

DOCTORAL DISSERTATION – summary

External effects of Foreign Direct Investments

The role of state policy in attracting foreign investments that generate them

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The main goal of this thesis was to broaden and deepen our knowledge regarding the impact of Foreign Direct Investments (FDI) on the host country's economy. Are the effects of this foreign capital positive or negative? If the negative effects of FDI are greater than the positive – then multinational corporations (MCNs) should internalize the costs associated with negative externalities. In opposition, if the positive effects outweigh the negative effects, for example, they make the host economy more productive – the policy should intensify the diffusion of knowledge to the local economy (in the value chains or on the labor market). According to Dunning's (1973) theory, MCNs invest abroad only when they have specific advantages over enterprises from the host country. And these advantages are the once that are being spilled over into the host country's economy.

In the economic literature location of FDI is often associated with comparative advantages of host locations. The term comparative advantage was first developed by the philosopher and economist David Ricardo (1817), who tried to explain why the mutual exchange of goods is still beneficial in a situation of significantly lower production costs of one of the producers. Based on the works of Ricardo, Balassa (1965) developed an index that shows which of the national economies have revealed comparative advantage in relation to other countries in previously defined categories of goods. The application of the above method allowed for the identification of specific comparative advantages in Poland. However, for the first time, this method was used at the voivodeship level and with more accuracy.

The voivodship has a revealed comparative advantage in a specific section of the national economy (PKD 2007), when the value of all goods and services produced by economic entities operating in this section, (reduced by the costs associated with their production), in relation to the value in all sectors, is greater than the same the ratio calculated for the reference group – in this case of all 16 voivodships. In this study, this indicator is an explained variable, while the

regressors are relative labor costs (labor costs in a specific section in relation to labor costs in all sections) and the capital present in the FDI.

One of the products of the research was a script in the R programming language that allows for continuous monitoring and analysis using Polish Central Statistical Office's API (*Application Programming Interface*). The results reveal that from 2003 to 2017 there was an unexplained spatial diffusion (spillover effects), observed in the residual variables of the neighboring voivodeships. This suggests that there was a diffusion of knowledge and *know-how* in the supplier network (in production chains) and demonstration effects associated with managerial knowledge. The results indicate that the presence of foreign capital in the FDI on average increased revealed comparative advantages in manufacturing and that the effect was slightly greater when this variable was delayed by one year.

The dissertation consists of five chapters, the first two are dedicated to the review of the literature, which was deepened using *text mining* methods. This portion of the research was conducted using n-gram modeling and the keyword co-occurrence network. The next chapter presents the results of the desk research of information available on the English-language verison websites of regional investor information centers and presents the revealed comparative advantages of individual voivodeships in the form of maps. The next part presents the methods and results of econometric modeling using panel data and taking into account spatial interactions. The last part explores factors associated with the role of state policy in attracting FDI in a broader context. The analysis is based on clustering methods and data about FDIs, employment costs, and selected indicators of the business climate in Europe.