

The role of multinational enterprises for regional development in Bulgaria

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Abstract

This paper offers a comprehensive and balanced assessment of the spatial distribution and significance of MNEs activities for the development of regions in Bulgaria. Comprehensive official data and large business samples of foreign affiliates show that the MNEs impact is controversial as benefits are unevenly distributed across regions. The paper states that MNEs activities are not only one of the most important vehicles of local development, but also a factor in extending regional disparities in production, income and living conditions. Possible explanations could be found in the motives and structure of attracted FDI, lagging national development, low absorption capacity of regions and inadequate government policy towards FDI.

Key words: Bulgaria, foreign direct investment, multinational enterprise (MNE), regional development

JEL Classification: R11, R30, F21

1. Introduction

The possibility of accelerating the development and productive restructuring of local economies and the mitigation of the regional disparities with the participation of MNEs became again a topical subject of discussions in the recent two decades. MNEs could benefit regional development by increasing jobs and income with various multiplier effects, bringing firm-specific assets, such as superior production techniques and knowledge, creating positive spillovers etc. However, despite this, FDI is believed by some authors to have harmful effects on the economies of these regions. These include the possibly low-quality jobs associated with FDI, production in enclave sectors and the ‘footloose’ nature of these plants, which destabilizes the local economies (Jones and Wren, 2006). Furthermore, uneven penetration and distribution of FDI could

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further increase regional disparities, undermining the overall national development. The ambivalent impact of MNEs is much more visible and significant at a regional level especially for an economy with a lagging rate of development and low absorption capacity.

In this regard, the objective of this paper is to offer a comprehensive and balanced assessment of spatial distribution and significance of MNEs activities for the development of regional economies in Bulgaria, as well as the factors which determine them.

This paper takes into consideration the economic systems of the 28th administrative regions as an analytical unit of regional economy, corresponding to the NUTS-III level in EU and EUROSTAT conventional classifications. The research is based on statistics compiled and supplied for the needs of this study by the National Statistical Institute and the Bulgarian National Bank. Some of the inferences are made by examining a sample of 1240 foreign affiliates, obtained from ORBIS database (Bureau Van Dijk)¹. Although data from both sources are not statistically comparable, the conclusions and findings thereof are not contradictory but rather complementary. Due to limitations imposed by the collected information, the paper deals only and solely with the direct effects of MNEs on employment, production, investment and efficiency (Dunning, 2000; Figlio, Blöninggen, 2002).

2. Dynamics and structure of FDI in Bulgaria

The MNEs effect on regional development is a function of the amount and quality of attracted FDI. Therefore, the proper starting point of the analysis is the general assessment of the dynamics and structure of FDI stock in Bulgaria as well as of the dominating motives of MNEs for investment.

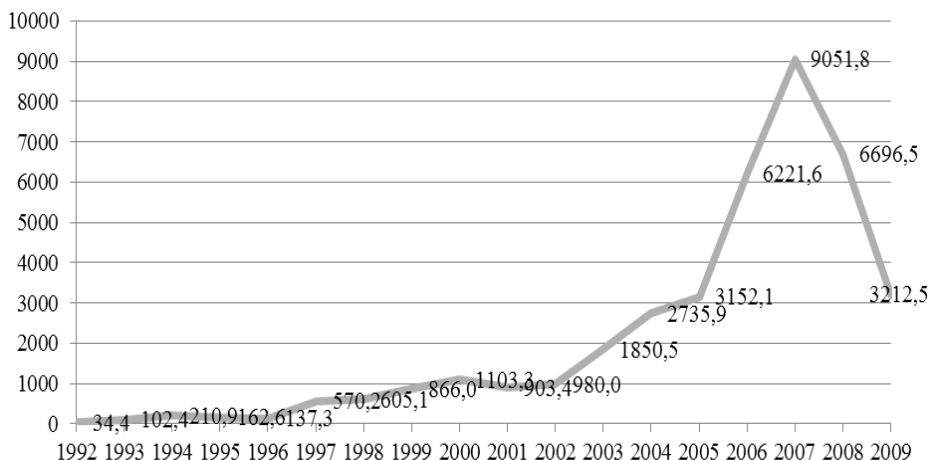
In 1992, Bulgaria adopted the first national Law on FDI, thus introducing one of the most liberal regimes to foreign investment. However, until the end of 1990's MNEs interest towards the country was marginal, compared to the one registered in Central Europe economies. Due to its unreformed economic and political system, Bulgaria welcomed foreign investors with additional specific transaction costs and it was considered a high-risk investment country, with a small domestic market, a high degree of state interference and corruption, political and economic instability.

Bulgaria enjoyed its real investment boom in 2005 - 2008, when only within four years EUR 24105.5 million was invested in the country (almost nine times as much as all FDI as of the beginning of transition). At its peak in 2007, FDI flow reached 85.1% of the gross domestic fixed capital formation and 31.3% of the country's GDP. Therefore, in 2008, UNCTAD ranked Bulgaria second in the world in "FDI inward performance" (UNCTAD, 2008), and the

¹ Available at: <http://bvinfo.com/Products/Company-Information/International/Orbis.aspx>.

government accepted these results wholeheartedly as a sure sign for the success of its economic policy.

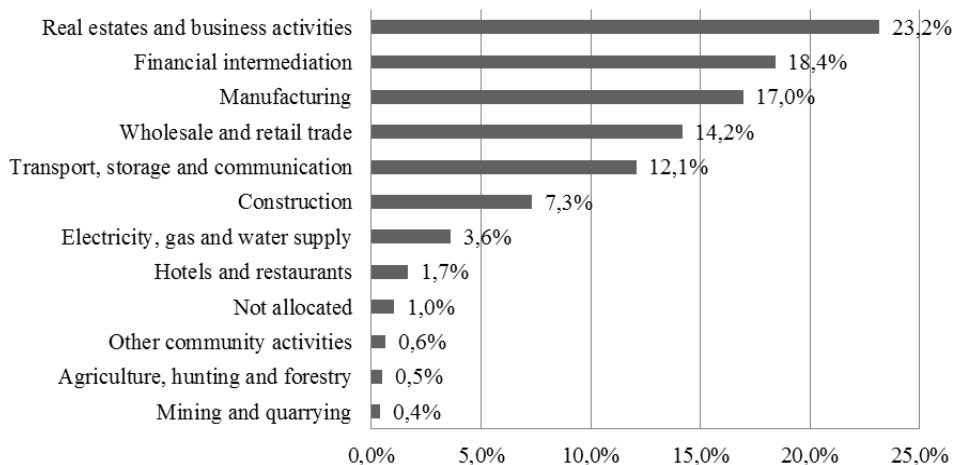
Graph 1. FDI inflow to Bulgaria (million EUR)



Source: Bulgarian investment agency, Bulgarian National Bank

However, the sector structure of FDI inflow after 2004 suggested that the investors' motives differ from the national development objectives.

Graph 2. FDI stock in Bulgaria by economic activity, 2008



Source: Bulgarian National Bank

The largest share of FDI was registered in real estate activities. Low prices of land and housing in the country and the surplus capital in the global economy literally blew up the Bulgarian real-estate market. Due to national legislation characteristics prior to EU accession, foreigners wishing to buy holiday or permanent dwellings established fictitious companies and the purchase costs were recorded as FDI. The boom in these transactions greatly increased real-estate market prices and created an opportunity for the entry of aggressive investment funds as well, which, in addition to their intermediary business, formed and managed portfolios of real estate to make speculative profits. Almost 1/3 of the registered growth in FDI stock in the period 2005-2008 was due to this kind of FDI. Most real estate purchases were carried out by United Kingdom citizens, ranking the UK from ninth to fourth place among the most important investors in Bulgaria.

The lack of sufficient domestic savings created an opportunity for the inflow of financial resource under beneficial conditions, since the interest spread between Bulgaria and the Eurozone provided substantial income at a relatively low risk. As the majority of Bulgarian banks, insurance and investment companies are subsidiaries of large foreign financial companies, the increase of their capital and the share of domestic financing were registered as FDI in the financial intermediation. Their share in FDI growth for the period in question was 19.8%.

The rapid expansion of the domestic market and the optimistic expectations in this period attracted FDI amounting to EUR 3224.3 million by the largest trade companies which referred to construction of large shopping centers and logistics bases. Within several years, foreign firms managed to restructure this sector, displacing small companies through their aggressive policy and facilitating consumption, redirecting it to modern malls.

A specific particularity of the FDI during this period was also the appearance of exotic destinations as major investors in the country (Belize, Virgin Islands, Panama, Gibraltar, etc.). For only four years, FDI at the amount of EUR 2221.3 million (10% of all capital flown in the period under consideration) was imported in Bulgaria from such offshore tax heavens. Though reported as FDI, this capital was mostly of Bulgarian origin, generated in the shadow field of economy and seeking its legitimacy, including through privileges enjoyed by foreign MNEs.

At the end, real estate activities, financial intermediation and domestic trade attracted EUR 12.7 billion or 64.5% of the growth of imported FDI stock for the period under consideration. At the same time the new foreign investment in the industry was EUR 2.1 billion (10.8%). Except for the pursuit of profit maximization in a globalized world economy, the main reason for the unfavorable sectoral structure of FDI in Bulgaria was the fact that the national government set quantitative objectives towards FDI, doing too little to attract or

support quality FDI to accelerate the country's development. The multiple problems with the privatization of national strategic enterprises, the heavy administrative procedures and corruption repelled the quality of the FDI flow and made way for a large portion of capital, which created unrealistic expectations and did not sufficiently contribute to the Bulgarian economic development. This is one of the main reasons for the disparity between the stock of FDI and unsatisfactory results in the development of Bulgarian economy (compared to the other CEE countries) and has its very visible projections on the regional level.

3. Spatial distribution of FDI

Spatial distribution of FDI in Bulgaria is similar to that of Central and Eastern Europe (Pustrela, Resmini, 2007; Blomström, 2006, Ledyeva, 2009), but it has its peculiarities arising from the country's geographical and economic features and borrowed capital structure and motives.

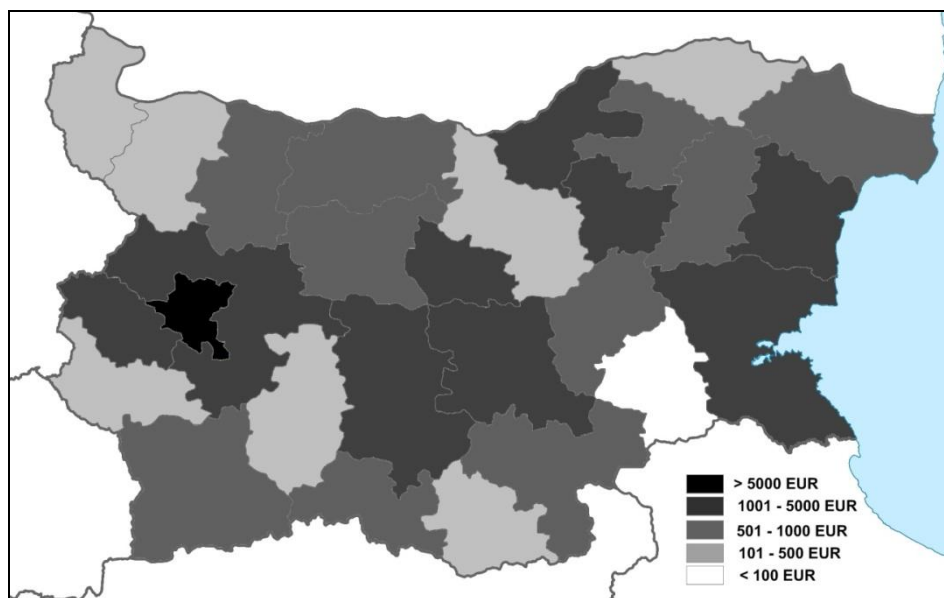
The most important characteristics of the FDI intra-regional allocation in Bulgaria is the high degree of disparity. According to NSI in 2008, 62.1% of FDI stock in non-financial sector was concentrated in the capital, Sofia², and the share of the five most attractive regions for foreign investors (Sofia, Varna, Plovdiv, Bourgas, Sofia Region) of the 28 regions in the country was 82.5% of the total stock. Official statistics indicated that in the period 2005-2008 the disparity in allocation was growing slowly, although all regions in the country managed to increase the volume of attracted capital many times.

Table 1. Regional distribution of non-financial FDI stock in Bulgaria, 2008

Region	Share in FDI stock	FDI per capita (euro)
Top five:	82.5%	*
Sofia (city)	62.1%	9383
Varna	8.3%	3396
Plovdiv	4.9%	1318
Burgas	3.5%	1586
Sofia (county)	3.5%	2595
Bottom five:	0.6%	*
Silistra	0.2%	241
Vidin	0.1%	208
Montana	0.1%	144
Kyustendil	0.1%	202
Jambol	0.1%	83

Source: National Statistical Institute

² If financial sector investments of EUR 5755,7 billion (2008) are added to that amount the share of Sofia in the FDI stock shall be much greater, since almost all banks and foreign financial intermediaries are registered in the capital.

Figure 1. Regional distribution of FDI stock per capita in Bulgaria, 2008

The disparity in regional distribution of FDI is one of the main reasons for the increase of the internal migration of population. The high concentration of MNEs activities created overcrowding in the capital and major cities with all problems arising in maintaining the sustainability parameters of urban environment. On the other hand, the outflow of mostly skilled workers depopulated the unattractive regions and doomed them to aging, lagging development, reduction of inputs and consumption, deterioration of social environment, etc.

The most attractive region for FDI is the capital Sofia, for which the FDI per capita in 2008 was 7.5 times as high as the average for the country. This phenomenon was due to extremely high concentration of people, institutions and businesses in Sofia. A lot of foreign investors registered their businesses in Sofia, where only the company's management was located, while the activities were placed elsewhere in the country, sometimes hundreds of kilometers away from Sofia. This allowed the extraction of the economies from urbanization (Jacobs, 1969; Bosma, Stel, Suddle, 2008), which is characteristic for any economy. In Bulgaria, however, they are not an opportunity for additional efficiency but rather an obligation for large foreign investors. The Bulgarian state administration still applies substantial packages of regulative regimes, and the starting and functioning procedures (especially for big business) are long and heavy. This requires continuous dialogue with institutions, which are entirely

concentrated in the capital³. Furthermore, decision-making bodies of financial intermediaries and insurance companies, investment intermediaries, marketing, audit, consulting companies, media, etc., with which MNEs subsidiaries operate are located in Sofia. Last but not least, the capital offers substantial resources (workers of different qualifications, research centers, infrastructure, the most advanced international airport, etc.) and with its constantly increasing population of over 1.5 million inhabitants, it is the largest and most solvent market in the country⁴.

Like other countries in Eastern Europe, the main reason for selection of a given location for investment is the number of population. The high concentration of people on the one hand secures the market for MNEs subsidiaries, and on the other – labor with the required qualification. In the past 20 years, Varna, Bourgas and Plovdiv regions have developed as major internal centers of migration. In this sense, it is not surprising that the bulk of FDI (excluding Sofia) is directed exactly there. The three regional cities act as a sort of economic and administrative centers of the northeast, south and south-central areas of the country with a high degree of concentration of economic activities. In 2008, about 20% of GDP was due to them, and 21% of the population concentrated there. Furthermore, despite the economic turmoil during the transition, many of the Bulgarian viable and structure-determining enterprises continued their operation. The lack of resource and know-how necessitated their privatization by foreign MNEs. Successful sales procedures and implementation of long-term investment programmes is one of the major reasons for the accumulation of large FDI stock in these regions.

Trade subsidiaries and production units of foreign companies undertaking green field projects also show interest in developed and large cities. Manufacturing and logistics facilities are located in adjacent areas or nearby villages and small towns. The reason for that is often the low price of the land and the availability of unoccupied territories and/or buildings. The proximity of large cities ensures sufficient labor, rhythm and competitive prices for the supply of production resources – something that small and economically underdeveloped regions are not able to provide. In addition, their strategic

³ Although business has been insisting on reform for ensuring local autonomy and decentralization for years, the degree of concentration of government institutions and powers in the capital is currently so high that in some cases there are organizational absurdities. For example, Maritime Administration Executive Agency is not located in the two most advanced port cities Varna and Bourgas, but in Sofia – over 500 km away from the Black Sea and the administered facilities and activities.

⁴ It is worth noting that the discrepancy between the place of registration (more often in Sofia) and that of the actual performance of MNEs subsidiaries activities creates purely statistical phenomenon of illusory regional concentration of FDI. This raises a lot of questions regarding the applicability of econometric analytical methods in Bulgaria and the reliability of the results thereof.

location, developed infrastructure and the availability of ports in Varna and Bourgas guarantee quick and secure shipment of end products throughout the country or to MNEs foreign markets.

If the high investment activity in the most advanced regions in the country could easily be explained by inherited capacities, population and business concentration, the question remains as to what attracts MNEs to the rest of 23 regions and why there is a lack of interest in some of them? In order to give an answer we need to refer back to the FDI structure in Bulgaria, its motives and modes of entry.

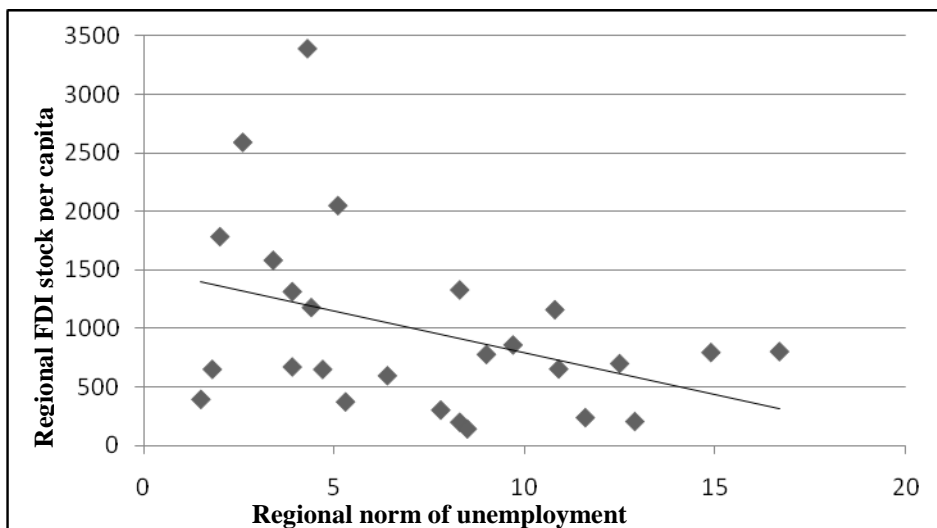
Previous studies in other Eastern Europe countries show that apart from the capital cities, western border areas of the countries are preferred by MNEs because of lower transportation costs to old EU member states, the higher level of development, cultural proximity, etc. (Resmini, 2007.) Bulgaria is remote from the EU economic core and except for Greece and Romania, the rest of its borders are with countries outside the EU. Most of these regions are mountainous, scarcely populated, inaccessible and traditionally agricultural. It should not be ignored that two decades ago border municipalities were part of the areas of special military access, isolated from social and economic processes in the country. Therefore, central or intermediate regions are attractive to MNEs, rather than border ones. Meanwhile, border regions suffer from the lowest investment interest and therefore they are characterized by the lowest growth rate⁵.

An exception to these characteristics of the FDI allocation in Bulgaria is Blagoevgrad Region, where part of the common border between Bulgaria and Greece is located. According to data from ORBIS, about 90% of foreign subsidiaries in the region are small Greek affiliates or joint ventures, most of which are specialized in the production of apparel and textile. Nearly 43% of all Greek investment projects have been concentrated in Blagoevgrad Region.

Contrary to the general belief and official state policy for FDI encouragement, the investment amounts in less attractive regions of Bulgaria are not directly and synonymously related to labor availability and its cost but to regional specialization prior to the transition, privatization, presence of specific natural resources, proximity to a neighbor country, etc. Graph 3 indicates that the regions with the highest unemployment and the lowest income have the lowest FDI stock per capita as well.

⁵ Exceptions are Varna and Bourgas since they are the most advanced and populated regions (after Sofia), and have large and developed Black Sea ports.

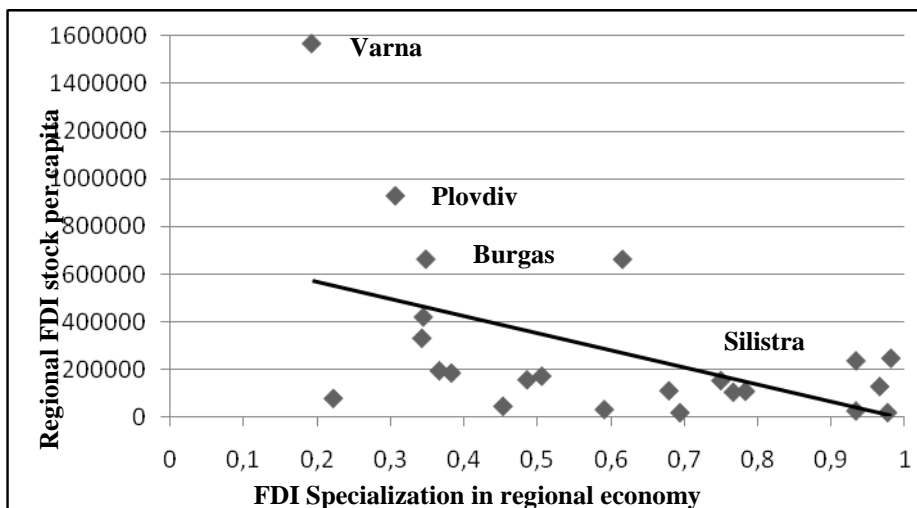
Graph 3. Correlation between rate of unemployment and FDI per capita, 2008



A possible explanation of this phenomenon could be found in a recent study by Dobrev and Kolev (2010). It shows that in less developed Bulgarian municipalities availability of workforce is not an option but rather a potential problem for “efficiency-seeking” FDI. There, unemployment is not cyclical but structural, ‘in nature, the labor market is rigid, and many of the unemployed are elderly or belong to minority groups with low or no qualification, without motivation and lasting work habits. Furthermore, such regions are also not attractive for “market-seeking” FDI, because high unemployment is associated with low income and market potential.

The comparison between FDI specialization (FDI concentration in a given field) and FDI stock in the regional economy throws some light on the problem of regional allocation of FDI.

Graph 4 and data, obtained from NSI clearly indicate that MNEs invest in many or in almost all activities in the most advanced and attractive regions, while undeveloped and non-attractive regions rely on a few investment projects of medium and/or large scale in specific fields, which strongly dominate the structure both of investment stock and of the local economy output. There FDI are mostly motivated by the available natural resources and/or the inherited sectoral specialization.

Graph 4. Correlation between regional specialization and FDI per capita, 2008

Before the transition, Bulgaria was specialized in mining and processing ferrous and non-ferrous materials and non-metallic materials, as well as in the production of low-tech machinery. However few in number, most deposits were economically efficient while operated by state enterprises that were privatized by foreign companies. Interest in them is related not only to their size, but rather to the low costs of their operation, respectively the competitive price of the output. The dominating part of the FDI stock in Sofia (region), Southwestern Bulgaria, Stara Zagora, Targovishte, Gabrovo, Vidin is due to such investment. Favorable climate and government incentives led to a boom of projects for the development of power generation facilities from renewable sources in the regions of Dobrich, Sliven, Ruse. The majority of thermal power plants were also privatized, and Stara Zagora proved to be the most favored region.

In assessing the allocation and low-degree of penetration of MNEs in some of the regions, it should not be forgotten that much of the territory is occupied by agricultural and forest areas, natural parks, which practically restrict the investment projects feasibility. The above-mentioned areas are exactly part of the northern and southeastern border territories. Greenfield investment there is rather rare (mostly in tourism, leisure and real estate), and their localization is usually related to the inherited regional specialization and/or privatization of viable enterprises. A common practice for the mitigation of the risk is the establishment of a joint-venture company or licensing of a local manufacturer, which calls for small-scale investment.

Last but not least, FDI data on regional allocation indicate also some agglomeration effects. The presence of a key foreign investor is perceived by the

other MNEs as a clear signal of availability of potential possibilities for FDI realization in the same region of activity (Ferrer, 1998). Often, competing companies make FDI a counter defensive reaction towards their competitor.

Table 2. Sectoral agglomeration of FDI stock, 2008

Activity	Coefficient of agglomeration
Mining and quarrying	3.516
Manufacturing	2.598
Construction	1.379
Trade	1.046

Source: Calculated as Ferrer (1998) using NSI data

Not surprisingly, the highest coefficient of FDI agglomeration has been noted in the mining industry since raw materials are concentrated in a few regions, where both mining and processing facilities are located. Out of the major industry fields, a concentration of investment projects is observed in the non-metallic and chemical products processing, clothing, production of small electrical appliances, food and beverage.

Officially, by the end of 2008, 20 clusters had been established and were operating as such, supported financially and institutionally by the state. The majority of them, however, are too young, incorporated in the last few years by Bulgarian companies with the participation of foreign partners and still do not provide the expected effect. Exceptions are *Information and Communication Technologies* (Sofia) and *Srednogorie Med Industrial Cluster* (Sofia Region). Nevertheless, what is most effective for MNEs is the non-institutional forms of cooperation mostly among foreign investors, active only in the event of a problem or need of negotiating new parameters of relations with local or national institutions.

The practice of Bulgarian municipalities shows that attempts to artificially create conditions for attracting investments and their geographical concentration within specially established expensive industrial parks are, in most cases, doomed to failure. This especially applies to regions which are not attractive for FDI. Foreign enterprises, like domestic ones, pursue the good business environment rather than the artificial special favors. Local authorities often build such areas without comprehensive preliminary studies of the interest of MNEs and consider the zones not a tool, but an objective of regional development. The shortage of resources and location disadvantages of underdeveloped regions cannot be compensated with good conditions limited to industrial zones. At best, buildings and facilities have been used as logistics centers and do not have the desirable effect on employment and production in the local economy.

4. The role of MNEs for regional development

The uneven distribution of FDI on the territory of Bulgaria creates also non-balanced effects on the regional economies. As one can expect, their influence is strongest in the capital city and the most developed regions, in which the main part of FDI stock is concentrated. The assessment of the significance of MNEs on the regional economies, based on absolute indicators in a similar situation is misleading and it would underestimate the effects of FDI on the regional development in the small and unattractive or undeveloped regions. Therefore, the further analysis is based on a system of relative indicators and the object of investigation is not the absolute value of the created direct effects but the share of foreign companies in the different markets and processes of the regional economies, as well as the factors that determine them.

4.1. Employment and incomes

Towards 2008, MNEs subsidiaries engaged 314 thousand people or 12.7% of people employed in the country. According to ORBIS data, half of the workers were hired in few large affiliates with over 500 people personnel (6.2% of all MNEs' subsidiaries) and the remaining part of the work places were created by average subdivisions of MNEs. Although micro and small subsidiaries represent the dominant form of organization of MNEs' activities in Bulgaria (55.5%), their effect on employment is insignificantly small (only 1% of the total employment for the country).

Table 3. Structure of employment by firm size, 2008

Job range	Projects (share)	Employment (share)
10 - 25	34.6%	3.8%
26 - 50	20.9%	5.2%
51 - 100	16.0%	7.7%
101 - 200	13.2%	13.3%
201 - 500	9.1%	19.4%
501 - 1000	3.7%	17.8%
>1000	2.5%	32.8%

Source: ORBIS database

According to the same data, almost half of the workers were employed in commerce, production of textiles, shoes, foods and beverages. If we add processing of metal and non-metal raw materials, timber, the total number of workers reaches 2/3 of all hired by MNEs. Obviously, foreign companies invest mainly in low technology productions, taking advantage mainly of the low price of labor and available production resources.

According to NSI data, during the period 2005 – 2008 the greatest number of employed in MNEs affiliates was in Sofia (city) – 40.6% If we add the work

places, created in Plovdiv, Varna and Bourgas, it becomes clear that 60% of people employed in foreign companies are on the territory of only 4 of the 28 regions.

On the national scale, MNEs engage on average about 10% of the employment resources of the regional economies, and there are great differences between the regions. The lowest share is only 2.6% (Vidin) and the highest – 22.5% (Blagoevgrad). What is interesting is the fact that in the four most developed regions (Sofia, Plovdiv, Varna, Bourgas), the share of the employed in foreign companies is not among the highest but close to the average value for the country, although almost 2/3 of the work places are created exactly in foreign companies.

Nevertheless, statistics show that during the period 2005 – 2008, the presence of MNEs in the regional economy did not affect dramatically the general degree of employment but rather its current dynamics (volatility). The main reason for this is that a great part of the average and large MNEs, which engage the main part of the work force, undertake “brownfield” FDI (through privatization) or acquisition of a local partner, i.e. they do not create a great number of new work places. Moreover, very often the strategy for the increase of the efficiency of the acquired enterprise includes also the dismissal of workers and reorganization of the production process (Blomström, 2006).

The additional panel data analysis⁶ shows that the share of the employed in MNEs’ subsidiaries in the regional economy is greater in the regions which have a greater number of residents (respectively work force), high concentration of foreign capital and higher degree of economic development.

Table 4. Determinants of TNC’s share in regional employment

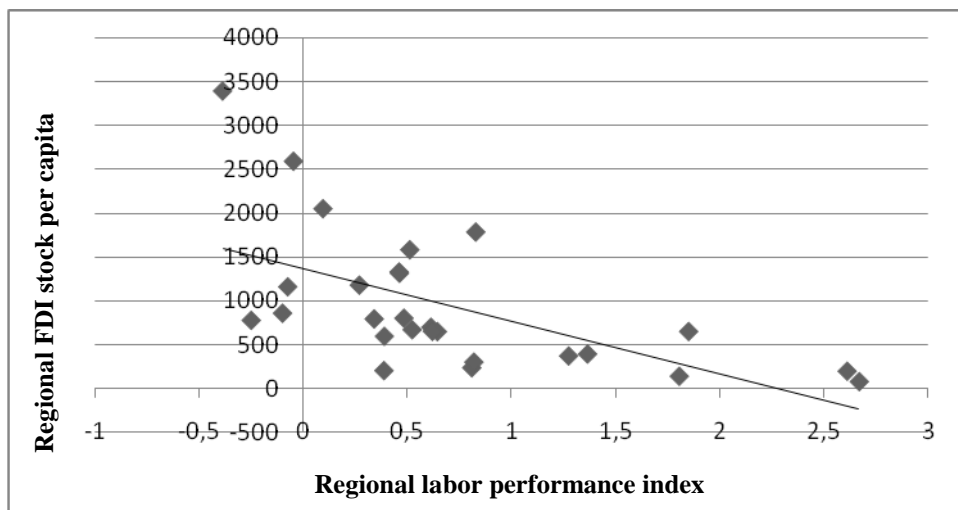
Determinants	Variables	Coefficients
FDI stock	FDI stock per capita	0.126*** (8.021)
Development of regional economy	Gross added value per capita	0.472*** (9.921)
Population	Population	0.148*** (2.705)
Cost of labor	Average wage in regional economy	1.417*** (-9.486)
Qualification (quality) of labor	Percentage of people with secondary and university education	0.137 (1.245)
Specialization of regional economy	Revealed comparative advantages of production	0.303*** (4.140)
Total pool (unbalanced) observations: 99; Adjusted R ² = 0.606; Prob(F-statistic)= 0.000		

⁶ Due to the limitations of the size of the publication, the details concerning the introduction of the econometric model and the parameters of its functioning are not included in the final version of the article. Upon request, the author is ready to provide additional information.

Results further show that the positive influence of MNEs on the employment market is stronger in the regions with revealed specialization and agglomeration effects of territorial concentration of productions in them. As concerning the specifics of the employment resources, MNEs avoid regions with higher unemployment, despite the tax exceptions, and they prefer engaging mainly cheap work force. The model shows straight dependence between qualification and work places but the result is statistically insignificant.

The share of people employed in MNEs' subsidiaries as compared to the total employment is not a sufficient indicator for the quality of FDI in the regional economy, since it does not take into account the differences in the value of the attracted capital. For the purposes of the analysis, Relative labor performance index of FDI (RLPI)⁷ is also used. The average value of the index is 0.66, which suggests that the effect of FDI on employment is unequally distributed and smaller than the relative significance of the attracted capital. The graphical comparison between the FDI stock per capita and RLPI further shows that there is a reverse dependence between the two variables.

Graph 5. Correlation between RLPI and FDI per capita, 2008



The lowest and negative value is in Sofia and the highest in Yambol and Kyustendil. In other words, in the smaller and less attractive regions, one unit of attracted foreign capital has higher relative positive effect on the employment as compared to the bigger and more developed regions. The logics of this result

⁷ Relative Labor Performance Index of FDI is calculated as $RLPI = \ln [(EF / ER) / (FDIR / FDI)]$, where – EF – employed by MNE, ER – total employed in regional economy, FDIR – regional FDI stock, FDI – total FDI stock in Bulgaria.

may hide the fact that the bigger cities and their adjacent territories are attractive for establishing logistic and marketing divisions, headquarters of MNEs, companies in the field of services or speculative operations with real estate properties, while those in the less developed regions, although a few, are almost always connected to production, seeking efficiency and creating employment.

Directly related to employment is also the effect on the level of income in the local economy. This level determines not only the quality of life but also the size of the local market and it may be a main pulling factor for the regional development. According to NSI data, in 2008, the employment salary of people employed in MNEs' subsidiaries was 39% higher than the average salary for the region. Moreover, during the period 2005 – 2008, the increase of salary which people employed in foreign companies received was 60% higher than that of people hired by local entrepreneurs.

Data further show that the size of the salary is in direct connection not with the efficiency of the subsidiary but to the degree of development of the local economy. In their labor payment policy MNEs follow the market price of labor with a certain addition, which would guarantee hiring more motivated and loyal personnel. Such a practice, however, does not have a positive impact on the reduction of the huge regional disparities on the level of income in the country.

If the number of employed in MNEs' subsidiaries is compared to the size of higher remuneration, it would become clear that foreign companies have a relatively small direct effect of 3.9% (on average) on the general level of income in the regional economy⁸. In other words, FDI create "occupation" for the local population but they do not have a sufficiently strong pulling effect on the development of the regional economy in the less attractive regions in the country.

4.2. Production

According to NSI data, the effect of MNEs on production exceeds many times the effect on employment. In 2008, foreign non-financial companies created 30.4% of the gross value added⁹ in Bulgarian economy, and this result is even more irregularly distributed among the different regions, as compared to employment. Statistics shows that 58% of GVA of foreign companies is created in Sofia and the share of the four most developed regions in the country (Sofia,

⁸ The capital city and the four most developed regions are exceptions because a greater number of highly qualified activities and administrative and management positions are concentrated there.

⁹ The National Statistical Institute does not calculate GDP on the regional level. Thus, the use of the closest indicator in terms of significance – gross value added under factor prices, in the analysis.

Plovdiv, Varna, Bourgas) exceeds 74% of the total GVA of the MNE subsidiaries.

Apart from being irregularly distributed, the effect of MNEs on the regional production is also variable. For the period 2005 – 2008, foreign companies appeared to be a factor in economic growth in 22 regions, while in the other six regions they caused shrinkage of local production. The strongest positive effect was realized in Pernik, Targovishte, Lovech, and the strongest negative effect was realized in Sofia (region) and Sliven.

The additional panel data analysis shows that MNEs create greater GVA in those local economies which have revealed comparative specialization in the national economy, provide an opportunity for concentration of production, avail of cheap and qualified labor. The dummy variable for strategic access to markets, transport infrastructure and administration has a positive sign, but is statistically insignificant. It seems that apart from FDI stock, decisive for the importance of foreign companies' production are not only the particularities of local economy, but also the parameters of the investment project.

Table 5. Determinants of TNC's share in regional GVA

Determinants	Variables	Coefficients
FDI stock	FDI stock per capita	0.490118*** (21,040)
Development of regional economy	Gross added value per capita	-0.100337 (-0,759)
Population	Population	0.101328** (2,275)
Cost of labor	Average wage in regional economy	-1.155124*** (-8.127)
Qualification (quality) of labor	Percentage of people with secondary and university education	0.440669* (1,863)
Agglomeration of FDI	Coefficient of sectoral agglomeration of FDI stock	0.234154*** (2,810)
Specialization of regional economy	Revealed comparative advantages of production	0.271324* (1.910)
Strategic location of region	Dummy variable	0.109544 (1,308)
Total observations: 97; Adjusted R ² = 0.659; Prob(F-statistic)= 0.000		

In contrast to employment, there is no clear and statistically significant connection between the share of MNEs' GVA and the degree of development of the local economy. This result is also confirmed by the Relative Added Value

Performance Index of FDI (RAPI)¹⁰. The average value of the index is 0.44 or 50% less than the one of employment, which is due to the huge regional differences in the output, created by foreign companies. The most developed regions (Sofia and Varna) and the small and unattractive regions too fall in the group of regions with negative RAPI. Although the index is with the highest value for Kyustendil, Pernik and Lovech, positive values close to one are available also for Plovdiv and Bourgas. Obviously, the MNEs' direct production effect is connected both to the specifics of the regional economy and to the parameters of the very investment project.

4.3. Investments and efficiency

One of the main specifics of MNE subsidiaries is their higher efficiency as compared to local companies (Hanson, 2001). A similar phenomenon is also observed in Bulgaria. On the average, MNEs realize 2.4 times as high gross value added per one employed as compared to local companies. Here again huge differences between the different regions can be noticed. In Dobrich, for example, MNEs have 10% lower efficiency than the local companies, while in Lovech, it is about five times as much. Data show that the production efficiency of one employee is higher in the large and developed regions, due to the concentration of services, technological intensive productions, management activities, which can be characterized by a smaller number of employees but higher GVA.

The dynamics of efficiency indicators is also interesting. Statistics shows that the average labor efficiency in the MNE subsidiaries grows more slowly than the average for the local economy. During the period 2005 – 2008, only in 11 out of 28 regions foreign companies outran the regional growth of efficiency, and in other five regions the labor efficiency has even dropped. Probably, after the initial incorporation of the subsidiary or restructuring and modernization of the acquired enterprise, MNEs reached a certain level of production and efficiency, which (at least during the four-year period of the analysis) was sufficient to satisfy the company goals. The better results of the local companies can be explained with the lower starting point, competitive pressure on them, and in many cases even with the positive spillovers, resulting from the presence of foreign companies.

Investments in fixed assets which foreign companies make after the initial acquisition or setting of their subsidiary are also directly related to production and its efficiency. With the exception of four regions, each regional economy receives additional capital resource of 18% up to 44% annually as compared to

¹⁰ Relative Added Value Performance Index of FDI is calculated as $RAPI = \ln [(GAVF / GAVR) / (FDIR / FDI)]$, where – GAVF – GAV by MNE, GAVR – total GAV in regional economy, FDIR – regional FDI stock, FDI – total FDI stock in Bulgaria.

the capital resource, invested by local companies. The dynamics of the TFA investments for the period 2005 – 2008, however, confirms the conclusions that the productivity in MNE subsidiaries is relevantly constant. It seems that after the initial FDI, MNEs gradually decrease their capital expenses. Therefore, in 17 out of 28 regions, the relation between MNE stock and costs for acquiring TFA constantly drops. This is particularly visible in the less attractive regions, where the number of investment projects is smaller.

5. Conclusions

Undoubtedly, multinational enterprises (MNEs) are one of the most important vehicles through which economic development in Bulgaria occurs. According to the National Statistical Institute in 2008 MNEs created 30.4% of gross value added and employed 12.7% of labor force in Bulgaria. However, major MNEs activities and the strongest positive effects are concentrated in a few large and developed regions. Despite that, FDI stock has greater relative importance in small and unattractive areas. MNEs acquire existing or create new structural defining productions and thus deepen the specialization and increase the effectiveness of the local economy.

These positive effects are related to potential negative consequences, which unfortunately appeared in 2009-2010. The high degree of specialization made regional economies volatile and dependent on the development of sectoral markets and performance of foreign companies. Specialized regions working mostly for export are more exposed to fluctuations in the international conjecture. In contrast, the regions with high concentration of FDI enjoy the diversification of economic activities in the regional economy, which provides them with substantial buffers and stability in a situation of a crisis.

In unattractive areas MNEs are mainly efficiency-seeking, taking advantage of available natural resources and cheap labor, while all the highly paid positions are concentrated mainly in the capital and few large cities. MNEs maintain employment and create new jobs, but their labor payment policy does not reduce the huge regional disparities on the level of incomes in the country. Moreover, MNEs presence (in general) does not have a sufficiently strong pulling effect on the development in unattractive areas.

Available data did not allow exploration of positive spillover effects. Despite this, the size, structure and spatial distribution of the activities of MNEs suggest that such positive effects could rather be found in the four most developed areas (Blomström, 2006). In other regions underdeveloped national counterparts cause low absorption capacity of the local economy. Moreover, MNEs operate relatively autonomously, often own concessions on natural resources, their activities do not involve significant transfer of "knowledge-capital" to local producers and counterparts.

One of the main reasons for regional disparities in FDI allocation and performance during the analyzed period was the inadequate state policy. The government set quantitative objectives towards FDI, doing too little to attract or support quality FDI to accelerate the country's development. Foreign investment was seen as a financial resource, which should cover the growing current account deficit. There was no adequate sectoral or regional policy towards FDI, and the requirements for receiving administrative support were determined only on the basis of the investment project size. Examples are the reports of the agency that should formulate and implement Bulgarian policy as referred to FDI. For the period 2005 – 2008, the Foreign Investment Agency awarded a first and second investment grade certificate and provided preferential conditions to 22 foreign investment projects for golf courses, spa and recreational facilities, 28 projects for construction of shopping centers and 6 for the construction of office and business parks. Their share of the total projects supported by the agency was 42.2% and represented almost half of the planned FDI for the period. Meanwhile, 22 industrial MNEs applied for such certificates as only 13 of them were related to establishing a new entity, and the rest of them – to expansion and modernization of already existing subsidiaries. Their total share in the scheduled FDI size was 24.1%. The disparagement of the FDI policy importance, the multiple problems with the privatization of national strategic enterprises, the heavy administrative procedures and corruption repelled quality FDI flow and made way for speculative capital invasion, which did not contribute to Bulgarian economic development, but created additional risks to its stability.

The research findings somewhat explain the disparity between the stock of FDI and unsatisfactory results in the development of Bulgarian economy compared to the other CEE countries. There is an obvious need of reconsideration of government policy towards FDI, especially its regional aspects by changing the targets and incentives, creating a strong absorption capacity in local economies. Otherwise the country will remain into the trap of steadily expanding regional disparities and will not be able to completely benefit from the advantages that attracted foreign capital can offer.

References

- Blomström, M. (2006), *Study on FDI and regional development (final report)*, European Commission, Directorate-General for Regional Policy, EC.
- Bosma, N., André van Stel, Suddle, K. (2008), The geography of new firm formation: Evidence from independent start-ups and new subsidiaries in the Netherlands, *International Enterprise Management Journal*, Issue 4, pp.129–146.
- Dobrev, D., Kolev, K. (2009), State and Development of the Undeveloped Rural Regions in Bulgaria, *Economic Studies*, Issue 2, pp.167-197.

Dunning, J. (2000), *Regions, Globalization and Knowledge-Based Economy*, Oxford University Press.

Ferrer, C. (1998), Pattern and determinants of location decision by French multinationals in European regions, in Rugman, A. (ed.), *Multinational Location Strategy*, Vol. 6, pp. 117-138.

Figlio, D., Blonigen, B. (2002), The effects of foreign direct investment on local communities, *Journal of Urban Economics*, 48, pp. 338-363.

Hanson, G. H., (2001), Should Countries Promote Foreign Direct Investment, *G-24 Discussion Paper Series*, Geneva: United Nations Conference on Trade and Development, No. 9.

Jacobs, J. (1969), *The Economy of Cities*, London: Jonathan Cape.

Jones, J., Wren, C. (2006), *Foreign Direct Investment and the Regional Economy*, Ashgate Publishing Limited.

Ledyeva, S. (2009), Spatial Econometric Analysis of Foreign Direct Investment Determinants in Russian Regions, *The World Economy*, Vol. 32, Issue 4, pp. 643-666.

Markusen, J. R. and Venables, A. (1999), Foreign Direct Investment as a Catalyst for Industrial Development, *European Economic Review*, 43: 335-56.

Pustrela, F., Resmini, L. (2007), Where do foreign firms locate in transition countries? An empirical investigation, *Annals of Regional Science*, Vol. 41, No. 4, 835-856.

Resmini, L. (2007), Regional Patterns of Industry Location in Transition Countries: Does Economic Integration with the European Union Matter?, *Regional Studies*, Vol. 41.6, pp. 747-764.