

# A Case Study of German Investment in Ireland and the CEECs after the EU Fifth Enlargement

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### **Abstract**

This paper draws on the findings of the case study and interview results of three German MNCs investment's location choices in Ireland and EU newly accessed countries. It focuses on the investigation of internationalization strategies and location choices of German manufacturing MNCs within the background of growing regional economic integration (e.g. the fifth EU Enlargement). The case studies of the three German investors also aim to highlight the current level of German FDI in the above destinations and possible future German FDI trends there. In order to investigate the potential changes of German MNCs location choice across regions after the fifth Enlargement, the company case study was confined to those CEECs acceding to the EU that have been the major recipients of German FDI. The countries chosen are therefore: Poland, Hungary and the Czech Republic. The questionnaire on location choice is restricted to two selected industrial sectors, namely mechanical engineering and chemical & pharmaceutical. The questionnaire design was guided by Dunning's conventional 'eclectic' paradigm, which, in spite of its limits has the merit of highlighting the country specific advantages.

Two German MNCs in the Mechanical engineering industry as well as one German MNC in the Pharmaceutical and Chemical manufacturing industry are the focus of this study. This case study is carried out during the year 2004 and the interviews held in the three German MNCs' headquarters were conducted in October the same year.

## **1. Introduction**

The constitution of the European Union and its subsequent effect on international capital flows have given researchers the opportunity to study on the topic of regional economic integration and its connection with FDI allocation within the area.<sup>1</sup> More recently, research on the fifth enlargement of the EU and on the redistribution of intra-EU FDI therein has only started to attract some attention with the completion of the CEECs' accession process (see Lejour, A. R. de Mooij and R. Nahuis, 2001; Altomonte and Guagliano, 2002; and Bevan, et al, 2001). The analysis on the potential threat of FDI being diverted towards the CEECs, and in particular from Ireland has been marginally addressed (Barry and Hannan, 2001; and Barry, 2002).

This paper draws on the findings of the questionnaire survey and expert interview results of German MNCs investment's location choices in Ireland and EU newly accessed countries. It focuses on the investigation of internationalization strategies and location choices of German manufacturing MNCs within the background of growing regional economic integration (e.g. the fifth EU Enlargement). Based on the examination of FDI data, this study on German investors also aims at highlighting the current level of German FDI in the above destinations and discussing possible future German FDI trends there.

Section II will highlight the recent trends of German FDI in Ireland and CEECs

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<sup>1</sup> This is in spite of early work on the issue; see the pioneering work by Giersh (1949-1950).

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within the background of EU fifth enlargement. The methodology (questionnaire design, case study stages) and findings from the questionnaire survey as well as the expert interview are summarized in section III. A concluding comment is presented in the last part.

## **2. Recent Trend of German FDI to Ireland versus the New Member Countries of the CEECs**

German Bundesbank, (the Federal Bank of Germany) data regarding foreign direct investments in Germany and abroad are available. However, modifications to statistical data entry hamper any comparisons over any extended time periods. Beginning in 1999, the threshold value of share ownership was reduced from 20 percent to 10 percent. Recorded entries include venture capital, reinvested profits as well as short and long-term loans. Data on short-term loans have only been collected since 1996. In addition, the exemption limits for declaring foreign majority interests and minority stakes were modified in 2003. To add to this, the flow of direct investments during certain time frames was characterized by extraordinarily high transaction amounts that distort data comparison. The merger of Daimler Benz and Chrysler in 1998 and the Vodafone takeover of Mannesmann in 2000 serve as examples. Accordingly great care is in order when interpreting comparisons of direct investments and stocks. Furthermore, there are very few empirical studies available on the impact of German foreign direct investments on employment with respect to individual businesses that would significantly complement already accumulated data. Available studies contradict one another and only provide very inconsistent findings (Sachverständigenrat 2004/05: 369).

These obstacles notwithstanding, we would like to examine the pivotal development direction of German direct investments in the Central and Eastern European Countries (CEECs) and Ireland:

German foreign investments abroad generally shrank in 2002 and 2003. This reflects a weak investment climate in Germany. According to the 'Bundesbank', the relationship between German direct investments abroad and gross fixed investments in 2003 has reached its lowest value since 1970 amounting to 0.6 percent.

Necessarily, the global environment must be considered within this context. In 2003, foreign direct investments worldwide decreased by 60 percent compared with an all-time high in 2000.

Merger statistics of 2002 provided by the 'Deutsche Bundesbank', indicate that only 6.7 percent of German foreign direct investments were distributed among Central and Eastern European countries. 85 percent of the total portfolio was distributed among all other EU countries. Between 1990 and 2002, direct investments to the industrial nations were raised by 455 billion Euros while the Central and Eastern European countries saw an increase of 43 billion Euros. Of these, 23 billion Euros were diverted to Poland, the Czech Republic and Hungary. Of interest is the stronger increase in the Central and Eastern European countries. The newly acceded EU member states saw an increase in direct investments of over 50 percent on an average annualized basis. In the other industrialized countries, direct investments grew by a "mere" 15 percent. The regional structure of German direct investments abroad has shifted increasingly in favor of the Eastern European states and the U.S.

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The numbers for the workforce at foreign affiliates in the Central and Eastern European countries are higher than average. This is indicative of relatively labor-intensive manufacturing (Sachverständigenrat 2004/05: 367). This also illustrates that the rationale for reducing cost (vertical direct investments) is increasingly gaining importance in the manufacturing sector. Earlier premises of opening up new markets (horizontal direct investments) appear to have undergone a change with respect to the rationale of German foreign direct investments. The Central and Eastern European Countries (CEECs) benefit greatly with respect to production costs and tax burden. Empirical studies point to labor cost as motivation. Labor costs in Poland and the Czech Republic amount to about one third to one quarter of the standards in the new German states according to the 'Zukunftsagentur Brandenburg 2003', the Brandenburg State Future Agency 2003. What needs to be considered however is that labor cost for foreign subsidiaries generally is 50 percent higher than average for that particular country.

By the time of EU accession, nearly all of the economic sectors were open to foreign investment. FDI have mainly gone into services (banking, telecommunications, retailing, real estate). Manufacturing accounts for less than 40 percent of the overall stock of FDI responsible for the bulk of exports. Now, FDI increasingly takes the form of reinvestment for profits. Foreign penetration of the domestic economy is greatest in the Hungarian manufacturing sector with 45 percent of the work force employed by foreign subsidiaries in 2001. In the Czech Republic, Slovakia and Poland, the share amounts to approximately 35 percent. Foreign affiliates have higher labor productivity and utilize more modern technology than domestic companies. Labor cost advantages relative to the EU-15 will continue for an extended period of time. Empirical studies suggest that FDI in manufacturing tends to be of a stronger vertical type. The model predicts strong increases in manufacturing FDI in the coming years (Landesmann, Ward 2005: x).

The results of the statistical and empirical studies are difficult to interpret. Many of the scare scenarios concerning the migration of German companies to the East appear to be misleading for the following reasons. Between 1991 and 2002 only one tenth of the increase in German FDI holdings in the manufacturing sector went to the Central and Eastern European Countries (CEECs). The majority of all stock is tied to other industrialized countries. Moreover, Germany's positioning as an exporting powerhouse contributed to a rise in employment within Germany. Indicative of that are the automobile and auto parts industry as well as engineering that also play an important role in the CEECs.

However, some indicators do suggest that in the future, German companies will invest more in the new EU member states. By comparison, the rate increase of FDI in this target region is considerable and can also be verified. This holds true for the manufacturing sector and relates specifically to its key sectors such as the metal and electrical industries as well as vehicle manufacturing. In the investment decision-making process, the advantages of labor cost and tax burden make cost-motivated (vertical) FDI very attractive. There are lots of noteworthy examples. One such example is German car manufacturer Audi. German Audi export models are manufactured with Hungarian-made engines and Polish-made chassis. It is not unreasonable to assume that companies, which relocate their production or parts thereof, encourage their suppliers to relocate as well. Such industrial clusters already exist in the Czech Republic. The adoption of the comprehensive EU body of rules and regulations has created a stable environment in the newly acceded EU member states and is therefore reassuring to smaller German investors.

By examining statistical data of German FDI, we found some evidence of increased

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German corporate commitment to the new EU member states. German corporate stock of direct investments in the central and Eastern European increased above average. Between 1990 and 2002, German direct investment stock in the industrialized nations grew annually by 15 percent, compared to an annual increase of above 50 percent in the new EU member states. German direct investments currently do favour Eastern Europe and China.

According to the Deutsche Bundesbank, the lion's share of German FDI flows is represented by the EU and the US, each attracting 40% of total German investment. Within the group of emerging economies, China accounts for 1.2% of total German FDI worldwide, whereas the larger new member countries of the EU (Poland, Hungary and Czech Republic) represent about 4%. Within the EU-15, Germany in particular was found however to consign a disproportionately large amount of its FDI to the CEECs. Judging from an historical analysis of the patterns of direct investment in Europe, investors tend to favour large and neighbouring markets. Among the CEECs, countries such as Poland and Hungary detain an absolute advantage in terms of market size and proximity, which is noticeable to German investors. For example, Poland, Hungary and the Czech Republic rank No. 9, 11, 12 respectively as the most favorite destinations of German FDI worldwide (Table 1).



**Table 1. Favourite Destinations for German FDI 2002**

Rank	Country	Rank	Country
1	US	14	China
2	UK	15	Sweden
3	France	16	Brazil
4	Austria	17	Canada
5	Italy	18	Mexico
6	Netherland	19	S. Korea
7	Spain	20	Luxembourg
8	Switzerland	21	Australia
9	<b>Poland</b>	22	Sigapore
10	Belgium	23	Portugal
11	<b>Czech Republic</b>	24	South Africa
12	Japan	25	Denmark
13	<b>Hungary</b>		

Based on amalgamated rankings according to numbers of companies, stock, employees and turnover

Source: Deutsche Bundesbank

Ireland's investment-friendly politics led to a steady increase in capital inflow during the 90s. U.S., Dutch, German and British companies decided on investing in Ireland because of direct and indirect financial investment incentives and the development of the infrastructure. FDI inflows in Ireland have been well above 8.5 per cent of GDP since the late 1990s, representing up to 28 per cent of GDP in 2000. Table 2 depicts perfectly the attraction exerted by Ireland on foreign investors in the late 1990s, compared with other new EU member countries (as well as with China). Inward FDI flows represented up to 112.5 per cent of gross fixed capital formation in 2000; this contrasts with 41 per cent for the EU-15, and for less than 33 per cent in the case of the new member countries from Eastern Europe. As a result, inward FDI stocks represented more than 129 per cent of Irish GDP in 2003, against roughly a quarter in the case of outward FDI stocks (UNCTAD, 2003 and 2004).

**Table 2 - Inward FDI flows as % of Gross Fixed Capital Formation**

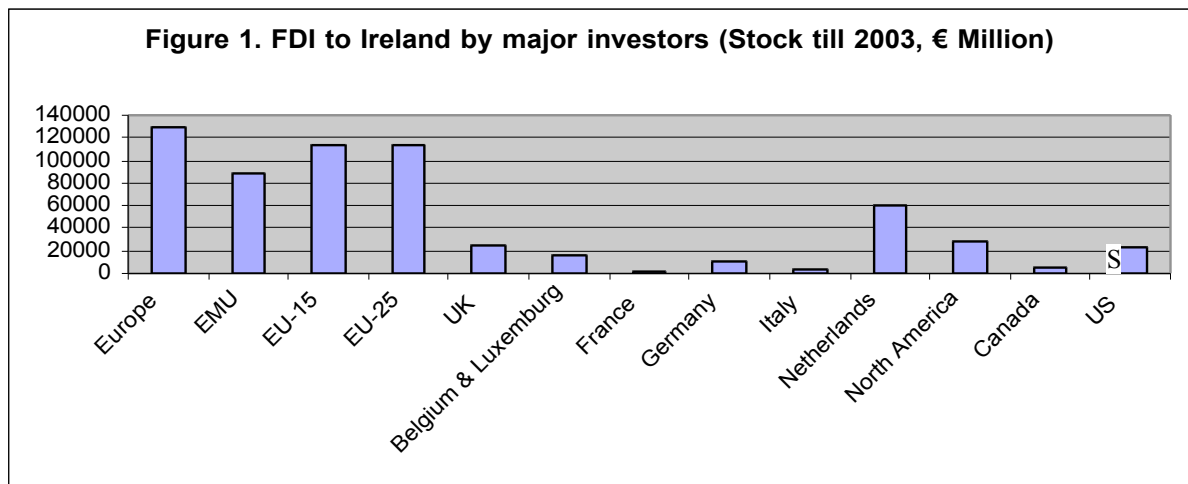
	1992-97	1998	1999	2000	2001	2002	2003
	(Annual Average)						
EU-15	6	14.8	27.7	41.3	22.3	22.3	14.7
Ireland	14.8	45.4	79.7	112.5	40	90.8	74.7

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Czech R.	9.5	22.3	41.3	32.7	33.6	44.5	11.6
Poland	12.2	15.9	18.4	23.8	14.9	11.4	11.1
Hungary	33	34.4	28.8	24.5	32.1	19.1	13.5
China	13.7	13.6	11.3	10.3	10.5	11.5	12.4

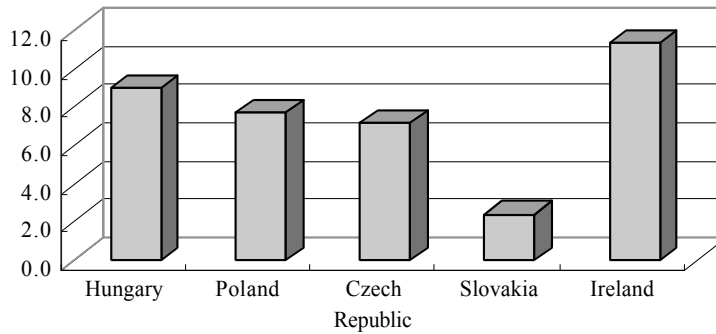
Source: UNCTAD (2004) World Investment Report, Geneva.

For most of the last decade, US firms have been major investors in flow terms, representing up to 84 per cent of all FDI flows in 1997. After the ‘dotcom’ crash, the stock of inward investment from the EU-15 countries continued to rise, and at the end of 2003 it represented almost two-thirds (or €113.960 billion) of the overall total (€171.943 billion).(Figure 1). Within EU-15 countries, Netherlands has the highest FDI stock in Ireland (€60.044 billion), followed by Belgium & Luxembourg (€15.793 billion) till 2003. German FDI stock in Ireland stood at 11.389 billion Euros till 2003, in contrast to 9, 7.7, 7.2 and 2.45 Billion Euros in Hungary, Poland, Czech Republic and Slovakia respectively at the end of 2002.(Figure 2).



Source: CSO, Press Release, Foreign Direct Investment, 20 December, 2004

**Figure 2. German FDI in the EU new member countries of CEECs vs Ireland (FDI Stock at the end of 2002) Billions of Euros**



Source: Deutsche Bundesbank  
Figure for Ireland: FDI stock at the end of 2003

As documented across the board in the literature on FDI in Ireland, multinational firms dominate the ‘high-tech’ sectors, representing more than 90 per cent of total output in pharmaceuticals, chemicals, computers and medical precision instruments (see for example Barry, 1999).

It is difficult to predict to what extent German direct investments to Ireland will be affected by the eastward expansion of the EU which began in early May 2004.

Available data are deemed inconsistent.

A stock survey conducted by the ‘Deutsche Bundesbank’, the Federal Bank of Germany, concludes that companies in North-Rhine Westphalia, the largest of the German states illustrate the following structure in the target countries of direct investments. (Deutsche Bundesbank, stock inventory on direct investments, May 2005). German direct investments between 2001 and 2003 to Ireland and several other recently acceded EU member states show rather variable growth. While Ireland’s

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growth rate approximated 32 percent, growth in Hungary rose by 9 percent and 98 percent in the Czech Republic. Poland by contrast experienced a decline of roughly 18 percent. These statistics, which reflect the specifics in one of Germany's important states suggests that Ireland remains attractive for German companies. Currently, there is no evidence to suggest that Germany is redirecting direct investments towards the East. It is noteworthy, however that employment gains as a result of German direct investments are greater in the newly acceded EU member states than in Ireland. These data are commensurate with statistics issued by the 'Deutsche Bundesbank' on foreign direct investments with respect to companies situated in the state of Baden-Württemberg. While employment numbers between 2002 and 2003 did not rise in Ireland, employment gains in Poland and the Czech Republic registered approximately nine percent and 30 percent in Hungary.

### **3. Case Study of German MNCs' Location Choice in Ireland and in the CEECs**

#### **3.1 Questionnaire Design and Case Study Stages**

In order to investigate the potential changes of German MNCs location choice between Ireland and the CEECs after the fifth Enlargement, the questionnaire on location choice is restricted to two selected industrial sectors, namely mechanical engineering and chemical & pharmaceutical, taking the fact that these sectors attract mainly German FDI inflows in Ireland and also the recent trend in CEE countries like Hungary. The questionnaire design was guided by Dunning's conventional 'eclectic' paradigm, which, in spite of its limits has the merit of highlighting the country

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specific advantages.<sup>2</sup> In order to investigate the locational choices of German MNCs, a series of host country determinants of FDI- locational variables related to the priority of location choice - are chosen. These variables can be grouped as:

**Non-institutional Variables:** Market Potential (Market Size, Market Proximity and Market Access), Cost factors (Labor Cost, Construction Cost, Transportation Cost, Living Cost), Labor Quality (Skills and Educational level of the Workforce, Inadequate Unskilled Labor Supply, Inadequate Technical Labor Supply, A Shortage of Specific Labor Skills which are needed in the Sectors of rapid Growth), Inflation Rate, Infrastructure and Technological Infrastructure, Availability of Raw Material, Quality of Suppliers.

**Institutional Variables:** Political Stability, Economic Stability (Uncertain Economic Future), Pro-Business Environment, Uncertain Industrial Relation Climate, Tax incentives, EU Membership, English Language, Other Incentives (e.g. Access to Funding, Government Grants), Life Quality, Customer Base.

These variables are grouped as competitive advantages and disadvantages of location choice and they were ranked from 5 to 1 along a likert scale (5 representing the greatest level of significance and 1 representing the least importance).

In order to explore the internalization strategy and future investment trends of these German firms, a series of comparative questions on entry mode, ownership arrangements, technical and financial relationship between headquarters and affiliates, linkage with local companies and governmental policy were highlighted. Another 29 more concise and qualitative questions were designed to bring additional information

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<sup>2</sup> See Dunning (1981). The eclectic paradigm does not explain for example resource seeking FDI.

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during the expert interview.

The first stage of the case study focused on the overview of German FDI to Ireland and to the CEECs and on any relevant literature on this topic. Furthermore, a questionnaire on location choice of German MNCs was completed and sent to selected German investors' headquarters and initial contacts with these investors' German headquarters were conducted simultaneously by research team located in Germany in early 2004.

The survey participants are German companies with subsidiaries in Ireland and CEECs. The survey was conducted on the basis of a questionnaire sheet in the first half of 2004. Three companies (One manufactures pneumatic machines and one manufactures pumps in Mechanical Engineering and one belongs to Pharmaceutical and Chemical sector) eventually took part in the case study by answering the complete questionnaires and holding further arranged interviews. The final stage relates to the fieldwork and interviews, which took place in October 2004 in the three MNCs' headquarters in Germany. This involved meetings and interviews with the relevant managers and experts in these companies.

## **3.2 Questionnaire and Expert Interview Results**

### **3.2.1 Results from the Questionnaire**

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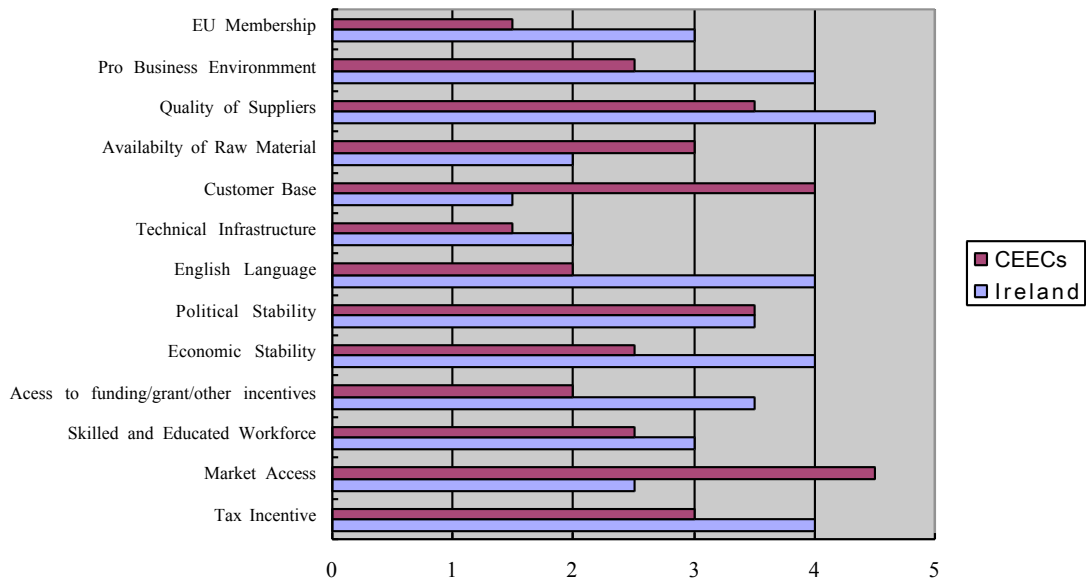
In specific, firms were asked to rank 12 different competitive advantage variables along a scale of 1 to 5, as well as 13 different competitive disadvantages variables along the same scale so as to highlight the importance of each variable in the investment choice of each location separately.

Figure 3 and 4 show the average ranking for each variable, along the scale 1-5. Each result is computed as an arithmetic average of the companies' separate rankings. The results show that variables such as "Availability of raw material and Market access" are ranked as being important competitive advantages for location choice in the CEECs, whereas "Inflation Rate and Infrastructure" variables are perceived as being important competitive disadvantages in the CEECs.

In Ireland, factors such as "Pro Business Environment, Quality of Suppliers, English Language, Access to funding/grant/other incentives as well as Economic Stability" are ranked as important locational competitive advantages (Figure 3). Variables such as "High Labour Cost and Smaller Market and Distance from Market" are considered as important competitive disadvantages in terms of location choice in Ireland (Figure 4). Furthermore, "Inadequate Technical and Unskilled Labour Supply" are also ranked as important competitive disadvantages in Ireland.

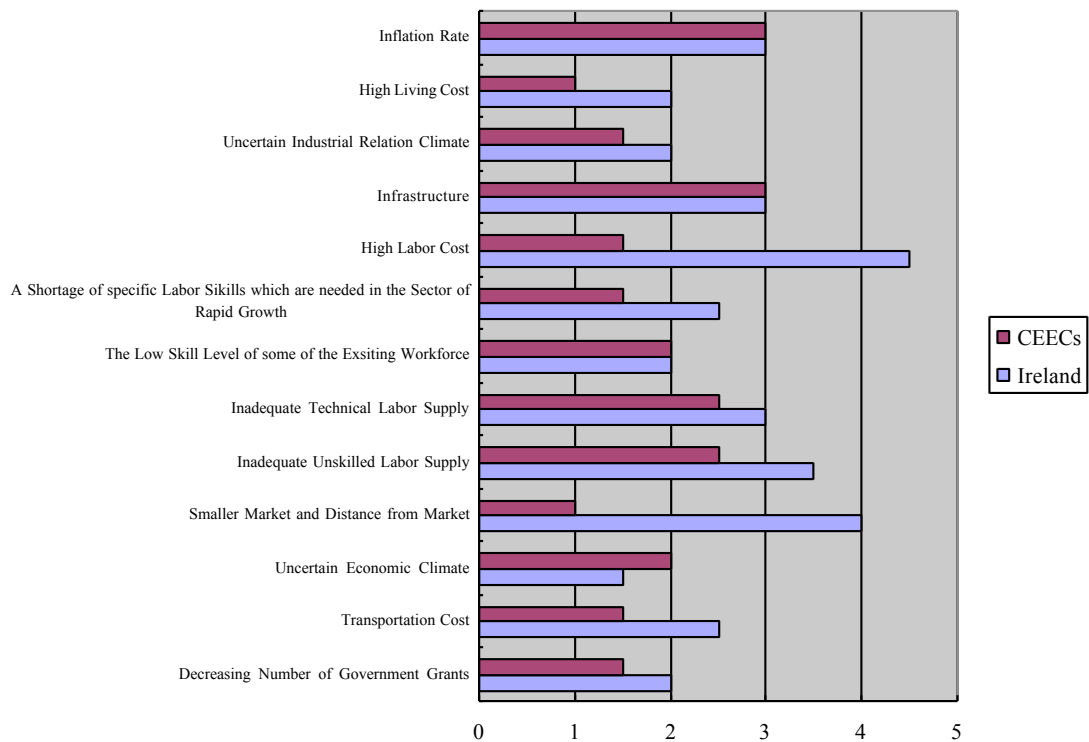
Finally, the results show that "Inflation Rate, Infrastructure and The low Skill Level of the Existing workforce in the CEECs" are comparable with those of Ireland. On the other hand, factor such as Political Stability is ranked equally important competitive advantages of location choice in both Ireland and the CEECs.

**Figure 3: Competitive Advantages of Locations (Scale of Importance): CEECs Vs Ireland**



Source: Questionnaire Results

**Figure 4: Competitive Disadvantages of Locations (Scale of Importance): CEECs Vs Ireland**



Source: Questionnaire Results



In short, when evaluating the competition for German FDI in the CEECs when compared with Ireland, all the firms admit that EU membership and geographic proximity are offering huge opportunities for these countries (Namely Poland, Hungary and the Czech Republic) to attract Intra-EU/German FDI particularly in certain industrial sectors, albeit many investment opportunities there have already been taken up during the CEECs' privatization process.

### **3.3 Expert Interview Results**

#### **3.3.1 Background Information on the three German MNCs**

Two German MNCs (referring here as Company A and B) in the Mechanical engineering industry as well as one German MNC (Company C) in the Pharmaceutical and Chemical manufacturing industry are the focus of the expert interview.

Company A ranks number 2 worldwide in terms of market shares (18%), behind its major Japanese competitors, whose market share accounts for 28% worldwide. It occupies a large market share in the EU-15 (75%) and is positioned as a pioneer and unchallengeable player in the East European Market. Company B ranks No.9 or 10 worldwide. It represents more than 30% of EU market and ranks No.3 in the area. Company C positioned itself as a medium-sized company producing mainly Pharmaceutical products, although maintaining a Chemical plant in Western Europe.

As far as legal structure and ownership arrangements are concerned, the three German MNCs in this case study are AG (Aktiengesellschaft) – i.e. Family owned Stock companies. The AG is the head company and holds 100% of the shares of the

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subsidiaries. Most of the subsidiaries, including those from the Production site and Sales Offices are wholly owned foreign companies because protecting technological-know is important to them and the subsidiaries are owned by family members as shareholders. In the case of Company C, family members own about 70% of the shares of the Stock company. Note that because of global restructuring in the late 1990s, the legal form of Company C changed from a GmbH (Limited Company) to AG in 1995, when 100% of its shares became controlled by family members.

### **3.3.2 Results from Interview Questions**

Apart from the questionnaire results, expert interviews with the relevant top managers and investment decision makers in the three German MNCs showed a panorama of their global operation and produced an interactive, vivid and concrete review of their investment decisions. The fruitful results stem from the open discussion based on the interview questions, and provide also a concise testimony of traditional FDI theories, albeit with unique German characteristics.

In general, by ranking the weight of 10 categories of FDI determinants variables along a 100 points system, the 3 interviewed companies gave “Benefits from lower cost labor and lower tax rate” a 50 percent weight for their investment decisions. Another 50 percent weight was attributed to the variable: “Enter a market in which superior profits are possible” for Companies B and C only. However, Company A shared the remaining 50 percent weight between two variables “React to trade restrictions” (30% weight) and “Neighboring to important high developed supply industries”(20% weight). By responding to the 10 interview questions, each company was finally able to rank its priorities in terms of the importance of location choice determinants in evaluating Ireland and the CEECs as investment locations. A summary on priorities of determinants is provided below (Table 3).

### **Market**

As far as company A concerned, its major investment determinants rely on the growth of sales and market potential in each location by locating close to its costumers.

Because of Market Segmentation and a defensive strategy, it follows its main competitor - a Japanese firm - by entering the Asian market and North America decisively. On the other hand, the family members of company A can influence both the investment decision and the strategy largely. This is demonstrated by the fact that company A is a pioneer in the CEECs, and that it set up production facilities in the Czech Republic and Hungary and a Sales office in Poland when the iron curtain fell down in 1989, as well as a Sales office in the Chinese market in 1993. Its presence in the Irish market with a sales office and workshop dated back as early as 1981. In recent years, company A also reacted promptly by arranging the establishment of a production site in Ukraine in order to target the Russian Market, and also a production facility in India. Instinct reaction, sense for a market potential and the spontaneous counter balance to fierce competition are the key factors in company A's decision making process. Technology and maintaining high quality are key factors in its global competition.

Due to fierce competition in other markets, company B relies more on market potential and potential investment in Poland, Bulgaria and Romania and its traditional market in West Europe due to fierce competition in other markets. In Ireland, the investment strategy changed dramatically in favoring a decrease in the last decade because of rising cost.

Company C's investment in the Polish and other markets (such as U.S. and China) is due mainly to the potential market as well as to tight regulations and restrictions on pharmaceutical products. In the pharmaceutical industry, barriers to entry into a foreign market include the Marketing authorization from the Ministry of Health in

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each local market. The sales office of each of the EU country has to prepare documents to comply with each country's health authority so as to obtain market authorization; this is not the case for either the US or Chinese market. Attracted by large markets such as Poland, U.S. and China, production sites were set up in 1990s in these countries, which are specialized in pharmaceutical products geared for each local market.

### **Cost**

As far as cost factor is concerned, a general agreement on rising costs in Ireland, compared with East European locations, was noticed by the three investors. This factor has had a major influence for company A's plan to build a Global Production Center in East Asia such as China. Other costs such as construction and transportation costs are viewed, as being less important, though company C highlights that construction costs and R&D costs are also decisive factors.

In the view of company B and C, what is more important in reducing cost depends on the intensity of labor or capital investment they are controlling. As the technology upgraded dramatically in both the mechanical engineering and pharmaceutical and chemical sectors (in the background of overcapacity of production in the pharmaceutical industry worldwide), greenfield investment in building new production plants in emerging markets is not planned for company B and C.

Through restructuring, company B has started to change its organizational structure and this made it possible to achieve positive synergies by avoiding production overlapping and reducing cost. Since then, with each subsidiary of company B focusing on special products. Therefore, as a group strategy, company B has reduced

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its investment in Ireland two years ago since 2002. Its production site in Limerick reduced to a smaller one focusing low level manufacturing such as assembling only. On the peak time, 150 full-time staff has been employed and it reduced to 30 full time staff currently. Company B invested in Ireland because of low labor cost and high incentive (governmental support and tax incentive). For instance, tax was negotiable at the time of entering in the Irish market two decades ago but no longer the case now.

Another important reason of reducing its investment is the problem of worker disputes (usually on the issues of the amount of working hours and wages) and in this case, the subsidiary in Ireland was not controllable comparing with other subsidiary. The capacity in France was thus a substitute to the Irish production capacity. In their opinion, it is cheaper to produce in France than in Ireland at the present, though there has not been a real competition of locations between France and Ireland. The simply reason for the reduction of Irish production is that the company realized that they did not need the capacity in Ireland when reorganization of production implemented. Thus, there will be no more investment in Ireland.

For company C, labor costs are less important because of a high level of capital intensity in the pharmaceutical industry. For example, company C designed recently its Irish production site as a strategic location. It planned to invest heavily (about Euro 70 million in the next six years) because the location is a chemical plant and functioning as a sole API<sup>3</sup> production site for the whole group, though labor costs are extremely high compared with locations in emerging markets. Therefore, company B and particularly company C as medium sized pharmaceutical and chemical MNCs, are more cautious on their large investment in new markets because they view that the

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<sup>3</sup> API stands for active pharmaceutical ingredients; it is produced by a subsidiary for the group as a whole.

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nature of their investments are more capital-intensive than labor-intensive.

### **Quality Concerns on Labor, Local Suppliers and Products**

For company A, production requires high labor quality and flexibility. Within the group, the sales office is capable of delivering products within 24 hours (normal standard, even to North or South America). However, in the case of the Asian market, the delivery time cannot match this standard; that is also the main reason why a regional GPC is planned to be set up in Shanghai, apart from the dramatic growth of the Chinese market.

The lack of Qualified Local Suppliers in CEECs, compared with Ireland has also been noted by company A. Therefore, the strategy for this company in the CEECs market is that production started at the level of primary products and may be developed to more complicated ones through the learning process of the local suppliers, a truth experienced in their CEECs location in the late 1980s.

For company B, the question is whether shifting production to lower cost locations can ensure quality competitiveness of German products. More importantly, company B prefers its competency in-house production to ensure product quality. In the view of company B, to set up a new plant in another country can be risky because of the problem of controlling know-how and technology. For them, quality management becomes more and more important in winning the market. Although ISO standards can testify the quality of the products manufactured in foreign locations, brands should also demonstrate that they belong to German companies, guaranteeing high quality in the sense of being “made in Germany”. However, the label “made in Germany” cannot be added to the product because it is a requirement that products made in Europe should use the standard sign as “Made in the EU”. The brand strategy

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uses a German slogan, which is attached to their products worldwide to highlight the German quality.

Company C is more concerned with product quality as well as protection of intellectual property of their patented products because the core competence of a pharmaceutical company is to develop new products and market them. Company C also noted the problem of shortage of qualified workers such as pharmacists working in the industry in Ireland.

Besides the above questions, 19 variables on locational determinants have been selected to formulate a comparative picture of Ireland's position as an investment location versus the CEECs; the comparative results from the three German MNCs are diverse in this instance. However, on five variables (Economic Stability, Political Stability, Infrastructure, Access to Funding/other Incentives and Infrastructure) CEECs are judged at least the same with those of Ireland by the three investors. Variables such as Market Access, Market Size, Proximity to Market, Labour Cost and Transportation Cost in the CEECs were unanimously seen as being superior. "Technical Infrastructure, Tax Incentive, Quality of Suppliers and Pro Business Environment" in the CEECs are viewed as being inferior. Although some disagreement occurs (i.e. either the CEECs are inferior or the same as Ireland), the other five variables of CEECs are judged at least the

**Table 3 Priorities on Determinants of Location Choice of Three German MNCs in Ireland and in CEECS**

MNC	Legal Structure of the group	Locations and Type of Investment					Determinants of Location Choice: Rank of Priorities					Investment Plan in 3 Years	
		Country	CEECS	1 <sup>st</sup> Priority	2 <sup>nd</sup> Priority	3 <sup>rd</sup> Priority	4 <sup>th</sup> Priority	5 <sup>th</sup> Priority	Decrease	Increase			
AG	company, Turnover and Employees worldwide in 2003	Sales office established in	GPC (Global Production Center) established in 1989	Market Size and Profitability	Cost (Labor Cost),	Market Proximity (Logistic Concerns: Delivery time of Products)	Qualified Local Suppliers	Market share and segmentation with other global competitors (particularly in Asia)	Decrease	Decrease			
		Dublin with workshop in 1981 and two branch sales offices set up in early 1990s.	in Czech Republic and Hungary Sale Office established in 1989 in Poland	Profitability and Cost (Tax Level and tax Incentive)	Cost	Transportation, (Construction, Transportation)	Suppliers	global competitors (particularly in Asia)					
			(All are wholly owned foreign companies)										
A	1.2 Billion Euro												
	1,000												
AG	Production site and	Production Site established and	Market	Cost	Global	Market Share	Cost	Decrease	Increase				

Hungary

Czech Republic and

Czech Republic and

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same with those of Ireland by the three investors. These variables include: “Uncertain Economic Future, Skilled and Educated Workforce, Technical Labour Supply, Industrial Relation Climate and Life Quality”.

In answering the question “Which aspect is government policy and support most helpful to your company’s operation in the market “, Companies A and B from the Mechanical Engineering industry pointed out the following aspects as being more helpful in the CEECs: Financial and Taxation and Providing qualified workers and college graduates. The following aspects were singled out as being more helpful in Ireland: “Financial and Taxation, Providing local research and development partners, Establishing good macro-economic environment and Establishing good business environment”.

Company C found “Providing qualified workers and college graduates, Providing support and admittance to the CEECs’ market, Establishing good macro-economic and good business environment” more helpful in the CEECs, whereas “Financial and Taxation, Establishing good business environment, Providing qualified workers and college graduates and Providing continuous education service” were seen as more helpful in the Irish market.

### **3.3.4 Tax Issues and Internalization Strategy**

The expert interviews confirmed the significance of cost motivation and market access. Although market oriented considerations for foreign direct investments remain at the forefront, cost reduction appears equally imperative. In examining the cost rationale, cuts in labor costs and taxes on profits are of fundamental importance. With the increase of capital intensity, the objective of minimizing the tax burden as much as

possible is ever more important. For instance, manager at company B reported that wages are less relevant than taxes. Management at the pharmaceutical company in company C made similar statements and assured that the favour of Irish location, however, remain largely at tax incentives. Company A, B and C all agree that Tax incentives are becoming more important and there will be tax competition among different locations, although the redistribution of profits is not important due to their legal structure. Therefore, transfer pricing is not designed, in the eyes of these companies, as a strategy to cut tax but to determine fair price levels between the companies within the group.

Tax considerations are definitely gaining significance in the selections of location and investment. The literature supports this view to the effect that agreed tax rates and an effective marginal tax rate are highly relevant (Sachverständigenrat 2004/05: 370). Apart from considerations with respect to the tariff burden, effective marginal tax rates also cover tax write-off conditions. Nevertheless, discussions on the rationale for FDI may be undergoing a shift. Not quite ten years ago, James Markusen's survey on the motives for foreign direct investments concluded that there is little support for the idea that tax avoidance is important (Markusen 1995: 121). Meanwhile, the evaluation of the importance of taxes as a determinant of FDI has changed markedly. A substantial body of empirical work has appeared in recent years concluding that high taxes have a significantly negative effect on the ability of a country to attract FDI (Haufler and Stöwhase 2003: 45).

In the competition for site selection between Ireland and the Central and Eastern European member states, favorable taxation is a definite advantage for either side. Accordingly, tax rates on corporate profits in the newly acceded Central and Eastern European member states range far below the German tax burden.

Corporate tax planning is ultimately subordinate to the strategic target of increased shareholder value. Our expert interviews reveal that two of three companies evaluate their investments in accordance with value-based management strategies. In other words, an investment must at the very least generate the cost of capital (Von Wuntsch, Knacke, Neumann 2005: 29. Management activity areas and tasks at transnational corporations are currently being reshuffled. On the one hand it is entities at financial markets that increasingly influence business operations via outside financed corporate acquisitions and hostile mergers. Having said that, corporate management boards have to assert themselves at the financial markets if they are intent on handling mergers, take-overs, stock buy-backs and restructuring etc. in an effective manner. In response to the growing significance of the capital and financial markets, corporate financing is moving to the forefront and is tied to the strategic orientation of corporate management. This is reflected in the new corporate action concepts collectively known as “value-based management”. In other words, shareholder interests and value appreciation essentially constitute strong or even primary motivation. Maximizing of value will ultimately boost a company’s market

<b>Table 2. Corporation Tax Rates in the EU (in percent)</b>	<b>2004</b>	<b>2005</b>
Belgium	34	34
Denmark	30	30
Germany	26.4	26.4
Finland	29	26
France	35.4	35.4
Greece	25/35 <sup>1)</sup>	25/32 <sup>1)</sup>
Great Britain	30	30
Ireland	12.5	12.5
Italy	34	34
Luxembourg	22.9	22.9
Netherlands	34.5	31.5
Austria	34	25
Portugal	30	25
Sweden	28	28
Spain	35	35

<b>EU-15 Average</b>	30	28,5
Estonia	0/26 <sup>2)</sup>	0/24 <sup>2)</sup>
Lettland	15	15
Lithuania	15	15
Malta	35	35
Poland	19	19
Slovakia	19	19
Slovenia	25	25
Czech Republic	28	26
Hungary	16	16
Cyprus	10/15 <sup>3)</sup>	10
<b>EU-25 Average</b>	<b>25.5</b>	<b>24.3</b>

<sup>1)</sup> 25% for Partnerships; 35%/32% for Corporations.

<sup>2)</sup> Rate for distributed profits.

<sup>3)</sup> 15% for profits > 1 Mill. Pound.

Source: Jacobs (2004)

value and hence the intrinsic value of its stock. Following the notions of Rappaport (Rappaport 1998), since the nineties, value-based management has spread especially throughout the Anglo-Saxon countries and is now changing corporate Germany and France.

The basis for any acquisition is always the investment decision of the investor. In our opinion, it is consistently management at the parent company that will decide on the rationale for foreign investments and related strategic objectives. The virtues of a given investment versus expected return flows and costs always need clarification with regard to any specific investment object. In that sense the acquisition of any foreign subsidiary must focus on valuation in line with the prevailing conditions of the host country. Accordingly, valuation will have to reflect business activities of the subsidiary. Moreover, from the very onset the valuation objectives of the parent company will incorporate foreign income from investment. The bottom line is that the acquisition of foreign subsidiaries is done with the intent to maximize profits for the

holding company.

Reviewing the target company for foreign direct investments generally involves an evaluation of local economic, political and tax conditions and also a comparison of different locations. After a preliminary review detailed idiosyncrasies will have to be listed in order to evaluate future cash flow with respect to taxes and value potential. If the primary objective is the opening up or expansion of new markets, then conditions surrounding economic growth, income development, demand as well as the impact of competitors must be identified. If a reduction in cost or taxes is the overriding motivation, tax rates and the scope of the tax assessment basis play an important role. Factors such as political and judicial stability in addition to currency stability generally play a vital role as these may affect the potential for profit distribution in the subsidiary's country and also the amount of transferred return flows at the parent company.

The objective of constant appreciation is the force behind increased cost efficiency and minimizing the tax burden. This leads transnational companies to compare tax conditions of individual countries and exploit incentives for profit shifting.

Companies shift their production capacities to areas with low taxation. Studies, i.e. (Devereux, Griffith 1998; Devereux, Griffith, Klemm 2002) suggest that tax rates play a significant role in selecting a location. There are several developments, the following of which are currently quite spectacular.

First of all, the strategy of multinational corporations is directed at exploiting advantages inherent in the affiliate network structure. The possibilities exist for transferring profits to foreign affiliates (subsidiaries, affiliated companies) with low taxation or to foreign manufacturing sites through This is made possible by transfer

prices for deliveries and services between companies and company entities within the affiliate network. Corporate fixation of transfer prices for varying revenues provides flexibility, which can be and indeed is exploited.

The strategy is clear. The revenue chain is set so that companies, which are positioned in low tax regions that will generate high returns. Effects of this strategy are accompanied or even maximized by internal company transfer prices. A high price is generally added on to advances (free deliveries) from countries with low taxes. The importing country with high taxation anticipates higher costs and thereby reduces local taxable returns and tax burden. Revenues accumulate in the low tax country thereby generating great benefits for the tax burden of the corporate network.

Considering that trade between corporate affiliates and corporate groups entails a large and growing percentage of total global trade, it becomes clear that the corporate structure of transfer prices currently presents an enormous problem for tax authorities, particularly in those countries with high taxation.

Furthermore, payment of taxes can be avoided as independent financing companies are established within the corporate group. This is due to the fact that companies, which are designed to provide financing will find favorable conditions in several countries. The Belgian coordination centers serve as one such example. The Belgian tax authorities tax resulting profits with a flat rate. A surcharge of three percent is applied to managerial salaries and recorded as profit. Advantages once again will fully develop within the framework of the corporate group. Within its structure, the corporate network allows for the realization of multiple benefits. The objective is to generate as much profit as possible at the coordination centers. Being a financing company facilitates this by extending loans to foreign corporations. While profits from financing transactions in Belgium grow, loan costs for higher taxed corporate

groups fall and lower their tax burden. Ireland too jumped on the bandwagon and created favorable tax conditions for the International Financial Services Center in 1987 in the former Custom House Docks in Dublin. There financial services companies have been taxed with a mere ten percent.

Regardless of how the term “Globalization of Markets” is viewed, from a corporate perspective the course of certain developments is clear. With the tremendous speed of technical innovation in telecommunications, large quantities of data can be transmitted to virtually any location at an increasingly lower cost. As a result of quicker information exchange, the international markets move closer together. Individual regions and countries are in a position to directly promote their respective strengths when competing and thereby tighten international competition. As a result, this promotes investment strategies that reflect the diverse market conditions in different countries and the advantages and disadvantages internationally.

Taking these factors into consideration, there are clear signs of international network strategies. Efficiency and asset seeking have gained importance. Companies focus on the production of the final product and value added stages at the most competitive locations where scale economies can best be realized. Efficiency seeking by increasing specialization goes along with intensified intra-company trade (Tavares and Pearce 1998). Internationalization strategies also aim at exploiting and enhancing existing know-how. Foreign subsidiaries are supposed to supply complementary knowledge to the parent company or affiliated firms in other countries (Jungnickel and Keller 2003: 6). Again the ultimate goal is to increase the added value of the company.

The internationalization of the total value added chain is a central element of



international manufacturing networks. They incorporate the purchase and supply system, organization of research and development, application of new technologies and the entire flow of production and distribution. Qualified workers, resources, semi-finished products, know-how and subcontractors are utilized wherever regional competitive advantages can be fully exploited. This favors functional specialization and the development of clusters in defined areas. The huge new market of 450 million people and low labor costs rather seem to favor investments in the CEECs. However, labor costs remain a factor in labor intensive industries, only.

“Value Added Activities” (World Investment Report 2002:125) are distributed to individual sites in accordance with most favorable cost factors and investment incentives. At Volkswagen AG for example, the percentage of domestic production has meanwhile declined to less than 44 percent. The trend toward “world products” is evident not only in automobile production. Different models are manufactured based on flexible manufacturing technologies with few base components. At General Motors, for instance, the number of base components was cut in half. Opel is responsible for some of these. An individual subsidiary can be build up into a central technology, production or distribution center within the global network. Local specialization in individual functions and processes within the global added value chain open up considerable value added potential. When considering that transnational companies are more likely to secure favorable conditions for capital at the international financial markets this potential is amplified.

As far as internalization strategy and global production network for the three interview companies concerned, company A has set up a global network, which consists of a set of companies in different locations with distance among them not being an important factor. For instance, the subsidiary in Brazil also supplies the European Market. The transportation costs are about 10 % of the product cost, which

is still low when the products are delivered by UPS in company A.

In company B, a network is under development between the parent and its foreign subsidiaries and also through cooperation with partners. (e.g. Compensation of production with partners and learning process of production). As far as the degree of control is concerned, the former relationship within the group is more reliable than the latter. The reason is the parent company has to try to protect its know-how and technology (intangible assets), which is an important aspect of control. Transportation costs are not an important factor and can be compensated by economies of scale. This company has for example several products made in China and exported to North America.

For company C, the redistribution of profits is lying mainly at the hands of each location. The AG is the holding company and strategic decisions are centralized there. The network of the group not only includes each location but also integrates contractual partners worldwide. Subsidiaries are free to reinvest their profits. Parent companies charge fees for certain central services such as development costs. All the subsidiaries of the group are aiming at fixing fair transfer prices. Normally, packaging is kept in-house because it is cheaper than outsourcing, therefore, supply chain management is important and it is always safer to keep the packaging in-house to reduce inventory.

#### **4. Concluding Comments**

Within the background of the recent integrating of CEECs in the EU through eastwards enlargement, a trend of substantial expansion of EU MNCs in the area through FDI activities is under seen. This trend includes the recent heated discussion on whether enlargement may be perceived as threatening by the EU's founding members and on what extent it may affect the EU periphery countries

competitiveness (such as Ireland) in attracting FDI.

More specifically, at the very heart of very current and heated discussions in Germany is to which extent globalization and the eastward expansion of the EU will affect investments and employment at German companies. Several economic views predict that German companies will henceforth invest solely in Eastern Europe and Asia. Ireland's role by contrast appears marginal. This is most likely related to the market potential involving about 450 million people in the ten new EU countries. Close analysis of available data however suggests that many questions remain unanswered.

The impact of the eastward expansion on the course of direct investments will not necessarily have negative consequences for Ireland. Several studies also support this view (Dunning 1997a and 1997b). Dunning investigated the previous expansion rounds of the European Union with respect to European direct investment. He concluded that direct investments to the European countries increased with each accession of a new member state. This pertained to the flow of direct investments between the member states and from outside their boundaries. Similarly, Barry assumes that direct investments act as complement rather than replacement (Barry, Hannan 2001: 10). This view evaluates the future development of Ireland as very positive. For U.S. companies in particular, Ireland will remain a very important portal to the European Union. The expansion of foreign direct investments and increased competition in Europe will not be a detriment to Ireland. Barry does concede that the accession of the Central and Eastern European countries to the EU implies direct competition between Ireland and these countries. Although Ireland offers favorable investment conditions, labor costs in the new EU member states are considerably lower. Generally there is no lack of qualified workers. Labor-intensive economic

sectors in the Central and Eastern European countries will probably reap great benefits. Nevertheless, the more convergence processes will press forward within Europe the more wage levels will approach Western European standards.

Company surveys we conducted in 2004 affirm that German companies do not intend to relinquish their commitment to Ireland, though the rationale behind German FDI remains largely the opening up of new markets such as CEECs. Questionnaire survey and expert interview also suggest that low production costs as well as a low tax burden are paramount in the investment decision-making process. Majority of German corporations with subsidiaries in Ireland and CEECs declared this to be the main *raison d'être*. When solely considering their rationale in the Irish market, only few companies indicated that considerations such as opening up new markets or gaining scale and synergetic effects were deemed important.<sup>4</sup>

Although market oriented considerations for foreign direct investments remain at the forefront, cost reduction appears equally imperative. Our interviews confirmed the significance of cost motivation and tax avoidance. The cost rationale includes different factors such as labour costs, tax burden and other cost items. What cost strategy is gaining importance depends on the nature of the investment. While in capital intensive industries minimizing labour costs has little effect, avoiding high taxation on profits is the more efficient strategy. The evaluation of motives for foreign investments may be undergoing a shift. German MNCs also raised other concerns about quality issues such as labor, product and suppliers. In various degrees, an internalization strategy is being developed in the three MNCs, since global networks

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<sup>4</sup> This is further demonstrated by another survey of German investment in Ireland, which Prof. Von Wuntsch from FHTW Berlin conducted in the first half of 2004. The survey participants were German companies with subsidiaries in Ireland. These included four companies from the automobile and engineering sector, two companies from the tool manufacturing and metalworking industries, two companies from the chemical and pharmaceutical sectors and one company each from the textile and leather industries as well as the insurance and financial services sector.

are being further developed at the world level between the parent and their foreign subsidiaries and also through cooperation with partners.

To highlight the results of the questionnaire and interview, variables on location determinants were selected so as to formulate a comparative picture of Ireland's position as an investment location versus the CEECs. Although the results emanating from the three German MNCs are diverse, it is found that the CEECs enjoy modest comparative advantages when compared with Ireland. In addition, the opportunity of the potential CEECs market is a competitive advantage that cannot be replicated elsewhere within the EU.

The importance of Irish subsidiary designed as a strategic position within the group by Company C gives an example that Ireland can attract much better quality and less mobile inward FDI in industries such like chemical and pharmaceutical sector. In this way, Ireland can maintain its comparative advantage through inviting high-tech and R&D FDI in establishing 'quality plant' within the global production network of MNEs. We can define a 'quality plant' as one that possesses a wide range of higher order functions (*i.e.* R&D and marketing) as well as a high degree of managerial autonomy, and one that occupies a strategically important position in its parent group (Hewitt Dundas et al, 2002). Given that they provide better quality jobs, 'quality plants' are less vulnerable to closure. The fact that these 'quality plants' have a higher longevity brings many benefits to the host economy. Beyond the benefits in terms of economic stability, they allow the minimisation of the transaction costs incurred by the development agencies in searching for new investors and in negotiating lengthy contracts. These plants are also more likely, than low quality plants, to generate a positive influence on the host economy through supplier linkages, technology spillovers and new firm spin-offs (Andreosso-O'Callaghan and Wei, 2005).

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