

FOREIGN DIRECT INVESTMENTS AND THE KNOWLEDGE SOCIETY IN THE CEE COUNTRIES

Ivan Mihail Vincentiu

Oil and Gas University of Ploiești, 39 Bucharest street, Ploiesti, Faculty of Economics, mihailivan@yahoo.com, 0722 602 320

Iacovoiu Viorela

Oil and Gas University of Ploiești, 39 Bucharest street, Ploiesti, Faculty of Economics, vioiacovoiu@yahoo.com, 0729 107 321

The foreign direct investments play an active role in transforming the Central and East European economies aiming at the construction of the knowledge-based society, by the development of some research-development activities with innovating character.

Generally, it has been noticed a more powerful impact either in the countries that have received massive foreign direct investments, namely the Czech Republic, Hungary and Estonia, or in countries in which the quality of the attracted foreign capital has completed, at a certain moment, their quantity (as for example Slovenia).

In this paper we are going to approach the relation between foreign direct investment (FDI) inflows and knowledge society building in an explicit manner, analysing the empirical data for the Central and Estearn European (CEE) countries, new members of European Union.

Key words: foreign direct investments, knowledge-based society, innovation activities, research, development

Introduction

Most of the studies tackle this subject in an indirect manner, through the positive effects of foreign direct investments upon host economies, in terms of productivity and competitiveness.

In this paper we are going to approach the relation between foreign direct investment (FDI) inflows and knowledge society building in an explicit manner, analysing the empirical data for the Central and Estearn European (CEE) countries, new members of European Union.

Our main goal is to demonstrate that, supporting the development of innovative research-development (R&D) activities foreign direct investments attracted by Central and Estearn European countries had been playing an active role in transformation of these economies, in their way towards a society based on knowledge.

1. FDI and innovative R&D activities

Specialists agree that technological innovation is essential for the economic development and growth. Even more, practice proved that any sustainable economic development requires more than a "receptive" economy to technological inflows inputs.

During the technological innovation process, transnational corporations (TNC) hold a significant role as the globalization and production internationalization processes of the economic inflows deepen. In the extent that these forecasts shall become true, positive effects of the technological progress upon the involved sectors competitiveness and productivity may take place in Romania too, by means of the R&D investments made by the foreign companies that relocate these activities.

In essence, the transnational corporations that develop R&D activities abroad, place it in one of the following categories:

Assets exploiting: these generally originate from the developed countries and internationalize the production in order to get access to national resources or cheap labor force, thus placing the R&D activities in the middle ground;

Augmenting exploiting: these generally originate from the developing economies and by means of FDI they intend to gain access to local research-development capabilities (for increasing competitiveness by means of technological innovation), reason for which R&D activities are placed in the foreground.

Practice showed that transnational companies from the first category (assets exploiting) hold the main share within TNC that internationalize the research-development activities. The developing states generally benefit from the process of the R&D activities abroad localization.

As per the host country, the internationalization of the R&D activities represents an opportunity not only for the technology transfer created somewhere else, but also for the development of technological innovation own capabilities, as long as the particular economy has managed to connect to the innovating and technological global research network. Taking into account the specific of this activity, that assumes not only the existence of some capabilities and knowledge, but also their easy and sometimes unspoken transfer between the producers and the users, the cluster development becomes imperative.

The importance of the clusters in R&D promoting and intensifying has been often underlined by the Romanian specialists, pointing out that given the deep disparities regarding the other EU member countries, Romania must tackle “the complex and difficult aspects associated to the knowledge-based economy construction in a totally changed manner, if it is felt the need to remove the disparities...and reach performance.” Thus, among the strategic options, concerning the main directions for the construction of the knowledge-based economy, one must find as compulsory those options regarding “the use of the clusters, the company networks and business centers for the research-development promotion and intensification “(Roșca, 2006, p. 71,74).

Of course, easier said than done as the setting up and development of the own capabilities of technological innovation are not only low, but very expensive processes that require a constant technical effort, the existence of a developed infrastructure (mainly an informational and communicational one) and some powerful and lasting institutions (universities, research centers).

We need to emphasize that the effects of localizing the R&D activities of the transnational corporations within the host economies are multiple and sometimes conflicting. Thus, beside the positive effects, there are other unwanted effects that can develop, namely: attracting the qualified personnel from the domestic companies; disloyal competition in TNC case, that behave totally unethical; on a long term, one can even register a job diminution.

Both the economical theory and practice showed that there is a set of determining factors that encourage the positive impact, namely:

The R&D activity type (adaptive or innovative);

The absorption capacity of the implanting economies;

The innovating system of the host economy.

As a consequence, we appreciate that the foreign direct investments attracted by the CEE countries can impel the R&D activities with innovating character, thus supporting the Central and Eastern European economies on the way of the construction of the new society, based on knowledge.

2. FDI and the knowledge society

Regarding the construction of the new society, the Society of Knowledge, Alvin Toffler specified in his book-the Third Wave (1981) that “the persons, groups, communities, societies or nations that shall have access to information and the potential to process them, shall then gain access to the new society.”

Therefore, the construction of the knowledge economy implies the transition from “the industrial approach” of the economy to “the informational approach” whose main characteristic is represented by the speed of change. Consequently, the economic success is no longer guaranteed only by the existence of the technology that changes rapidly due to the high rhythm of the technological progress, because it also depends on adopting a new flexible production system, which may be quickly adjusted in order to comply with the market needs and the distribution system radical change (Roșca, 2006, p.341).

Thus, within the globalization context, the transnational corporations deal with a more and more severe pressure due to the massive and rapid changes that register within the global economy, at the production and distribution level. Taking into consideration the intensive informational character of the globalization, in order to keep their competitive advantages, TNC must achieve significant investments in research-

development activities, along with the IT and communication high tech integration within the production process.

As a consequence, the bitter global competition changed the knowledge into the vital force of the economy. Therefore, in order to survive, the transnational corporations have to allocate important resources in view of obtaining knowledge.

The importance of knowledge in the new world economy has been officially acknowledged across the EU once with the adopting of the Lisbon Agenda, that established as a priority for the member countries to build up the knowledge-based society in view of providing the competitiveness increase and a sustained economical development.

Following the adoption of the Lisbon Strategy (2000), The European Commission monitors the progresses recorded by the member countries regarding the capabilities and the innovative performance. In this respect, a survey drafted based on the data supplied by EUROSTAT (The CE Office for Statistics) showed that, during 2002-2004, over 42% of the enterprises that work in the production and services sector within the 27 EU current member countries reported the development of some innovating activities (Eurostat news release, Feb. 2007).

Within the 27 analyzed countries one can notice severe disparities regarding the percentage of the enterprises that achieved innovative activities from the total of the enterprises. Thus, the highest values register in Germany (65% of the overall enterprises), Austria (53%), followed by Denmark, Ireland, Luxembourg (52%), Belgium (51%) and Sweden (50%). At the opposite pole, are ranked the countries with the lowest rates, namely Bulgaria (16% of the overall enterprises), Latvia (18%), Romania (20%), Hungary and Malta (21%).

In what concerns the accomplishment of some partnerships between the public and the private sector, in view of developing the innovative activities it has been ascertained that they occur more frequent in countries like Finland, Slovenia, Slovakia, Latvia, and Lithuania and less frequent in Italy, Malta, Romania and Cyprus.

Moreover, at the EU level, the partnership between the companies involved in the innovation process (suppliers or users) and the public research institutes, as well as the higher education institutions is relatively low (6%, respectively 9%). Though, there are some countries inside which the cooperation level is very high, namely Lithuania (56%) and Slovenia (47%).

Similar to the EU recorded situation, the Central and Eastern European countries present severe disparities in what concerns the enterprise involvement in innovating activities (table 1).

Table 1. Innovation activity and co-operation during 2002-2004 for CEE countries

Countries	Enterprises with innovation activity (% of all enterprises)	Co-operation partners (%of all enterprises with innovation activity)			
		Suppliers	Clients or customers	Universities or other higher education institutes	Government or public research institutes
EU-27	42	17	14	9	6
Bulgaria	16	16	13	6	4
Czech Republic*	38	31	26	13	7
Estonia	49	23	23	9	6
Hungary	21	26	20	14	5
Poland	25	28	16	6	9
Romania	20	14	10	4	4
Slovenia	27	38	33	19	13
Slovakia	23	32	30	15	11

Source: Eurostat News Release, 27 feb.2007, p.2, FCIS 4 (Fourth Community Innovation Survey)

*Data for Czech Republic correspond to the reference period 2003-2005

Estonia and the Czech Republic, states that received massive foreign capital inflows, are ranked the first (with 49%, respectively 38% of the overall enterprises), while the disadvantaged countries, under the FDI inflows, namely Bulgaria and Romania, are among the last places with rates of 16%, respectively 20%.

Starting from the assertion regarding “the 3I of knowledge”, according to which “the processes considered as defining for the phenomenology of a knowledge-based society are: innovation, partnership learning and interactivity” (Dragomirescu, 2001), we shall compare the data concerning the innovative activity and the human capital, previously presented and analyzed, to those related to the FDI inflows (inward FDI stock per capita) within the CEE countries in order to emphasize in a more explicit manner the relation between the attracted foreign direct investments and the knowledge based economy.

In this respect, we shall allocate a number from one to eight to each of the eight countries submitted to analysis, according to the ranking in top (1 for the first place, up to eight for the last place), according to the level of the following indicators: inward FDI stock per capita, the innovation index (ICI), the human capital index (HCI) and the percentage of the enterprise with innovative activities (table 2).

Table 2. Relation between FDI and knowledge-based society for CEE countries

Countries	ICI 2001	HCI 2001	Enterprises with innovation activity 2002-2004	Inward FDI stock per capita 2001	
-	(rank)	(rank)	(rank)	(rank)	USD/capita
Bulgaria	5	5	8	7	432
Czech Republic	4	6	2	1	2638
Estonia	2	3	1	3	2307
Hungary	3	4	6	2	2310
Poland	6	1	4	6	1073
Romania	8	8	7	8	351
Slovenia	1	2	3	4	1613
Slovakia	7	7	5	5	1155

Source: UNCTAD, World Investment Report 2003 and 2005, Eurostat and own calculations

From the above-mentioned data, it comes out that the CEE countries placed on the first positions in what concerns the foreign direct investment inflows, namely the Czech Republic, Hungary, Estonia and Slovenia, still occupy top places regarding the innovative activities and the human capital.

Also, Romania and Bulgaria, ranking last within the CEE analysed countries in what concerns the FDI inflows are occupying the same low positions regarding the innovation capabilities and the quality of the labour force.

Consequently, there is a correlation between foreign direct investments inflows and the positive evolutions recorded by some Central and East European countries (as for example Slovenia, Estonia, the Czech Republic and Hungary) on the way of the construction of the knowledge-based economy.

In our opinion, the presented data suggest that in these countries foreign direct investments contributed to the development of the enterprise innovative activities and the improvement of the human capital.

We shall henceforth end by emphasizing the cases of Slovenia and Poland. As per Slovenia, the positive difference between the rank according to FDI inflows and the ones regarding the knowledge society (ICI, HCI and innovation activity) underlines the importance of the FDI inflows structure and of the domestic resources (human and capital) within the social and economic development of this country.

In what concerns Poland, in our opinion, the positive impact is mostly due to the fact that transnational companies, following the internal market potential have diversified the production, achieving new products to respond the local consumer requirements.

3. Conclusions

In our opinion, given the above-mentioned facts, the foreign direct investments play an active role in transforming the Central and East European economies aiming at the construction of the knowledge-based society, by the development of some research-development activities with innovating character.

Despite all, given the foreign capital input reduced level in most of the analyzed countries, as well as the structure of the FDI inflows (aiming at the market and the reduced cost of the production factors) the foreign capital impact is relatively low in most of the CEE countries. Generally, it has been noticed a more powerful impact either in the countries that have received massive foreign direct investments, namely the Czech Republic, Hungary and Estonia, or in countries in which the quality of the attracted FDI has completed, at a certain moment, their quantity (as for example Slovenia).

Therefore, learning from these countries' experience, Romania that register big discrepancies compared to the other Central and East-European economies that have joined the European Union, can maximize the FDI positive contributions attracting more foreign direct investment inflows especially in those branches intensive in technology and knowledge. In this respect, it is imperative to improve the training level of the labor force and to develop the innovative capabilities.

References

1. J.H. Dunning, *Multinational Enterprise and the Global Economy* (Wokingham, England, Edison-Wesley Publishing Co., 1993)
2. I.Gh. Roșca , *Knowledge-based society* (Bucharest, Editura Economică, 2006)
3. UNCTAD, *World Investment Report 2005: Transnational Corporations and the Internationalization of R&D* (New York and Geneva, UNCTAD, 2005)
4. A. Toffler, *The third wave* (New York, Bantam Books, 1981)
5. EC, *Fourth Community Innovation Survey* (Eurostat News Release, 2007)
6. F.G. Filip, *Informational society - knowledge society. Concepts, solutions and strategies for Romania* (Bucharest, Expert Publishing House, 2001)
7. UNCTAD, *World Investment Report 2003: FDI Policies for Development: National and International Perspectives* (New York and Geneva, UNCTAD, 2003)
8. J.H. Dunning, *Re-evaluating the benefits of foreign direct investments*, *Transnational Corporations*, 3(1), 1994
9. UNCTAD, *World Investment Report 2006: FDI from Developing and Transition Economies: Implications for Development* (New York and Geneva, UNCTAD, 2006)
10. Eurostat, www.eurostat.eu.ro