

# Determinants of Korean FDI and Corporate Performance in Latin America and the Caribbean in 2000s : Micro and Macro Data Analysis

\* *Kisu Kwon*

\*\* *Taejin Koh*

## Abstract

This paper analyzed what determined the FDI flow of Korean firms and how characteristics of local market in Latin America affected the performance of Korean corporations. The empirical results of this study showed that it supported the existing theoretical hypothesis. The test to reveal FDI determinants using macro data indicated that FDI flow increased with GDP of host country and economic boom in the United States. The distance appeared to hamper FDI flow as expected in the basic gravity model, with political corruption in the host country acting as another barrier to FDI. The micro data analysis showed that the characteristics of the local market generally had a positive impact on corporate performance, even though the impact varied depending on each characteristic. For instance, factors that were positively related to corporate sales are market access, political stability, potential for growth, distribution networks, the facility of contracting and payment, suitability for FDI, suitability for resource development, and the predictability of the local market ; well-developed infrastructure, the facility of contract and payment, and suitability for resource development positively affected corporate profit.

**Keywords :** Latin America, foreign direct investment, corporate performance, Korean corporations, micro and macro data analysis

**JEL Classification :** G11, F21, F23, O54

**Paper Submission Date :** September 28, 2018 ; **Paper sent back for Revision :** March 14, 2019 ; **Paper Acceptance Date :** May 10, 2019

Latin America and the Caribbean countries (LACs) recently began attracting attention as a new investment destination for their stable growth and the abundance of natural resources. Transnational corporations (TNCs) from industrialized countries and even emerging economies such as China and India expanded investment in the region to secure the "Latin American Opportunity" in advance. Investment by TNCs in LACs is diversified in terms of production and motivation. The production varies from the assembly of electric and electronic equipment, textile and autos, to IT service and bioenergy. Motivations range from market seeking, R&D investments to securing a bridge-head for the global market.

Realizing its strategic value, Korean firms have accelerated their investment in LACs since 2004. Besides traditional investors such as LG and Samsung, there are notable new investors - POSCO<sup>1</sup>, Hyundai Motors,

---

<sup>1</sup> POSCO is a South Korean steel - making company. It had an output of 42 million tonnes of crude steel in 2015, making it the world's fourth-largest steelmaker by this measure.

---

\* *Assistant Professor & Head*, Department of Portuguese, Hankuk University of Foreign Studies, Imun-ro 107, Dongdaemun-gu, Seoul, S. Korea 02450. Email: kskwon@hufs.ac.kr

\*\* *Associate Professor & Head (Corresponding Author)*, Department of Hindi, Hankuk University of Foreign Studies, Imun-ro 107, Dongdaemun-gu, Seoul, S. Korea 02450. E-mail: india@hufs.ac.kr ORCID Id: 0000-0002-9025-800X

DOI: 10.17010//ijf/2019/v13i6/123896

Dongkuk Steel<sup>2</sup>, and CJ Corporation<sup>3</sup>. The investment into Mexico, Brazil, and Panama surged dramatically in 2008 and as a result, total investment into LACs amounted to a record high of \$1.6 billion.

Despite the increase in investment from Korea, the level of investment is still imperceptible compared to the strategic importance of the region. Most investment flows are from conglomerates as the participation of small and medium - sized enterprises (SMEs) is negligible. Korean products account for about 3% of imported goods in LACs, while the portion of FDI from Korea is at a mere 1%. Moreover, SMEs comprise of less than 10% of the total investment. Even though the investment from Korea has grown fast, the investment is limited to certain industries such as electronics, textile, mining, and energy. Moreover, modes of entry are not diverse. Most Korean firms enter the market by sole ventures, while companies from advanced economies exploit joint ventures, strategic alliances, cooperation among SMEs, etc.

There is no prior study on the investment of Korean firms into LACs due to lack of awareness and interest in the region. This paper will remedy such dearth of information with analysis on the determinants of Korean FDI and corporate performance in LACs.

## Previous Literature and the Trend of Investment into LACs

**(1) Previous Literature :** Foreign direct investment is a type of international movement of capital, where capital, technology, and production factors are transferred together to a foreign country with the object of exercising substantial control over a foreign affiliate. In other words, FDI is differentiated from equity investment and takes forms such as greenfield investment or cross border M&As (Moosa, 2002). According to Reddy (2016), FDI plays an important role not only as a source of capital, but also in the long-term development of the nation in order to strengthen the competitiveness of the domestic economy through technology transfer, strengthening of infrastructure, productivity improvement, and creation of employment opportunities. Chellasamy and Ponsabariraj (2016) also pointed out that FDI plays a significant role in transforming developing countries into developed countries and in markets and financial indicators in the future<sup>4</sup>.

The determinants of FDI and motivations of investors for engaging in FDI are classified into five different types. First, market-seeking FDI aims at gaining access to a foreign market where a country has high or expected rapid growth of income. Second, the motivation for resource-seeking FDI is to gain access to natural resources such as mineral, oil, and raw material for the production of goods. Third, efficiency-seeking FDI is designed to move the production base to foreign countries where labor cost is lower. Fourth, FDI can be a way to overcome tariff or non-tariff barriers in trading partner countries. Fifth, FDI can diversify investment risk from economic downturn in the domestic market.

Main theories concerning FDI are as follows: Monopolistic advantage theory by Hymer (1976), product life cycle theory by Vernon (1966), oligopolistic competition theory by Knickerbocker (1973), internalization theory by Rugman (1981), and eclectic theory by Dunning (1980, 1988).

Wezel (2003) ; Garcia - Herrero and Santabarbara (2007) ; Nunes, Oscategui, and Peschiera (2006) analyzed the FDI in LACs based on the theories mentioned above. The result presented that non - traditional factors such as country risk are more important variables than traditional ones in determining FDI in Latin American and Asian

---

<sup>2</sup> Dongkuk Steel is a steel company. It is the second largest EAF steel producer in Korea behind Hyundai Steel. Also, it is world's 49th largest steel maker among IISI member companies.

<sup>3</sup> CJ Corporation is a South Korean conglomerate holding company. It comprises of numerous businesses in various industries of food and food service, pharmaceuticals and biotechnology, entertainment and media, home shopping and logistics.

<sup>4</sup> See also Chawla and Sharma (2014), Chellasamy and Ponsabariraj (2013), Ramakrishna (2011), and Srinivasan (2010) for representative studies on the determinants of FDI.

emerging economies (Kim, 2000). Garcia - Herrero and Santabarbara (2007) analyzed the impact of China on the FDI into LACs. Data covered the period from 1993 to 2003 for six major Latin American countries - Argentina, Brazil, Chile, Colombia, Mexico, and Venezuela. The results indicated that the emergence of China hindered FDI into Mexico until 2001 and into Colombia since 2001. The impact on the rest of the countries, however, did not appear to be significant (Wu & Chen, 2001).

Nunes et al. (2006) studied non - traditional variables such as the openness of the economy, macroeconomic stability, human capital, the importance of natural resources, and privatization.

Mariotti and Piscitello (1995) as well as Christmann, Day, and Yip (1999) analyzed the characteristics of local market and corporate performance. Christmann et al. (1999) found the empirical evidence for multinational enterprises (MNEs) working in 37 countries : how corporate performance is affected by the level of economic development and industry structure of the host country, corporate characteristics, and subsidiary strategy. The results indicated that country characteristics were the most important determinant of subsidiary performance followed by industry structure, subsidiary strategy, and corporate characteristics.

In Korea, there are various studies on the determinants of FDI. Park (1999) outlined the motivations, performance, and problems of FDI in Korean textile companies, which invested in America and Southeast Asia using the methods of literature research and in-depth interviews. The study showed that Korean textile firms' investment was driven by the heightened trade barrier in developed countries, the increase in wages in Korea, low production cost, and the high level of manufacturing technology in foreign countries.

Lee and Kim (2004) analyzed the determinants of Korean FDI into China with panel data from each Chinese province between 1988 and 2002. The study focused on whether the motivation of FDI was efficiency-seeking, which means taking advantage of the difference in production cost or market-seeking to access the local market. The empirical results indicated that it was a mixture of market-seeking and efficiency-seeking. It is to say that Korean firms initially entered China to exploit low labor cost, but their strategy developed into a more aggressive one in order to engage the enormous Chinese market.

As stated above, most Korean research on FDI is limited to China. Especially, there is no previous research about LACs. Most FDI from Korea flowed into a limited number of economies: China, the United States, and other countries in Asia, which reflected the lack of interest in LACs. The difficulty of access to corporate data on investment into LACs such as financial reports and investment performance has also hampered the study about the region.

## **(2) The Trend of FDI in LACs**

**(i) Temporal Patterns :** Korea's investment into LACs can be categorized into the incipient, the take-off, the expansion, the adjustment, and the re-take off phases.

First, the incipient phase refers to the period from 1980 and 1987 and can be named as the “resource-seeking investment” era as shown in the Figure 1. Korea's investment in LACs remained negligible until the mid-1980s when Korea's FDI started to grow. The average annual investment into the region barely reached \$2.25 million, and the main destinations were Panama, Argentina, Chile, Guatemala, and Honduras. The sectors receiving the bulk of investment were fisheries and forestry. Simultaneously, the textile industry in Central America and the Caribbean started to attract small amounts of Korean FDI.

Second, the take-off phase between 1988 and 1994 is characterized by “efficiency-seeking investment,” where the products were finally exported to the United States as presented in the Figure 1. Korean FDI in this period grew quickly owing to domestic factors such as the expansion of economic power caused by surplus in balance of payment, the appreciation of the Korean Won, and the rise in labor costs. Moreover, the international factors such as the elevation of import regulation and trade protectionism in developed economies, typified by the United States and EC, stimulated the trend.

Concomitant to the hike in Korea's FDI outflows, rapid expansion of investment in LACs was recorded since the mid 1980s - reaching a high of \$44 million ; whereas, it had remained at a few millions of dollars until 1987. Due to this rising trend, LACs accounted for about 10% of total FDI outflows from Korea in 1989. During this period, Central America and the Caribbean area emerged as a halfway point for exports to the United States. Korea took advantage of the geographical importance of this region and Caribbean Basin Initiatives (CBI), where the U.S. provided duty-free access for most goods produced in Central America. In addition, FDI into Mexico surged as the newly agreed NAFTA provided an opportunity for the preferential access to the U.S. market. In South America, Argentina attracted the greatest portion of Korean FDI, especially in fisheries. FDI in Chile continued, mainly into forestry.

Thirdly, "The Golden Period" of FDI in LACs was during the expansion phase between 1995 and 1999 as presented in the Figure 1. In the early 1990s, FDI was sluggish, but the fastest increase since 1994 was recorded due to the enforcement of NAFTA, the consolidation of MERCOSUR, and due to the economic stability of the region. While the overall investment environment of the region improved, former Korean president Kim Youngsam's tour of LACs ignited the interest of Korean enterprises in the region. Average annual FDI surged to \$227 million from the several million dollars during the previous phase. Mexico and Brazil attained most FDI and flows to Andean countries such as Peru rose dramatically.

The Korean FDI into Peru began in 1994 with investments mainly in oil field exploration and development. There were major projects such as Block 67 in December 1995, located at the border between Peru and Ecuador ; Block 8 in June 1996 ; and Block 79 in July 1996. The investments in this period were different from the earlier periods in that conglomerates were the main investors. In addition, the FDIs had initially been concentrated in assembly using cheap labor and natural resource development, but they moved to high-value added industry such as electronics and telecommunications.

Fourth, the adjustment phase was between 2000 and 2003 as presented in the Figure 1. FDI that had increased since the mid- 1990s reached its peak in 1997 and started to plummet after 1999. The decline worsened with the loss of investment capacity of Korean companies as a result of the Asian financial crisis, and with the economic crisis in LACs, mainly in Brazil and Argentina<sup>5</sup>. As a result, the average annual inflows in this period plunged to \$157.62 million.

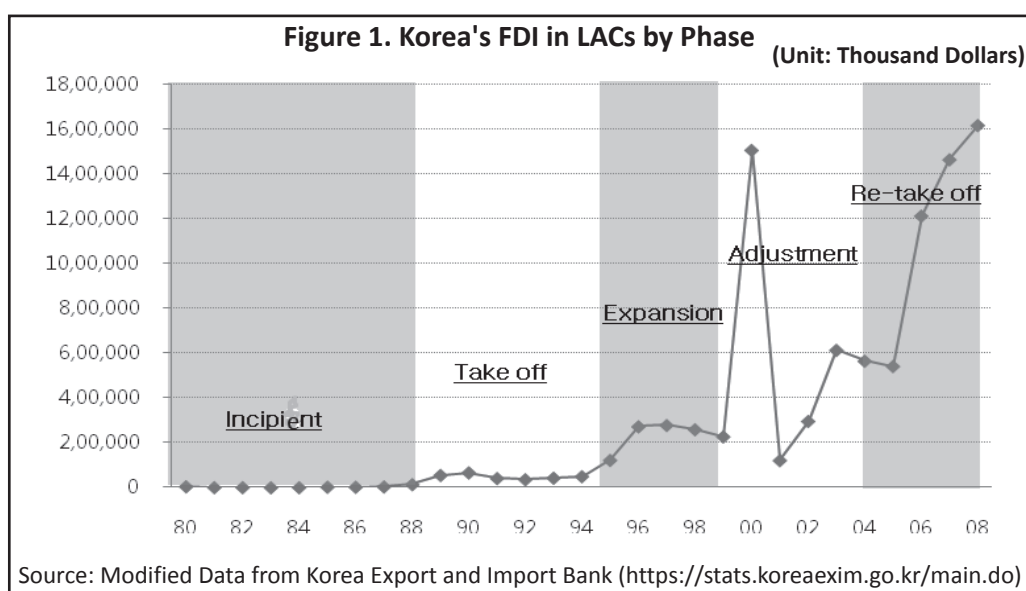
Despite the overall diminution, investment towards mining in Peru witnessed a great increase, contradicting the downward trend of FDI into LACs. FDI in Peru was centered on mining, particularly oil exploration and development. Peru accounted for 28.6% of gross FDI flow to the region, outstripping Mexico and Brazil, which took up 14.1% and 8.7% FDI flow, respectively. Investment in textiles in Central America increased and recorded \$17.63 million, far outstripping the \$7.72 million of the previous phase.

In contrast, FDI in Mexico and Brazil, which had led the investment of LACs, plummeted. The average annual inflow to Mexico fell to \$22.2 million, a dramatic decrease compared to \$33.84 million during the expansion phase. The decline in Brazil was worse; the average annual investment of \$60 million during the previous period plunged to a mere \$16.82 million. Investment had remained over 10 million dollars since 1995, but it experienced a ten-fold decrease.

Lastly, the re-take off phase started in 2004 as presented in the Figure 1. During this period, LACs recovered from their collective economic downturn, maintained high growth rates of about 5%, and gained fresh attention as the reservoir of natural resources due to the global raw material crisis. The crisis caught up with Korea as well and FDI into LACs resumed its upward movement. The investment this time converged on the countries which provided opportunity in manufacturing and natural resource development such as Peru, Brazil, and Mexico.

---

<sup>5</sup> One fact of note is that most FDI plans after visit of the President to the LACs were canceled. In case of Brazil, more than \$4 billion worth of FDI was earmarked, but most of it was called off except the investment by LG.



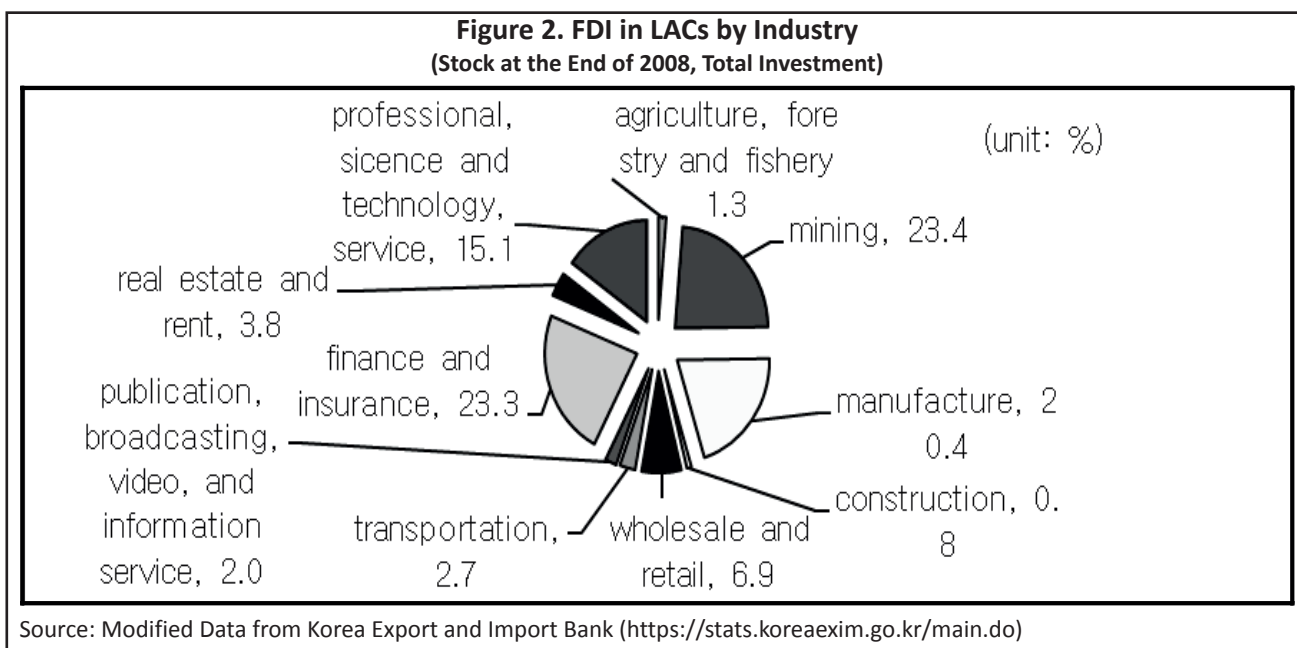
**Table 1. The Share of FDI by Country and Year**

| Country                      | 2004   | 2005    | 2006    | 2007    | 2008    | (Unit: thousand dollars, %) |
|------------------------------|--------|---------|---------|---------|---------|-----------------------------|
|                              |        |         |         |         |         | Total (1968 - 2008)         |
| Guyana                       | 0      | 0       | 0       | 0       | 0       | 3,600 (0.0)                 |
| Guatemala                    | 3,297  | 14,266  | 113     | 17,059  | 5,696   | 107,612 (1.1)               |
| Nicaragua                    | 7,755  | 4,500   | 3,458   | 1,035   | 600     | 25,645 (0.3)                |
| Dominican Republic           | 0      | 0       | 0       | 0       | 0       | 4,107 (0.0)                 |
| Mexico                       | 25,328 | 71,856  | 58,596  | 119,164 | 236,658 | 810,421 (8.6)               |
| Barbados                     | 0      | 750     | 0       | 0       | 0       | 1,186 (0.0)                 |
| Bahamas                      | 0      | 0       | 0       | 10,000  | 0       | 38,875 (0.4)                |
| Bermuda                      | 862    | 115,872 | 649,630 | 325,717 | 526,919 | 3,102,045 (32.9)            |
| Venezuela                    | 0      | 0       | 0       | 0       | 0       | 66,491 (0.7)                |
| Belize                       | 3,437  | 0       | 0       | 3,000   | 0       | 6,437 (0.1)                 |
| Bolivia                      | 650    | 970     | 146     | 0       | 312     | 61,193 (0.6)                |
| Brazil                       | 19,892 | 174,114 | 110,203 | 263,943 | 134,359 | 998,686 (10.6)              |
| Saint Lucia                  | 0      | 0       | 0       | 0       | 0       | 500 (0.0)                   |
| Saint Vincent and Grenadines | 0      | 0       | 0       | 0       | 0       | 870 (0.0)                   |
| Surinam                      | 0      | 0       | 0       | 0       | 0       | 665 (0.0)                   |
| Argentina                    | 0      | 0       | 3,854   | 4,129   | 7,238   | 157,037 (1.7)               |
| Haiti                        | 0      | 0       | 0       | 0       | 10,001  | 10,001 (0.1)                |
| Ecuador                      | 0      | 0       | 93      | 4,988   | 3,687   | 14,104 (0.1)                |
| El Salvador                  | 1,700  | 1,353   | 7,290   | 5,300   | 0       | 36,085 (0.4)                |
| British Virgin Island        | 37,395 | 36,270  | 48,005  | 85,668  | 133,449 | 504,059 (5.3)               |
| Honduras                     | 5,102  | 6,775   | 9,064   | 0       | 2,002   | 106,399 (1.1)               |

contd. on next page

|                     |         |         |           |           |           |                   |
|---------------------|---------|---------|-----------|-----------|-----------|-------------------|
| Uruguay             | 0       | 0       | 0         | 0         | 87        | 690 (0.0)         |
| Jamaica             | 0       | 0       | 0         | 0         | 0         | 11,330 (0.1)      |
| Chile               | 11,510  | 599     | 3,926     | 26,295    | 2,600     | 106,602 (1.1)     |
| Cayman Islands      | 360,393 | 58,652  | 188,787   | 307,838   | 230,198   | 1,710,306 (18.1)  |
| Costa Rica          | 5,800   | 120     | 3,630     | 1,750     | 0         | 32,236 (0.3)      |
| Colombia            | 0       | 188     | 4,859     | 21,925    | 0         | 46,281 (0.5)      |
| Trinidad and Tobago | 0       | 0       | 10        | 0         | 0         | 10 (0.0)          |
| Panama              | 5,000   | 22,103  | 59,275    | 172,197   | 240,926   | 703,599 (7.5)     |
| Paraguay            | 320     | 100     | 197       | 0         | 0         | 3,927 (0.0)       |
| Peru                | 76,798  | 33,322  | 61,624    | 94,098    | 82,149    | 685,614 (7.3)     |
| Puerto Rico         | 0       | 0       | 0         | 0         | 0         | 67,426 (0.7)      |
| Total               | 565,239 | 541,809 | 1,212,759 | 1,464,106 | 1,616,881 | 9,424,040 (100.0) |

Source: Modified Data from Korea Export and Import Bank (<https://stats.koreaexim.go.kr/main.do>)



## (ii) Geographical and Industrial Patterns

📌 **FDI Trend by Country** : Bermuda was the first place in terms of the stock of real Korean FDI between 1968 and 2008. It was followed by Brazil, Mexico, Panama, and Peru. Bermuda was the main destination of Korean FDI in finance and insurance sector and accounted for 32.9% of the total FDI in LACs as shown in the Table 1. Investment in tax havens such as Bermuda and the Cayman Islands represented over 51% of the total FDI into the region. When excluding tax evasion countries, Brazil (10.6%) took the top place followed by Mexico (8.6%), Panama (7.5%), and Peru (7.4%).

➤ **FDI Trend by Industry** : By industry, Korean FDI flowed mainly into mining, finance, insurance, and manufacturing. Mining accounted for the biggest share (23.4%) followed by finance & insurance (23.3%) and manufacturing (20.4%). The reason why Korean FDI was concentrated in finance and insurance is because FDI into tax havens is classified as finance and insurance. Other sectors on the list are wholesale and retail (8.4%), service (3.8%), and telecommunications (3.0%) as presented in the Figure 2.

## Macro Analysis

**(1) Data and Model** : Latin America and the Caribbean consists of 33 countries in all: 1 North American country, Mexico ; 7 Central American countries, which are Guatemala, Nicaragua, Belize, El Salvador, Honduras, Costa Rica, and Panama ; 12 South American nations, which are Guyana, Venezuela, Bolivia, Brazil, Surinam, Argentina, Ecuador, Uruguay, Chile, Colombia, Paraguay, and Peru ; and 13 Caribbean states as presented in the Table 2.

Among these 33 countries, main destinations of Korean FDI were Guatemala, Mexico, Bermuda, Brazil, Argentina, and Panama as of the year 2008.

Many TNCs, however, establish affiliates in tax havens in LACs to avoid taxes and to finance and manipulate funds. In this study, 14 countries are excluded - Cuba and 13 Caribbean countries where tax havens are located such as Barbados, Bahamas, Saint Vincent, etc. In addition, Guyana and Surinam are exceptions where the inflow of FDI from Korea is negligible.

Thus, 17 countries were selected for the analysis of the determinants of Korean FDI in LACs: Brazil, Argentina, Dominican Republic, Bolivia, Honduras, Ecuador, Mexico, Chile, Venezuela, Peru, Belize, Colombia, Costa Rica, Guatemala, Nicaragua, Paraguay, and Panama.

Meanwhile, the *World Investment Report* (2002) by UNCTAD explained that the determinants of FDI include market accessibility, which refers to location advantage of the eclectic theory by Dunning (1980) ; production cost ; productivity ; logistic and telecommunication costs ; investment incentives ; government intervention ; infrastructure ; cultural motivation ; etc. That is to say, the report divided the determinants into three categories: economic, political, and business facilitation. Policy determinants are social and political stability, FDI regulations, privatization policy, joining international investment treaties for foreign investment and trade, etc. Economic determinants are market size, abundance of natural resources, production cost, labor productivity, openness of the economy, infrastructure, technological capabilities, etc. Business facilitation determinants refer to investment promotion activities such as image improvement and publicity, investment incentives, amenities, post management services, etc. Previous literatures analyzed FDI determinants using variables similar to those from the *World Investment Report* 2002 by UNCTAD. In addition to those variables, this study considers non-traditional, country-specific variables to examine the factors that drove Korean firms' FDI in Latin America and the Caribbean.

To simplify the analysis, FDI from Korea into a given country '*i*' is denoted as  $FDI_i$ .

Then, a model is established as follows :

$$FDI_{i,t} = f(X_{i,t}, \mu_{i,t}) \quad (1)$$

where,  $X_{i,t}$  indicates characteristics specific to country *i* at time *t* and  $\mu_{i,t}$  is an unobservable characteristic of country *i* at time *t*.

There are many factors that drive FDI behavior. Traditional determinants include market size, level of income, distance between countries, wage competitiveness, trade barriers, the openness of the economy, etc. Generally, the attractiveness of FDI increases proportional to market size. Thus, market size is a principal factor for investment

**Table 2. Countries in Latin America and the Caribbean**

| Latin America and the Caribbean (33 countries) |   |   |   |
|--|---|---|---|
| North America (1)                              | Central America (7)   | South America (12)  | The Caribbean (13)  |
| Mexico   | Guatemala, Nicaragua,<br>Belize, El Salvador, Honduras,<br>Costa Rica, Panama | Guyana, Venezuela, Bolivia,<br>Brazil, Surinam, Argentina, Ecuador,<br>Uruguay, Chile, Colombia, Paraguay, Peru | Grenada, Dominican Republic, Dominica,<br>Barbados, Bahamas, Saint Vincent,<br>Saint Lucia, Saint Kitts and Nevis, Haiti,<br>Antigua Barbuda, Jamaica, Cuba,<br>Trinidad and Tobago |

decisions and is expected to have a positive relationship with FDI flow. Geographical distance between host and home countries is an important determinant. The distance is measured between two capital cities. Trade barriers and openness of the economy affect investment decisions significantly. The openness of the economy has a positive impact on FDI flow, while non-trade barriers such as quantitative restriction, subsidies for domestic producers, and complicated customs processes hamper investment. The foreign debt ratio can be an important factor as well. LACs suffered from frequent foreign debt crises and debt ratios to GDP remained high. Consequently, high indebtedness erodes credibility and dampens inflow of FDI and financing from international markets.

The added country specific variables which represent the characteristics of LACs are country risk, corruption, and GDP of the United States. First, effects of country risk and corruption on FDI have been a major concern in many studies such as Schneider and Frey (1985). In emerging economies, political and social risks constitute the main obstacles to FDI inflows. Second, another main factor is the GDP of USA. Korean FDI into Mexico and Central America are accompanied by strong intentions of export to the United States. Thus, the economic situation of the United States can impact Korea's FDI flows to LACs. In other words, it is expected that FDI into LACs increase with an economic boom in the U.S., while recession leads to a fall in FDI flows. Thus, the economic development of the United States is expected to be related positively to Korean FDI flows to the region.

**(2) The Results of Empirical Tests :** In this section, Korea's FDI into LACs is analyzed with the gravity model. The gravity model has been proven empirically to be a proper framework for examining FDI as well as trade. This paper refers to previous studies such as Blonigen (2005) and di Giovanni (2005) for the analysis of Korean FDI.

As explained above, there are many factors which affect decisions concerning FDI. The variables which are considered in this study are presented in the Table 3. The period of analysis is between 1988 and 2008 when FDI expanded significantly, and the dependent variable is FDI flow into each LAC country. FDI data was provided by the Korea Export and Import Bank.

GDP or purchasing power is used as a proxy for market size, the most important explanatory variable, and the data was provided by the IMF. The basic independent variable, distance between countries, is the distance between capitals of Korea and the host country. Political risk and corruption index were derived from the Political Risk Rating data provided by the Services (PRS) Group. The U.S. GDP is included in consideration of the United States, the final destination of export of goods produced in LACs by FDI.

The empirical formula for the determinants of Korean FDI is as follows :

$$\ln(FDI_{i,t}) = \alpha + \beta_1 \ln(Y_{i,t}) + \beta_2 \ln(Distance_{i,t}) + \beta_3 Corrupt_{i,t} + \beta_4 \ln(USGDP_t) + \epsilon_{i,t} \quad (2)$$

where,

$FDI_{i,t}$  means FDI from Korea to each country in year  $t$ ,

**Table 3. Explanation for Variables**

| Name of Variables | Explanation  | Expected Sign | Source                       |
|-------------------|--|---------------|------------------------------|
| FDI by Country    | Korea's FDI in Latin America and the Caribbean.          |               | Korea Export and Import Bank |
| Size of Market    | GDP or GDP per capita                                    | +             | IMF                          |
| Distance          | The distance between capitals of Korea and host country. | -             |                              |
| Corruption Index  | Higher number presents less corruption.                  | +             | PRS Group                    |
| U.S. GDP          | U.S. GDP   | +             | U.S. Department of Commerce  |

$Y_{i,t}$  means GDP of host country  $i$  in year  $t$ ,

$Distance_{i,t}$  means distance between Korea and host country  $i$  in year  $t$ ,

$Corrupt_{i,t}$  means corruption of host country  $i$  in year  $t$ ,

$USGDP_t$  means GDP of the United States in year  $t$ .

The Table 4 shows the results tested with the equation (2). This paper uses panel ordinary least squares (OLS) and generalized least square (GLS) estimations with panel data to solve the bias problem, which is caused by the fact that the simple cross - sectional OLS regression cannot adjust to unobservable characteristics. The result is consistent with the expectation.

The results suggest that a larger GDP, which means bigger market size and demand, tends to attract more FDI inflow. FDI flow is hampered by distance, which is consistent with the basic assumption of the gravity model. Corruption appears to be an obstacle to FDI. Lastly, U.S. GDP, which indicates roundabout export to the U.S. market, affects FDI flow positively. In other words, economic boom in the U.S. is followed by the rise of Korean FDI flow into LACs and vice versa.

The results of the above analysis are consistent with the results of previous studies. Nunes et al. (2006) ; Ramirez (2010) ; Amal, Tombio, and Raboch (2010) ; De Castro, Fernandes, and Campos (2013) ; Ramirez

**Table 4. The Results of Empirical Test**

| (The Determinants of Korean FDI into Latin America and the Caribbean) |                      |                       |                       |                       |                       |
|---|----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Variables   | Panel OLS            |                       | Random Effect Model   |                       |                       |
|   | Model (1)            | Model (2)             | Model (3)             | Model (4)             | Model (5)             |
| Constant  | 25.266***<br>(3.182) | 25.429***<br>(3.277)  | 16.713*<br>(1.875)    | 25.429***<br>(3.288)  | 16.698*<br>(1.861)    |
| $\ln(Y_{it})$   | 0.534***<br>(7.057)  | 0.550***<br>(7.422)   | 0.514***<br>(6.768)   | 0.550***<br>(7.448)   | 0.513***<br>(6.741)   |
| $\ln(Distance_{i,t})$   | -1.991**<br>(-2.390) | -1.883**<br>(-2.312)  | -1.752**<br>(-2.156)  | -1.883**<br>(-2.320)  | -1.753**<br>(-2.151)  |
| $Corrupt_{i,t}$   |                      | -0.456***<br>(-3.510) | -0.384***<br>(-2.858) | -0.456***<br>(-3.522) | -0.385***<br>(-2.849) |
| $\ln(USGDP_t)$  |                      |                       | 0.811*<br>(1.953)     |                       | 0.814*<br>(1.917)     |
| Adjusted  | 0.1656               | 0.2020                | 0.2113                | 0.2020                | 0.2088                |
| No. of Observations   | 244                  | 244                   | 244                   | 244                   | 244                   |

**Note.** \*, \*\*, \*\*\* mean 10%, 5%, 1% levels of significance, respectively and  $t$  - value is presented in parenthesis ( ).

(2017) ; and Das (2017) analyzed the determinants of FDI in Latin America and showed that the size of the market (GDP) had a positive impact on FDI. On the other hand, distance has a negative effect on FDI. The corruption variable has a negative effect on FDI as in the previous studies (Das, 2017 ; Godinez & Liu, 2015). Finally, an interesting feature revealed in this study is that Korea's FDI in Latin America is closely related to U.S. GDP. This is because Korean companies use Mexico and Central America as production bases for the U.S. market as described above.

## Micro Analysis

**(1) Motivation of Investment :** The survey to investigate the motivation for FDI of Korean firms includes 12 subcategories: market access, low labor cost, roundabout export, the procurement of raw material and parts, natural resource development, etc. According to the survey, as shown in the Table 5, the major motivations of FDI in LACs are low labor cost, service to local customers, access to the market, and roundabout export, which accounted for 21.4%, 20.1%, 14.6%, and 12.3% shares, respectively.

The survey on Mexico is similar to the previous result but differs in that access to the market ranks first with 24.3% of the share and there are many cases of FDI where subcontractors accompany their prime contractors, a common practice when large Korean electronic enterprises invest in LACs, with suppliers of their parts and components also establishing production bases there (Perlmutter, 1969). Regarding the motivation for Central America, low labor cost provides the biggest incentive. Serving local customers, mainly U.S. distributors, is another major reason where Central America offers various investment incentives and also location advantage for access to the U.S. market. Meanwhile, investors appear to use Mexico and Central America as the halfway place of roundabout export thanks to the incentives in rules of origin and tariffs there. In case of Brazil, the main factors are access to market and serving the local customers. In addition, resource-seeking motivation accounts for a significant share of the motivation, 16.7% for natural resource development, and another 16.7% for the procurement of raw materials and parts. Regarding resource-abundant Peru, the development and procurement of

**Table 5. Motivation for FDI (Survey Result)**

|                                       | (Unit: share, %) |       |       |        |                 |       |
|---------------------------------------|------------------|-------|-------|--------|-----------------|-------|
|                                       | Mexico           | Chile | Peru  | Brazil | Central America | Total |
| Access to local market                | 24.3             | 17.6  | 22.2  | 25.0   | 7.6             | 14.6  |
| Low labor cost                        | 17.6             | 11.8  | 11.1  | 0.0    | 28.2            | 21.4  |
| Round about export to 3rd country     | 13.5             | 5.9   | 0.0   | 0.0    | 14.7            | 12.3  |
| Serving the local customers           | 16.2             | 23.5  | 5.6   | 25.0   | 21.8            | 20.1  |
| Securing raw materials and parts      | 2.7              | 17.6  | 22.2  | 16.7   | 2.4             | 5.2   |
| Accompanying prime contractor         | 10.8             | 5.9   | 11.1  | 0.0    | 8.8             | 8.4   |
| Investment incentives in host country | 2.7              | 0.0   | 5.6   | 0.0    | 12.4            | 8.1   |
| Low demand in Korean market           | 6.8              | 0.0   | 0.0   | 8.3    | 1.8             | 2.9   |
| Regulation in Korean market           | 0.0              | 0.0   | 0.0   | 0.0    | 0.0             | 0.0   |
| Making use of local technology        | 0.0              | 0.0   | 0.0   | 0.0    | 0.6             | 0.3   |
| Natural resource development          | 1.4              | 11.8  | 22.2  | 16.7   | 0.0             | 3.6   |
| Etc                                   | 4.1              | 5.9   | 0.0   | 8.3    | 1.8             | 2.9   |
| Total                                 | 100.0            | 100.0 | 100.0 | 100.0  | 100.0           |       |

natural resources takes the first place. Besides, there is growing FDI flow to secure the fastest expanding Peruvian market. In another resource - rich country, Chile, resource-seeking motivation takes up the largest share.

**(2) Characteristics of Local Markets and Corporate Performance :** This study analyzes the Korean firms' FDI performance in Latin America based on the determinants described previously. As many know already, each Latin country has its own characteristics in terms of market size, political stability, potential for growth, infrastructure, distribution networks, access to nearby countries, etc. Accordingly, this paper examines the FDI performance of Korean companies according to different characteristics of the local market with the help from a previous survey.

## Data and Model

The survey was conducted for 470 Korean companies which were operating in Latin America between August - December of 2009 by means of email, fax, telephone calls, actual visits, etc ; 136 firms were eventually judged to be the valid respondents<sup>6</sup>. By industry, respondents were 71.1% in manufacturing ; 11.9% in wholesale and retail ; 5.9% in service ; 4.7% in agriculture, forestry, and fishery ; 4.4% in mining ; 1.5% in construction ; and 0.5% in others.

This study analyzes the survey results. First, the dependent variable: corporate performance is evaluated on a scale of 1 to 5<sup>7</sup> based on managers' assessment of total sales and profit. For instance, a 5 is the figure for *increase* of total sales or surplus in profit, 3 for *no change* in total sales or surplus in profit, and a 1 for a *decline* in total sales or deficits in profit.

Meanwhile, independent variables become explanatory variables from previous studies, but when data is available. First, it is expected that the size of firms and their performance are positively correlated. It is inferred that large companies can benefit from economies of scale and have advantage in acquiring technology and accumulating experience by R&D activities. This paper measures the size of a firm with the number of employees including Koreans.

The attributes of a firm is another major factor affecting performance by letting the firms maintain their competitiveness in the host country. Nine characteristics include price competitiveness, the quality of products, brand value, advanced technologies, etc. These are measured on a 5-point rating scale.

Localization is assessed by the level of concession in the power of decision between the subsidiary and parent company, such as the decision on the introduction of new products, setting prices, and sales goals. The survey for this category consisted of 10 questionnaires with 5 - point rating scale.

Lastly, country-level characteristics are the main determinants when selecting a FDI destination. In this study, 16 country-specific attributes are considered as explanatory variables, including the size of the market, political stability, distribution networks, and the development of infrastructure. The measurement and scale of variables used in this paper are summarized in the Table 6.

For the empirical test, elementary statistics for variables are estimated in the Table 7. The averages of total sales and profit are 3.4 and 3.3 out of 5, respectively, both surpassing the median value. The number of employees, which represents the size of companies, has an average of 419.4. Average operating years are 9.1, which seem to be enough time for a firm to adapt to the local market.

---

<sup>6</sup> The source of data is a survey about Korean firms which invested in Latin America that was conducted by the Korean Ministry of Foreign Affairs and Trade and Korean Institute for International Economic Policy in 2009.

<sup>7</sup> Financial report includes information to measure the performance such as the percentage of operating profits and return on assets, but it is not easy to gain access to these reports. Alternatively, market's or owner's satisfaction is used as a proxy for performance in various previous studies (Geringer & Hebert, 1991 ; Killing, 1983).

**Table 6. Variables**

| Type  | Variable and Definition  | Scale  |
|---|--|--|
| <b>Performance</b>                                    | Total sales or profit: The performance of local subsidiary during the last 3 years ('06~'08).  | 5 - point scale ( <i>increase/maintaining surplus: 5, even/turning surplus: 3, decrease/deficit: 1</i> ) |
| <b>Size of Subsidiary</b>                             | The number of employees<br>Investment amount   | The number of locals and Koreans<br>Invested amount (1,000 dollars)                                      |
| <b>Years of Operation in Host Country</b>             | Year of operation in host country  | 2009 minus the year of entrance  |
| <b>Competitiveness of Subsidiary</b>                  | Price competitiveness, the quality of products, brand value, etc.  | 5 - point scale ( <i>very important: 5, moderately important: 3, not at all important: 1</i> )           |
| <b>Localization</b>                                   | The introduction of new products, setting price, sales goal, and the amount of production  | 5 - point scale ( <i>decided by subsidiary: 5, decided by both: 3, decided by parent company: 1</i> )    |
| <b>Characteristics of Local Market (Host Country)</b> | Market size<br>Political stability<br>Potential for growth<br>Distribution networks<br>The development of infrastructure<br>Accessibility to nearby countries<br>Efficiency of local government<br>Accessibility to local financial market<br>The cost of finance<br>Level of taxation<br>Facility of capital flows<br>Facility of contract and payment<br>Price regulation<br>Suitability for FDI<br>Suitability for resource development<br>Predictability of local market | 5 - point scale ( <i>very much: 5, moderate: 3, not at all: 1</i> )                                      |

**Table 7. Elementary Statistics**

|                        | Total Sales | Profit | Number of Employees | Years of Operation | Localization | Competitiveness | Characteristics of Local Market |
|------------------------|-------------|--------|---------------------|--------------------|--------------|-----------------|---------------------------------|
| Average                | 3.4         | 3.3    | 419.4               | 9.1                | 3.5          | 3.8             | 2.8                             |
| Median                 | 3.0         | 3.0    | 66.5                | 8.0                | 3.6          | 3.8             | 2.8                             |
| Maximum                | 5.0         | 5.0    | 6,576.0             | 36.0               | 5.0          | 5.0             | 5.0                             |
| Minimum                | 1.0         | 1.0    | 2.0                 | 0.0                | 1.0          | 1.8             | 1.1                             |
| Standard Error         | 1.6         | 1.7    | 862.2               | 7.1                | 1.0          | 0.8             | 0.6                             |
| Number of Observations | 116         | 97     | 132                 | 134                | 80           | 112             | 118                             |

Levels of localization and competitiveness have averages of 3.5 and 3.8, respectively, above the median value, while the average of figure for the local market is 2.8 - slightly below the median value.

The characteristics of the local market are divided into 16 categories such as market size, political stability, potential for growth, distribution networks, and the development of infrastructure as presented in the Table 8. The

**Table 8. The Characteristics of Local Market and Elementary Statistics**

|                        | The Characteristics of Local Market |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|------------------------|-------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|                        | ①                                   | ②   | ③   | ④   | ⑤   | ⑥   | ⑦   | ⑧   | ⑨   | ⑩   | ⑪   | ⑫   | ⑬   | ⑭   | ⑮   | ⑯   |
| Average                | 3.5                                 | 2.5 | 3.3 | 2.5 | 2.3 | 3.4 | 2.2 | 1.8 | 1.8 | 2.5 | 3.2 | 3.1 | 3.3 | 3.2 | 3.1 | 2.8 |
| Median                 | 4.0                                 | 2.0 | 3.0 | 2.0 | 2.0 | 4.0 | 2.0 | 2.0 | 2.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| Maximum                | 5.0                                 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Minimum                | 1.0                                 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Standard Error         | 1.3                                 | 1.2 | 1.2 | 1.0 | 0.9 | 1.1 | 0.9 | 0.9 | 1.0 | 1.2 | 1.2 | 0.9 | 1.0 | 0.9 | 1.3 | 0.9 |
| Number of Observations | 99                                  | 99  | 99  | 99  | 99  | 99  | 99  | 99  | 99  | 99  | 99  | 99  | 99  | 99  | 99  | 99  |

**Note.** ① Market size ② Political stability ③ Potential for growth ④ Distribution networks ⑤ The development of infrastructure ⑥ Accessibility to nearby countries ⑦ The efficiency of local government ⑧ Accessibility to local financial market ⑨ The cost of finance ⑩ Level of taxation ⑪ Flow of capital ⑫ Contract and payment ⑬ Price regulation ⑭ Suitability for FDI ⑮ Suitability for resource development ⑯ Predictability of local market

average market size, accessibility to nearby countries, growth potential, and suitability for FDI are 3.5, 3.4, 3.3, and 3.3, respectively, all above the median values. Meanwhile, accessibility to local financial market and the cost of finance is the lowest with 1.8. The efficiency of local government is also lower than median, at 2.2.

The problem of heteroskedasticity usually arises in cross-sectional data, while autocorrelation is frequent in time series data analysis. Heteroskedasticity does not cause bias or inconsistency in the OLS estimators. However, the variance of coefficients increases by lowering the efficiency, and the OLS estimators are not the best linear unbiased estimators (BLUE).

Korean firms invest in diverse industries in LACs such as mining, textile, and electronics. Thus, controlling the heterogeneity among industries becomes an important matter. To solve this problem, this paper adds an industry dummy<sup>8</sup> referring to the International Standard Industrial Classification of All Economic Activities by the United Nations (Revision 3.1 : ISIC Rev. 3.1).

The equation for test is as follows :

$$P_{ij} = \alpha + \beta_1 Size_{ij} + \beta_2 Y_{ij} + \beta_3 Com_{ij} + \beta_4 Char_i + \beta_5 Local_{ij} + \beta_6 D_{ij} + \varepsilon_{ij} \quad (3)$$

where,  $P_{ij}$  represents corporation  $j$ 's performance in country  $i$ ;  $Size_{ij}$  is the size of corporation  $j$  in country  $i$ ;  $Y_{ij}$  is the years of operation of corporation  $j$  in country  $i$ ;  $Com_{ij}$  is competitiveness of corporation  $j$  in country  $i$ ;  $Char_i$  is the characteristics of country  $i$ ;  $Local_{ij}$  is the level of localization of corporation  $j$  in country  $i$ ;  $D_{ij}$  is the industry dummy of corporation  $j$  in country  $i$ ; and  $\varepsilon_{ij}$  is error.

## Results

To test the hypothesis that the characteristics of local market affect corporate performance, both total sales and profit are considered as dependent variables under the same estimation method.

The results, as shown in the Table 9, indicate that corporate performance, in case of total sales, is influenced by company size. In other words, it coincides with the generally known fact that larger companies earn higher profits and the years of operation in host country is negatively correlated to sales. This shows that the longer a corporation runs its business in the host country, the total sales decline. It is somewhat different from the expectation that long-

<sup>8</sup> In this paper, six industry dummies are introduced ; textile, printing, and publication ; steel and chemical ; electric and electronics ; machines and equipment ; retail and wholesale ; and miscellaneous goods.

term operation would have a positive effect on sales by letting a firm acquire knowledge or by the learning effect. The coefficient for competitiveness is positive but not significant. Most variables for characteristics of the local market have positive but insignificant coefficients.

The characteristics of the local market are broken down into several types and tested as it was divided into 16 items in the survey. The sub - division is judged to be necessary due to the fact that the characteristic of the local market will affect corporate sales, but the effect will differ according to the type of characteristic. The Table 9 shows that eight out of all listed characteristics have positive effects on sales : market size, political stability, potential for growth, distribution networks, facility of contract and payment, suitability for FDI, suitability for resource development, and the predictability of the local market. That is to say, corporate sales tend to increase with a large local market, high political stability, and big growth potential. In addition, total sales increase when distribution networks are well built, contract and payment are easy, and the host country is suitable for resource development.

The development of infrastructure, however, has a positive coefficient but low significance. Other factors that were tested have no effect on sales, such as accessibility to nearby countries, the efficiency of local government, and low taxation.

When the corporate performance variable is represented by profit, similar results are induced in that overall characteristics of the local market have a positive impact. The results are shown in the Table 10. However, there are slight differences in the effect depending on the sub - division; four characteristics that are tested have a positive impact: political stability, distribution networks, the development of infrastructure, and suitability for resource development.

The factors affecting corporate sales, which are market size, the potential for growth, facility of contract and payment, and suitability for FDI, also have positive effects on corporate profits, but they are not statistically significant.

Based on sales and profits, the investment performance of Korean companies in the Latin American market is analyzed. As a result, the common factors that positively influenced Korean companies' investment performance are political stability, distribution networks, and suitability for resource development. In other words, the more stable the political environment, the more developed the distribution network, the more suitable for resource development, and the higher is the investment performance of Korean companies in the Latin American market.

## Conclusion

Generally, firms investing in foreign countries take characteristics of the local market such as market size, political stability, growth potential, distribution networks, and level of infrastructure development into consideration. In line with this fact, this paper analyzes what determines the FDI flows of Korean firms and how corporate performance is affected by the characteristics of local markets in Latin America.

The empirical results of this study show that it supports the existing theoretical hypothesis. Firstly, the test to reveal FDI determinants using macro data indicates that FDI flow increases with the size of GDP of the host country. In other words, more FDI flows to countries with bigger economies or demands. Geographical distance hampers FDI flows as expected in the basic gravity model and political corruption in the host country constitutes another barrier to FDI. Lastly, Korean FDI in LACs is positively affected by USA's GDP, where the purpose of FDI is to secure a production base for the roundabout export to the United States, which means an economic boom in U.S. will be followed by increased inflow of Korean FDI into LACs and vice versa. FDI strategies of Korean firms are evidence of this fact. Since the mid-1980s, medium-size and small textile companies began to establish their production subsidiaries in Central America to exploit the preferential tariff which was called the Caribbean

**Table 9. The Impact of Characteristics of Local Market on Corporate Performance (Sales)**

| Variable            | Sales             |                    |                    |                    |                      |                   |                     |                   |                    |                     |                   |                   |                   |                   |                   |                   |                   |
|---------------------|-------------------|--------------------|--------------------|--------------------|----------------------|-------------------|---------------------|-------------------|--------------------|---------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
|                     | Model (1)         | Model (2)          | Model (3)          | Model (4)          | Model (5)            | Model (6)         | Model (7)           | Model (8)         | Model (9)          | Model (10)          | Model (11)        | Model (12)        | Model (13)        | Model (14)        | Model (15)        | Model (16)        | Model (17)        |
| <b>Constant</b>     | 0.0732<br>(0.053) | 0.8069<br>(0.633)  | 0.8104<br>(0.596)  | 0.7771<br>(0.614)  | 0.3609<br>(0.302)    | 1.2213<br>(0.891) | 1.0347<br>(0.822)   | 1.3848<br>(1.068) | 1.5673<br>(1.241)  | 1.7256<br>(1.361)   | 0.9295<br>(0.688) | 1.4442<br>(1.103) | 0.5761<br>(0.489) | 0.8265<br>(0.551) | 0.8740<br>(0.689) | 0.6628<br>(0.579) | 0.9103<br>(0.735) |
| <b>Size of</b>      | 0.0005***         | 0.0005**           | 0.0005**           | 0.0006***          | 0.0006**             | 0.0005**          | 0.0005**            | 0.0005**          | 0.0006***          | 0.0006***           | 0.0006*           | 0.0005**          | 0.0006***         | 0.0005***         | 0.0006***         | 0.0006***         | 0.0006***         |
| <b>Subsidiary</b>   | (2.511)           | (2.509)            | (2.612)            | (2.957)            | (2.592)              | (2.496)           | (2.589)             | (2.445)           | (3.029)            | (3.201)             | (1.997)           | (2.599)           | (3.183)           | (2.580)           | (2.810)           | (2.762)           | (3.026)           |
| <b>Years of</b>     | -0.0675           | -0.0451            | -0.0451            | -0.0564            | -0.1137              | -0.058            | -0.0510             | -0.062            | -0.0913            | -0.0967             | -0.0558           | -0.067            | -0.084*           | -0.0617           | -0.088            | -0.065            | -0.0794           |
| <b>Operation</b>    | (-1.736)          | (-1.173)           | (-1.971)           | (-1.498)           | (-2.802)             | (-1.527)          | (-1.279)            | (-1.495)          | (-2.294)           | (-2.572)            | (-1.332)          | (-1.671)          | (-2.161)          | (-1.470)          | (-2.329)          | (-1.683)          | (-2.085)          |
| <b>Competitive-</b> | 0.1562            | 0.1973             | 0.3629             | 0.2556             | 0.0543               | 0.2640            | 0.3536              | 0.3436            | 0.2496             | 0.2520              | 0.3148            | 0.3445            | 0.1501            | 0.3048            | 0.0943            | 0.1822            | 0.0282            |
| <b>ness of</b>      | (0.578)           | (0.704)            | (1.400)            | (0.954)            | (0.204)              | (0.989)           | (1.252)             | (1.273)           | (1.021)            | (1.034)             | (1.138)           | (1.282)           | (0.620)           | (1.131)           | (0.373)           | (0.741)           | (0.107)           |
| <b>Subsidiary</b>   |                   |                    |                    |                    |                      |                   |                     |                   |                    |                     |                   |                   |                   |                   |                   |                   |                   |
| <b>Localization</b> | 0.1161<br>(0.592) | 0.1125<br>(0.555)  | 0.1534<br>(0.801)  | 0.1109<br>(0.558)  | 0.4142*<br>(1.905)   | 0.1141<br>(0.532) | 0.1952<br>(0.953)   | 0.1225<br>(0.588) | 0.2613<br>(1.241)  | 0.2730<br>(1.309)   | 0.1756<br>(0.823) | 0.1546<br>(0.726) | 0.2405<br>(1.173) | 0.0872<br>(0.407) | 0.1996<br>(0.950) | 0.1406<br>(0.679) | 0.2349<br>(1.164) |
| <b>The Average</b>  | 0.807**           |                    |                    |                    |                      |                   |                     |                   |                    |                     |                   |                   |                   |                   |                   |                   |                   |
| <b>Charac</b>       | (2.463)           |                    |                    |                    |                      |                   |                     |                   |                    |                     |                   |                   |                   |                   |                   |                   |                   |
| <b>teristics</b>    |                   |                    |                    |                    |                      |                   |                     |                   |                    |                     |                   |                   |                   |                   |                   |                   |                   |
| <b>of Local</b>     |                   |                    |                    |                    |                      |                   |                     |                   |                    |                     |                   |                   |                   |                   |                   |                   |                   |
| <b>Market</b>       |                   |                    |                    |                    |                      |                   |                     |                   |                    |                     |                   |                   |                   |                   |                   |                   |                   |
| ①                   |                   | 0.3677*<br>(1.961) |                    |                    |                      |                   |                     |                   |                    |                     |                   |                   |                   |                   |                   |                   |                   |
| ②                   |                   |                    | 0.3214*<br>(1.953) |                    |                      |                   |                     |                   |                    |                     |                   |                   |                   |                   |                   |                   |                   |
| ③                   |                   |                    |                    | 0.3412*<br>(1.690) |                      |                   |                     |                   |                    |                     |                   |                   |                   |                   |                   |                   |                   |
| ④                   |                   |                    |                    |                    | 0.7132***<br>(3.623) |                   |                     |                   |                    |                     |                   |                   |                   |                   |                   |                   |                   |
| ⑤                   |                   |                    |                    |                    |                      | 0.1927<br>(0.687) |                     |                   |                    |                     |                   |                   |                   |                   |                   |                   |                   |
| ⑥                   |                   |                    |                    |                    |                      |                   | -0.0041<br>(-0.021) |                   |                    |                     |                   |                   |                   |                   |                   |                   |                   |
| ⑦                   |                   |                    |                    |                    |                      |                   |                     | 0.0097<br>(0.042) |                    |                     |                   |                   |                   |                   |                   |                   |                   |
| ⑧                   |                   |                    |                    |                    |                      |                   |                     |                   | -0.083<br>(-0.412) |                     |                   |                   |                   |                   |                   |                   |                   |
| ⑨                   |                   |                    |                    |                    |                      |                   |                     |                   |                    | -0.1798<br>(-1.101) |                   |                   |                   |                   |                   |                   |                   |
| ⑩                   |                   |                    |                    |                    |                      |                   |                     |                   |                    |                     | 0.0962<br>(0.543) |                   |                   |                   |                   |                   |                   |

[illegible]

**Note.** \*, \*\*, \*\*\* represent 10%, 5%, and 1% levels of significance; t-value is in parenthesis ().

**Note.** ① Market size ② Political stability ③ Potential for growth ④ Distribution networks ⑤ The development of infrastructure ⑥ Accessibility to nearby countries ⑦ The efficiency of local government ⑧ Accessibility to local financial market ⑨ The cost of finance ⑩ Level of taxation ⑪ Flow of capital ⑫ Contract and payment ⑬ Price regulation ⑭ Suitability for FDI ⑮ Suitability for resource development ⑯ Predictability of local market

**Table 10. The Impact of Characteristics of Local Market on Corporate Performance (Profit)**

| Variable            | Profit              |                      |                      |                      |                       |                      |                     |                      |                      |                      |                     |                      |                      |                      |                      |                      |                   |
|---------------------|---------------------|----------------------|----------------------|----------------------|-----------------------|----------------------|---------------------|----------------------|----------------------|----------------------|---------------------|----------------------|----------------------|----------------------|----------------------|----------------------|-------------------|
|                     | Model (1)           | Model (2)            | Model (3)            | Model (4)            | Model (5)             | Model (6)            | Model (7)           | Model (8)            | Model (9)            | Model (10)           | Model (11)          | Model (12)           | Model (13)           | Model (14)           | Model (15)           | Model (16)           | Model (17)        |
| <b>Constant</b>     | -0.3867<br>(-0.256) | 1.1362<br>(0.769)    | 0.3900<br>(0.275)    | 0.8723<br>(0.588)    | -0.5922<br>(-0.465)   | 0.2276<br>(0.153)    | 0.5165<br>(0.341)   | 0.7796<br>(0.537)    | 1.0576<br>(0.707)    | 0.9208<br>(0.605)    | 0.3582<br>(0.229)   | 0.7217<br>(0.462)    | 0.2254<br>(0.146)    | 0.3638<br>(0.219)    | 0.4791<br>(0.316)    | 0.5638<br>(0.389)    | 0.4094<br>(0.278) |
| <b>Size of</b>      | 0.0000<br>(0.050)   | -0.0000<br>(-0.131)  | 0.0000<br>(0.035)    | -0.0000<br>(-0.103)  | 0.0000<br>(0.076)     | 0.0000<br>(0.015)    | -0.0000<br>(-0.010) | -0.0000<br>(-0.002)  | -0.0000<br>(-0.112)  | 0.0000<br>(0.002)    | -0.0000<br>(-0.099) | -0.0000<br>(-0.045)  | 0.0000<br>(0.269)    | -0.0000<br>(-0.037)  | 0.0000<br>(0.170)    | 0.0000<br>(0.009)    | 0.0000<br>(0.263) |
| <b>Subsidiary</b>   | -0.0079<br>(0.0068) | -0.0081<br>(-0.0081) | -0.0319<br>(-0.0319) | -0.0009<br>(-0.0009) | -0.0546<br>(-0.0546)  | -0.0076<br>(-0.0076) | 0.0052<br>(0.0052)  | -0.0109<br>(-0.0109) | -0.0224<br>(-0.0224) | -0.0136<br>(-0.0136) | 0.0031<br>(0.0031)  | -0.0043<br>(-0.0043) | -0.0092<br>(-0.0092) | -0.0028<br>(-0.0028) | -0.0126<br>(-0.0126) | -0.0014<br>(-0.0014) | -                 |
| <b>Years of</b>     |                     |                      |                      |                      |                       |                      |                     |                      |                      |                      |                     |                      |                      |                      |                      |                      |                   |
| <b>Operation</b>    |                     |                      |                      |                      |                       |                      |                     |                      |                      |                      |                     |                      |                      |                      |                      |                      |                   |
| <b>in Host</b>      |                     |                      |                      |                      |                       |                      |                     |                      |                      |                      |                     |                      |                      |                      |                      |                      |                   |
| <b>Country</b>      |                     |                      |                      |                      |                       |                      |                     |                      |                      |                      |                     |                      |                      |                      |                      |                      |                   |
| <b>Competitive</b>  |                     |                      |                      |                      |                       |                      |                     |                      |                      |                      |                     |                      |                      |                      |                      |                      |                   |
| <b>ness of</b>      |                     |                      |                      |                      |                       |                      |                     |                      |                      |                      |                     |                      |                      |                      |                      |                      |                   |
| <b>Subsidiary</b>   |                     |                      |                      |                      |                       |                      |                     |                      |                      |                      |                     |                      |                      |                      |                      |                      |                   |
| <b>Localization</b> |                     |                      |                      |                      |                       |                      |                     |                      |                      |                      |                     |                      |                      |                      |                      |                      |                   |
| <b>The Average</b>  |                     |                      |                      |                      |                       |                      |                     |                      |                      |                      |                     |                      |                      |                      |                      |                      |                   |
| <b>Charac-</b>      |                     |                      |                      |                      |                       |                      |                     |                      |                      |                      |                     |                      |                      |                      |                      |                      |                   |
| <b>teristics</b>    |                     |                      |                      |                      |                       |                      |                     |                      |                      |                      |                     |                      |                      |                      |                      |                      |                   |
| <b>of Local</b>     |                     |                      |                      |                      |                       |                      |                     |                      |                      |                      |                     |                      |                      |                      |                      |                      |                   |
| <b>Market</b>       |                     |                      |                      |                      |                       |                      |                     |                      |                      |                      |                     |                      |                      |                      |                      |                      |                   |
| ①                   |                     | -0.1716<br>(-0.687)  |                      |                      |                       |                      |                     |                      |                      |                      |                     |                      |                      |                      |                      |                      |                   |
| ②                   |                     |                      | 0.4075**<br>(2.055)  |                      |                       |                      |                     |                      |                      |                      |                     |                      |                      |                      |                      |                      |                   |
| ③                   |                     |                      |                      | 0.0068<br>(0.029)    |                       |                      |                     |                      |                      |                      |                     |                      |                      |                      |                      |                      |                   |
| ④                   |                     |                      |                      |                      | 1.0838***<br>(4.6165) |                      |                     |                      |                      |                      |                     |                      |                      |                      |                      |                      |                   |
| ⑤                   |                     |                      |                      |                      |                       | 0.7228**<br>(2.412)  |                     |                      |                      |                      |                     |                      |                      |                      |                      |                      |                   |
| ⑥                   |                     |                      |                      |                      |                       |                      | 0.0689<br>(0.263)   |                      |                      |                      |                     |                      |                      |                      |                      |                      |                   |
| ⑦                   |                     |                      |                      |                      |                       |                      |                     | 0.2563<br>(0.935)    |                      |                      |                     |                      |                      |                      |                      |                      |                   |
| ⑧                   |                     |                      |                      |                      |                       |                      |                     |                      | 0.2024<br>(0.769)    |                      |                     |                      |                      |                      |                      |                      |                   |
| ⑨                   |                     |                      |                      |                      |                       |                      |                     |                      |                      | 0.1449               |                     |                      |                      |                      |                      |                      |                   |

[illegible]

**Note.** \*, \*\*, \*\*\*, represent 10%, 5%, and 1% levels of significance, t-value is in parenthesis().

**Note.** ① Market size ② Political stability ③ Potential for growth ④ Distribution networks ⑤ The development of infrastructure ⑥ Accessibility to nearby countries ⑦ The efficiency of local government ⑧ Accessibility to local financial market ⑨ The cost of finance ⑩ Level of taxation ⑪ Flow of capital ⑫ Contract and payment ⑬ Price regulation ⑭ Suitability for FDI ⑮ Suitability for resource development ⑯ Predictability of local market

Basin Initiatives (CBI), where the U.S. provided duty-free access for most goods produced in Central America. Besides, when Mexico signed the NAFTA, that also attracted FDI inflows where foreign firms also sought opportunities for roundabout export to the U.S. (Lim & Moon, 2001). Consequently, FDI into Central America and Mexico, which are mainly manufacturing bases, was closely related to economic growth in the U.S. instead of that of the host country. Accordingly, economic boom in the United States caused a rise in demand for textiles, in turn resulting in the expansion of investment into the region, and vice versa.

Secondly, as regards to empirical test of corporate performance utilizing micro data, the results indicate that the characteristics of local markets generally have a positive impact on the performance, even though the impact varies according to each characteristic. For instance, the sub - divisions that are positively correlated to corporate performance are market access, political stability, the potential for growth, distribution networks, facility of contract and payment, suitability for FDI, suitability for resource development, and the predictability of the local market. In other words, a bigger local market and high political stability and growth potential lead to more sales. And well-built infrastructure, facility of contract and payment, and suitability for resource development are positively related to corporate profits.

## **Implications**

In spite of the increase of Korea's investment in Latin America in the 2000s, there is little research on Korean companies' investment in Latin America. In this background, the significance of this study is that it analyzed the investment of Korean companies in Latin America in an academic and systematic way. Especially, this study analyzed the characteristics and the performance of Korean companies' investment in Latin America in 2000s using micro data as well as macro data.

## **Limitations of the Study and Scope for Further Research**

This study has some limitations. This paper used cross-sectional data from a survey conducted in 2008 - 09. The characteristics and environments of local markets which affect corporate performance vary as time passes. However, cross-sectional data that are collected by observing many subjects at the same point in time can estimate only a static correlation. Panel data can solve the problem, but collection of data for it is not easy. Another drawback is insufficient sample, which is frequently observed in the survey data. Thus, for future studies, it is essential to collect panel data of Korean firms operating in LACs to test their performance.

## **Acknowledgement**

This work was supported by Hankuk University of Foreign Studies Research Fund of 2019. We express our gratitude to the anonymous reviewers for their valuable comments.

## **References**

Amal, M., Tombio, B. T., & Raboch, H. (2010). Determinants of foreign direct investment in Latin America. *Journal of Globalization, Competitiveness & Governability*, 4(3), 116-133.

- Blonigen, B. A. (2005). A review of the empirical literature on FDI determinants. *Atlantic Economic Journal*, 33(4), 383 - 403.
- Chawla, S., & Sharma, P. (2014). A macroeconomic approach to foreign investment flows in India. *Indian Journal of Finance*, 8(5), 42 - 49. DOI : 10.17010/ijf/2014/v8i5/71917
- Chellasamy, P., & Ponsabariraj, N. (2013). Profitability and trend analysis of select retail companies in India. *Indian Journal of Finance*, 7(12), 19 - 26.
- Chellasamy, P., & Ponsabariraj, N. (2016). FDI in the retail sector and its impact on select macro - economic variables: A comparative study of India and China. *Indian Journal of Finance*, 10(6), 24 - 37. doi:10.17010/ijf/2016/v10i6/94876
- Christmann, P., Day, D., & Yip, G. S. (1999). The relative influence of country conditions, industry structure, and business strategy on multinational corporation subsidiary performance. *Journal of International Management*, 5(4), 241 - 265.
- Das, B. (2017). *Determinants of FDI into Latin America: An empirical study*. DOI: <http://dx.doi.org/10.2139/ssrn.3064821>
- De Castro, P. G., Fernandes, A. E., & Campos, A. C. (2013). The determinants of foreign direct investment in Brazil and Mexico: An empirical analysis. *Procedia Economics and Finance*, 5, 231 - 240.
- di Giovanni, J. (2005). What drives capital flows? The case of cross-border M&A activity and financial deepening. *Journal of International Economics*, 65(1), 127-149.
- Dunning, J. H. (1980). Toward an eclectic theory of international production: Some empirical tests. *Journal of International Business Studies*, 11(1), 9 - 31.
- Dunning, J. H. (1988). The eclectic paradigm of international production: A restatement and some possible extensions. *Journal of International Business Studies* 19(1), 1 - 31.
- Garcia - Herrero, A., & Santabarbara, D. (2007). Does China have an impact on foreign direct investment to Latin America? *China Economic Review*, 18(3), 266 - 286.
- Geringer, J. M., & Herbert, L. (1991). Measuring performance of international joint ventures. *Journal of International Business Studies*, 22(2), 249 - 263.
- Godinez, J., & Liu, L. (2015). Corruption distance and FDI flows into Latin America. *International Business Review*, 24(1), 33 - 42.
- Hymer, S. H. (1976). *The international operations of national firms: A study of direct foreign investment*. Mass: The MIT Press.
- Killing, J. P. (1983). *Strategies for joint ventures success*. New York : Praeger.
- Kim, Y. G. (2000). A study on localization of international corporations in Asian emerging markets. *Research in International Business*, 11(2), 141 - 185.
- Knickerbocker, F. T. (1973). *Oligopolistic reaction and multinational enterprise*. Boston, MA: Harvard University Press.
- Korea Export and Import Bank. (2018). *Data*. Retrieved from <https://stats.koreaexim.go.kr/main.do>

- Lee, H., & Kim, H. (2004). International investment location decisions : The case of Korean firms into China. *Journal of International Economic Studies*, 8(2), 257- 289.
- Lim, S., & Moon, H. (2001). Effects of outward foreign direct investment on home country exports: The case of Korean firms. *Multinational Business Review*, 9(1), 42 - 49.
- Mariotti, S., & Piscitello, L. (1995). Information costs and location of FDI within the host country: Empirical evidence from Italy. *Journal of International Business Studies*, 26(4), 815 - 841.
- Moosa, I. (2002). *Foreign direct investment: Theory, evidence and practice*. New York : Palgrave.
- Nunes, L. C., Oscategui, J., & Peschiera, J. (2006). *Determinants of FDI in Latin America* (Working Paper No. 2006 - 252). Retrieved from [www.pucp.edu.pe/economia/pdf/DDD252.pdf](http://www.pucp.edu.pe/economia/pdf/DDD252.pdf)
- Park, K. (1999). A study on the foreign direct investment of Korean Textile Enterprises. *Korean Business Review*, 12, 209 - 237.
- Perlmutter, H. (1969). The tortuous evolution of the multinational enterprise. *Columbia Journal of World Business*, 4(1), 9 - 18.
- Ramakrishna, H. (2011). Foreign direct investment in India and China: Some lessons for India. *Indian Journal of Finance*, 5(12), 4 - 12.
- Ramirez, M. D. (2010). *Economic and institutional determinants of FDI flows to Latin America: A panel study* (Working Paper 1003). Dublin : Department of Economics, Trinity College.
- Ramirez, M. D. (2017). FDI flows to Latin America: A pooled and cointegration analysis, 1980 - 2014. *Business and Economic Research*, 7(2), 178 - 201.
- Reddy, M. M. (2016). Impact of FDI on performance of select private sector banks in India. *Indian Journal of Finance*, 10(3), 52 - 65. doi:10.17010/ijf/2016/v10i3/89024
- Rugman, A. M. (1981). *Inside the multinationals: The economics of internal markets*. New York : Columbia University Press.
- Schneider, F., & Frey, B. (1985). Economic and political determinants of foreign direct investment. *World Development*, 13(2), 161 - 175.
- Srinivasan, P. (2010). Causal nexus between foreign direct investment and economic growth in India. *Indian Journal of Finance*, 4(5), 3 - 9.
- UNCTAD. (2002). *World Investment Report*. Retrieved from [https://unctad.org/en/Docs/wir2002overview\\_en.pdf](https://unctad.org/en/Docs/wir2002overview_en.pdf)
- Vernon, R. (1966). International investment and international trade in the product cycle. *The Quarterly Journal of Economics*, 80(2), 190 - 207.
- Wezel, T. (2003). *Determinants of German foreign direct investment in Latin American and Asian Emerging Markets in the 1990s* (Discussion Paper 11/03). Economic Research Centre of the Deutsche Bundesbank. Retrieved from <https://pdfs.semanticscholar.org/6ae1/bda33d9ef81902d7f1fe62bc3bb5f3f7fe78.pdf>
- Wu, H. - L., & Chen, C. - H. (2001). An assessment of outward foreign direct investment from China's transitional economy. *Europe-Asia Studies*, 53(8), 1235 - 1254. Retrieved from <http://www.jstor.org/stable/826269>

### About the Authors

**Dr. Kisu Kwon** is an Assistant Professor at HUFS. He is a holder of Ph.D. (Economics) from Hankuk University of Foreign Studies. His main areas of interest are Latin American economy and Asia - Latin America economic relations.

**Dr. Taejin Koh** is an Associate Professor at HUFS. He is a holder of Ph.D. (Linguistics) from the University of Delhi. His interests lie in language education and South Asian studies. He has published six books and 25 articles.