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### **Pros and cons of foreign direct investments on local economy**

A case-study on the Cluj County

Foreign direct investments represent an essential factor of economic development and growth at all levels: national, regional and local (county or municipality/city/commune). These investments can have both positive and negative impact on the local development depending mostly on the type of FDI taking into consideration the attraction factors for specific foreign investors. The authors try to underline these aspects by analyzing the FDI in Cluj county and taking as a case study the NOKIA investment in Cluj and presenting the benefits and also the problems it created for the local community.

Key words: foreign direct investments, FDI determinants, FDI inflows  
JEL-code: R11

#### **Introduction**

The present paper is structured on five sections. This first part of the paper covers some of the most important theoretical aspects linked to the pros and cons for foreign direct investments (FDI), but also the main types and factors that attract FDI into an economy. The second and the third parts present the main economic indicators at national and regional level showing the general context for FDI and the main trends of the FDI in Romania and North-West region in the last twenty years, underlying the most important moments in this evolution. In the main section of the paper, the fourth one, the authors present the situation of FDI in Cluj county, the most developed county of the North-West region, taking as a case study one of the most important foreign investment: NOKIA and presenting the effects it had on the local economy.

#### *Definition*

According to the International Monetary Fund<sup>1</sup>: “*Direct investment* is a category of cross-border investment associated with a resident in one economy having control or a significant degree of influence on the management of an enterprise that is resident in another economy” (this definition of direct investment is the same as in the fourth edition of the *OECD Benchmark Definition of Foreign Direct Investment*). The resident entity is the direct investor and the enterprise is the direct investment enterprise. The lasting interest implies the existence of a long-term relationship between the direct investor and the enterprise and a significant degree of influence by the investor on the management of the enterprise: “Immediate direct investment relationships arise when a direct investor directly owns equity that entitles it to 10 percent or more of the voting power in the direct investment enterprise”. Direct investment involves both the initial transaction between the two entities and all subsequent capital transactions between them and among affiliated enterprises, both incorporated and unincorporated.

#### *Types of investors*

Based on OLI (ownership, localization, internalization advantages) paradigm, John Dunning (1993) outlines four reasons for a firm to invest abroad:

- the search for resources – physical, technological, labour force (education, salaries, availability, unemployment);

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<sup>1</sup>Balance of Payments and International Investment Position Manual, sixth edition

- the search for markets – following the clients, suppliers or competition abroad, better knowledge of the local business environment, reducing the costs for supplying the foreign market;
- the search for efficiency – exploiting different equipments and institutional arrangements, economic and political systems, market structure (governmental aid, the level of public spending, the taxation level, industrial mix and structure, development level of different economic sectors)
- the search for new strategic assets – that could allow them to support and develop their international competitive advantage (buying new assets in order to maintain the mark/brand portfolio).

The dynamics between knowledge assets and location factors have dictated the upsurge in multinational investments over the last decades - mainly the search for strategic assets. In spite of the shifting, in recent years, of multinational activity towards developing countries, either market-seeking or resource-seeking, the main novelty is the increase in investments in developing countries in search of strategic assets, altering the nature of the location factors. If, on one hand, knowledge assets (intangible) can cross national borders, with which multinational firms would have a competitive edge in seeking strategic assets in countries other than their own, on the other hand, the location of these assets is increasingly influenced by the existence of activity clusters, which are complementary.

#### *FDI determinants*

Foreign investors take into consideration the advantages provided by one country, when considering a location for developing business. Countries in Central and Eastern Europe generally offer attractive conditions, especially comparative lower labor costs, along with educated and skilled labor force. Moreover, the fiscal regime has become very encouraging in many of these countries.

One can notice that Romania became a more appealing target for an increasing number of foreign investors due to the fact that it offers foreign investors many reasons to invest:

- *strategic location* - situated at the turning point between European Union, the Balkans and Commonwealth of Independent States countries - crossed by three important pan-European transport corridors that assure the connections between Eastern and Western Europe and Northern and Southern Europe (IV – E-W, IX – N-S and VII – Danube River);
- *great market potential* - one of the largest markets in Central and Eastern Europe, ranking 7<sup>th</sup> in the EU taking into consideration the number of inhabitants;
- *significant natural resources* - rich natural resources such as fertile agricultural land, oil and gas, surface and underground waters, high potential for tourism;
- *low-cost workforce* - was an important aspect that attracted foreign investors to Romania but mainly in the low-value sectors such as manufacturing;
- the *privatization process* - privatization-related FDI had great shares within the FDI flows and reached their peak during the mass privatization periods like 2000-2004, the EU accession negotiations period for Romania, and in 2006, the year preceding the officially announced EU integration for Romania
- *access to EU markets and EU funds* - the integration in the EU created a unique market gateway which facilitates the access to approximately 500 million consumers - access to the EU Single Market – economic openness;
- *friendly business environment* - progress of reforming the FDI institutional and legislative framework and the transformation of the business environment;
- *legislative and fiscal advantages* - Romania has a sound fiscal policy with 16% flat tax and the legal provisions are in line with the Acquis Communautaire;

- *political advantage* - bilateral agreements have been signed between Romania and other countries on investment promotion and protection, as well as diplomatic relations with 177 UN member states and also free trade agreements with EFTA and CEFTA - Romania is a member of the UN, OSCE and WTO.

The FDI were also driven by the national *economic development*, the high FDI flows being higher in the periods of important economic development. There are also state aid schemes for encouraging foreign investors to invest in Romania

*Positive and negative effects generated by FDI*

The effects of the foreign direct investment can be noticed both at firm level and at community level and also they could be positive or negative effects (Pavlinek, 2004).

At firm level one can notice that the FDI can contribute to the development and increase of the production, increase of the labour productivity and in competitiveness, increase in the R&D activities, access to the international markets and distribution networks, new technologies and know-how transfer.

On the other hand the entrance on the local market of new investors can bring an increase in the number of unemployed persons, transfer of knowledge and R&D abroad, disinvestments and decrease in production.

Taking into consideration the effects of FDI on regional and local economies one can mention lots of positive effects such as (Copenhagen Economics & Blomstrom, 2006):

- sustaining the local employment and creating new jobs on long term
- increase in the level of professional training of the labour force
- increase in the level of salaries and real incomes
- increase of the taxation base and in the incomes of the local budget
- increase in the level of capital investments
- access to the necessary currency for obtaining new and better equipment and technologies
- supplying social services for the local communities
- stimulating the local investments, increase in the local businesses' efficiency and competitiveness
- access to new modern technologies and management
- increase of the exports and access to new markets and distribution networks
- support for privatization and restructuring of the economy.

As we mentioned at the beginning there are also many negative effects that FDI can bring:

- local dependency on the foreign capital
- external control of the local economy
- informational advantage allows foreign investors to be more aggressive on the market and sometimes could get in a dominating position in the local economy
- "stealing" qualified workforce from the local companies
- decrease in the number of local companies due to the fact that they are not offered the same facilities as the foreign investors and can not compete with them due to the lack of new technologies and know-how
- specialization of the local economy in sectors with low value added and labour intensive and favoring the unbalanced development
- instability of the foreign investments.

We should also take into consideration the so called "speculative" foreign investments that are only interested in gaining high benefits in a very short period by capitalizing some opportunities and not having as an objective stability and integration on the local market. These types of investments will leave the local economy as soon as they are not benefiting anymore from the

advantages for which they came in the first place or if they identify better conditions on other markets.

### **The macro-economic context**

The North-West region (Northern Transylvania) was created under the law 151/1998 (amended by Law 315/2004) by the voluntary association of the Bihor Bistrita-Nasaud, Cluj, Maramures, Satu-Mare and Salaj counties. As the other seven NUTS 2 development regions of Romania, The North-West region is not an administrative-territorial unit and has no legal personality.

The region covers 14% of the territory (34,159 km<sup>2</sup>), the number of inhabitants being 2.71 million (12,7%) in 2011, ranking fourth nationally both in terms of area and population. The population density is 79,5 inhabitants/km<sup>2</sup>.

The region has a strategic geographical position, being the gateway to Romania from Hungary and Ukraine and standing at the intersection of the north-south axis and the east-west in Eastern Europe. Inside the country, it borders three other areas of development: in the south the West region, in the south-east and east the Centre and the North-East regions. The region is crossed by five European roads, a highway under construction, five railway junctions and three airports. In the territorial profile the region is structured around three centers of polarization: Cluj-Napoca (ranking 2<sup>nd</sup> among the Romanian cities), Oradea and Baia Mare.

The North-West region is a cosmopolitan region, where alongside Romanian, living Hungarians, Roma, Ukrainians, Germans and so on, which led to the creation of a unique cultural identity.

Comparing the Romanian economy with the European one we see that in 2009 the country ranked second lowest in Europe, ahead of Bulgaria (10.300 Euro/person), with a GDP/capita (PPP) of 11.000 Euro/person. In the North-West region this value was 10.100 Euro/capita, below the national average, ranking fourth nationally after Bucuresti-Ilfov, West and Center, the only regions that recorded values of GDP per capita above the national average. Despite a steady increase in the last period, the GDP/capita in absolute terms as well as national and regional income is low compared to the EU average. The GDP/capita at regional level was lower than the national average throughout the last decade. If the GDP/capita (PPP) at national average was 47% of EU-27 average at the regional this indicator was only 43% in 2009. This low level can be explained by the fact that most economic activities in the industrial sector have a low added value. Within the region, Cluj county emerges strongly from the rest, exceeding the regional and county averages, but with values still low compared to EU-27 average (58%).

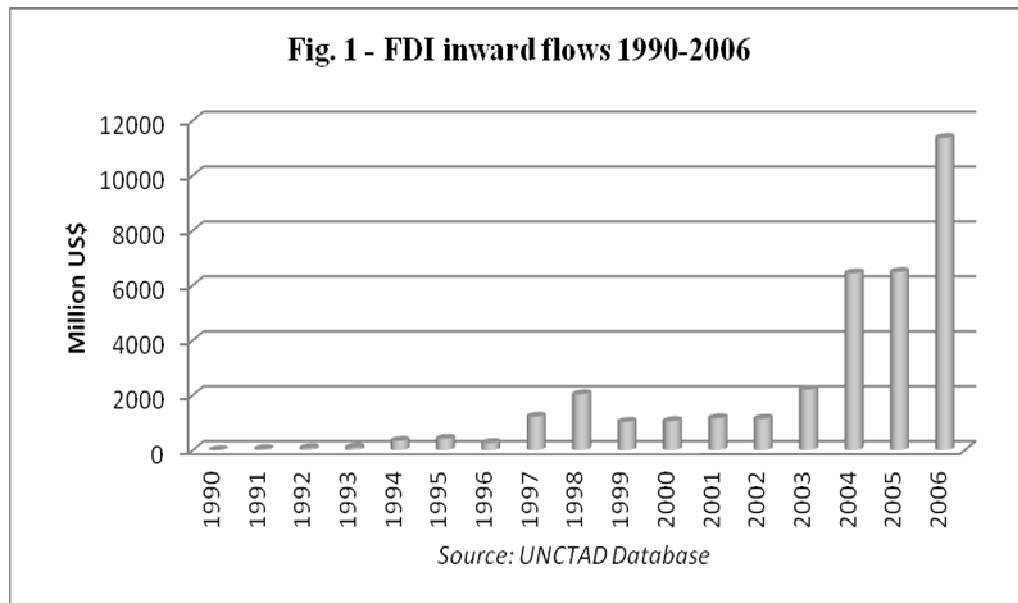
### **FDI flows' evolution at national and regional level in the last two decades**

The FDI flows in Romania experienced major fluctuations since 1990. In the first three years of the '90s the inflows of FDI were almost inexistent, as investors remained reticent due to the political and economic instability of the states in the CEE. During the '90s Romania was marked by great economic difficulties, high unemployment, inflation and shortages of consumer goods, the transition process to the market economy being much harder compared with other countries in the region, such as Hungary, the Czech Republic or Poland.

The low FDI inflows during 1990-1996 are explained by the fact that this was the immediate period after the communism years when the Romanian government had just started its reform agenda, this period being characterized by many social and economic changes and also by a delay in promoting the market mechanism. The low FDI inflows were also influenced by the continuous decrease of the GDP and GDP per capita at the beginning of '90s. During this period Romania was not capable to attract big foreign investors due to the lack in privatization offers and was on the last places among the countries in the region.

Starting with 1997, the situation has changed and the stock of FDI started to ascend, even though evolution was a fluctuating one. Large scale privatizations and positive changes in the

business climate were among the determinants of this new evolution trend. Certainly, the progress in fulfilling the criteria of adhesion to the EU has substantially contributed to the increase of the investors' confidence.

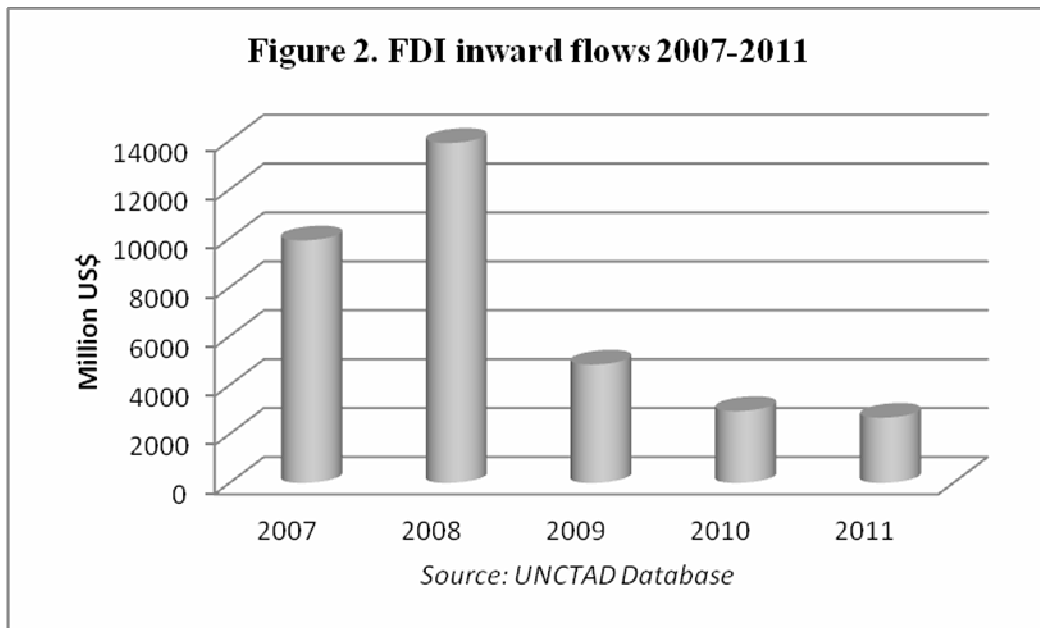


If in 2006 Romania has overtaken the Czech Republic becoming the third largest destination of FDI flows among the new members of the European Union, in 2007 Romania was the second receiving state after Poland, even surpassing this country at the number of greenfield investments, 366 compared with only 333 for Poland. From the total FDI stock in Romania around 80% comes from the EU, with over 45% coming from just three countries, major investors in Romania: the Netherlands, Austria and Germany

In 2008 the maximum of FDI inflows was registered in Romania, reaching 13,909 mil.\$. Investors' interest diversified from low cost sectors towards high value added products, reflected in the raising share of services sector.

At the end of 2008, the global economic crisis made its presence felt in Romania, leading to a decline in the Romanian exports as the global crisis severely limited the access to external financing. A severe decrease has been noted also in FDI inflows in 2009-2011 period, when the inflows decreased to 4,844 mil.\$ in 2009 and reached a minimum of 2,671 mil.\$ in 2011.

The territorial repartition of the FDI for all activity sectors of the economy puts into evidence some of the trends manifested by the investors in 90s. During the 1990's and early 2000's, a big part of foreign direct investment was directed around Bucharest area (Bucharest-Ilfov region) and the Western part of the country (West and North-West regions and Cluj, Timiș and Bihor counties), as these regions have more extensive infrastructure networks available and some are closer to the Western Romanian border, thus facilitating exports to other states within the European Union. The regions and counties at the Southern border also registered important FDI flows (Argeș, Constanța, Galați, Prahova counties and South Muntenia and South-East regions).



*Table 1.: Structure of foreign companies and foreign capital by regions (1991-2006)*

<b>NUTS 2 regions of Romania</b>	<b>% of the total number of foreign companies</b>	<b>% of total foreign capital (mil. \$)</b>
North-East	4,1	4,1
South-East	5,5	7,7
South Muntenia	4,2	9,9
South-West Oltenia	2,6	1,6
West	11,1	6,7
North-West	10	5,4
Center	9,7	5,1
Bucharest-Ilfov	52,8	59,5

*Source:* <http://www.onrc.ro/statistici>

There are emerging centers of concentration for the foreign investors in those geographical areas and historical provinces with a rich economic and infrastructure potential or with historical traditions in certain activity branches.



Figure 3.: Structure of foreign companies by regions (1991-2011)

Source: own calculation on the basis of the data from <http://www.onrc.ro/statistici>

When one analyzes the distribution of the foreign investors taking into consideration the number of the commercial companies, one can see that about half (49%) have been founded in Bucharest, which anyhow has the supremacy regarding the value of the invested capital, with almost 59%. The second group of regions, on the subsequent places are: the West, North-West and Center regions (between 10.2% and 11.5%), respectively Timiș, Arad, Bihor, Cluj, Sibiu, Brașov and Mureș counties. The fewest commercial companies were founded in South-West Oltenia region (only 2.7%).



Figure 4.: Structure of foreign capital by regions (1991-2011)

Source: own calculation on the basis of the data from <http://www.onrc.ro/statistici>

If we take into consideration the value of the investments, Bucharest-Ilfov region is followed by Center, West and South Muntenia regions, respectively Timiș, Cluj, Bihor, Brașov, Bacău, Galați, Argeș, Prahova and Constanța counties. These four regions gather over 80% of the total FDI in Romania. On the last place is the South-West Oltenia region. Generally, the foreign investors avoided the poorest regions in Romania (South-West Oltenia and North-East), the rural environment, preferring the towns or the adjacent areas.

### Case-study: FDI in Cluj County

In 2011, Cluj county ranked first regionally and third nationally (after Bucharest and Timiș) by number of companies with foreign capital, and 2nd (after Bihor), respectively 12 nationwide by size of foreign capital.

Between 2001 and 2010, the only period for which data at county level is available, despite a steady increase in the number of foreign companies and capital, the share of the Cluj county at regional level dropped from 38,5% to 35,6% by number of firms and from 41% to 30,1% by capital. This tendency was largely influenced by what we are going to call the *NOKIA Effect*.

Established in Cluj in 2008, NOKIA was the biggest foreign investor in the county ever, but its presence was short, as in 2011 the factory in Jucu was closed and the entire staff dismissed. We can in the figure below that the foreign capital subscribed in the county doubled between 2007-2009 mostly due to the capital brought by the Finish company. The decline of the company in 2010-2011 conducted to a drop in the level of foreign investments in the county, inconsistent with the regional trend.

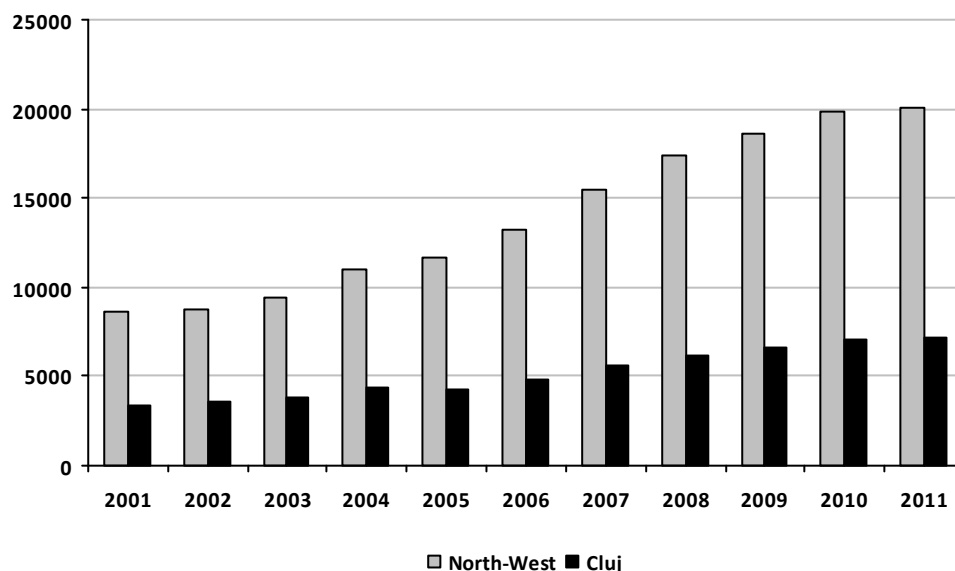


Figure 5.: – Number of companies with foreign capital, 2001-2011, the Cluj county vs the North-West region

Source: own calculation on the basis of the data from <http://www.onrc.ro/statistici>



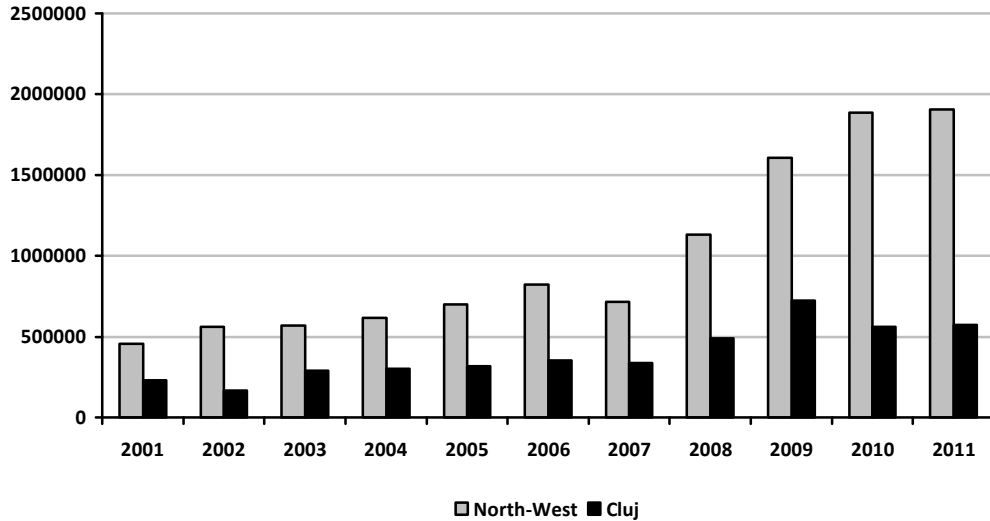


Figure 6.: – Foreign capital subscribed, 2001-2011, the Cluj county vs the North-West region  
 Source: own calculation on the basis of the data from <http://www.onrc.ro/statistici>

By country, the most important foreign investors in the county come from Switzerland, The Netherlands and Austria. By comparison at national level most investors come from The Netherlands, Austria and Germany.

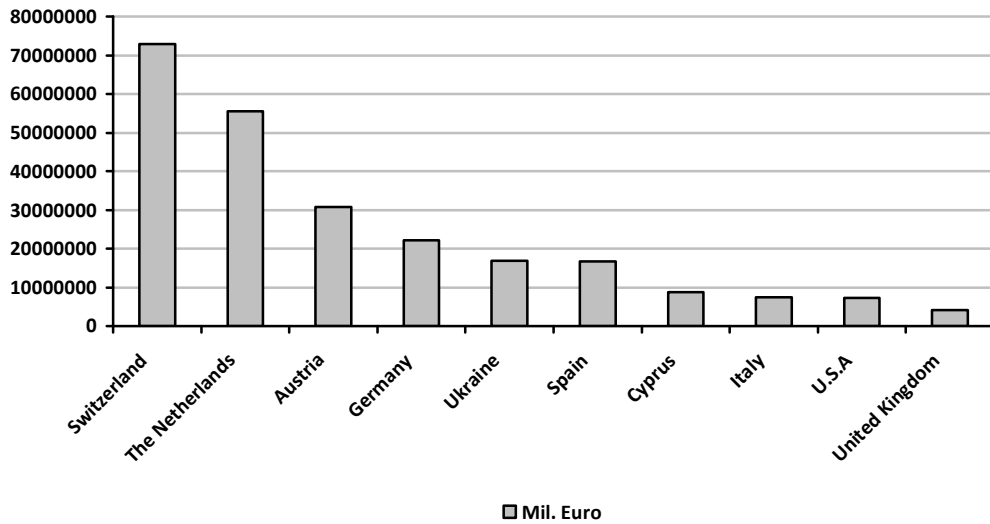


Figure 7.: – Foreign capital subscribed by country of origin, 1991-2011, the Cluj county  
 Source: own calculation on the basis of the data from <http://www.onrc.ro/statistici>

### The NOKIA Effect

In order to evaluate the economic performance of the foreign capital companies active and the effect of the NOKIA investment in the Cluj county we have selected a panel of 118 firms, covering all foreign companies with more than 50 employees. Despite the fact that these 118 companies represent only 1,7% of the total number of firms with foreign capital in the county, they contribute with more than 85% of the total turnover, employment and profit of this market segment.

In 2010, the panel of 118 foreign companies contributed with 38,5% to the total turnover of all companies registered in the county (including the one with Romanian ownership) and with 12,1% to the total number of employees. Against 2005, the share of the 118 foreign companies in the total turnover of the private sector of the county has increased by 18%. Moreover, the labor productivity of the companies in the panel was 3,2 times bigger than the county average in 2010.

Most of the foreign companies (80,5%) in the panel have established in the Cluj-Napoca Metropolitan Area, where modern business infrastructure (e.g. industrial and logistic parks) and skilled labor force is available.

By field of activity, the biggest number of foreign companies is registered in the field of trade (15,3%), IT&C (11%) and light industry (10,2%).

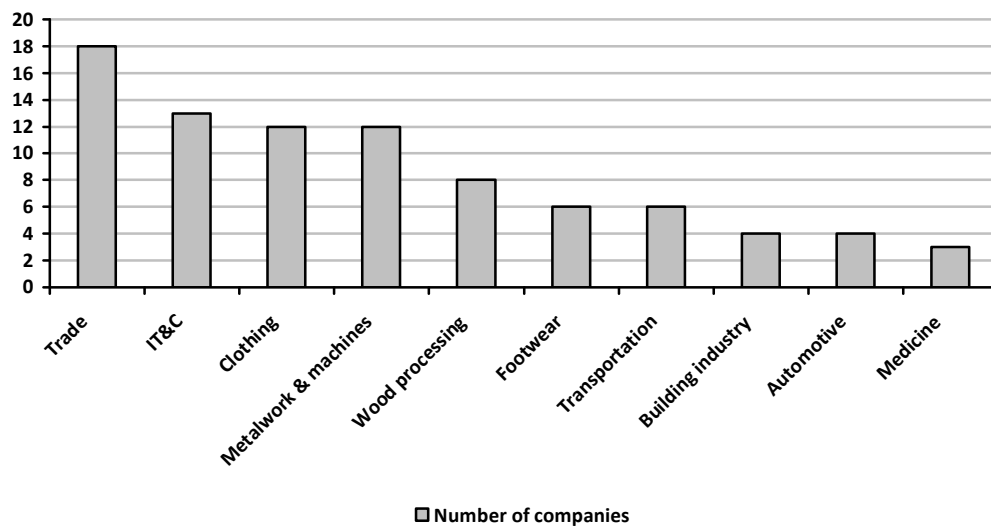


Figure 8.: – The number of foreign capital companies in the Cluj county with more than 50 employees, by field of activity

Source: own calculation on the basis of the data from the Romanian Ministry of Finance

As regards the total turnover of the foreign companies we can see in the Figure 7 that, after a steady increase in 2005-2008, their sales dropped in 2009 as a consequence of the global crisis, while the turnover of NOKIA increased substantially, as 2009 was the first year in which the factory from Jucu (Cluj-Napoca) worked at its full capacity. Considering the fact that this only investor assured around 45% of the total turnover of the foreign companies in the selected panel, it had a positive influence on the whole sector, inconsistent with the national and regional trend. As a result, the county was the only one in Romania to see a growth in GDP in 2009 and 2010 against 2008. In 2011, when the NOKIA factory was closed, the total turnover of the panel de-

creased, although the other companies have seen an increase in their sales, especially on the foreign markets.

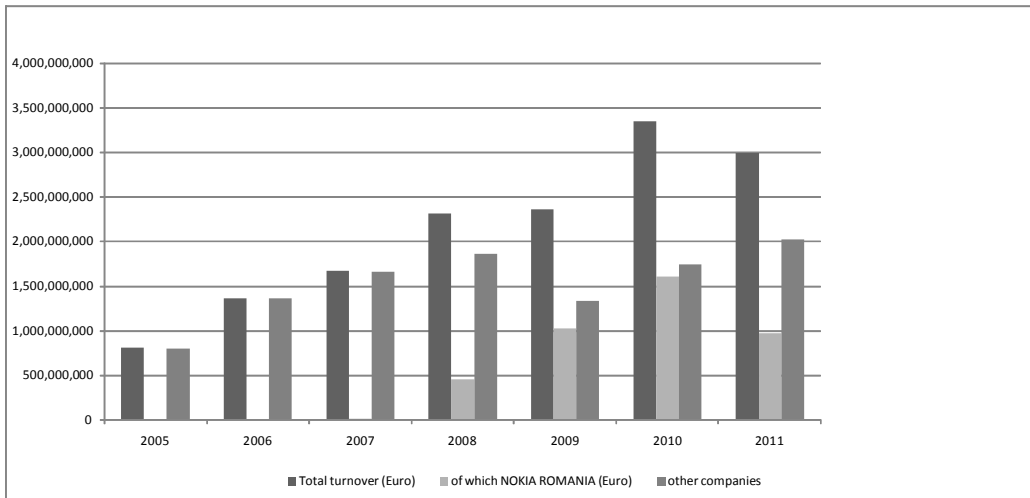


Figure 9.: – The total turnover of the foreign capital companies in the Cluj county with more than 50 employees and the contribution of NOKIA, 2005-2011

Source: own calculation on the basis of the data from the Romanian Ministry of Finance

As regards the net profit, the impact of NOKIA was rather marginal, as the factory in Jucu was active for only 3 years, too short to ensure the return on investment. However, we see huge fluctuation in the profitability of the other foreign companies, which is quite normal considering that most of them are in the first cycle of the investment process and the turbulence on the global market.

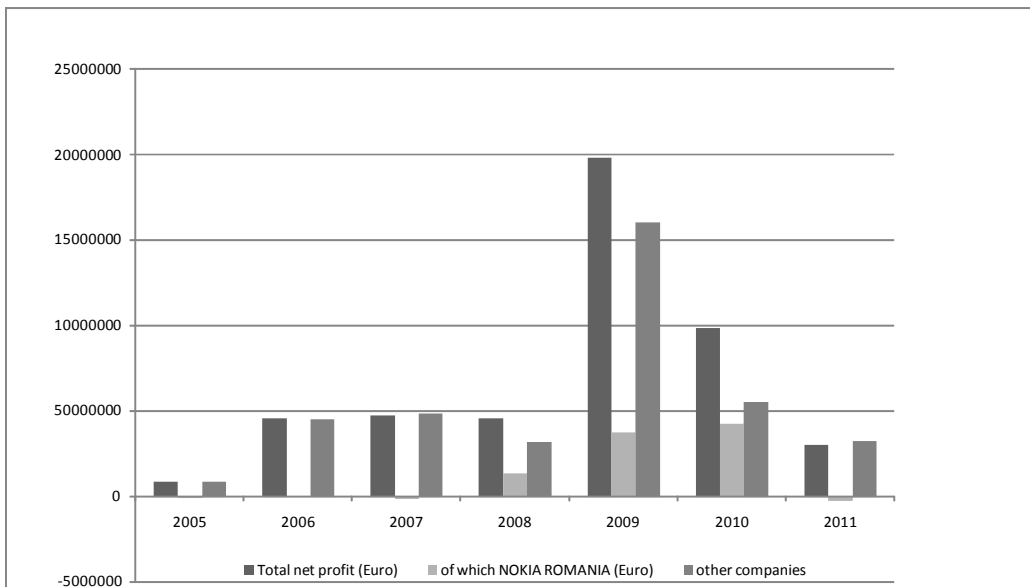


Figure 10.: – The total net profit of the foreign capital companies in the Cluj county with more than 50 employees and the contribution of NOKIA, 2005-2011

Source: own calculation on the basis of the data from the Romanian Ministry of Finance

We can see below that the impact of the NOKIA investment on employment was rather marginal for the entire period. This can be explained by the fact that, although NOKIA had a total turnover of more than 1 billion Euro in 2010 and 2011, its number of employees was only around 1.500. As a result the labor productivity in its case being seven times bigger than for the other companies. Considering this argument we can conclude that the NOKIA effect has been more relevant from the structural point of view (high-added value output and labor productivity).

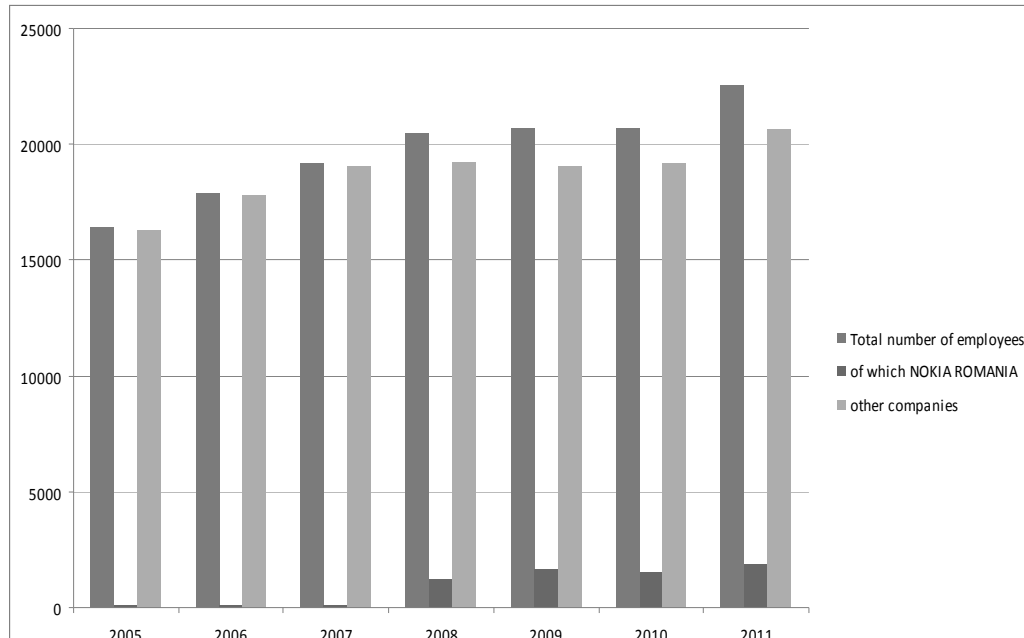


Figure 11.: – The total number of employees of the foreign capital companies in the Cluj county with more than 50 employees and the contribution of NOKIA, 2005-2011

Source: own calculation on the basis of the data from the Romanian Ministry of Finance

Figure 10 shows that the NOKIA investment had an significant impact on the total industrial output and turnover, during the cycle of its existence (November 2008 – November 2012). More exactly, in the 1st half of 2012, the first year in which the factory was completely closed, the industrial output and turnover of the county dropped by 40-60% compared with same period in 2011.

As indicated before, the NOKIA investment had a positive impact on the labor productivity of the county, the performance of this company being more than seven times bigger against the other foreign companies. This indicator can be explained by the fact that NOKIA had a portfolio of high-added value products (IT&C), whereas the other companies are mostly labor-intensive ones (light industry, software, wood processing, etc.).

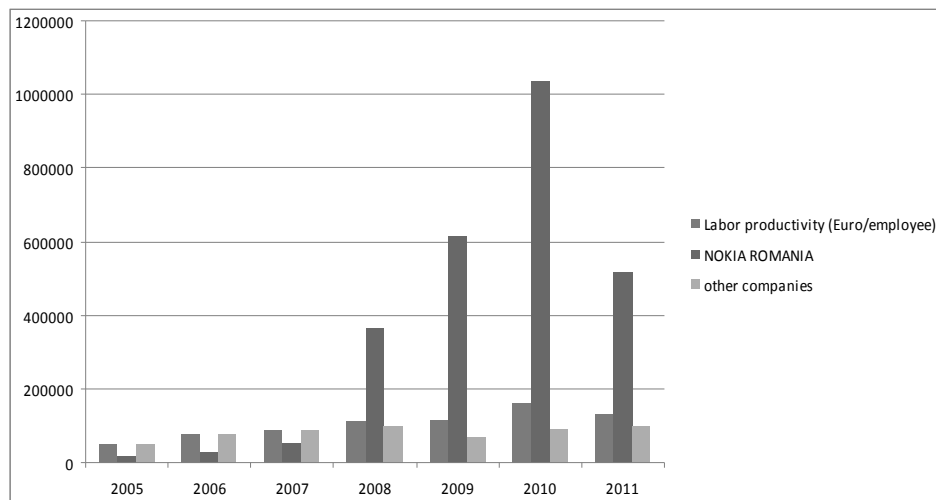


Figure 12.: – The total number of employees of the foreign capital companies in the Cluj county with more than 50 employees and the contribution of NOKIA, 2005-2011

Source: own calculation on the basis of the data from the Romanian Ministry of Finance

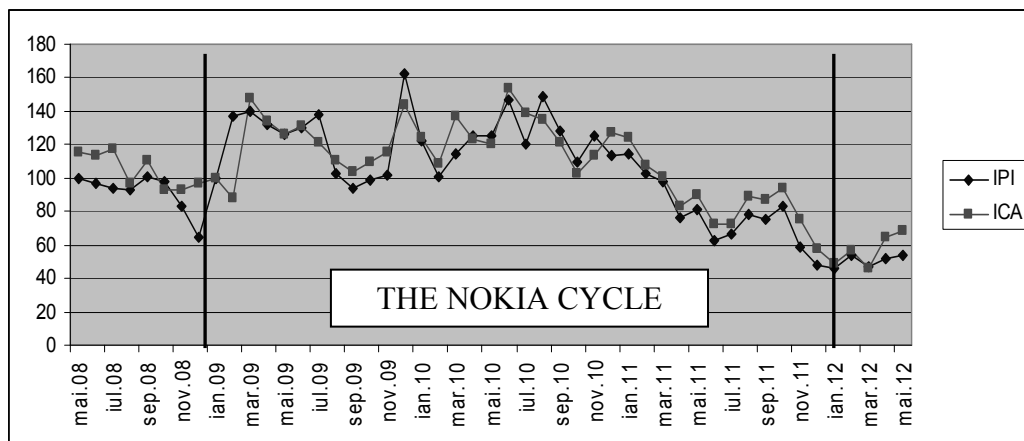


Figure 13.: – The NOKIA Effect on the monthly industrial output and turnover of the Cluj county, 2008-2012

Source: The National Institute of Statistics. Cluj County Monthly Statistical Bulletin. 2008-2012  
 IPI – the industrial output index (the corresponding month of the previous year = 100%)  
 ICA – the industrial turnover index (the corresponding month of the previous year = 100%)

The same huge impact can be seen when it comes to the monthly foreign trade figures for the same period. After NOKIA left the county in November 2011 the volume of FOB exports dropped by 50% against. Currently the monthly volume of exports is similar to the one registered before the NOKIA Cycle, in the 2nd semester of 2008. The volume of import was much lower in 2012 against the pre-NOKIA Cycle – being influenced by the reduced purchasing power, in the context of the global crisis. We have to mention here that NOKIA was also the main importer from the county, by purchasing different inputs for its factory, so a similar negative impact was registered also for imports after November 2011.

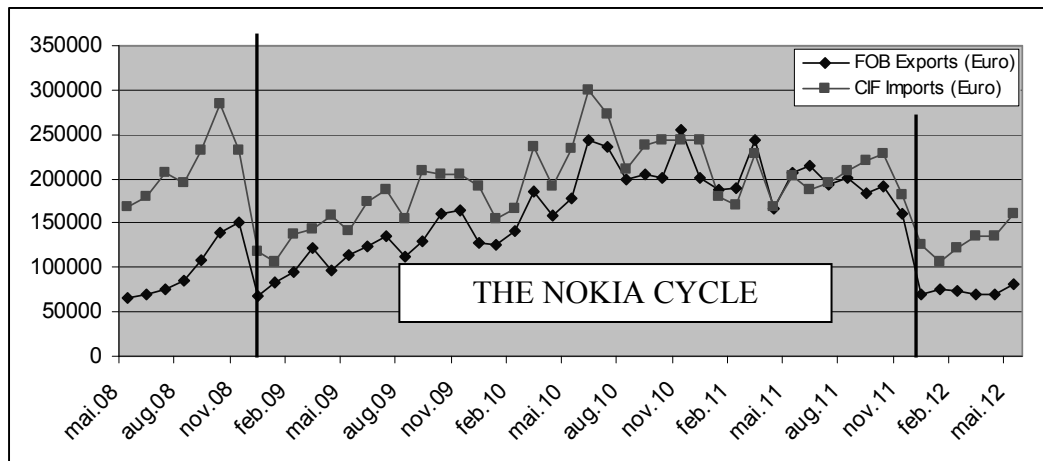


Figure 14.: – The NOKIA Effect on the monthly exports and imports of the Cluj county, 2008-2012

Source: The National Institute of Statistics. Cluj County Monthly Statistical Bulletin. 2008-2012

### Final remarks

Over the past years, most regions from the New Member States of the EU, as well as Romania, benefited from increasing foreign direct investment (FDI) flows due to the macroeconomic stabilization, strong GDP growth, large-scale privatizations and the EU membership. These flows slowed down after 2008 due to less capital inflows from privatizations and also due to the global economic crisis that brought changes in the level of FDI flows all over the world.

Foreign direct investments played an important role in the Romanian economy in the pre-accession period, representing the main means for covering the lack of own capital. FDI assured the necessary capital and technology for restructuring different sectors of the economy and access to modern technologies, competitive management methods, qualification of the labour force, as well as access to new markets. Even though there are many benefits that foreign investments bring to an economy, they could also bring unwanted effects if they leave the economy.

Foreign investment also generated an increasing proportion of private-sector employment, foreign trade and GDP. Restructuring and competitiveness gains have taken place more rapidly in those sectors that benefited from foreign investments, such as, IT&C, food-processing, automotive, banking and brewing sectors, due to the introduction of new technologies and know-how.

The case-study above shows that foreign investments in general and NOKIA in particular, have had a positive impact on the Cluj county economy:

- creating more than 20.000 new jobs;
- higher labor productivity;
- a positive change in the structure of the regional economy, by increasing the share of high added-value products;
- a large contribution to the GDP, industrial output and turnover;
- a significant increase in the volume of foreign trade.

However, we have to have in mind that in most cases FDI have negative effects, especially for less developed regions:

- a large dependency on a short list of big foreign investors makes the local economies vulnerable to the instability of foreign investment;
- the case of NOKIA shows that so-called "speculative" FDI really exist, aimed at maximizing the benefits (in this case the competitive costs with the labor force) for a period of as soon as possible, taking advantage of some opportunities and not necessarily stability and integration into the local market;
- in some cases, the total costs with the incentives offered by central, regional and local authorities may overcome the short-time benefits offered by the foreign investment;
- the economic boom generated by big FDI is often misleading for public authorities, that weaken their efforts to attract new investors, especially SMEs, that are not so visible.

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