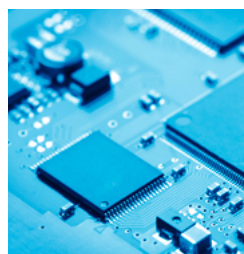


Cecilia Plottier
Yuri Park



Korean FDI in Latin America and the Caribbean

A partner for
sustainable development



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Korean FDI in Latin America and the Caribbean

A partner for sustainable development

Cecilia Plottier
Yuri Park



This document was prepared by Cecilia Plottier, Economic Affairs Officer, and Yuri Park, Republic of Korea Expert, in the Division of Production, Productivity and Management of the Economic Commission for Latin America and the Caribbean (ECLAC).

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Abstract

This study analyzes foreign direct investment (FDI) outflows from the Republic of Korea to Latin America and the Caribbean in the last two decades to identify how Korean companies are investing in the region and which lessons can be learned from this relationship. The study relies on the analysis of investment flows, greenfield projects, and mergers and acquisitions as well as on interviews with entrepreneurs and authorities and a survey conducted on a small sample of suppliers of the automotive industry in Mexico. The Republic of Korea is a valuable economic partner for countries in Latin America and the Caribbean, because the countries in the region can learn from Republic of Korea's past and present. Furthermore, there are future opportunities that arise from this relationship given the high technological profile and environmental standards of Korean companies.

Introduction

In the 21st century, relations between the Republic of Korea and Latin America and the Caribbean “evolved from politically friendly ties to practical cooperation in the areas of economy, trade, and natural resources” (MOFA, 2019a), and this evolution has been reflected in trade and investment flows. Bilateral trade in goods almost quadrupled from 2001 to 2018, growing from US\$ 13 billion in 2001 to US\$ 46 billion in 2018. Foreign direct investment (FDI) outflows from the Republic of Korea to the region, though smaller in size, had a more impressive growth, from US\$ 89 million in 2001 to 1.4 billion in 2018. The figures are quite remarkable, but the qualitative aspects of the Republic of Korea’s trade and investment relations and its successful economic and social transformation in the last six decades are the main reasons why it is a very useful case study for Latin America and Caribbean countries, for whom structural change still poses a big challenge.

In very broad terms, the economic transformation of the Republic of Korea was based on two pillars: industrialization and globalization (Sakong, 2018, p. 17). These two concepts have been common in many emerging economies, particularly in Asia, but the Republic of Korea stands out because of the remarkable results it attained, the role played by the State—which implemented a series of development strategies with a major industrial policy component—, and the leading part played by the large business conglomerates known as *chaebol*. Furthermore, the country recognized sustainability and environmental care in its development strategies. These elements were added to industrialization, productivity growth and development of capabilities through investment in research and development (R&D), and the country started to promote a green-growth approach since the late 2000s. Today, the strategy is “to move forward to an inclusive State”,¹ centered around government innovation and high levels of investment in the deployment of new infrastructure in information and communications technologies such as 5G. In this context, Korean companies have positioned themselves as global

¹ Presentation by Mr. LEE Jae-young, “Innovation of Government, the Driving Force of Sustainable Growth”, at the 2019 Korea-LAC Future Cooperation Forum, June 12-13, 2019, Seoul.

leaders in certain leading edge of high-technology sectors and are increasingly including sustainability as a core element in their strategies.

This study analyzes foreign direct investment (FDI) outflows from the Republic of Korea to Latin America and the Caribbean in the last two decades, to identify how Korean companies are investing in the region and which lessons can be learned from this relationship. The purpose is to inform policy makers in the region who seek to increase the impact of Korean companies on their country's sustainable development processes. The study relies on the analysis of investments flows, greenfield projects, and mergers and acquisitions as well as on interviews with entrepreneurs and authorities and a survey conducted on a small sample of suppliers of the automotive industry in Mexico.

I. Background and evolution of Korean FDI: the surge of a global player

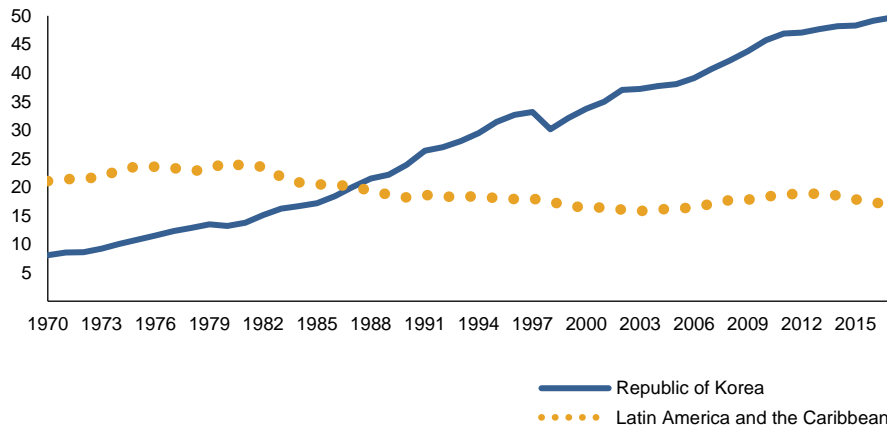
In 1970, when the Republic of Korea had a per capita income of US\$ 1,817, it would have been almost impossible to imagine that by 2017 that figure would rise to US\$ 26,400 and that, in addition, several Korean companies would stand at the cutting edge of technology, competing with the world's most advanced nations.²

For instance, in 2019, only two of ten world's most valuable brands are not properties of the United States, and one of them is the Korean Samsung, which ranks seventh and is valued at US\$ 53.1 billion (Forbes, 2019).³ The competitiveness level of Korean companies is particularly notable because, even though the country is now a developed economy, it still has a per capita GDP that is half that of the United States (see figure 1), the country with the largest number of companies placed in high positions in most competitiveness rankings.

² Per capita GDP at constant 2010 prices. See United Nations Conference on Trade and Development (UNCTAD), UNCTADStat [online database] <https://unctadstat.unctad.org>.

³ The other brand is Japan's Toyota, ranked ninth and valued at US\$ 44.6 billion.

Figure 1
Republic of Korea and Latin America and the Caribbean:
per capita GDP compared to that of the United States, 1970-2017
(Percentages of GDP based on dollars at constant 2010 prices)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), based on United Nations Conference on Trade and Development (UNCTAD), UNCTADStat [online database] <https://unctadstat.unctad.org>.

A comparison between the path of the GDP per capita in Latin America and the Caribbean and in the Republic of Korea in the last fifty years highlights the divergence between them and further motivates the study of Korean strategies. In 1970, the average GDP per capita in Latin America and the Caribbean was 21% of that of the United States, and the Republic of Korea had a per capita income level equal to 8% of that of the United States. In 2017, the positions were reversed, and the average GDP per capita for Latin America and the Caribbean was 17% of that of the United States while Korean GDP per capita stood at 50% of that of the United States.

Profound economic and social transformations have occurred in both the Republic of Korea and Latin America and the Caribbean—and worldwide—in the last five decades. It is outside of the scope of this study to provide a comprehensive picture of this process, not in the Republic of Korea nor in Latin America and the Caribbean. Nevertheless, it is acknowledged that the Republic of Korea's process of economic and social transformation has raised income levels and enabled structural changes. Today, the country is one of the most technologically advanced countries in the world. Growth was marked by cycles of boom and bust, and although it was not free of social conflict or corruption scandals, the path chosen by the Republic of Korea has enabled several domestic companies to flourish worldwide, including in countries in Latin America and the Caribbean. And countries in Latin America and the Caribbean could learn valuable lessons from the Korean experience.

A. The foundations of outward investment set in the industrialization process

The Republic of Korea is one of the most successful cases of economic development of the 20th century, and a succinct analysis of some of the most relevant features of the government-led industrialization strategy provides an interesting background to understand present-day Korean outward investment.

In 1945, the end of the Second World War also brought an end to Japanese dominion over the Korean peninsula; efforts began to reconstruct the economy, but they were interrupted in 1950 with the outbreak of the Korean War (1950–1953). During the war, between 42% and 44% of production facilities were destroyed (Kim and Roemer, 1979 cited in Lee et al., 2018, p. 156), and the post-war reconstruction

process continued until 1959. During this period, assistance from the United Nations and from the United States played a key role in meeting the population's basic needs and in covering the trade deficit. The primary sector dominated the economy: in 1953, for example, agriculture, forestry, and fisheries accounted for 47% of GDP and employed around 70% of the workforce (Koh et al., 2018, p. 367).

In the 1950s, the country adopted a protectionist trade policy with multiple exchange rates and an overvalued currency. Imports were restricted in order to promote industrialization through import substitution, interest rates and bank loans were stringently controlled, and the Central Bank independence was undermined. During this period, the *chaebols* grew rapidly. There is, however, no consensus about the reasons behind the rapid growth of the *chaebols*: there are debates about whether it was more on the account of legitimate policy incentives or the *chaebols'* privileged access to former Japanese properties, to import quotas and licenses, to foreign currency and credit, or to non-competitive concessions of reconstruction contracts by the government and the United States army (Koh, 2018, p. 32) than to legitimate policy incentives.

Between 1960 and 1979, at the urging of the military government that took power in 1961, the country deployed a growth strategy based on government-led industrialization and export promotion.⁴ The influence of planning strategies from Japan, the Soviet Union and China was apparent in spite of the regime's loyalty towards the United States: the government implemented five-year plans under the oversight of the Economic Planning Board with sectoral plans provided by the Ministry of Trade and Industry (Chang and Zach, 2018, p. 13).

The strategy was partly motivated by "revanchism against Japan and by the military threat from its communist neighbours" (Chang and Zach, 2018, p. 13) and partly due to the government's belief that dependence on foreign capital was a major economic problem. In fact, the government of the Republic of Korea thought that this problem could only be solved by building an economy with enough technological capabilities to allow a reasonable standard of living without a chronic deficit in the balance of payments, which was believed to be rooted in underdevelopment of intermediate and capital goods industries (Chang, 1993, p. 138). As a result, the focus of industrial policy from 1962 onwards was to upgrade the industrial structure. Strategies were aimed at protecting the country's nascent industries, developing export industries in high-technology sectors, and providing incentives to control outbound capital flows. This was accompanied by copious investments in education, research, and development and by urbanization plans to develop infrastructure, which led to displacements of the rural population (see Sakong and Koh (2018) for a full analysis of these policies).⁵

The plans selected priority industries, which were those with potential for high levels of productivity growth. They were encouraged with priority access to state loans —on occasions, subsidized— preferential access to foreign currency, tax breaks, import protections, and entry restrictions for competitors, and as counterpart, they were subjected to rigorous performance controls.

The revised version of the first five-year plan, which began in 1964, prioritized cement, fertilizers, industrial machinery, and oil refinery; at the time, labor intensive industries were the ones with major comparative advantages. Later, comparative advantages shifted to capital, and under the heavy and chemical industries (HCIs) plan announced in 1973, the emphasis was placed on steel making, non-ferrous metals, machinery, shipbuilding, electronics, and chemical engineering, later

⁴ One relevant element in the development process was the Agrarian Reform Act of 1949 as amended in 1950. The reforms led to "compensated forfeiture and non-free distribution", whereby the government bought land from landlords at fixed prices and sold it to farmers at below-market value (Koh, 2018, p. 17 and 27). The weakened landed class and a ban on political organization by the working class and farmers led to the creation of a social structure without a powerful social class that could contest state power. These factors alone are not enough to lead to a strong state, but they could have facilitated the implementation of the state's development strategies (Chang, 1993, p. 150).

⁵ Kim (2011) presents a compilation of the main economic laws enacted by the Republic of Korea during its development process.

expanding to include the automobile industry and high-technology sectors (semiconductors, new materials, and biotechnology).

The transformation of the economy was impressive: the manufacturing output growth rate peaked between 1970 and 1990, reaching 15.8% in 1970–1980 and 12.2% in 1980–1990 with even higher rates in the HCLs (17.2% and 14.4%, respectively) (Lee et al., 2018, p. 113). Structural change was achieved, and although the growth rate slowed down, the output share of HCLs continued to rise at the expense of light industries even until 2018 (see table 1).

Table 1
Republic of Korea: share in gross added value by sector, 1960-2018
(Percentages)

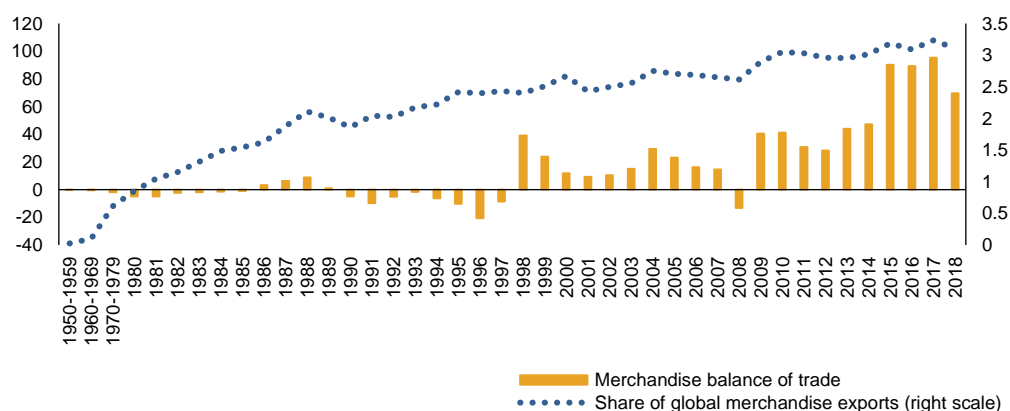
	1960–1969	1970–1979	1980–1989	1990–1999	2000–2009	2010–2018
Agriculture, forestry and fishing	35.4	23.9	12.0	5.8	3.2	2.3
Mining	1.9	1.3	1.1	0.5	0.2	0.2
Manufacturing	17.1	23.0	27.6	27.2	28.1	30.4
Light industries	–	10.1	8.7	5.8	4.1	3.6
Heavy and chemical industries	–	12.9	18.9	21.4	24.0	26.8
Services	45.7	51.8	59.3	66.5	68.5	67.1

Source: Economic Commission for Latin America and the Caribbean (ECLAC), based on Bank of the Republic of Korea, Economic Statistics System (ECOS) [online database] <https://ecos.bok.or.kr/>.

Exports began to expand rapidly as a result of the exchange-rate policy and thanks to a major devaluation in 1964 (Lee et al., 2018, p. 169). Imports—chiefly of raw materials and capital goods—also rose substantially. The share of trade in goods and services in GDP began an upward trend, rising from an average of 50% in the 1970s to 60% in 1980 and 74% in the first decade of the new century, finally reaching 81% in 2017 (World Bank, 2019). The export promotion part of the strategy was comprised of the expansion of subsidized export credits and permits for input imports as well as the establishment of institutions to work in close collaboration with exporters such as the Korea Trade-Investment Promotion Agency (KOTRA) in 1962 and the Korea International Trade Association (KITA) in 1964.

Despite the rise in exports, however, the Republic of Korea ran a negative balance of merchandise trade until 1986 and again between 1990 and 1997 (see figure 2), highlighting the effect of imports on economic transformation and manufacturing upgrade. In the 1970s, the country saw the fastest growth in its share of global goods exports from an average of 0.1% of total in the 1960s to an average of 0.6% in 1970s. The change is even more drastic when comparing the yearly figures: the share was 0.02% in 1960, 0.26% in 1970, and 0.9% in 1979. Since 1998, except for 2008, the country has had a positive merchandise trade balance, and its share of global goods exports expanded reaching the 3.1% of world exports value by 2018.

Figure 2
Republic of Korea: merchandise trade balance and share of global merchandise exports, 1950-2018
(Billions of dollars and percentages)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), based on United Nations Conference on Trade and Development (UNCTAD), UNCTADStat [online database] <https://unctadstat.unctad.org>.

Together with the transformation of manufacturing, the export components changed: capitalizing on the advantages of low labor cost, primary exports and light industries were initially at the forefront, but heavy and chemicals industries replaced them over time. In 1970, mining and fisheries accounted for 17% of total exports, light industries for 70%, and heavy and chemicals industries for 13%. By 2008, however, the shares of the primary sector and light industries had fallen to 2% and 6%, respectively, while HCLs had risen to 92% (Kim and Koh, 2018, p. 116). That evolution was also reflected in the country's main export products: between 1970 and 2018, textiles and light industry gave way to semiconductors and capital goods (see table 2).

Table 2
Republic of Korea: shares of the five top products in total exports value, 1970-2018
(Percentages)

	1970		1990		2008		2018
Textiles	40.8	Apparel	11.7	Ships and parts thereof		Semiconductors	18.1
Plywood	11	Semiconductors	7	Petroleum products	8.9	Petroleum products	7.4
Wigs	10.8	Footwear	6.6	Telephony	8.5	Automobiles	6.3
Iron ore	5.9	Video equipment	5.6	Automobiles	8.3	Auto parts	3.2
Electronic goods	3.5	Ships	4.4	Semiconductors	7.8	Ships and parts thereof	3.1

Source: Prepared by the authors on the basis of D. Kim and Y. Koh, "Korea's industrial development", *The Korean Economy: Six Decades of Growth and Development*, I. Sakong and Y. Koh (eds.), Seoul, Korea Development Institute, 2010; Korea International Trade Association (KITA) [online] <http://www.kita.net>.

Note: Four-digit product codes as categorized in the Harmonized Commodity Description and Coding System.

The government's control over the financial sector enabled it to use loans to channel investments into sectors of strategic importance. Between 1962 and 1985, 57.9% of all bank loans were subsidized credits extended to priority industries (Chang, 1993, p. 141). During recessions, this policy ensured that the prioritized industries had access to funding to the detriment of others. The government believed that short-term injustices were justified by the long-term benefits that would come from faster growth and efficient structural change (Chang, 1993, p. 139). The dearth of financial support for other productive sectors, however, contributed to imbalances between light and heavy industries and between the largest conglomerates and small- and medium-sized enterprises (Kim and Koh, 2018, p. 139).

Imports were strictly regulated with caps that remained in place until the 1980s and high tariffs. In 1982, 93% of the country's imports, by value, were subject to some form of restriction (Chang, 1993, p. 132). Access to foreign exchange was also severely limited, which helped control imports further, and priority access was granted solely for some capital goods and intermediate components. At the same time, subsidized government credits were used to promote purchases of domestically produced machinery, credits that could amount to as much as 90% of the total cost (Chang, 1993, p. 135).

At this stage, the State's influence in the economy not only involved granting incentives and credit; on occasions, government authorities directly influenced corporate decisions. The origin of the shipbuilding industry, for example, was a personal "command" from the President of the Republic of Korea to the Hyundai Group, who at first was opposed to the idea (Chang, 1993, p. 137). This is a surprising fact, given that the Republic of Korea is currently the world's largest shipbuilder. When the private sector was reluctant to invest in the industries that the government deemed strategic, the State would create a company. One example of this is POSCO, the world's fifth largest steel manufacturer (World Steel Association, 2018), which was incorporated in 1968 and privatized in 2001 (Chang and Zach, 2018, p. 13).

In contrast to its promotion policies, the State controlled technology used by companies along with capacity expansion and prices. Companies were thus subject to monthly checks on their exports and other performance variables. Subsidies—including export subsidies—were contingent on improvements in export performance or on capacity-building in research and development: if the recipient failed to meet the targets, the subsidies were withdrawn. Moreover, if companies failed to meet their capacity expansion commitments or filed false information, they were fined, and their executives could even be sent to prison. In the late 1980s rationalization plans were implemented, which also introduced measures to increase productivity such as subsidies for investing in research and development, training programs, and joint research programs with state research centers.

At the time when the government-industrialization strategy was launched, one concern was the large scale required in the high-productivity industries. As a result, companies had to rapidly attain minimum efficient scales of production. To this end, exports were emphasized from the very start of operations, and if the companies involved were too small, the State encouraged mergers and provided subsidies for them. Likewise, there were efforts to prevent excessive competition, and to avoid the inefficient price wars typical of industries with large sunk costs, the State regulated entries and capacity expansions (Chang, 1993, p. 140).

In addition to the measures aimed at enterprises, restraint in consumption was encouraged to control outbound capital flows. State banks refrained from consumer lending, and heavy reliance on indirect taxes was justified—despite being regressive in distributive terms—on account of their discouraging effect on consumption (Chang, 1993, p. 139). Consumption requiring foreign currency was tightly restrained with very high rates of domestic tax imposed on imported luxury goods, and taking holidays abroad were prohibited until the early 1980s. Evidence of these stringent regulations can be seen in the fact that although the country was an automobile manufacturer and exporter, in 1985 there were 73.5 people for each car, compared to 27 in Taiwan Province of China, 21.8 in Chile, and 15.2 in Brazil (Chang, 1993, p. 139).

These examples, though limited, aim to provide a general picture of the complexity and broad scope of the policies implemented amid the government-led industrialization and export-promotion strategies. Moreover, during this process, the strategies were adapted to meet the new challenges and opportunities that arose from changing economic realities. This also highlights the importance of the relationship between the public and private sector in designing policies that increase productivity and promote structural change.

The government-led industrialization strategy was toned down towards the end of the 1980s, and in 1993 the planification structure was dismantled with the closure of the Economic Planning Board. Following the 1997 financial crisis, liberalization prevailed under the terms imposed by the rescue agreement signed with the International Monetary Fund (IMF). Trade-related subsidies, import licenses, and other commercial controls were lifted. The Republic of Korea agreed not to postpone liberalization for reasons related with its balance of payment and began to actively pursue a free trade agreements policy (Lee et al., 2018, p. 174).

There are different arguments in the literature about the exact role played by government policies in the industrialization process.⁶ From a mainstream point of view, the greatest boost for economic growth and development comes from macroeconomic stability, openness, and investment in human capital. On the other hand, the heterodox view underscores the role played by the government's export promotion and industrialization strategies with a particular emphasis on the development of the HCLs. The concentration of economic power in the *chaebols* enabled them to expand internationally, although that concentration might now pose problems for the country's economy (Kim and Koh, 2018, p. 139), and a mismatch remains between the evolution of the *chaebols* and that of small- and medium-sized enterprises (SMEs). Notwithstanding, as will be noticed in the next section, the industrial specialization of Korea FDI reflects the relevance of the prioritized sectors.

Finally, one key element for the development of capabilities was kept in place during the liberalization process that was accelerated after 1997: the emphasis on technological progress and on investments in research and development (R&D), mainly in information and communications technologies (ICTs). The Republic of Korea evolved from being an importer of technologies to being a technological leader. The research and development institutions funded by the State in the 1960s and 1970s played a leading role in through this development in the 1980s and 1990s. Later, investments made by companies, universities, and private research centers made additional contributions to Republic of Korea's rise as a leader in technology: investment in R&D rose from 1.7% of GDP in 1990 to 2.4% in 1996, 3.4% in 2008 and 4.2% in 2016, and the private sector's share increased to between 70% and 80% of the total, replacing the government as the largest investor in R&D (Kim and Koh, 2018, p. 145).

B. Republic of Korea as one of the top investors in the world since mid-2000s

In 2018 the Republic of Korea was the world's 9th largest overseas investor with outward FDI worth US\$ 39 billion (3.8% of the global total) and the fourth largest in Asia after Japan, China, and Hong Kong (SAR of China), which accounted for 14.1%, 12.8%, and 8.4% respectively (UNCTAD, 2019).⁷ This was the highest ranking that the Republic of Korea has ever achieved: in 2017 the country ranked 11th between top home countries (considering yearly FDI outflows), 15th in 2016, and 22nd in 2005. Its outbound international investment stock in 2017 was worth close to US\$ 356 billion, which was similar to that of Brazil (US\$ 359 billion) and greater than that of Mexico (US\$ 180 billion), but still below those of Japan and China (US\$ 1.5 trillion each).

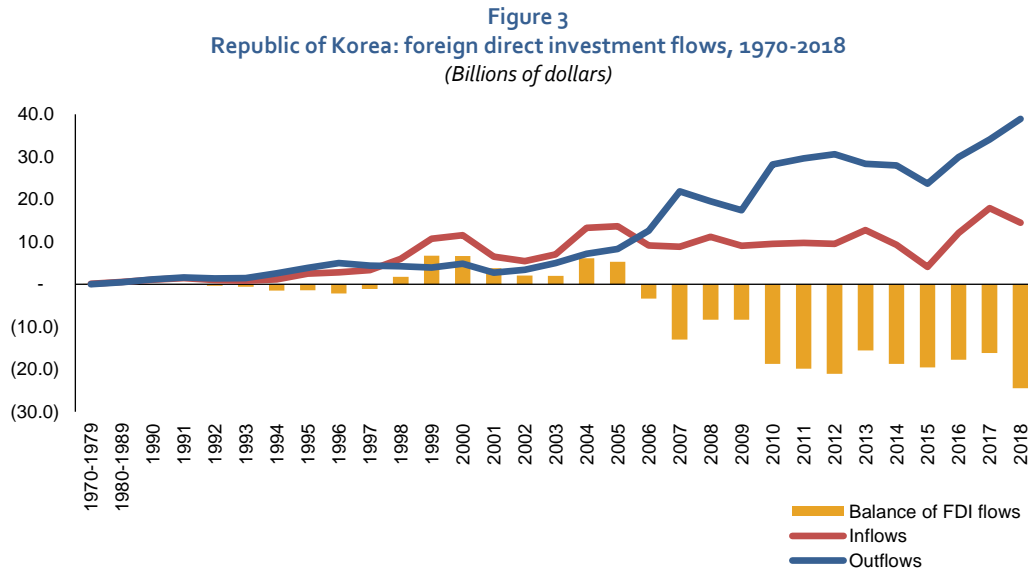
Comparing FDI outflows with FDI inflows, from 2006 the country has been a net foreign investor, which means that the outflows exceeded inflows (see figure 3). Between 1995 and 2000, FDI inflows to

⁶ That debate and an analysis of the policies' effectiveness is beyond the scope of this study. For a more detailed analysis of the opposing views, see Koh (2018), Lee and others (2018), Chang (1993), and Chang and Zach (2018).

⁷ Figures from United Nations Conference on Trade and Development (UNCTAD) were used for global comparisons. The analysis of investment destinations and sectors uses official figures for the country published by the Export-Import Bank of the Republic of Korea.

the Republic of Korea increased fivefold. After that boost, however, this upward trend stopped; meanwhile, FDI outflows have sustained a growing trend.

Despite stagnation in FDI inflows, the Republic of Korea was one of the world's top 20 host countries in 2018, its inflows of US\$ 14 billion accounting for 1.1% of the world total (UNCTAD, 2019).



Source: Economic Commission for Latin America and the Caribbean (ECLAC), based on United Nations Conference on Trade and Development (UNCTAD).

Decades of restrictions on FDI inflows and outflows contributed to the rise of the Republic of Korea as a leading host and home country. The government-led industrialization strategy relied on tight controls over inward FDI. The balance-of-payments deficit was financed through overseas loans instead of FDI, since the government was concerned about foreign companies dominating local industry and understood that loans were easier to control (Lee et al., 2018, p. 182). In addition, FDI inflows were restricted to protect the assimilation of cutting-edge technologies by domestic companies, and the assimilation was needed in order to upgrade domestic manufacturing. The goal was to boost capacity-building of local companies instead of allowing foreign companies with greater technological capabilities to set up operations. Even technology licensing was banned in those industries where the government believed that the local technology had great potential (Chang, 1993, p. 141). Outside of the free trade zones, most forms of foreign ownership were not allowed, and foreign investors also had to meet performance targets for local content and technology transfers. FDI inflows reflected the tight controls, and the average annual inward investments were US\$ 109 million in the 1970s and US\$ 529 million in the 1980s (see figure 3).

In 1986, trade surplus was achieved (see figure 2), and the liberalization of FDI policies began around the same time. In the 1980s, foreign debt became a serious problem among developing countries, and the Korean government changed its policy to reduce dependency on foreign loans and instead began to encourage FDI. In 1984, FDI inflow restraints were changed from a positive to a negative list system, in order to expand the number of categories where inbound investments would be liberalized, and the horizontal 50% cap on foreign capital was lifted (Lee et al., 2018, p. 182). Notwithstanding, in the early years of liberalization, foreign investment remained under tight control in "priority" industries, infant industries, industries relying heavily on imported raw materials, polluting industries, and agriculture and fishery. Majority ownerships were still low in numbers: only 6% of the

multinationals in the Republic of Korea were wholly-owned foreign subsidiaries compared to 50% in Mexico and 60% in Brazil during the same period (Chang, 1993, p. 141).

When the country joined the Organization for Economic Cooperation and Development (OECD) in 1996, foreign capital was allowed into financial service, telecommunications, and distribution service sectors, and in 1997, friendly merger and acquisitions (M&A) by foreign companies were allowed. In 1998 the government enacted the Foreign Investment Promotion Act, which allowed for hostile M&A, enabled the acquisition of real estate by foreigners and extended tax exemptions to ten years and to more industries, including high technology industries, industrial support services, and businesses located in foreign investment zones. An institutional framework for FDI was also set up with the creation of the Korea Investment Service Centre (KISC)—later renamed “Invest Korea”—as a one-stop shop for investors, and free economic zones were established (Lee et al., 2018, p. 182). This approach led to larger FDI inflows: the annual average in the 1990s totaled US\$ 3.1 billion reaching the maximum of US\$ 10.7 billion in 1999 (see figure 3).

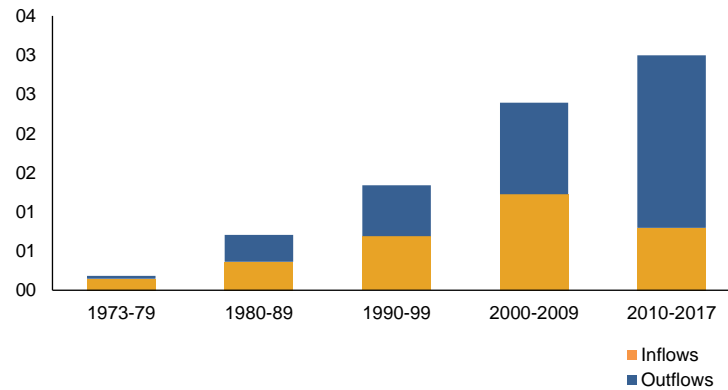
As for the evolution of outward FDI (OFDI), Korean companies were prohibited from investing abroad until the 1980s. Exceptions were made when it was necessary to secure access to natural resources, to open export markets or to support certain activities that would earn foreign exchange. In this context, overseas investment was very low during the 1970s, averaging US\$ 10 million per annum. This situation was overturned in 1986, when export growth and the current account surplus fueled the international expansion of Korean companies, both to set up businesses in markets where access had been restricted—the rapid growth in Korean exports had led to trade restrictions in some destination markets—and to ensure cost efficiencies and counteract the effect of rising domestic wages (ECLAC, 2007, p. 104). This led to a growth in average annual OFDI, which reached US\$ 442 million in the 1980s.

During the 1990s, the leading *chaebol* adopted internationalization strategies that led to a rise in OFDI, which on average totaled US\$ 3 billion annually during the decade. Moreover, FDI outflows outperformed FDI inflows between 1990 and 1997 (see figure 3). The internationalization strategies of the large conglomerates at that time, however, were not sustainable in the short or medium run. During the 1997 financial crisis, many Korean companies went into liquidation, and others had to restructure and close overseas subsidiaries. The shortcomings in how the financial institutions managed their assets abroad prior to the crisis led to a more cautious atmosphere at the start of the second wave of internationalization that began in the mid-2000s (ECLAC, 2007, p. 106).

Starting in 2006, the government promoted OFDI. The balance of payments surplus was used to encourage companies to invest abroad, in order to expand international production networks and bolster efforts to ensure cutting-edge research. In addition, the cap of US\$ 300 million per project abroad was abolished, and the maximum investment restriction on individual investors rose from US\$ 1 million to US\$ 10 million (Nicolas et al., 2013, p. 30). FDI outflows almost doubled from 2006 to 2007 and the upward trend continued until 2018 when FDI outflows reached a historical high (see figure 3).

As should be expected given the high performance of foreign investments, its share in the economy increased: FDI flows rose from 0.2% of GDP in the 1970s to 3% between 2010 and 2017 (0.8% inbound and 2.2% outbound) (see figure 4). In addition, several domestic companies were bought out by foreign companies after 1997, and FDI inflows played a major role in the accumulation of foreign exchange, which helped the country overcome the effects of the 1997 Financial Crisis (Lee et al., 2018, p. 184). Notwithstanding, the weight of inbound FDI in the economy remains low compared to the global average and to other advanced economies. Between 2010 and 2017, inbound FDI on developed economies was equal to an average of 1.9% of GDP, surpassing 0.8% of the Republic of Korea (UNCTADstat).

Figure 4
Republic of Korea: foreign direct investment flows as a proportion of GDP, 1970-2017
 (Percentages)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), based on United Nations Conference on Trade and Development (UNCTAD).

Comparing the weight given to trade in the Korean economy as opposed to that of FDI reveals a model of international integration in which, to date, trade has prevailed over investments. Moreover, inbound FDI has decreased relative to GDP in recent years. In contrast, Korean companies have thrived internationally, which has been reflected in an increase in OFDI.

C. Korean companies among global leaders in electronics and heavy-industries

The Republic of Korea is an uncommon case of an economy that evolved from being a receptor of FDI to one of the top global investors in just a few decades. In addition, OFDI from the Republic of Korea has defining characteristics that make it a distinctive home country. The characteristics to be noted are that (i) large conglomerates, known as *chaebol*, alongside State-owned companies are the main investors abroad, (ii) greenfield investments are preferred over mergers and acquisitions (M&A), and (iii) investments are concentrated in certain industries and countries.

Between 2014 and 2018, 81% of Korean FDI outflows belonged to conglomerates or chaebols (see figure 5). Chaebols are diversified large corporate groups that are controlled by one or two families. They are similar to the Japanese productive and financial conglomerates known as zaibatsu except in that Korean conglomerates do not have their own banks (Chang, 1993, p. 147). Today, Korean conglomerates are leading international players in electronics, telecommunications, oil and gas, chemicals, automobiles, steel, shipbuilding, construction, electricity, and retail (see box 1). Although some research traces their origins back to the Japanese colonial occupation of 1910 to 1945 (Rhyu, 2005, p. 204), most of the *chaebols* emerged during the reconstruction period that followed the end of the Korean War (1950–1953), and they started to form precisely in the sectors where demand was the highest.

Box 1**The Republic of Korea's five largest *chaebols***

Samsung: The Republic of Korea's largest conglomerate dates back to 1938 when it was founded as a export company supplying foodstuffs, fruit, dried fish, and noodles primarily to the Chinese market. Led by the Lee family, it has interests in electronics, insurance, shipping, luxury hotels, hospitals, an amusement park, and an affiliated university. Samsung Electronics is the group's best-known subsidiary.

Hyundai: Hyundai Group began in the construction sector in 1947 and later diversified into the automobile industry, shipbuilding, finance, and electronics. In 2003, following the Asian financial crisis and the death of its founder Chung Ju-yung, the *chaebol* was split into five companies. These include Hyundai Motor Group, the world's third largest automobile manufacturer, and Hyundai Heavy Industries, the world's largest shipbuilder.

SK Group: Known as SK Holdings, this conglomerate traces its origins to 1950 when the Chey family acquired Sunkyong Textiles. The *chaebol* currently controls around 80 subsidiaries primarily in the energy, chemicals, financial, shipbuilding, insurance, and construction sectors. Notable components of the conglomerate include SK Telecom, the Republic of Korea's largest provider of wireless services, and SK Hynix, the world's second biggest maker of memory chips.

LG Corporation: A merger between Lucky and Goldstar led to the rise of this conglomerate, which began operations in 1947, in the chemicals and plastics industries. Under the leadership of the Koo family, in the 1960s the company began to invest in consumer electronics, telecommunications networks, and power generation along with its chemicals business, which supplies cosmetics and household goods. In 2005 LG split, and the GS *chaebol* was created, which is engaged in the energy, retail commerce, sports, and construction sectors.

Lotte: Founded in Japan in 1948 as a chewing-gum company, Shin Kyuk-ho moved the company to the Republic of Korea in 1967. The conglomerate's core business is foods and beverages, discount stores, department stores, hotels, amusement parks, and entertainment in addition to finance, construction, energy, and electronics. Lotte Confectionery is the world's third-biggest manufacturer of chewing gum and, in 2017, the company inaugurated the 123-floor Lotte World Tower in Seoul, the highest building in the Republic of Korea.

Source: E. Albert, "South Korea's Chaebol Challenge", New York, Council on Foreign Relations, 2018 [online]. <https://www.cfr.org/backgrounder/south-koreas-chaebol-challenge>.

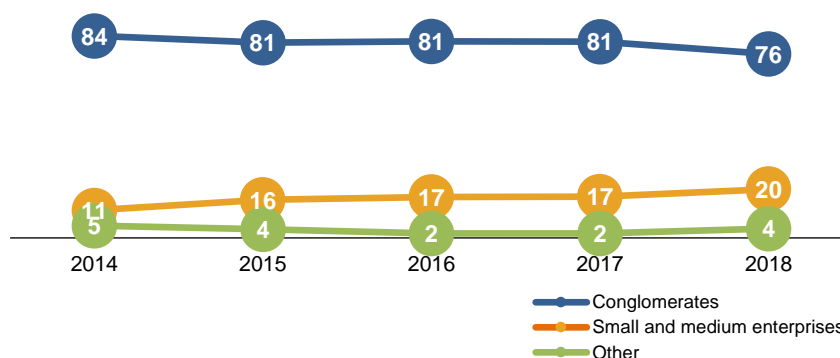
At present, 45 conglomerates meet the traditional definition of *chaebol*, and the top ten account for 27% of all business assets in the Republic of Korea (Pae, 2018). Their share of assets is greater than their impact on employment given that they employ 12% of the workforce; SMEs are the country's largest source of jobs (Albert, 2018). These conglomerates enjoy a high market value, and the *chaebols* account for 77% of the market capitalization of Korean companies on the Asia300 index: Samsung 41%, Hyundai 13%, LG 9%, SK Group 7%, and other *chaebols* 7% with companies not belonging to these conglomerates making up the remaining 23% (Albert, 2018).

In order to expand the international presence of Korean companies that do not belong to the *chaebols*, the Government of the Republic of Korea is making efforts to support the internationalization of small- and medium-sized enterprises (SMEs). The size classification depends on total assets and three-year-average sales: to be considered an SMEs, the total assets should not exceed 500 billion South Korean won (approximately US\$ 424 million at the current exchange rate) regardless of the business type. The maximum for the criteria of three-year-average sales varies by industry. The sales range is between 40 billion won and 150 billion won (between US\$ 34 million and US\$ 127 million), although most sectors fall within the range of 100 and 150 billion won (18 and 9 industries, respectively, out of 47) (MSS, 2019).

The share of SMEs in Korean OFDI peaked in 2000 (42%) and decreased between 2000 and 2014. The expansion of the share of SMEs in that period could be related to the expansion of the mining and

quarrying sector that started in 2006 —mainly in oil and gas— which required large-scale investments that are carried out mostly by large companies (Mah, 2018, p. 101-102). In recent years, this trend has started to be reversed, and OFDI by SMEs grew more rapidly than that of the conglomerates, increasing their share to 20% of the total in 2018 (see figure 5).

Figure 5
Republic of Korea: share of outward FDI by business type, 2014-2018
(Percentages)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), based on Export-Import Bank of the Republic of Korea.

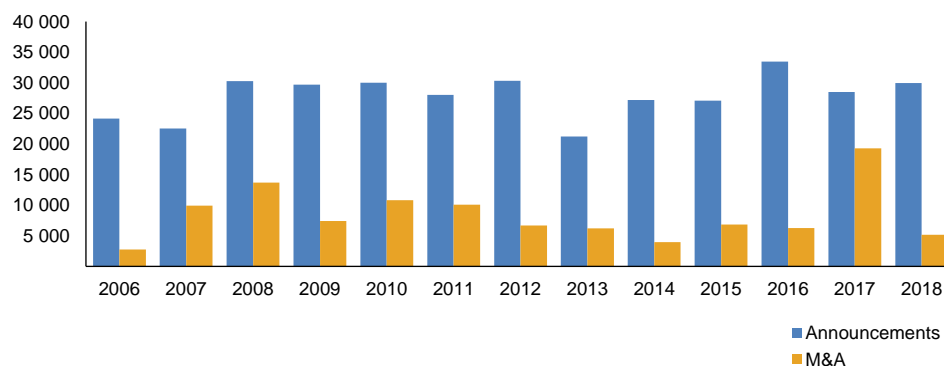
The rise of SMEs' share in OFDI in recent years is aligned with the policy agenda where one of the priorities is to support SMEs. In 2017, the Small and Medium Administration was reorganized and expanded into the Ministry of SMEs and Startups. In addition, the Framework Act on Small and Medium Enterprises from 2016 establishes that the government must encourage SMEs to go global, and the scope of the Korea Trade-Investment Promotion Agency was expanded in furthering the international development of smaller companies, chiefly through export promotion but also by backing the expansion of overseas investments.⁸

The second defining characteristic of Korean investment refers to the mode of investment: greenfield investments have been preferred over M&A. Between 2006 and 2018, cross-border M&As by Korean companies totaled an average of US\$ 8.4 billion annually, while greenfield and expansions announce investments abroad totaled US\$ 27.9 billion annually (see figure 6).⁹ Both figures are not strictly comparable in quantitative terms, because M&A refer to confirmed deals and announcements are potential, in the sense that they could be realized or not in the future, and in occasions the amounts are estimated. Nevertheless, the comparison allows to identify investment behavior and serves as a proxy of the leading strategy in terms of mode of investment. Moreover, compared with the rest of the world, the Republic of Korea has a smaller ratio of M&A flows over FDI outflows. Between 1990 and 2017, the value of global cross-border M&A represented 40% of the total value of global FDI outflows, while the same figure —considering M&A with Korean buyers— in the Republic of Korea was a mere 14% (UNCTAD, 2018).

⁸ "Article 14 (Facilitation of Internationalization): (1) The Government shall take measures necessary to promote the exportation and importation by small and medium enterprises, cooperation with foreign companies, etc. to encourage them to go global. (2) The Government shall take such necessary measures as furnishing information about small and medium enterprises so that they may be able to cope actively with changes in the domestic and overseas economic environment." [online] <https://www.mss.go.kr/site/eng/02/1020300000002016111504.jsp>

⁹ In the period considered, 80% of the announcements were greenfield projects and 20% were expansions.

Figure 6
Greenfield and expansion announcements and mergers and acquisitions by Korean companies, 2006–2018
(Billions of dollars)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), based on Bloomberg and fDi Markets [online database] <https://www.fdimarkets.com/>.

Note: In the period consider, 80% of the announcements are greenfield and 20% expansions. Mergers and acquisitions are listed under the years in which they were concluded, not when they were announced.

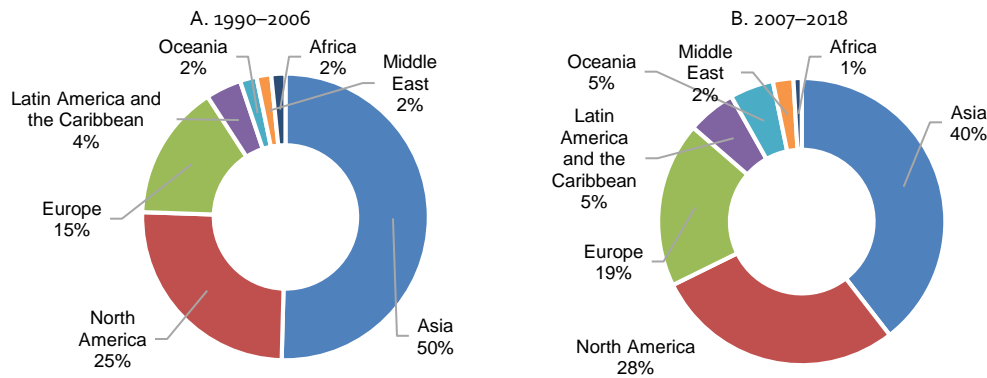
The emphasis on greenfield projects contrasts with the strategy adopted by Chinese companies' outward investments: Chinese FDI has focused on M&A within strategic industries, which are mainly high-technology industries in the United States and Europe and natural resources and energy in developing economies (ECLAC, 2018).

The third characteristic is related to the geographic and industry specialization of Korean OFDI, which has been concentrated in Asia and North America, and the leading industries have been manufacturing, mining and quarrying, financial and insurance activities, and wholesale and retail trade.

Two regions attracted the bulk of Korean OFDI—Asia and North America—which between 1990 and 2018 received 69% of flows with identified destination.¹⁰ A comparison of the last 12 years (2007–2018) with the first wave of internationalization (1990–2006) reveals that Asia has remained the principal destination, albeit with a diminishing share, while investments in North America, Europe, and Oceania increased (see figure 7). At the same time, Latin America and the Caribbean received 4.0% in the first wave and 5.5% in the second, above both Africa and the Middle East.

¹⁰ This analysis excludes FDI flows towards financial centers in the Caribbean (Cayman Islands, British Virgin Islands, United States Virgin Islands, and Netherlands Antilles) and Bermuda, because it is not possible to identify the ultimate destination of the investment, not in geographical nor in industry terms.

Figure 7
Republic of Korea: OFDI by destination region, 1990-2018
(Percentages)

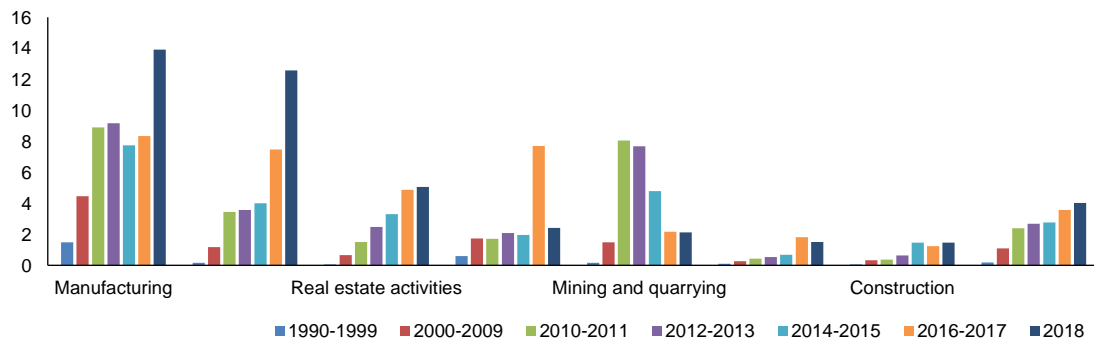


Source: Economic Commission for Latin America and the Caribbean (ECLAC), based on Export-Import Bank of the Republic of Korea.
Note: Does not include FDI flows towards the Cayman Islands, British Virgin Islands, United States Virgin Islands, Netherlands Antilles, or Bermuda.

At the country-level, the leading destination was the United States, followed by China (including Hong Kong (SAR)), accounting for 23% and 18%, respectively, of Korean OFDI between 1990 and 2018. Other than those two countries, investments were distributed in a relatively uniform pattern with Vietnam receiving 4%, Australia 3%, and the United Kingdom 3%. In Latin America, Brazil (2%) and Mexico (1%) were ranked 11th and 14th among FDI recipients between 1990 and 2018. Although Korean OFDI is focused on two main destinations, companies are diversifying their destination targets, which increased from 67 countries in 1990 to 149 in 2018. More recently, the number of countries receiving more than US\$ 1 billion (cumulative) in Korean OFDI rose from 22 between 2000 and 2009 to 38 between 2010 and 2018.

The industrial specialization of Korean OFDI can be traced to the specialization of the leading business conglomerates. Between 1990 and 2018, four sectors accounted for 76% of total OFDI: manufacturing (34%), mining and quarrying (15%), financial and insurance activities (15%), and wholesale and retail trade (12%). During the commodity price boom, investment in mining and quarrying grew impressively, and OFDI reached an annual average of US\$ 8.1 billion and US\$ 7.7 billion in 2010-2011 and 2012-13, respectively. After that, investments in extractive industries fell, and manufacturing, financial sector, and wholesale and retail trade acquired greater relevance (see figure 8).

Figure 8
Republic of Korea: OFDI by industry, annual averages, 1990-2018
(Billions of dollars)

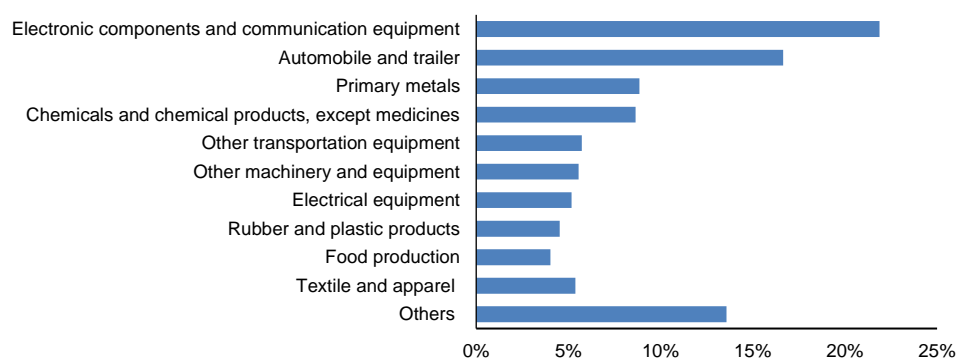


Source: Economic Commission for Latin America and the Caribbean (ECLAC), based on Export-Import Bank of the Republic of Korea.
Note: Does not include FDI flows towards the Cayman Islands, British Virgin Islands, United States Virgin Islands, Netherlands Antilles, or Bermuda.

The distribution of investments to each destination country differs by industry. On the one hand, Korean OFDI in wholesale and retail trade, real estate, and financial and insurance activities have been concentrated in the United States, a destination that accounted for 46%, 41%, and 38% of OFDI in those sectors, respectively, over the past decade (2007–2017). It is similar in manufacturing where China (including Hong Kong SAR) was the main recipient of Korean manufacturing OFDI, receiving 40% of the total, followed by Vietnam (10%), the United States (10%), Brazil (4%), Indonesia (4%), and Mexico (3%). On the other hand, the geographical concentration in mining and quarrying was lower, and three countries received 49% of Korean OFDI between 2007 and 2017: the United States (18%), Australia (17%), and Canada (15%).

Within manufacturing, the largest share in OFDI correspond to industries that could be in a way related to the ones prioritized during the industrialization and the implementation of export-promotion strategies (the heavy and chemical industries). Between 2007 and 2017, 77% of Korean manufacturing OFDI went to electronics and communications equipment, automobile and other transportation equipment, primary metals, chemicals, machinery, electrical equipment, and rubber and plastic products (see figure 9).

Figure 9
Republic of Korea: OFDI in manufacturing, by subsector, 2007-2017
(Percentages)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), based on Export-Import Bank of the Republic of Korea.

Note: Does not include FDI flows towards the Cayman Islands, British Virgin Islands, United States Virgin Islands, Netherlands Antilles, or Bermuda.

The geographical segmentations by industry is illustrated in more detail via the analysis of investment announcements. Between 2006 and 2018, Korean companies announced investments worth US\$ 362 billion, and five industries accounted for 52% of the total: automotive OEM and components (12%), coal, oil and gas (11%), semiconductors (10%), electronic components (10%), and metals (9%). China and the United States were the preferred destinations in semiconductors, while China and Vietnam lead the projects in electronic components (see table 3). Mexico is the only country in the region that appears among the top five target countries in the top five target industries in the automotive and components sector. Mexico also has obtained 15% of the announced amount of Korean greenfield investments in consumer electronics, the industry that ranked 10th among Korean FDI announcements.

Table 3
FDI announcements by Korean companies, top five industries and destinations, 2006-2018
(Percentages of total investment amounts)

Automotive and components	Coal, oil and gas		Electronic components		Semiconductors		Metals		
China	20	Vietnam	27	China	44	China	57	India	33
Mexico	18	Indonesia	8	Vietnam	28	United States	36	China	17
India	13	Myanmar	5	United States	7	Philippines	4	Vietnam	15
United States	12	Iran (Islamic Rep. of)	5	Poland	5	Singapore	3	Iran (Islamic Rep. of)	5
Slovakia	7	India	5	Malaysia	3	Japan	0	Indonesia	5
Others	31	Others	50	Others	13	Others	1	Others	25

Source: Economic Commission for Latin America and the Caribbean (ECLAC), based on fDi Markets [online database] <https://www.fdimarkets.com/>.

In general, greenfield investments has prevailed among other modes of investment, but M&A deals were also prominent in oil and gas and in real estate business. The value of cross-border M&A in oil and gas and in real estate represented 23% of the total amount accumulated by deals with Korean buyers between 2005 and 2018, and the deals were worth US\$ 13.1 billion in oil and gas and US\$ 11.6 billion in real estate.¹¹ With 56 deals in real estate and 43 in oil and gas, they are the top industries. This, however, only amounts to 6% and 5%, respectively, of total number of deals due to deals in various other industries. Notable industries in terms of the number of deals were mining (39), renewable energies (38), internet-based business (36), and auto parts (34).

In 2017, M&A from Korean companies reached a maximum, explained in part by the acquisition of Harman, a leading U.S. company that designs and engineers connected products and solutions for automakers, consumers, and enterprises, by Samsung Electronics for US\$ 8.6 billion. In 2018 the amount of cross-border M&A fell to previous levels (see figure 6). In addition to Samsung's acquisition of Harman, another notable deal outside of the extractive industries was the acquisition of Bobcat Company, a leading U.S. producer of compact equipment for construction, agriculture, and mining industry, by Doosan Infracore for US\$ 4.9 billion in 2007.

To conclude, the internationalization strategies of Korean companies were noticeable not only by the evolution of Korean FDI outflows, but also by the positions achieved by Korean companies in international business rankings. In 2018, 16 Korean companies were listed among the world's 500 largest companies by revenue, 11 of which had first appeared on the list in 1998 (Fortune, 2018) (see Table 4). Samsung electronics, for example, is currently the largest private Korean conglomerate, and over a period of 20 years, it rose from the 142nd place of the Fortune "Global 500" to 12th in 2018, the best result for any Korean company. The semiconductor boom was the main driving force behind Samsung Electronics' achievement, and the company has achieved extraordinarily high levels of access in the global electronics market.¹² In Latin America and the Caribbean, for example, Samsung led in the sales of smartphones in 2017, accounting for 38% of all units sold in the region.¹³

¹¹ Data from Bloomberg. It only refers to public companies and deals where the buyer is Korean (excludes deals where the buyer is a consortium with a Korean company).

¹² See [online] http://news.chosun.com/site/data/html_dir/2019/02/20/2019022000272.html.

¹³ See [online] <https://www.statista.com/>.

Table 4
Top Korean companies in the Global 500 listing, 1998, 2008 and 2018
(By ranking and revenue in billions of dollars)

		2018			
2008					
		Samsung Electronics (12)	Electronics	211.9	
	Samsung Electronics (38)	106.0	Hyundai Motor Company (78)	Automobiles	85.2
	LG (67)	82.1	SK Holdings (84)	Hydrocarbons	83.5
	Hyundai Motor Company (82)	74.9	LG Electronics (178)	Electronics	54.3
1998	SK Holdings (86)	70.7	POSCO (184)	Metals	53.2
Daewoo Group (18)	POSCO (224)	34.0	Korea Electric Power (188)	Electricity	52.5
SK Group (71)	Korea Electric Power (245)	31.3	Kia Motors (219)	Automobiles	47.4
Hyundai Corporation (105)	Samsung Life Insurance (247)	30.9	Hanwha Group (244)	Insurance	44.6
Samsung Corporation (121)	GS Holdings (267)	29.5	Hyundai Mobis (380)	Automobiles	31.1
Samsung Electronics Co., Ltd. (142)	Shinhan Financial Group (278)	28.7	Samsung Life Insurance (421)	Insurance	28.3
Samsung Life Insurance Co., Ltd. (180)	Woori Finance Holdings (279)	28.7	GS Caltex (438)	Hydrocarbons	26.8
LG International Corporation (236)	Hanwha (329)	24.4	SK Hynix (442)	Semiconductors	26.6
LG Electronics (270)	Hyundai Heavy Industries (378)	22.5	Samsung C&T Corporation (458)	Commerce	25.9
Korea Electric Power Corporation (294)	KT (387)	21.7	KB Financial Group (471)	Commercial banking	25.1
Hyundai Motor Company (359)	KB Kookmin Bank (461)	18.0	LG Display (483)	Electronics	24.6
Kyobo Life Insurance (466)	Samsung C&T (475)	17.6	CJ Corporation (493)	Commerce	23.8

Source: Economic Commission for Latin America and the Caribbean (ECLAC), based on *Fortune*, "Global 500", 2018 [online database] <https://fortune.com/global500/2018/search/>.

Note: Revenue data for 1998 not available.

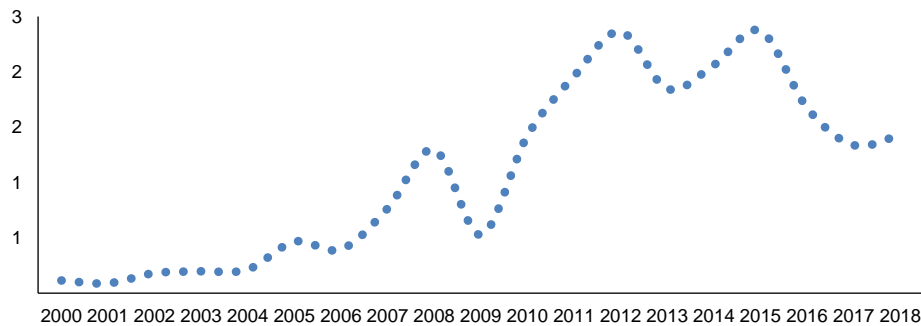
II. Growing ties between the Republic of Korea and Latin America and the Caribbean

A. Thriving investment and trade since mid-2000s

The presence of Korean companies in Latin America and the Caribbean is not a new phenomenon. In the 1970s, when the Republic of Korea had stringent restrictions on OFDI, there were already liaison offices and subsidiaries of Korean conglomerates in Brazil and Panama. Notwithstanding, in the mid-2000s, Korean OFDI in Latin America and the Caribbean started to thrive, and bilateral trade flows bloomed. The country signed Free Trade Agreements (FTAs) with several countries in the region in the last decade, and cooperation initiatives were reinforced, setting the bases for a new era of relations in international trade and cooperation.

Along with the expansion of Korean OFDI to the rest of the world, investments in Latin America and the Caribbean started to grow rapidly after 2006. In the 1990s, Korean OFDI into Latin America and the Caribbean totaled US\$ 1.1 billion. In the 2000s the figure was multiplied by four (US\$ 4.2 billion), and between 2010 and 2018, Korean OFDI into the region amounted to US\$ 16.5 billion (see figure 10), representing a total investment of US\$ 22 billion from 1990 to 2018. Thus, from 2008 to 2018, the region annually received US\$ 1.7 billion in Korean OFDI, which represented 5.2% of total Korean OFDI at that time.

Figure 10
Republic of Korea: OFDI into Latin America and the Caribbean, 2000-2018
(Billions of dollars)

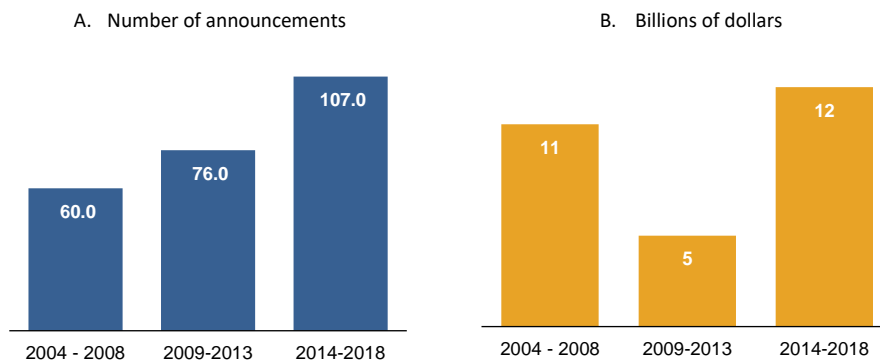


Source: Economic Commission for Latin America and the Caribbean (ECLAC), based on Export-Import Bank of the Republic of Korea.

Note: Excludes Korean OFDI towards the Cayman Islands, British Virgin Islands, United States Virgin Islands, Netherlands Antilles and Bermuda.

The rising interest of Korean companies in Latin America and the Caribbean is also reflected in the evolution of FDI announcements. The number of announcements rose by almost 80% from 2004 to 2018, while associated amount grew by 18% (see figure 11). The volume of investments between 2004 and 2008 was due to two large projects: Dongkuk Steel's construction of a new steel plant in a joint venture between POSCO and the Brazilian company Vale in the State of Ceará in 2006 (Companhia Siderúrgica do Pecém, CSP) for a total amount of US\$ 4 billion, and the expansion of LG's electronics plant in Reynosa, Mexico in 2005, which was valued at around US\$ 1.3 billion. The CSP plant ultimately entailed an investment of US\$ 5.5 billion and began operations in June 2016 (Jung, 2016).

Figure 11
FDI announcements by Korean companies in Latin America and the Caribbean, accumulated for 2004-2008, 2009-2013 and 2014-2018

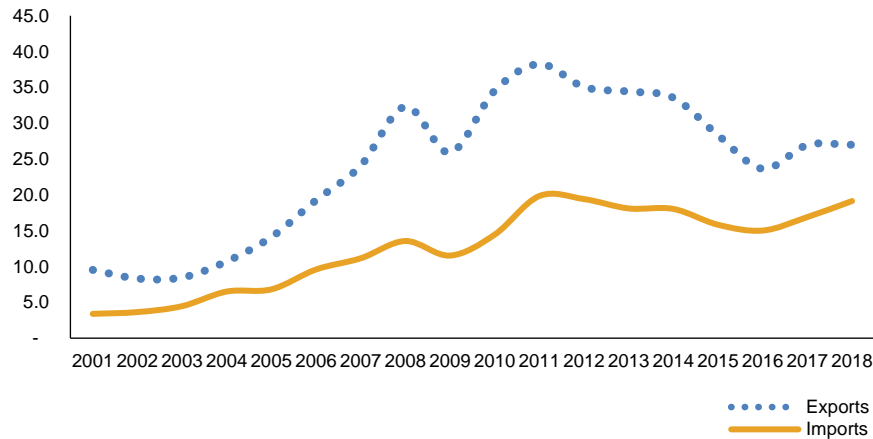


Source: Economic Commission for Latin America and the Caribbean (ECLAC), based on fDi Markets [online database] <https://www.fdi-markets.com/>.

In addition to investment, trade relations intensified since 2006. Merchandise trade flows between the Republic of Korea and Latin America and the Caribbean grew from an average of US\$ 17 billion per year between 2001 and 2006 to US\$ 46 billion per year between 2007 and 2018 (see figure 12). Thus, bilateral merchandise trade flows totaled US\$ 662 billion between 2001 and 2018 with a positive balance in favor of the Republic of Korea. Like is the case with FDI, the weight of Latin America

and the Caribbean as a trade partner for the Republic of Korea is not large in quantitative terms; however, relevance increases when industry specialization is considered. Between 2016 and 2018, the share of Latin America and the Caribbean in total Korean goods exports was 4.6%, a similar weight to that of the region in Korean OFDI, and larger than the share of Latin America and the Caribbean in Korean imports (3.6%).

Figure 12
Republic of Korea: trade in goods with Latin America and the Caribbean, 2001-2018
(Billions of dollars)



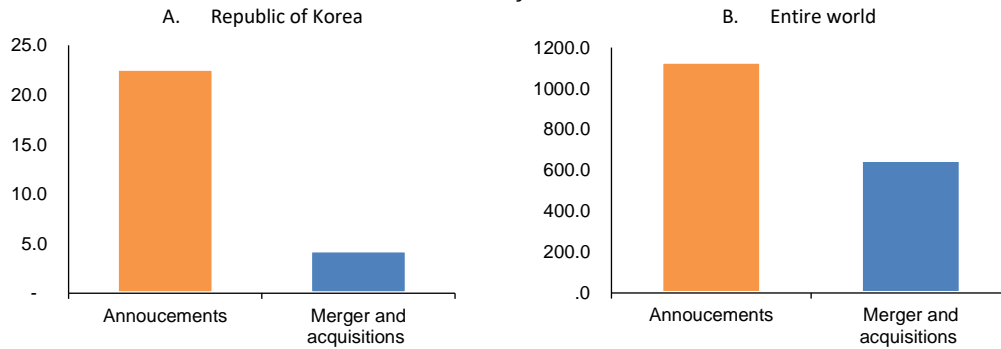
Source: Economic Commission for Latin America and the Caribbean (ECLAC), based on data from the International Trade Centre Trademap. [on line database] <https://www.trademap.org/Index.aspx>.

B. High added-value manufacturing, the main target for Korean OFDI

The defining characteristics that make the Republic of Korea a distinctive home country (see section C) apply to investments in Latin America and the Caribbean: (i) Large conglomerates alongside state-owned companies are the main investors; (ii) Greenfield investments are preferred over M&A; and (iii) Investments are concentrated in certain industries and countries.

The Analysis of FDI announcements and M&A as modes of investment show that Korean companies prefer greenfield investments over M&A in Latin America and the Caribbean just as they do in other parts of the world. As stated earlier, the comparison between the value of announcements and the value of M&As is imprecise given the different nature of both figures. The comparison of the ratio between different geographical origins, however, helps identify investment behavior of Korean companies in Latin America and the Caribbean relative to the rest of the world and serves as proxy of the leading investment mode. The ratio between the value of announcements and the value of cross-border M&A with target firms in the region by Korean companies is 5.2 while the same ratio for investments from all countries including Korea is 1.7 (see figure 13).

Figure 13
FDI announcements and mergers and acquisitions in Latin America and the Caribbean
by origin, accumulated, 2005-2018
(Billions of dollars)

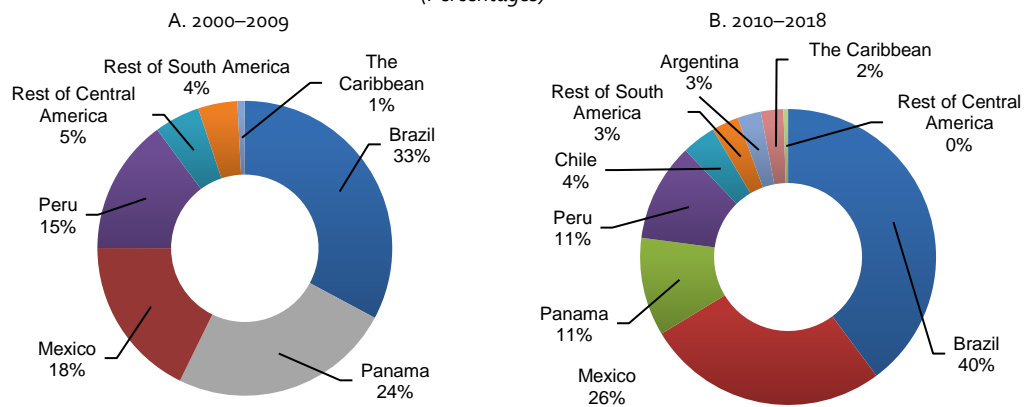


Source: Economic Commission for Latin America and the Caribbean (ECLAC), based on Bloomberg and fDi Markets [online database] <https://www.fdimarkets.com/>.

As for the destinations of Korean OFDI in Latin America and the Caribbean, Brazil and Mexico accounted for the majority, but almost all the countries, including the whole of South America, Central America, Mexico, and 12 Caribbean countries, received some FDI from the Republic of Korea (29 countries between 1990 and 2018) (see figure 14).

Comparing the 2000s with the period from 2010 to 2018, there was an upswing in the concentration of investments in Brazil and Mexico while Central America’s share dropped as a result of less OFDI into Guatemala, Honduras, and El Salvador. Central America, excluding Panama, went from accounting for 5% of the total to a share of less than 1%. In contrast, the share received by Chile, Argentina, and the Caribbean increased. The fall in Central America was explained by lower investments in manufacturing, particularly in the textile and apparel industries, and the fact that investments in Panama grew less than in other countries. The growth in Argentina was due to recent mining investments associated with lithium extraction, whereas in Chile, it was due to investments in the energy and mining sectors. The increase in the Caribbean was the result of increased FDI flows to the energy sector in Barbados in 2011 and 2012.

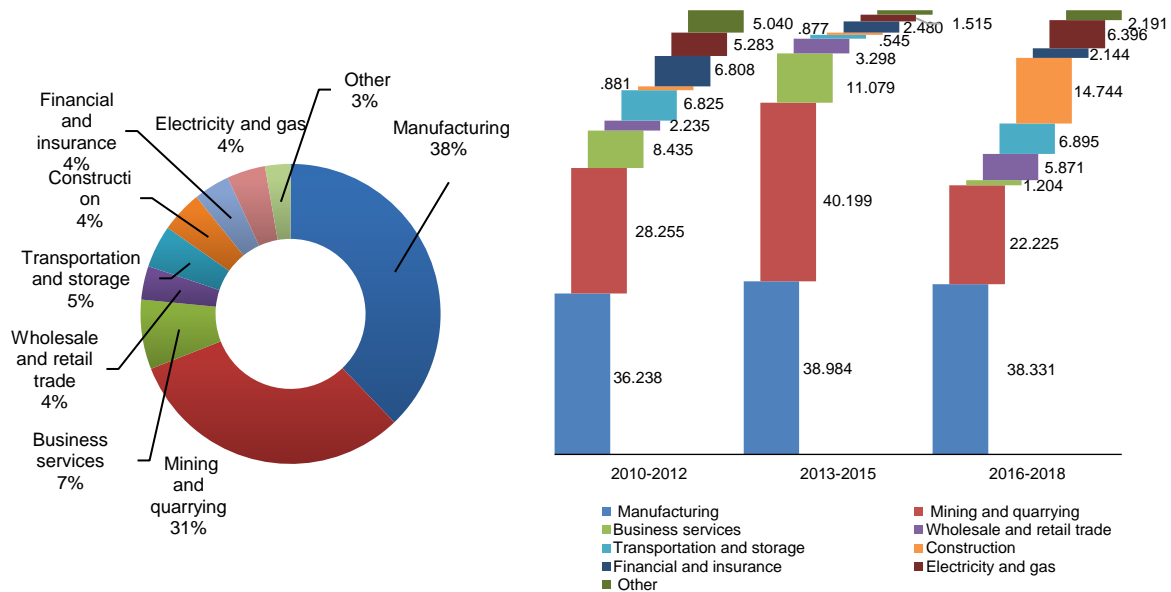
Figure 14
Korean outward FDI in Latin America and the Caribbean, by destination country, 2000-2009 and 2010-2018
(Percentages)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of Export-Import Bank of the Republic of Korea.
 Note: Does not include FDI flows towards the Cayman Islands, British Virgin Islands, United States Virgin Islands, Netherlands Antilles, or Bermuda. Figures for the Caribbean also include Guyana, Belize, and Suriname.

Industry specialization of Korean OFDI in the region shows a concentration in manufacturing and mining (see figure 15). OFDI in manufacturing was mainly intended to expand markets and, in certain cases, reduce costs while those in mining were aimed at ensuring stable supplies of natural resources.

Figure 15
Republic of Korea: foreign direct investment in Latin America and the Caribbean, by destination sector, accumulated total for 2010-2018
 (Percentages)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), based on Export-Import Bank of the Republic of Korea.
Note: Does not include FDI flows towards the Cayman Islands, British Virgin Islands, United States Virgin Islands, Netherlands Antilles, or Bermuda.

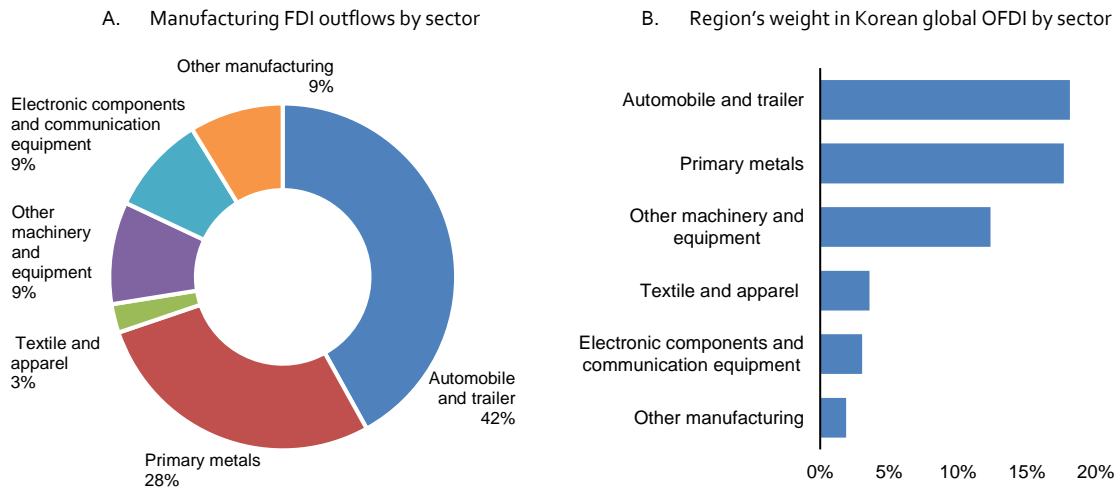
During the commodity price boom, mining investments reached its peak: 61% of Korean OFDI in mining and quarrying in the region in the last 19 years was received between 2010 and 2015. Investments in mining went primarily to Peru (34% of the total between 2000 and 2018), Brazil (30%), and Mexico (24%) and to a lesser extent to Argentina and Chile. The abundance of natural resources in Peru was an advantage in obtaining the FTA with the Republic of Korea in 2011 (Invest Korea, 2019) and recent outflows into mining show that Korean companies are still interested in the Peruvian mining industry.

From 2016, the highest increase of Korean OFDI was in construction, transportation and storage, and electricity and gas, industries in which Korean companies are beginning to expand their activities in Latin America and the Caribbean. OFDI in construction was concentrated in Brazil (64% of the OFDI in the construction industry between 2016 and 2018), although Bolivia also accounted for a sizeable share (16%). Brazil also received the largest portion of OFDI in transportation and storage (75%), followed by Panama (24%). OFDI in electricity and gas, in contrast, mostly went to Chile (97%).

Korean manufacturing companies bolstered the growth of high added-value industries in the region such as automobile and auto parts, electronics and communications equipment, and other machinery and equipment along with the processing of natural resources thanks to the establishment of steel plants (see figure 16 A). Korean companies played an important role in the development of the automobile and auto parts industry in Mexico and Brazil, which received 64% and 36%, respectively, of the OFDI to the industry in the region, and in that of the steel industry with Brazil taking 80% of that sector's OFDI and Mexico, 17%. Apparel investment has been concentrated in Central America and

Haiti, which received 53% and 47%, respectively, of Korean OFDI in the period between 2007 and 2017, and OFDI in textiles have been decreasing steadily with zero investments in the industry in 2018.

Figure 16
Korean outward FDI in manufacturing in Latin America and the Caribbean, by subsector, 2007-2017
(Percentages)



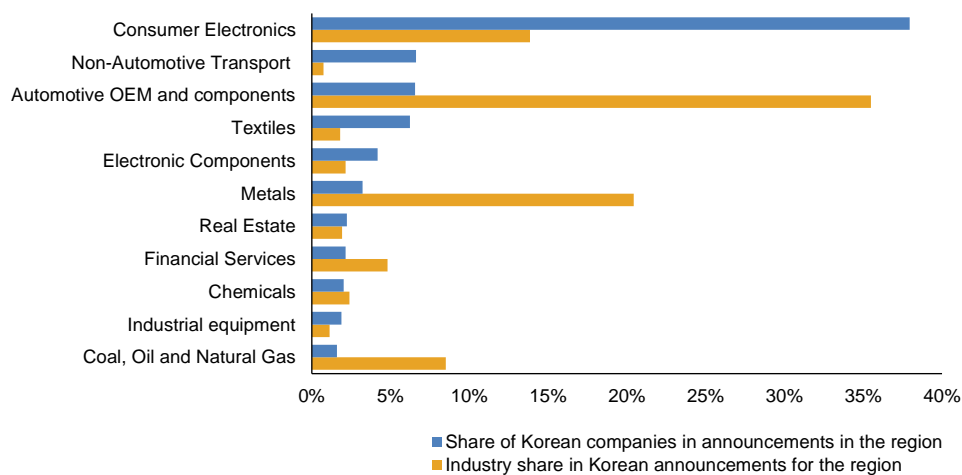
Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of Export-Import Bank of the Republic of Korea.

Note: Does not include FDI flows towards the Cayman Islands, British Virgin Islands, United States Virgin Islands, Netherlands Antilles, or Bermuda.

Moreover, Latin American and Caribbean is a relevant location for Korean multinationals in the automobile and trailer, primary metals, and other machinery and equipment industries. In the last decade, 18% of the Korean OFDI in automobile and trailer and primary metals was invested in the region and 12% in other machinery and equipment (see figure 16 B). In textile and apparel and electronic components, the region attracted a smaller share of Korean FDI. In very broad terms, the region does not appear to be a strategic market for the internationalization of production in either the textile and apparel industries or in electronics and communications equipment sectors; however, it seems to be a strategic location for automobiles and primary metals.

Between 2005 and 2018, Korean companies announced investments worth US\$ 27.2 billion in Latin America and the Caribbean. Given the concentration of investments in companies from largest conglomerates specializing in specific industries, Korean companies played a leading role in the development of certain industries in Latin America and the Caribbean. The most relevant in terms of the value of FDI announcements is consumer electronics: between 2005 and 2018, 38% of total FDI announcements in that industry in Latin America and the Caribbean belonged to Korean companies (see figure 17). Korea's high share among total FDI announcements was achieved although consumer electronics is not the main industry in Korean FDI announcements in the region: consumer electronics only accounted for 14% of Korean announcements. In fact, the industry with the largest value is automotive OEM and components, which represented 35% of the value of Korean announcements in Latin America and the Caribbean between 2005 and 2018. Korean companies also played an important role in developing non-automotive transport projects, automotive OEM and auto parts by supplying 7% of the value of projects announced for Latin America and the Caribbean between 2005 and 2018 (see figure 17).

Figure 17
Korean companies' share on FDI announcements in Latin America and the Caribbean,
leading sectors, accumulated total for 2005-2018
(Percentages)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), based on fDi Markets [online database] <https://www.fdi-markets.com/>.

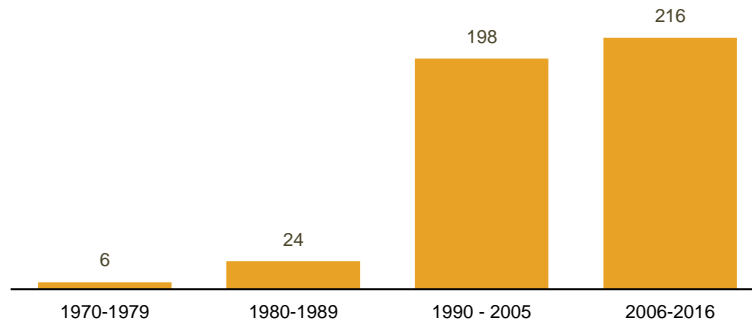
C. Korean business in the region: the coexistence of conglomerates and SMEs

According to the Korea Trade-Investment Promotion Agency (KOTRA), in 2016 there were at least 444 Korean business registered in Latin America and the Caribbean. This figure does not cover all companies located in the region as not all Korean firms operating in Latin American and the Caribbean are registered with KOTRA. Furthermore, multiple offices of a single company (e.g. Samsung office in Brazil and in Mexico) are registered independently in this database. Consequently, it does not represent the exact number of Korean companies in Latin America and the Caribbean. It does, however, provide an overview of the evolution of Korean business in the region.

Most of these offices began their operations in or after 2006 (see figure 18), at the start of the most recent internationalization wave of Korean companies. Notwithstanding, there are records of liaison offices being opened as early as the mid-1970s, like POSCO and the Korea Exchange Bank in Brazil and Samsung C&T America, Samsung Electronics (production subsidiary formally started operations in 1989), and Hyosung Corporation in Panama.¹⁴ The most common business type has been subsidiaries (83% of all the recorded business), which means that the enterprises have an independent legal identity but that corporate headquarters in the Republic of Korea hold 50% or more of its voting power (OECD, 2008). In contrast, branches, which are not legally independent from corporate headquarters, account for 12% of the total number of business, whereas 5% are liaison offices. Thus, in most investments, corporate headquarters have retained control over decision-making.

¹⁴ Trading relations between Samsung and Panama date back further with Samsung exporting its first black and white televisions to Panama in 1973.

Figure 18
Korean-owned business operating in Latin America and the Caribbean, by year operations began, 1970-2016
(Number of establishments)

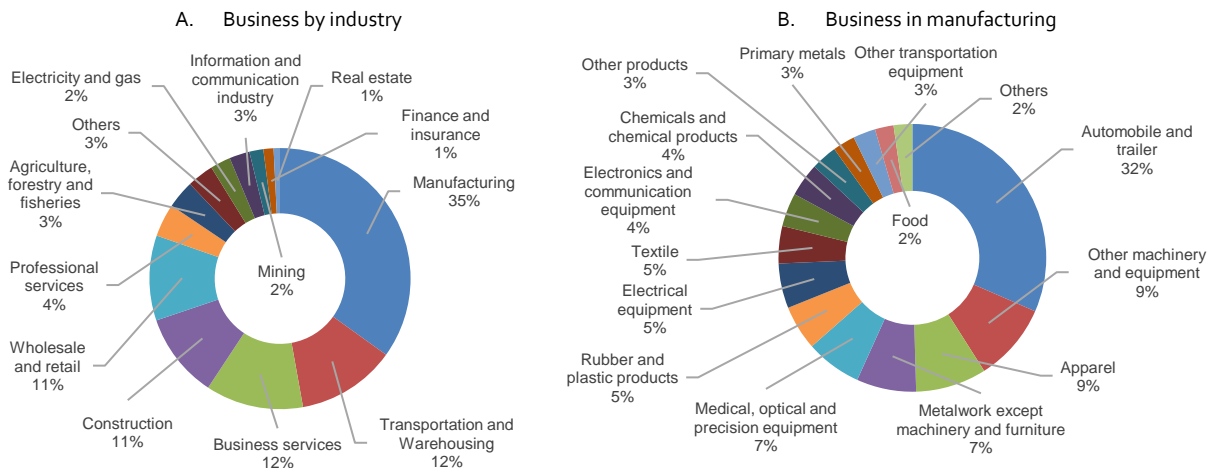


Source: Economic Commission for Latin America and the Caribbean (ECLAC), based on fDi Markets [online database] <https://www.fdi-markets.com/>.

Although the five biggest *chaebols* (see box 1) lead investments in the region, not all Korean enterprises in Latin America and the Caribbean belong to the largest conglomerates. In fact, according to information from the Export-Import Bank of the Republic of Korea (Korea Eximbank), from 1980 to 2018, 563 enterprises invested at least one year in Latin America and the Caribbean and, of those, 45% belonged to one of the conglomerates with the remainder being made up of SMEs (46%) and other kinds of organizations (9%). Therefore, considering the number of enterprises, SMEs and large conglomerates have had an almost equal share. In Mexico, for example, KOTRA is currently supporting between 10 and 15 SMEs with investment projects in addition to the support they provide to large-scale projects, such as Hyundai Motor Group’s support for the Kia Motors plant in the State of Nuevo León.

As to be expected given the industrial breakdown of Korean OFDI, most businesses (222) belong to manufacturing. In contrast, mining activities, which account for a significant share in total investments, are concentrated in a very limited number of enterprises (see figure 19 A). In manufacturing, most investors belong to automobile and auto parts (70), followed by other machinery and equipment and apparel.

Figure 19
Number of Korean companies with OFDI in Latin America and the Caribbean, by industry, 1980-2018
(Percentages)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), based on Export-Import Bank of the Republic of Korea.

In the last 16 years, almost 800 Korean companies announced 101 projects in the region. Within the automobile industry, Hyundai Motor is the company with the most value in announcements, including the construction of the Kia Motors plant in Nuevo León, Mexico, announced in 2014 with an investment of US\$ 3 billion, and the Hyundai Motor plant in São Paulo, Brazil, in 2008 for US\$ 600 million (see table 5). Considering the number of announcements, Samsung is the leading company with 52 projects in the last 16 years.

Table 5
Korean companies with the largest FDI announcements in Latin America and the Caribbean, 2003-2018
(Millions of dollars and number of projects)

Company	Main activity	Amount	Number
Hyundai Motor	Automobiles	8,865	39
Dongkuk Steel Mill	Steel	4,000	1
LG	Consumer electronics	3,134	32
Samsung	Consumer electronics and electronic components	2,189	52
POSCO (POSCO Daewoo)	Steel	1,825	17
Korea Gas Corporation (KOGAS)	Energy (gas)	1,500	1
Sae-A Trading	Textiles	832	7
Korea Electric Power Corporation (KEPCO)	Electricity (fossil fuels)	500	1
Korea Land and Housing Corporation	Construction	400	1
Shinhan Financial Group	Retail banking	339	3
Halla Group	Auto Parts	338	3
Hansae	Apparel	323	2
Another 798 companies		4,757	101

Source: Economic Commission for Latin America and the Caribbean (ECLAC), based on fDi Markets [online database] <https://www.fdi-markets.com/>.

According to previous studies, the major motivations behind Korean OFDI until the mid-2000s were market access and reduction of production cost (MOCIE, 2002 cited in Kim and Rhe, 2009, p. 136). In this study, we find similar motivations in a survey of 11 suppliers for the automobile industry located in Mexico and in several interviews to representatives of firms in consumer electronics, construction, and electricity.

1. Automotive suppliers in Mexico

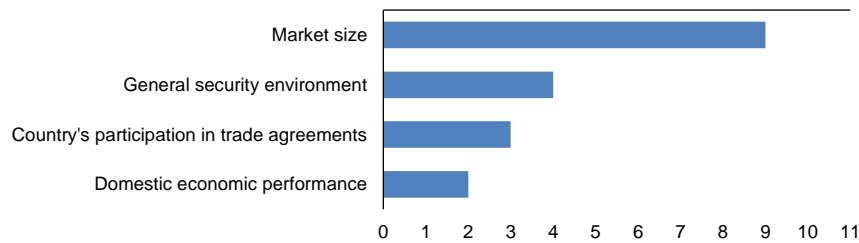
The Kia plant in Mexico was opened in 2016, and after its opening, several Korean suppliers joined. It has been a common strategy for Korean enterprises to invest abroad following an investment by a major client (Kim and Rhe, 2009, p. 130). According to information provided in 2018 by 11 suppliers for the automotive industry in Mexico, most of them (64%) set up their facilities in the country during the past five years and started as a greenfield investment (73%). In fact, according to one businessman who has been in the country for decades, the opening of the Kia Motors plant fueled a sharp increase in the number of Korean businesspeople and the size of the Korean community in the area, which rose from a population of 500 to 5,000 people over the past 15 years.

Considering the sales range of the previous year and following the thresholds established in Korean law, most of the surveyed firms could be classified as SMEs with 5 out of 8 SMEs having annual sales below US\$ 50 million. 73% of the 11 surveyed firms exported, and half of them exported more than 80% of their output. The common destination of all these exports was the United States; two companies also exported to Europe, while another also exported to Canada.

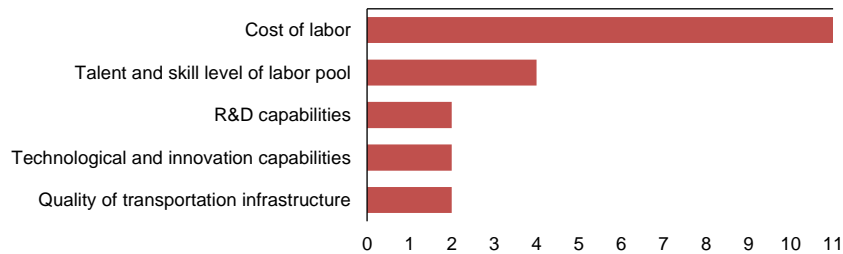
When asked about the factors that contributed the most for the preference of the current location, almost all of the surveyed firms (10 out of 11) pointed to market expansion as the main driver while one firm pointed to cost efficiency. In addition, the three highest contributing factors for the current location to be favorable in terms of market expansion were market size, general security environment, and participation of the country in FTAs, while all companies answered that cost of labor was an advantage in terms of cost efficiency (see figure 20 A and 20 B). Answers about government incentives and institutional support were more diverse (see figure 20 C).

Figure 20
Investment drivers in a small sample of automotive suppliers in Mexico
(Number of responses)

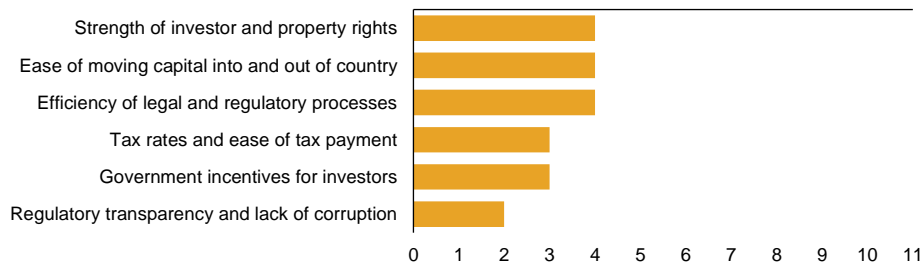
A. Which of the following were the 3 most contributing factors for the current location to be favorable in terms of market expansion?



B. Which of the following were the 3 most contributing factors for the current location to be favorable in terms of cost-efficiency and logistics?



C. Which of the following were the most contributing factors for the current location to be favorable in terms of government incentives and institutional supports?

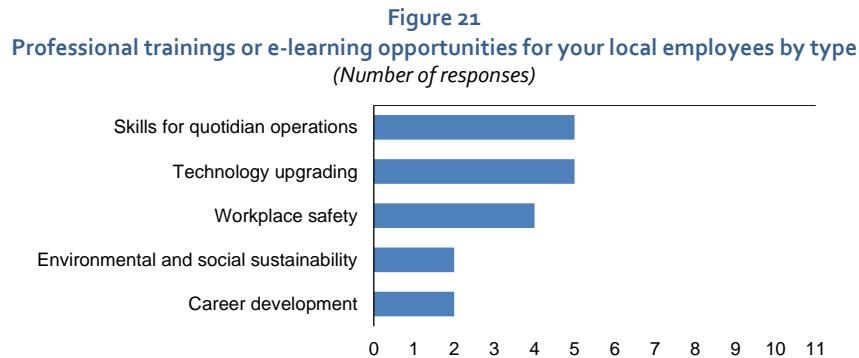


Source: Authors based on a survey of 11 automotive suppliers in Mexico.

Regarding linkages with local firms, 9 businesses answered, and six of them contracted more than 50% of their basic and financial services locally while their purchases of raw materials, machinery, and capital goods were primarily sourced from abroad: 5 bought less than 10% of their capital goods locally, and 4 bought less than 30% of their raw materials locally. According to the firms, there needs to be improvements in the quality and price of local goods and services: 54% of the respondents were dissatisfied with quality, and 64% with prices and delivery times. However, they are optimistic, with 82%

of the respondents expecting the quality of local goods and services to improve. One of the difficulties of operating in Mexico that they identified was security along with problems of infrastructure and low productivity, which prevented them from making greater use of local suppliers.

Companies understand that providing personnel with training could help them to achieve higher productivity levels. Providing personnel with training is a generalized practice among Korean companies, and 10 of the 11 surveyed firms in Mexico do so. Training areas differ among companies and the top three topics are daily work skills, technology upgrading, and workplace safety (see figure 21).

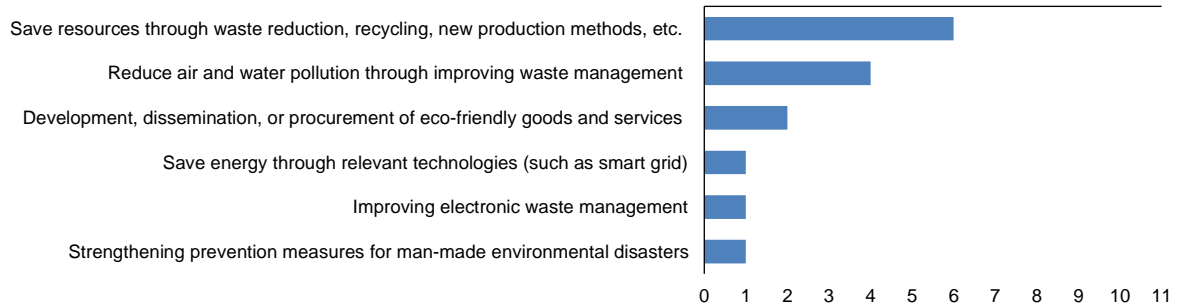


Source: Authors based on a survey of 11 automotive suppliers in Mexico.

Korean enterprises located in Mexico are pursuing some interesting initiatives in response to indicating that they had encountered difficulties in finding qualified personnel as well as in dealing with absenteeism. One interesting initiative is the launch of training programs so their workers can obtain secondary-school diplomas given that many of the employees have reached the maximum earnings possible as production operators and require a secondary-school degree before they can be promoted. Accordingly, programs are being developed to enable workers to prepare for the necessary exams. Such programs can be expensive, but the companies believe that they are necessary to increase worker productivity.

Finally, most surveyed businesses (9 out of 11) believe that technological change and the social and environmental requirements of sustainable development will impact FDI and demand greater investments. Seven companies responded that they did carry out R&D activities and innovation in-house, but none said that they pursued such endeavors in conjunction with local research institutes, universities, or technology centers. Asked about changes to cope with climate change and environmental sustainability, most of the companies answered that they take steps in pursuit of more sustainable production methods, citing waste management as the most frequent method (6 out of 11) (see figure 22).

Figure 22
In which aspect is your local office currently making changes to cope with climate change and environmental sustainability?
(Number of responses)



Source: Based on a survey of 11 automotive suppliers in Mexico.

2. Consumer electronics

In the consumer electronics industry, the arrival of globally well-positioned multinationals such as Samsung and LG has helped attract suppliers even though assembly operations account for a large part of the activities.

The expansion of the electronics company LG's plant in Reynosa, Mexico —announced in 2005 and worth US\$ 1.3 billion—was the largest project in recent years. In turn, Samsung was the company with the largest number of project announcements: 52 since 2003, albeit of relatively smaller size (see Table 5). In 2018, Samsung Electronics had three manufacturing plants in the region (in Brazil and Mexico), seven sales offices, a research and development center, a design center (see Box 2), and ten other offices (Samsung, 2018). Also present in Mexico is Winia Daewoo, which began expanding its operations in the Mexican market in 1993 and is the second largest domestic-appliance company in that market after Mabe. Almost 90% of the output of its plant in Querétaro is for the domestic market with the remaining 10% exported to the United States.

In consumer electronics as well as in the automotive industry and textiles and apparel, access to the United States is a key element in Korean FDI in Mexico, Central America, and the Caribbean. The rivalry between the United States and China could create incentives for investments in Mexico rather than in China for products destined for the U.S. market. In fact, the United States' trade sanctions on China encouraged several Korean companies to set up production subsidiaries in Vietnam in order to avoid exporting from China to the United States (Korea Economic Research Institute, 2018). Furthermore, there is a concern that over the next five to ten years, these protectionist measures could be extended beyond China. In case of a situation in which other Asian countries are affected, investments in Mexico would be a favorable alternative although conflicts with Mexico itself are creating pressure in new directions.

In Mexico, the signing of the new United States-Mexico-Canada Agreement (USMCA) between the United States of America, the United Mexican States, and Canada could bring new opportunities to expand investments. If the agreement is ratified, companies can be expected to increase their investments and to expand their customer portfolios in the United States, since in many cases SMEs sell almost all of their output to the large Korean conglomerates established in Mexico.

Box 2**Samsung's Research and Development (R&D) Network and Samsung Design Latin America (SDLA)**

Samsung's Research and Development department, which consists of 14 R&D centers in 12 countries (United States, United Kingdom, Poland, Russia, Ukraine, Israel, Jordan, India-Bangalore, Philippines, Indonesia, China, and Japan), 7 AI-dedicated centers and over 65,000 employees worldwide, develops innovative new technologies by thinking of applications that will be relevant to users.

Furthermore, with global design centers Samsung seeks to understand people and lifestyles and to deliver meaningful experiences through beautiful yet functional design, enabled by innovative cutting-edge technologies. Currently, there are 7 global design centers established in San Francisco, Beijing, Shanghai, Delhi, London, Tokyo, and São Paulo.

Samsung Design Latin America (SDLA) was founded in 2016 in São Paulo, Brazil as an effort to take a deeper look at the unique attributes of Latin America. SDLA works to advance customer research by properly comprehending a growing market and bringing together different cultures. SDLA's Product Strategy Team analyzes the lifestyles and behaviors of consumers in the region to uncover areas of opportunities for local-specific products and services. Their Product Strategy Team and UX Design Team are in close collaboration to reflect the findings of this research in all products, collaborating with the local R&D Team to carry out commercialization development.

According to Vivian Jacobsohn Serebrinic, the Director of SDLA, the launch was "a bold new step for Samsung, as few multinational companies have design centers in this region focusing on mobile devices, TVs, and home appliances." The SDLA team is interested in hearing what local consumers have to say and identifying their needs, to place themselves in consumers' shoes and ultimately develop customized solutions.

SDLA meets with both typical consumers and so-called "extreme users" to gain a thorough understanding of both groups' respective requirements of specific products and identify any needs that have not yet been addressed. The team focuses on enriching the user experience by presenting products that are not only enchanting and entertaining, but also functional, easy to use, capable of simplifying daily activities and able to adapt according to consumers' behaviors.

In a similar endeavor, Samsung opened its first experience center in Latin America in Buenos Aires, Argentina in 2018. At the "Samsung House", visitors can take smartphone photography classes taught by renowned photographers, lectures on trends in fashion with prominent designers and cooking classes. Visitors can also participate in Galaxy School to learn how to get the most out of their devices.

Source: Authors based on Samsung's websites <https://research.samsung.com/global-rnd-network>, <http://design.samsung.com/global/contents/sdla/>, <https://news.samsung.com/global/samsung-launches-latin-america-focused-design-center>, <https://news.samsung.com/global/samsung-opens-its-first-experience-center-in-latin-america>

3. Other industries

Korean OFDI in extractive industries in the region was conducted by few large companies, and most investments were via mergers and acquisitions (M&A) (see table 6). A record number of M&A deals by Korean companies in Latin America and the Caribbean was registered in 2011, the final year of the commodity price boom. The most recent deal took place in 2018 when POSCO bought Salar del Hombre Muerto in Argentina from the Australian company Galaxy Resources for US\$ 280 million and announced to invest US\$ 450 million to produce lithium hydroxide and lithium carbonate (América Economía, 2018).

Table 6
Latin America and the Caribbean: ten largest mergers and acquisitions by Korean companies, 2006–2018

Year	Company	Assets acquired (percentages)	Assets located in	Seller's country	Sector	Amount (millions of dollars)
2011	POSCO	Consorcio Santos CMI (70)	Ecuador		Engineering and construction	720
2011	POSCO, EQ Partners	Companhia Brasileira de Metalurgia e Mineração (5) ^a	Brazil		Mining	650
2012	Polaris Shipping	10 ships for transporting iron (100)	Belize	Brazil	Maritime transport	600
2017	CJ CheilJedang, STIC Investments	Sementes Selecta (90)	Brazil		Soy products	322
2011	Korea Electric Power Corporation	Jamaica Public Service (JPS) (40)	Jamaica		Electricity	300
2018	POSCO	Salar del Hombre Muerto (100)	Argentina	Australia	Mining	280
2011	Korea Resources Corporation	Santo Domingo project (30)	Chile	Canada	Mining	219
2010	Samsung C&T Corp, Korea Resources Corporation	Mining assets (30)	Chile		Energy	190
2012	Korea Panama Mining Corporation	Minera Panamá (20)	Panama	Canada	Mining	169
2011	LG International Corporation	GeoPark Ltd (20)	Chile	Bermuda	Hydrocarbons	142

Source: Economic Commission for Latin America and the Caribbean (ECLAC) based on Bloomberg.

^aSince the percentage acquired was below 10%, the operation was not registered as a flow of FDI in the national accounts. It is nevertheless included because it helps illustrate the presence of Korean companies in the region.

In construction, POSCO Engineering & Construction (POSCO E&C) started operations in Latin America 13 years ago in 2006 when it was awarded an engineering, procurement, and construction contract for a coal-fired power station in Chile, the Nueva Ventanas project. It was the first Korean company to build a power-generation facility in Latin America and, since then, has finalized projects in the region worth a total of US\$ 10 billion (POSCO, 2019). It has built plants in Chile, Peru, and Panama, where in 2018, it concluded a combined-cycle plant and a terminal for liquefied natural gas. In 2019, the company entered the Mexican market with a contract to build a combined heat and power (CHP) plant in the State of Coahuila, the first of its kind for a Korean company in the region.

As late entrants into a sector in the region where European businesses—primarily Spanish—have had a significant presence, the Republic of Korea's companies are seeking to differentiate themselves through their high levels of efficiency and transparency. In addition, they abide by the established budgets and deadlines and are willing to compromise their own conditions in order to meet the agreed terms. In this context, participation in public procurement is an unexplored market. In Mexico, since the Republic of Korea is not a partner of a free trade agreement, it cannot participate on an equal footing in public tendering. Activities are therefore limited to the private sector, but if a trade agreement were to be struck enabling Korean firms to participate in public works contracts under more advantageous conditions, it would be a profitable market in which to expand.

At the same time, the POSCO E&C experience in engineering, procurement, and construction projects (EPC)—specifically with power plants—gives it a competitive advantage that could form the basis for the development of a more efficient energy mix. Given that Mexico's current energy policy entails using traditional sources as the country transitions towards renewables, the experience of Korean companies that have worked to reduce energy dependence and carbon emissions can provide solid technologies for building efficient power plants that use traditional sources with low emissions.

Interviewed Korean companies investing in Chile stated that the most relevant driving factor for investment decisions in the region was profitability and security of individual projects. In addition, support of the Korea Export Import Bank (Korea Eximbank) was crucial for the financing of the projects.

A good example is the Kelar gas-fired combined-cycle power plant. The consortium of Korea Southern Power (KOSPO), which is a subsidiary of Korea Electric Power Corporation (a public enterprise for integrated electric utility) and Samsung C&T, signed a 25-year power purchase agreement with the Chilean arm of the Anglo-Australian multinational mining BHP to supply power to the copper mines in the Mejillones region. For its successful project financing, the participation of Korea Eximbank was crucial: by providing US\$ 380 million in loans and guarantees which accounts for almost 80% of the total debt financing of the project, the Korea Eximbank secured a foothold for Korean companies in the Chilean private electricity market, which had been formerly dominated by U.S. and Spanish companies (Kexim, 2014, p. 28).

Though currently limited in terms of the total number of projects, Korean investment in Chile are closely connected to the local economy through procurement, and ties are expected to become stronger in the future. Companies hire employees and buy goods and services locally, from tools, machinery, basic services for regular operations and management to consulting. Enterprises consider their relationship with local providers seriously. Furthermore, most of them plan to invest their profits back to the local market, and the reinvestment is motivated partly through the local tax laws and investment promotion policies that incentivize reinvestment in the local market over transmitting the profits back to Korea.

Finally, cutting-edge projects relating to electromobility and smart cities have not yet been developed massively in the region. In Mexico, the sources consulted reported the existence of some innovative projects (for example, in smart farming and smart grid), but for the moment, these are very small—and, in some cases, experimental—initiatives and require multilateral funding to conduct pilot testing. Innovative and advanced manufacturing projects require solid and well-connected infrastructure, which are still not fully developed in Mexico. For instance, one of the requirements for electric transport is stable infrastructure equipped with a highway network, which is an area where Mexico still has room for improvement.

In conclusion, Korean business in Latin America and the Caribbean range from large conglomerates to small enterprise with several firms belong to high-technology manufacturing. All of the enterprises share similar perspectives on prospects of a long-term relationship with the region, efforts to improve the linkages with the local economy and the importance of personnel training in order to be more productive.

III. Three key areas for further bilateral relations: Institutions, sustainability and innovation

As Korean investment in important sectors has increased, so has its potential as a great partner for sustainable development. The country has robust institutions to support foreign investment, rising awareness and practices of sustainable business, and nimble strategies for innovation, from which countries of Latin America and the Caribbean could draw lessons on how to raise productivity more efficiently through investment.

A. Major institutions behind Korean OFDI

One of the salient elements in the recent internationalization of Korean companies is public policy for supporting outward FDI, in which two agencies play a key role: the Korea Trade-Investment Promotion Agency (KOTRA) and the Export-Import Bank of the Republic of Korea (Korea Eximbank).

1. Korea Trade-Investment Promotion Agency (KOTRA)

The Korea Trade-Investment Promotion Agency (KOTRA) is a state-funded organization operated by the Korean government established in 1962 in order to contribute to the development of the national economy through trade and investment promotion. KOTRA aims to expand small- and medium-sized enterprises' business in overseas markets, support SMEs to extend their business abroad, attract inbound FDI to the Korean market, provide business trainings for SMEs, support international development cooperation and munitions trade, and deliver relevant government projects.

It is one of the government agencies with the greatest international presence. KOTRA is present in 83 countries and runs 124 business centers, 12 of which are in Latin America and the Caribbean (Asunción, Bogotá, Buenos Aires, Guatemala City, Havana, Lima, Mexico City, Panama City, Quito, Santiago, Santo Domingo, and São Paulo).

Under the current economic conditions, with the re-emergence of protectionist policies and ever fiercer competition in strategic industries, the Government of the Republic of Korea has set job creation as its priority. Accordingly, KOTRA will focus its efforts on four key areas (Kwon, 2019): (i) support for small- and medium-sized enterprises (SMEs) in identifying international opportunities, (ii) global job creation, (iii) diversification of exports and markets, and (iv) the identification of new opportunities for overseas expansion.

This focus on small- and medium-sized enterprises stands at the forefront of the current agenda. As an example, the KOTRA office in Mexico is currently supporting between 10 and 15 smaller companies that are seeking to invest in the country. In addition, to bolster exports, the agency's services include acting as a branch with an employee assigned to support SMEs' exports. At present, 57 selected SMEs are making use of this service.

For investment promotion, KOTRA provides information about overseas investment and supports firms with various programs. The "Overseas Investment Information System" provides a complete range of information about investing overseas from the latest news about investment activities worldwide to country-specific investment information. The system offers search services to look up Korean firms based around the world and publishes global investment statistics, columns on investment-related topics, and other key statistical data. In addition, KOTRA hosts seminars on potential overseas investment opportunities. In these sessions, competent authorities of the foreign governments as well as KOTRA Trade Centers located overseas are introduced, with information on the current industry status in each market and local investment promotion policies. Furthermore, KOTRA dispatches investment research teams 6 to 8 times annually to prospective destinations to gather preliminary information. Finally, KOTRA operates an overseas information consulting center that consists of country experts for comprehensive consulting at the initial stage of overseas investment. The country experts provide free consultation on overseas investment procedures, institutions, and investment conditions.

To support companies already established abroad, KOTRA operates the "Korean Investment Support Center". Currently there are 12 such centers in seven countries: China, India, Indonesia, Myanmar, Philippines, Poland, and Vietnam. They provide information sessions on accounting, tax, and labor, provide consultations with attorneys and accountants, take complaints on difficulties in the investment process, and support efforts of local marketing and exporting to third countries. In addition, it promotes overseas corporate establishments of Korean companies by providing resources on corporation establishment procedures, consulting services, and local network of experts of competent authorities, attorneys, and accountants.

One very interesting element is its operation of intellectual property centers abroad called IP-Desks, which were created to protect Korean companies' intellectual property. Currently it is operating in China, Germany, Japan, Thailand, the United States, and Vietnam, providing support for application and registration of trademark and design, registration of customs clearance (partial support of expenses), investigation of IP infringement, and administrative relief (partial support of expenses) by establishing a joint response council for Korean companies investing in the market.

2. Export-Import Bank of the Republic of Korea (Korea Eximbank)

The Export-Import Bank of the Republic of Korea (Korea Eximbank) is an official export credit agency providing comprehensive loan and guarantee programs to support Korean companies conducting business overseas. Since its establishment in 1976, it has actively supported Korea's export-led economy and facilitated economic cooperation with foreign countries. Its primary services include export finance, trade finance, and guarantee programs structured to meet the needs of clients in a direct effort to both complement and strengthen clients' competitiveness in global markets. Korea Eximbank also provides overseas investment finance, import finance, and financial advisory and arranges services aimed at

exploiting business opportunities abroad. In Latin America, Korea Eximbank has offices in São Paulo and Mexico City.

Access to loans from the Export-Import Bank was one of the main changes that drove the internationalization of the Republic of Korea's companies (ECLAC, 2007). The Bank is responsible for the operation of two government-entrusted funds: The Economic Development Cooperation Fund and the Republic of Korea's official development assistance program.¹⁵

The amendment of the Korea Eximbank Act in January 2014, which was partly the result of Korea Eximbank's effort to strengthen its support for Korean companies developing overseas projects and their subsidiaries, eased restrictions on the Bank's direct equity investment, enabling it to provide a comprehensive financing package including an equity component on top of loans and guarantees. Following the amendment, the Bank launched the Financial Investment Department and has endeavored to expedite Korean companies' participation in investment-development type projects where Korean entities are involved in every stage from early development, equity investment and construction to operation. The Bank has also supported Korea-based domestic corporations to enter overseas markets by investing in equities of the foreign subsidiaries of those corporations together with providing a loan or guarantee and directly investing in preferred stocks and hybrid securities such as convertible bonds issued to fund their businesses overseas.

Following the revision of the Act in 2014, the Bank launched and expanded its fund investment program. In late 2017, the Bank had either contributed to or raised capital for a total of 15 funds: 11 private equity funds and four special assets fund targeting specific industries and enterprises. The Bank has participated in creating the following two funds, which could be of interest in supporting projects in Latin America and the Caribbean: (i) the Global Infrastructure Venture Fund was raised to support Korean enterprises participating in overseas infrastructure development projects in Public Private Partnership (PPP) at the initial stage of development. The fund is sized at 85 billion won (US\$ 72 million as of July 2019), and 23.5% of the total capital was approved by the Bank; and (ii) the SME Overseas Investment Fund, composed of three sub-funds, aims to assist small and medium-sized Korean enterprises in improving their overseas business activities such as exports and foreign direct investment. The total capital raised is sized at 873 billion won (US\$ 739 million as of July 2019), of which the Bank committed 3.4%. Other funds targeting specific areas that could be of special interest in promoting sustainable development initiatives include the Korea Placement Certified Emission Reduction Special Assets Fund, which is an investment in certified emission reductions, and two Natural Resources Investment Funds, which is for resources development projects.

3. Integration strategy

In addition, the integration strategy of the Republic of Korea provides a regulatory framework for the internationalization of its companies. The Korean policymakers became interested in signing Free Trade Agreements (FTAs) during the recovery of the financial crisis of 1997, because the country needed stable access to overseas markets and FTAs would induce the required reforms necessary to recover from the crisis (Kim, 2018, p. 21).

The Republic of Korea has signed several FTAs with countries in the region, which had an impact in bilateral trade and in deepening bilateral relations. The first Korean negotiation of an FTA was with Chile and started in 1998; the FTA went into effect in 2004. In 2011, a second FTA in the region was signed, this time with Peru, and after that, an FTA with Colombia was entered into force in 2016.

¹⁵ It also manages the Inter-Korean Cooperation Fund, an economic cooperation programme that works to promote exchanges with the Democratic People's Republic of Korea.

Recently, in 2018, the Republic of Korea signed an FTA with five countries from Central America: Costa Rica, El Salvador, Honduras, Nicaragua, and Panama. From the 1980s, Central America has been important for Korean OFDI, with several SMEs investing in textile and garment industries to re-export to the United States by taking advantage of their trade preference status (Kim, 2018, p. 27). Recently, both parts signed an agreement that is expected to lead to the formation of a more comprehensive and strategic partnership between the Republic of Korea and Central America.

Furthermore, the Republic of Korea submitted the application to join the Central American Bank for Economic Integration (CABEI) in December 2018 to increase its participation in the region's infrastructure projects. In August 2019, an amendment to the Act on the Measures for the Admission to International Financial Institutions was passed in the Korean National Assembly as a step to joining CABEI (Jung, 2019). Thus, the country is set to be the second-largest extra regional partner, providing US\$ 112.5 million in the next four years for a 7.6 percent stake (Yi, 2019).

The efforts to increase integration with countries in Latin America and the Caribbean are not isolated. The Republic of Korea has been making efforts to expand the number of FTA partners to overcome increasing protectionism around the globe. As stated by the Trade Minister, Yoo Myung-hee, "It is important to actively penetrate into emerging markets amid growing external uncertainties, such as Japan's export restriction (against South Korea) and the trade talks between Washington and Beijing" (Yonhap News Agency, 2019). Accordingly, the country is seeking to sign FTAs with Indonesia, Malaysia, and the Philippines.

B. Sustainability in Korean government and business strategies

The world is facing enormous environmental challenges, and the Korean government has launched several initiatives in order to cope with climate change and increase sustainability of society. Likewise, many Korean companies have adopted sustainable business practices, which, not only could be a source of competitive advantage for them, but also have the potential to raise the quality of their investments abroad.

The Republic of Korea has been one of the leading members in the global community to engage in efforts to tackle climate change. In 2009, the country announced its voluntary mitigation target to reduce greenhouse gas emissions by 30% from the business-as-usual (BAU) level by 2020, and in 2011 enacted the Framework Act on Low Carbon, Green Growth to provide the legal basis for climate policies and actions, which was then followed by important measures across all sectors including the GHG and Energy Target Management System (TMS) (2012), National Greenhouse Gas Emissions Reduction Roadmap (2014), Emissions Trading Scheme (ETS) (2014), and National Climate Change Adaptation Plans (2010, 2015). In June 2015, the Republic of Korea submitted its ambitious Nationally Determined Contribution (NDC) to the United Nations Framework Convention on Climate Change (UNFCCC) Secretariat, to reduce its greenhouse gas emissions by 37% from the BAU emission level by 2030. In December 2016, the Korean government adopted the Basic Plan for Climate Change Response and the Road Map to Achieve National Greenhouse Gas Reduction Goals in order to set up domestic framework to implement the Paris Agreement that was taken into force domestically on December 2, 2016 (MOFA, 2019b).

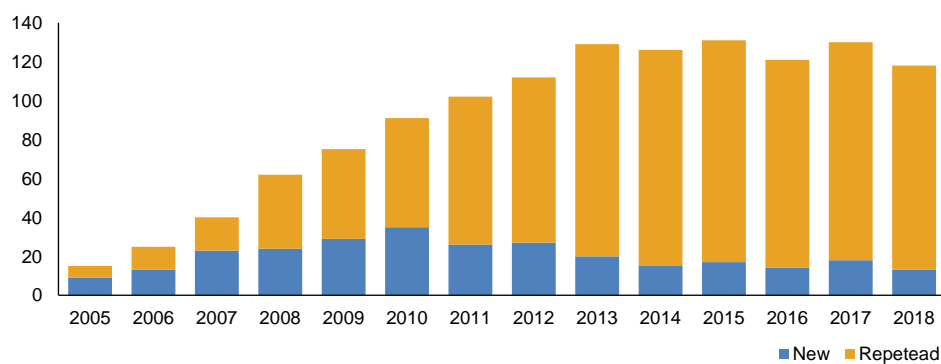
In the realm of multilateral environmental diplomacy, the Republic of Korea has been making major contributions. For instance, the Ministry of Foreign Affairs launched the "Green Round Table" in November 2016 to discuss ways to strengthen cooperation and synergies among international organizations and domestic agencies related to green economy. By 2018, four rounds of the Green Round Table had taken place. Also, the Korean government has led the establishment of the Global Green Growth Institute (GGGI) in 2012 as a part of its efforts to spread the green economy agenda and to contribute to the international community's cooperation toward a green economy. Currently GGGI is assisting more than 33 developing countries in addressing climate change, establishing and implementing green growth strategies and capacity building (MOFA, 2019c).

Even amid recent retraction of commitments by other countries, the Republic of Korea continues to enhance its position as a leader of the green growth movement today. At the fourth Green Round Table held in Seoul on July 27, 2018, Seoul launched its National Platform for Partnering for Green Growth and the Global Goals 2030 (P4G), a new initiative commenced in 2018 for developing concrete public-private partnerships (PPPs) at scale to deliver on the SDGs and the Paris Climate Agreement in five key areas: food and agriculture, water, energy, cities, and circular economy. Through this platform, the Korean Ministry of Foreign Affairs will help identify and support partnerships in developing countries in Asia, Africa, and Latin America that offer innovative sustainability solutions in collaboration with business leaders, government and sustainability professionals from across the country (P4G, 2018). To qualify for P4G support, partnerships must include public, private and civil society partners, be focused on projects in one or more developing countries, and offer a commercially viable solution in one or more of the SDGs in the five key areas. In 2018, P4G selected 24 partnerships from nearly 450 applications from over 80 countries to receive facilitation and/or funding support to advance their projects. In addition to facilitation support, those partnerships selected as start-up finalists qualify for up to US\$ 100,000 in P4G funding while the scale-up finalists will compete for up to US\$ 1 million in funding. Currently, country partners (Chile, Columbia, Denmark, Ethiopia, Kenya, Mexico, the Netherlands, the Republic of Korea, and Vietnam), international organizations (C40, GGGI, IFC, WEF, WRI, etc.), private companies, and civil society organizations are participating in P4G. The Korean government is collaborating in promoting PPPs with P4G partner countries, establishing a professional network, creating business models, and disseminating best practices (P4G, 2019).

Korean enterprises also have been active in global initiatives for sustainability. As of 2019, 251 Korean institutions, which include 164 private companies, are among the more than 13,000 active participants of the UN Global Compact. While the level and length of participation vary for each participant – with firms joining at various points between 2005 and 2019 –, there is high awareness of corporate sustainable management among Korean companies including SMEs (44 of the participants are SMEs). The UN Global compact defines itself as “a voluntary initiative based on CEO commitments to implement universal sustainability principles and to take steps to support UN goals”, and its role is acknowledged by United Nations Member States (UN Global Compact, 2019).

Moreover, the commitment of Korean companies to sustainable management can also be seen in the publication of a greater number of sustainability reports (see figure 23). Corporate sustainability reports present the economic, environmental, and social impact of business activities and showcase the relationship between their strategies and their commitment towards sustainable development, combining their analyses of financial and non-financial performance.

Figure 23
Sustainability reports published by Korean companies, 2005-2018
(Number of companies)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of Korean Standards Association (KSA) [online] <http://ksi.or.kr/ksi/5011/subview.do>.

According to the UN Global Compact, consumers, local communities, and civil society organizations are demanding greater transparency, and this is a key motivator for non-financial reporting. Moreover, mainstream investors are considering environmental, social, and governance information in their strategies, which provides further motivation. In fact, these reports used to be voluntary, and now there is a trend towards mandatory non-financial reporting (UN Global Compact, 2019). Similarly, UN Environment recognizes the importance of corporate sustainability reporting as “a potential mechanism to generate data and measure progress and the contribution of companies towards global sustainable development objectives as it can help companies and organizations measure their performance in all dimensions of sustainable development, set goals, and support the transition towards a low carbon, resource efficient, and inclusive green economy.”¹⁶

It is worth noting that the Korean companies publish their sustainability reports along with the global standards like the Global Reporting Initiative (GRI). As the current GRI certified training partner for the Republic of Korea, the Korean Standards Association (KSA) provides the sustainability report assurance service, through which KSA independently reviews the reports following the assurance principles and thereby guaranteeing the credibility and validity of the sustainability performance of the company.¹⁷ Along with the sustainability report assurance service, KSA provides various relevant services to support Korean companies' commitment to sustainable management, including: educational sessions on sustainable management strategy planning and implementation and GRI reporting; support for the drafting of sustainability report; analyses and verification of greenhouse gas reduction effectiveness; and conducting the Korean Industrial Standards certification and international certifications.

Another indicator used to determine the value of sustainable business practices is the Dow Jones Sustainability Index (DJSI), calculated jointly by S&P Dow Jones Indices and RobecoSAM. Launched in 1999, the DJSI tracks the stock performance of the world's leading companies in terms of economic, environmental, and social criteria. The index analyzes more than 600 variables, including environmental, social and governance factors, in order to identify and rank the companies. Publicly-traded companies that meet certain criteria may apply for listing on this index, which provides investors with an index that shows not only financial solvency, but also social and environmental commitment. There is currently a global index, four regional indices, an index for emerging economies, and three country indices (Australia, Chile, and the Republic of Korea).

In the 2018 DJSI World, only 317 (12.6%) of the 2,521 evaluated companies were listed, and it include 20 Korean companies. Out of the 612 evaluated subjects on DJSI Asia Pacific, 150 firms (24.5%) made it onto the list, and it included 35 Korean companies. On DJSI Korea, out of a of total of 203 firms, 39 (19.2%) were included. It is noticeable that many of these companies are listed on the DJSI for consecutive years up to a decade (Annex 1 contains a complete listing of the Korean companies included in each index by sector).

According to the DJSI, there have been improvements in sustainable management in the industries of personal items, home appliances, petroleum and gas, and communications. Especially in

¹⁶ United Nations Environment Programme, Corporate Sustainability Reporting [online] <https://www.unenvironment.org/explore-topics/resource-efficiency/what-we-do/responsible-industry/corporate-sustainability> [retrieved: September 2019].

¹⁷ The Korea Standards Association (KSA) is a special corporation created to promote technology and productivity through research, development and dissemination of industry standardization and quality management. It is the largest certification body in Korea, conducting the Korean Industrial Standards certification and international certification including ISO and JIS. It is also the inspection body since it was designated as the verification body for Greenhouse Gas and Energy Target of Korea in 2011. Currently KSA manages over 4,700 partner Korean companies' certification and verification while also publishing and distributing domestic and international standards, holding training and seminars, and conducting educational services on topics including sustainable management. Information at: <http://eng.ksa.or.kr/>.

the personal items sector, the average score of companies listed on the DJSI Korea was significantly higher than those in the DJSI World. Similarly, companies on the DJSI Korea had higher scores than those on the DJSI World list in the home appliances, petroleum and gas, and communications sector.

C. Deployment of the 5G network and new incentives for innovation

The Republic of Korea has been ranked among the most innovative countries in the world. In the Bloomberg Innovation Index, it was ranked as the world most innovative country for six years in a row in 2019, followed by Germany, Finland, Switzerland, Israel, Singapore, Sweden, and the United States.¹⁸ It earned a score of 87.38, with high points for R&D intensity and manufacturing value-added, high-tech density, and tertiary efficiency and researcher concentration. Notably, the country has the highest ratio of R&D spending to gross domestic product in the world. According to OECD Main Science and Technology Indicators published in 2019, the Republic of Korea had the highest R&D intensity rate at 4.55 percent as of 2017 (OECD, 2019). In the Global Innovation Index 2019, it ranked 11th and second among South East Asia, East Asia, and Oceania, only behind Singapore.

Notwithstanding, Korean authorities understand that the country faces a chronic technology trade deficit and that it “needs to make a radical transition from yesterday’s ‘fast-follower’ R&D system to a human centered and pioneering National R&D system”.¹⁹

Among recent policies and initiatives, this study highlights the deployment of the 5G network, which sooner or later will arrive in Latin American and the Caribbean countries, and the “sandbox program”, which aims to build a more advantageous environment to seek innovation. The “sandbox program” could be useful for countries in the region as a starting point in exploring alternative ideas to promote innovation in the private sector in an era of deep technological change.

In recent years, the Republic of Korea has been investing for innovative future growth engines, including the fifth generation (5G) wireless technology. On 5 April 2019, it became the first country in the world to commercialize 5G mobile technology nationwide. The 5G network transfers data much faster than the 4G network: it reaches a maximum of 10 Gbps, compared to 150 Mbps with 4G technology, and its latency is 1 millisecond, compared to 50 milliseconds with 4G, characteristics that allows the digitalization of societies to move into a new phase (Hill, 2019).

The deployment of the 5G mobile network was achieved through cooperation between the Ministry of Science and ICT, the three leading mobile operators in the country —KT, SK Telecom, and LG U Plus— and mobile telephone manufacturers pursuant to the Innovation Growth Engine policy, which was launched in 2017 to nurture new industries based on R&D and transform the country by 2020.

One of the five pillars of the policy is the development of intelligent infrastructure. The Korean Ministry of Science and ICT is trying to meet the goal to unveil and disseminate convergence services (personalized health services, smart cities, virtual and augmented reality, and smart robots) through commercialization of 5G and Internet of Things (IoT) hyper-connection services by 2022. Specific targets include reaching 30 million IoT subscriptions by 2022 (Ministry of Science and ICT, 2018).

With this launch, the Government of the Republic of Korea is looking to become the global standard-setter for 5G infrastructure. The government and the private sector will jointly invest more

¹⁸ The 2019 ranking process began with more than 200 economies. Each was scored on a 0-100 scale based on seven equally weighted categories. Nations that did not report data for at least six categories were eliminated, trimming the total list to 95. Bloomberg publishes the top 60 economies. The index includes factors such as expenditures on research and development, value-added manufacturing capability, concentration of high-tech companies, quality of post-secondary education, number of research personnel, and number of patents (Jamrisco et al., 2019).

¹⁹ Presentation by Mr. RYU Kwang-jun, ‘Future Innovation through the Development of Science and Technology and Improvement of Productivity with Role of Government’, at the 2019 Korea-LAC Future Cooperation Forum, June 12-13, 2019, Seoul.

than US\$ 25 billion (30 trillion won) to establish a nationwide 5G network by 2022 and will help to foster new 5G-based industries and services, ranging from network equipment, next generation smartphones, smart robots, and drones to self-driving vehicles, smart factories, and smart cities. As announced by the President, the government and affiliated organizations will be the first to utilize 5G and to carry out testing to help the market take off as quickly as possible. In that regard, tax credits will be provided for establishing 5G networks in a bid to stimulate private-sector investment, and world-class test beds will be formed. The government will assist in establishing one thousand 5G factories for the sake of manufacturing innovation at SMEs and increase productivity at flagship manufacturing industries (Cheong Wa Dae, 2019).

In 2019, the Ministry has also launched the "regulatory sandbox" programs, in which companies are granted more leeway to commercialize new technologies in the market, free from existing regulations. The program centers on encouraging local companies to seek innovation and new opportunities without the restraints from excessive regulations. It speeds up the process of getting government approvals by paving the way for firms to launch new services and goods first and apply reasonable regulations later.

The government first provides companies with information on whether their new businesses conflicts with regulations. If the government does not respond within the deadline (30 days), the firms can assume that there are no existing rules restricting the enterprise. If regulations do exist, the government can give companies exemptions with provisions added. To avoid hasty deregulation and the potential threat to the safety and well-being of people, the judging committee of the regulatory sandbox program thoroughly checks the potential impact of the new businesses. If threats to safety are found or an actual accident takes place because of the deregulation, the government can immediately retract the approval. Moreover, the government will make it mandatory for companies to purchase related insurance programs and will adopt tougher rules against the firms in case their new businesses incur damage (Ministry of Science and ICT, 2018).

Both companies and consumers can benefit from the regulatory sandbox program, as firms are provided with a more advantageous environment to seek innovation, and consumers can benefit from new services and goods. The government allocated 2.89 billion won (US\$ 2.45 million as of July 2019) and 2.81 billion won (US\$ 2.38 million as of July 2019) to the industry and science ministries, respectively, to carry out related tests and help companies find new markets. The Financial Services Commission was also given 4 billion won (US\$ 3.39 million as of July 2019).

The South Korean government is using regulatory sandbox as a key measure to encourage startups and to foster new growth engines. The regulatory sandbox is intended to cover a wide array of products and services. Some of the companies that have already applied and been approved for new ventures under this program include: Hyundai Motors for the installation of hydrogen fuel charging stations in Seoul; Macrogen for providing genetic testing for a broad spectrum of diseases; JG Industry for installing LCD and LED advertising panels on buses; Charzin for installing electric charging stations; KB Kookmin Bank for providing finance-telecom products; and Directional for offering a blockchain-based P2P stock lending platform for certain investors.

IV. Conclusion

The Republic of Korea is one of the most successful cases of economic development of the 20th century. Its current strategies and the international integration of its companies make the Republic of Korea a valuable economic partner for countries in Latin America and the Caribbean. This potential is based on lessons that the countries in the region can learn from the past and on the future opportunities given the character of Korean investments.

There are five takeaway points from the analysis of the Republic of Korea and its trade and investment strategies. The first lesson comes from history, specifically about the policies that framed the evolution of the Korean OFDI. The different stages in Korean development process highlight the importance of devising and designing a long-term strategy and the flexibility to adapt as circumstances change in building domestic capabilities of the highest international standard.

For instance, the position of the Republic of Korea as a leading host and home country was reached after decades of restrictions on FDI inflows and outflows. When the country was a developing economy, the Republic of Korea did not use inward FDI as a mechanism for funding the balance of payments, and until mid-1980, foreign companies were only allowed in restricted areas and for specific purposes. The goal was to upgrade manufacturing and build domestic technological capabilities, a goal that was achieved in part by controlling foreign investments, but most significantly, via industrial policy and investment in R&D. At this point, it is worth mentioning that FDI restrictions in the Republic of Korea were implemented a long time ago, and they seem unrealistic for most developing economies in the current global economic context. Additionally, in terms of balance of payments, at least in Latin America and the Caribbean, FDI inflows have been the major and most stable source of cross-border capital inflows (ECLAC, 2019, p. 29), and most countries aim to attract investment rather than to regulate it. The Korean experience shows that policies for attracting and maintaining FDI acquire a broader meaning and a greater relevance in the context of development policies, in which different policy areas are coordinated and integrated within a national development project. It is true that FDI has the potential to be a driving force for development; however, positive effects do not always follow automatically. Countries can take the maximum advantage

of policies to attract FDI (ECLAC, 2016, p. 72) and control potential damages when they are coordinated and integrated with development policies.

Second, one key element for the development of capabilities was kept in place after liberalization: the emphasis on technological progress and on investments in R&D. The Republic of Korea evolved from being an importer of technologies to being a technological leader, and its experience as a leading country in information and communication technologies could be further exploited by countries in Latin America and the Caribbean. Initiatives in smart manufacturing, smart cities and the deployment of 5G, to mention a few, could benefit from Korea's expertise in the area.

Third, manufacturing has been central in Korean OFDI despite a recent significant upswing in investments in the financial and insurance sectors. Several Korean companies are global leaders in high-tech industries, and their establishment could be beneficial for host countries in terms of the development of capabilities. After 2006, Korean OFDI to Latin America and the Caribbean grew substantially and supported the development of certain high added-value segments in manufacturing, particularly in the automotive industry in Mexico and Brazil. In the electronics industry, however, some manufacturing projects involve assembly processes that entail the importing of components (ECLAC, 2018). As a result, the technological spillovers might not be as large as is expected from a business at the cutting edge of technology.

On the other hand, consulted firms located in the region – both large companies and SMEs – agree on the idea that the further improvement of employees' skills is crucial for productivity. Policy makers in host countries could explore ideas in this respect and design programs that provide mutual benefits to the local workforce and foreign investors. The fact that Korean investments are mostly greenfield projects provides an interesting negotiation space.

Fourth, the commitment of the Republic of Korea and of several of its companies to sustainable development is an asset for economies in Latin America and the Caribbean. An increasing number of Korean companies are passing evaluations, such as the DJSI, that require high sustainability standards, and these are favorable features of a potential investor for host countries.

Finally, the Republic of Korea has been making efforts to expand the number of FTA partners to overcome increasing protectionism around the globe. This process represents an opportunity for forging closer ties between the region's countries and the Republic of Korea in order to enhance the region's importance to Korean multinationals and magnify these companies' impact on sustainable development processes in the Latin America and the Caribbean countries.

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Annex

Annex 1

No	Sector	Name	Dow Jones Sustainability Index (DJSI) Korea	Asia-Pacific	World
			Participation in index	Participation in index	Participation in index
1	Gas utility	Korea Gas Corporation		6 years	
2	Home appliances	LG Electronics	10 years	9 years	7 years
3	Personal items	LG Household & Health Care	6 years	9 years	New
4		Amorepacific	9 years		
5	Construction and engineering	Samsung Engineering	8 years	6 years	
6		GS Engineering & Construction	4 years	9 years	
7		Hyundai Engineering & Construction	10 years	9 years	9 years
8	Construction materials	LG Hausys	4 years		
9	Financial services	Mirae Asset Daewoo	9 years	9 years	7 years
10		Samsung Securities	10 years	9 years	9 years
11	Equipment and electrical installation	Doosan Infracore	9 years		
12		Doosan Heavy Industries & Construction	5 years		
13		Samsung Heavy Industries	8 years		
14	Durable goods	Coway	New	6 years	3 years
15	Wireless communication	SK Telecom	2 years	10 years	11 years
16	Semiconductor	SK Hynix	8 years	9 years	
17	Composite industry	SK Holdings	9 years	7 years	7 years
18		Doosan Corporation	5 years	5 years	
19		Samsung C&T	2 years	3 years	2 years
20	Leisure	Kangwon Land	8 years	8 years	
21	Commercial service supply	KEPCO Plant Service & Engineering	10 years		
22	Life insurance	Samsung Life Insurance	7 years		
23	Petroleum and gas	SK Innovation	2 years	2 years	2 years
24		S-Oil		9 years	9 years
25	Indemnity insurance	DB Insurance	10 years		6 years
26		Samsung Fire & Marine Insurance	10 years	6 years	5 years
27	Food	CJ CheilJedang	4 years	4 years	
28	Logistics	Hyundai Glovis	4 years	4 years	
29	Wire communication	KT Corporation			9 years
30	Bank	BNK Financial Group		4 years	
31		DGB Financial Group	10 years	9 years	
32		KB Financial Group	10 years	10 years	3 years
33		Shinhan Financial Group	10 years	10 years	6 years
34		Hana Financial Group		3 years	

No	Sector	Name	Dow Jones Sustainability Index (DJSI) Korea	Asia-Pacific	World
			Participation in index	Participation in index	Participation in index
35	Automotive parts	Hankook Tire	8 years	6 years	3 years
36		Hyundai Mobis	9 years	9 years	
37	Electricity utility	Korea Electric Power Corporation	7 years	5 years	
38	Electrical equipment and parts	Samsung SDI	7 years	10 years	4 years
39		Samsung Electro-Mechanics	10 years	10 years	10 years
40		LG Display		6 years	
41	Steel	POSCO		10 years	
42		Hyundai Steel	New	10 years	New
43	Computer hardware and office equipment	Samsung Electronics	2 years		
44	Chemicals	LG Chem	10 years	10 years	
45		OCI Company	10 years		
46		Lotte Chemical Corporation	10 years	8 years	
Total			39	35	20

Source: Korea Productivity Center/S&P Dow Jones Indices/RobecoSAM, "보 도 자 료", 2018 [online] http://djsi.or.kr/wp/wpcontent/uploads/2018/09/2018KPC_DJSI_%ED%8F%89%EA%B0%80%EA%B2%B0%EA%B3%BC%EB%B3%B4%EB%8F%84%EC%9E%90%EB%A3%8C_vweb.pdf.



The process of economic development of the Republic of Korea has been one of the most interesting of the twentieth century. This study analyses foreign direct investment (FDI) outflows from the Republic of Korea to Latin America and the Caribbean in the past two decades, in order to identify how Korean companies are investing in the region and what lessons can be learned from the relationship. The study draws on the analysis of investment flows, greenfield projects and mergers and acquisitions, as well as on interviews with entrepreneurs and authorities and a survey conducted on a small sample of Korean suppliers of the automotive industry located in Mexico. The Republic of Korea is a valuable economic partner for countries in Latin America and the Caribbean, because of the policy lessons that may be drawn from its history and current strategies and the international integration of its companies, and because of the future opportunities that may arise given the high technological profile and environmental standards of Korean companies.