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THE INFLUENCE OF FOREIGN DIRECT INVESTMENT ON SELECTED ECONOMIES IN CENTRAL EUROPE

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Abstract: *Nowadays, the decline in agricultural land is more evident than in the previous decades, and land is becoming a valuable natural resource. Agricultural land often gives way to construction activities, leading to the degradation of land resources almost all over the world. Foreign direct investment also affects the decline in agricultural land. The aim of this paper is to determine the influence of foreign direct investment (FDI) on the situation in individual economies in Central Europe (the Czech Republic, Slovakia, Germany, Austria, Poland and Hungary). In general, foreign direct investment reflects the intention of a resident of one economy (the direct investor) to acquire a permanent interest in an entity resident in an economy other than that of the investor. The paper focuses on FDI values and numbers on Greenfields in given economies and consequently how FDI significantly influence macroeconomic indicators such as GDP and unemployment in selected economies. The analyzed period is from 2003 to 2018. Data are obtained through the Eurostat, OECD, The World Bank and UNCTAD. In the period of recession (2009-2010), the FDI and GDP values in the economies are expected to be on a downward trend compared to unemployment, which will be higher than in previous years.*

Keywords: *FDI, GDP, Unemployment, Greenfields, Agricultural Land.*

JEL Classification E22 · E24

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1. INTRODUCTION

Investing in business are defined in general economic theory, for example, as „the decision to give up consumption at present with a view to higher production in the future" (Samuelson and Nordhaus, 2007). In general, foreign direct investment reflects the intention of a resident of one economy (a direct investor) to acquire a permanent interest in an entity resident in an economy other than that of the investor (Šimanová, 2011, p. 26). The inflow of foreign direct investment (FDI) is often considered to be one of the factors increasing the country's economic growth (Hunady and Orviska, 2014). According to Demakas et al. (2007) there is a substantial theoretical literature on the determinants of FDI. One of the first models, the internationalization framework of ownership - the placement - proposed by Dunning (1977), explains the firm's decision to invest abroad in terms of acquiring market power (ownership), taking advantage of placement (placement) and direct execution of operations than through market agreements (internalization). The following articles have expanded this model. In the more recent literature (Navaretti and Venables, 2004), the explanatory FDI variables are divided into three broad groups: trade costs (including distance), market size and differences in production costs. According to Amoroso and Müllerová (2018), most of the relevant literature deals with the impact of FDI on proxies of economic growth, such as capital accumulation, growth in total factor productivity (TFP) and growth in gross domestic product (GDP). Recently, more and more studies deal with the relationship between foreign direct investment (cross-border mergers and acquisitions, mergers and acquisitions) and the entry of new local businesses or survival of the company (De Backer and Sleuwaegen 2003; Ayyagari and Kosová 2010; Munemo 2014; Danakol et al., 2017). Creating new businesses - or doing business in general - offers a new perspective on the effects of foreign direct investment on the host economy. The entry of new domestic firms is often seen as a key driver of economic growth and job creation and has become the primary target of policy makers. As in the relationship between FDI and other growth indicators, the interaction between FDI and business is shaped by complex dynamics such as vertical and horizontal spillovers of industries (Markusen and Venables 1999) and the regulation on businesses creation (Munemo 2014). The traditional view of the effects of FDI suggests that FDI on Greenfields will increase productivity, employment and capital formation in host countries, while cross-border mergers and acquisitions only involve a change from local to foreign ownership of existing assets and production capacity (Norbäck and Persson 2005; Johnson et al. 2006; Ashraf et al. 2016).

The paper is conceived as follows, after the introduction is the second chapter focusing on the methodology of the article. The next chapter (third) deals with selected macroeconomic indicators in selected economies. The fourth chapter focuses in the article FDI and their impact on GDP, unemployment and agricultural land. At the end of the paper is conceived conclusion.

2. METHODOLOGY

The second chapter of the paper focuses on the methodology of the article. The aim of this paper is to determine the effect of foreign direct investment (FDI) on the situation in individual economies in Central Europe (Czech Republic, Slovakia, Germany, Austria, Poland and Hungary). The first part pays attention to the comparison of selected macroeconomic indicators, where the real rate of GDP growth is taken into account. According to Majerová (2019, p. 22), economic maturity expressed in terms of gross domestic product per capita and GDP growth are very important indicators of the macroeconomic condition of the economy. Another part of the paper deals mainly with FDI and its influence on basic indicators, where the rate of unemployment and the state of agricultural land in individual economies were selected. The data contained in this paper is provided

through secondary data in databases such as Eurostat, OECD, The World Bank and UNCTAD. The analyzed period from the given data is mainly from 2005 to 2018.

3. MACROECONOMIC INDICATORS IN SELECTED ECONOMIES

Figure 1 shows real GDP growth rate as a percentage of given economies. The figure shows that most countries (except Poland) in 2009 it reached negative values within real GDP growth rate. The most dramatic decline in this indicator was mainly for Hungary and Germany. In 2009, Poland showed a slight decline in GDP growth rate compared to the remaining countries. Another reversal for the economies was 2012 and 2013, when it can be said that the economies were losing real GDP growth again, especially in Hungary. In recent years can be seen in the given real GDP growth in less developed economies such as the Czech Republic, Slovakia, Poland and Hungary. This is mostly a 'catching-up effect', with less developed economies growing significantly faster than developed economies and 'catching up' with economic growth. The causes of faster economic growth in less developed countries may include structural changes in investment, policy changes, technological progress, new export opportunities. The expected finding in 2019 is mainly the value of real GDP growth in Germany when it showed a decline since 2017 and in 2019 the growth rate was 0.6%. In 2020, all the economies shown below are expected to show negative real GDP growth rates.

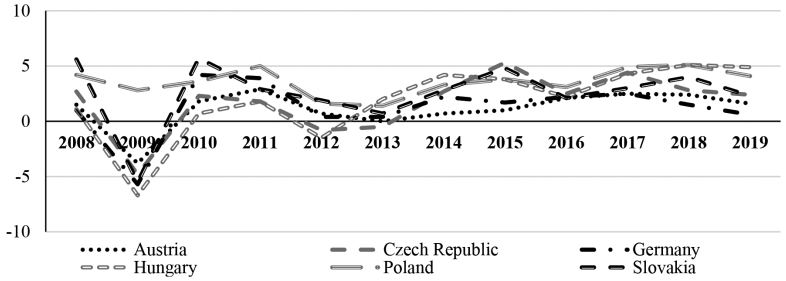

Figure 1. Real GDP Growth Rate % in selected economies
Source: Eurostat (2008-2019); own elaboration (2020)

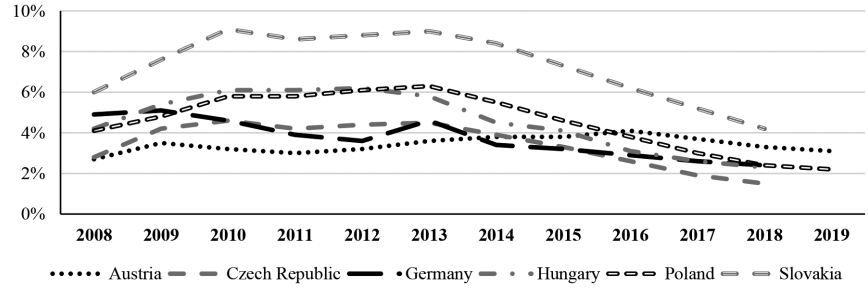

Figure 2. Percentage of Unemployment in Selected Economies
Source: Eurostat (2008-2019); own elaboration (2020)

The next figure (Figure 2) pays attention to the real unemployment rate in the economies of the total population. The figure shows that the highest unemployment rate is mainly in Slovakia, when in 2010 the unemployment rate was at 9.1% and it was the highest unemployment rate among all the economies surveyed within the given time period. During the recession in Austria and the Czech Republic, the unemployment rate was favorable compared to Slovakia. It is important to note that these are annual values per country. It is evident that the values within regions will be

much different and only in times of economic recession. From 2016 to the present, you can see a decline in the unemployment rate in the economies. This is largely due to a well-functioning economy and the fact that firms experienced a boom in some countries until 2018 and in 2019, when there was a labor shortage on the labor market.

Another macroeconomic indicator in the performance of economies is the gate of inflation, as shown in Figure 3. We can say that during the recession in most countries except Hungary and Poland, countries experienced a fall in the inflation rate. Hungary showed different fluctuations in inflation during the reporting period. The biggest inflation rate was measured in 2008 and 2012. In recent years, the inflation rate in Hungary has remained at acceptable levels. In Poland and Slovakia, a negative value of the inflation rate was measured in 2015 and 2016, when it is deflation. We are talking about deflation when the inflation rate falls below 0% (a negative inflation rate). Unlike inflation, deflation increases the purchasing power of money. Deflation also has a negative impact on export-oriented firms by making their production abroad more expensive. In the period from 2014 to 2016, other countries showed a decline in the inflation rate to the very border, with some of the inflation rates lower than the economic recession in the period under review. Since 2017, countries have been showing acceptable inflation rates.

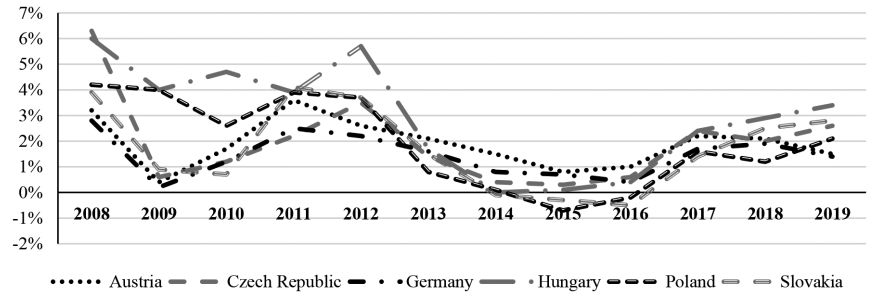

Figure 3. Inflation Rate (%) in Selected Economies
Source: Eurostat (2008-2019); own elaboration (2020)

4. FDI IN SELECTED ECONOMIES

The fourth chapter will focus on the issue of foreign direct investment (FDI) in selected economies. In the first part of this chapter, the author pays attention to the inflow of FDI flows into individual economies. The following section deals with the situation of comparing individual economies based on the FDI inflow and changing the unemployment rate. The last part of this chapter focuses on comparing the situation of the inflow of FDI flows into individual economies against the change of agricultural land in these economies.

The next figure (Figure 4) shows the inflow of FDI to individual economies in mil. €. The figure shows that in the period under review the largest inflow of FDI was mainly in Germany. Between 2007 and 2008, we can see a dramatic drop in the country's FDI inflow in that country. In the given period due to the economic recession, the decline in value of 48 721 mil. €. Germany has managed to correct the FDI inflow again, but only until 2012, when a steady decline has been observed since that year, with occasional fluctuations leading to a negative FDI inflow in 2014. In the last year analyzed, the decline in FDI inflows in Germany is again apparent. The other countries reported an FDI inflow to Austria and Hungary, when Austria recorded a negative FDI inflow to its country. A similar situation is also evident in Hungary, which in 2015 shows a dramatic decline in FDI in negative values.

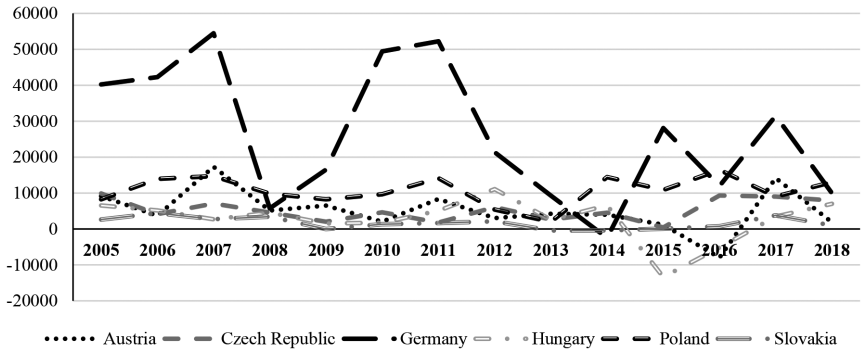

Figure 4. FDI inflows into selected economies in mil. €
Source: OECD (2005-2018); own elaboration (2020)

The following figure (Figure 5) shows the average flows of foreign direct investment (FDI) divided by gross domestic product (GDP). Data are expressed as a percentage of GDP to eliminate the effect of differences in the size of the reporting countries' economies. If we look at the above picture, we can see a significant drop in these values in Hungary in 2015, but in 2016 the figure was 37% of GDP. The opposite situation in that year was in Austria, which in 2016 had a fall in the values to 8.6%. In the last year analyzed (2017), in addition to Hungary, we can see a percentage of GDP growth in the average FDI flows.

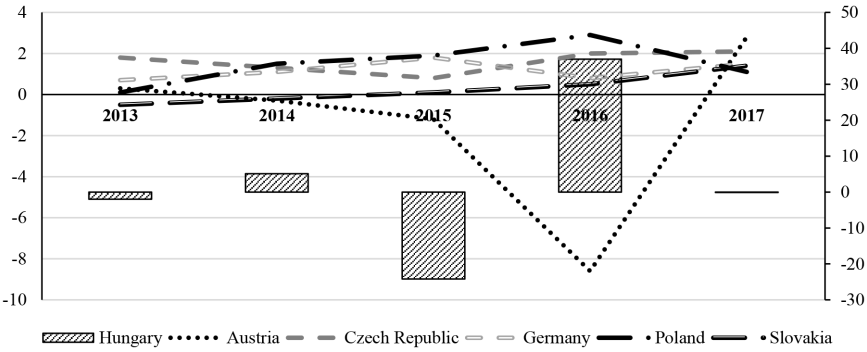

Figure 5. Average FDI flows divided by GDP (in % GDP)
Source: Eurostat (2013-2017); own elaboration (2020)

FDI has some effect on unemployment rate that if an investor decides to invest in that country, this will create new jobs. The inflow of FDI into the countries can also have a positive impact on the unemployment rate. The figures below (Figure 6 - Figure 11) show the FDI inflow situation in € million on the left-hand axis and the right-hand scale show the unemployment rate as a percentage. The analyzed period is from 2008 to 2018. The figure shows that the greatest impact of the FDI inflow on unemployment is mainly in the Czech Republic, Poland, Slovakia and Austria. Here is a certain degree of impact where FDIs have an impact on the unemployment rate. Unlike Germany and Hungary, where the effect of FDI inflows on unemployment rates has not been demonstrated in these countries.

The following figure (Figure 12) shows the number of reported FDI on Greenfields by destination. The analyzed period is from 2003 to 2018. Right axis (curves) shows economies such as Poland, Hungary, the Czech Republic, Slovakia and Austria. The left side shows the number of reported FDIs on Greenfields in Germany. All values in this figure are in the number of projects notified.

The figure below shows that most economies show an increase in these announced projects by 2008. In 2009, a decrease in these projects on Greenfields is apparent. In the following years, we can especially see in Germany an increase in the number of projects announced by 2017. In the last year analyzed (2018), there is a marked decrease in these notified projects. The year-on-year decline in the given projects in the given economy is 484. Other economies, with some exceptions since 2010, showed mainly a decline in these values. It is interesting to note that in Poland since 2015 there has been an increase in the number of FDIs on Greenfields, when in 2018 their number is 440. This number is higher than before the economic recession in 2008. Other economies except Slovakia showed mainly an increase in the number of reported FDI at Greenfields in the last analyzed year.

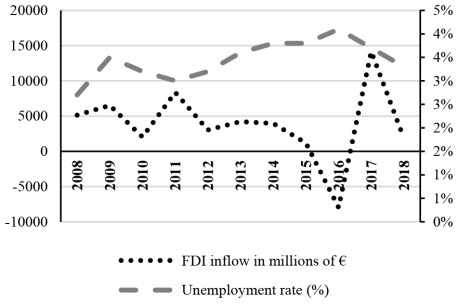

Figure 6. Relation between FDI and unemployment rate in Austria

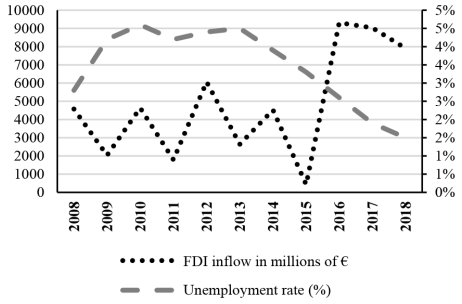

Figure 7. Relation between FDI and unemployment rate in Czech Republic

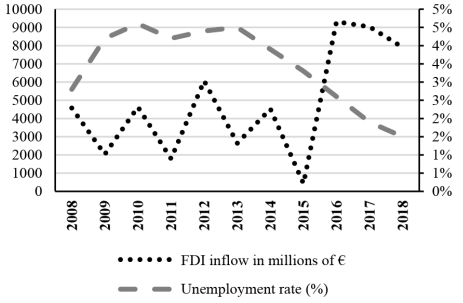

Figure 8. Relation between FDI and unemployment rate in Germany

Figure 9. Relation between FDI and unemployment rate in Hungary

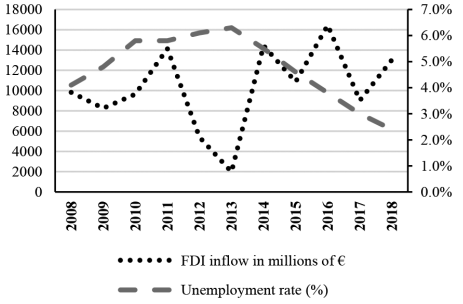

Figure 10. Relation between FDI and unemployment rate in Poland

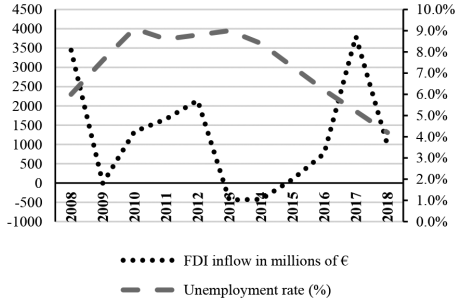

Figure 11. Relation between FDI and unemployment rate in Slovakia

Source: OECD, Eurostat (2008-2018); own elaboration (2020)

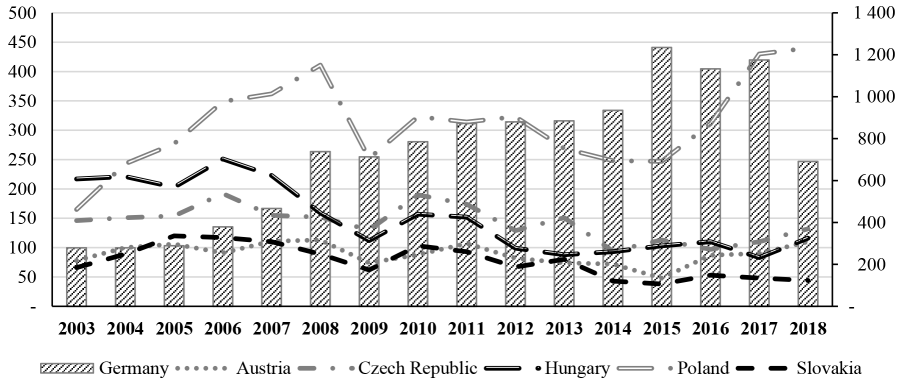

Figure 12. Number of notified FDI at Greenfields by destination
Source: UNCTAD (2003-2018); own elaboration (2020)

Along with the previous figure (Figure 12), there is a section below that focuses on the FDI inflow of agricultural land loss in these economies. The analyzed period is from 2005 to 2016. The results shown in the figures (Figure 13 to Figure 18) show an indirect effect of FDI development and agricultural land loss in the economies. It is important to point out that the analyzed period is short. In general, building new businesses on Greenfields generally reduces the amount of agricultural land in the economies. Within the above figures, the noticeable drop in the agricultural land curve is mainly influenced by land grabbing or agricultural land transfer. The most demonstrable effect, when due to FDI inflow into the economy has an impact on the loss of agricultural land is mainly in the Czech Republic. Other economies do not show such intensity between the inflow of FDI and the loss of agricultural land.

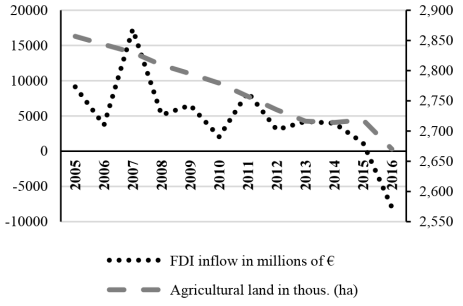

Figure 13. Relation of FDI
and agricultural land (ha) in Austria

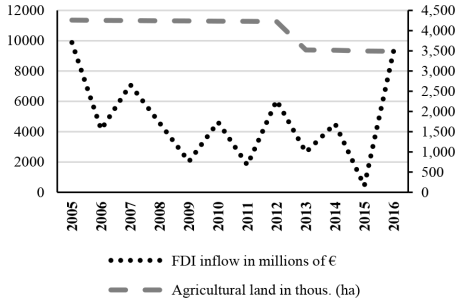

Figure 14. Relation of FDI
and agricultural land (ha) in Czech Republic

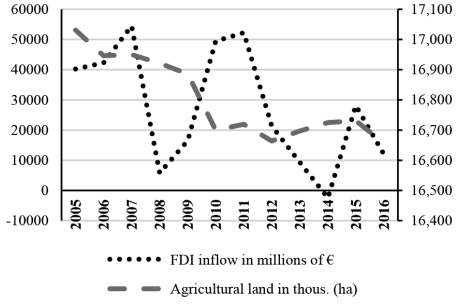

Figure 15. Relation of FDI
and agricultural land (ha) in Germany

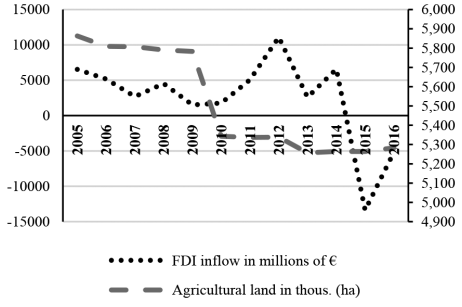

Figure 16. Relation of FDI
and agricultural land (ha) in Hungary

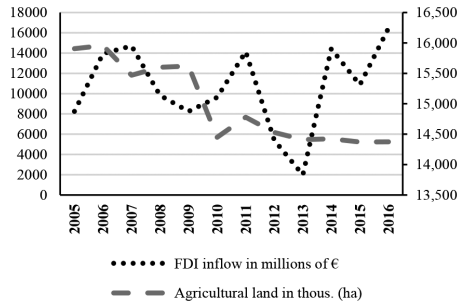

Figure 17. Relation of FDI and agricultural land (ha) in Poland

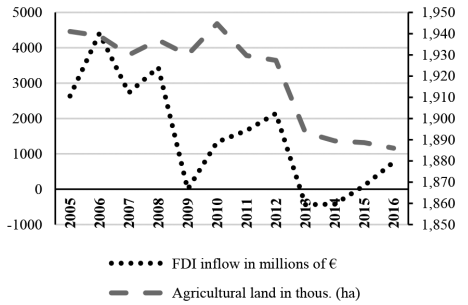

Figure 18 Relation of FDI and agricultural land (ha) in Slovakia

Source: OECD, World Bank (2005-2016); own elaboration (2020)

5. CONCLUSION

This paper deals with selected macroeconomic indicators and FDI in selected economies of Central Europe. The aim of this paper was to determine the impact of foreign direct investment on the situation in individual economies in Central Europe. It was found in the comparison of individual economies that the inflow of FDI in some way has the effect of reducing the unemployment rate in those economies, especially in the Czech Republic, Poland, Slovakia and Austria. Furthermore, the paper dealt with the situation of the inflow of FDI against the loss of agricultural land. In recent years, the decline of agricultural land not only in Central Europe has been caused by the construction of logistics and production centers on Greenfields. The results did not unequivocally prove a certain dependence in given economies except for the Czech Republic, where there was some weak dependence. It is important to point out that only ten periods were monitored. The author of the paper also wants to deal with this topic in order to find out what direct and indirect impact FDI has on individual economies, especially in Central Europe.

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