

## **FOREIGN INVESTMENTS IN THE ECONOMY OF EASTERN EUROPEAN COUNTRIES**

**Carmen-Elena STOENOIU<sup>1</sup>, Mioara Florica SERBAN<sup>2</sup>, Ciprian CRISTEA<sup>3</sup>**

*Technical University of Cluj-Napoca, Romania*

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### **Abstract**

*Foreign direct investment (FDI) has been debated by many specialists being considered in most cases a source of development for the receiving countries. From this perspective the study is a comparative analysis of FDI evolution in Eastern European countries and an analysis of FDI in Romania. The analysis was carried out over a period of five years and allowed us to obtain useful information regarding the FDI volume expressed in % of GDP, FDI structure and structure of activities in Romania considered attractive for FDI, respectively FDI distribution in the regions of Romania.*

**Keywords:** *foreign investment, economic growth, investors*

**JEL classification:** *E22, F21, F62*

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### **1. Introduction**

Although globalization is considered beneficial leading to trade liberalization and economic integration of EU countries, some experts believe that with globalization regional inequalities at EU level have deepened (Kramar, 2006) while others argue it FDI has allowed economic growth and

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<sup>1</sup> Associate Professor, Ph.D., Technical University of Cluj-Napoca, Faculty of Electrical Machine and Drive, [Carmen.Stoenoiu@emd.utcluj.ro](mailto:Carmen.Stoenoiu@emd.utcluj.ro)

<sup>2</sup> Assistant Professor, Ph.D., Technical University of Cluj-Napoca, Faculty of Electrical Machine and Drive, [Florica.Serban@emd.utcluj.ro](mailto:Florica.Serban@emd.utcluj.ro)

<sup>3</sup> Associate Professor, Ph.D., Technical University of Cluj-Napoca, Faculty of Electrical Machine and Drive, [Ciprian.Cristea@emd.utcluj.ro](mailto:Ciprian.Cristea@emd.utcluj.ro)

development in European countries and has contributed to attracting and others foreign investors (Campos and Kinoshita, 2002; Rugraff, 2008; Mallick and Moore, 2008).

Starting from the neo-classical theory, according to Solow's model, the exogenous growth of FDI was observed to have determined a short term capital increase and in the long term it led to the modification of the technological processes, increase of productivity and efficiency, leading to an increase of revenues (Görg and Greenaway, 2004). Models of endogenous growth show that assuming constant yields at the level of reproducible factors led to the stimulation and attraction of FDI, as a result of spatial externalities and urban agglomeration (Hilber and Voicu, 2010; Basile et al., 2008; Cantwell and Piscitello, 2005).

Thus, FDI are considered in the form of sustainable investment with positive effects on economic growth contributing to the transfer of resources, expertise between economies, corporate governance practices (Gauselmann and Marek, 2012; Thompson, 2008). The beneficial effects of FDI can be seen through the vertical links of foreign firms with domestic firms (Ozturk and Kalyoncu, 2007; Mallick and Moore, 2008) as well as as a result of the horizontal spread to domestic firms in the same industry (Dunning, 1993). For the investing countries, FDI allows the influence to be extended to international markets (Berthelemy et al., 2009), and for the beneficiary countries of foreign investments there are both direct effects: infusions of foreign capital (allowing the creation of jobs, therefore additional tax revenues; human resource development, acquisition of new skills, incorporation of innovative technologies, etc.) (Lent et al., 2014) as well as indirect effects (training impact on local firms) (De Mello, 1997, Ozturk and Kalyoncu, 2007).

The existence in different proportions of the FDI in different countries is explained by some authors as a result of the increased political risk in that country (Busse and Hefeker, 2007; Blackburn and Sarmah, 2008), of the tax regulations (Jones and Temouri, 2016; Kottaridi et al., 2019), of the labor standards (Kucera, 2002; Javorcik and Spatareanu, 2005), existing resources and applied incentives (Kolstad and Wiig, 2012), or as a result of human capital quality in the terms of performance (Choi, 2015; Gittens and Pilgrim, 2013).

The purpose of this study is to measure the evolution of domestic direct investment in reporting economies as% of GDP over the 5 years under study, to determine whether the FDI level is lower in countries with high HDI

(Human Development Index) and CPI indices (Corruption Perception Index) and to identify for Romania which are the attractive activities from the FDI point of view.

## **2. Material and method**

In this study, an FDI analysis was performed for the following countries: Bulgaria, Czech Republic, Poland, Romania, Slovakia and Hungary, which are in the Eastern region of Europe. The study was conducted for the period 2013-2017 based on the data obtained from the databases: Eurostat, UNDP (United Nations Development Program), TI (Transparency International) and BNR (National Bank of Romania), the data collection being carried out on 25.01.2020.

The hypotheses studied were: 1. globalization determined an increase of FDI during the 5 years studied; 2. there is a link between countries with HDI and high CPI vis-à-vis the FDI option of investors; 3. for Romania, the industry or services are considered attractive from the FDI perspective.

In the first part of the study, an analysis was made that allows to obtain information about the evolution of the countries as a result of globalization, vis-à-vis the FDI, knowing that these investments have both economic and social impact on the economies of the beneficiary countries (Blackburn and Sarmah, 2008 ; Alvarez and Molero, 2005). For this, the following indicators were considered: Inward FDI stocks in % of GDP, Outward FDI stocks in % of GDP, FDI flows intensity, market integration, Human Development Index and Corruption Perceptions Index. Inward FDI stocks in % of GDP is the indicator that measures the domestic direct investment in the reporting economy, including the debts and assets transferred between the resident direct investment companies and their direct investors (Eurostat data base). Outward FDI stocks in % of GDP is the indicator that measures direct investment abroad and includes assets and liabilities transferred between resident direct investors and direct investment firms (Eurostat data base). FDI flows intensity, market integration is the indicator that includes the net data obtained as the difference between the credits of the capital transactions and the debts between the direct investors and their foreign affiliates (Eurostat data base). Human Development Index (HDI): A composite index that measures average achievements in three basic dimensions of human development - a long and healthy life, knowledge and a decent standard of living. High values show a better level of human

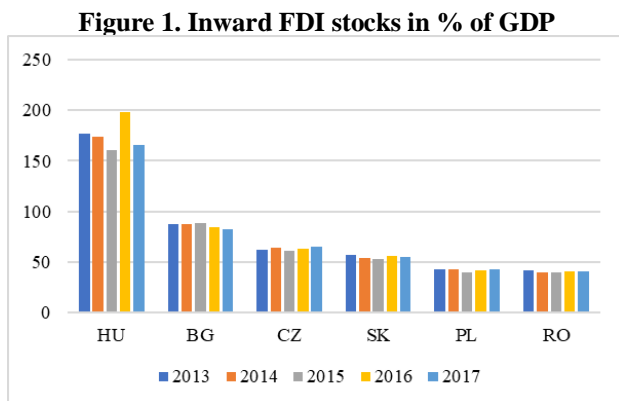
development index compared to a lower level (UNDP, 2017). The Corruption Perception Index (CPI) measures the perceived levels of corruption in the public sector according to experts and business people. Low values show a low level of corruption and higher values a higher level (TI, 2017).

In the second part, a study was conducted on Romania to observe the evolution of FDI on the economic activities carried out, on the countries of origin and on the economic regions of the country.

### 3. Results and Discussion

Foreign direct investment has been a major area of research from various perspectives meant to capture intra-company motivations, localization decisions or regional consequences. The intensification of FDI has prompted countries to react by adopting regulations that support or against blocking certain actions on their territories.

Internal direct investments made by resident direct investment companies and their direct investors (including transfers of assets and liabilities between resident and non-resident partner companies if the control company is non-resident) calculated as % of GDP are graphically represented in Figure 1, for the countries from Eastern Europe which were taken into study.

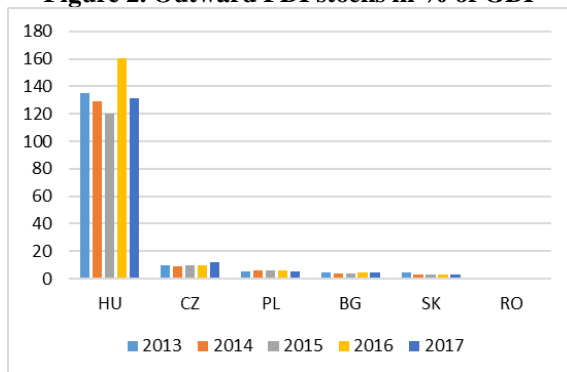


Analysis of the Figure 1 shows us that the indicator Inward FDI stocks in % of GDP registered a decrease from 2013 to 2017 in almost all countries (except Czech Republic and Poland). This decrease is also recorded when calculating the average per region (2013: 77.87; 2017: 75.2). Hungary is the

country where the highest values were registered (with 89.3 compared to the next country in the ranking), followed by Bulgaria, which also it records values above the average of this region. It can be said that these countries present more favorable opportunities for exploiting the global market, being for the more attractive multinational companies.

Figure 2 shows the external direct investment made by resident direct investors and direct investment companies (including transfers of assets and liabilities between resident and non-resident enterprises, if the final controlling parent is resident) as a % of GDP.

**Figure 2. Outward FDI stocks in % of GDP**



Analyzing Figure 2 we find that the first place is occupied Hungary, followed by the Czech Republic (at a distance of 119.6). Compared to 2013, growth is reported only in the Czech Republic (2.1) and Bulgaria (0.4). The value average for this indicator is 26.07, which is only surpassed by Hungary. And at this indicator Romania is in the last place.

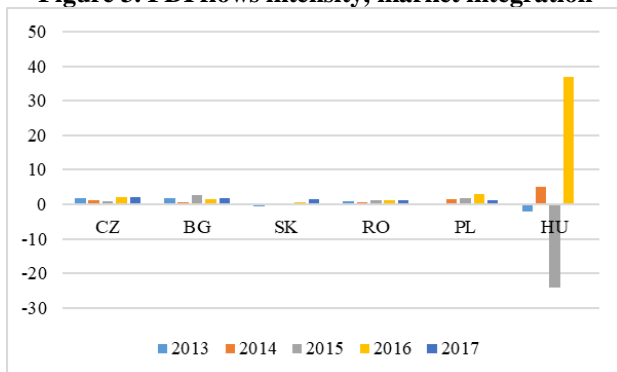
Although some researchers argue that countries should be able to develop an entry-oriented perspective of FDI (Hassel et al., 2003; Blonigen and Piger, 2014), from the study we see that Hungary is in first place in both cases Inward FDI stocks % of GDP and Outward FDI stocks in % of GDP (this being at the greatest distance from the rest of the countries).

Figure 3 shows the FDI flows intensity, market integration indicator, which measures the credits of the capital transactions less the debits between the direct investors and their foreign affiliates. Loans, net decreases of assets

or net increases of liabilities were considered, and debts were considered net increases of assets or net decreases of liabilities.

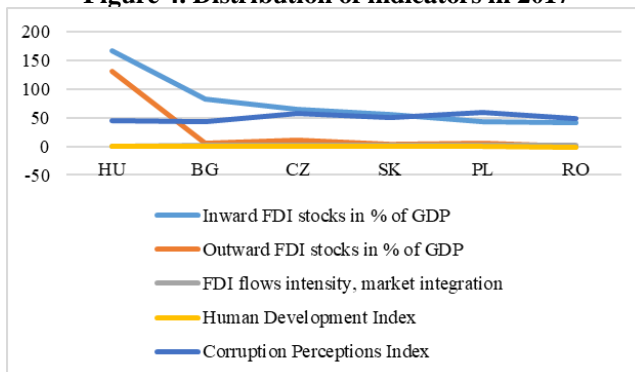
From the analysis of Figure 3 it is found that in Hungary, the FDI flows were negative, in the years 2013 (-2), 2015 (-24.2) and 2017 (-0.1), indicating that at least one of the components of the ISD is negative and is not offset by the positive quantities of the remaining components. This could be justified as a result of some actions of the investors present for reverse investment or disinvestment. Values above the average registered in 2013 (0.33) are registered in the countries: Czech Republic, Bulgaria and Romania, and in 2017 (1.25), values above average are in the countries: Czech Republic, Bulgaria, Slovakia and Romania.

**Figure 3. FDI flows intensity, market integration**



In Figure 4, a comparative analysis was carried out at the level of 2017 of 5 indicators that influence the FDI level.

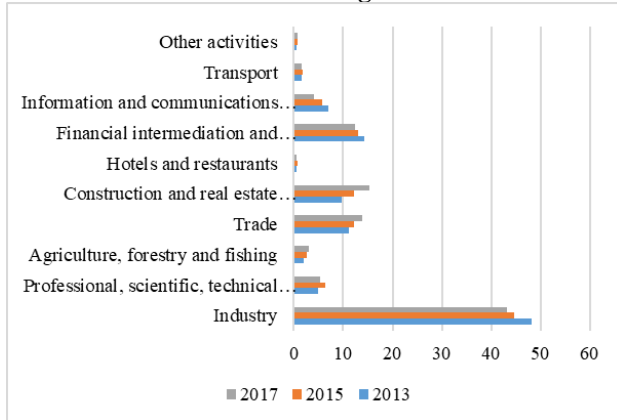
**Figure 4. Distribution of indicators in 2017**



From the analysis of Figure 4 it is found that the highest level of FDI is recorded in Hungary (inward and outward), Bulgaria (inward) Czech Republic (inward and outward). If we take into account the Human development index (HDI) we find that the highest level is in the Czech Republic, Poland and Slovakia and lower values are in Hungary, Bulgaria and Romania. Corruption Perception Index (CPI) tells us that Bulgaria, Hungary and Romania have the highest values, which shows us that they are more corrupt compared to the other countries: Poland, Czech Republic and Slovakia. Analyzing the case of Romania we can say that it is in the last place in terms of attracting FDI (inward and outward), having the lowest HDI index and placing on the antepenultimate place in the CPI (before Hungary and Bulgaria).

In order to be able to observe the evolution of the activities in Romania in which there is FDI, Figure 5 was built. Within the activity called generic: Industry, information was obtained by summed from the three components: processing, extractive and energy, gas and water.

**Figure 5. FDI distribution according to the Romanian activities**



When comparing 2017 with 2013 (Figure 5), we find that the largest decrease occurred in the Industry activities (-5%), followed by Information and communications technology activity (-2.8%) and Financial intermediation and insurance activity (-1.8%). The decrease registered in the Industry was against the background of the decrease recorded in the following activities in the industry: Extractive (-3.3%) and Energy, gas and water (-2.6%). Although the Processing industry registered an increase (0.9%) this could not compensate for the decrease recorded in the Extractive industry and the Energy, gas and water industry.



Figure 6. FDI distribution in Romania by investors' home countries

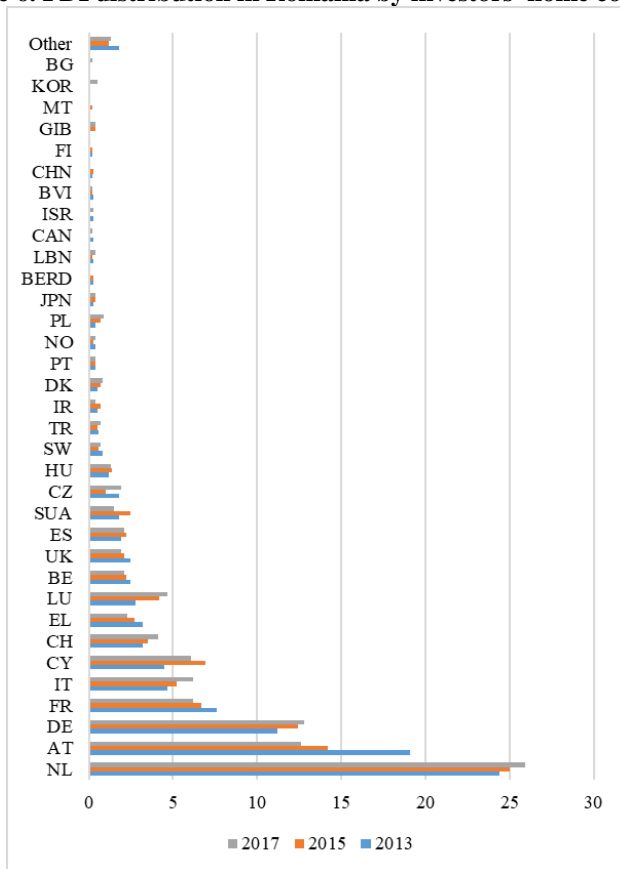


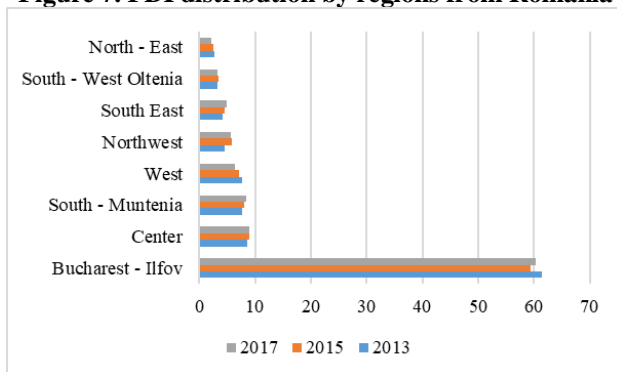
Figure 6 shows the evolution of FDI by country of origin. The largest amounts allocated by FDI in Romania in 2017 (Figure 6) are related to investors from: The Netherlands (25.9%), Germany (12.8%) and Austria (12.6%). The largest increases in investments in Romania compared the year 2017 to 2013 are observed at the investors from: Luxembourg (1.9%), Germany (1.6%) and Cyprus (1.6%). The biggest drops in investments in Romania compared the year 2017 to 2013 are observed in the countries: Austria (-6.5%), France (-1.4%) yes Greece (-0.9%) In the category "others"

were included countries whose investments have a balance of less than 100 million euros.

Figure 7 shows the FDI distribution on the eight geographical regions in Romania, which are considered economic zones and which are monitored separately at local level.

The analysis of Figure 7 shows an increase of FDI in 2017 compared to 2013 in the following regions: Center (0.3%), South-Muntenia (0.8%), North-West (1.1%), South-East (0.8%), a decrease was in the regions: Bucharest-Ilfov (1.1%), West (1.3), North-East (0.6%) and a maintain at the same level in the South-West Oltenia region. At the level of geographical regions, we find that in Romania most foreign investors are in the Bucharest Ilfov region (60.3%), which is also the most developed region from an economic point of view.

**Figure 7. FDI distribution by regions from Romania**



#### 4. Conclusions

According to the first hypothesis, it was found that the indicator "Inward FDI stocks in% of GDP" there is a constant maintenance of values in most countries, except for Hungary and Bulgaria where there is a decrease and the Czech Republic where there is a slight increase.

At the indicator "Outward FDI stocks in% of GDP" we notice that the Czech Republic is the only country that shows a slight increase in 2017 while Hungary, Poland, Bulgaria and Slovakia show a decreasing trend.

Foreign direct investments (inward and outward) are more pronounced in Hungary, this country being considered more attractive from the perspective of foreign investors.

After checking the second hypothesis, it was found that there is no link between HDI and CPI compared to FDI, because although Hungary has the highest level of FDI, it ranks 5th in HDI and CPI. When analyzing countries with for Human Development Index (HDI) we find that the highest level is in the Czech Republic, Poland and Slovakia and lower values are in Hungary, Bulgaria and Romania. However, this does not determine an implicit correlation in terms of the prospect of being more attractive from the perspective of foreign investors. Corruption Perception Index (CPI) is another indicator that tells us that Bulgaria, Hungary and Romania would be considered more corrupt compared to the other countries: Poland, Czech Republic and Slovakia. From the analysis of FDI data with CPI we find that there is no correlation that determines the lack of attractiveness for investors. Analyzing the case of Romania we can say that it is in the last place in terms of attracting FDI (inward and outward), having the lowest HDI index and placing on the antepenultimate place in the CPI (before Hungary and Bulgaria).

For hypothesis 3, it was found that in Romania at the level of 2017 the investments in FDI were made in proportion of: 53.9% in services, 43.1% in industry and 3% in agriculture. Thus, the activities in the field of services (including constructions) seem to be more attractive than those in the industry.

## **5. References**

- Alvarez, I., Molero, J., 2005, Technology and the generation of international knowledge spillovers: An application to Spanish manufacturing firms, *Research Policy*, 34, p. 1440–1452.
- Asiedu, E.; Lien, D. (2011) Democracy, foreign direct investment and natural resources, *Journal of International Economics*, 84, p. 99–111.
- Basile, R.; Castellani, D.; Zanfei, A. (2008) Location choices of multinational firms in Europe: the role of EU cohesion policy, *J. Int. Econ.*, 74, p. 328–340.
- Berthélemy, J.C.; Beuran, M.; Maurel, M. (2009) Aid and migration: substitutes or complements?, *World Dev.*, 37 (10), p. 1589–1599.

- Blackburn, K.; Sarmah, R. (2008) Corruption, development, and demography, *Economics of Governance*, 9 (4), p. 341–362.
- Busse, M., Hefeker, C. (2007) Political risk, institutions, and foreign direct investment, *Europ. J. of Pol. Econ.*, 23 (2), p. 397–415.
- Campos, N.F.; Kinoshita, Y. (2002) Foreign direct investment as technology transferred: Some panel evidence from the transition economies, *Manchester School*, 70, p. 398–419.
- Cantwell, J.A.; Piscitello, L. (2005) Recent location of foreign-owned research and development activities by large multinational corporations in the European regions: the role of spillovers and externalities, *Reg. Stud.*, 39 (1), p. 1–16.
- Cheung, Y.W.; de Haan, J.; Qian, X.; Yu, S. (2012) China's outward direct investment in Africa, *Rev. of Int. Ec.*, 20 (2), p. 201–220.
- Choi, N. (2015) Accounting for quality differences in human capital and foreign direct investment, *Journal of International Trade and Economic Development*, 24, p. 228–246.
- Cuaresma, J.C.; Doppelhofer, G.; Feldkircher, M. (2014) The determinants of economic growth in European regions, *Reg. Stud.*, 48 (1), p. 44–67.
- De Mello, Jr. L.R. (1997) Foreign direct investment in developing countries and growth: A selective survey, *The J. of Dev. St.*, 34, p.1–24.
- Dunning, J. (1993) *Multinational Enterprises and the Global Economy*. Addison Wesley, Wokingham.
- Gittens, D.; Pilgrim, S. (2013) Foreign direct investment and human capital: A dynamic paradox for developing countries, *Journal of Finance, Accounting and Management*, 4, p. 26–49.
- Görg, H.; Greenaway, D. (2004) Much ado about nothing? Do domestic firms really benefit from foreign direct investment?. *World Bank Res. Obs.*, 19, p. 171–197.
- Hassel, A.; Höpner, M.; Kurdelbusch, A.; Rehder, B.; Zuehör, R.; (2003) Two Dimensions of the Internationalization of Firms, *Journal of Management Studies*, 40 (3), p. 705–723.
- Hilber C.; Voicu I. (2010) Agglomeration economies and the location of foreign direct investment: empirical evidence from Romania, *Reg. Stud.*, 44 (3), p. 355–371.

- Javorcik, B.S.; Spatareanu, M. (2005) Do foreign investors care about labour market regulations?, *Rev. World Econ.*, 141 (3), p. 375–403.
- Jones, C.; Temouri, Y. (2016) The determinants of tax haven FDI, *J. World Bus.*, 51 (2), p. 237–250.
- Jones, C.; Temouri, Y. (2016) The determinants of tax haven FDI, *J. World Bus.*, 51 (2), p. 237–250.
- Kolstad, I.; Wiig, A. (2012) What determines Chinese outward FDI? *Journal of World of Business*, 47 (1), p. 26–34.
- Kottaridi, C.; Giakoulas, D.; Manolopoulos, D. (2019) Escapism FDI from developed economies: the role of regulatory context and corporate taxation, *Int. Bus. Rev.*, 28 (1), p. 36–47.
- Kramar, H. (2006) Economic Convergence on different spatial levels: the conflict between cohesion and growth, *Raumforschung und Raumordnung*, 64 (1), p. 18–27.
- Kucera, D. (2002) Core labour standards and foreign direct investment, *Int. Labour Rev.*, 141 (1-2), p. 31–69.
- Mallick, S.; Moore, T. (2008) Foreign capital in a growth model, *Rev. Dev. Econ.*, 12 (1), p. 143–159.
- Ozturk, I.; Kalyoncu, H. (2007) Foreign direct investment and growth: an empirical investigation based on Cross-Country comparison, *Econ. Int.*, 61 (1), p. 75–82.
- Rugraff, E. (2008) Are the FDI policies of the Central Eastern Europe countries efficient? *Post-Communist Econ.*, 20 (3), p. 303–316.
- Thompson, S. (2008) Economic growth with foreign capital, *Rev. Dev. Econ.*, 12 (4), p. 694–701.