

Trends and Determinants of South Korean Outward Foreign Direct Investment

JUNG MIN KIM AND DONG KEE RHE

Abstract

This paper examines the trends and determinants of South Korean outward foreign direct investment (FDI) and the extent to which location decisions in a single country need to be nested within the general theory of the multinational firm. In a conceptual framework analysis, the patterns of South Korean outward FDI exhibit several different types of motivations for going abroad. We empirically examine the important factors for the location decisions of South Korean outward FDI, considering host countries at very different stages of economic development. In line with this objective, we test the determinants of South Korean outward FDI using macroeconomic factors of host countries. Thus, we both identify several factors that affect such trends and develop hypotheses that could explain the phenomenon generically. We test our hypotheses using official South Korean outward FDI data collected from 1994 to 2005. Several distinctive features correspond to the behaviour of South Korean multinational firms. As a result, we find that the dynamic effects of economic development have influenced the changing character of outward FDI.

Keywords: South Korean outward FDI, theory of FDI, location decisions, MNE firm strategy

Introduction

This paper examines (1) the trends and determinants of South Korean outward foreign direct investment (FDI) attributable to South Korean multinational firms over the period 1994 to 2005, and (2) the extent to which location decisions in a single country need to be nested within the general theory of the multinational firm. South Korean outward FDI has drastically increased since the late 1990s. Regarding South Korean government policy relative to outward FDI, it was not until 1987 that the South Korean government liberalized its outward FDI regulations. The rise in South Korean outward FDI remains an unclear phenomenon. One reason for this lack of clarity is the limited cross-sectional research on the topic; hence, it is difficult to investigate dynamic changes of outward FDI. Using official data from the Export-Import Bank of Korea,

this study is the first empirical test to identify and analyse the driving force behind South Korean outward FDI.

Our argument starts with the premise that South Korean outward FDI may possess unique characteristics different from the characteristics attributable to developed countries or developing countries and that this uniqueness may rest on the basis of South Korea's investment development path. Recently, changing patterns of outward foreign direct investment have raised important questions in emerging economies (Hejazi and Pauly 2003). Even though several indicators point to a strengthening of the typical emerging economy's role in other countries' investment patterns, previous studies have focused mainly on the impact of developed countries' outward FDI (Gammeltoft 2008).

In this regard, South Korea is a particularly good empirical test case for the general theory of FDI as the country presents many pertinent related phenomena. South Korea is a successful representative of several leading emerging and developing countries even though it is now clearly on the path toward becoming a developed country. Furthermore, even though South Korean outward FDI flows have fluctuated since the 1997 financial crisis, outward FDI has steadily increased. South Korean multinational firms have started to actively participate in outward FDI owing to the outward investment liberalization that took place in the 1990s.

This study is designed to ascertain the characteristics of South Korean outward FDI. Several findings have emerged that differ from previous findings. We should remind ourselves that the behaviour of South Korean multinational enterprises (MNEs) is still evolving and hence, their behaviour could not be the same as that of developed MNEs. After increases in the degree of their multinationality through outward FDI in the early 1990s, several South Korean corporations, including Samsung, LG and Hyundai, are now being recognized as representative MNEs the world over. In this context, our study offers an opportunity to examine how well a single distinctive country's related phenomena fit the corresponding theory. Also, this study shall provide additional evidence to the emerging stream of research-oriented literature on the subject. From the research, we expect that theoretical generalization is appropriate, as prior studies have identified impacts on the 'outward FDI location decisions' of multinational enterprises.

This study is organized as follows: first, we evaluate a more conceptually comprehensive framework of the motivations of South Korean outward FDI and then review the literature and develop the hypotheses for empirical analysis. Next, we present the methods and data. In

this same section we explain details of the methodology used in our research. Specifically, the section describes the measurement formula, the research model and variable specifications. Then the data and the sample are explained. We discuss the empirical results from an analysis using data from official statistics (covering the period between 1994 and 2005) of publicly recognized organizations such as the Export-Import Bank of Korea, the World Bank, the UN, the ILO, and the IMF. Finally, we present conclusions.

A Conceptual Framework for South Korean Outward FDI Motivations

Today, South Korean firms such as Samsung, LG and Hyundai have become full-fledged multinational firms (Gammeltoft 2008). Many South Korean firms have rapidly developed from being domestic players that lacked competitive advantages into being strong global players. To enhance their competitiveness they go abroad to expand their businesses. It is clear that they invested mainly in developed countries during the early stage. These firms, however, have gradually invested in both developed countries and developing countries. It is recognized that market size is an important determinant of investment patterns. For example, Samsung's motivation to engage in variously located outward FDI stemmed chiefly from a desire for market access in developed countries at the initial stage. But there are exceptions. In the cases of Brazil and China, this pattern of behaviour reflects market size, low-cost production (Dunning 2003) and low labour cost. Meanwhile, LG's motivation is different. Even though they initially focused on market access in developed countries, LG's effort is to internalize certain transactions by means of active involvement in foreign expansion rather than merely perform as a passive investor. However, it is interesting to note that Samsung and LG have exhibited exactly the same pattern of location choice over time

In general, the location decision for outward FDI has changed over time. Firms concentrated their outward FDI in developed countries at the initial stage, but later moved to developing countries. But this pattern did not manifest itself in a mutually exclusive manner among many South Korean multinational firms. According to traditional FDI theories, firms are likely to move into less developed countries, not into developed countries. Diversified motivations resulting in more foreign investment are more acceptable in explaining firms' globalization strategies. The discrepancy can be understood in the concept of exploitation and exploration (March 1991).

According to Moon's study (2007), four of the major motivations for South Korean outward FDI have been cheap labour, a saturated market at home, cost disadvantage and competition. To overcome these factors, many South Korean firms have invested abroad to gain access to efficiency, as well as market and strategic assets. For example, South Korean firms that invest in Asia have tended to seek low-cost labour to reduce production costs (MOCIE 2002). South Korean firms that invest in North America and Europe have generally been either market-seeking or strategic asset-seeking FDI. Market seeking for South Korean outward FDI includes efforts to support trade channels and to overcome trade barriers. Strategic asset seeking for South Korean outward FDI includes efforts to acquire or to improve technology and research and development (R&D) (MOCIE 2002, Moon 2007).

An accurate illustration of South Korean firms' outward FDI can be found in both Porter's diamond model and the South Korean government's outward FDI policy. Porter (1990) introduced the diamond model, which consists of four attributes of analysis: factor conditions, demand conditions, related and supporting sectors, and strategy, structure and rivalry. First, factor conditions include cost reduction and technology learning. In the case of cost reduction, China is the primary location for South Korean outward FDI because of its low labour cost, which is about one-tenth that in South Korea (Export-Import Bank of Korea 2001, 2004). For example, LG Electronics has established more than ten production sites in China since the mid-1990s and has significantly reduced its production costs. About 98 percent of the company's employees in China are local workers and more than 80 percent of resources and components are local sources (Moon 2007). Given its success in China, the company has further expanded its production in China into high-value products. The case of technology is considered an important firm-specific advantage and is usually exploited by developed countries' MNEs that are investing abroad. However, firms from developing countries lack such high technology, and hence, these firms often adopt outward FDI as a means to overcome their existing disadvantages – in other words, as a means to acquire much needed advantages overseas (Moon and Roehl 2001). Regarding technology learning, a number of South Korean firms have invested abroad to learn about or to access foreign technologies. Even though some of these investments have not yielded satisfactory profits abroad, the main goal has been to gain access to more advanced technologies and to establish a global brand name. For example, LG Electronics purchased a five-percent share of Zenith (United States) in 1991. The

main purpose of the investment was to acquire substantial knowledge of 'flat screen TV' technology and to acquire a brand name. LG Electronics subsequently increased its stake in the company to 57.7 percent in 1995 and eventually took over the company in 1999 (Moon 2007).

Second, demand conditions include market seeking, local presence requirements, production creation and market learning. Many companies seek a foreign market to diversify the risk of focusing on the domestic market (Deng 2004). Moreover, saturated domestic markets and intensive competition in industries such as the electrical-appliances industry diminish companies' profits and, therefore place pressure on the companies to go abroad in pursuit of higher profits. Outward FDI may be preferred to exporting when transaction costs are high in the external market. Samsung Electronics invested in Vietnam-based production of television sets, monitors and other home appliances that would eventually go on sale in local Vietnamese markets. The rationale behind this investment strategy rested on Vietnam's requirement that foreign companies establish production facilities in Vietnam in order to sell their products to Vietnamese markets (KITA 2003). Firms may need to modify their products (e.g., improve their quality) to access new markets. For example, LG Electronics introduced new products such as three-directional air-conditioners and stainless-steel refrigerators in Taiwan (KITA 2003). Operating close to overseas customers can be an important feature in a company trying to respond quickly to consumer tastes and to access design facilities. Samsung Electronics established a design center in Italy to learn about advanced Italian design mechanisms. Samsung has already built design centers in Los Angeles, San Francisco, Tokyo, London and Shanghai.

Third, related and supporting sectors include follow-the-customer strategies, infrastructure and regulation bypassing. Firms may follow their customers abroad to keep the customers. The follow-the-customer FDI strategy can be found in manufacturing and service industries. For example, 49 parts-suppliers to Hyundai Motor followed the latter in investing abroad. Currently, about ten percent of the total suppliers to Hyundai Motor operate outside South Korea (KITA 2003). Host country location advantages such as provision of a conducive business environment and excellent infrastructure can play a role in encouraging outward FDI. Samsung chose Malaysia for its Samsung Electronics Complex because of the high quality of labour, the stable political environment, and the advanced business infrastructure of the host country compared to other countries in the region (KITA 2003). Some Korean

firms go abroad to avoid existing restrictions such as foreign exchange controls, while others invest abroad to take advantage of trade quota privileges of the host countries (Moon 2007).

Fourth, strategy, structure and rivalry include labour management relations, catch-up, and strategic location. Concern over labour issues at home has led many South Korean firms to invest abroad. The tension between labour and management in South Korea, particularly in labour-intensive industries such as textiles, exemplifies this type of concern. Taekwang Corporation of South Korea, a supplier to Nike, established production facilities in Vietnam and hired more than 10,000 Vietnamese workers – the country being known as a place in which labour issues are easier to manage (KITA 2003). In terms of catch-up, South Korean firms invest abroad to imitate or to offset the advantages of their competitors' previous moves abroad. For example, Samsung Electronics and LG Electronics are two major competitors in the South Korean electronics industry. But Samsung has stronger technology than LG in some areas such as in semi-conductors.

According to the traditional outward FDI theories, Samsung should be more active because it has stronger technology or a greater ownership advantage than LG. However, LG has recently invested more capital in technology than Samsung. One reason for LG's outward FDI behaviour is LG's attempt to catch up with Samsung (Moon and Roehl 2001, Moon 2002). In addition, South Korean firms may invest in a strategic location because of the need to be well positioned in key markets, especially in the automotive industry. Hyundai Motor invested in key locations in North America, Europe and Asia. The company invested abroad to bypass trade barriers and aspires to become a top global automaker. To do so, the company has to survive and grow in the most competitive markets in the three previously mentioned regions, and operate close to local customers. The company has established R&D centers and production facilities in major strategic foreign locations (Moon 2007). Samsung Electronics established its first overseas semiconductor plant in Austin, Texas in 1998. In the following year it generated US\$ 700 million in sales and US\$ 160 million in income, which was acknowledged as a very successful outward FDI case (KITA 2003).

Porter's (1990) diamond model analysis suggests that the investment behaviour of South Korean firms has been passing from one end of the investment development path to the other, from the earliest stage to the final stage. Aiming to examine the validity of traditional theories of FDI in explaining the investment behaviour of South Korean firms at stage three or four of the investment development path (OECD 2006),

we found that the behaviour of South Korean firms does not completely comply with the traditional theories of FDI. Thus, we may argue that this applies not only to South Korean firms but also firms from other economically evolving countries.

Meanwhile, South Korean government policy may have led to a distinctive pattern of South Korean outward FDI, even though there has been no apparent regulation governing outward FDI since the 1990s. The South Korean government's policy has evolved over the years (Table 1).

TABLE 1: Korean outward FDI policy development

<p>Stage 1: Introduction (1968 -1974) In 1968, the Korean government introduced four articles on foreign investment law under the foreign exchange regulation (Rhim 1975). Article 131 refers to the approval of foreign investment. It states the establishment of overseas subsidiary as an exception. To acquire foreign stock, real estate or bond, approval of the Minister of Ministry of Finance is required. The investor must submit required documents, including contract paper, permission by the host government, business plan, acknowledgement, and other required documents.</p>
<p>Stage 2: Growth (1975-1979) Due to an increase in outward FDI activities, the Korean government revised the laws on outward FDI in 1975 and 1978. In 1975, the Ministry of Finance enacted foreign investment approval and post management guide and in 1978 the Bank of Korea established the by-laws on foreign investment approval operations. The approval requirement was needed. Investing companies had to get prior approval of their business plans by the president of the Bank of Korea before concluding a joint contract or acquiring the warrant by the host Government. The attempt of the Government to control capital flight from the country pushed the introduction of controls.</p>
<p>Stage 3: Encouragement (1980-1985) During this period, the Korean government liberalized the law relating to outward FDI. Revisions were made in 1981, 1982 and 1983. Many restrictive conditions for outward FDI were relaxed. In July 1981, the requirement of three-year business experience and host country's condition were relaxed and streamlined, and pre-approval process on outward FDI plan was abolished. In July 1982, the rate of investment was relaxed and in December 1983, restriction on the credit limit of profit reservation was also relaxed.</p>
<p>Stage 4: Openness (1986-2004) Since 1986, the Korea economy has recorded trade surpluses and thus outward FDI was more actively encouraged. Increasing wage costs and deterioration of labour-management relations also drove firms to go abroad. The Korean government has relaxed most of the outward FDI-related regulations including the investment ceiling for venture capitalists. In 2003 a new enforcement ordinance in foreign trade law was established, which included support for outward FDI by Korean firms by solving obstacles faced by Korean firms operating abroad.</p>

Source: Modified by authors based on Moon (2007)

The government has also recently introduced new measures supporting investment by South Korean firms' (Table 2). The South Korean government provides four major types of outward FDI measures: financial support, taxation, overseas investment services, and institutional services such as administration and information.

The Export-Import Bank of Korea provides loans to investing companies and, more specifically, provides loans of up to 90 percent of the capital invested abroad to small- and medium-size companies. Tax support includes avoidance of double taxation. The Korea Export Insurance Corporation, a state-owned corporation established under the Ministry of Commerce, Industry and Energy, provides export credit insurance to South Korean exporters against non-payment risks by buyers, and this same corporation guarantees banks that provide export financing and that issue bonds for exporters. The corporation also covers war and civil

TABLE 2: Korean outward FDI measures

Type	Classification	Description
Finance	The Export-Import Bank of Korea	To reduce financial burdens of an investing company, the bank provided a loan plan that can cover up to 80 percent of estimated total overseas investment (90 percent for the small-and medium-size firms)
	Economic Development Cooperating Fund (EDCF)	EDCF supports investment in developing countries especially for business involving a long-term resource development and business that takes a long retrieval period. The loan condition is repayment in 15 years with a 5 year grace period at an annual interest of 5-6percent.
	Agreement between Government on Investment Security	As a means to protect overseas Korean investors from war, expropriation, restriction on remittance, etc., Korea has established investment security agreement with 62 countries.
	Foreign direct investment post management system (Foreign exchange regulation-Clause 7-9 Article 9)	The aim of this regulation is to induce fair management overseas, prevent possible problems caused in overseas subsidiary, and avert the flight of invested capital. The report organization was designed for foreign exchange banks and overseas legation. It should practice post management for a case of foreign direct investment.
Taxation	Exemption on Overseas Paid Tax (Corporate Tax Law-Article 57)	If an investor has paid corporate tax to the host country, then the amount of tax paid will be exempted within the limits of tax deduction in that business year. A domestic firm is also subject to a tax credit for dividends received from its subsidiary.
	Exemption on Deemed Overseas Paid Tax (Corporate Tax Law-Clause 3 Article 57)	If a country that has concluded a taxation treaty with Korea in order to prevent double taxation decides to exempt tax for Korean firms, then the same amount of tax will be also exempted for these firms in Korea. The Korean Government will acknowledge the exempted tax as tax paid overseas so firms do not have to repay the tax in Korea.
	Exemption of Corporate Tax on the Dividends from the Overseas Investment (Qualified Beneficial Tax Law-Article 22)	If a country possessing a certain resource exempts tax for dividend income generated from overseas resource development investment by Korean firms, then the same amount of tax will be also exempted in Korea. This is to promote overseas resource development.
	Double Taxation Avoidance Agreement	Korea has established this agreement with 57 countries so as to avoid imposing double tax on overseas investing firms.
Overseas Investment Insurance Administration	Korea Export Insurance Company	It helps Korean firms that experienced a loss in capital, dividends and interest, due to expropriation, war, breach of contract, and risk of remittance.
	Korea Overseas Company Assistance Center	This centre collects information, provides administrative help, and solves issues concerning Korean firms abroad. The centre also supports overseas business on behalf of the Government.
	FDI Information Network	In order to provide precise information for companies willing to invest abroad, the Ministry of Finance and Economy runs a separate website related to outward FDI information network (www.mofe.go.kr/odi)
	Korea Overseas Company Information System (MOFE)	The overseas direct investment information network page (www.mofe.go.kr/odi) also has a website of Korea overseas company information system (www.kocis.go.kr), which provides information on overseas companies via the Internet.

Sources: Modified by authors based on Moon (2007), MOFE (2005) and MOCIE (2006)

disturbance, expropriation, inconvertibility and the threat of contract risks connected with new investment overseas (MOFE 2004).

South Korea has many 'outward FDI'-supporting organizations¹ that promote investment overseas. For instance, the Ministry of Finance and Economy runs an overseas direct investment information network website, which provides information on foreign direct investment procedures, on countries' investment-related features and on South Korean overseas companies. The Export-Import Bank of Korea also provides similar information in publications and through the internet, and provides substantial support for South Korean outward FDI. The International Management Institute was established on 31 October 2005

to consult with small- and medium-size companies investing abroad in regard to the environment of a given host country, joint ventures and business opportunities abroad.

A Theory for South Korean Outward FDI

Several international business researchers (Makino *et al.* 2002, Moon 2002) have sought a rigorous explanation as to why and when developing countries invest in developed or developing countries. In particular, international business scholars are often asked why a developing country's MNEs invest in developed country's MNEs. In fact, these investments are becoming more popular. As scholars have noted, the traditional FDI theories operate on the premise that the investing firm is from a developed country and the country invested in is a less developed country (Makino *et al.* 2002, Moon 2002). Perhaps, as Erramilli *et al.* (1997) mentioned, this premise reflects the focus of empirical studies on developed countries that take ownership advantages in foreign host locations. Many scholars argue that traditional FDI theories are not satisfactory in explaining a variety of FDI in emerging economy countries because the theories neglect specific cases in which emerging country firms expand their international activities from their home countries to both developed countries and developing countries (Makino *et al.* 2002). In fact, little empirical investigation has focused on this issue.

This study is using the theory of FDI that addresses firm strategy as well as macro-economic factors. Accordingly, this study constitutes an empirical investigation into the issue and rests on an analysis of longitudinal South Korean outward FDI data. Currently, South Korea is too economically developed to be considered as a developing country, but remains sufficiently undeveloped to be excluded from the set of traditional advanced countries. Hence, South Korea is still classified as a rapidly growing emerging country. South Korean outward FDI was four times greater in the 1994-2005 period than in 1993 (Export-Import Bank of Korea 2006). South Korean outward FDI in the manufacturing sector accounted for about 50 percent of the total value of South Korean outward FDI.

There is still no clear explanation for changes-of-location decision patterns of South Korean outward FDI. Nor is there theoretical or empirical support on the question of whether South Korean firms would prefer to invest in low-income countries for low-wage advantages and in high-income countries for market entry into large potential markets. In the 1990s, many South Korean firms invested in the Silicon Valley of

California, although these firms had little significant ownership advantage relative to the firms in Silicon Valley. The firms have learned a lot in terms of technology and management skills from this investment (Moon 2002). According to traditional FDI theory, firms go abroad when they have significant ownership advantages, but the new type of FDI appears to create new ownership advantages. In the cases of Samsung and LG, the major competitors in the South Korean electronics industry, Samsung should be more active because it has a better ownership advantage than LG. However, LG invested almost twice as much as Samsung in recent years. The traditional FDI theories poorly explain the new types of FDI exemplified in the LG case. LG's approach to Silicon Valley is basically strategic 'asset-seeking' FDI rather than 'asset-exploiting' FDI (Moon and Roehl 2001, Makino *et al.* 2002, Moon 2002).

Even if there are some studies on South Korean outward FDI, they do not use longitudinal panel South Korean outward FDI data at the macro-economic level. It is necessary to use a macro-economic perspective for a more realistic analysis. In particular, using macro-economic data of South Korea (a country that has evolved from a less developed country to a developed one) has meaningful implications. Thus, firms' decision makers are increasingly aware of how certain factors can influence firms' location decisions targeting different kinds of assets.

The current study's empirical test identifies and characterizes real, specific country-based motivations underlying foreign investment. Moreover, the results reveal that the diverse location factors, according to home country, depend on the stage that each group of host countries has reached along the investment development path. In order to fully understand South Korean outward FDI, it is important that empirical analyses take full account of investing trends by South Korean firms and it is necessary that the analyses clarify the investment location decisions of South Korean MNEs. Table 3 shows different motivations underlying South Korean outward FDI according to host countries. South Korean outward FDI in developed countries prioritizes market seeking as a way to secure access to markets. In contrast, South Korean outward FDI in developing countries prioritizes efficiency as a way to reduce production costs. Many developing countries have invested in developed countries. Their goal has been to find, acquire and exploit strategic assets such as advanced technology and newly acquired competitive advantages (Dunning 2000, Moon 2002). South Korean MNEs in developed countries are likely to exploit a wider variety of intangible assets while South Korean MNEs in developing countries are likely to

TABLE 3: Motivations of Korean Outward FDI by Host Countries

	North America	Europe	China	ASEAN	Latin America	Total (%)
Market Access	39.8	48.7	36.2	33.0	25.3	36.5
Reduction of Production cost	11.4	-	42.8	36.7	32.4	31.2
Access to parts	9.7	5.4	5.6	7.5	8.8	7.2
Promotion of export	11.4	10.8	4.9	5.9	2.9	6.9
Access to technology	10.2	10.8	0.9	0.5	2.9	4.5
Avoidance of trade barriers	9.1	21.6	3.1	4.2	14.7	5.9
FDI policy in host country	4.0	2.7	3.8	6.4	11.8	4.3
Others	4.4	-	2.7	5.8	1.2	3.5
Total	100	100	100	100	100	100

Source: MOCIE (2002).

rely on simple competitive advantages. This finding indicates that South Korean MNEs in developed countries are under pressure to compete with local rivals that are more advanced.

Location Aspects of Outward FDI and the Investment Development Path

Location factors usually differ from one another regarding the type of motive ascribable to each one. As a supplementary approach, looking at the investment development path will help us to understand this phenomenon. This approach helps identify the main motives and the different location factors in foreign direct investment. Dunning and Narula (1996) examine the economic development of different countries by categorizing their evolution through five stages.² The investment development path approach identifies three types of motives underlying investment: the efficiency-seeking motive, the market-seeking motive and the strategic asset-seeking motive (Dunning and Narula 1996). The three motives also represent asset exploitation and asset exploration (Makino *et al.* 2002, Buckley *et al.* 2007). According to the assumptions of this approach, the most relevant factors for locating FDI depend on the development stage of a given host country.

Meanwhile, there are some significant motivation-related differences between developed countries and developing countries. The main mo-

tives for investing in developing countries are the efficiency-seeking motive and the market-seeking motive, whereas the main motives for investing in developed countries are the strategic asset-seeking motive and the market-seeking motive. In fact, when the host country develops, the type of foreign investment gradually evolves to higher levels. The investment development path traces the link between the shifting trends of a given home country's efficiency-seeking investments or that country's market-seeking investments and the economic development of different regions. Firms, however, might exhibit a mix of motives different from that discussed above. This phenomenon is likely to be repeated when competitive pressures start building up even in the new location, triggering the search for another prospective region supportive of efficiency-seeking and market-seeking investments.

Research on the investment path, whether to developed or developing countries, has a longitudinal element (Dunning 1980, Dunning and Narula 1996, Galan *et al.* 2007). Less developed countries attract mostly efficiency-seeking FDI in product markets (Deng 2004). However, many firms in developing countries perhaps can invest abroad, as do firms in developed countries, regardless of whether their factor conditions and market demand conditions have been similar to the corresponding conditions of developed countries.

In the case of South Korean outward FDI, motives in location decisions for investing abroad are mixed. The South Korea economy has developed rapidly. Currently, South Korea is situated between stages three and four of the investment development path (OECD 2006). Earlier in the country's history, South Korea did not correspond to a situation exactly the same as Dunning's stage one. Instead, South Korea exhibited chiefly market-seeking motives owing to the country's lack of capital and technology skills.

Factors Causing Changes in Outward FDI

Many scholars provide general theoretical frameworks that take into account all the characteristics of FDI. Given minor differences among these characteristics, the scholars suggest that the MNEs should locate their manufacturing facilities abroad if profitable. In brief, the internalization theory (Buckley and Casson 1976) focuses on imperfect markets for knowledge and expertise, which contribute to a natural monopoly. But while Hymer (1976) sees FDI as a way of internalizing pecuniary externalities arising from structural market imperfections, Buckley and Casson

(1976) see it as a way of internalizing pecuniary externalities arising from external market imperfections. That is, once knowledge is disclosed, its value to a seller is reduced. Rugman (1981) defines internalization as 'the process of making a market within a firm' and considers multinationals a response to government regulations and natural externalities that can be overcome by internalization (Park 1999). Hennart (1991) incorporates property rights theory, transaction costs theory, and the market failure literature into his treatment of the issue. In applying transaction costs theory to horizontal investment, he introduced two types of intangible assets, namely, knowledge and goodwill (reputation). Both of these intangible assets are proprietary firm-specific assets. Teece (1981, 1986) also argues that the MNE and FDI represent a response to high transaction costs by firms with unique assets that have value when utilized in production facilities located in foreign markets. He introduced three factors that MNEs need in order to make an FDI: strategic advantage, location and transaction costs. He argues that firms with strategic advantages should internalize them to reduce market transaction costs.

Dunning's (1980, 2000) eclectic theory expands the internalization theory of MNEs to incorporate location factors. To explain why a particular location is selected among alternatives, some scholars consider location advantage as a condition. However, this approach cannot explain why firms invest abroad without the combined concept of ownership advantage, location advantage and internalization advantage. The eclectic paradigm emphasizes the assertion that the ownership-specific advantages drawn from a home country constitute the important driving force for foreign direct investment (Dunning 1998, 2000). However, the eclectic paradigm posits at large that FDI flows from more developed countries to less developed countries since investing firms from more developed countries have some ownership advantages that are not available to local firms in less developed countries. The paradigm also mentions that firms in developing countries invest in developed countries for internalization-related reasons. In general, FDI explains the effects of economic opportunities generated by both the market demand and the low cost characteristics of a home country and those of a host country. Namely, FDI moves to countries with economic indicators that increase profits and decrease labour costs.

Recently the increasing role of emerging economies has implied that potential opportunities exist for both a given home country's economy and a host country's economy. However, scholars have neglected the scenario in which emerging countries' outward FDI constitutes one of

the major sources of world economic development (UNCTAD 2006). According to UNCTAD (2006), recent outward FDI from developing countries help these countries not only explore investment opportunities abroad but develop a competitive position as well.

Nevertheless we do not clearly understand developing countries' affection for FDI even though we have been gaining a better understanding of how different economic contexts influence multinational companies, as we have discussed before. In particular, there is little research examining the influence that a country's macro-economic factors have on FDI (Ingham 1996). Previous research has investigated chiefly the effects that a country's structure has on the country's economic growth in order to explain the development of the country itself. Kumar and Kim (1984) found that the amount of the outflow of FDI from Asian newly industrialized economies to developed countries has rapidly increased over the past decade. Emerging economy firms investing in developed countries have tended to use outward FDI primarily to obtain intangible assets. In contrast, the emerging economy firms investing in developing countries have tended to use outward FDI primarily to obtain competitive advantages.

As mentioned above, our argument is that South Korean outward FDI possesses unique characteristics different from those of developed countries and developing countries. South Korean outward FDI has tended to wind up in developed countries for both strategic asset-seeking and market-seeking purposes, and to wind up in developing countries for both efficiency-seeking and market-seeking purposes. As in the previous studies, we claim that both the size of the target market and labour costs significantly affect decisions to invest abroad. We claim that technology intensity is a strong motivation to invest abroad. In particular, we highlight the fact that the strategic asset-seeking approach in South Korean outward FDI yields the most important consequences for both developed countries and developing countries.

Hypotheses Regarding the Determinants of South Korean Outward FDI

A widely accepted assertion is that various factors drive outward FDI in developing countries (Li and Resnick 2003, Gammeltoft 2008). Li and Resnick (2003) mention that market-related factors appear to be strong forces and rising labour costs in the home economy are a particular concern. Also, competitive pressures on developing country firms are pushing them to

expand overseas. In addition, many developing countries are concerned about how their rapid growth will affect their economic expansion.

From our empirical tests, we find that the location decision motives in South Korean outward FDI are similar to – yet different from – the location decision motives of other emerging countries passing along the evolutionary path. However, the difference might not always be clear cut, even in same-country research. South Korean firms prioritize investing abroad in line with labour-seeking goals and market-seeking goals until the firms obtain competitive advantages. Then the firms may use their investment activities – that is, the firms may require new source of competitive advantage – as a means to improve their global market position.

Market-seeking Outward FDI

One of the motives underlying investment decisions is the market-seeking motive. Market-seeking FDI is characteristic of relatively developed countries, which have higher labour costs. Firms have a greater tendency to undertake FDI in markets whose size is large enough to compensate for the costs of investments in those markets. Dunning (1998) and UNCTAD (2006, 2007) offer the following comments on market-seeking motives. First, market-seeking FDI provides complementary assets such as technology, management and organizational competence. Second, market-seeking FDI fosters backward supply linkages and clusters of specialized labour markets and agglomerative economies. Third, market-seeking FDI raises standards of product quality and domestic consumer expectations of indigenous competitors. Fourth, market-seeking FDI stimulates local entrepreneurship and domestic rivalry.

Emerging countries' firms tend to invest in high-income countries to produce differentiated goods marketed toward high-income customers (Makino *et al.* 2002). To gain higher returns than indigenous firms in the host country, emerging countries' firms need to possess superior technological capabilities that enhance the uniqueness of the differentiated goods in question. Therefore, market-seeking FDI would be more likely to occur in large countries than in small countries for standard goods, and more likely in developed countries than in developing countries for differentiated goods. From this point of view, we can conclude that developing countries tend to invest in developed countries for market-seeking purposes, that small and large developing countries do so for efficiency-seeking purposes, and that large developing countries do so for both market-seeking purposes and efficiency-seeking purposes.

The fact that different external environments pose different levels of complexity for foreign investors (Lee and Beamish 1995) is particularly significant to globally operating firms from developing countries. According to Van Hoesel's (1999) in-depth case studies of South Korean consumer electronic firms are more likely to invest in countries where market potential is large.

Assuming that South Korean firms have an easier time accessing developed countries' potential markets than developing countries' potential markets, we expect that South Korean firms are more likely to invest for market-seeking purposes in developed countries, and less likely to invest in developing countries. Hence, we create the following hypothesis that we test in the study.

Hypothesis 1: South Korean outward FDI is associated positively with absolute and relative host market size.

In previous literatures, the indicators of market attractiveness are determined by market potential such as gross domestic product (GDP) and population. Similarly, Sethi *et al.* (2003) found that GNP is highly significant and positive, but population shows no significant. Similarly, we found that GDP, as a proxy of market size in developed countries, is very significant.

Efficiency-seeking Outward FDI

In addition to their large market size, developing countries offer lower wages and factor costs (Makino *et al.* 2002, Dunning 2003). Dunning (1998) and UNCTAD (2006, 2007) summarized the efficiency-seeking motive as follows. First, efficiency-seeking FDI improves the international division of labour and cross-border networking and entices comparative advantages of host countries. Second, efficiency-seeking FDI provides access to foreign markets and/or sources of supply. Third, efficiency-seeking FDI fosters backward supply linkages and clusters of specialized labour markets and agglomerative economies. Fourth, efficiency-seeking FDI raises standards of product quality and domestic consumer expectations of indigenous competitors. Fifth, efficiency-seeking FDI aids structural adjustment. The current study assumes that several features of efficiency-seeking FDI overlap with the features of market-seeking FDI.

Moreover, intense competitive pressures in the original host region would cause foreign investors to make efficiency-seeking investments in low-wage countries to reduce costs. Namely, competitive intensity and the efficiency-seeking investment exploit economies of scale. It is

likely that foreign investors will repeat investment when competitive pressures arise in the old location, and that investment will then trigger foreign investors' search for another prospective region conducive to efficiency-seeking and market-seeking investments.

For an empirical test, we assume that efficiency-seeking FDI by South Korean firms (1) would be more likely to occur in developing countries than in developed countries when the South Korean's labour-production capabilities are superior to the former's labour-production capabilities, and (2) would be more likely to occur in developed countries than in developing countries when the former's technological capabilities are superior to South Korean's technological capabilities. In other words, South Korean firms tend to focus on using their own capabilities.

Assuming that South Korean firms can more easily access low-cost labour in developing countries than in developed countries, we expect that – for efficiency-seeking purposes – South Korean firms are more likely to invest in developing countries than in developed countries. Hence, we create the following hypothesis to test in the current study.

Hypothesis 2: South Korean outward FDI is associated negatively with the host country's labour cost.

Strategic Asset-seeking Outward FDI

Dunning (1998) argues that 'the most significant change in the motives for FDI over the last two decades had been the rapid growth of strategic asset-seeking FDI.' This argument has two implications: foreign investors are less likely to exploit an investing firm's existing specific ownership advantage than to explore new advantages; and a foreign investor's preference for exploration will manifest itself as an acquisition of new intangible assets or as a partnering arrangement with a foreign firm. One particular type of intangible asset is knowledge (Buckley and Casson 1976, Rugman 1981, Hennart 1982, 1991).

Although a firm may not have any significant advantage relative to its competitors, the firm may have to be active in outward FDI to attain a strategic asset. In reality, firms from emerging countries investing in developed countries use outward FDI to strengthen their non-price competitiveness (Kumar and Kim 1984). Moreover, foreign firms invest for strategic asset-seeking purposes in developing countries when the firms want to attain a specific asset such as a particular technology although the investments are not immediately profitable. These points can help explain the situation of South Korean outward FDI. From the early 1990s, many South Korean firms went abroad to learn about highly

sophisticated technologies while many foreign multinational firms came to South Korea to obtain unique South Korean IT technology.

Dunning (1998) and UNCTAD (2006, 2007) mentioned the following characteristics of strategic asset-seeking FDI. First strategic asset-seeking is oriented to acquiring resources and capabilities, so an investing firm will sustain or advance its core competence in regional or global markets. Second, strategic asset-seeking FDI provides new finance capital and complementary assets. Third, strategic asset-seeking provides access to foreign markets and provides local entrepreneurship and domestic rivalry. Fourth, strategic asset-seeking FDI improves the international division of labour and cross border networking and entices comparative advantages of host countries.

Firms from emerging countries are most likely to invest in developed countries for sophisticated technologies, thereby compensating for a firm's competitive disadvantages (Deng 2004). In recent years, South Korean outward FDI, like that of many other East Asian countries (Dunning 2006), has been geared toward accessing important proprietary technology, that is, intangible strategic assets. This trend implies that MNEs from emerging countries might be prompted to invest in relatively highly advanced countries to gain intangible strategic assets rather than to exploit ownership advantages. In this context we expect that South Korean outward FDI would go directly abroad for strategic asset-seeking FDI. It would gravitate toward developed countries' economies, which typically possess significant levels of human and intellectual capital, so that the South Korean firms could strengthen their own competitiveness (Dunning 2006).

Therefore, we hold the position that South Korean outward FDI pursues both asset exploitation and asset exploration. Assuming that South Korean firms can gain access to advanced proprietary technology and intangible strategic assets more easily in developed countries than in developing countries, we expect that South Korean firms are more actively investing for asset-seeking purposes in developed countries than in developing countries. Hence, we create the following hypothesis to test in the study.

Hypothesis 3: South Korean outward FDI is associated positively with the rate of patenting in the host country.

We might argue about whether using country-patent data as a proxy for strategic asset-seeking is appropriate, but patent data are the only available data to measure intangible strategic assets at the country level. The patent system makes it theoretically possible to transfer knowledge on the market even though knowledge is difficult to codify

into patents (Park 1999, Buckley *et al.* 2007). Proprietary ownership advantage endowments can be also a proxy for the number of patents in the host country.

Research Methodology

We adopted both a conceptual framework analysis and an empirical test for our research here. At the conceptual framework analysis, we found the investment behaviour of South Korea's most prominent multinational firms by using Porter's diamond model. The conceptual framework analysis supports our empirical test results. As for the empirical test, we conducted this study's analysis by using macro-economic factors because the determinants under investigation affect all MNEs uniformly (Knickerbocker 1973, Freeman 1978). The analytical approach uses the spatial and temporal dimensions of the pooled data and facilitates efforts to estimate random effects generalized least square (GLS) regressions, which are generally used in panel analysis. After excluding host countries with missing values, we used 444 observations from

TABLE 4: Proxy of Korean Outward FDI

Hypotheses and number	Proxy	Theoretical justification	Main or control variable	Datasource
Outward FDI	Annual outflow of Korean FDI			Export-Import Bank of Korea, UNCTAD
Market seeking FDI	Host country GDP	Market seeking	Main	World Bank Development Indicator
	Host country population	Market seeking	Main	United Nations Statistics Social Indicator
Efficiency seeking FDI	Host country wages	Efficiency seeking	Main	U.S. Department of Lanbour, ILO
Strategic asset seeking FDI	Total annual patent applications in hostcountry	Stystrategic asset seeking	Main	World Intellectual Property Organization
Exchange rate	Host country official annual average exchange rate	Domestic currency price of foreign assets	Control	World Bank Development Indicator
Inflation rate	Host country annual inflation rate	Macroeconomic conditions	Control	IMF: World Economic Outlook Database

Note: all monetary values are in constant (2000) US\$ prices.

* Developed country list: Australia, Belgium, Canada, Finland, France, Germany, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Singapore, Spain, Sweden, Switzerland, United Kingdom, United States (18 countries)

** Developing country list: Brazil, Chile, China, Czech Rep., El Salvador, Guatemala, Hong Kong, Hungary, India, Kazakhstan, Mexico, Philippines, Poland, Portugal, Romania, South Africa, Sri Lanka, Taiwan (MEF,2007), Thailand (19 countries)

37 countries for all the models. As for the measurement formula, our analyses helped derive a generic descriptive model that explains the location decision motives of South Korean outward FDI.

$$Y_{it} = \beta_0 + \beta_1 X(\text{GDP})_{it} + \beta_2 X(\text{GDPpercapita})_{it} + \beta_3 X(\text{population})_{it} + \beta_4 X(\text{patents})_{it} + \beta_5 X(\text{wages})_{it} + \beta_6 \text{Control}(\text{exchangerate})_{it} + \beta_7 \text{Control}(\text{inflationrate})_{it} + \beta_8 \text{Dummy}(\text{developed country})_{it} + \mu_{it}$$

Research Model

The study shows empirically various aspects of the proposed hypotheses, and does so by using data on the outflow of South Korean FDI to 18 developed countries and to 19 developing countries from 1994 to 2005. To avoid industry bias, we use only the manufacturing industry outflow FDI data (Park 1999, Sethi *et al.* 2003, Buckley *et al.* 2007). Both the empirical panel data of the 12-year time series and cross-sectional tests rested on a number of GLS regression models. The dependent variable is the South Korean outward FDI in country i at the end of time t . Here, we also test developed and developing countries by comparing results for the subsamples of 18 of the developed countries and 19 of the developing countries.

Model 1: This model had, as its dependent variable, the flows of annual South Korean outward FDI in respective countries. Herein, we included 444 observations over the entire 12-year period. Model 1 ran a random effects GLS regression on the factors of GDP, GDP per capita, population, patents, wages, and dummy developed countries. Exchange rate and inflation rate functioned as control variables. The coefficients in this model depict the location decision motives underlying South Korean FDI outflows during this period. This model depicts the cumulative effect of the volume of FDI outflows.

Model 2: This model has the same structure as that of model 1, but only 216 observations of developed countries were included herein over the entire 12-year period. In addition, model 2-1 serves to identify the relationship between market-seeking investment and efficiency-seeking investment in developed countries while model 2-2 serves to clarify the relationship between market-seeking investment and strategic asset-seeking investment in developed countries. Model 2-3 serves to identify and to clarify the relationship between strategic asset-seeking investment and efficiency-seeking investment in developed countries.

Model 3: This model has the same structure as that of model 1, but only 228 observations of developing countries were included over

the entire 12-year period. In addition, model 3-1 serves to identify the relationship between market-seeking investment and efficiency-seeking investment in developing countries while model 3-2 serves to clarify the relationship between market-seeking investment and strategic asset-seeking investment in developing countries. Model 3-3 serves to identify and to clarify the relationship between strategic asset-seeking investment and efficiency-seeking investment in developing countries.

Variable Specifications

Our study assumes that GDP, GDP per capita, population, wages and patents are key macro-economic determinants of FDI that, as economic actors, function independently of one another.

FDI outflows: This dependant variable represented annual South Korean outward FDI flows (US\$ thousands). We covered annual South Korean FDI flows into the respective countries over the entire 12-year period. Again, data are from 1994 to 2005.

GDP: Each country's year-end gross domestic product is in US\$ billions. Market potential is commonly measured according to the size and growth of GDP and sometimes according to the size and growth of population (Crenshaw 1991).

GDP per capita: This variable concerns each country's year-end gross domestic product per capita in US\$.

Population: This variable refers to each country's year-end population.

Patents: This variable refers to each country's number of annually-applied-for patents.

Wages: Each country's average wages are based on hourly compensation costs in US\$ for production workers in manufacturing.

Exchange rate: This variable refers to each country's yearly average exchange rate in US\$.

Inflation rate: This variable refers to each county's yearly average inflation rate.

Dummy developed country: This variable is a dichotomous dummy variable, taking the value of one when the country is developed and zero when it is developing.

Time: The time period extends from 1994 to 2005, with $t=1$ denoting the year 1994.

Data and Sample

The sample comprised 18 developed countries and 19 developing countries in which South Korean manufacturing firms had invested during

the 1994-2005 period. The main data sources were the annual statistics of the Export-Import Bank of Korea, the annual World Development Indicator, and the annual UNCTAD world investment report. In addition, wage-related data stem from the annual U. S. Bureau of Labor Statistics and the annual labour statistics of the International Labour Office. Patent-related data stem from the annual World Intellectual Property Organization. For complementary data, we used other information collected by the United Nations, the Organization for Economic Corporation and Development, and the International Monetary Fund.

Results and Analysis

We used longitudinal panel data to test the hypotheses. We used the 444 available observations of 37 developed and developing countries (from the 1994-2005 period) to gain evidence regarding South Korean outward FDI motives relative to location decisions.

Table 5 presents the descriptive statistics and shows a correlation matrix. The data matrix did not present any particular problems for the estimation of the coefficients. The correlation results of other variables showed some significant levels, indicating possible multicollinearity. However, this possibility did not cause any serious problems. The results of a variance inflation factor (VIF) test indicate that there are no general problems with the data.

Table 6 shows the results of the random effects GLS regression. Regarding the main variables in models, the results are similar to conventionally recognized results (Sethi *et al.* 2003, Buckley *et al.* 2007), according to the theory of FDI. We see that market size is the most important determinant of South Korean outward FDI. In GLS regressions, however, the GDP per capita, one of the three alternative measures of host market size, did not attain significance. The GDP and the population, the host market size variables, capture the market-seeking motivation. The GDP variable has more explanatory power than the population variable in developed countries. Overall, we found that South Korean investors preferentially seek out large markets and strategic assets.

However, the study shows differences between motivations relative to developed countries and motivations relative to developing countries. Surprisingly, South Korean outward FDI is strategic asset-seeking FDI rather than efficiency-seeking FDI in developing countries. The result implies that South Korean firms are likely to explore new advantages and the preference for exploration will manifest itself as an acquisition

TABLE 5: Means, Standard Deviations and Correlation Matrix of Variables (n=444)

Variables	Mean	S.D.	1	2	3	4	5	6	7	8	
FDI outflow (US\$ thousand)	55202.89	21334.1	1.00								
GDP (US\$ million)	775.26	1708.02	0.35**	1.00							
GDP per capita (US\$)	16423.43	14322.20	-0.60	0.34**	1.00						
In Population	17.02	1.56	0.42**	0.45**	-0.36**	1.00					
Patents	28938.85	79641.56	0.28*	0.82**	0.30**	0.38**	1.00				
Wages (US\$ hourly)	10.64	9.32	-0.07	0.35**	0.90**	-0.21**	0.26**	1.00			
Exchange rate	57.69	194.85	-0.06	-0.01	-0.08*	0.03	-0.13	-0.07	1.00		
Inflation	13.91	119.24	-0.02	-0.11*	-0.30**	0.05	-0.11*	-0.30**	-0.02	1.00	
Dummy Developed	0.48	0.50	-0.06	0.33**	0.82**	-0.22**	0.24**	0.89**	-0.04*	-0.09**	1.00

**Correlation significant at 0.01 (two-tailed)

* Correlation significant at 0.05 level (two-tailed)

TABLE 6: GLS Regression Results of Models

Independent-variables	Model 1 FDI outflow (Random Effects)	Model 2-1 FDI outflow	Model 2-2 FDI outflow	Model 2-3 FDI outflow	Model 3-1 FDI outflow	Model 3-2 FDI outflow	Model 3-3 FDI outflow
GDP (US\$ million)	-5.89 (0.33)	44.35 (4.87)***	56.21 (5.17) ***		919.87 (17.90) ***	313.17 (3.90)***	
GDP per capita (US\$)	0.66 (0.28)	-1.19 (-0.59)	-1.12 (-0.89)		5.63 (1.00)	-8.60 (-2.36)	
In Population	0.00 (6.04)	-12745.34 (-0.86)	-13430.61 (-1.10)		-88725.3 (-4.47)***	-33193.08 (-1.52)	
Patents	0.99 (2.75)		-0.28 (-1.42)	0.44 (2.35) **		7.42 (8.69)***	10.27 (21.34)***
Wages (US\$ hourly)	-3490.35 (-0.79)	24.14 (0.01)		-1242.86 (-0.51)	-55548.46 (-3.90)***		-7596.66 (0.89)
Exchange rate	-11.27 (-0.25)	-43.47 (-1.06)	-41.60 (-1.03)	-34.84 (-0.80)	-3.89 (-0.03)	-21.70 (-0.16)	-38.84 (-0.28)
Inflation	-5.48 (-0.08)	33405.12 (3.60)***	28741.42 (2.99) ***	35210.73 (3.47) ***	73.01 (1.47)*	28.74 (0.69)	33.71 (0.79)
Dummy Developed	37307.91 (0.65)						
R-squared	0.36	0.37	0.38	0.21	0.71	0.68	0.59
N	444	216	216	216	228	228	228

- z-values are given in parentheses. The superscripts ***, **, and * indicate that the coefficient is significantly different from zero at 1%, 5%, and 10% level, respectively.

of new intangible assets whether a location is a developed country or a developing country. Regarding the control variables, developed countries' inflation exhibited a significantly positive association with other independent variables. The inflation was a characteristic of those buoyant markets that attracted South Korean firms.

In detail, model 1 helps examine the cumulative effect of FDI outflows. The coefficients indicate significantly large FDI outflows going to the developed countries with high population levels and high patent levels. In Sethi *et al.*'s research (2003), market-seeking FDI tended to gravitate toward the developed countries with high GDP levels and low population levels. However, our finding is that South Korean firms entered countries with high population levels and high patents levels, a finding that is not consistent with previous research. The result shows that the population variable is better as a market-seeking proxy than either GDP or GDP per capita.

Model 2 for only developed countries has the same variables as model 1. Model 2 shows that South Korean outward FDI is associated positively with absolute host market size. According to the empirical results, the GDP and the patent variables were significant (0.01 and 0.1 level, respectively) and positive, while inflation as a control variable exhibited strong significance. This finding indicates that South Korea FDI flows into developed countries possessing high GDP levels not necessarily high population levels. This finding is contrary to model 1's results, where we found a negative relationship. In fact, there is no theoretical reasoning to suggest that South Korean manufacturing firms would prefer to invest in low-GDP countries for any reason.

Model 3 for only developing countries presents more complicated results. The empirical results show that GDP, population, wages, and patents are significant (0.01 level for all). Therefore, we hold the position that South Korean outward FDI favors large markets, low wages, and technology advantages in developing countries simultaneously. Our findings imply that South Korean outward FDI is likely to find its way into developing countries whose potential market attractiveness includes low wage levels and strategic assets.

Conclusion

With the ongoing globalization, many firms are now actively promoting outward FDI to obtain their own competitive edge. Accordingly, many firms now consider outward FDI an important means of operating their

business. Thus, it is necessary to understand the extent to which South Korean firms' investment-location decisions are explicable by reference to conventional FDI theories.

In particular, this study has attempted to identify the trends and the determinants of South Korean outward FDI. We found that South Korean outward FDI has both conventional and idiosyncratic dimensions. In terms of our main variables, we found a conventional result for market size. The host market size has a positive influence on South Korean outward FDI. This finding indicates that market seeking was a key motivation for South Korean outward FDI in the period. South Korean outward FDI was also driven by the motive to acquire strategic assets, regardless of whether the investment was to take place in developed countries or in developing countries. These results support the conclusion that South Korean outward FDI functions not only to exploit ownership advantages but also to obtain previously out-of-reach competitive advantages.

In our research, we expected that low-wage advantages will only be applicable in the developing countries. Thus, our expectation rested on the fact that the high-wage differential between developed and developing countries was a significant factor in the 1980s. However, both low-wage advantages and strategic assets were the most significant factors during the 1994-2005 period. Therefore, this research contributes not only to the empirical literature on location decisions of Korean outward FDI, but also to consensus development regarding theories on FDI.

Therefore, two points are worth noting in relation to the results of our empirical analysis. First, unlike previous researches, our research in the current study suggests that the patent variable for strategic asset-seeking FDI was very important. Technological intensity has been, in general, a strong determinant of South Korean FDI, as is the case with most developed countries. Earlier studies of South Korean outward FDI had downplayed the role of technology exploitation. Second, the GDP variable and the population variable for market seeking were not consistent with the research of Sethi *et al.* (2003). These two variables can be sub-divided into, for example, high GDP and low GDP, or high population and low population.

In conclusion, this paper offers some theoretical contributions as well as managerial implications. Our work significantly improves on previous empirical studies of South Korean outward FDI. First, we use longitudinal data to measure location determinants. Most previous studies on outward FDI are cross-sectional approaches. Hence, it is difficult to investigate

dynamic aspects of FDI. However, this study explores changing aspects of South Korean outward FDI through longitudinal analysis. Second, by using the data of South Korean overseas manufacturing investment, this study contributes to a better understanding of the changing aspects of South Korean outward FDI. For these reasons, the confidence levels applicable to the current study's findings are greater than the corresponding levels of previous studies.

Meanwhile, after much consideration of the investment development path, we conclude that South Korean outward FDI to developed countries functions as a way for the firms, by compensating for their competitive disadvantages, to expand their share of the market and that South Korean outward FDI to developing countries functions as a way for the firms, by using their ownership advantage, to expand their share of the market. This distinction is very important because implications are different in terms of FDI location-decision motives. Indeed, these motives vary according to the economic level of FDI-recipient countries.

Finally, this study has some limitations that should be overcome in future studies. First, concerning the level of analysis, outward FDI may be examined at the firm level. However, many firms often invest in a particular country for the same reason, notwithstanding the unique characteristics of individual investment decisions. Knickerbocker (1973) found that, among competitors, the flow into foreign markets triggers a bandwagon effect. Firms can use their own firm-specific advantages abroad to exploit markets or to lower labour costs. Second, we did not consider culture issues in our study since we wanted to consider purely the economic effects. Third, we may consider both inward and outward FDI to better understand the overall FDI phenomenon. But, in this study, we concentrated mainly on outward FDI owing to the growing importance of recent South Korean outward FDI. Fourth, in future research, we can approach the topic on the basis specifically of the investment development path between home and host country. Finally, we should focus more heavily on the firm-specific approach throughout case studies such as those herein. However, we could not embrace an in-depth approach of this kind because of a lack of available data. As mentioned before, we followed Knickerbocker's (1973) arguments on bandwagon effects. He showed that firms follow their rivals into new markets as a strategic response to oligopolistic rivalry. However, we think that further firm-level in-depth case studies are necessary for proper development of this research.

*Jung Min Kim is from Seoul National University, Republic of Korea
(jungmin2@snu.ac.kr)*

*Dong Kee Rhee is from Seoul National University, Republic of Korea
(rheedong@snu.ac.kr)*

NOTES

- ¹ A number of institutions in South Korea have actively facilitated South Korean outward FDI. Among them are the Ministry of Finance and Economy; the Bank of Korea; the Export-Import Bank of Korea; the Korea Federation of Banks; the Ministry of Commerce, Industry and Energy; the Korea Trade-Investment Promotion Agency; the Small Business Corporation; the Korea Chamber of Commerce and Industry; the Korea International Trade Association; the Small and Medium Business Administration; and the Korea Institute for Industrial Economics & Trade (Moon 2007).
- ² According to Dunning and Narula (1996), the developed countries (DCs) are in two stages of the investment development path (stages 4 and 5). The newly industrialized countries (NICs) which are catching up and converging with the DCs are in stage 3. The less developed countries (LDCs) which are becoming NICs of various forms, are in the most backward stages of the investment development path (stages 1 and 2).

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