

**Why do Korean firms invest in the EU?  
Evidence from FDI in the peripheral regions**

**Ki-Sik Hwang**

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European Institute  
London School of Economics  
Houghton Street  
London  
WC2A 2AE

Tel: +44 (020) 7955 6780

Fax: +44 (020) 7955 7546

Contact: Nan Hume

E-mail: [n.hume@lse.ac.uk](mailto:n.hume@lse.ac.uk) or [europeaninstitute@lse.ac.uk](mailto:europeaninstitute@lse.ac.uk)

## **Abstract**

This paper examines the question of why the Korean electronics firms invest in the EU. It applies conventional OLI (Ownership-Location-Internalisation) paradigm of Dunning to explain the motivations of Korean investment in the EU. The main questions in this research are: What are the nature of competitive Ownership (*O*) advantages of Korean firms and Location (*L*) advantages of the EU? and how do both *O* and *L* advantages affect Korean firms' decision to invest?

This study raises questions about the 'reverse investment theory' and refutes the basic logic of this theory (e.g., no clear *O* advantages of Korean firms, high labour costs of the EU, and advanced technology access as the main investment motivation). It mainly argues that some 'cost saving factors' (such as low labour costs, various types of grants and ability to source low-cost components from Korean suppliers) in the EU have been major determinants for Korean firms in the EU.

The paper demonstrates these arguments through the various primary data analysis and case-studies of Korean firms in the EU. It emphasizes the particular characteristics of Korean consumer electronics *chaebols'* investment in EU peripheral regions which are eligible for EU Structural Funds support (including special assistance through the structural funds to candidate countries).

**Keywords:** FDI, Korean firms, OLI paradigm, Dunning, ownership advantages, location advantages, reverse FDI, peripheral regions, EU structural funds, cohesion countries, European Union

Ki-Sik Hwang is a research student in the European Institute, LSE. This Working Paper is a revised version of his M.Phil Thesis which he defended in December 2003 at the LSE.

# 1. Introduction

## 1.1 The research objectives and questions

The European Union is the largest host to Foreign Direct Investment (FDI) in the world, absorbing nearly two-fifths of global investment flows and stocks (UNCTAD, 2001, P.56). After the 1992 deadline for the creation of the Single Market was achieved, Developing Countries (DCs) have rapidly increased their investment into the EU. Especially, the Asian NICs have been at the forefront of this increase. The data presented in Table 1.1 show how the share and value of FDI from Asian NICs in the EU have increased dramatically since the 1980s. FDI flow from Asian NICs rose from 565 million ECUs in 1988-1989 to 8.3 billion ECUs in 1999-2000. In 2000, Asian NICs accounted for around 6 per cent of total amount of inward FDI into the EU (EU FDI year book, 2002; UNCTAD, 2001; EUROSTAT 2001c). Therefore, it is clear that the amount and share of EU inward FDI originating in Asian NICs are not negligible.

**Table 1.1. Amount and share of EU of total inward FDI : Developing countries vs. Developed countries.**

	1988-1989		1993-1994		1999- 2000	
	FDI inflows (ecu/euro mill)	share of EU total (%)	FDI inflows (ecu/euro mill)	share of EU total (%)	FDI inflows (ecu/euro mill)	share of EU total (%)
Developed	19,929	90.5	16,864	82	124,586	86.6
USA	5,118	20	9,921	48	102,534	71.3
Japan	3,216	15	1,511	7	-1828	-1.2
EFTA	8,470	41	3,855	19	15,469	10.7
Other developed	3,124	14	1,577	8	8,411	5.8
Developing	2,091	9.5	3,880	18	19,189	13.4
<b>Asian NICs</b>	<b>565</b>	<b>2.6</b>	<b>1,054</b>	<b>5.0</b>	<b>8,310</b>	<b>5.8</b>
ACP	18	0	145	0.4	904	0.6
OPEC	500	2.4	782	3.6	439	0.3
Other developing	1,008	4.5	1,899	9.0	9,536	6.7
Total	22,020	100	20,744	100	143,775	100

Source: *Author's calculations* based on data from 'EU FDI year book'(2000); UNCTAD (2001); EUROSTAT (2001), *European Union and its main trading partners 2000 economic and trade indicators*.

However, very little empirical research has been done into FDI behaviour of Asian NICs within the EU.<sup>1</sup> Moreover, current studies have emphasized that basic framework of conventional FDI theories (e.g. OLI paradigm of Dunning) is not easily applied to explain the phenomenon of Asian NICs FDI into the EU. As many current studies have acknowledged, it is more difficult to explain the phenomenon of NICs FDI in relatively more developed regions such as Western Europe and the U.S. than it is to account for NICs FDI in less developed countries (LDCs) such as South-East Asia and Latin American countries.<sup>2</sup> According to Hoesel (1999) and Cherry (2001), this can be attributed to the fact that basic framework of conventional FDI theories is not easily applied to provide a compelling explanation for this phenomenon. Thus, unlike NICs FDI into the LDCs, NICs FDI into the EU related questions are still surrounded by controversy such as – why do they enter the EU?; what are the competitive advantages of Asian firms in the EU? ; how are they different from other developed countries in terms of types of FDI? –<sup>3</sup>.

The research proposed here starts with the recognition that this gap needs to be filled. Thus, the main topic of this thesis is to explore the FDI in the EU from Asian NICs – an area of study which has not been covered

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<sup>1</sup> The majority of studies conducted on FDI into the EU have been focused on the analysis of the behaviour of FDI from major countries such as American and Japanese firms. The lack of research on FDI inflows into the EU from non major countries (such as NICs FDI into the EU) has been steadily brought forward by several studies since the mid-1990s. For example Young, Hood & Peters, 1994; Dent & Randerson, 1996; Shin, 1998; Dent, 1999; Hoesel, 1999; Jung, 2000; Cherry, 2001).

<sup>2</sup> Recent studies have revealed a definitional problem. This is the question of what term to use in classifying the development levels of the Asian NICs like Korea, Hong Kong, Singapore, and Taiwan. So far, various terms have been used for these countries, ranging from ‘third world’ (Wells, 1983), ‘developing country’ (Cherry, 2001), and ‘emerging economy’ (Hoesel, 1999), etc. In recent works on Korean and Taiwanese FDI, however, the Asian NICs have been defined as being somewhere in the middle stage between developing and developed countries. Thus, North American, European, and Japanese firms have been referred to as industrialised countries (IC) firms, Asian NICs firms have been designated the term developing countries (DC) firms, and the remaining South-East Asian and Latin American firms have been called less developed countries (LDC) firms (Hsiang-Chun Chen, 1999; Hoesel, 1999; Cherry, 2001). This research will use this methodology to separate the countries into ICs, DCs, and LDCs. Asian NICs, including Korea, will be labelled as DCs to indicate the fact that they occupy the ‘middle ground’.

<sup>3</sup> Notably, UNCTAD (1996); Pike, A. & Tomaney, J. (1999); Garrahan, P & Ritchie, J (1999); and Dunning, et al (2001).

extensively enough despite its importance. This research will examine, in particular, the case of Korean FDI in the EU. The case of Korean FDI is meaningful in many aspects. First of all, it is one of the most important sources of FDI originating from Asian NICs. For example, the European share of FDI (16 per cent) compared to Hong Kong (3 per cent) and Singapore (8 per cent) is higher (UNCTAD, 2000). Second, FDI in manufacturing is over 50 per cent (Hong Kong and Singapore amount to less than 10 per cent each) (EUROSTAT, 2000 & UNCTAD, 2001). Third, unlike other NICs such as Hong Kong and Singapore (where up to half of their outward FDI is undertaken by foreign affiliates from developed countries), an overwhelming bulk of Korean outward FDI is carried out by its own domestic firms (UNCTAD, 1996).

Therefore, this research will attempt to find out what motives lie behind Korean FDI in the EU, what advantages Korean firms hope to gain by choosing to invest in the EU, and what kinds of location advantages the EU provide as a host economy.

The explanatory framework provided by conventional FDI theories will be used as an analytical tool in this study. According to the widely accepted theoretical framework for the existence of FDI, the main motivations for firms to invest abroad come from specific competitive advantages which they possess (Dunning, 1981, 1988, 1992, 1993, 1994, 1997, 2001; Agarwal, 1985; Dunning and Narula, 1994, 2000; Young, et al., 1994; Ozawa, 1992, 1996; Lall, 1996; Hoesel, 1999; UNCTAD; 1999, 2000; Chudnovsky and Lopez, 2000; Tolentino, 2001; Cantwell and Narula, 2001). In his famous eclectic paradigm, Dunning (1988, 1994) proposed three specific advantages that are necessary for FDI of MNEs (multinational enterprises) to take place. The first is that a firm must have ownership-specific (O) advantages over its competitors in a foreign country. Second, it must have internalisation (I) advantages. The hypothesis is that it is more beneficial for a firm to use its O advantages rather than to sell them, or to

sell the right to use them to other firms. Third, host countries possess some location (L) advantages that make it more attractive to serve the market via FDI rather than through exports from the country of origin. These three sets of advantages (usually collected under the acronym, OLI) are considered to be essential conditions in the determination of the outflows of FDI. The explanatory framework offered by conventional FDI theories - the OLI paradigm (Dunning, etc)- can also be applied to the case of Korean FDI in the EU.

However, as many studies have pointed out, mainstream FDI theories (e.g. the OLI paradigm) are mostly derived from the experience of developed country's firms such as the developed triad (US, Japan, and Europe). To what extent is this explanatory framework of conventional theories valid in explaining the phenomenon of FDI from developing countries such as Asian NICs? Applying this OLI paradigm to describe the case of Korean FDI into the EU will therefore be a meaningful contribution to the theoretical debates related to current Asian NICs FDI research.

Consequently, this thesis is attempting to answer the following research questions:

1. Why do Korean firms invest in the EU? And how are they different from other Asian countries in terms of motivation and types of investment?
2. What are the nature of competitive Ownership (O) advantages of Korean firms? And how do these O advantages affect Korean firms' decision to invest?
3. What kinds of Location (L) advantages (i.e., characteristics of host country/region) does the EU provide? And how do these location advantages affect Korean firms' motivation of FDI and location decision?

## 1.2. Explaining Korean FDI into the EU: 'Reverse FDI'?

Existing studies have emphasized that the phenomenon of NICs FDI in the EU (or in the US) is not easily explained by the explanatory framework of conventional FDI theories. In particular, when applying the OLI paradigm, it is not easy to define clearly what competitive advantages the NICs firms possess. Investing in the EU is not an easy task for Asian developing countries' MNCs, including Korean manufacturing investors in the EU. There might be 'competitive OLI constraints' rather than 'competitive OLI advantages' (UNCTAD, 1996, p. 47; Hoesel, 1999, p. 32; Fujita et al, 1997, p. 95; and Cherry, 2001, p. 35). According to the 1996 UNCTAD report, there are three sets of constraints in the case of FDI from Asian NICs in the EU such as technological limitations, high transaction costs and high labour costs:

Asian investors in the EU (especially Korea and Taiwan) have competitive constraints, reflecting the fact that their economies are less developed than most European ones. Technological limitations are particularly evident in complex manufacturing activities and advanced services such as infrastructure development, communications, merchant banking or media. Also, transaction costs including those related to knowledge of local markets, culture and conditions are higher when investing in Europe than in other developing Asian economies. Furthermore, EU is not low labour costs regions. Labour costs are much higher than in Asia.  
(UNCTAD 1996, p.15-16)

So, existing studies view such investments as being 'exceptional' or as instances of 'reverse FDI' (which basically means that the investing firm lacks clear or, at least, difficult to define, ownership competitive



advantages).<sup>4</sup> The vast majority of current research examining Asian NICs FDI into the EU has utilized this ‘reverse FDI’ approach (Shin, 1995&1988; UN, 1996; Hoesel, 1999; Jung, 2000; Cherry, 2001). The main focus of this theory is simple. It mainly assumes that FDI from NICs in industrialised countries (e.g. US/EU) is made even if these firms do not possess any clear competitive advantages over the local firms in host developed economies. In other words, the O advantages of Korean manufacturers do not work properly in advanced countries such as the U.S. and Europe because of various constraints (e.g., wide technological gap, high transaction costs and high labour costs, etc.). Therefore, current studies have suggested the existence of alternative advantages that can ‘replace’ the competitive advantages of the investing firm. Examples of such advantages include strong assistance from the home government, a firm’s development strategy, and the strong role of L advantages provided by the host industrialised economies (e.g. access to advanced technological skills and strengthened trade barriers). Therefore, Asian NICs (including Korea) MNCs’ investment activity in Europe is more for ‘learning purpose’ to adopt advanced technology or simply for ‘avoiding trade barriers’ in a passive manner (notably, Cherry, 2001).

However, I argue that those current studies which adopt the ‘RDI’ approach in their examinations of NICs FDI in industrialised economies still leave several questions to be answered. Firstly, they have not paid sufficient attention to analysing specific characteristics of leading industries/firms which make up the major share of FDI cases and amount in the case of Korean FDI in the EU. Asian NICs differ considerably with respect to their competitive advantages. In fact, Korean FDI in Europe is predominantly the result of investments undertaken by several Korean

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<sup>4</sup> To explain the phenomenon of these ‘reverse investment’ activities from DCs to developed areas, various terms, such as ‘reverse’, ‘upward’ or ‘upstream direct investment’, have appeared in the relevant literature. For example, Jun, W.T. and Prendergast, R. (1991) ‘Upstream foreign direct investment by Korean manufacturers’, in *Development perspective for the 1990s*, edited by R. Prendergast and H.W. Singer. Basingstoke: Macmillan.

*Chaebols* (large conglomerates such as Samsung, LG, and Daewoo). In addition, the majority of FDIs made by these Korean *Chaebols* have been in certain low and medium technology-intensive sectors (particularly in the consumer electronics and communication equipment sector) where they are already extremely competitive.<sup>5</sup> Secondly, current studies fail to provide an adequate framework for analysing the L advantages of the EU. Current research on Korean firms' FDI in the EU does not take into account the regional distribution of investments. In other words, current studies pay little consideration to region-specific characteristics in their analysis of host location advantages of the EU. I argue that the O advantage of FDI firms is a relative concept. What determines whether or not a particular FDI firm has enough O advantages is the level of economic development of the host economy (e.g., labour cost, technology and infrastructure, etc.). Thus, the competitive ownership advantages held by the FDI firm need to be compared with the economic situation of the host country (or region). This notion of region-specific characteristics is especially important for the case of Europe. For example, there is a huge difference between the types of L advantages offered by the EU Objective 1 and 2 regions on the one hand, and the non-Objective 1 and 2 regions on the other. Over 75 per cent of Korea's manufacturing FDI is concentrated in the EU peripheral regions, while more than 80 per cent of trade-related FDI is concentrated in the non-peripheral regions (European Centre of Korea Trade-Investment Promotion Agency, 2002) When considering the fact that peripheral regions of the EU have been the preferred target for FDI by Korean manufacturing firms, it is evident that a region-by-region analysis is required. Current approaches (notably RDI theory) do not provide comprehensive insights on this question.

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<sup>5</sup> Currently, the share of the number of FDI cases in EU conducted by *chaebols* is 50 per cent of the total number of Korean FDI cases, and 95 per cent of the total amount invested. In addition, FDI in special sectors (e.g. the electronics/communication equipment sector) made up over 61 per cent of the total amount of Korean FDI in the EU in 2000 (The Export-Import Bank of Korea (2002), *The overseas investment annual trends*).

Therefore, I argue that Korean firms in the EU can have certain level of competitive ownership advantages in specific sectors of technology intensive industry. If this is true, it seems to be inconsistent with the prediction of existing FDI theory, especially 'Reverse FDI' approach, which argues that Asian NICs firms (including Korean firms) do not possess the clear monopolistic advantages. Furthermore, locational distribution of Korean FDI also seems to be inconsistent with the explanation of 'Reverse FDI approach'. According to RDI approach, insufficiency of transferable O advantages of NICs firms push them to invest their high technology intensive manufacturing sectors in economically advanced countries in order to gain access to the more sophisticated and advanced forms of manufacturing technologies used there (notably, Cherry, 2001). If it is true, Korean manufacturing investors in Europe may prefer to invest into highly developed regions rather than peripheral regions which hardly provide advanced technological resources to foreign firms.

Therefore, main hypotheses of current studies (notably RDI approach) are no longer convincing and need to be tested. In other words, there is not enough evidence to simply classify Korean FDI in the EU as a form of 'reverse FDI'. For example, low labour cost and investment subsidies supplied by host EU peripheral regions are substantial, and play a crucial role in the FDI location selection process of Korean firms. So, to be competitive in Europe, Korean firms in the EU may have cost saving as main object of FDI.

### **1.3. The Organisation of the argument**

With this theoretical background as the basis, this research will try to apply the OLI paradigm to explain Korean FDI in the EU. The various theories on NICs FDI (e.g. RDI theory) that are currently debated will be combined to create the analytical framework of this study. Consequently, this research suggests two sets of variables: 1) ownership advantages of

Korean firms and location advantages of EU host regions as independent variables; 2) motivation of FDI and location decision as dependent variables. With this aim in mind, this research builds on the following two hypotheses:

- 1) If Korean firms have clear competitive advantages in certain sectors of manufacturing (e.g., consumer electronics and communication equipment), then Korean FDI in the EU is concentrated in these special sectors.
- 2) European states and their regions do not offer homogenous locational advantages to Korean investors. If this is true, Korean manufacturing firms will favour peripheral regions with cost-saving as the objective, rather than highly developed regions with high-technology access in mind.

Thus, this research is designed to challenge some of the established assumptions and theories that dominate the motivation and location choice of Korean FDI in the EU, notably 'reverse FDI' approach.

#### **1.4 Research methodology**

In order to address main research questions on Korean FDI, the following constituted the key methodological components of the research:

- Quantitative data: various independent sources

- 1) Trends and characteristics of Korean FDI in the EU

The majority of the data is based on annual statistics/reports from Korea, mainly *The overseas investment annual trends* from The Export-Import Bank of Korea, and *Current information of Korean companies in Europe* from the European Centre of Korea Trade-Investment Promotion Agency. The two sets of data complement each other very well. The former provides valuable insight into the workings of Korean FDI flow into the

EU at the EU level as well as at the member state level, but lacks information regarding the regional distribution of FDI inside each member state. On the other hand, the latter gives details at the regional level (i.e. regions which are hosts of Korean FDI) but fails to give a comprehensive view from the EU level. Therefore, both references need to be closely studied together. In addition, data will also be collected on other Asian FDI (notably Japan) in the EU in order to compare and contrast the motivation and characteristics of investments. For the case of Japanese investment, the majority of the data is based on annual statistics and reports from the Japan External Trade Organization (JETRO), chiefly *The White Paper on Foreign Direct Investment* and *The White Paper on International Trade*.<sup>6</sup> For the case of other Asian NICs FDI, Data will also be collected from the standard sources (e.g. UNCTAD, World Bank, etc).

## 2) Korean FDI in the EU region by region

In addition to data collected from Korean sources, it is important to examine materials published in the EU in order to find more detailed information about FDI region by region. The EU DG for Regional Policy's *Map of eligible areas, 2000-2006* is thus quite useful. Through these publications, it will be possible to determine whether FDI from Korean firms are located in the Objective 1 and 2 regions (eligible for assistance from EU structural funds).

## 3) Characteristics of Korean electronics industry

In order to define the precise nature of the competitive ownership advantages of Korean firms in the EU, below documents need to be collected. The documents are related to 1) books on the histories of Korean *Chaebols*, and 2) Various books from Electronics Industries Association of Korea (EIAK) such as *Korea's place in the global electronics industry, 1997-2000*.

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<sup>6</sup> As compared with Korean investment data, the statistics on Japanese FDI into the EU lacks information regarding the regional distribution of FDI inside each member state. Although annual statistics and reports from the Japan External Trade Organization (JETRO) contain a whole range of indicators on Japanese FDI, they omit data on FDI by region in each country, the name of company and sub-divided manufacturing sectors. To

4) Characteristics of location advantages (The EU in general and Objective 1&2 regions in particular)

In order to examine the specific characteristics of L advantages of the EU host country and region, below documents need to be collected: 1) EU inward FDI, regional and trade policies (especially anti-dumping regulations and local contents rules); 2) The World Bank, *World development indicators* in order to analyse the general level of economic development of host countries. 3) Various materials from the Commission (especially from DG for Regional Policy) such as *Main regional indicators, 2002* in order to analyse the economic situation of the host regions (e.g., GDP, unemployment rate, and labour market).

▪ Qualitative data: Interviews with selected Korean companies

Given this rationale for my choice of study, it is only logical to take a closer look specifically into manufacturing investments made by Korean consumer electronics *Chaebols*. This is because Korean manufacturing investment into the EU is heavily focused on the consumer electronics industry, a sector that accounted for 65 per cent of all Korean manufacturing investments. Korean electronics *chaebols* that actually have local factories inside the host region and produce goods, as well as those that hire a minimum number of local employees (e.g., over 50) will be used as case studies. Firms with fewer than 50 employees will automatically be excluded from the interview list since these are simply 'information bureaus' or 'distribution centres' (i.e. not actually engaged in manufacturing). There are fifteen firms that meet these requirements. Of these, 11 firms are currently located in the Objective 1 and 2 regions, and 4 have invested in the candidate member states. So, all 15 cases are located in the peripheral regions which are eligible for Structural Funds support (including special assistance through the structural funds to candidate countries). Among these companies,

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identify Japanese FDI in the EU by EU regions, individual firm and sub-divided manufacturing sectors, it would be necessary to find further primary sources.

especially final assemblers that employ more than 300 local employees have been interviewed face to face. Ten companies are final assemblers.

**Table. 1.2. Korean consumer electronics final assemblers in EU objective 1&2 regions and in candidate countries**

Regions	EU objective	Company	Employment
UK 13 (North)	Obj.2	Samsung Electronics	1,100
UKB (Northern Ireland)	Obj.1	Daewoo Electronics	738
UK13 (North)	Obj.2	LG electronics	570
FR41 (Lorraine)	Obj.2	Daewoo Electronics	539
DEA5 (Ansberg)	Obj.2	LG electronics	350
ES 51 (Cataluna)	Obj.2	Samsung Electronics	950
UKL (Wales)	Obj.1	LG electronics	2,000

Hungary	Candidate	Samsung electronics	1003
Poland	Candidate	LG electronics	422
Poland	Candidate	Daewoo electronics	1,011

Source: Extrapolated from *Overseas direct investment statistics yearbook*, The National Bank of Korea, 1995-2002; *The overseas investment annual trends, 2003*, The Export-Import Bank of Korea. Author's survey (2000-2002); Office for official publications of the European Communities (2002), *European regional statistics change in the NUTS classification 1981-1999*

Of these, 7 firms are currently located in the Objective 1 and 2 regions, and 3 have invested in the candidate member states.

The interviews focus on three main factors: first, the decision to locate within the EU; second, data and information on 'costs'-related factors such as labour costs, investment incentives, and cost of component purchase; third, data and information on performance variables such as product items, profits, productivity, duration, size and quality of employment created, and labour market.

## 1.5 Structure of paper

The paper comprises five chapters, including this first introductory chapter:

### **Chapter 2: Trends and characteristics of Korean FDI in the EU**

This chapter mainly examines, through data analysis, the nature, content, and regional distribution of Korean FDI inside the EU in order to create a framework for analysing the Ownership advantages of Korean FDI firms as well as the Location advantages of the host regions. This chapter shows how characteristics of Korean FDI flowing into the EU are inconsistent with the explanation of ‘reverse FDI approach’. This chapter proposes that Korean firms in industrialized regions such as the EU, can have certain level of Ownership advantages in specific sectors of industry such as (consumer) electronics. This chapter also shows that the peripheral regions and candidate countries of the EU have generated attractive locational advantages for Korean manufacturing FDI firms.

### **Chapter 3: Competitive ownership (O) advantages of Korean consumer electronics industry**

This chapter is devoted to explaining the competitive (O) advantages of Korean investors in the EU. In order to define the precise nature of the competitive (O) advantages of Korean firms in the EU, this chapter analyses specific characteristics of leading industry for Korean FDI in the EU (e.g. consumer electronics). In addition, Korean FDI in Europe is predominantly the result of investments undertaken by several *chaebols*. Therefore, this chapter also provides particular characteristics of the Korean electronics *chaebols* system. The final section explores why the EU is important for this leading industry (and leading firms) of Korea.

### **Chapter 4: Location (L) advantages of the EU: Specific characteristics of peripheral regions**

This chapter examines the specific characteristics of the Location advantages of EU regions. What kinds of L advantages are offered by



European peripheral regions which make them different from other regions of the EU? This question is answered by analysing various ‘cost-related variables’ such as labour costs, investment incentives, and cost of local component purchase, etc. This chapter mainly presents the argument that Korean manufacturing FDI is highly sensitive to ‘costs-saving’, and that EU peripheral regions have satisfied the requirements of Korean investors.

## **Chapter 5: Conclusion**

Chapter five reports on the results of the testing of the hypotheses. It concludes that the competitive ownership advantages of Korean firms and location incentives of EU host regions have significant influences on Korean firms’ investment decision. More specifically, it concludes that some ‘cost saving factors’ in EU peripheral regions have been one of major determinants for Korean firms in the EU. This chapter also considers its limitation and suggests some issues for future research.

## **2. Trends and characteristics of Korean FDI in the EU**

### **2.1. Introduction**

According to the *World Investment Reports*, various positive benefits can be achieved by conducting FDI: It allows producers to gear products more closely and quickly to changing consumer preferences in foreign markets; Cost savings are achieved through the internalization of activities within a TNC system; It enables producers to tap into the base of skills and knowledge in host economies, It can help to deal with protectionist sentiment; And a larger financial resource base due to access to larger markets (World Investment Report 1996, pp. 63-64; and 2001, pp.21-25). These various reasons for seeking to invest can be also applied by Asian MNCs. Then what are the reasons for seeking to invest in Europe? There are several reasons.

- 1) Market size and proximity. If Japan is excluded, Asia's market size is below 30 per cent of that of the EU (World Bank, 2003). It is vital for Asian economies to have a strong market presence in the EU. In addition, setting up direct manufacturing facilities within the EU may provide cost savings for Asian investors in terms of the reduced transportation and transaction costs.
- 2) Overcoming protectionist pressures and sentiments. One of the main reasons for Asian FDI in both the EU and the US has been to relieve protectionist sentiments in these major markets for exports. Investment in local manufacturing operations may be necessary for securing their market shares.
- 3) Access to technology, high-quality suppliers and high levels of skill. Setting up production facilities in Europe can provide access to a technology base. Small technology-based firms could be acquired by Asian investors and technology-based joint ventures and strategic alliances could be set up.
- 4) Financial support from the EU and national governments. Various grants and subsidies (e.g., tax relief, low interest rate loans and grants for

employment and training) are available to Asian investors. These grants and packages are very effective in attracting Asian investors.

However, as we saw in chapter 1, Asian investors in the EU have various competitive constraints, notably technological limitations in complex manufacturing activities and high production costs. Most importantly, the EU is not a low-labour costs area. Labour costs are higher when investing in Europe than in other Asian economies. Therefore it can be said that the EU is not an attractive place for efficiency-seeking type investment that is highly sensitive to (low) labour costs (UNCTAD 1996, p.16). So, competitive ownership advantages of Asian NICs firms may be much more effectively exploited in Asia or other developing regions that have lower labour costs, simpler industrial structures and comparable levels of technological capability. This is the reason why current studies put the Korean case under the category of 'reverse FDI'. Therefore, the main reason for Asian firms to invest in developed regions such as the US and the EU is to expand their markets, to be near their major buyers, and to have easy access to technological information and technologies. This 'RDI approach' suggests that US/EU and South-East Asia countries possess distinct location-specific advantages for Asian NICs' firms. The main L advantages of the US/EU are the presence of advanced technology and large markets, while the advantages of South-East Asia are low-cost labour and land (Hsiang-Chun Chen, 1999, p. 273).

However, I argue that those current studies still leave several questions to be answered: Did, and do, Korean firms decide to carry out FDI in the EU knowing that they lacked, and lack, clear ownership advantages?

Furthermore, is Europe the single place where production cost is high and technological advances are great? Is Europe really an unattractive place for investors who pursue low production costs? As I argued in the previous chapter, competitive ownership advantages differ between firms, depending on their size and their technical abilities. More importantly,

they also vary by industry, with some industries performing better than others. Therefore, to define the precise nature of competitive ownership advantages of Korean firms in the EU, it is necessary to look at specific characteristics of firms and types of industry which play a 'leading role' for Korean FDI in the EU. Furthermore, current research and analysis falls short in determining what specific locational advantages Korean FDI firms are able to benefit from by investing in the various regions (notably peripheral regions) of Europe. .

Accordingly, the main purpose of this chapter is to examine, through data analysis, the nature, content, and regional distribution of Korean FDI inside the EU in order to create a framework for analysing the competitive ownership advantages of Korean FDI firms as well as the locational advantages of the host regions. Systematic data analysis of Korean FDI in Europe contributes to show the nature and direction of Korean investment at local, national, and European level. This chapter will show how characteristics of Korean FDI flowing into the EU are inconsistent with the explanation of 'reverse FDI approach'. Therefore, I mainly argue that the prediction of current theories (mainly reverse FDI approach) is not appropriate for explaining the case of Korean manufacturing FDI in the EU.

To meet such an objective, the following five questions must be properly answered. 1) Do certain industries attract Korean FDI more than others? Or is Korean FDI targeted evenly towards a broad spectrum of industries? 2) Is Korean FDI being targeted towards specific regions or countries? Or do most countries in the EU attract Korean FDI equally? 3) Are certain industries of Korean FDI flowing into certain specific regions? 4) When comparing the form of Korean FDI directed towards other continents (such as Asia and North America), are there any particularities about Korean FDI into Europe that stand out?

In addition, for the purpose of comparative analysis, the following question will also be answered. 5) Are there any differences between the types of FDI flowing into the EU from other developed countries (notably Japan) and those made by Korean firms?

Therefore, the second aim of this chapter is to show how types of Korean FDI flowing into the EU are different from those of other developed countries (notably Japan). By introducing the case of Japan for the purpose of comparison, I believe that the nature and type of Korean investment can be much more clearly defined.

## **2.2 Overview of current Korean FDI in the EU and candidate countries**

The EU is the world's largest host region for FDI, having absorbed 38 per cent of global inflows and 39 per cent of total stock in 2000 (UNCTAD, 2002, pp. 14-5). In fact, in the recent past there has been a wave of Korean investment in Europe. With respect to the net amount of Korean FDI flow in Europe, there has been a sharp increase since the late 1980s. As of December 2000, there have been a total of 586 cases of FDI into the EU 15 member states and candidate countries such as Poland, Hungary, and the Czech Republic (775 cases when considering the whole of Europe). The cumulative total FDI is US\$5.9 billion (US\$6.7 billion for Europe as a whole). Korean FDI into the EU comprises about 1 per cent of all FDI made by non-European firms. This figure is still dwarfed by those of other developed countries such as the United States and Japan (69 per cent and 6 per cent respectively) (EU Direct Investment year book, 2002, p. 39).

However, Korea is the 8<sup>th</sup> largest trade partner for the EU, and it was made clear in *Chapter 1* that Korean FDI plays an important role in any comparative analysis of FDI in the EU from developing countries.<sup>7</sup> Based

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<sup>7</sup> Developing countries accounted for 13 per cent of total FDI inflow to the EU in 2000, and out of this figure, the Asian NICs were responsible for 72 per cent of FDI. FDI from Korea comprises about 11 per cent of total Asian NICs' FDI into the EU, but the Korean case is more significant than other Asian NICs, for two reasons. First, the European

on 2000 figures, the EU's import total from Korea equalled 24.3 billion euros, while its export total was 16.4 billion euros. The EU is currently the third largest target (16 per cent) of Korean FDI after Asia (40 per cent) and North America (30 per cent) in spite of Korea's relatively short investment history in Europe. *Table 2.1* presents the current status of Korean firms' FDI by destination.

**Table 2.1. Korean outward Foreign Direct Investment by destination (Cumulative investment; 2000)\***

(US 1,000 dollars & per cent)

<b>Regions</b>	<b>Total Case</b>	<b>% as total</b>	<b>Amount (US \$ 1,000)</b>	<b>% as total</b>
<b>Asia</b>	<b>11,399</b>	<b>66.9</b>	<b>15,985,958</b>	<b>39.9</b>
Middle East	94	0.5	796,181	1.9
<b>North America</b>	<b>3,548</b>	<b>20.8</b>	<b>11,750,003</b>	<b>29.3</b>
Latin America	501	2.9	3,156,043	7.8
<b>Europe</b>	<b>775</b>	<b>4.6</b>	<b>6,720,905</b>	<b>16.8</b>
Africa	140	0.9	725,658	1.9
Oceania	581	3.4	926,638	2.4
<b>Total</b>	<b>17,038</b>	<b>100</b>	<b>40,061,386</b>	<b>100</b>

Note: \*. 'Cumulative investment means the sum of 'total investment' each year.

(Total investment = net investment + liquidation, etc.)

Source: The Export-Import Bank of Korea, *The overseas investment annual trends, 2003*

It is interesting to note, however, that there are differences between Korea's direct investment in the EU and that in other regions. The average value of Korean FDI in the EU has grown faster than that of elsewhere.

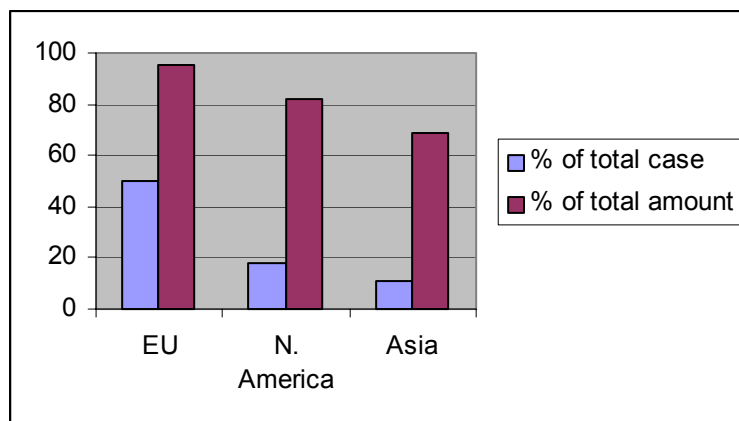
As *Table 2.1* shows, when analysing Korean FDI in Asia, it becomes clear that the total amount of investment is surprisingly low when compared to the number of investments. The number of cases of Korean FDI in Asia accounts for 66.9 per cent of the world-wide total, while the monetary amount of FDI accounts for only 40 per cent of the total Korean FDI

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share of FDI (16 per cent) compared to Hong Kong (3 per cent) and Singapore (8 per cent) is higher. Second, FDI in manufacturing is over 50 per cent for Korean firms, while the share of FDI in this sector for firms from Hong Kong and Singapore amount to less than 10 per cent each.

world-wide. The reverse holds true for Korean FDI in Europe. Although the number of FDI cases is only 4.6 per cent of total Korean FDI, the amount of FDI in the EU – again, measured financially - accounts for 16.8 per cent of total Korean FDI world-wide. As this is true for Korean investment, it can be said that Korean FDI in Europe is predominantly the result of large-scale investments undertaken by Korean *chaebols* (large conglomerates such as Samsung, LG, Hyundai and Daewoo). Currently, the share of the number of FDI cases in EU conducted by Chaebols is 50 per cent of the total of Korean FDI cases, and 95 per cent of the total amount. Similarly, for North America the number of FDI cases by *chaebols* accounts for 18 per cent of total Korean FDI cases, but 82 per cent of total amount. On the other hand, *chaebols* comprise only 11 per cent of the total number of FDI cases in Asia, but 69 per cent of the total amount (*Table 2.2*). It can be observed that Korean FDI in industrialized countries is usually initiated by *chaebols*.

**Table 2.2 Shares of chaebols in Korean FDI**



Source: The Export-Import Bank of Korea, *The overseas investment annual trends*, 2003

This shows that in a highly industrialized region like the EU, Korean *chaebols* possess better comparative advantages vis-à-vis the local EU firms than do Korean SMEs (small and medium enterprises).

### 2.3. Korean investment in Europe by country

When looking at a country-by-country breakdown of investments made by Korean firms, there appears to be a fairly even distribution of FDI flows across all of Europe. Among the EU member states, Germany has hosted the most cases of Korean FDI with a total of 176, followed by the UK (123 cases), France (66 cases), and the Netherlands (55 cases). Alternatively, Finland, Denmark, Sweden, and Portugal have each hosted fewer than 10 cases of FDI, and clearly fall behind the likes of Germany and the U.K. in attracting Korean FDI. Luxembourg has the lowest number of Korean FDI out of all the EU member states (one case). Among the EU candidate countries, Poland, Hungary and the Czech Republic have all hosted Korean FDI, attracting 53, 16, and five cases, respectively. If the total amount, instead of number of cases, of FDI is examined, a different trend emerges. While the Netherlands attracted the fourth largest number of FDI cases behind Germany, the UK, and France, in terms of total amount of FDI invested, it comes first (US\$2.1 billion). The UK comes second with US\$1.4 billion, followed by Germany with US\$800 million, France (US\$300 million), Italy (US\$140 million), and Spain (US\$110 million). Among the EU candidate countries, Poland ranks first, drawing US\$580 million of FDI from Korean firms, while Hungary and the Czech Republic were hosts of US\$120 million and US\$40 million of FDI, respectively.

*Table 2.3* outlines the number of cases and amount of FDI made by Korean firms in the EU 15 and the three other member-candidate countries. One obvious conclusion that can be drawn is the fact that there have been a large number of investments made in countries such as Germany, the U.K., the Netherlands, France, and Poland. Moreover, Italy, Spain, Hungary, and Ireland have also attracted, and continue to attract, a fair amount of FDI. Especially, some CEE countries such as Poland, Hungary, and the Czech Republic have also proven very attractive for Korean investors (their share is 10.0, 2.1, and 0.6 per cent respectively).



**Table 2.3 National distribution of Korean Investment in Europe:  
Cumulative investment, 2000**

(US 1,000 dollars & per cent)

Countries	Case	% of total case	Amount (US \$ 1,000)	% of total amount
Austria	11	1.8	35,980	0.6
Belgium	10	1.7	96,195	1.6
Denmark	2	0.3	106	0.01
Finland	3	0.3	433	0.08
France	66	11	307,502	5.2
<b>Germany</b>	<b>176</b>	<b>31</b>	<b>794,049</b>	<b>13.5</b>
Greece	3	0.3	5,127	0.1
Ireland	9	1.5	54,108	1.0
Italy	26	4.5	138,090	2.4
Luxembourg	1	0.1	258	0.01
<b>Netherlands</b>	<b>55</b>	<b>9.4</b>	<b>2,090,374</b>	<b>35.1</b>
Portugal	4	0.6	86,775	1.5
Spain	18	3.1	113,565	2.0
Sweden	5	0.8	15,359	0.2
<b>UK</b>	<b>123</b>	<b>21</b>	<b>1,393,697</b>	<b>24.0</b>
Czech Rep.	5	0.8	38,444	0.6
Hungary	16	2.8	124,753	2.1
<b>Poland</b>	<b>53</b>	<b>9.0</b>	<b>577,852</b>	<b>10.0</b>
Total	586	100	5,872,667	100

Source: The Export-Import Bank of Korea, *The overseas investment annual trends, 2003*

In contrast with Korean FDI in the EU, Japanese FDI in Europe is concentrated in the UK and the Benelux countries (notably the Netherlands). According to the total cumulative amount until 2000, nearly 50 per cent of Japanese FDI is concentrated in the UK, with the Netherlands (23.5 per cent), Germany (7 per cent), and France (7 per cent) making up the four countries that have been the main targets of Japanese FDI in the EU; together these countries have received more than 85 per cent of the total amount. Some of the annual figures reveal an even stronger preference for the UK, the host of 69 per cent of all Japanese FDI stock in Europe in 1998, and although there was a drop to 45 per cent in 1999, the recipient of 78 per cent in 2000 (*Table 2.4*)<sup>8</sup>. *Table 2.4* shows the national distribution of Japanese FDI in the EU, including candidate countries.

<sup>8</sup> It is well known that most Japanese banking affiliates are located in the most important financial centre of Europe, London. And for the same reason, the Netherlands, as the next largest host country of Japanese FDI in Europe, has also proven very attractive for trading and financial TNCs of Japan. United Nations (1996), p. 20.

**Table 2.4. National distribution of Japanese Investment in Europe:  
Cumulative investment, 2000**

(US million dollars & per cent)

	1951-1997	1998	1999	2000	Total 1951-2000
	Amount (% share)	Amount (% share)	Amount (% share)	Amount (% share)	Amount (% share)
<b>UK</b>	<b>44,831 (38.4)</b>	<b>9,780 (69.1)</b>	<b>11,718 (45.1)</b>	<b>19,142 (78.4)</b>	<b>85,471 (48.2)</b>
<b>Netherlands</b>	<b>25,350 (21.7)</b>	<b>2,118 (15.0)</b>	<b>10,361 (40.0)</b>	<b>2,757 (11.3)</b>	<b>40,586 (23.5)</b>
Ireland	2,944 (2.5)	180 (1.8)	310 (1.7)	305 (1.2)	3,739 (2.1)
<b>Germany</b>	<b>9,911 (8.5)</b>	<b>553 (4.0)</b>	<b>649 (2.4)</b>	<b>320 (1.3)</b>	<b>11,433 (6.8)</b>
<b>France</b>	<b>10,154 (8.7)</b>	<b>521 (3.8)</b>	<b>1,127 (4.3)</b>	<b>325 (1.3)</b>	<b>12,127 (6.9)</b>
Italy	2,165 (1.9)	301 (1.9)	118 (0.5)	58 (0.2)	2,642 (1.5)
Belgium	3,749 (3.2)	180 (2.1)	480 (1.9)	249 (1.1)	4,658 (2.9)
Hungary	468 (0.4)	10 (0.1)	270 (1.0)	234 (1.1)	982 (0.5)
Spain	1,908 (1.7)	70 (0.5)	122 (0.5)	33 (0.1)	1,094 (1.0)
Turkey	741 (0.6)	98 (0.6)	121 (0.5)	129 (0.5)	1,089 (0.5)
Poland	95 (0.1)	18 (0.1)	11 (0.1)	26 (0.1)	150 (0.1)
Czech Rep.	80 (0.1)	17 (0.1)	28 (0.1)	52 (0.1)	177 (0.1)
Switzerland	3,353 (2.9)	12 (0.1)	146 (0.6)	37 (0.1)	3,548 (2.0)
Russia	144 (0.2)	9 (0.1)	54 (0.2)	46 (0.1)	253 (0.1)
Portugal	281 (0.3)	21 (0.1)	34 (0.1)	52 (0.1)	388 (0.2)
Romania	21 (0.1)	8 (0.1)	12 (0.1)	11 (0.1)	52 (0.1)
Sweden	175 (0.2)	101 (0.6)	213 (0.9)	635 (2.7)	1,124 (0.6)
Cyprus	84 (0.1)	11 (0.1)	32 (0.1)	52 (0.1)	179 (0.1)
<b>Total</b>	<b>116,914 (100)</b>	<b>14,010 (100)</b>	<b>25,804 (100)</b>	<b>24,406 (100)</b>	<b>181,134 (100)</b>

Source: Japan External Trade Organization (JETRO), *The White Paper on Foreign Direct Investment* (various years)

The Southern periphery (notably, Portugal and Spain) of the EU has attracted a smaller portion of Japanese FDI. Their combined share is less than 1.5 per cent of Japanese FDI in Europe (compared with 3.5 per cent of Korean FDI).<sup>9</sup> In addition, the candidate countries such as Hungary, Poland, and the Czech Republic have hosted even less Japanese FDI. Their combined share is just 0.7 per cent of Japanese FDI stock in Europe; the same countries host more than 12 per cent of Korean investment in Europe. Then why, unlike Korean FDI, is Japanese FDI highly concentrated in four major countries? In order to answer this question, there is a need to take an industry-by-industry analysis of Korean and Japanese FDI. This type of analysis will reveal a clear difference in the

<sup>9</sup> In Spain, Japanese manufacturing investment grew rapidly until the early 1980s, but in the 1990s the country did not remain a very attractive destination for Japanese FDI in Europe. However, a major Nissan investment in Barcelona remains the largest single Japanese project in Europe in terms of employment and an important indicator of Japan's investment strategies for manufacturing in Southern Europe, as well as automobile manufacturing in Europe as a whole. (Darby, 1996, p.5).

pattern of FDI carried out by Korea and Japan. A more detailed look at the nature of investments by each industry sector, an interesting pattern can be observed.

#### 2.4 Korean investment in Europe by sectoral distribution

Korean firms' FDI in the EU is typically characterized by a concentration in manufacturing and trade-related retail and wholesale industries. FDI in these two sectors account for 78 per cent of all cases, and 87 per cent of the total amount of FDI. The manufacturing industry alone comprises 40 per cent of the total number of Korean firms' FDI in the EU, and makes up 58 per cent of the total amount of FDI. The share of the number and amount of Korean FDI in the retail and wholesale industry is 43 per cent and 34 per cent, respectively. *Table 2.5* shows an industry-by-industry breakdown of Korean FDI in the EU.

**Table 2.5. Korean investments in the EU and candidate countries: by sector. Cumulative investment, 2000**

(US 1,000 dollars & per cent)				
Industrial sectors	Case	% of total	Amount (US\$ 1,000)	% of total
Agriculture& fishery	3	0.5	9,623	0.1
<b>Manufacturing</b>	<b>233</b>	<b>40.0</b>	<b>3,419,885</b>	<b>58.2</b>
Construction	6	1.0	7,131	0.1
<b>Trade related whole sale and retail</b>	<b>253</b>	<b>43.0</b>	<b>1,995,936</b>	<b>34.2</b>
Transportation	25	4.3	24,009	0.4
Others	66	11.2	416,083	7.0
Total	586	100	5,872,667	100

Source: The Export-Import Bank of Korea, *The overseas investment annual trends, 2003*

This type of investment pattern is comparable to that of Korean FDI vis-à-vis other continents. For example, the manufacturing industry takes up 80 per cent of the total number of investments, and around 70 per cent of the total amount of investments in Asia. On the other hand, investments towards the trade-related retail and wholesale industry comprise less than 10 per cent of total number of investments and only about 13 per cent of

the total amount of investment. In North America, the manufacturing industry accounts for 26 per cent of the total number of investments and 48 per cent of the total amount of investments. The number and amount of investments related to the trade-related retail and wholesale industry sector each make up 31 per cent of the total number and amount of investments. *Table 2.6* shows an industry-by-industry breakdown of Korean FDI in North America and Asia.

**Table 2.6. Korean investment in North America and Asia: by sector. Cumulative investment, 2000**

(US million dollars and per cent)

	North America				Asia			
	Case	% share	Amount	% share	Case	% share	amount	% share
Manufacturing	945	26.6	5,718	48.6	9,180	80.5	11,039	69.5
Trade related whole sale & retail	1,115	31.5	3,767	32.2	963	8.4	2,144	13.4
Other	1,488	41.9	2,265	19.2	1,256	11.1	2,802	17.1
Total	3,548	100	11,750	100	11,399	100	15,985	100

Source: The Export-Import Bank of Korea, *The overseas investment annual trends, 2003*

As revealed in both *Table 2.5* and *Table 2.6*, Korean FDI in the EU has a lower share of investments in the manufacturing industry sector but a higher share in the trade-related retail and wholesale industry sector when compared to Korean FDI in Asia. The weight of Korean FDI in the EU in the retail and wholesale industry sector is similar to the level invested in North America, while the amount invested in the EU manufacturing industry is relatively higher than that invested in US manufacturing. Overall, it can be said that the pattern of Korean FDI in the EU is more comparable to the North American model (where the share of FDI in the trade-related retail and wholesale industry is over 30 per cent), rather than the pattern of investment in Asia (where the rate of FDI in the manufacturing industry is over 80 per cent).

More interestingly, the nature of Korean FDI is in sharp contrast with the case of Japan, whose FDI in the EU is heavily directed toward the non-manufacturing sectors such as banking and insurance. In fact, Japanese

investment in the EU is dominated by finance, insurance, and real estate companies (Japan External Trade Organization (JETRO), 2002, p. 51). During the period from 1995 to 1998, Japanese FDI in finance and insurance sectors took up over 60 per cent of the total value of investments. In fact, the most recent data (1998) shows that Japanese investment in non-manufacturing sectors (including the finance and insurance sectors) takes up 80 per cent of the total value of investments. In 1998, Japanese FDI entering the EU grew strongly to US\$14 billion, an increase of 23 per cent on the previous year. As *Table 2.7* shows, this was primarily due to a surge in FDI in finance, banking, and insurance to US\$9.3 billion. Table 2.7 shows that most Japanese FDI in the EU is in trade-related activities and financial institutions rather than manufacturing industry.

**Table 2.7. Japanese investment in Europe: by sector, 1995-1998**

(US million dollars and per cent)

	1995	1996	1997	1998	Total 1995-1998
Manufacturing	1,995 (23.9)	2,871 (38.8)	2,447 (22.4)	2,873 (20.5)	10,186 (25.3)
Non-manufacturing	6,406 <b>(75.9)</b>	4,376 <b>(61.1)</b>	8,561 <b>(77.5)</b>	11,007 <b>(79.4)</b>	30,350 <b>(74.6)</b>
*(Finance&insurance)	n.a	n.a	*5,990 (54)	*9,363 (67)	
Others	69 (0.1)	125 (0.1)	196 (0.1)	130 (0.1)	520 (0.1)
Total	8,470 (100)	7,372 (100)	11,204 (100)	14,010 (100)	41,056 (100)

Source: Japan External Trade Organization (JETRO), *The White Paper on Foreign Direct Investment* (2001 & 2002)

According to a recent report from the Japanese Ministry of Finance, FDI in finance and insurance grew to account for more than 60 per cent of total cumulative amount of Japanese FDI entering the EU (Japanese Ministry of Finance, 2002). On the other hand, investments in the manufacturing sectors comprise less than 25 per cent of total amount of investments into the EU. In 1998, the manufacturing industry made up just 20.5 per cent of the total amount of Japanese investment into the EU. In Korea's case, however, the manufacturing industry comprised 58 per cent of the total amount of firms' FDI in the EU in 1998 (The Export-Import Bank of Korea, 2000).

Thus, the main engine of Korean firms' competitiveness in Europe appears to have been in manufacturing. However, this does not necessarily mean that Korean firms have competitive ownership advantages (or superiority) in *all* manufacturing industries. To analyse the competitive base of the ownership advantages of Korean firms, it is necessary to look at the sectors of the EU manufacturing industry in which Korean firms are mostly concentrated.

## 2.5. Korean manufacturing investment in Europe by sector

If we look at Korean FDI in a world-wide perspective, the three primary investment sectors are: 1) electronics/communication equipment; 2) transportation equipment/machinery, and 3) textile/clothes (Table 2.8).

**Table 2.8. Korean manufacturing investment in the world: by sector**

(Cumulative investment, 2000)

	Case	% as total	Amount (US\$ 1,000)	% as total
Electronics & communication equipment	1,478	14.0	7,928,907	<b>37.0</b>
Transportation equipment & machinery	1,353	13.0	4,243,911	<b>20.0</b>
Petroleum & chemical product	945	9.0	1,772,736	8.2
Food & beverages	726	7.5	735,141	3.3
Textile & clothes	2,296	22.0	2,379,640	<b>11.0</b>
Leather & footwear	718	7.5	539,997	2.5
Wood & furniture	377	3.0	250,826	1.0
Paper & printing	256	2.0	312,604	1.5
Others	2,406	22.0	3,362,206	15.5
Total	10,555	100	21,526,067	100

Source: The Export-Import Bank of Korea, *The overseas investment annual trends, 2003*

As illustrated in *Table 2.8*, FDI in these three industries makes up 50 percent of the total number of investment cases and 68 per cent of the total amount. Thus, the main engine of Korean firms' competitiveness in the world is to be found in these three industrial sectors.

Given the above assumption, is Korean FDI in these domains of industry spread out evenly in industrialized regions such as North America, the EU, and in developing regions such as Asia? Or are certain industries only heavily concentrated on in some continents? If this is the case, then which EU-based industry attracts the most Korean FDI? Korean FDI in the textile industry, Asia hosted about 78 per cent of the total amount of FDI. However, in the more industrialized regions such as Europe and North America, it amounts to no more than about 8 per cent of the total FDI. By way of contrast, for Korean FDI related to the electronics/communication equipment industry, the developed regions of Europe and North America hosted about 61 per cent, while Asia hosted 34 per cent. FDI for the transportation equipment & machinery industry was also higher in Europe and North America (51 per cent) than Asia (47 per cent) (Korea Trade-Investment Promotion Agency, 2003).

To summarize the findings, it seems that FDI in labour-intensive industries (textile, clothing) is mainly focused in Asia, while FDI in technology-intensive industries (especially electronics/communication equipment) is more concentrated in highly industrialized regions such as North America and the EU. A closer examination of the investment statistics for the different continents will reveal an even clearer pattern. *Table 2.9* reveals different sectoral distribution of Korean manufacturing investment in the EU, Asia, and North America.

**Table 2.9. Korean manufacturing investment in the EU, Asia and North America: by sector**

(Cumulative investment, 2000; % share)

	<b>EU</b>	<b>N. America</b>	<b>Asia</b>
Electronics & communication equipment	<b>61.0</b>	43.0	13.0
Transportation equipment & machinery	<b>26.0</b>	20.0	3.7
Petroleum & chemical product	<b>6.0</b>	9.0	9.1
Food & beverages	<b>0.9</b>	3.0	7.0
Textile & clothes	<b>0.5</b>	3.0	22.0
Leather & footwear	<b>0.2</b>	0.3	8.0
Wood & furniture	<b>0.4</b>	1.0	4.0
Paper & printing	<b>1.2</b>	8.0	3.0
Others	<b>3.8</b>	12.5	30.0
Total	<b>100</b>	100	100

Source: The Export-Import Bank of Korea, *The overseas investment annual trends, 2003*

According to *Table 2.9*, a detailed scrutiny shows that Korean firms' FDI in the manufacturing industry in the EU is quite distinctive from FDI vis-à-vis other continents. Three sectors — electronics/communication equipment (61 per cent), transportation equipment/machinery (26 per cent), and petroleum/chemical product (six per cent) — make up a total of 93 per cent of Korean manufacturing FDI. In particular, investment is heavily geared towards only two sectors — electronics/communication equipment and transportation equipment /machinery.

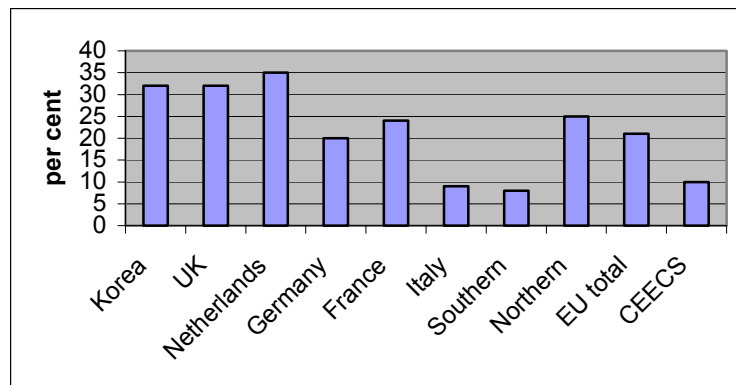
As for FDI in North America, although investment is concentrated in the electronics/communication equipment and transportation equipment/machinery industries, the degree of concentration is lower than in the EU. The electronics/communication equipment industry attracts 43



per cent of FDI, while 20 per cent is invested in the transportation equipment/ machinery industry, and nine per cent in the petroleum/chemical product sector. The remaining investments are made in paper/printing (eight per cent), food/beverages (three per cent), and textile/clothes (three per cent), giving a more diverse character to the nature of FDI in North America than is evident in investment in the EU. The Korean FDI pattern in Asia is noticeably different from that of the EU or North America. Textiles/clothing industry account for 22 per cent of total FDI, with electronics/communication equipment making up 13 per cent, followed by leather /footwear (eight per cent), food/beverages (seven per cent), wood/furniture (four per cent); other labour-intensive industries also attract Korean FDI.

In summary, since technology-intensive investments (particularly in the electronics/communication equipment and transportation equipment/machinery sectors) are made in industrialized regions, it can be said that Korean firms in industrialized regions may possess certain comparative advantages in these sectors. The technological capacities existing in these sectors are a very important indicator in defining the nature of ownership advantages of Korean firms in the EU as they provide the basis for the competitiveness of manufacturers. Therefore, these capacities affect both the overall ability of Korean outward investors and the activities in which they have advantages vis-à-vis European firms. *Table 2.10* implies that Korean firms may possess certain level of competitive advantages compared with European host countries, especially in certain high technology products in the manufacturing industry.

**Table 2.10. Percentage shares of high-technology products in manufactured exports, 2000**



Source: The World Bank, *World development indicators*, 2003

Note: Southern countries include Spain, Portugal, and Greece; Northern countries are Sweden, Finland, and Denmark. Figure is average of each three countries.

According to World Bank publications (2003), high technology products account for a significantly large portion of Korean manufacturing exports. Even when compared to Europe, the percentages are slightly lower than those for the UK, and Netherlands, but are still higher than the average for the whole of the EU. In particular, compared to the Southern peripheral countries like Spain, Portugal, and Greece, and the candidate countries, the percentages are much higher. What is certain is that Korea has export competitiveness over Europe in the high-technology product sector. Of course, it is difficult to conclude that just because high technology products hold a significant share of export items, Korean FDI firms will have competitive advantages over European firms in Europe. However, it can be assumed that even in a case where a firm carries out FDI, there is a high probability that the competitive advantages of firms that allow successful exports will contribute to the competitiveness of that firm to an extent. In other words, the competitive advantages that lead to successful exporting often also lead to direct investment in its own right (UN, 1996, p. 16).

Furthermore, Korean FDI in Europe is predominantly the result of investments undertaken by several Korean *Chaebols* (large conglomerates

such as Samsung, LG, and Daewoo). In addition, the majority of FDIs made by these Korean *Chaebols* have been in certain technology-intensive sectors (particularly in the electronics and communication equipment sector) where they are already extremely competitive. Therefore, it can be assumed that Korean firms hold a certain level of competitive advantage compared to European firms in at least these sectors.

A unique characteristic of Korean manufacturing FDI in the EU (its high level of concentration in the electronics/communication equipment industry) clearly stands out when compared with the pattern of Japanese manufacturing FDI. According to the most recent figures (1998) for Japanese FDI in the US, electrical machinery (37 per cent), chemicals (14 per cent), and machinery (17 per cent) are the primary target sectors, while for Asia, the numbers are 18 per cent, 16 per cent, and 7 per cent, respectively. For Asia, investment in textile comprises six per cent of the total Japanese FDI in Asia (Japan External Trade Organization (JETRO), 2002). With respect to Japanese FDI in the EU, the percentages are similar to those of Korean FDI. (electrical machinery (37 per cent), chemicals (34 per cent), transport equipment (eight per cent), and machinery (seven per cent). However, the ratio of FDI in the electrical machinery sector is less than that of Korea.

Why then has Korean firms' investment in electronics/communication increased sharply in Europe, and what were (and are) the reasons for the much greater share of this type of FDI compared to that made in the US? Assuming in this instance that the comparative advantages — mainly ownership advantages such as technical superiority — that Korean firms enjoy do not change irrespective of the host (North America or the EU), there is only one logical answer. It lies in the fact that Europe as a host region offers better locational advantages for Korean electronics/communication industries than do other highly industrialized regions.

**Table 2.11 Japanese manufacturing investment in the EU, Asia and North America: by sector, 1998**

	(% share)		
	EU	N. America	Asia
Electronics & communication equipment	37.5	37.1	18.0
Transportation equipment & machinery	14.7	15.1	29.2
Petroleum & chemical product	34.1	14.0	16.0
Food & beverages	2.0	5.9	3.5
Textile & clothes	0.1	0.1	6.5
Wood & furniture	2.9	1.0	3.7
Others	8.7	26.8	23.1
Total	100	100	100

Source: Japan External Trade Organization (JETRO), *The White Paper on Foreign Direct Investment* (2001 & 2002)

If so, what type of locational advantages does the EU offer to investors and potential investors (in particular, to Korean electronics/communication manufacturing companies)? And do all EU member states or regions inside the member states share the same type of locational advantages or are there certain particularities that differentiate one member state or region from another? To answer this question, it is essential to explore the particularities of Korean FDI at a more detail level according to member country and region. Is FDI from Korean firms concentrated only in certain member states or spread out evenly? Which regions or states within the EU offer favourable conditions for particular industries? Specifically, which regions attract FDI related to the manufacturing industry (concentrated mainly in electronics/communication sector)? If there are regions where there have been heavy FDI inflows, what are their common characteristics?

## **2.6. Korean manufacturing FDI by sector and by location**

An analysis of the sector and regional trends of Korean manufacturing FDI in Europe will reveal whether or not states and their regions have homogeneous (or heterogeneous) locational advantages. If Korean FDI towards the EU is analysed country by country, an interesting phenomenon will be observed. By categorizing the study into two groups initially (EU member states vs. candidate states), what will stand out is

that the weight of FDI related to the retail and wholesale industry is higher in EU member states (in terms of the total number of cases) than in EU candidate countries. Furthermore, the percentage of FDI related to the manufacturing industry is higher for EU candidate states than for member states. This can be seen as an investment strategy of Korean firms vis-à-vis the EU (i.e. applying different strategies for FDI in the already developed market (EU) and for the under-developed market (candidate countries, especially CEECs).

**Table 2.12 National and sectoral distribution of Korean FDI in the EU (2000)**

(unit: case & % share)

Groups of Countries	Manufacturing		Retail and wholesale industry	
	Total Case	% share	Total Case	% share
UK	55	23.0	48	19.0
Netherlands	12	5.1	30	12.0
Germany	33	15.0	106	41.0
France	29	12.5	27	10.5
Italy	13	6.0	12	5.0
Cohesion*	25	11.0	6	2.5
Northern*	1	0.5	9	4.0
Total EU member states	189	82.0	239	95.0
EU candidate states	44	18.0	14	5.0
<b>Total</b>	<b>233</b>	<b>100</b>	<b>253</b>	<b>100</b>

Source: The Export-Import Bank of Korea, *The overseas investment annual trends, 2003*

Note\*: Cohesion countries include Spain, Portugal, Greece, and Ireland; Northern countries are Sweden, Finland, and Denmark.

Looking only at individual EU member states, the share of FDI in the retail and wholesale industry for highly developed countries (i.e. high GDPs) is significantly higher than for that in the manufacturing industry. As *Table 2.12* shows, for countries such as Netherlands, Germany, and Northern European countries, the percentages of FDI related to the retail and wholesale industry is much higher than for that in the manufacturing investment. For countries such as the UK, France, and Italy (developed countries), the percentages of FDI related to the retail and wholesale industry and the manufacturing industry are similar. And for the relatively low-developed 'cohesion' countries — Ireland, Spain, Portugal, and Greece — the share of FDI in the manufacturing sector is greater

than that for highly developed countries. The candidate countries such as Poland, Hungary, and the Czech Republic all have an extremely high percentage of Korean FDI in the manufacturing industry. Therefore, it is clear that even among EU member states, Korean firms have applied different strategies according to each country's level of development.

A breakdown of FDI inflows into the EU by region reveals much more interesting trends. As *Table 2.13* shows, the eight regions that host the most FDI in the trade-related retail and wholesale industry account for 83 per cent of the total case of Korean FDI in this sector. These regions are as follows — Darmstadt (DE 71; 23.5%), Greater London (UK 55; 16.0%), Dusseldorf (DEA 1; 12.0%), Ile de France (FR 1; 10.5%), Noord-Holland (NL 32; 8.0%), Lombardia (IT 2; 4.5%), Saarland (DEC; 5.5%), and Surrey and East-West Sussex (UK 53; 3.0%) —.<sup>10</sup> Hence, the majority of FDI related to the trade-related retail and wholesale industry is undertaken not in less-developed countries like Spain and Portugal, but in more developed countries such as Germany, the UK, France, and Italy, and especially in and around heavily populated cities.

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<sup>10</sup> These detail figures are based on annual statistics/reports from Korea, mainly *The overseas investment annual trends* from The Export-Import Bank of Korea, and *Current information of Korean companies in Europe* from the European Centre of Korea Trade-Investment Promotion Agency. In order to find more detailed information about FDI region by region, the EU DG for Regional Policy's *Map of eligible areas, 2000-2006* has been used.

**Table. 2.13 Regional (sub-national) distribution of Korean FDI in the EU (2000)**

(unit: case & % share)

Regions Standard region (NUTS)	Retail and wholesale		Regions Standard region (NUTS)	Manufacturing	
	Total Case	% share		Total Case	% share
Darmstadt (DE 71)	59	23.5	Northern Ireland (UKB)	33	14.5
Greater London (UK 55)	41	16.0	Lorraine (FR 41)	27	12.0
Dusseldorf (DEA 1)	30	12.0	Brandenburg (DE4)	22	9.5
Ile de France (FR 1)	26	10.5	Cataluna (ES 51)	10	4.5
Noord-Holland (NL 32)	20	8.0	Northumberland, Tyne and Wear (UK13)	10	4.5
Saarland (DEC)	13	5.5	Wales (UKL)	9	4.0
Lombardia (IT 2)	11	4.5	Lisboa e Vale do Tejo (PT 13)	7	3.0
Surrey and East-West Sussex (UK 53)	7	3.0	Ireland (IE)	8	3.0
Other EU members	32	12.0	Other EU members	63	27.0
Candidate countries	14	5.0	Candidate countries	44	18.0
Total	253	100	Total	233	100

Source: elaborated from *Current information of Korean companies in Europe* from the European Centre of Korea Trade-Investment Promotion Agency; *The overseas investment annual trends, 2003* from 'The export-import bank of Korea'. Authors survey (2000-2002); Office for official publications of the European Communities (2002), *European regional statistics change in the NUTS classification 1981-1999*

As *Table 2.13* shows, however, the distribution of FDI related to the manufacturing industry is completely different. The eight regions inside the EU that host the most FDI related to the manufacturing sector are responsible for 55 per cent of total manufacturing FDI in this domain, while the candidate countries also take up 18 per cent. These regions are: Northern Ireland (UKB; 14.5%), Lorraine (FR 41; 12.0 %), Brandenburg (DE4; 9.5%), Cataluna (ES 51; 4.5%), Northumberland, and Tyne and Wear (UK 13; 4.5%), Wales (UKL; 4.0 %), Lisboa e Vale do Tejo (PT 13; 3.0%), and Ireland (IE ; 3.0%). In addition, Poland (14.0 %), Hungary (3.0%), and the Czech Republic (1.0 %) make up the EU candidate countries that have hosted a fair share of FDI in the manufacturing sector. In other words, Korean firms' FDI related to the manufacturing industry is mainly concentrated in relatively low-developed peripheral countries. Even when FDI in this sector is undertaken in highly developed countries

such as the UK, Germany, and France, it is still targeted towards the peripheral regions of these member states. Korean manufacturing FDI is thus concentrated in the objective 1 and 2 regions (eligible areas for assistance of structural funds) such as Wales, Northern Ireland, Northumberland and Tyne and Wear, Lorraine, and Brandenburg. Since the candidate countries of the EU (eligible areas for special assistance of structural funds) account for 18 per cent of this FDI, it can be said that around 75 per cent of Korean FDI in the manufacturing industry is directed towards the peripheral regions of the Europe.

## 2.7. Conclusion

It can be said that Korean manufacturing firms in industrialized regions such as the EU have the comparative advantages and main motives of direct investment in technology intensive industry sectors (particularly in the electronics/ communication equipment and transportation equipment/machinery sector). Furthermore, in the case of Korean investment in the EU, it is apparent that the concentration in certain specific industry (e.g. the electronics/communication equipment industry) is much higher than that of North America as well as that of Asia. Furthermore, over 73 per cent of Korean manufacturing FDI is concentrated in the peripheral regions and candidate countries (eligible for assistance of structural funds). Therefore, it can be said that peripheral regions and candidate countries of the EU have generated attractive locational advantages for Korean manufacturing FDI firms. Then exactly what kinds of competitive ownership advantages do Korean electronics chaebols possess? And what kinds of locational advantages are offered by European peripheral regions, which make them different from other regions of the EU? These are remaining questions, which should be answered properly in the next chapters. In chapter 3, main competitive O advantages of Korean electronics *chaebols* will be analysed. I will show that the competitiveness of Korean electronics *chaebols* are mainly based on mass production system, cost-driven competitiveness, and highly



standardised products. In chapter 4, the nature of L advantages of peripheral regions will be analysed. Chapter 4 will show that EU peripheral regions have offered appropriate location advantages (mainly low production costs) to Korean consumer electronics *chaebols*.

### 3. Competitive ownership (O) advantages of Korean consumer electronics industry

#### 3.1 . Introduction

As Dunning argued, the main motivations for firms to invest abroad come from the specific competitive ownership advantages which they possess (Dunning, 1988, 1994, 1997; Ozawa, 1992, 1996; Lall, 1996; Hoesel, 1999; UNCTAD, 1999, 2000). Competitive ownership advantages are the firm specific set of capabilities that enable individual firms to perform well in open markets (UNCTAD 1996, p.77). For FDI, MNCs must have ownership-specific (O) advantages over their competitors in a foreign country. So the nature of this competitive O advantages is the chief determinant of the types of FDI as well as the quality of investment (Lall, 1996; Dunning, 1998).

The purpose of this chapter is to analyse the nature of the competitive ownership advantages of Korean investors in the EU. In fact, Korean FDI in Europe is predominantly the result of investments undertaken by several Korean *chaebols*, and these Korean *chaebols* have focused highly on the consumer electronics sectors (see chapter 2). Therefore, in order to define the precise nature of the competitive O advantages of Korean firms in the EU, this chapter will look at the specific characteristics of the Korean consumer electronics industry.

This chapter has two parts. In the first part, the characteristics of the Korean electronics industry will be examined in order to explain how they could maintain their competitiveness in these specific electronics sectors. In fact, the Korean electronics *chaebols* have focused on a small range of products that could be mass-produced, thus achieving export price competitiveness. Four main products such as audio, colour TV, video cassette recorders and microwave ovens, accounted for 62 per cent of all consumer electronics products exports in 1998 (EIAK 2000). So, the first part will try to answer the below questions: What kinds of competitive

advantages do Korean consumer electronics chaebols possess in the world export market? How could they be competitive in certain consumer electronics industries? Concerning these questions, I argue that the main competitive ownership advantages of Korean consumer electronics chaebols are deeply related to both the typical mass production system of standardised goods with medium levels of technology, and cost-driven competitiveness based upon low-cost labour.

The second part of this chapter will examine the reasons behind the decline in competitiveness that affected the export performance of Korean consumer electronics chaebols in the late 1980s and early 1990s. In fact, Korean electronics firms have seen a sharp erosion of their price competitiveness since the late 1980s, and this has been the main motivation for Korean FDI. So, the second part will analyse various factors which have effected this loss of competitiveness, such as rising domestic wages and increasing trade regulations overseas. Why did Korean electronics firms lose their export competitiveness? The second part provides an answer to this question and it is closely related to the question of why Korean firms want to invest abroad, especially in the EU.

The main primary sources used in this chapter are: books on the histories of Korean *Chaebols*; various books from Electronics Industries Association of Korea (EIAK) such as *Korea's Place in the Global Electronics Industry, 1997-2001*; and various statistics from the National Statistical office of Korea, notably *Major Statistics of the Korean Economy*.

### **3.2 The nature of competitive advantages of Korean consumer electronics industry**

From its beginning in 1959, the Korean electronics industry has grown into one of the country's leading export industries, and is widely recognised as having made a major contribution to the nation's economic development and growth (EIAK, 2001, p.2; Cherry 2001, p.58; Cyhn 2002,

p.75). Exports in the electronics industry amounted to 66.7 billion US dollars in 2000, and the electronics sector represented almost 30 per cent (29.3%) of all Korean exports in 2000 (EIAK 2001 p.2). As can be seen in Table 3.1, Korea accounted for 2.6 per cent of global production of electronics products and ranked fifth in the world after the United States, Japan, China, and Germany in 1998 (EIAK 2000).

**Table. 3.1 Global Electronics Production, 1998: Share and value of top five countries**

	Value of Production (US\$ bn)	Share of total production (%)
United States	522.0	31.0
Japan	337.1	20.0
China	49.3	3.0
Germany	45.1	2.7
Korea	43.1	2.6
Global Total	1,682.0	100

Source: Electronics Industries Association of Korea, 2000

Korea accounted for 5.5 per cent of the global production of consumer electronics products in 1998 and ranked fifth in the world after Japan (20.7 per cent), China (15.2 per cent), the US (7.6 per cent), and Malaysia (6.8 per cent)<sup>11</sup>. By the mid-1990s, Korea had become the largest manufacturers of colour TV sets and microwave ovens in the world, taking global market shares of 40 per cent for these products (EIAK 2000).

What are the main reasons for the fast growth of Korean electronics industry? How could they be so competitive in world export market? A number of forces are significant such as high export dependency, abundant low-cost labour, and an oligopolistic market structure dominated by *Chaebols*. Other factors are the dominance of a few mature

<sup>11</sup> Before the financial crisis of 1997, Korea was the second largest producer of consumer electronics in the world behind Japan, realising about 9.8 per cent of global production (EIAK 1997).

and standardized products and medium levels of technology.<sup>12</sup> These factors constitute the important characteristics of Korean electronics industry and have helped to shape the FDI activities of Korean electronics firms.

### **3.2.1 Export orientation : Promoting exports as a means of development of firms**

Firstly, in terms of market orientation, the electronics industry has been a strategic export industry, and has been highly focused on exports since the 1960s. This outward-looking industrial approach has determined the level of production and product technology and influenced their competitive sources on the global market. (Shin 1995, p.130; Jung 2000, p. 104; Cherry 2001,p.72). The limited size of the Korean market forced electronics firms to promote exports as a means of continued growth. Therefore, price competitiveness could only be achieved through mass production, and the local market was too small to be relied on to absorb domestic output. This export-led development has led Korean electronics firms to be competitive in world export market through strategy of mass production and mass exports.

The Korean electronics industry has had a high share of total Korean manufacturing export activities. It increased from 12 per cent in 1980 to 32.2 per cent in 1994. Even in the early 2000s, the share stayed above 29 per cent (EIAK, 2001). In addition, the export dependency ratio (the share of total sales accounted for by foreign markets) in the electronics industry gradually increased from 52.0 per cent in 1970 to 70.3 per cent in 1980, and it reached 82.2 per cent in 1998 (Park 1996, p.178; EIAK 1999, P.4).

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<sup>12</sup> A survey of current literature has revealed a number of characteristics of the Korean consumer electronics industry. For example, Cherry (2001) identified several key factors: 1) high degree of dependence on exports, 2) availability of low-cost labour, 3) the inducement of foreign technology, and 4) the domination of export by a few mature and standardized products. In addition, Jung (2000) suggested four main driving forces acting on the fast growth of the industry: 1) export-led industrialisation, 2) state-led industrialisation, 3) *Chaebol*-led growth, and 4) low wages-based competitiveness

This high level of export dependency has left Korea vulnerable to changes in the business environment such as exchange rate fluctuation, trade regulation change (e.g., import restrictions, tariff and non tariff barriers), the erosion of price competitiveness, and challenges from developing countries that enjoy the advantage of low production costs (Hobday, 1995; Hoesel, 1999; Jung, 2000; Cherry, 2001). As Lipietz pointed out earlier, the Korean (consumer) electronics industry can be understood as a typical internationalised industry, which continues to export Fordist goods at either the final or intermediary stages (Lipietz 1987, p.81).

### **3.2.2. The advantage of abundant, low-cost labour**

In terms of labour relations, low labour costs had been the main competitive strength of Korean electronics industries with low and medium levels of technology (based upon assembly technology). Ernst (1994) argued that the rapid growth of Korean electronics industry was mainly based on the advantages of low labour costs and mass production. Since the 1960s, Korean electronics firms have aimed at mass employment with low wages, which is appropriate to the combination of mass production and mass export. As a result, their success and failures on the global export market have been heavily dependent upon maintaining low labour costs in order to achieve global competitiveness (Shin 1998, p. 102; Jung 2000, p. 105; Cyhn, 2002, p.75). From the 1960s until the late 1980s, the Korean military government strictly controlled labour wage, freezing and the prohibition of labour disputes and labour movements. This allowed electronics chaebols to continue their intensified exploitation of labour thus maintaining their price competitiveness. Therefore, the success of the Korean electronics industry was heavily dependent upon state and firm level controls on the level of wages. In fact, hourly manufacturing wages in Korea remained well below those earned in industrialised countries until 1990 (table 3.2).

**Table 3.2. Hourly manufacturing wage rates, 1980-1990**

	1980 (US \$)	1985 (US \$)	1987 (US \$)	1988 (US \$)	1989 (US \$)	1990 (US \$)	Growth Rate (%) 80-90
<b>Korea</b>	<b>1.03</b>	<b>1.35</b>	<b>1.78</b>	<b>2.50</b>	<b>3.57</b>	<b>4.16</b>	<b>15.4</b>
Japan	5.61	6.43	10.83	12.80	12.63	12.84	8.8
Taiwan	1.00	1.50	2.26	2.82	3.53	3.98	15.0
S'pore	1.49	2.47	2.31	2.67	3.15	3.78	9.7
Mexico	N/A	1.60	1.06	1.32	1.60	1.85	N/A
USA	9.84	12.96	13.40	13.85	14.28	14.83	4.2
Germany	12.33	9.56	16.91	18.04	17.51	21.30	3.8
UK	7.43	6.19	8.97	10.46	10.43	12.42	9.2
France	8.94	7.52	12.42	12.96	12.60	15.25	9.3

Source: Ku 1992 p. 40; National Statistical office of Korea, 1997; Cherry 2001, p.67

Therefore, up until the late 1980s, the Korean consumer electronics industry had been successful due to the maintenance of low domestic labour costs. However, this low-cost labour advantage disappeared after 1990 due to a series of sharp wage increases.

### 3.2.3. Oligopolistic market structure : *Chaebol*-led industry

The Korean *Chaebols* have been a dominant force in the Korean economy, and the electronics industry is a prime example of a chaebol-led industry. The consumer electronics industry was, particularly, primarily developed by the 'Big Three *chaebols*' such as Samsung, LG, and Daewoo under government supportive and developmental schemes<sup>13</sup>. The Korean government fostered export industries through the uneven distribution of loans and funds to these *chaebols* (Choi, 1995; Shin, 1998; Jung, 2000; Hoesel, 1999; Cherry, 2001; Cyhn, 2002). In other words, the government's policy of offering support to these *chaebols* to develop as world-class exporters, and its promotion of volume-led industrial development in the 1960s and 1970s was a major factor in the creation of an oligopolistic

<sup>13</sup> In 1988, the official definition of *chaebol* was total assets exceeding 400 billion Korean won (about US\$ 500 million)

market structure within the electronics industry. According to UNCTAD (1996, p.77), a government can play a crucial role in increasing the competitiveness of a country's firms, by providing the correct incentives and signals for firms to undertake the risky and costly task of developing competitive capabilities. This extensive assistance by the government to the *chaebols* included capital (policy loans), a domestic market (import protection), cheap labour (strict labour laws) and export push (export incentives) (Cyhn 2002, p.85). In addition to benefiting from the government's support, electronics *chaebols* enjoyed certain advantages over smaller domestic competitors in terms of their access to funding, their ability to establish and operate global production facilities, the support they received from other companies within the family owned group and so forth. Within each *chaebol*, the electronics affiliates have been seen as flagship companies which make a major contribution to the groups' domestic and overseas sales, and to their overall profits (Cherry 2001, p.77). This was the context in which Korean electronics *chaebols* were able to achieve their competitiveness through the combination of 'mass production and mass export'.<sup>14</sup> As Cyhn argued, large sized Korean firms (*chaebols*) could undertake the cost and risk of absorbing very complex technologies, further develop it through their own R&D, set up world-scale facilities and create their own brand names and distribution network (Cyhn, 161-165)<sup>15</sup>

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<sup>14</sup> Yet, some believe that the domination of *chaebols* has caused many of the problems of small and medium sized firms (SMEs). As the domestic human and physical capital pool is dominated by *chaebols*, Korea's SMEs have become mere sub-contractors to *chaebols*. In 1985, more than 40 per cent of the SMEs identified contracted work from *chaebols* as their major source of income. Notably Ernst (1997) argues that the government support for the SMEs has been insufficient.

<sup>15</sup> Firms' demographic variables - such as size, number of employees, capital, cumulative international experience, and existence of established affiliates - are regarded as important elements of O advantages and may have certain influences on their location decisions of FDI (Dunning, 1988; Buckley, 1989; Hsiang-Chun Chen, 1999). The oligopoly model suggests that large MNEs can afford to use FDI more often and more actively in FDI expansion; they may also have more ventures because they have sufficient resources to support their activities. According to Hsiang-Chun Chen (1999), firms with less export experience may conduct FDI in locations with low costs (e.g. South-East Asia).



In 1988, Samsung, LG and Daewoo accounted for almost two thirds (65.9 per cent) of electronics production in Korea ; within the consumer electronics sector they accounted for about 90 per cent. By product, those *chaebols* fully controlled the market for video cassette recorders, microwave ovens, refrigerators, and washing machines (100 per cent), and took 82.2 per cent share of the production of colour TV sets (Pae, *et al* 1990, p.33). Even in the 1990s, the electronics industry was still dominated by a limited number of *chaebols*. The total share of sales taken by the ‘big three’ *chaebols* accounted for over 65 per cent of all electronics production in 1995 (EIAK, 1999). As table 3.3 shows, of the top ten electronics firms, only three did not belong to these ‘big three’ in 1995.<sup>16</sup>

**Table 3.3 The top 10 electronics companies in Korea, 1995**

Company name	Sales (billion Korean won)	Share/ top 10 (%)	Employees
1. Samsung electronics	8,714	47.6	47,600
2. LG electronics	3,677	20.0	31,000
3. Daewoo electronics	1,640	8.9	12,348
4. Samsung display device	1,181	6.4	11,000
5. LG cable and machinery	741	4.3	5,600
6. Samsung electro-Mechanics	730	3.9	7,050
7. Anan industrial	545	2.9	6,225
8. Trigem computer	388	2.1	1,500
9. Orion Electric	384	2.0	4,927
10. Daewoo Telecom	361	1.9	2,467
Total top 10 sales	18,361	100	129,717

Source: EIAK (1999)

As demonstrated in Chapter 2, Korean investments abroad have been predominantly the result of investments undertaken by these *chaebols*. In fact, *chaebols* accounted for 95 per cent of the total FDI amount invested in the EU (see chapter 2).

<sup>16</sup> By the mid 1990s, the top 30 *chaebols* controlled 75 per cent of the country’s GNP. While comprising only 1 per cent of the total number of companies in Korea. *Chaebols*

### 3.2.4 Focusing on a small range of mature and standardized products

As a newly industrialised country, Korea mainly relied on imported technology to build the foundation of its industry. According to the Late Industrialisation Paradigm (LI paradigm) (Amsden, 1989, 1991; Amsden and Hikino, 1993; Hikino and Amsden, 1994), a common characteristic of Asian NICs is that even their leading companies have to grow without the competitive asset of pioneering technology. Therefore, learning from others or borrowing technologies at the beginning of their growth is the only source for their technological enhancement. Therefore, Korean electronics *chaebols* have focused on a small range of products which could be mass produced, and enhancing export price competitiveness (Cherry, 2001: pp 79-80; Cyhn, 2002:pp. 152-155).

During the 1980s, a few products like radio cassettes, video cassette recorders, colour TVs, and micro wave ovens accounted for over 60 per cent of production in the Korean consumer electronics sector. The share of these main products was 63.6 per cent in 1983, and 61.1 per cent in 1988. By 1991, the same four products accounted for more than 70 per cent of the total production of consumer electronics goods and took 91 per cent of all consumer electronics exports (Ku 1992, p.32). Even in the late 1990s, these products still accounted for 61.5 per cent of total consumer electronics production and 61.8 per cent of total consumer electronics exports. (EIAK 1999, p.1-4). Table 3.4 shows detailed amounts and the share of these main products in Korean consumer electronics production and exports.

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accounted for 34 per cent of the labour force, 60 per cent of the capital and 62 per cent of

**Table. 3.4 Consumer electronics: Production and export proportion by sectors**  
(1998 figures)

Item	Production (100 M Korean won)	% share /total c. electronics production	Export (M US \$)	% share/total c. electronics export
C-TV	22,011	<b>22.6</b>	933	<b>17.3</b>
VCR	12,376	<b>12.8</b>	530	<b>9.9</b>
Audio	14,895	<b>15.3</b>	1,161	<b>21.6</b>
Micro Wave Oven	10,463	<b>10.8</b>	694	<b>13.0</b>
Washing Machine	7,072	7.3	241	4.5
Air conditioner	8,366	8.6	397	7.4
Others	21,969	22.6	1,422	26.3
Total	97,152	100	5,378	100

Source: EIAK 1999, P. 3-4.

A high concentration on a small number of mature and standardised products has led Korean electronics industry to be competitive in world export market with the benefits of ‘mass production - low labour costs’. However, since the late 1980s, it also brought problems for the Korean electronics firms in terms of the intensification of trade barriers in importing countries such as the EU and the US.

### 3.3. The erosion of Korean electronics *Chaebols*’ export competitiveness

Since the late 1980s, changes in the domestic and global business environment have had a significant impact on the consumer electronics industry. Korean electronics *chaebols* saw a sharp erosion of their competitive advantages (mainly cost-driven competitiveness). The domestic factors in this loss of competitiveness were rising wages, and labour problems. The external factors were increasing trade restrictions overseas and the challenge from other Asian developing countries.

Firstly, rapid increase in labour costs was a key factor in the erosion of Korean electronics firms’ export price competitiveness in the late 1980s

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total exports (Lee 1996, p.107)

and the early 1990s. As presented in table 3.5, annual wages rose at an average rate of 22.7 per cent between 1988 and 1993, and this figure was almost twice that in other Asian developing countries. As a result, average wages in the Korean electronics industry were twice those in Hong Kong, Singapore and Malaysia and six times those in Thailand in 1993.

**Table. 3.5. Annual growth rate and average wages in the electronics industry: Korea and other Asian Countries, 1988 - 1993**  
(Unit: % and 1,000 Japanese yen)

	Annual Growth Rate 1988- 1992	Average wages 1993
Korea	22.7	116
Taiwan	10.9	120
Thailand	14.1	18
Malaysia	13.9	44
Singapore	10.7	60
Hong Kong	N/A	86

Source: Pak, et al., 1994, p.42-43; Jung 2000, p.115

Therefore, the main Korean export industries, such as textile and consumer electronics, which are mainly based on the advantages of cost-competitiveness have been severely challenged by other East Asian developing countries, like Malaysia, Thailand, and China. In other words, because of increased competition from other developing countries and domestic real wage rises, the traditional competitive ownership advantage of Korean electronics firms based on labour-intensive mass production, started to erode (Hoesel 1999: 117). The firms in Asian developing countries were exploiting the advantage of a low-cost labour base that was now lost to Korea. The threat was strongest from Malaysia and Thailand in the labour-intensive, medium to low technology product markets (Pae et al 1990, p.55).

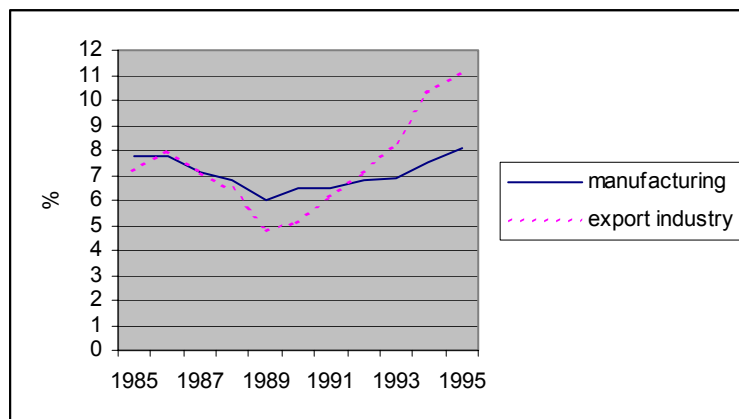
Secondly, there was another threat to price competitiveness arising from trade friction in industrialised markets, notably in the EU and the US. In

fact, since the 1970s import restrictions have targeted labour-intensive consumer electronics products such as micro wave ovens, colour TVs, audios and video cassette recorders (Shin, 1998; Cherry, 2001). Between the 1980s and 1990s, out of all Korean electronics exports to the EC, around 30 per cent faced trade restrictions of one kind or another: anti-dumping investigations and voluntary export restrictions, for example (Cherry, 2001 p. 68; EIAK, 1999, chapt.3). Europe and America reacted to low priced Korean consumer electronics products with the imposition of trade barriers; seriously threatening the competitive advantage of Korean electronics *chaebols*.<sup>17</sup>

### 3.4 Motivation of Korean electronics FDI since the late 1980s

Domestic and external factors such as rising wages and increasing trade restrictions played a critical role in educing Korean corporate profitability. As table 3.6 shows, Korean corporate profitability in manufacturing and in the export industry had fallen sharply during 1986 and 1989, even though it increased again between 1991 and 1995.

**Table 3.6 Korean corporate profitability in manufacturing and export industry: 1985-1995**



Source: Chang, H.J. *et al.*, 1998: 742; Jung, 2000: 44)

<sup>17</sup> In fact, it can be said that trade restrictions of the EU such as anti-dumping actions and quantity (quota) restrictions have actually contributed to increasing production costs for Korean electronics companies. For example, for the case of Samsung electronics in the UK, those EU trade protectionist measures caused at least 15 per cent of price increase of main electronics products such as CTVs and MWOs (Ms .S.K Kim (Korean managers), August. 2003)

At the same time, these factors have also been the main motivation for Korean FDI since the late 1980s. Therefore, Korean FDI has been deeply related in the reaction to the diminishing competitiveness in Korean export industries. The only way out of the crises was outward FDI to low-production costs countries such as Southeast Asia. So this type of Korean FDI has mainly concentrated on Southeast Asia and Latin America. Using the conventional OLI paradigm to understand why Korean electronics firms would invest in relatively less-developed countries is simple. The search for lower production costs to keep their competitive advantages has promoted Korean firms to invest heavily in developing countries.

Then why do Korean electronics firms want to invest in the EU which is one of more developed economies? The EU is not a low labour-cost area. Labour costs are higher when investing in Europe than in other Asian economies. Efficiency-seeking investment that is highly sensitive to (low) labour costs is not attracted to the EU. So, the competitive ownership advantages of Korean firms may be much more effectively exploited in Asia or other developing regions that have lower labour costs, simpler industrial structures and comparable levels of technological capability. What are the main motivations of Korean FDI in the EU? How could it be explained in the framework of OLI paradigm?

According to current studies, the investment activity of Korean firms in Europe is generally more for 'learning purpose' to adopt advanced technology or simply for 'avoiding trade barriers' in a passive manner rather than for exploiting their main competitive O advantages. As many current authors emphasized, the main location advantages of the US/EU are the presence of advanced technology and large markets, while the advantages of South-East Asia are low-cost labour. Therefore, the main reason for Asian firms to invest in developed regions such as the US and the EU is to expand their markets, to be near their major buyers, and to have easy access to technological information and technologies. (UNCTAD

1996, P.64; Hsiang-Chun Chen, 1999, p. 273). Similar views are shared by Shin (1998), Hoesel(1999) and Jung (2000) which argue that Asian NICs' FDI in the EU and the US have resulted mainly from the changing extra-EU trade regulations and access to advanced technology rather than from the search for low production costs. Thus, current studies have argued that Korean manufacturing FDI in the EU does not necessarily require competitive ownership advantages that are generally perceived to be a necessary condition for FDI. More recently, Cherry (2001) also argued that the ownership advantages of Korean investors in the EU are too weak to offset the cost of foreignness. According to her, the main motivation of Korean investment is to benefit from the location specific advantages offered by EU host nations such as access to high technologies and large markets (Cherry, 2001, p.171). In her book, Cherry wrote:

“In common with other major industries in Korea, manufacturers of home appliances have faced rising production costs at home, increasing trade restriction overseas, and fiercer competition in the domestic, as well as the global market. Therefore, the search for low production costs has prompted Korean electronics companies to invest heavily in developing countries, while the need to avoid trade barriers and acquire advanced technology and skills vital to industrial restructuring has attracted Korean electronics investors to the EU and US, despite the erosion of their competitive advantage in these markets” (Cherry, 2001, P.71).

As summarised in table 3.7, all these current researchers point to the location advantages of the host economy such as access to high technology and the avoidance of trade restrictions as the main motivation of Korean electronics FDI in the EU.

**Table 3.7. Current theoretical explanations of Korean FDI: Southeast Asia, and EU/US**

Core concepts	FDI in Southeast Asia	FDI in EU/US
(O) advantages	-Clear technology superiority -Possible to maintain main competitive advantages (based on cost driven competitiveness)	-No clear advantages -No cost-driven competitive advantage
(I) advantages	- FDI is clearly better to exploit O advantages than to sell them, or to sell the right to use them to other firms.	-No clear advantages -Importing key components from home country is restricted by EU local contents rule
(L) advantages	-Low labour cost -Access to natural resources -Technology transfer to host countries -Favourable incentive packages	-Trade barriers such as anti-dumping duties, import quota and other non tariff barriers -Access to advanced technology through M&A -Access to large market (SEM) -Host government incentives
Motivation/ Type	-Cost saving motivation -Efficiency seeking type	-Typical trade related investment -Technology seeking ‘reverse FDI’

Source: Author’s summary, compiled from literature

However, this thesis refutes those studies. Is Europe really an unattractive place for investors who pursue low production costs? In chapter 4, I argue that Korean electronics firms in the EU may have ‘cost saving’ as their main FDI objective. Korean FDI in the EU has been positively influenced by protectionist measures, but technology sourcing in high tech sectors is not the case for Korean electronics firms. When considering the fact that peripheral regions of the EU have been the preferred target for their investment, maintaining their competitive advantages (mass production of limited range of highly standardised goods with low production costs) is still one of important incentives for Korean investors in the EU as well as other incentives such as avoiding import restrictions and non-tariff barriers.

### 3.5. Conclusion

In conclusion, the main competitive O advantages of Korean consumer electronics *chaebols* are based on the mass production system, cost-driven competitiveness, and highly standardised products. This competitiveness



of Korean *chaebols* has been declined since the late 1980s and early 1990s because of rapid wage increases, and trade friction in industrialised markets. Therefore, maintaining their competitive advantages has been an important incentive for Korean investors abroad.

Then the question remains as to why Korean consumer electronics *chaebols* invest in the EU, which is generally understood to be a high production cost area. Is it true that there is no possibility for Korean electronics firms to maintain their competitive O advantages when located in Europe? Unlike the main assumption of current studies, I argue that maintaining their competitive advantages is still an important incentive for Korean investors in the EU. In the next chapter, I will show that EU peripheral regions have offered appropriate location advantages (mainly low production costs) to Korean consumer electronics *chaebols*.

## **4. Location (L) advantages of the EU: Specific characteristics of peripheral regions**

### **4.1 . Introduction**

As discussed in the above chapters, location-specific advantages are assumed to have significant influences on a firm's FDI decisions in the OLI paradigm (Dunning, 1988, 1997). While O- and I- type advantages are firm-specific determinants of FDI, L advantages are country-specific. To attract FDI, the host country (or region) must possess L advantages; these include factor cost advantages, proximity to the market, and an existing economic structure and legal, social, and political frameworks conducive to foreign investment. The FDI activities of firms have been shown to be related to the characteristics of their competitive advantages and to reflect the resources abundant in host locations (Dunning, 1993, 1997). This suggests that there are some links between the comparative advantages of host countries and the FDI activity of firms. (Dunning and Narula, 2000).

Therefore, this chapter will try to answer the question concerning why EU regions are attractive for Korean consumer electronics investors. I assume that host regions within the EU do not provide the same kinds of locational advantages for inward investors. Especially given that Korean manufacturing FDI has been significantly concentrated in the EU's less developed regions (Chapter 2), so it examines the specific characteristics of the L advantages of EU peripheral regions. Therefore, this chapter will provide a framework for analysing primary questions such as: What kinds of L advantages are offered by European peripheral regions to Korean firms in particular? And how have these L advantages of peripheral regions supported Korean investors to maintain their competitive advantages within the EU?

In this chapter, I show that in terms of production costs, although average labour cost levels are higher in Western Europe than in Korea, there are

low labour cost areas within the EU and in Eastern Europe. Furthermore, financial assistance for those low cost production locations from the EU has increased the attractiveness of these regions for Korean consumer electronics investors. For this reason, Korean electronics *chaebols* have mainly invested in the EU peripheral regions (objective 1&2 regions and candidate countries) which offer appropriate locational advantages to maintain their competitive ownership advantages (mainly cost-driven competitiveness with low production costs). As was shown in chapter 3, this point is inconsistent with the prediction of existing studies which mainly argue that efficiency seeking type FDI with cost saving motivation is not the case for Korean FDI in the EU.

For this chapter, the main primary materials are related to: 1) The World Bank, *World development indicators* in order to analyse the general level of economic development of host countries; 2) Various materials from the Commission (especially from DG for Regional Policy) such as *Main regional indicators, 2002* in order to analyse the economic situation of the host regions (e.g., GDP, unemployment rate, and labour costs); 3) Korean Foreign Economic Policy Research Centre (1998) *Incentive Package for Korean FDI: Case study of major countries, UK case*. Also, information from interviews with selected Korean companies in the EU will be presented.

To summarise, this chapter will mainly present the argument that Korean manufacturing FDI is highly sensitive to ‘costs-saving’, and that EU peripheral regions have satisfied the requirements of Korean investors by offering relatively low labour cost and various investment subsidies, etc. This chapter is divided into three sections. In the first section, the importance of sub-national level analysis is presented. Secondly, an attempt is made to identify the particular nature of EU peripheral regions along with an analysis of some cost-related factors such as labour costs, investment subsidies, and local content rules. In the final section, the

main motivation (cost-saving related) of Korean electronics *chaebols* in EU peripheral regions will be discussed.

#### 4.2. The importance of local and regional level analysis

With the launch of the EU's cohesion policy at the end of the 1980s increasing emphasis has been placed on the local and regional (i.e. sub-national) levels as well as supranational or national levels of the motivations for FDI to take place in Europe<sup>18</sup>. Iammarino and Santangelo insist that:

The competitive advantages of a region is created and sustained through highly localised processes, which are in turn reinforced by the location's capacity to attract resources from outside. Given the growing importance of the local dimension of MNEs' activity, regions turn out to be a more appropriate unit of economic analysis, as nation-state-based investigations are likely to neglect important phenomena. Regional inequalities reinforced by cumulative causation mechanisms and consequent convergence (divergence) processes within national borders may not be captured at all through analyses at the national level (Iammarino & Santangelo, 2000 p. 5&8) <sup>19</sup>

Therefore, it can be said that EU investors turn out to be increasingly interested in the sectoral comparative advantages of regional economic systems as well as the development of supranational economic integration such as the implementation of anti-dumping regulations and the creation of the Single European Market (SEM) in 1992 (Iammarino & Santangelo, 2000). In this context, it is worth looking at the different degree of attractiveness of EU regions for FDI by distinguishing between peripheral regions which are mainly supported by EU regional policy (i.e. Objective 1

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<sup>18</sup> Sub-national actors have become formally involved in the regional policy process at the implementation stage through 'the 1988 reform of the structural funds'. According to some Ph.D. research in Sheffield University, this reform provided clearly identifiable networks operating within the domestic EU regional policy process. Bache, I. (1996) *EU regional policy: has the UK government succeeded in playing the gatekeeper role over the domestic impact of the European regional development fund?* Published Ph.D. thesis, Sheffield University, DX 197276, chapt.2

and 2 regions) and non-objective regions. Iammarino and Santangelo, in looking at the Italian case, have also argued that:

While Northern Italy is far more integrated in the European economic context, the South is a main target of the European Union regional policy aiming at intra-EU regional convergence. Thus, if the 'global-local' development of MNE's activity seems to call for a more detailed description of location choices, the need for a regional analysis is even stronger when one looks at sub-national heterogeneous realities such as those occurring in Italy (Iammarino & Santangelo, 2000 p. 5).

In fact, there are striking disparities in economic performance between EU peripheral and non-peripheral regions. GDP per head is typically half to two-thirds of the EU average in Objective 1 regions (Commission, 6<sup>th</sup> Periodic Report, p. 1). More specifically, Objective 1 regions consist of those regions whose per capita GDP does not exceed 75% of the Community average, as well as the thinly populated regions of Finland and Sweden (fewer than 8 people per sq.km.). All these regions have a number of economic indicators "in the red": such as low investment levels, higher than average unemployment rates, lack of services for people and businesses, and poor basic infrastructure. Objective 2 regions include regions undergoing industrial conversion, and are usually more centrally located. These characteristics must be considered in attempting to assess the attractiveness of these regions for FDI.

So in analysing the location specific advantages of EU host regions, it must be noted that there are differences between them in their endowments of entrepreneurship, organizational capacity, skills, propensity for innovation, technological competence, and production costs. The less developed regions in the EU have the highest priority for the allocation of funds for the promotion of social and economic development. Thus, to explore the influence of the comparative location advantages of

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<sup>19</sup> Iammarino & Santangelo (2000) 'Foreign Direct Investment and regional attractiveness

the EU regions (especially Objective 1 and 2 regions) on the determinants of entry by Korean firms, it is necessary to analyse these factors at the sub-national level.

However, very little has been written concerning the analysis of sub-national structures and the flow of FDI. In other words, current research on Korean FDI in the EU does not take into account the regional distribution of the FDI firms. It is clearly impossible to argue that the EU offers a single type of L advantage. There is a huge difference between the types of L advantages offered by different EU regions. Most of current studies have failed to notice the fact that European states and their regions do not offer homogeneous locational advantages to Korean investors. That is why current studies have insisted that the EU is not a low-production cost area and that cost-saving investment is not possible.

#### **4.3. Particular characteristics of EU peripheral regions**

A number of writers have discussed the different location attractions which influence firms' location decisions. The total GDP and market size of the host area can be of some significance (notably, Resmini, 2000).

Other factors, such as the availability of labour resources and infrastructure, can also be important (Girma, 2002). In addition, certain host government policies such as regional grants and restrictions on FDI firms are also meaningful (Hubert and Pain, 2002).<sup>20</sup> In the OLI paradigm, Dunning highlights the cost factors related to location advantages such as availability of low-costs labour, raw materials, capital/technology, and other costs factors including host government incentives. This chapter

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in the EU integration process. In *European urban and Regional Studies*, vol. 7(1): p. 5-18

<sup>20</sup> For further details on the role of regional incentives for attracting FDI, see Amin, A., Bradley, J., Gentle, C. (1994), "Regional Incentives and the quality of mobile investment in the less favoured regions of the EC", *Progress in Planning*, 41 (1), pp. 1-22; and Thomas, D. (1996) "Winner or Loser in the New Europe?: Regional Funding, Inward Investment and Prospective for the Welsh Economy", *European Urban and Regional Studies*, 3, pp. 225-40.

focuses on the analysis of 'cost factors' to explain the L advantages of EU peripheral regions.

#### **4.3.1 Labour costs of EU peripheral regions**

The term labour costs refers to the expenditure borne by employers in order to employ workers. Labour costs exercise a considerable influence on the choice of investment location for MNEs as they account for some two-thirds of production costs for goods and services (Eurostat 2002:1).

According to an official report by Eurostat (1999), the EU is not a low-labour cost area. The labour costs statistics for 1996 show that average hourly labour costs of EU 15 (20.2 ECU) were higher than those in the USA (17.4) and in Japan (19.7). Euro-Zone costs are even higher at 21.6 ECU. In the most recent figures for 2000, EU average hourly labour costs were 22.19 euro. In the USA the average level reached 18.1 euro, and 22.0 euro in Japan in the same year (Eurostat, 2002).

However, hourly labour costs in the EU vary enormously across the countries. In 1996, there were major disparities between the levels of labour costs in the various member countries of the EU. In manufacturing, the average hourly labour costs varied from ECU 6.1 in Portugal, to ECU 26.5 in Germany. Labour costs in Belgium, Austria and Sweden were close to those of Germany. The EU average was ECU 20.2 with Luxembourg and Finland closest to this average. However, labour costs in all cohesion countries such as Portugal (6.1 euro), Greece (9.6 euro), Spain (14.9 euro) and Ireland (13.8 euro) were much lower than the EU average. As table 4.1 shows, these enormous disparities between European countries still exist in the most recent figures, 1999 and 2000. In 1999, Austria, Denmark and Germany were the most expensive countries for hourly costs in industry, at around 27 euro. Again the lowest labour costs were observed in Portugal, Greece, and Spain. Similarly in 2000, average labour costs per hour were lowest in Portugal (8.13 euro), Greece (10.40 euro), Spain (14.22 euro), and Ireland (17.31 euro); and were highest in Sweden

(28.56 euro), Denmark (27.10 euro) and Germany (26.34 euro). In the other six member countries, the hourly labour costs were close to the EU average of 22.19 euro.

**Table 4.1 Hourly labour costs in industry of the EU: between 1996 and 2000** <sup>21</sup>

(unit: ECU/EURO)

	1996	1999	2000	Average 1996-2000
<b>EU 15</b>	<b>20.2</b>	<b>21.5</b>	<b>22.70</b>	<b>21.4</b>
Germany	26.5	26.8	26.54	26.6
Sweden	23.9	25.8	28.56	26.1
Belgium	25.8	26.2	N/A	26.0
Denmark	23.0	27.0	27.10	25.7
Austria	24.6	27.2	23.60	25.1
France	22.5	23.8	24.39	23.5
Netherlands	22.6	21.7	22.99	22.4
Luxembourg	19.3	22.7	24.23	22.1
UK	N/A	19.3	23.85	21.6
Finland	19.7	20.8	22.13	20.8
Italy	17.2	18.8	18.99	18.3
<b>Ireland</b>	<b>13.8</b>	<b>16.2</b>	<b>17.34</b>	<b>15.7</b>
<b>Spain</b>	<b>14.9</b>	<b>15.3</b>	<b>14.22</b>	<b>14.8</b>
<b>Greece</b>	<b>9.6</b>	<b>11.8</b>	<b>10.40</b>	<b>10.6</b>
<b>Portugal</b>	<b>6.1</b>	<b>7.0</b>	<b>8.13</b>	<b>7.0</b>

Source: Eurostat (various years)

As can be seen in the above table, the average for cohesion countries between 1996 and 2000 was 12.0 euro, just over half of the EU average (21.4 euro). And, as table 4.2 shows labour productivity of these cohesion countries is also much lower than the average (100) for the EU 15 (except Ireland): Spain (81), Greece (68), Portugal (58) and Ireland (110).

<sup>21</sup> According to Eurostat (2003), average hourly labour costs are total annual labour costs divided by the number of hours worked during the year. Total annual labour costs are the sum of: wages & salaries; employers' social contribution (i.e. voluntary social security contributions); other labour costs (i.e. vocational training costs). Among these factors, wages and salaries take almost 75 per cent of total labour costs.



**Table 4.2 Labour productivity of the EU, 2002: EU 15 =100**

Countries	Average Labour Productivity
Luxembourg	127.5
Belgium	125.3
France	116.9
Netherlands	114.9
Germany	107.4
UK	86.7
Eurozone	103.4
<b>EU 15</b>	<b>100</b>
Ireland	110.1
Spain	81.8
Greece	68.1
Portugal	58.4
<b>Cohesion states</b>	<b>78.3</b>

Source: Eurostat 2003: 1

Furthermore, the average hourly labour costs for the candidate countries are much lower than the EU average and even lower than those of cohesion countries. In 2000, the average for the candidate countries was 3.47 euro, more than six times lower than the EU average and less than one third of the cohesion countries average. Table 4.3 shows hourly labour costs in EU candidate countries.

**Table. 4.3 Hourly labour costs in industry: The candidate countries, 2000**

Countries	Hourly labour cost (euro)
Cyprus	10.74
Slovenia	8.98
Poland	4.48
Czech Republic	3.90
Hungary	3.83
Slovak Republic	3.06
Estonia	3.03
Lithuania	2.71
Latvia	2.42
Romania	1.51
Bulgaria	1.35
<b>Average (%)</b>	<b>3.47</b>

Source: Eurostat (2002)

In terms of the monthly labour costs, the overall disparities are broadly same as that portrayed in table 4.1 and 4.3 for hourly costs. Table 4.4 presents the monthly labour costs per employee in 2000. The average for

cohesion countries was 1,872 euro, around 55 per cent of the EU average (3,169 euro), and the average for the candidate countries, 520 euro, was 1/6 of the EU average. In that year, monthly labour costs in Korean industry were 1,890,000 Korean won, approximately 1,575 euro (1 euro = 1,200 won).

**Table 4.4. Comparison of monthly labour costs, 2000: MS, CS, CC, and Korea \***

(unit: euro)	
Countries	Average monthly labour costs
Member States	3,169
Cohesion States	1,872
Candidate countries	520
Korea	1,575

Source: Eurostat 2003: 4; Korea National Statistical Office 2002

\* MS: member states, CS: cohesion states, CC: candidate countries

It can be said that average labour costs of EU member states are much higher than those of Korea (over two times), but the average for peripheral countries (cohesion and candidate countries) is close or much lower than that of Korea. So, Korean manufacturing investors can enjoy relatively low labour costs in these peripheral countries. In reality, the detailed figures in table 4.5 show that Korean consumer electronics *chaebols* in these peripheral countries have enjoyed low labour costs.

In all four Korean electronics companies operating in peripheral countries, the labour costs of local production were lower than those of companies operating in Korea. Notably, in the case of Halla industry in Portugal, the labour situation was as follows:

‘(With respect to the labour situation in Portugal), one of the merits of investment in Portugal is relatively low labour costs. Especially wages in this country are relatively lower than those in other European countries and those in Korea. In 2002, average labour costs in Portugal are less than 70 per cent of those in Korea. Moreover, as the Portuguese government controlled the increase

of wages, so it has been favourable for our investment' (Mr W.K. Noh (Korean Manager): December, 2001)

**Table 4.5. Actual levels of labour costs: Four Korean companies in peripheral countries 2001**

(unit: euro and %)					
Countries	Companies	Hourly labour costs	Monthly wages*	Labour cost index (Head Company in Korea =100)	
Portugal	Halla industry*	N/A	1,150	65	
Spain	Samsung electronics	9.5	1,210	72	
Ireland	Saehan media*	13.5	1,340	93	
Hungary	Samsung electronics	3.1	508	35	

Source: Author's survey and interview

Note\* 1: Exact monthly labour costs of four Korean companies were not available. However, 'Wages' account for two-thirds of total (monthly) labour costs, and labour costs account for some two-thirds of total production costs

Note \*2: Halla industry is a family company of Hyundai (one of big 4 *chaebols*) and Saehan media is a family company of Samsung

According to my interviews with all of the four Korean electronics investors in peripheral countries, their labour costs situation were generally same as those of Halla in Portugal. For example, in the case of Samsung Electronics in Hungary, the benefit of 'low labour costs' also played the most important role in their investment decision:

'For our investment decision, low labour and production costs were the main benefits and most important motivations. In 2001, we paid \$3.8 an hour and \$6,100 an year for local manufacturing workers. These levels of labour costs are much lower than those of our head company in Korea. They paid \$10.9 an hour and \$19,100 an year for their manufacturing workers at Samsung Electronics in Korea (Suwon) in the same year. The average labour costs for Hungary is at least three times lower than the Korean average.'

(Mr J.W. Shin (Korean manager), January, 2002).

Let's consider the labour costs of Korean manufacturing investors in more developed countries, such as the UK, Germany and France. Do they enjoy the same low-labour-costs benefits as Korean firms in cohesion and candidate countries? Or do they lose their cost competitiveness due to the high labour costs of these developed European countries? To answer these questions, it is worth looking at the different levels of labour costs within a single member country (notably the case of developed countries). In other words, in addition to national variation, the regional variation of labour costs is also remarkable. There are huge variations in industrial labour costs between the different regions as well as between the national averages. The regions with the highest and lowest labour costs within each single country are presented in table 4.6.

**Table 4.6 Regional labour costs per hour in industry: Selected countries 2000**

(unit: euro)		
Country	Highest	Lowest
UK	London (32.0)	North (19.2 )
France	Ile de France (30.8)	Est (19.5)
Germany	Hamburg (32.3)	Thuringen(16.1)
Italy	La zio (22.1)	Sud(16.1)
Spain	Madrid (17.0)	Canarias (12.1)
Portugal	Lisboa (10.5)	Norte (7.1)

Source: Eurostat (2003) 'EU labour cost in 2000'; Commission (2002) 'Main regional indicators, 2002'

This regional variation is widest notably in the UK, Germany and France and narrowest in Greece and Portugal. The regions with the highest labour costs are Hamburg in Germany (32.31 euro), and Ile de France in France (30.84). The region with the lowest labour cost is Norte in Portugal (6.72 euro). In the UK, hourly labour costs are highest in London (32.0 euro), and lowest in North (19.2 euro). Therefore, even in high labour cost countries such as the UK, Germany and France, there are low labour costs areas within each country. As we saw in chapter 2, Korean electronics firms in developed member countries are concentrated in low labour costs areas. For example, all Korean electronics *chaebols* in the UK have

invested in peripheral regions (North, Wales and Northern Ireland) which offer relatively low labour costs. Average labour costs of these peripheral regions are not as high as those in other UK regions. Table 4.7 shows labour costs in the UK peripheral regions in which Korean consumer electronics *chaebols* are currently located in detail.

**Table 4.7 Korean companies in UK peripheral regions: Hourly labour costs, and monthly wages 2000**

(unit: GBP and %)				
Company	Regions (Objective 1&2)	Hourly labour costs	Monthly wages *	Labour cost index (Head Company in Korea =100)
Daewoo electronics	Northern Ireland (Obj.1)	11.5	1,245	128
LG electronics	North (Obj.2)	12.1	1,305	115
Samsung electronics	North (Obj.2)	12.0	1,315	129
LG electronics	Wales (Obj.1)	12.2	1,390	125

Note\* 1: 'Wages' account for two-thirds of total (monthly) labour costs. See the note \*1 of table 4.5

Source: Author's survey and companies in-house data

As the above table shows, average labour costs of these UK peripheral regions are still slightly higher than those of Korea, ranging from 115 per cent to 129 per cent of Korean average. However, various types of regional grants are offered to Korean investors and these grants played an essential role in compensating for this slight gap in labour costs.

#### 4.3.2 Investment incentives

The attraction of manufacturing FDI into the EU peripheral regions is largely encouraged by the Commission as a mechanism for solving the regional development problem. Therefore, the EU has supported the assisted regions in various ways. The Structural and Cohesion funds support improvements in infrastructure and training to raise the skills of the work force, so making the areas concerned more attractive to foreign investors (Commission, 6<sup>th</sup> Periodic Report). Less developed regions (Objective 1 and 2 regions) receive support from the Structural Funds of the EU: the European Regional Development Fund (ERDF), the European Social Fund (ESF), the Guidance Section of the European Agricultural Guidance and Guarantee Fund (EAGGF-Guidance) and the Financial Instrument for Fisheries (FIFG). The Funds' contributions have grown from euro 8 billion per year in 1989 to euro 32 billion per year in 1999. They will remain at about euro 28 billion per year from 2000 to 2006, or euro 195 billion over seven years (at 1999 prices).<sup>22</sup> The Cohesion Fund assists Spain, Greece, Ireland and Portugal in upgrading their transport and environmental infrastructures. The resources of the Cohesion Fund amount to about euro 2.5 billion per year from 2000 to 2006, for a total of euro 18 billion (at 1999 prices). In all, 213 billion euro will be available from 2000 to 2006 to improve the economic performance of the less developed regions of the EU. Objective 1 and 2 regions receive a majority of these funds—i.e., more than 80 per cent—as seen in Table 4.8

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<sup>22</sup> [http://www.europa.eu.int/comm/regional\\_policy/intro/regions4\\_en.htm](http://www.europa.eu.int/comm/regional_policy/intro/regions4_en.htm): the instrument of solidarity

**Table 4. 8 Structural assistance to EU peripheral regions, 2000-2006**  
(unit: billion euro)

Structural Funds	195.0
Objective 1	135.0
Objective 2	22.0
Objective 3	24.0
Community Initiatives	10.44
Fisheries	1.11
Innovative actions	1.00
Cohesion fund	18.0 (at 1999 prices)

Source: [http://www.europa.eu.int/comm/regional\\_policy/intro/regions4\\_en.htm](http://www.europa.eu.int/comm/regional_policy/intro/regions4_en.htm)

The availability of expenditures in these regions from the EU Structural Funds attracts FDI inflows into the less favoured regions. In fact, various grants and subsidies are available to domestic as well as foreign investors wanting to set up new firms in the Objective 1 and 2 areas. These incentives have also been available to Korean firms, and these institutional packages played an essential role in the attraction of Korean firms into EU peripheral regions.<sup>23</sup> In this respect, it is important to evaluate the institutional packages that were offered to Korean firms.

With regard to grants for employment and training, Korean firms have been provided with per capita grants when they recruit and train new employees. Korean investors have also been provided with a significant amount of grants for land and buildings. In addition, some firms gained local and property tax concessions. In terms of the figures from the author's survey in Table 4.9, the level of grants for investment in less developed countries (cohesion and candidate countries) are below or equal to the EU average, 20 per cent of total investment.

<sup>23</sup> For more detail contents about regional incentives given to Korean investors, see: Korean Foreign Economic Policy Research Centre (1998) *Incentive Package for Korean FDI : Case study of major countries, UK case*. Seoul.

**Table 4.9 EU grants detail to Korean companies in cohesion and candidate countries**

(unit: euro and %)

Grants	Halla industry (Portugal)	Samsung electro. (Spain)	Saehan media (Ireland)	Samsung electro. (Hungary)
Land and production facilities	122,600	2,388,500	N/A	None
Employment and training	784,100	None	N/A	None
Tax concessions	3,403,000	None	N/A	Exemption of corporation tax for 10 years
No interest rate loans	6,927,500	1,495,900	N/A	None
<b>Grants % / Total Investment</b>	<b>20.0</b>	<b>8.1</b>	<b>14.5</b>	<b>1.3</b>

Source: Author's survey (2000-2002); Companies' in house data.

However, the level of grants available for investments in more developed countries went well beyond the EU average: Four plants in UK peripheral regions (Daewoo in Northern Ireland, Samsung in North, and two LG plants in North and Wales) were provided with 90 %, 25 %, 45%, and 22 % of total investment, respectively (Table 4.10)

**Table 4.10 Grants detail to Korean companies in developed member countries: UK case**

(unit: 1,000 GBP)

Grants	Daewoo electro. (Northern Ireland)	LG electronics (North)	Samsung electro. (North)	LG electronics (Wales)
Training	8,463	2,950	3,890	6,130
Land. & Facilities	17,007	3,800	8,950	27,870
Other Grants (tax concession & low interest rate)	5,763	None	6,410	None
Total Grants	25,470	6,750	19,250	34,000
<b>Grants% / Total Investment</b>	<b>90% / 28,520</b>	<b>45% / 15,000</b>	<b>25% / 77,000</b>	<b>22% / 162,000</b>

Total Grants Per employee	£25,470k/733 =£34,740	£6,750k / 417 =£16,180	£19,250k / 1140 =£16,880	£34,000k / 1980 =£17,170
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Source: Author's survey (2000-2002); Korean Foreign Economic Policy Research Centre (1998)



When Daewoo invested in Northern Ireland, they were provided with an average of 34,000 GBP in grants per employee, and an average of 16,500 GBP in grants was provided to the other three Korean companies in UK regions. Also, most plants in the other developed member countries such as France and Germany have been provided with grants covering more than 40 per cent of the total investment. For example, Samsung in Berlin was provided with 44.4 % and Daewoo in Lorraine was provided with 55 % grants (companies' in house data and Korean Foreign Economic Policy Research Centre 1998).

To sum up, these investment grants have been 'special benefits' for Korean consumer electronics firms in the EU, especially for firms in more developed countries. They are the same institutional packages which Korean electronics *chaebols* were provided with by the Korean government during the 1970s and 1980s, in order to make domestic *chaebols* more competitive on the global export market. Various types of grants have helped Korean consumer electronics investors to reduce production costs in relatively high labour costs regions in the EU.

#### **4.3.3. High cost of local component purchase?**

Apart from the relatively high labour costs, there are several 'economic constraints' to Korean firms in Europe such as the high cost of component purchase from local companies in host regions. The supply of (electronics) components is strictly controlled by the EU's local-content requirements or rules of origin. The rules of origin directly affect not only customers' treatment of goods from outside the EU (i.e. foreign trade) but are also relevant to goods manufactured within the EU (i.e. FDI). In order to obtain 'EU origin', non-member producers must use at least 45 per cent EU local contents when they assemble their products through an affiliate in the EU (The Commission 2001, p.2)<sup>24</sup>

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<sup>24</sup> Related to this rule of origin or local content rules, however, the EU has not stuck to a single rule of origin or local content rules but has rather worked case by case. More

I argue that most Korean electronics firms in EU host regions are extremely sensitive to the price of components purchase and the levels imposed by EU local contents regulations, because this factor is profoundly related with maintaining cost-and price competitiveness. According to my interviews with Korean consumer electronics firms in the EU, all Korean electronics final assemblers faced EU local contents regulations ranging from 35 to 45 per cent of all components purchases. In spite of the high price of components, a certain amount of components must be bought from local companies (for example, 45 % for the case of Samsung in Spain, and 35 per cent for LG in the UK)

**Table 4.11 The ratio of electronic component purchases by Korean consumer electronics *chaebols* in the EU (2000)**

(unit: %)

Companies	Countries	Products*	From host EU regions	From Korea	Other
Daewoo Elect	UK	VCR	<b>35</b>	65	0
LG Electronics.	UK (North)	MWO, CTV	<b>45</b>	40	15(China)
Samsung Elect	UK	CTV,MWO	<b>35</b>	65	0
LG Electronics	UK (Wales)	Computer	<b>40</b>	40	20(China)
Samsung Elect.	Spain	VCR, CTV	<b>45</b>	55	0
Samsung Elect.	Germany	CTV	<b>70</b>	3	27
<b>Average (6)</b>			<b>45</b>	44.5	10.5

Source: Author's survey (2001)

Note\*: MWO: Microwave oven; CTV: Colour Television; VCR: Video Cassette Recorder.

Actually, in terms of the ratio of electronic components purchased, the share of components purchased from host countries was relatively high. As shown in table 4. 11, the average percentage of the purchases from host countries was 45 per cent, which is the same as that of purchased from the home country (44.5 per cent). As an extreme case, Samsung Electronics'

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specifically, the Community is applying a rule of origin not of 'last substantial process or operation' but of 'key manufacturing process' or others depending upon the products. So, it is quite an unpredictable or inconsistent rule of origin or local content rules, such as the 'case by case' approach, and ambiguous. As Byun (1995) argued, the Commission needs more clear origin rules and local content regulations in connection with the application of other trade measures.

plant in Germany purchased 70 per cent of related components from the host country.

In fact, the intensification of EU local content regulations has seriously limited the cost competitiveness of Korean electronics firms. Korean consumer electronics firms have found it quite difficult to maintain cost-competitiveness in transactions with other European partners for components purchases. As many relevant studies have suggested, Korean electronics firms in industrialised economies have been able to retain their low manufacturing costs advantages and maintain their price competitiveness to some extent by importing key parts and components from home (Won, 1987; Shin, 1995&1998; Cherry, 2001). However, this advantage has been eroded by the strengthening of local content requirements for foreign production in industrialised countries. The high price of components in EU host regions, and EU local contents regulation constitutes one of the 'locational constraints' for Korean consumer electronics investors. It poses a significant threat to the price competitiveness of Korean consumer electronics firms (Cherry 2001:22). In this context, current studies argue that it is not possible for cost-saving to be the main motivation of investment for Korean electronics *chaebols'* investment in the EU (UN 1996: 15; Jung, 2000: 54; Cherry, 2001: 171-72). However, I argue that their hypothesis needs to be tested rather than assumed correct. If the contents of the share of components purchase are examined in more detail, it can be said that the local contents rule has not actually contributed to increasing production costs for Korean companies in Europe.

As shown in table 4.11, around 45 per cent of electronics components are supplied from host country firms, but two-thirds of these transactions have been conducted with Korean affiliates and suppliers in the EU (Table.4.12). During my interviews with Korean managers from Samsung Electronics in the UK, they emphasized that:

.....(With respect to the local contents regulations), in order to meet the EU local content rules, at least 45 per cent of total related components must be provided from local firms. However, as the price of components from local firms is so high, we could not maintain cost-competitiveness. So the only way to maintain cost competitiveness and meet EU local content rules at the same time was to minimise the share of local purchase and to establish Korean affiliates or subcontractor within the EU (Mr Y. K. Lee: March, 2001)

In other words, local contents rules imposed on Korean firms in the EU played a crucial role in the attracting *chaebols'* affiliates and Korean suppliers into the EU. Therefore, Korean firms could maintain cost-competitiveness due to the relatively low price of components from Korean suppliers within host EU regions.

**Table 4.12 Local components suppliers detail: % as supplied by Korean affiliates and subcontractors in the EU (2000)**

Companies	Korean affiliates	Korean subcontractors	(unit: %)
			(European) Local partners
Daewoo UK	35.5	28.5	36.0
Samsung UK	57.5	35.0	7.5
LG UK	9.0	30.0	61.0
Samsung Germany	58.7	0.0	41.3
<b>Total</b>	<b>40.2</b>	<b>23.3</b>	<b>36.5</b>

Source: Author's survey

Korean electronics final assemblers in the EU sourced 36.5 per cent of their average component purchases from indigenous local firms, while the rest was supplied by Korean affiliates and Korean subcontractors in the EU (40.2 and 23.3 per cent, respectively). As a result, around 64 per cent of local components purchases are supplied by Korean suppliers. Therefore, I argue that the ability to source low-cost parts and components from home and from Korean suppliers within the EU has been a major factor

enabling Korean firms to meet (or circumvent) EU local contents rules and achieve cost-and price-competitiveness.

#### **4.4. Conclusion**

Throughout this chapter, I have argued that host regions within the EU do not provide equal locational advantages to Korean inward investors. In fact, there are striking disparities in location advantages between EU peripheral and non-peripheral regions. In terms of production costs, although the average level of labour costs is higher in Western Europe than in Korea, there are low labour costs areas within the EU and in Eastern Europe. Furthermore, financial assistance for those low cost production locations from the EU has increased the attractiveness of these regions for efficiency seeking type FDI with cost saving motivation. It can be said that these ‘economic advantages’(e.g. low labour costs and various types of grants) have been main location advantages of EU peripheral regions. Therefore, one of the most important motivations of Korean consumer electronics companies in European peripheral countries has been ‘the search for lower production costs’.

According to my interviews, Korean electronics companies’ motivation invest in peripheral regions all fitted the same pattern. Samsung Electronics in Spain, for example, was motivated as follows;

One of the incentives of investment in Spain is the relatively low labour costs. Labour costs in this country (especially in this region, Catalonia) are lower than those in Korea. Furthermore, we had various types of grants for investment from the Spanish local government. And we were supplied with relatively cheap components from our Korean affiliates within the EU. Therefore, the benefit of lower production costs has been one of the main investment motivations for us as well as other motivations such avoiding EU tariff barriers and import regulations. (Mr J.K Cho: October, 2001).

In this context, EU peripheral regions have satisfied the requirements of Korean electronics investors by offering relatively low labour costs and

various investment subsidies, etc. This is why Korean consumer electronics investors have invested heavily in peripheral regions (low cost production locations) within the EU.

## 5. Conclusion

This final chapter has two main objectives. One is to summarize briefly the major findings of the study as well as outlining the contributions. The other objective is to consider its limitation and to suggest some issues for future research.

### 5.1 Major findings and recapitulation of the results

The FDI of Korean firms in the EU has increased dramatically since the late 1980s and early 1990s. This increase in investment activity gave rise to a debate on the ability of existing FDI theories to explain in full the types and motivations of Korean FDI in the developed economies (e.g., the EU). This research began with the question of why the Korean electronics firms invest in the EU. This research applied conventional OLI (Ownership-Location-Internalisation) paradigm of Dunning to explain the motivations of Korean investment in the EU. The main questions in this thesis are: What are the nature of competitive Ownership (*O*) advantages of Korean firms and Location (*L*) advantages of the EU? and how do both *O* and *L* advantages affect Korean firms' decision to invest?

In order to analyze the above questions, this research has proposed two facts as the basis for analysis. First, what is unique about Korean FDI in Europe is that consumer electronics *chaebols* particularly lead the investment movement unlike the investment in the US and East Asian countries. Over two thirds of the total investment in Europe is led by consumer electronics *chaebols* (see Chapter 2). Therefore, in analyzing the competitive *O* advantages of Korean manufacturing firms in the EU, the characteristics of electronic *chaebols* have to be analyzed first. Second, these electronics *chaebols* are concentrating their investment on less-developed regions in Europe. Thus, what *L* advantages the Korean companies can gain from investing in less-developed European regions as opposed to developed European areas has to be analysed. Based on such

an analysis framework, the paper analyzed the *O* advantages of Korean (consumer) electronics *chaebols* and the *L* advantages of less-developed European countries (and regions), and then analyzed how these two factors were at work in affecting the investment motivation of Korean companies.

The result of analysis is inconsistent with the prediction of existing FDI theory, especially 'Reverse FDI' approach, which argues that Asian NICs firms (including Korean firms) in the EU do not possess the clear ownership advantages. The focus of this theory is simple. First, the *O* advantages of Korean manufacturers do not work in advanced countries such as the U.S. and Europe. For instance, with the technological gap wide, Korean companies lag behind European companies in terms of finance capabilities and the degree of recognition in the global market. Moreover, the high labour costs of Europe work to the great disadvantage of Korean companies. Second, investing in Southeast Asia and Latin America where Korean companies can take full benefits of their *O* advantage can be regarded as 'normal investment' activities. However, FDI in Europe where high labour costs exist and technology has advanced farther than Korean companies, is far-removed from helping the Korean companies maintain their competitive *O* advantages. Therefore, the investment activity in Europe is more for 'learning purpose' to adopt advanced technology or simply for 'avoiding trade barriers' in a passive manner.

However, this paper raises questions about the 'reverse investment theory' and refutes the basic logic of this theory (e.g., no clear *O* advantages of Korean firms, high labour costs of the EU, and advanced technology access as the main investment motivation). Is it true that there is no possibility of Korean companies maintaining their ownership advantages (based on low production cost) when located in Europe? Is Europe the single place where production cost is high and technological advances are great? Is



Europe an unattractive place for investors who pursue low production costs? Put it simply, this paper argues that the main motivations for Korean electronics firms investing in Europe comes from the pursuit of 'cost saving' as well as avoiding trade restrictions. In other words, unlike the main hypotheses of 'reverse FDI' approach, maintaining their competitive O advantages has been one of important incentives for Korean investors in the EU.

The following major findings of the research support the main hypotheses in this thesis:

1) Korean electronics *chaebols* have grown based on the strategy to produce certain limited items of products, backed up by abundant and cheap labour and the government support for export promotion (*see* chapter 3). Therefore, the basis of competitiveness lied in mass-producing specific consumer electronics such as television sets and microwaves, which do not require high technologies, while maintaining price competitiveness due to low production costs in home. However, these competitive advantages began to lose incentives after the late 1980's as wage levels in Korea rose rapidly and the major export markets such as the U.S. and Europe increased trade barriers. As a result, for Korean electronics *chaebols* to maintain their O advantages, they began to invest in foreign markets where mainly low-cost labour was available. Investment in Southeast Asia and Latin America is a case in-point in a way to maintain low production costs. Previous researches emphasize that unlike investment in Southeast Asia, investing in developed areas such as Europe and the U.S. makes it impossible to take advantage of low production costs, which is vital to maintaining the competitiveness of Korean consumer electronics *chaebols*

2) However, it is made possible because of the Location (*L*) advantages that under-developed European countries (regions) offer, such as relatively cheap labour and a significant amount of investment subsidies, which leads to low production costs. In other words, the 15

members of EU offer different *L* advantages as investment hosts; different areas even within the member countries offer different *L* advantages. Existing research is limited in recognizing this point. The previous research is based on a premise that all European areas offer the similar kinds of location advantages: for instance, high labour and production costs, advanced technology and infrastructure. However, as well analyzed in Chapter 4 of this thesis, in many aspects, the differences among countries and regions in Europe are significant. Usually, the average labour costs of less-developed cohesion countries such as Portugal, Greece, Ireland and Spain is just half the European average; and even in developed-countries such as the UK and Germany, there are quite a few areas within the nations where labour costs are much below the national average. For instance, the labour cost in North, Wales, and Northern Ireland is much below the national average of the UK. Korean companies are concentrating investment on these under-developed areas (*see chapter 4*).

3) Besides, EU peripheral areas are designated as the target areas for the regional policy of EU, with a variety of subsidies offered. As seen in Chapter 4 in this paper, the Korean companies investing in these areas have received a significant amount of diverse subsidies, greatly helping Korean firms achieve their goal of pursuing low production costs. Furthermore, contrary to what the existing research asserts, the Local contents rule set by the EU has not actually contributed to increasing production costs for Korean companies operating in Europe. Locating their subsidiaries or Korean component companies in Europe and receiving supplies at cheap price from them, Korean companies are complying with the Local contents rule, while reducing production costs in Europe.

Therefore, I believe that some ‘cost saving factors’ (such as low labour costs, various types of grants and ability to source low-cost components from Korean suppliers) in the EU have been one of major determinants for Korean firms in the EU. Low production cost is one of the most important

location advantages that needs to be provided in order for Korean consumer electronics *chaebols* in the EU to keep their competitive advantages. Therefore, EU peripheral regions have satisfied the requirements for Korean electronics investors by offering relatively low labour cost and various investment subsidies, etc. This is why Korean consumer electronics investors have invested heavily in peripheral regions (low cost production locations) within the EU.

Simply, the overall benefits for Korean manufacturing firms in the EU can be summarised as below:

**Overall benefits of FDI in the EU for Korean companies**

- (+) circumventing trade restrictions
- (+) grants and subsidies
- (+) lower labour costs than Korea
- (+) low-cost sourcing from Korean suppliers

## **5.2. Limitation and future research**

The main limit of this paper is lack of comparison regarding the investment in Europe as opposed to the nature of investment in the U.S. If, more comparative research was conducted on the characteristics of the investment activities of Korean companies in the U.S., which is another developed economy, the nature of investment by Korean firms in Europe could have been studied more in depth. Lack of comparison research is pointed out in detail, in the recently released article by Miotti, Perrin and Sachwald (2001). According to them, empirical tests on the decision of Korean firms to invest in the industrialised economies need to be conducted by two different regions (e.g., the US and the EU). With a series of comparative tests, they argued that Korean FDI in the US has been mainly motivated by technology sourcing in high tech sectors. But it is not

the case for investment in Europe which is more concentrated in consumer electronics.<sup>25</sup>

Also, there are some interesting topics for future research emerging from the current research. Notably, one of the most important topics that requires more attention is what impact the investment of Korean companies has on the economic development of EU peripheral regions. Studies conducted by the European Commission have found that FDI has been one of the critical factors in determining the success of EU regional and cohesion policy.<sup>26</sup> Therefore, the analysis of the costs and benefits of FDI have received considerable attention from both academics and policy-makers in the EU. However, the literature dealing with the impact of Asian NICs FDI in economic development of host EU regions (mostly objective 1 &2 regions) are almost completely absent. Studies demonstrating what kind of performance the Asian FDI firms (notably Korean investors) display once they enter the host regions, or how they affect the regional development are very rare. For that research topic (i.e., Asian NICs FDI and EU regional development), many of the findings and hypotheses suggested in this thesis could be helpful. Because, the various effects of FDI on the host region are mainly influenced by the nature of 'competitive advantages' which investing firms and host economies possess. The effects of the FDI on the development of host economy are the result of the interaction between the firm specific O advantages of inward investors and the location specific L advantages of host country (Young et al, 1994; Dunning, 1998). Therefore, the main findings of this research -

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<sup>25</sup> According to Miotti, Perrin and Sachiwald, motivations of Korean FDI into the EU are actually different from those of investment into the US. Korean FDI in the EU has not been motivated by technology sourcing in high tech sectors- which is the one of main motivations of Korean FDI into the US

<sup>26</sup> Various publications of the Commission, notably 'periodic reports' and 'cohesion reports', have emphasized the positive contributions of FDI for reducing regional disparities. According to the 'Sixth periodic report', the economic development of a region is strongly linked to its ability to attract and retain highly productive activity, such as FDI. And a more recent report has emphasized that FDI contributes to regional development by increasing the capital stock and productive capacity (Sixth Periodic Report of the EU pp. 52-56, and; Preparation of the second cohesion report: 2001 pp. 17-34).

the O advantages of Korean firms and L advantages of EU peripheral regions— could be useful for the analysis of Korean investors' role for the economic development of EU peripheral regions.

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