inflow of foreign direct investment was again higher in the service sector (54%) than in manufacturing (38%). The highest volume of investments continued to be into financial intermediation and into insurance (19% of total FDI). The real estate and business

services industry consisted 12.3% of the total volume, followed by transport and telecommunications. (CNB, 2007)

Since 1998, the foreign investment into the manufacturing sector led to the increase of all manufactured products by 30%. Comparing to previous years the largest share of foreign capital within the total volume of FDI went into manufacturing (33.4%), followed by financial and insurance activities (25.4%) and wholesale and retail trade and repair of motor vehicles (10.7%) in 2014 (Figure 11). For development of competitiveness of the Czech economy, there are primarily important investments in sectors with high added value, such as the production of pharmaceuticals, computers and manufacture of medical, optical and other precision devices. In case of service sector, the important activities are in the field of postal and telecommunication technology, research and development, and information technology. The Czech Republic is classified by multinational firms in the second and third ten of the most attractive countries for research and development. (CNB, 2016)

Figure 11 FDI in the Czech Republic 2014 - breakdown by industry [%]



(Source: Data provided by the Czech National Bank, 2016)

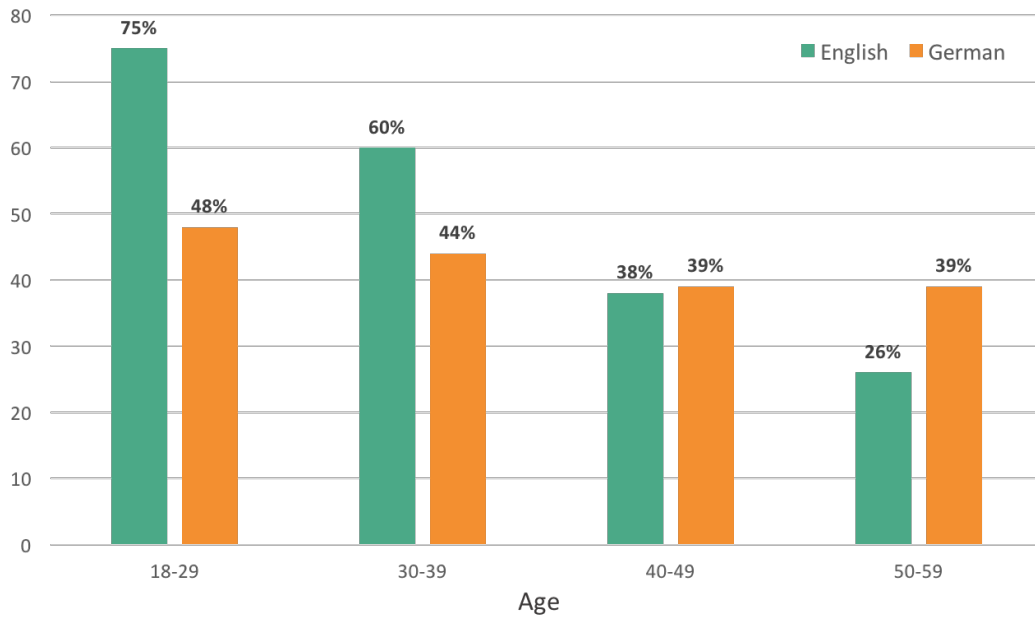
4.2 Key attractiveness factors influencing Czech FDI

The main factors of attractiveness of the Czech Republic for foreign investors are its strategic geographical location in the centre of Europe combined with good quality of life, social stability, cost competitiveness, financial stability, investment incentives, skilled workforce and its unique cultural and natural heritage. The analysis of factors influencing Czech foreign direct investment includes the size and openness of the economy, education and labour market and the transport infrastructure network. Other factors such as barriers, the government measures and the risk are briefly described within this section.

4.2.1 Education and labour market

Additional education generally enhances labour market outcomes, because it increases the number of available skilled and experienced workers for foreign investors. The Czech Republic has a skilled, hardworking, productive and well-educated labour force and the literacy rate is above 98 percent. At the end of 2016 there were more than 91,000 students enrolled in technical fields at Czech universities. The number of students at universities increased from 118,000 in 1991 to 326,909 in 2016. The reason for the increasing number of students are changes in the education system and a group of potential employees for foreign investors, who are interested in university graduates. Based on the survey provided by Czech Invest in 2014, 72 percent of people in the Czech Republic aged 18 to 59 speak at least one foreign language and their knowledge of languages is still rapidly improving. (CzechInvest, 2016) The best known foreign language in the Czech Republic is English, followed by German (Figure 12).

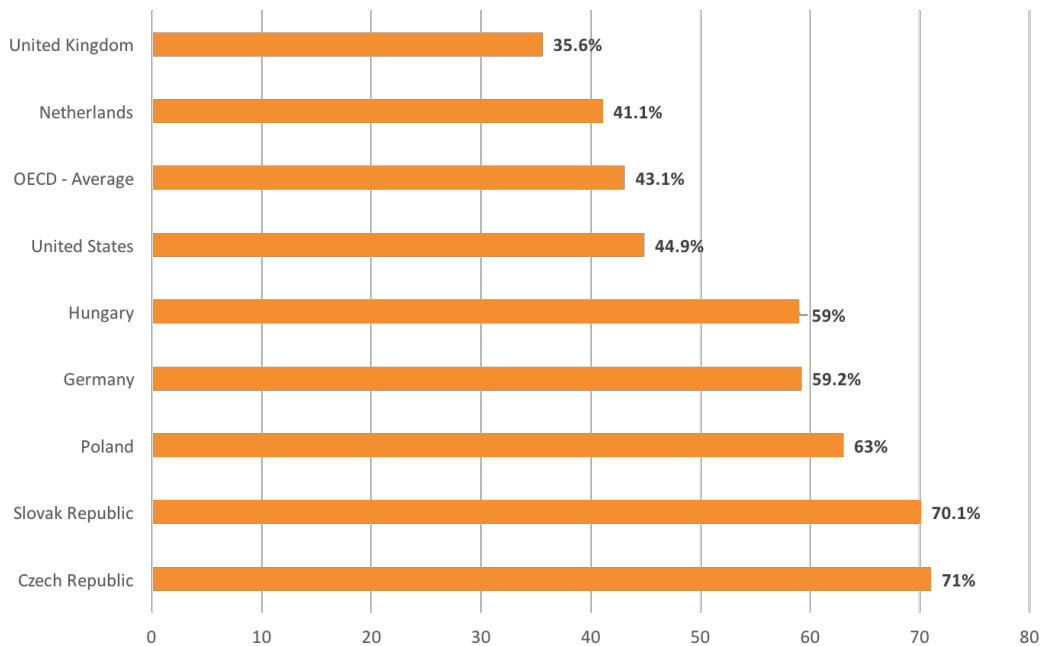
Figure 12 Foreign language skills by age group in 2014 [%]



(Source: Data provided by STEM, 2014)

The OECD estimates that 75 percent of individuals ages 24 to 64 across OECD countries have acquired post-high school education. In the Czech Republic, 92 percent of its citizens having pursued education after high school, which show its potential skilled and effective workers attractive to foreign investors. The indicator in figure 13 looks at adult education as defined by the upper secondary education completed by the 24-64 age group. Compared with the European Union, in the Czech Republic 71 percent of 25-64 year olds population have completed the upper secondary education. The average percentage of the population with at least upper secondary education across OECD countries was 43.1 percent in 2015. (Skellington, 2016)

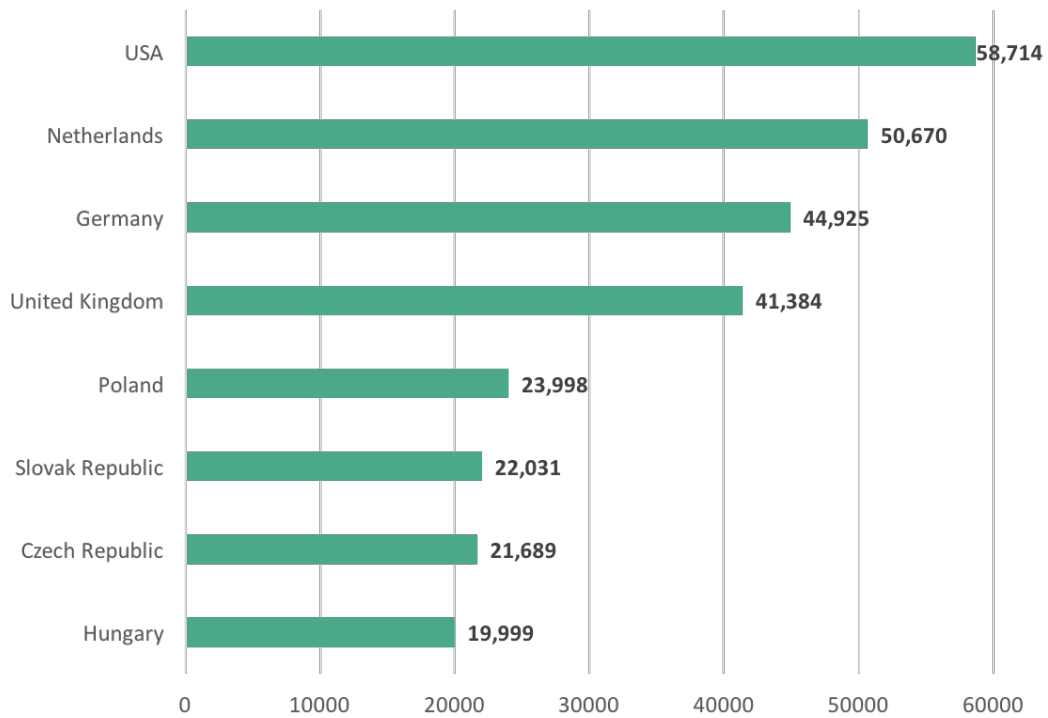
Figure 13 Population with at least upper secondary education in 2015 [% of the 25-64 age group]



(Source: Data provided by OECD. 2015)

As the companies are increasingly inclined to seek out additional cost savings, one of the main attractions of the Czech economy is its skilled and well-educated workers available at a fraction of the costs compared with CEE countries. The Czech Republic sustains lower labour costs, which includes wages and salaries, contract labour, employee benefits and insurance, compared to for instance France, the United Kingdom or Germany. Although the labour costs are higher than in some Asian countries, together with other attractive factors, such as high-quality infrastructure or great geographical location, the Czech Republic is an attractive destination for foreign investors. In 2015 the average annual wage for employees in the Czech Republic was \$21,689 (Figure 14), which was much lower than in the United Kingdom (\$41,384), Germany (\$44,925) or in USA (\$58,714). Furthermore, the differences in wages among Czech regions reach approximately 20 percent. Employees in the capital city Prague are generally paid more than in other regions in the Czech Republic (currently 28 percent above the Czech average). (CzechInvest, 2016) (Skellington, 2016)

Figure 14 Average annual wages in 2015 [USD]



(Source: Data provided by OECD, 2015)

More important information for foreign investors could be the unit labour costs in industry of particular country. The indicator is calculated as average labour costs per one hour in industry measured in EUR. Based on the data from Eurostat, labour costs in the Czech Republic represent the competitive advantage, because their level is many times lower than in the Euro area (19 countries) average. In 2015 the EU-19 average unit labour costs per one hour in industry was 29.5 EUR, while in the Czech Republic was 9.9 EUR. However, the competitive advantage of lower costs is decreasing, as the increasing trend of unit labour costs is higher than the increasing productivity. Above that there is still decreasing competitiveness coming from lower wages of the new EU members. (Plchová et al., 2013) (Eurostat, 2016)

4.2.2 Market size and openness of the economy

The market size is another important determinant of FDI in the host country, as the country with a larger market size will attract more foreign investors due to lower costs and a larger

potential demand. Market size can be measured by the country's total population size and economic power, or it can be approximated by GDP. For foreign-owned firms, the size of demand of the host country is important. (Skellington, 2016)

Since 1989, the Czech Republic has become a highly popular destination. Tens of thousands of foreigners have moved to the Czech Republic based on a combination of a high standard of living and low costs. Based on the quality of life index, people are happily living and working in the Czech Republic, which appeals to foreign investors seeking a reliable and dedicated workforce in the country. The Czech Republic offers security, social stability and reliable healthcare to its citizens. Based on the data from Eurostat (Table 8), all populations from selected countries have grown between 2014 and 2016, except Hungary and Poland. However, Poland has the largest population size among the Visegrad Four, followed by the Czech Republic with 10.5 million people. The CEE countries with larger population are more attractive for foreign investors due to the potential higher rates of return on capital and profits from investments. (Skellington, 2016)

Table 8 Total population (2014-2016)

Country	2014	2015	2016
Czech Republic	10,512,419	10,538,275	10,553,843
Slovak Republic	5,415,949	5,421,395	5,426,252
Poland	38,017,856	38,005,614	37,976,209
Germany	80,767,463	81,197,537	82,175,684
Hungary	9,877,365	9,855,571	9,830,485
United States	319,849,022	321,773,631	324,118,787
Netherlands	16,829,289	16,900,726	16,979,120
United Kingdom	64,351,155	64,875,165	65,382,556

(Source: Data provided by Eurostat, 2016)

For foreign investors, the openness of the country and involvement in the international trade is very important. An open investment climate is a key element of the Czech economy. The Czech Republic follows EU law and OECD standards for equal treatment of foreign and domestic investors. There are no general restrictions for foreign investors, however, some

limits exist within some sectors. The Czech Republic attracts FDI for its market size and is trying to diversify its investments into new fields of research, development and innovative technology. The countries from the European Union are the main foreign investors in the Czech economy but in these days the government is trying to gain more export and investment opportunities from other countries in the world. Since 2005, the trade balance has been positive and in 2012 reached a surplus of about \$7.5 million. (OECD, 2001) (Eurostat, 2016)

Nowadays, the structure of foreign direct investment is changing. The Czech Republic spends more resources on research and development, strategic services and investment projects. All foreign investors are treated identically as domestic investors: both are subject to the same tax codes and laws. This means that there are no general restrictions on foreign investment and investors can operate their business under the same conditions as Czech persons, however, some sectors require special registrations or memberships. The size of involvement of a country in international trade influence the size of a country and the level of reached economic development. (CzechInvest, 2016)

Table 9 includes indicators of intensity of the engagement of selected countries and European Union in international trade, the quantitative role of exports of goods and services in the economy of the country as percentage of GDP. The Czech Republic has relatively high engagement in international trade, which represents a high attractiveness for international investment. Since 2000, the percentage has been increasing and in 2015 the exports of goods and services comprised 83 percent of GDP. The openness of the country is important for efficiency seeking investment, they are based on the low cost production which is determined for export abroad. (Plchová et al., 2013)

Table 9 Exports of goods and services 2000-2015 [% of GDP]

Country	2000	2001	2002	2003	2004	2005	2006	2007
Czech Republic	48.3	49.1	45.2	47.1	57.4	62.3	65.3	66.6
Hungary	66.8	64.9	58.1	56.4	59.7	62.8	74.3	78.3
Poland	27.2	27.2	28.8	33.4	34.3	34.6	37.9	38.6
Slovak Republic	54.1	57.8	57.5	62.2	68.7	72.0	81.0	83.3
European Union	33.7	33.7	33.1	32.4	33.7	35.1	37.3	37.9

Country	2008	2009	2010	2011	2012	2013	2014	2015
Czech Republic	63.4	58.8	66.2	71.3	76.2	76.9	82.5	83.0
Hungary	79.6	74.8	82.2	87.2	86.8	86.0	88.7	90.7
Poland	37.9	37.2	40.1	42.6	44.4	46.3	47.6	49.6
Slovak Republic	80.0	67.6	76.3	85.0	91.4	93.8	91.8	93.5
European Union	38.9	34.8	38.6	41.4	42.6	42.8	43.1	44.0

(Source: Data provided by OECD, 2015)

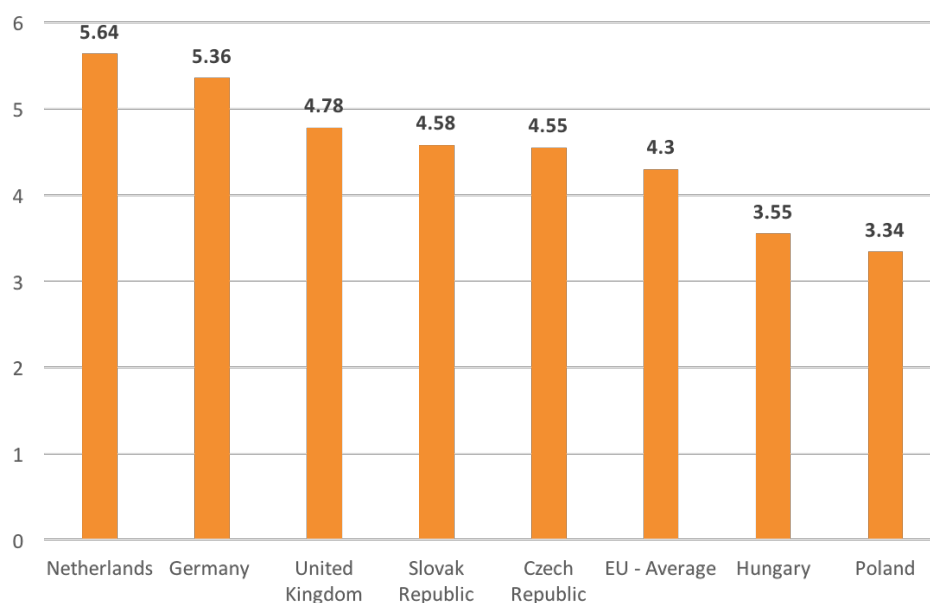
4.2.3 Transport infrastructure network

One of the other important determinants influencing Czech foreign direct investment is advantageous geographical location of the Czech Republic combined with reliable infrastructure. This location at the very centre of Europe makes it a natural crossroads for major transit corridors. Transport infrastructure is usually connected with FDI and economic growth of the country. The availability of good infrastructure, such as roads, highways, ports, air transportation, communication networks and electricity, increases productivity and mainly attracts foreign investors. An extensive network of transport routes links the Czech Republic to neighbouring and other European states. In general, the capital city Prague is only a two-hour flight from most other European capitals like London, Paris, Berlin, Amsterdam and others. Since the Czech Republic has become a member of the EU Single Market, the significance of the country as a transit hub has grown. The single market currently covers the area of 28 countries in Europe and with more than 500 million of customers in total. With a reliable infrastructure the Czech Republic improves the investment climate by subsidizing the cost of total investment and increasing the amount of returns. (Czechinvest, 2016) (Skellington, 2016)

The quality of transport infrastructure in the Czech Republic remain quite high for air transportation and rail networks. On the other hand, ratings for the road infrastructure are lower, but with a clear positive trend. The timeliness of shipments has improved to close to the EU average. The density of railways in the Czech Republic ranked as twelfth in the world, with 1.66 km per square km, and as the average compared with Europe. According to survey by the World Economic Forum for the quality of railroad infrastructure, where number 7 means extensive and efficient railroad infrastructure, the Czech Republic received

score of 4.55 in 2015-2016, while the EU average was 4.30 (Figure 15). (Czechinvest, 2016) (European Commission, 2017)

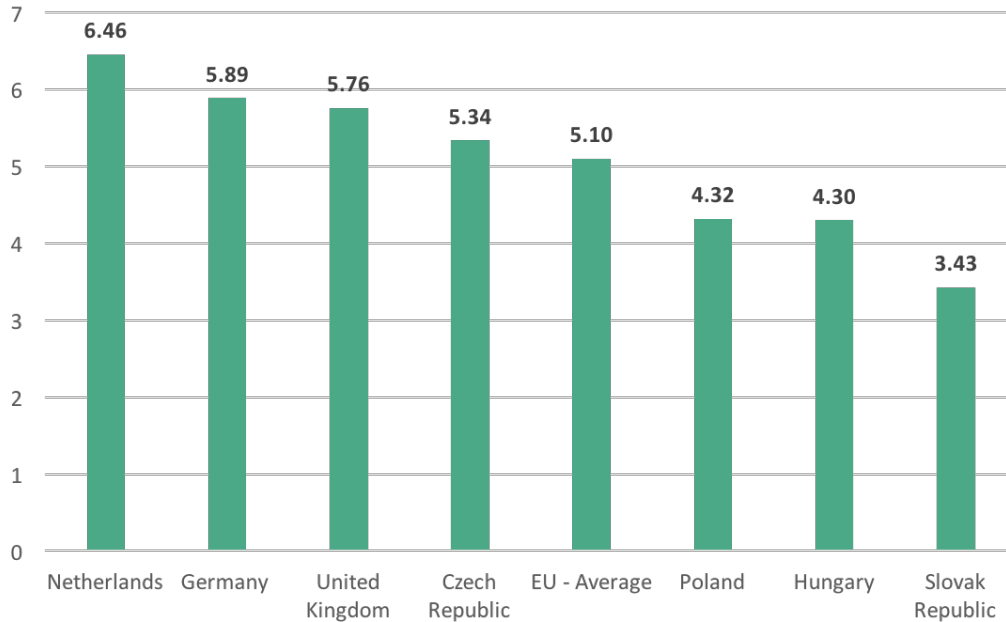
Figure 15 Quality of railroad infrastructure 2015-2016 [1=extremely underdeveloped, 7=extensive and efficient]



(Source: Data provided by World Economic Forum Global Competitiveness Report, 2016)

In 2014, based on data from the Czech statistical office, the length of constructed railway tracks in total was 15,578 km, total road and motorway network 55,748 km, total length of navigable waterways regularly used for transport was 687 km and total number of airports included public and private international and domestic airports was 91. According to a survey by the World Economic Forum in 2015-2016 for the quality of air transport infrastructure, the Czech Republic received a score of 5.34 compared to the EU average 5.10 (Figure 16). In 2015, the total number of air passengers transported by the Czech Republic was over 12 million. This number indicates the potential market for foreign investors, as the country with more visitors appears more prosperous to investors. The higher quality of air transportation also encourages business development. (European Commission, 2017) (Skellington, 2016)

Figure 16 Quality of Air transport infrastructure 2015-2016 [1=extremely underdeveloped, 7=extensive and efficient]



(Source: Data provided by World Economic Forum Global Competitiveness Report, 2016)

Based on the country's advanced railroads, road and air transportation system, the potential investment costs are lower, while the potential productivity is increasing. It follows that the transport infrastructure network in the Czech Republic is a big advantage for foreign investors.

4.2.4 Investment promotion and incentives

The Czech Republic disposes of a lot of programmes to attract foreign investment and currently has the most positive attitude to incoming investors in its history. The incentives are linked mainly to supporting job creation and reducing the level of unemployment, to develop economic activities and enable innovation of technology centres and strategic services in all regions of the country. In 1992, the government tried to start up the economy through investment incentives and established the Business and Investment Development agency CzechInvest. The main aim of the agency is attracting foreign investment and developing domestic companies through its services and development programmes.

CzechInvest also provides current data and information on business climate and investment opportunities to potential investors. (CzechInvest, 2015) (KPMG, 2014)

The Czech government introduced a program of national investment incentives in 1998 and it was a significant factor influencing FDI in the Czech Republic. One year later, the job creation grants were increased and the minimum investment volume requirement was reduced from \$25 million to \$10 million. Further reduction was in regions of high unemployment to \$5 million to widen access to the program. The program was successful and, up to the end of 2000, almost 50 companies (for example Schoeller, Continental, Glaverbel, Matsushita, Philips and others) received support from investment projects worth \$2.1 billion and created almost 16,000 new jobs. From 1998 to 2014, investors committed to investing more than \$29.2 billion and created approximately 170,000 new jobs. (OECD, 2001) (OECD, 2004)

Foreign investors often weigh their decisions to locate a company based on the investment incentives offered by the host country. Investors who place their investments in the Czech Republic can obtain aid in the form of investment incentives and only a legal entity with its registered office in the Czech Republic can be a recipient of incentives. The Czech Republic has developed attractive conditions for new investors and all benefits are provided based on the law and transparent rules. The conditions for investment incentives differ according to the supported areas which are the manufacturing industry, technology centres or business support services centres. The largest numbers of applications for incentives were received in the automotive and mechanical-engineering sectors. Based on Act No. 72/2000 Coll., on Investment Incentives effective as of May 1, 2015, investors in the Czech Republic may receive the investment incentives in the form listed below. (CzechInvest, 2015) (Skellington, 2016)

Forms of Investment Incentives

- ⇒ Corporate income-tax relief for a period of ten years
- ⇒ Cash grants for job creation up to the amount of CZK 300,000
- ⇒ Cash grants for retraining and training new employees up to the amount of 50% of training costs
- ⇒ Property-tax exemption for a period of five years – only in special industrial zones

⇒ Cash grants for acquisition of assets – only for strategic investments

Eligible Costs

⇒ Assets, whereas new machinery must comprise 50% of eligible costs

State Aid

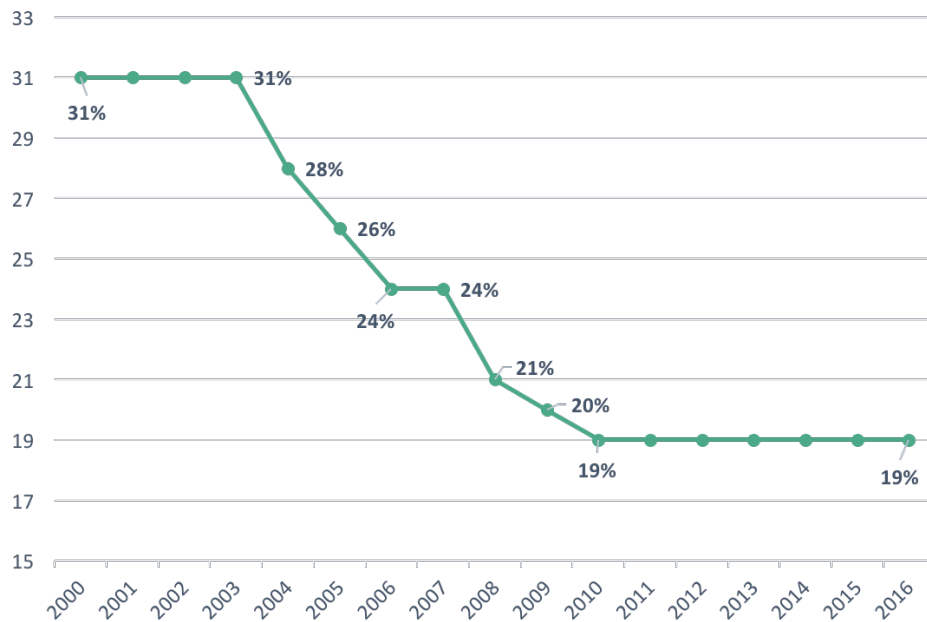
⇒ 25% of eligible costs for large enterprises throughout the Czech Republic, with the exception of Prague, for all types of business support services centres

⇒ 6.25% of eligible costs in the case of data centres

The net growth in domestic income from foreign investment is shared with the government through taxation and is an important source of income for the government. The taxes with most significant impact on investment are corporate taxes, personal income taxes and the value added tax (VAT). In the Czech Republic the taxes from net profit are applied on the company through the corporate tax and taxes from income of each person are collected through personal income taxes. The value added tax is imposed on goods and services. (Accace, 2016) (Skellington, 2016)

The corporate income tax is an important macroeconomic factor in determining the flow of FDI. The corporate tax rate in the Czech Republic is levied at a general rate of 19 percent, and averaged 28.17 percent from 1993 to 2016. The highest rate of 45 percent reached in 1993 and the lowest rate of 19 percent reached in 2010 (Figure 17). Corporate income tax rate of 5% applies to basic investment funds. Pension funds are subject to a tax rate of 0%. (Accace, 2016)

Figure 17 Development of Corporate Income Tax 2000-2016 [%]



(Source: Data provided by OECD, 2016)

In 2016 the personal income tax in the Czech Republic was a flat rate of 15%. The Czech VAT Act is based on EU Directives relating to VAT. Value added tax is generally imposed on supplies of goods and provision of services in the Czech Republic, as well as on goods imported to the Czech Republic or acquired in the Czech Republic from other EU member states. As a VAT payer must be register businesses seated in the Czech Republic whose turnover exceeds CZK 1,000,000 for a period of 12 previous consecutive calendar months, there is no registration needed for non-resident businesses. However, they have to register as a VAT payer if they make any supply subject to Czech VAT or supply goods from the Czech Republic to another EU member state. (Accace, 2016) (CzechInvest, 2016)

There are three VAT rates in the Czech Republic:

- ⇒ 21% for most goods and services
- ⇒ 15% for some selected goods and services (e.g. food products, certain books, certain pharmaceuticals and special healthcare products)
- ⇒ 10% for some selected goods (e.g. certain books, infant food, certain pharmaceuticals)

4.2.5 Types of FDI barriers and risks

Investment flows from foreign countries are also affected by restrictions that prevent free movement of the capital between countries, acquisitions of property or the ability to set up a company. The barriers include limitations on foreign ownership, screening or notification procedures and management and operational restrictions. However, investment agreements aim at partly removing these restrictions. (OECD, 2015)

The most obvious barriers toward FDI are restrictions on foreign ownership and they usually take the form of limiting the share of companies' equity capital in a target sector that non-residents are allowed to hold. Other restriction can be the ability of foreign nationals either to manage or work in affiliates of foreign companies. Furthermore, FDI flows can be held back by non-transparent informal public or private measures. To measure these barriers, OECD compiled the FDI Regulatory Restrictiveness Index (FDI Index). The FDI index is measured in 58 countries and is built on the following main types of FDI restrictions: (OECD, 2015) (Lebrand, 2015)

- ⇒ Foreign equity limitations
- ⇒ Screening or approval mechanisms
- ⇒ Restrictions on the employment of foreigners as key personnel
- ⇒ Operational restrictions, e.g. restrictions on branching and on capital repatriation or on land ownership

Table 10 FDI Regulatory Restrictiveness Index 2015 [0= no restrictions]

Country/Indicator	Equity restriction	Screening & Approval	Key foreign personnel	Other restrictions	FDI Index
Czech Republic	0.003	0.000	0.000	0.007	0.010
Hungary	0.027	0.000	0.000	0.001	0.028
Poland	0.056	0.000	0.006	0.010	0.072
Slovak Republic	0.049	0.000	0.000	0.000	0.049
OECD - Average	0.038	0.017	0.002	0.010	0.067

(Source: Data provided by OECD, 2015)

Based on the FDI index in 2015 (Table 10), the Czech Republic did very well, compared to other countries in the region and OECD average. When the index is 0, there are no restrictions to foreign entry. In general, there are no restrictions in screening and restrictions on key personnel (manager, directors) in the Czech Republic. Some obstacles can be found for companies owned by foreign entities, where there are some low limits for share of equity capital that non-residents are allowed to hold, and other restrictions (such as land, reciprocity, capital repatriation, branches, etc.). The FDI index in the Czech Republic is very low which means a high advantage for foreign investors and the Czech Republic is open to foreign direct investment inflows. (OECD, 2015)

The overall country risk is an important aspect for foreign investors. In general, the country risk includes the economic, political and financial system risks. The Czech Republic is one of the most stable and prosperous markets in Central Europe. The Czech Republic has relatively low external and internal macroeconomic imbalances and the public debt and fiscal deficit are on manageable levels. Economic growth in 2016 lowered the deficit to less than 0.4% of GDP. The Czech Republic has a stable and healthy banking sector, which has excess liquidity and is able to meet the financing needs of investors. The Czech National Bank regulates the insurance industry in addition to the banking sector and capital markets. Bribery is illegal, but bribery and corruption is still an issue for legal and business transactions. Based on the Corruption Perception Index, the country was ranked 53rd out of 176 countries in 2014. The risk of losses related to financial crises are minimal. (KPMG, 2014)

The level of respect for human rights in the Czech Republic is generally very high and the standard of living is increasing. The Czech Republic has a predictable and transparent legal environment, legal system and business infrastructure. Based on the Doing Business Survey by World Bank, it has a ranking of 36th out of 189 countries in 2016. Table 11 shows credit rankings which evaluate a country's creditworthiness and its future ability to pay its obligations. These ratings are produced by independent credit rating agencies such as Standard and Poor's, Moody's and Fitch. All ratings for the Czech Republic stand at stable outlook with low credit risk. Based on this data, the Czech Republic represents a stable economy with low risks for investment and a safe environment for foreign investors. (A.M.Best, 2016) (CNB, 2011)

Table 11 The Credit rating of the Czech Republic 2016 [A = riskless]

Country/Rating	S&P	Moody's	Fitch
Czech Republic	AA-	A1	A+
Slovak Republic	A+	A2	A+
Poland	BBB+	A2	A-
Germany	AAA	Aaa	AAA
Hungary	BBB-	Baa3	BBB-
United States	AA+	Aaa	AAA
Netherlands	AAA	Aaa	AAA
United Kingdom	AA	Aa1	AA

(Source: Data provided by Trading Economics, 2016)

4.3 Trend analysis of macroeconomic factors

The Czech Republic is one of the most stable and prosperous markets in Central Europe, with a long period of economic growth, low inflation and low interest rates. These factors make the Czech economy an exception among emerging market economies. From an economic perspective, the foreign investors mainly focus on GDP growth and other financial indicators such as inflation rate, unemployment rate and exchange rate. The following macroeconomic factors are briefly analysed in period from 2004 to 2015. Furthermore, the trend analysis is used for estimation of future values of all factors.

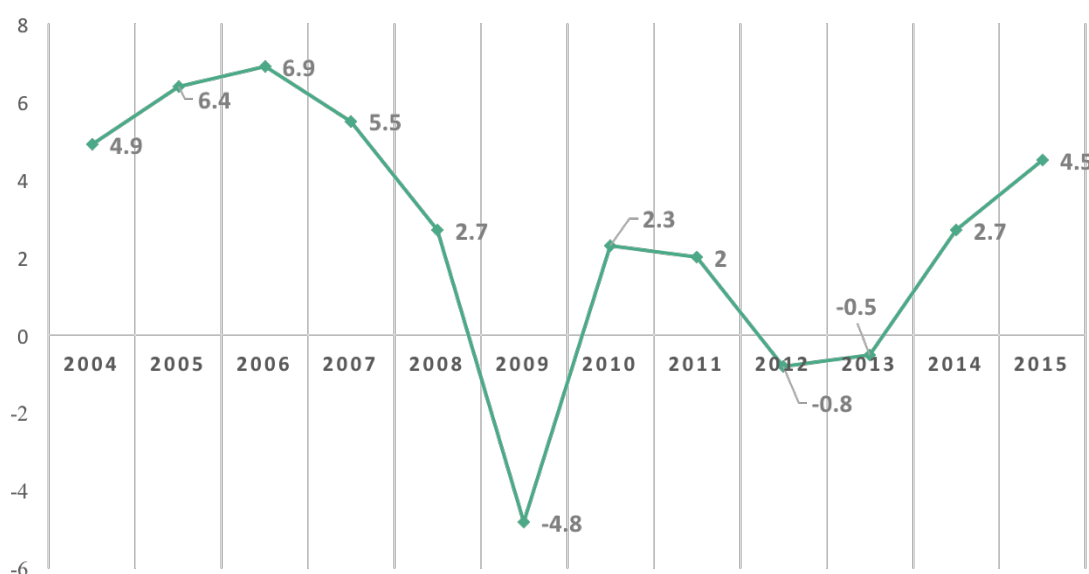
4.3.1 Economic growth

The Czech Republic successfully adopted many best practise policies from OECD membership during the past twenty years and belonged to the fastest growing countries of the EU in 2015. Since the 1990s, the growth of the economy has been strong, driven by opening markets and inflows of foreign investment and supported by advantageous location and competitive industrial base. However, in the aftermath of the crisis, the economic growth almost stopped and again picked up sharply in 2015 (Figure 18).

The macroeconomic situation in general is good and economy is recovering, however, productivity growth has decelerated markedly since the crisis. After a brief part of recovery to positive growth rates in 2010 (2.3%) after crisis in 2009 (-4.8%), the Czech economy dived into another period of decrease in 2012, mainly caused by deteriorating domestic

environment and a more difficult investment climate. However, the economy performance was exceptionally strong, reaching 4.5% in 2015, which was the fastest rate since 2006 (6.9%). The main contribution was by domestic demand underpinned by absorption of expiring EU funds and low commodity prices, and household consumption was supported by income growth. The economy growth in 2015 was supported as well by the fall of oil prices on the world market, thereby reducing input costs for companies and spent on fuel purchase for households. (KPMG, 2014) (MFCR, 2016)

Figure 18 Annual GDP growth rate 2004-2015 [%]



(Source: Data provided by OECD, 2015)

Since 1995, the real GDP per capita rose by 48 percent and it stood at 76 percent of the OECD average in 2014. The gross domestic product per capita is increasing year by year and the average amount between 2004 and 2015 was \$27,451. The total amount of GDP per capita was \$33,753 in 2015 (Table 12). (Kamenický et al., 2016)

Table 12 Total GDP per capita 2004-2015 [USD]

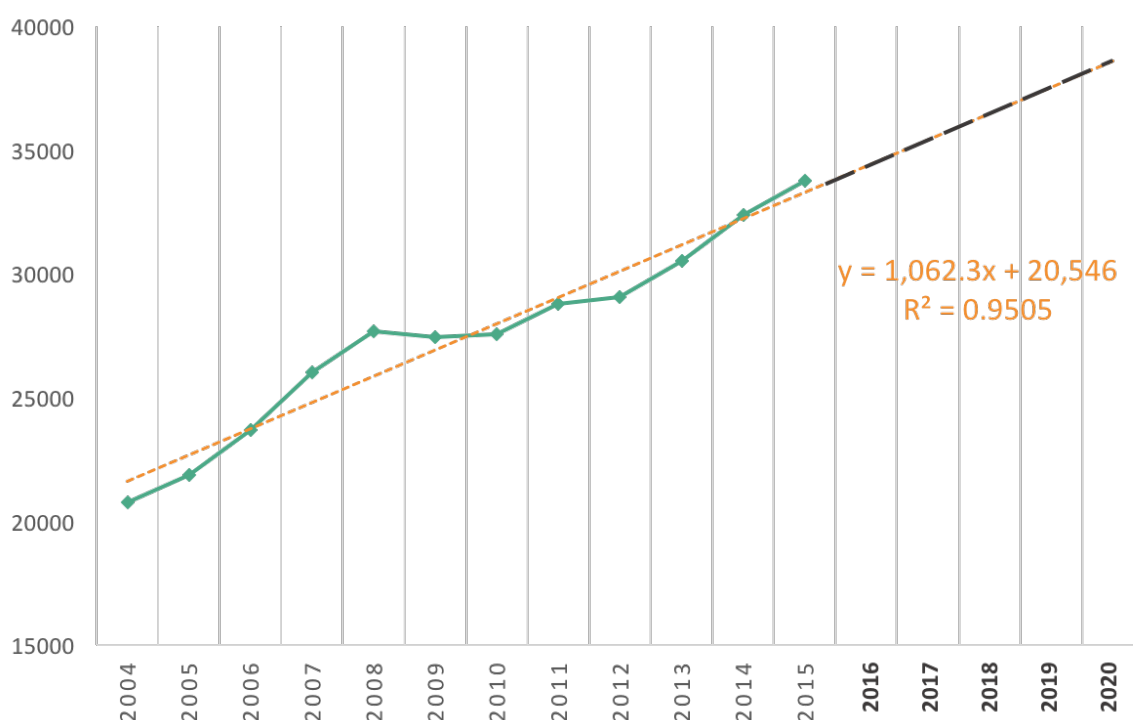
Year	2004	2005	2006	2007	2008	2009
GDP	20,761	21,861	23,688	25,998	27,664	27,442

Year	2010	2011	2012	2013	2014	2015
GDP	27,547	28,796	29,051	30,496	32,359	33,753

(Source: Data provided by OECD, 2015)

The linear trend line is used for the estimation of future GDP growth per capita. The linear trend line is a best-fit straight line that is used with simple linear data set and usually shows that something is increasing or decreasing at a steady rate. The calculation is based on data from table 12. Furthermore, the least square method is used to find a line that matched the best point. The coefficient of determination R^2 will give information about the goodness of fit of a model. If the R^2 value equals 1, the regression line perfectly fits the data.

Figure 19 Trend analysis of GDP per capita [USD]



(Source: Data provided by OECD, 2015)

The figure 19 shows the equation $y = 1,062.3x + 20,546$ and a R^2 value of 0.9505. It follows that about 95 percent of variability of these values can be explained by this model and the deviation of the real data from the model can be only about 0.5 percent. The model shows a rising trend, which indicated stable economic growth between 2016 and 2020 (Table 13).

The consumption growth will be maintained by strong income growth and beneficial borrowing conditions. The main risks to the forecast of economic growth are external, mainly slower growth in world trade would lower exports through value chains. Domestic risk may occur on the basis of increased public spending or faster take-up of EU funds. (OECD, 2016)

Table 13 Estimated future amount of GDP per capita [USD]

Year	2016	2017	2018	2019	2020
GDP	34,356	35,419	36,481	37,543	38,605

(Source: Own calculation)

4.3.2 Inflation

Foreign investors also pay attention to the inflation rate as the price level directly affects their production inputs and profitability. High inflation and also high deflation are undesirable. Inflation in the consumer price area is measured as the increase in the consumer price index. The recovery of the Czech economy after the global crisis was characterised by low inflation. The Czech National Bank has pursued extremely accommodative monetary policy. Relatively low inflation rate is very positive for the financial sector and an important attraction for foreign investor, because inflation is a major factor in the movement of interest rates. Inflation is also an important part of the appreciation of money, regards to savings or investment. (OECD, 2016)

Since 2004, inflation has had an acceptable level of relatively stable development. For example, in 2006 inflation rate was 2.5 percent. However, before the global crisis inflation in the Czech Republic rapidly increased to 6.30 percent and then in 2009 sharply fell to 1 percent. Since 2009, inflation has been steadily decreasing. The average annual inflation rate in the Czech Republic in 2015 reached only 0.3 percent (Table 14), which was the lowest rate since 2003 and the second lowest in the history of the independent Czech Republic. Low inflation was determined largely by the deep slump in work prices for mineral fuels and a generally low inflation rate around the world. (CSO, 2017) (MFCR, 2016)

Table 14 Annual inflation growth rate 2004-2015 [%]

Year	2004	2005	2006	2007	2008	2009
Inflation	2.80	1.80	2.50	2.90	6.30	1.00

Year	2010	2011	2012	2013	2014	2015
Inflation	1.50	1.90	3.30	1.40	0.40	0.30

(Source: Data provided by OECD, 2015)

The base index is inflation rate counted as an increase in CPI compared with the base period (average 2015=100) and expresses the change in the price level between the reference year against the average of 2015. The linear trend line is used for the estimation of future base index. The linear trend line is a best-fit straight line that is used with simple linear data set and usually shows that something is increasing or decreasing at a steady rate. The calculation is based on data from table 15. Furthermore, the least square method is used to find a line that matched the best point. The coefficient of determination R^2 will give information about the goodness of fit of a model. If the R^2 value equals 1, the regression line perfectly fits the data.

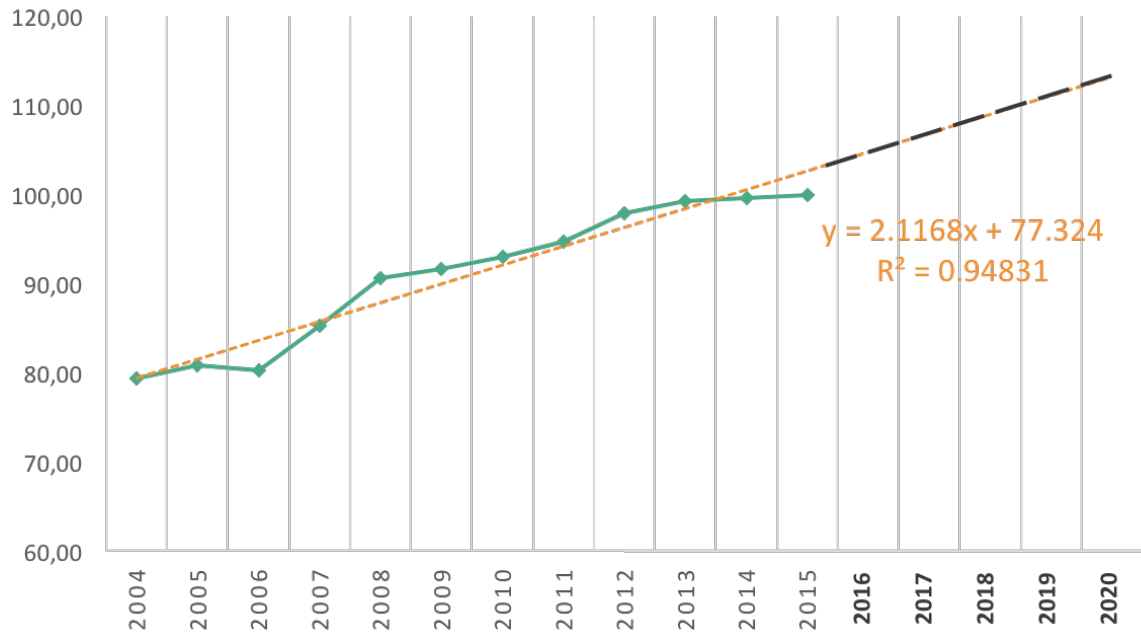
Table 15 Inflation rate – an increase in CPI compared with the base year [2015=100]

Year	2004	2005	2006	2007	2008	2009
Base index	79.40	80.90	80.30	85.30	90.70	91.70

Year	2010	2011	2012	2013	2014	2015
Base index	93.00	94.80	97.90	99.30	99.70	100

(Source: Data provided by CSO, 2015)

Figure 20 Trend analysis of inflation rate [2015=100]



(Source: Data provided by OECD, 2015)

The figure 20 shows the equation $y = 2.1168x + 77.324$ and a R^2 value of 0.94831. It follows that about 95 percent of variability of these values can be explained by this model and the deviation of the real data from the model can be only about 0.5 percent. The model shows a rising trend, when the rising cost pressures will push inflation rate between 2016 and 2020 (Table 16).

Table 16 Estimated future inflation rate [2015=100]

Year	2016	2017	2018	2019	2020
Base index	104.84	106.96	109.08	111.19	113.31

(Source: Own calculation)

4.3.3 Unemployment rate

Unemployment is the socio-economic global problem that affects millions of people. The Czech Republic has the lowest proportion of unemployment across the European Union. However, since 1997, unemployment has started rising sharply and the highest value of unemployment was in 2004 (8.3%). Another critical period was at the turn of the year

2009/2010 during the economic crisis. Reducing foreign demand forced companies to restrict production and reduce staff, and companies were afraid of unfavourable future development of the economy. (OECD, 2016)

In 2015, the annual average unemployment rate was only 5 percent, compare to the previous year, where the share of the unemployed was 6.1 percent and people without a job was about 465,700. On the labour market, the economic growth was reflected also in the favourable development of employment; the annual growth of 1.4 percent was the highest since 2008. The number of vacancies is increasing and low unemployment rate has significant social impact and improves public finances. The number of vacancies is almost 141,000, the higher number was recently in 2008. Nowadays, companies need a qualified workforce and are open for workers from abroad. The current situation on the labour market mainly influenced the growth of the Czech economy, industrial production and agriculture, as well as services, forestry, mining and tourism. (CSO, 2017) (MFCR, 2016)

Table 17 Annual average of general unemployment rate 2004-2015 [%]

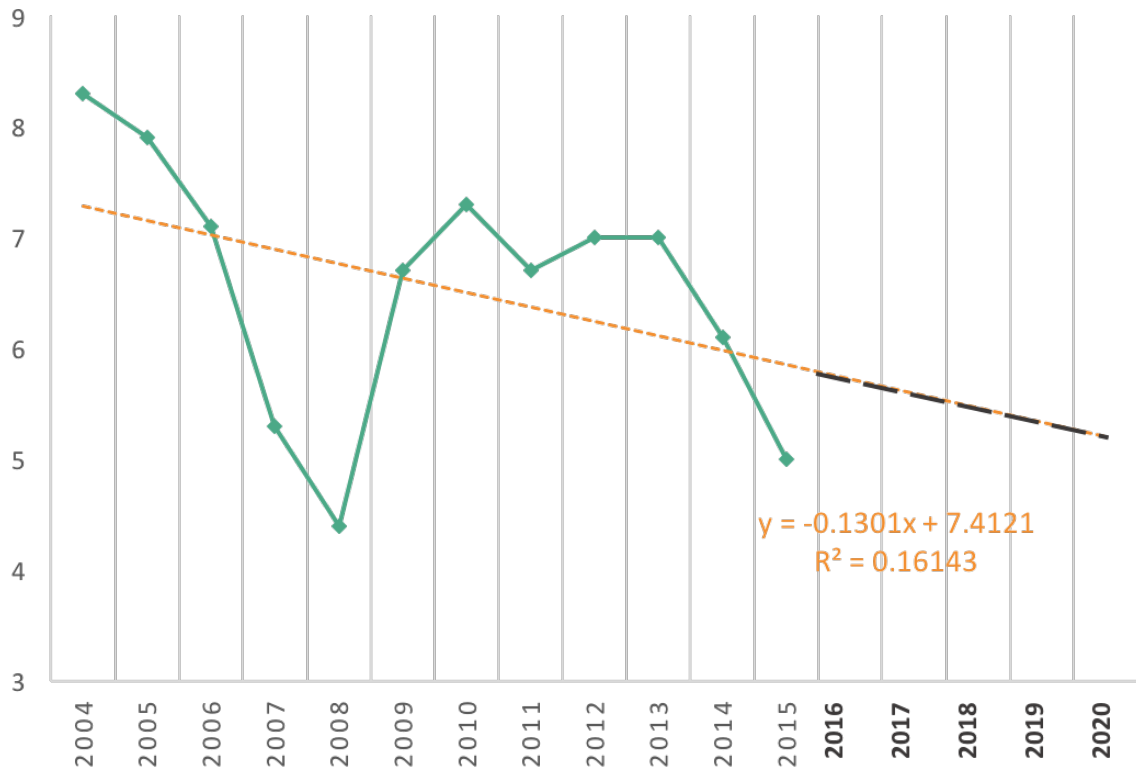
Year	2004	2005	2006	2007	2008	2009
Unemployment rate	8.3	7.9	7.1	5.3	4.4	6.7

Year	2010	2011	2012	2013	2014	2015
Unemployment rate	7.3	6.7	7	7	6.1	5

(Source: Data provided by CSO, 2015)

The trend analysis is used for the estimation of future unemployment rate. The calculation is made in the program Excel by Trendline, based on data from table 17. Furthermore, the least square method is used to find a line that matched the best point. The coefficient of determination R^2 will give information about the goodness of fit of a model. If the R^2 value equals 1, the regression line perfectly fits the data.

Figure 21 Trend analysis of general unemployment rate [%]



(Source: Data provided by CSO, 2015)

The figure 21 shows the equation $y = -0.1301x + 7.4121$ and a R^2 value of 0.16143. It follows that only about 16 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 84 percent. The model shows a decreasing trend, which is desirable in case of unemployment (Table 18). Besides, stable labour demand will push unemployment towards its lowest rate, accelerating wages and supporting consumption.

Table 18 Estimated future unemployment rate [%]

Year	2016	2017	2018	2019	2020
Unemployment rate	5.72	5.59	5.46	5.33	5.20

(Source: Own calculation)

4.3.4 Exchange rate

The exchange rate is very important factor for foreign investors, as FDI are long term investments. The advantage is when the host country and investor use the same currency or at least currencies with a fixed exchange rate. All liabilities and assets then have the equal value without currency risks between the company and the investor. The exchange rate can be measured as the nominal, which expressed as the domestic price of the foreign currency, or as the real effective exchange rate, which is measured as the currency's overall alignment. (Catão, 2007)

After the Czech Republic joined the European Union in 2004, the long term rate of productivity growth in the Czech Republic and a low inflation rate, caused a further appreciation of the Czech crown. The global crisis in 2007 caused a depreciation of the dollar and the Czech crown accelerated even more, supported by increasing the interest rates by the Czech National Bank. In 2008, the Czech crown reached the strongest position with a value of CZK 17.06 per one USD (Table 19).

On the other hand, in 2012 the depreciation of Czech crown started and the rate per one dollar was CZK 24.6 in 2015. In 2013, the Czech National Bank decided to implement an intervention of the Czech crown as a further policy instrument within its inflation-targeting strategy. The CNB announced that it would intervene to maintain the Czech crown above a floor set at CZK 27 to the euro, in the foreign exchange market. (OECD, 2016) The primary reason was to prevent deflation, enhancing the competitiveness of exporters, creating more jobs and increasing wages. Although the undervalued exchange rate reinforces export, it also reduces the real value of wages, pension, savings and total household wealth. (CNB, 2017)

Table 19 Average annual Exchange rate 2004-2015 [USD]

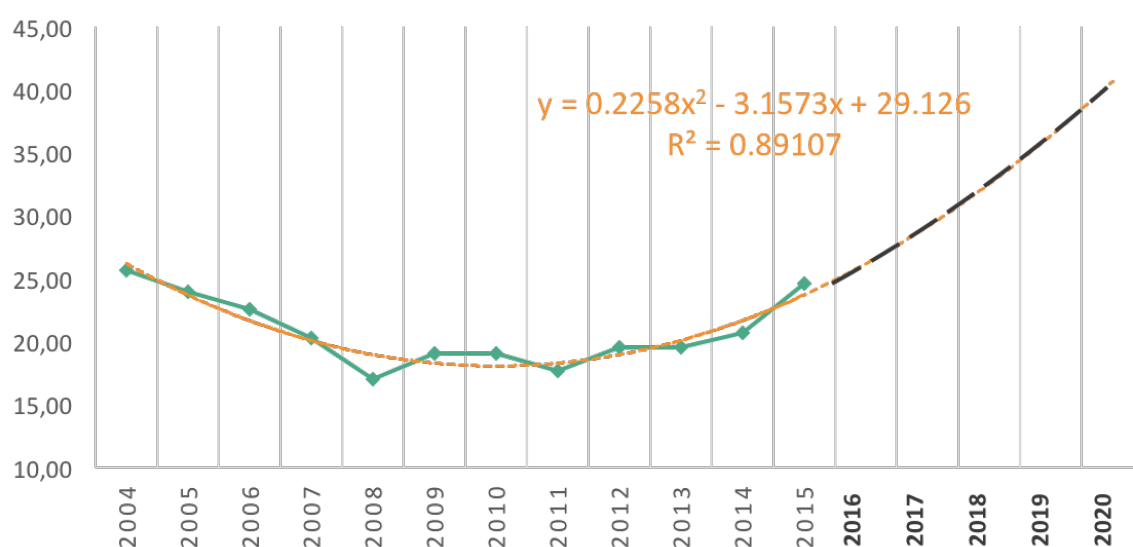
Year	2004	2005	2006	2007	2008	2009
Exchange rate	25.70	23.95	22.59	20.31	17.06	19.06

Year	2010	2011	2012	2013	2014	2015
Exchange rate	19.11	17.69	19.59	19.57	20.75	24.6

(Source: Data provided by CNB, 2015)

The polynomial trend line is used for the estimation of the future exchange rate for USD. An order 2 polynomial trend line is a curved line that is used when data fluctuates and generally has only one hill or valley. The calculation is based on data from table 10. Furthermore, the least square method is used to find a line that matches the best point. The coefficient of determination R^2 will give information about the goodness of fit of a model. If the R^2 value equals 1, the regression line perfectly fits the data.

Figure 22 Trend analysis of average annual Exchange rate [USD]



(Source: Data provided by CNB, 2015)

The figure 22 shows the equation $y = 0.2258x^2 - 3.1573x + 29.126$ and a R^2 value of 0.89107. It follows that about 89 percent of variability of these values can be explained by this model and the deviation of the real data from the model can be only about 11 percent. The model shows a rising trend, which indicates the depreciation of CZK against the USD between 2016 and 2020. (Table 20).

Table 20 Estimated future Exchange rate [USD]

Year	2016	2017	2018	2019	2020
Exchange rate	26.24	29.18	32.57	36.41	40.71

(Source: Own calculation)

The Real Effective Exchange Rate (REER) is one of the indicators of the international competitiveness of countries. The REER is measured as an average of the bilateral real exchange rates between the country and each of its trading partners, weighted by the respective trade shares of each partner. The values above 100 mean the decrease in the country's competitiveness relative to the base period, while values below 100 mean rising competitiveness. (Catão, 2007) Based on the data from table 21, the REER for the Czech Republic signify a rising trend in the county's competitiveness between 2012-2015, due to progressive improvement of foreign exchange relations.

Table 21 Real effective exchange rate index [2010=100]

Country/Year	2004	2005	2006	2007	2008	2009
Czech Republic	77.159	81.658	86.188	88.863	102.569	98.402
Slovak Republic	73.651	75.615	80.154	88.884	97.251	103.727
Poland	85.58	95.459	97.472	100.975	110.715	94.061
Germany	104.646	102.793	102.047	103.838	104.387	105.137
Hungary	92.314	94.23	89.922	100.247	103.862	97.839
United States	110.886	109.368	108.748	103.622	99.544	104.039
Netherlands	101.808	100.99	99.932	100.643	101.764	103.8
United Kingdom	119.809	119.517	121.502	125.712	110.139	96.547

Country/Year	2010	2011	2012	2013	2014	2015
Czech Republic	100	102.161	99.089	97.125	91.371	89.904
Slovak Republic	100	101.177	100.719	102.159	101.937	98.533
Poland	100	98.553	96.013	96.679	97.344	94.02
Germany	100	99.172	95.65	98.153	98.628	93.365
Hungary	100	100.023	97.727	96.631	92.273	89.08
United States	100	95.098	97.999	99.115	101.181	113.841
Netherlands	100	99.558	96.9	99.865	99.894	95.758
United Kingdom	100	101.478	106.832	105.769	113.702	121.798

(Source: Data provided by World Bank, 2015)

4.4 Statistical analysis of FDI inflows

The main aim of analysis is to use an econometric model and to evaluate how the development of selected indicators affect FDI inflows into the Czech economy. The econometric model is based on the economic theory. The analysis examines the dependency of increase in FDI inflow to these indicators: GDP growth, inflation rate, unemployment rate, exchange rate, wages, exports and corporate tax.

Table 22 Relations between variables in the model

	Name of the variable	Type of the variable	Unit
y₁	FDI inflow	endogenous	million USD
x₁	GDP growth	exogenous	%
x₂	Inflation rate	exogenous	%
x₃	Unemployment rate	exogenous	%
x₄	Exchange rate	exogenous	for USD
x₅	Average gross monthly wage	exogenous	CZK
x₆	Exports of goods and services	exogenous	% of GDP
x₇	Corporate tax	exogenous	%

(Source: Own elaboration)

The economic model consists of FDI inflow as a one-equation model. The assumption for this model is that changes in exogenous variables will influence FDI inflow into the Czech economy. The economic model is as follows:

$$y_{1t} = f(x_1, x_2, x_3, x_4, x_5, x_6, x_7)$$

The econometric model has to contain the stochastic variable (u_{1t}). All variables are specified in table 22. Based on the economic model, an econometric model with FDI inflow as an explained variable and GDP growth, inflation rate, unemployment rate, exchange rate, wages, exports and corporate tax as explanatory variables is as follows:

$$y_{1t} = \gamma_{11} x_{1t} + \gamma_{12} x_{2t} + \gamma_{13} x_{3t} + \gamma_{14} x_{4t} + \gamma_{15} x_{5t} + \gamma_{16} x_{6t} + \gamma_{17} x_{7t} + u_{1t}$$

The data set uses annual observations from year 2004 to 2015 (Table 23).

Table 23 Data set

Year	FDI inflow (million USD)	GDP growth (%)	Inflation (%)	Unemployment rate (%)
Variable	y ₁	x ₁	x ₂	x ₃
2004	4,974	4.9	2.8	8.3
2005	11,658	6.4	1.8	7.9
2006	5,459	6.9	2.5	7.1
2007	10,436	5.5	2.9	5.3
2008	6,465	2.7	6.3	4.4
2009	2,928	-4.8	1	6.7
2010	6,137	2.3	1.5	7.3
2011	2,319	2	1.9	6.7
2012	7,982	-0.8	3.3	7
2013	3,676	-0.5	1.4	7
2014	5,912	2.7	0.4	6.1
2015	1,223	4.5	0.3	5

Year	Exchange rate (USD)	Annual wage (CZK)	Exports (% of GDP)	Corporate tax (%)
Variable	x ₄	x ₅	x ₆	x ₇
2004	25.7	17,466	57.4	28
2005	23.95	18,344	62.3	26
2006	22.59	19,546	65.3	24
2007	20.31	20,957	66.6	24
2008	17.06	22,592	63.4	21
2009	19.06	23,344	58.8	20
2010	19.11	23,864	66.2	19
2011	17.69	24,455	71.3	19
2012	19.59	25,067	76.2	19
2013	19.57	25,035	76.9	19
2014	20.75	25,768	82.5	19
2015	24.6	26,467	83	19

(Source: Data provided by CNB, OECD, CSO, 2015)

The correlation matrix is created by statistic system Gretl (Table 24). The correlation matrix explains dependency among all variables in the model. The correlation matrix has values 1

on the diagonal. Other elements of matrix have values in the interval (-1,1). If any of elements have values higher than 0.8 or -0.8, the multicollinearity is detected in the model.

Table 24 Correlation matrix

	y ₁	x ₁	x ₂	x ₃	x ₄	x ₅	x ₆	x ₇
y ₁	1	0.3951	0.3578	0.1351	0.0722	-0.5088	-0.2875	0.4902
x ₁		1	0.1300	0.0076	0.5760	-0.5473	-0.0667	0.6189
x ₂			1	-0.2834	-0.3404	-0.3394	-0.4243	0.2672
x ₃				1	0.3797	-0.4740	-0.3623	0.4112
x ₄					1	-0.4807	-0.0492	0.6350
x ₅						1	0.7988	-0.7652
x ₆							1	-0.6689
x ₇								1

(Source: Calculation provided by Gretl, 2017)

The strong dependency between y₁ and other variables is desirable. Based on the data from correlation matrix, the index of correlation between y₁ and x₁ is 0.3951 and can be considered as moderate dependence between FDI inflow and GDP growth. The moderate dependence is also between FDI inflow and inflation, and the index of correlation is 0.3578. The index of correlation between y₁ and x₇ is 0.4902 and can be considered as stronger dependence between FDI inflow and corporate tax. Foreign investors attach importance to the development of this economic indicator when deciding on the location for their investment. Based on the correlation matrix, there is not a strong dependency between other variables and FDI inflow. There is no other value higher than 0.8 and no multicollinearity in the model.

The ordinary least square method is used to estimate parameters of econometric model. Matrix X (values of all explanatory variables) and vector y (values of endogenous variables) is defined in the table 25. Parameters are estimated by the formula $(X^T X)^{-1} X^T y$ and also by Gretl.

Estimated form of econometric model:

$$y_{1t} = 2.95x_{1t} + 0.94x_{2t} + 152.51x_{3t} - 866.16x_{4t} - 0.65x_{5t} + 282.14x_{6t} + 848.65x_{7t} + u_{1t}$$

Table 25 Matrix X and vector y

X	x ₁	x ₂	x ₃	x ₄	x ₅	x ₆	x ₇	y	y ₁
	4.9	2.8	8.3	25.7	17,466	57.4	28		4,974
6.4	1.8	7.9	23.95	18,344	62.3	26	11,658		
6.9	2.5	7.1	22.59	19,546	65.3	24	5,459		
5.5	2.9	5.3	20.31	20,957	66.6	24	10,436		
2.7	6.3	4.4	17.06	22,592	63.4	21	6,465		
-4.8	1	6.7	19.06	23,344	58.8	20	2,928		
2.3	1.5	7.3	19.11	23,864	66.2	19	6,137		
2	1.9	6.7	17.69	24,455	71.3	19	2,319		
-0.8	3.3	7	19.59	25,067	76.2	19	7,982		
-0.5	1.4	7	19.57	25,035	76.9	19	3,676		
2.7	0.4	6.1	20.75	25,768	82.5	19	5,912		
4.5	0.3	5	24.6	26,467	83	19	1,223		

$(X^T X)^{-1} X^T y$

x ₁	2.95
x ₂	0.94
x ₃	152.51
x ₄	-866.16
x ₅	-0.65
x ₆	282.14
x ₇	848.65

(Source: Own elaboration)

4.4.1 Statistical verification

Statistical verification is used for evaluation of significance of the estimated parameters. Statistical verification evaluates conformity estimated model data and the statistical significance of the structural parameters. The level of significance is $\alpha=0.05$.

Table 26 OLS, using observations 2004-2015 (T=12)

	<i>Coefficient</i>	<i>Std. Error</i>	<i>t-ratio</i>	<i>p-value</i>
x ₁	2.95173	585.498	0.0050	0.9962
x ₂	0.940913	1006.66	0.0009	0.9993
x ₃	152.512	1167.41	0.1306	0.9012

x_4	-866.163	803.786	-1.0776	0.3304
x_5	-0.654849	0.913762	-0.7167	0.5057
x_6	282.135	323.6	0.8719	0.4232
x_7	848.654	768.526	1.1043	0.3198

(Source: Calculation provided by Gretl, 2017)

Based on the OLS method, all parameters in the model are not statistically significant (Table 26). The model includes superfluous variables x_1 , x_2 , x_3 , which just reverse the results and add nothing to the total variance explained by the regression equation. For this reason, the OLS method is used again only with variables x_4 , x_5 , x_6 and x_7 and table 27 shows the new results.

Table 27 OLS, using observations 2004-2015 (T=12)

	<i>Coefficient</i>	<i>Std. Error</i>	<i>t-ratio</i>	<i>p-value</i>	
x_4	-842.541	477.119	-1.776	0.1154	
x_5	-0.633224	0.468286	-1.352	0.2133	
x_6	275.668	191.507	1.439	0.1880	
x_7	870.767	331.845	2.624	0.0305	**

(Source: Calculation provided by Gretl, 2017)

The model has a spurious relationship, as the variables in the model are not causally related to each other (they are independent). This situation may occur due to either coincidence or the presence of a certain unseen factor. The regression may provide misleading statistical evidence of a linear relationship between independent variables. For example, any two economic variables are likely to be correlated with each other, even neither has a casual effect on the other. It means, the statistical significance of relationships in the model do not accurately reflect the causal significance of relationships in the data-generating process.

p-value (F) = 0.000721

Residual of variance = 0.887799

Only one explanatory variable (x_7) is statistically significant in the model, as the p-value is less than 0.05 (tested at a significance level of 5%). According to F-statistic and a p-value, the model as whole is also statistically significant.

The adjusted coefficient of the determination indicator shows how significantly chosen variables clarify changes of endogenous variable (FDI inflow). The indicator is interpreted in percentage and belongs to the interval of 0 to 1. The result in the model shows that chosen variable clarify changes from 89%, which is a quite good result. A high R-square can also be considered as a positive sign that the correlation between variables is very high.

The interesting fact is that variables such as macroeconomic indicators are not statistically significant in the model. The model was outweighed mainly by investment strategies oriented to export which is explained by exchange rate and openness of the economy. It means that the openness to international trade in the Czech Republic is an important factor for foreign investors, more than, for example, the size of the market and GDP growth.

The corporate tax is recognized as being an important factor and a statistically significant variable in decisions on where to invest. However, the economic verification failed, as the decreasing trend is expected if the corporate tax will increase by 1%. Investors regularly compare tax burdens in different locations and the international tax competition is increasing. However, it is not clear that a tax reduction is able to attract FDI, as where a higher corporate tax is matched by a high quality of infrastructure, market size and other attributes attractive to investment, and may not affect location choice. Furthermore, investors in the Czech Republic may receive the investment incentives and use the corporate income-tax relief for a period of ten years, which also may be an attractive factor for their investment into the Czech Republic.

4.4.2 Econometric verification

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

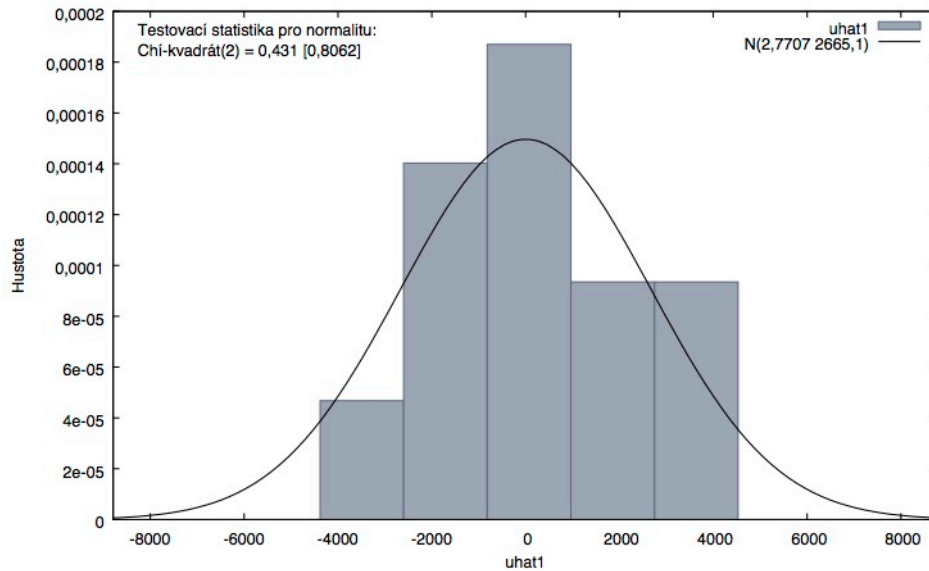
Test for normality of residual: H_0 : Residual are normally distributed

A: Residuals are not normally distributed

$$p\text{-value} = 0.806212 > 0.05$$

Accepted H_0 – random variables has normal distribution in the model (Figure 23)

Figure 23 Test for normality of residuals



(Source: Calculation provided by Gretl, 2017)

Test for autocorrelation: H_0 : No autocorrelation

A: Autocorrelation

$$p\text{-value} = 0.0092653 < 0.05$$

Rejected H_0 - Accepted A: the values are dependent to each other

Heteroscedasticity test (Breusch-Pagan test): H_0 : No heteroscedasticity

A: Heteroscedasticity

$$p\text{-value} = 0.825484 > 0.05$$

Accepted H_0 - the values confirm constant and finite variance

5 Conclusion

The aim of the diploma thesis is to analyse foreign direct investment in the Czech Republic and to provide a comprehensive overview of the FDI inflows from the perspective of its determinants. The main definitions of FDI, which are mentioned in the first part of the thesis, points out that FDI can take a number of different forms. It might seem that it is not possible to clearly and strictly define the laws and rules for all multinationals, but every investor base their decisions on a unique combination of motives and their own expectations and a number of other circumstances.

Over the past 26 years, after the transition from a centrally planned economy towards a market economy in the Czech Republic, there have been significant changes, which shifted the Czech economy toward being one of the most developed countries in the world, and the FDI has a significant credit for the high proportion of foreign capital in the Czech economy. Based on the geographical location close to Germany and Austria, lower production costs compared to Western Europe, well-developed economy and political stability, the Czech Republic has been among the leading recipients of FDI in Central and Eastern Europe.

The Czech Republic is one of the most successful CEE countries in terms of attracting foreign direct investment and is doing decently well in terms of GDP and competitiveness. At the beginning, FDI inflows to the Czech Republic accounted mostly for investment in equity, but over time the importance of reinvested earnings and other capital began to grow significantly. Over 173,00 firms across all sectors are supported by foreign capital. The country fully complies with European Union law and OECD standards for the equal treatment of foreign and domestic investors. The growth across various sectors of the economy, including renewed merges and acquisitions activity, is expected. The open investment climate of the Czech Republic is a key element of its economy. Based on the territorial structures of FDI inflows, the largest investor is Netherlands, followed by the Austria and Germany. Almost 93% of FDI in the Czech Republic is from Europe. The largest share of foreign capital within the total volume of FDI has been in manufacturing, followed by financial and insurance activities and wholesale and retail trade and repair of motor vehicles. In case of the service sector, the important activities are in the field of postal and telecommunication technology, research and development, and information technology.

The main factors of attractiveness of the Czech Republic for foreign investors are its strategic geographical location in the centre of Europe combined with reliable infrastructure, good quality of life, social stability, cost competitiveness, financial stability, investment incentives, skilled workforce and its unique cultural and natural heritage. The trend analysis shows an increasing trend, which is desirable in case of FDI inflows. The situation is improving and the Czech Republic gets a very good evaluation of competitiveness compared to other countries in the region. The main reasons are the new investment incentives, skilled workforce, efficient goods market, developed technological readiness, as well as, the location advantages of the country. An increase in FDI will increase the demand for the currency of the receiving country, and raise its exchange rate. In addition, an increase in a country's currency will lead to an improvement in its terms of trade, which are the ratio of export to import prices.

For foreign investors, the openness of the country and involvement in the international trade is very important. An open investment climate is a key element of the Czech economy. The Czech Republic follows EU law and OECD standards for equal treatment of foreign and domestic investors. There are no general restrictions for foreign investors, however, there are some limits that exist within some sectors. The FDI index in the Czech Republic is very low which means a high advantage for foreign investors and the Czech Republic is open to foreign direct investment inflows. The Czech Republic attracts FDI for its market size and is trying to diversify its investments into new fields of research, development and innovative technology. The countries from the European Union are the main foreign investors in the Czech economy, but in these days the government is trying to gain more export and investment opportunities from other countries in the world.

The macroeconomic analysis shows expected stable economic growth between 2016 and 2020. The consumption growth will be maintained by strong income growth and beneficial borrowing conditions. Furthermore, the model shows a decreasing trend in case of unemployment, which is desirable. Besides, stable labour demand will push unemployment towards its lowest rate, accelerating wages and supporting consumption. The rising trend was estimated in case of inflation and the rising cost pressures will push inflation rate.

The statistical analysis examines the dependency of increase in FDI inflow to the GDP growth, inflation rate, unemployment rate, exchange rate, wages, exports and corporate tax. The interesting fact is that variables such as macroeconomic indicators are not statistically significant in the model. The model was outweighed mainly by investment strategies oriented to export. This is explained by exchange rate and openness of the economy. It means that the openness to international trade in the Czech Republic is an important factor for foreign investors, more than, for example, the size of the market and GDP growth.

The corporate tax is recognized as being an important factor and a statistically significant variable in decisions on where to invest. FDI is becoming increasingly sensitive to taxation. Investors regularly compare tax burdens in different locations and the international tax competition is increasing. However, it is not clear that a tax reduction is able to attract FDI, as where a higher corporate tax is matched by a high quality of infrastructure, market size and other attributes attractive to investment, and may not affect location choice. Furthermore, investors in the Czech Republic may receive the investment incentives and use the corporate income-tax relief for a period of ten years, which also may be an attractive factor for their investment into the Czech Republic.

The Czech Republic is one of the most stable and prosperous markets in Central Europe, has relatively low external and internal macroeconomic imbalances and the public debt and fiscal deficit are on manageable levels. The Czech Republic has a stable and healthy banking sector, which has excess liquidity and is able to meet the financing needs of investors. The Czech Republic has a predictable and transparent legal environment, legal system and business infrastructure. The Czech Republic represents a stable economy with low risks for investment and a safe environment for foreign investors.

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