

Analysis of Experiences in Trade and Investment between LAC and Korea: Lessons Learned in Development

**Knowledge Sharing Forum on
Development Experiences:
Comparative Experiences of Korea
and Latin America and the Caribbean**

Korea Institute for International Economic
Policy

**Knowledge and Learning
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Executive Summary

Trade and investment were unarguably the main drivers of Korea's outstanding economic development. Heavy government intervention together with the private sector's continuous efforts to innovate drove export-led growth during the second half of the 20th century.

Trade and investment are still very important components of the Korean economy in the age of globalization. Even though the kinds of policies pursued previously are no longer viable, both the public and private sectors are taking various measures to further promote trade and investment and sustain the fruits of economic development. Various services provided by the Korea Trade-Investment Promotion Agency (KOTRA) are good examples of this. Measures such as the Branch Agent Service and Post-Investment Service provide financial as well as managerial support to firms that export and invest abroad. These measures and others like them have been highly successful in promoting Korean firms' trade and investment.

Through this process more attention is being paid to relatively neglected economic actors such as SMEs. Rectifying this imbalance will help achieve more equal growth, something that was missing in past efforts.

Trade and investment have been vital to the Korean economy. It is therefore critical to expand the opportunities of trade and investment to every corner of the world in a way that benefits everyone.

Entering the 2000s, Korea-Latin America and the Caribbean (LAC) economic relations have developed in size but not substance. The LAC region's trade deficit with Korea has deepened. While Korea's FDI flows to LAC have increased rapidly, LAC countries' investments in Korea are still minimal.

The Korea-Chile FTA has contributed significantly to expansion of trade volumes and diversification of trade items. In particular, it has made positive contributions to increases in SME exports. However, the effects of increases in mutual FDI have been moderate.

One of the serious obstacles that Korean exporting firms face in the LAC market is non-tariff barriers. Considering the Korean experience, trade facilitation measures such as Single Window and Authorized Economic Operator (AEO) are crucial for reducing or eliminating non-tariff barriers to trade. Furthermore, trade facilitation is one of the more significant opportunities to reduce trade costs between Korea and LAC.

Korea and LAC need to do the following to develop balanced and sustainable economic relations between Korea and LAC: Make more active efforts to expand new FTAs,

including the Korea-Mexico FTA; upgrade existing FTAs; support LAC countries' participation in the global supply chain by transferring Korea's economic development experiences and technologies; foster interactive FDI; and boost cooperation in the area of trade facilitation through Single Window and the Authorized Economic Operator (AEO) program.

Part. 1: Trade and Investment as Drivers of Development in Korea

1. Introduction

Since the 1960s the Korean government actively pursued export promotion policies that grew the Korean economy. Growth was most rapid in the 1960s but then slowed in the 1990s. gross domestic product (GDP) per capita increased from less than US \$100 in 1960 to US \$1,688 in 1980. By 2013, GDP per capita in Korea was US \$26,000. While heavy government intervention had its drawbacks, it nonetheless resulted in increased export values and changes in the composition of export commodities. Export values equaled US\$15.0 billion in 1980 but reached US\$618.2 billion in 2013 (see Table 1a-1 in the appendix, all the tables and figures are in the appendix unless stated otherwise). At first, exports were led by labor-intensive industries such as textiles and garments. However, due to the Korean government's export promotion strategies targeting the heavy chemical industries (HCI) sector, the share of HCI exports *vis-à-vis* other sectors' export shares began to rise. Technology-intensive industries such as the electronics industry didn't begin to lead Korea's exports until the late 1980s. Unlike the active promotion of exports, the Korean government was not as active in attracting foreign direct investment (FDI) until 1997. While in the midst of the 1998 economic crisis, the Korean government began to actively court FDI. As a result, although the FDI/GDP ratio was less than 1 percent up until the mid-1990s, it reached as high as 3.5 percent in 1999. In 2013, the amount of FDI inflows was recorded at US\$14.5 billion but because of high GDP rates the FDI inflows/GDP ratio actually fell to 1.1 percent (see Table 1a-2).

Given the significance of Korea's outward-oriented policy, this paper discusses the role of trade and investment as drivers of development in Korea. First, this paper explores the effects of trade and investment promotion policies on Korea's international trade, FDI inflows, and economic development. It also provides a case study of Korea's Free Trade Zones (FTZ) and their role in attracting FDI and promoting exports. It then looks at the role of Small and Medium Enterprises (SME) in trade, investment and development.

2. The Role and Effectiveness of Export Promotion in Korea

2.1 Korea's Export Promotion Measures: Past and Present

Korea's export promotion measures have included tax and financial incentives, Free Trade Zones, and trade supporting organizations. The government provided large subsidies to promote export-related industries. The export subsidy ratio - the amount of export subsidies divided by export values - during the aggressive export promotion period of the mid-1960s to the early 1980s varied depending on the method of calculation. According to Balassa (1982), effective subsidies for Korean exports reached 31 percent while in Chinese Taipei, another economy that actively pursued export promotion policies, effective subsidies reached 12 percent. Korea was the most aggressive in its pursuit of export promotion policies. Using data for 1978, Nam (1990) calculated that the export subsidy ratio in the manufacturing sector reached 15.9 percent. Meanwhile, the subsidy ratio for domestic sales was 3.5 percent, which indicates that there were greater incentives to export than to sell in the domestic market.

First, it is necessary to discuss Korea's tax incentives. Beginning in 1961, the Tax Exemption and Reduction Control Law provided tax deduction measures to exporting firms. Tax benefits such as an 80 percent reduction of profit taxes were provided to export-based profits starting in 1964 (Cooper, 1994). Since 1973, as a way of promoting the HCIs, strategic industries including chemicals, shipbuilding, iron and steel, and machinery were provided tax benefits. For example, firms were exempted from domestic taxes through a full waiver of their profit taxes for the first three years and an exemption of half of their profit taxes for the following two years (Lim, 1997; Bae, 2001). Starting in the early 1980s, the government began to offer tax incentives to support research and development (R&D) (Lim, 1997). Due to the WTO regulation on tax incentives, tax benefits that directly target export promotion are currently not allowed in Korea.

Although most tax incentives targeting export promotion are prohibited by the WTO Subsidies Code, a duty drawback that does not exceed the duty amount actually levied on the imported product is permitted. Therefore, a duty drawback scheme can be used as a measure of export promotion by reducing the cost of producing exportable products. Meanwhile, since the duty drawback procedure is complicated under certain circumstances, the social cost borne by the government, banks, and exporting firms may be too high to promote exports (Mah, 2006). The duty drawback's effect on export promotion depends on the efficiency of the scheme that is actually implemented. The government began to implement the duty

drawback scheme as an export promotion approach in 1975. According to the Special Act for Duty Drawback, up until 1997 raw materials used for export products were eligible for duty drawback for the first thirteen months after importation. Since 1997, the Act changed the period to two years after importation (Chang and Kim, 1997).

The drawback rate - the amount of duty drawback divided by total export values - rose from 0.3 percent in 1975 to 2.6 percent in 1990. The amount of duty drawback was as low as 0.1 trillion Korean Won (US\$0.2 billion) in 1975 but continued to increase to 4.3 trillion Korean Won (US\$4 billion) up until 2013. Due to the expansion of export values, the drawback rate fell to 0.6 percent in 2013. The ratio of duty drawback/import tariff collection has fluctuated between 17 percent and 27 percent during the 1990s and 2000s. It reached 40.9 percent in 2013, which shows that the amount of duty drawback is substantial and the Korean government actively utilizes the duty drawback scheme to promote exports (See Table 1a-3).

Next, a discussion of Korea's financial incentives is necessary. The government imposed strict regulations on Korea's commercial banks up until the 1980s. It provided policy loans (i.e. lending at preferential rates that were lower than regular commercial rates) to specific, mostly export-related, industries. The government-owned Korea Development Bank supported selected industries as well. The share of policy loans increased from less than 40 percent of total bank lending in 1971 to 70 percent in 1978 (Haggard, 1990). The government decided to reduce policy loans in 1980 and officially liberalized most interest rates in December 1988 (Youn, 1998).

Currently, policy loans are provided to small and medium-sized enterprises (SMEs), particularly their R&D activities, and are not directly related to export promotion. For instance, the Korea Technology Finance Corporation (KIBO), a specialised government institution, provides credit guarantees to promote SMEs' R&D activities. The accumulated amount of credit guarantees provided by KIBO to SMEs reached 237.2 trillion Korean Won (US\$ 220 billion) in 2012 (Kang and Mah, 2015).

Depending on the situation, export financing can be seen as a set of financial incentives to promote export activities. Export financing has been provided to exporters since 1961. Exporters received huge amount of interest rate subsidies for their export activities between the 1960s and 1980s. Currently, the export finance scheme is just one of the export promotion measures actively utilized in Korea. Interest rates covered by export finances are essentially the same as commercial lending interest rates. If the provision of export financing does not require appropriate collateral, it can be regarded as a financial incentive.

The Korea Export-Import (EXIM) Bank, established in 1976, is an official export

credit agency that has provided export financing and guarantees to exporting firms. Its paid-in capital reached 7.2 trillion Korean Won and in 2013 it provided 75.8 trillion Korean Won (about US\$69.2 billion) to support trade-related firms. Of that amount, EXIM channeled 34 percent of its total credits to SMEs. Export financing mainly covers capital goods exports, such as industrial plants, machinery, and ships. The amount of export financing provided by the EXIM Bank reached US\$34.5 billion in 2013, accounting for 6.2 percent of total Korean exports in the same year (Korea EXIM Bank, 2014).

The Korea Credit Guarantee Fund (KCGF), established by the government in 1976, guarantees repayment of SMEs' export related commercial loans. It guarantees up to seven billion Korean Won (US\$6.3 million). The amount of newly provided guarantees to exporting enterprises by the KCGF reached 11.4 trillion Korean Won (US\$10 billion) in 2013 (KCGF, 2014).

Export insurance is the other financial incentive that is particularly important in Korea. Korea introduced the export insurance scheme in 1969 under the Export Insurance Act to protect enterprises against unexpected losses as they pursued increased exports. These unexpected losses are covered through the Korean government's Export Insurance Fund (EIF). The value of the EIF totaled 1.83 trillion Korean Won (US\$1.7 billion) in 2012. The export insurance utilization ratio, or export values supported by export insurance, was approximately 3 percent during the 1980s. Although Korea's EXIM Bank had been in charge of the export insurance scheme for two decades, the government established the Korea Export Insurance Corporation (KEIC) in 1992 as an organization fully devoted to the export insurance scheme. Its name was changed to the Korea Trade Insurance Corporation (K-sure) in 2010.

The export insurance utilization ratio increased sharply to 22 percent per year, on average, from 2003-2004. It peaked at 38 percent in 2009 when Korea became the heaviest user of an export insurance system. In 2013, the export insurance utilization ratio reached 30.1 percent. The loss ratio – the total payment on claims divided by premiums received – was generally less than 100 percent up until 1991. This means that the effects of government subsidized export insurance were not substantial until the early 1990s. The annual average loss ratio reached as high as 325 percent between 2003 and 2004; it was recorded as 102 percent in 2013 (See Table 1a-4). Table 1a-4 also shows that the total amount of payments on claims and premium revenues amounted to US\$630 million and US\$416 million in 2013, respectively. Meanwhile recoveries equaled about 20 percent of payments on claims.¹ Recently, K-sure began to cover not only export but also import contracts to secure natural

resources and commodities critical to the Korean economy.

The duty drawback and export insurance schemes are expected to be important measures of Korean export promotion under the WTO system. The duty drawback does not exceed WTO threshold levels and the export insurance schemes comply with the OECD Arrangement on Export Credits.

2.2 Effectiveness of Trade Promotion Measures

While it may appear as common sense that export expansion leads to economic growth, it is necessary to test the export-led economic growth hypothesis. Testing the effect of export promotion (or trade promotion) on economic growth consists of the effect of export promotion (or trade liberalization) on export growth and that of export growth (expansion of trade values) on economic growth. Rigorous empirical works have been mainly focused on the latter - testing the export-economic growth hypothesis.

Beginning in the mid-1980s, Granger causality tests have been applied to the relationship between export growth and economic growth. As a modification of the export-led economic growth hypothesis, some economists focus on testing the threshold effect. According to this hypothesis, exports do not lead to economic growth until a threshold level of economic development has been achieved. Conclusions of such empirical work have been mixed. That is, the export-led economic growth hypothesis has not been unanimously supported by empirical work.

Co-integration tests and error-correction models were applied to export-led economic growth hypothesis tests since the 1990s while recognizing the importance of non-stationarity in time series data. Applying these methods to the case of Korea, Koh and Mah (2013) showed that the expansion of trade values has a positive effect on Korea's economic growth.

As an extension of the export-led economic growth hypothesis tests, some economists focused on the hypothesis that changes in export product composition cause economic growth (so-called export composition-economic growth). Koh and Mah applied the co-integration test and error correction models to Korea and found that a higher ratio of non-textile to textile exports led to economic growth and *vice versa*. That is, Koh and Mah found bi-directional causality between export composition and economic growth in Korea. Thus, changing a developing country's export composition towards more value added products appears to contribute to its economic growth.

In addition to the export-led economic growth hypothesis tests, there has been some

empirical work testing whether or not export promotion measures lead significantly to export expansion. Using the data for Korea, Jung and Lee (1986) examined the effect of export promotion policies on manufacturing exports. They considered export supply to be determined by relative prices, subsidies, and the capacity utilization ratio, which is a measure of domestic demand pressure. In their study subsidies were made up of preferential export financing, tariff reductions, and exchange rate changes. Using data covering the period from 1964 to 1980, they showed that a 1 percent increase in subsidies would promote export supply by as much as 2 percent. Using data for Korea during 1975-2001, Mah's (2007) co-integration test result showed that the duty drawback scheme significantly contributed to promoting Korea's export supply. Their empirical work based on cross sectional data showed that export promotion agencies have a statistically significant effect on export expansion.

3. The Role and Effectiveness of Investment Promotion in Korea

3.1 FDI Promotion Policy

Many economists such as Stiglitz (2000) found that the liberalization of short-term capital movement across countries caused the East Asian economic crisis. Korea hesitated to actively attract FDI until 1997. Prior to that, during the 1960s and 1970s, while the Korean government officially welcomed FDI, in practice economic policymakers and government officials hesitated to attract FDI because of their nationalistic sentiment or worries about the dominance of foreign capital in the Korean economy (Oh, 1996).

With the occurrence of the financial crisis that started in late 1997, acquiring foreign exchange became the government's top priority. Therefore, the Korean government began to attract FDI aggressively. In 1998, it opened certain industries to foreign investors and every type of merger and acquisition (M&A) investment was allowed except hostile M&As. In June 1998, the government abolished restrictions on foreign exchange transactions of corporate and financial institutions and individuals as well as on foreigners' acquisition of land (Nam and Yoon, 2007).

The Kim Dae Jung government also took the following measures to attract FDI: increasing the ceiling on aggregate foreigners' ownership of listed Korean shares from 26 to 55 percent by the end of 1997; eliminating the aggregate ceiling on foreign investment in Korean equities completely by the end of 1998; simplification of FDI approval procedures (Government of Korea, December 24, 1997); privatization of many state-owned enterprises;

provision of land to new FDI ventures at reduced prices, particularly in high technology-related investment projects; and relaxed rules on hostile takeovers of Korean companies (Stoever, 2002; Mah, 2006).

In July 1998 The Foreign Investment Promotion Act (FIPA) replaced the previous Foreign Investment and Foreign Capital Inducement Act to serve as the basic law to govern and attract FDI into Korea following the economic crisis. It intended to relax the regulations imposed on foreigners' investment, expand tax incentives, and reorganize FDI related systems. The Foreign Investment Promotion Act expanded exemptions to corporate income taxes of Foreign Invested Enterprises (FIE) and allowed foreign investors additional business categories such as industry support services and distribution industry.

Since 1998, the Korean government has provided various incentives to FIEs to attract FDI, which include corporate tax reduction and subsidized rental fees. The Roh Moo Hyun government strengthened the tax incentives provided to FIEs by lowering the required minimal investment amount in manufacturing and physical distribution service from US\$50 million to US\$30 million and US\$30 million to US\$10 million, respectively. Although the amount of FDI inflows decreased to about US\$4-5 billion for each year between 2001-2003, it increased again in 2004 due to this change in the tax reduction scheme (Nam and Yoon, 2007; Bae and Mah, 2008).

In addition to the provision of tax incentives and rental subsidies, in 2004 the Roh Moo Hyun government introduced a new cash grant system to attract FIEs that are regarded as indispensable for R&D or hi-tech businesses (Ministry of Commerce, Industry and Energy, 2004). New construction or expansion of factory facilities in greenfield type investments with a 30% or higher foreign investment ratio are eligible for cash support under certain categories such as industries with high-end technology, industries essential for strengthening national competitiveness, and businesses manufacturing certain parts and materials. The cash grant rate can be at most 30 percent of the investment amount. The limit is 40 percent for R&D centers (Invest Korea, 2014).

3.2 Effectiveness of Investment Promotion Measures

There have been many empirical studies examining the effect of FDI inflows on economic growth. Even if one focuses on the empirical work dealing with the East Asian economies, the results are mixed. Zhang (2001) tested the causality between FDI inflows and economic growth for 11 developing economies in East Asia and Latin America. He used the Johansen

cointegration test, the error-correction model, and the Granger causality test and found a positive effect from FDI on economic growth in East Asian countries. Liu, Shu, and Sinclair (2009) applied the Johansen cointegration test and the Granger causality test to eight East Asian developing countries and India. Their results found that exports, imports, and FDI affect GDP in most economies. They also found bidirectional Granger causality for the majority of the sample economies.

The positive effect of FDI on economic growth may be pronounced in countries with a higher Trade Dependence Ratio (TDR). Important incentives to attract FDI in regimes that rely heavily on international trade would be low wage levels and/or the availability of raw materials. This would allow the FIEs to operate in an environment that is free from distortions, leads to output expansion in internationally competitive production markets, and has the potential to enjoy lower production costs from economies of scale achieved through enlarged market size (Bhagwati, 1978). Mah (2010) applied the small-sample co-integration test to the case of Korea and found that FDI's growth-enhancing effect is not contingent on the trade regime.

4. Joint Efforts for Trade and Investment Promotion: Case Studies

4.1 Export Processing Zones

Trade promotion and investment attraction can be intertwined in some cases. A typical example of such efforts can be found in the experience of the establishment of Free Trade Zones (FTZs), usually called export-processing zones (EPZs). An EPZ is a special enclave, outside a nation's normal customs territory, within which investing firms, mostly foreign, enjoy preferential treatment with respect to import of raw materials and intermediate goods, taxation, provision of infrastructure, cheap utilities, and freedom from regulations not generally available in the rest of the country. Such privileges are subject to the conditions that most of the outputs produced are exported and that all imported intermediate goods are utilized fully within the zones or re-exported. Export Processing Zones promote both exports and FDI, among other activities. The experiences of Chinese Taipei and Korea have been known as having the most successful operation of EPZs (Warr, 1990; Amirahmadi and Wu, 1995).

There are certain benefits and costs of establishing and maintaining EPZs. In many developing economies, the major gains from EPZs have been in employment and foreign

exchange earnings. With a few exceptions, the zones in Korea and Chinese Taipei realized their full planned capacity shortly after they were established. Export Processing Zone employment consists of a substantial proportion of the manufacturing labor force. Increases in exports and foreign exchange earnings are important benefits that may be derived from EPZs (Amirahmadi and Wu, 1995). Despite the many benefits expected from EPZs, it is very costly to construct them. Still, establishing EPZs can be far less costly than other ways of attracting FDI, given that most developing countries lack adequate infrastructure and the resources for large-scale development. The ability to control the initial development costs will significantly affect future net benefits from EPZs (Amirahmadi and Wu, 1995).

4.2 Korea's Experience of Maintaining FTZs

In 1970, to promote exports and FDI inflows, the Korean government established the Masan Export Free Zones Administration Office (MEFZAO). The Masan FTZ continued to record rapid growth until the mid-1980s. Exports of the Masan FTZ increased from US\$9.7 million to US\$175 million between 1970 and 1975 and then to US\$3.8 billion in 2010. Exports later decreased to US\$1.5 billion in 2013. Its share in Korea's total value of exports reached 4 percent in 1974, remained somewhat lower than 3 percent since the 1980s, and then fell to less than 1 percent throughout the 2010s. The products produced within the FTZs have been permitted for export to the customs territory since 1974. In 2013, ninety-eight percent of outputs produced in the Masan FTZ were exported (See Table 1a-5).

The number of firms in the Masan FTZ increased from 6 in 1971 to 71 in 1973 and to 98 in 1974. During the 2010s, about 100 firms operated in the Masan FTZ. As of October 2014, the number of FIEs reached 58. Recently the share of local firms has increased significantly compared to the early stages of the Masan FTZ. The share of Korea's FDI located in the Masan FTZ was as high as 40.0 percent in 1975 (MEFZAO; <http://www.ftz.go.kr>). As recently as 2013 that share went down to 1.1 percent because while foreign capital was responsible for a large proportion of the Masan FTZ's investment until the 1980s, its share has continued to fall since then. Furthermore, automation and a transition to more capital-intensive and technology-intensive industries decreased the number of workers in the Masan FTZ. Technology transfer may have played a significant role in this reduction. The number of Korean workers participating in training programs abroad between 1973 and 1997 was 12,184 and during the same period 7,605 foreign engineers were invited from abroad to Korea.

The Changwon National Industrial Estate (CNIE) is the largest industrial estate in Korea. It is located near Masan and accommodates about 1,200 firms that cover machinery, metals, electronics, and automobiles. It produces about 7 times more value-added output than the Masan FTZ. Through this co-location of the Estate and Masan FTZ we can expect substantial effects on the regional economy. In 2010, the Masan FTZ contributed as much as 1,449.3 billion Korean Won to the Korean economy, which consisted of 498.2 billion Korean Won in domestic raw materials and intermediate products; 778.4 billion Korean Won in various types of payment of taxes, utilities, and financial costs; 156.2 billion Korean Won in general wages; 14.2 billion Korean Won in wages related to out-zone processing; and 2.3 billion Korean Won in rent (Masan FTZ Association of Enterprises, <http://mftza.or.kr>, retrieved September 29, 2011).

In November 2014, the number of electricity/electronics and precision machinery firms employed in CNIE was 27 and 39, respectively. Together they comprise about two-thirds of the total firms employed. Additional sectors represented include machinery (11 firms), metal (5 firms), and 'other' (20 firms). While labor-intensive industries such as textiles and garments characterized Masan FTZ in the early stage, technology-intensive industries currently prevail. These industries contribute to advanced technology transfer to the national economy (MFTZAO, <http://www.ftz.go.kr>, retrieved on November 23, 2014).

4.3 Korea's Experience: KOTRA

The Korea Trade-Investment Promotion Agency (KOTRA) is a leading trade and investment promoting organization. It started its work in 1962 to help Korean firms create new export markets. Its main functions are focused on supporting small and medium sized enterprises (SME). It helps SMEs extend their business abroad by providing them with overseas market information, providing consulting services, and offering global business training, among other services.

Later, KOTRA expanded its role in attracting foreign investment after the government enacted the Foreign Investment Promotion Act (FIPA). Invest Korea (IK) was founded as part of KOTRA. Invest Korea is a national investment promotion agency whose role is to support the entry and establishment of foreign business in Korea. The agency is committed to providing comprehensive services for foreign businesses. They include consultations, assistance with investment notification and corporate establishment, support for business activities in Korea, and grievance resolution. Invest Korea facilitates foreign firms' rapid

settlement in Korea (See Table 1a-6). Among the various activities of KOTRA, two cases will be introduced: a Branch agent service for Korean firms and Post-investment service for foreign firms.

4.3.1 Branch Agent Service

KOTRA has 124 overseas offices in 84 countries. These offices serve as Korean firms' foreign branches abroad. The offices' branch agent service fills Korean firms' needs when they begin export activity in a country. The service is customized for each company and includes a suite of export-related services from market research and finding potential trading partners to accomplishing contracts.

The branch agent service is provided to companies whose exporting products are expected to succeed in making a profit. First, firms apply for the service and then KOTRA conducts market research to determine whether the products have potential for success. Finally, KOTRA decides who receives the service. The cost of service varies depending on the exporting country and can range from about US \$2,280 to about US \$3,190. The selected firms receive the service for one year. When the official service period ends, firms evaluate the services received. They can require post-service assistance, if necessary (See Figure 1). In 2013, KOTRA provided branch service to 2,205 firms across the globe. In the same year, 160 cases of new exports to Latin America were reported and many of them were accomplished with help of KOTRA's branch agent service.

4.3.2 Post-Investment Service (Foreign Investment Ombudsman System)

Since the Korean government pursued active FDI promotion policies in the mid-1990s, the inflow of investment has surged. It also has brought about the need for resolving FDI-related grievances. Foreign investors aired various FDI-related grievances related to permits, approvals, incentives and the arbitrary interpretations of laws by ministries and local governments. To resolve these grievances, the Korean government introduced the Foreign Investment Ombudsman System in October 1999. Its main objective is to handle a wide range of FDI-related grievances and to facilitate their investment activities.

The Foreign Investment Ombudsman is appointed by the President and heads the grievance settlement body. The settlement body is operated by KOTRA's Investment Aftercare Division, which consists of 9 Home Doctors and 4 KOTRA employees. The process is as follows: first, Home Doctors receive grievances on-site, in person, over the

Internet or by phone, fax, or email. Second, they examine the grievances and seek resolutions by contacting relevant organizations, if any. Third, they keep and manage the issues in KOTRA's customer management system. Finally, they notify the filing company of the results. Also, Home Doctors keep the filing company informed through every step of the resolution process.

In 2010, the Foreign Investment Promotion Act was revised and the settlement body gained more authority. This let the government and the relevant organizations cooperate in the resolution process. When the foreign investment promotion offices or local governments are summoned by the grievance settlement body they must fully comply with any requests such as submission of related data, statement of opinion, on-site visits, or implementation of corrective measures.

When a case is filed, a Home Doctor is assigned to each company and dispatched to the individual foreign company to offer consultations about the grievances. Home Doctors either require the company to improve a system or do an administrative intervention in collaboration with local governments to resolve the problem. The resolution channels can be divided into three types: system improvement, administrative intervention, and Home Doctor resolution.

In 2013, the Office of the Foreign Investment Ombudsman addressed 383 grievances filed by foreign investors, which represent 10 more cases than it addressed in 2012. Among these, 5 cases were resolved by system improvement, 98 by administrative support, and 280 by Home Doctor intervention.

5. The Role of SMEs in Trade and Investment in Korea

Korea's rapid economic growth in the second half of the twentieth century centered on the promotion of large enterprises (LE) along with the government's industrial policies favoring HCIs. While this development strategy is highly controversial in many respects, it is hard to deny that LEs were the main drivers of Korean economic development, substantially contributing to both trade and investment promotion. SMEs, on the other hand, experienced relatively less success in the Korean economic miracle. In this chapter, we focus our attention to this seemingly marginal actor by highlighting the role of SMEs in economic development, trade, and investment. We also discuss the role of government in promoting SMEs. Finally, we introduce an SME that successfully entered international markets and analyze its strategy and the role government played in its success.

5.1 SMEs in the Korean Economy: An Overview

Korea's development strategy in the second half of the twentieth century was characterized by import substitution and export-led development. In the process, the government concentrated resources to HCIs and promoted LEs in the hope of utilizing economies of scale. It proved to be effective in promoting Korea's economic growth. Obviously, the main beneficiaries were the LEs. It seems, on the other hand, that SMEs were left out of this development process as contributors as well as beneficiaries. Apparently, the main role of SMEs was to provide intermediate inputs to large enterprises in the relevant industries such as HCI. It can be readily shown that only about 30 percent of all small manufacturers in Korea were fully independent as late as the 1990s.² In other words, 70 percent of the country's small manufacturers depended, in varying degrees, upon big firms' purchasing power and oligopolistic market control to sell their parts, components, or semi-finished products.³ As a result, their products were also concentrated in these industries.

Table 1a-7 shows SMEs' contribution to growth in terms of the number of firms, number of employees, and value-added. For example from 1963 to 1969, ninety-four percent of the increase in firms came from SMEs. The picture is almost identical throughout the period - SMEs contribute the most to the growing number of firms. The trend is different when it comes to the number of employees. Until the 1970s LEs contributed more to employment than SMEs did but this pattern was reversed in the 1980s. For the growth of value-added a similar pattern emerges where until 1970s substantial parts of growth came from LEs but from the 1980s on the contribution is more or less equal. By 2011, in terms of the number of firms, 99.9 percent were SMEs and in terms of the number of employees 86.9 percent were employed in SMEs. Since 1994, more than 99 percent of firms were SMEs and the proportion of employees employed in SMEs gradually increased from about 75 percent (Small and Medium Business Administration).

Analyzing export patterns of SMEs is not possible before 1990 because official trade statistics for SMEs were not collected until then.⁴ Recent statistics show that SMEs account for about 19% of total exports.⁵ Trends in foreign investment of SMEs are shown in Figure 2 (appendix). It depicts the SME share of the foreign investment in US dollar terms from 2001 to 2013. It seems that the financial crisis in 2008 substantially reduced SMEs' share of foreign investment. Figure 3 illustrates the share of the government's budget for R&D going to SMEs for various years. It is quite constant throughout the period. Only about 10-15 percent of the government's budget for R&D is provided to SMEs.

5.2 The Role of Government in SME Development

Throughout the period various policies aiming to promote SMEs were enacted. Here we will highlight a few important policies that shaped government attitudes towards SMEs. To systematically support SMEs, in 1966 the government enacted the “Framework Act on SMEs”. The Act set the basic strategy to nurture SMEs. It also regulated the size of SMEs that were subject to SME policies. The details, however, were not provided and enacted until 1983, making the Act ineffective in promoting SMEs until then.

The “SME Systematization Promotion Act” was enacted in 1975 to bolster HCI in Korea. To promote these industries it was necessary for intermediate parts to be smoothly supplied. The Act “defined” the role of SMEs as suppliers of intermediate inputs and the role of LEs as final goods producers and facilitated the linkage between SMEs and LEs by establishing contract-based businesses. This Act epitomizes Korea’s development strategy in the 1970s.

In the 1980s the government began to realize the serious imbalance between LEs and SMEs and the problems this caused. The problems included risky and aggressive expansion of LEs based on favorable government treatment, inefficient resource allocation, and weak SME competitiveness. Consequently, the government began to implement measures that protected and promoted SMEs. The “SME Start-up Support Act” of 1986 simplified start-up procedures for SMEs and provided financial support and tax exemptions to start-up firms. During this period, many regulations were introduced to protect SMEs. For example, the government increased the number of “designated” industries specifically reserved for SMEs. During the 1990s and 2000s the whole economy was exposed to the forces of globalization and for SMEs international competition was unavoidable. But the legacy of the policies in the 1980s still lingered and additional measures to support SMEs were implemented.

Policies since the 1980s have been geared towards protecting and promoting SMEs domestically and measures to support SMEs entering international markets have been relatively lacking. For example only 1.5 percent of the Small and Medium Business Administration’s (SMBA) budget was used to promote SME exports in 2012. The SME Promotion Act provides the basis for support to firms establishing overseas plants but its lack of details is preventing SMEs from taking advantage of the measure. One of a few exceptions is KOTRA (Korea Trade-Investment Promotion Agency), which was established in 1962 to support firms exporting and investing abroad. Recently more actions have been taken by the government to overcome this situation. The “World Class 300” program supports SMEs’

focus on global markets through a package deal that includes R&D, marketing, funds, and experts.

5.3 A Case Study of a Successful SME in the Global Market: SU OPTICS

SU OPTICS is an SME and an OEM (original equipment manufacturer) for an American company, Bushnell, which produces scopes, hybrid-scopes and precision parts for rifles.

<Figure 1-1> Products of SU OPTICS



SU OPTICS was established in 2008 when the negotiations over the Korea-US FTA were well underway. It explicitly targeted the U.S. market and wished to utilize the FTA because under the agreement it was subject to a 14.9 percent tariff exemption. Moreover, the demands for these products were substantially larger in the U.S. than in Korea because hunting was enjoyed and practiced as a sporting activity far more by Americans than by Koreans.

Initially SU OPTICS faced stiff competition from Chinese firms who had the cost advantage. While it focused on promoting product quality and services to compete against less costly Chinese products, it also took steps to get ready for the impending FTA. First, it actively promoted the benefits of doing business with Chinese firms to perspective buyers after the FTA's enactment. These benefits included quality products with lower prices, time-savings, and facilitated trade procedures, among others. Second, SU OPTICS did not cease investing in R&D and improving the quality of its products for possible synergistic effects. Finally, it participated in various training programs provided by the government to utilize the FTA effectively.

With the enactment of the Korea-US FTA and the preparations mentioned above, the business condition for SU OPTICS improved substantially. There were, however, some unforeseen problems in taking advantage of the FTA effectively. For example, in identifying the country of origin – a subtle issue regarding any FTA- the regulators were using the “value-added rule” rather than the conventional “change of tariff classification rule.” SU

OPTICS needed to be extra careful in meeting the country of origin requirement. Again with the support of the government consulting programs this issue was successfully resolved. SU OPTICS is utilizing these programs to maximize its export capacity. It is also getting advice on patent systems and marketing strategies. While the support from the public sector contributed to the company's success in the global market, its own effort to maintain competitive was another contributing factor. Employees have been regularly attending exhibitions to familiarize themselves with ongoing trends and to discover new ideas. It also invests a large amount of its profit in R&D; Its cooperation with academia (Pusan National University) to develop new and more improved products is a good example.

As a result of this support and effort, SU OPTICS could achieve a rapid increase in exports and employment in a short span of time. The value of its exports more than doubled in one year, from \$3 million in 2011 to \$7 million in 2012. The number of employees also increased substantially from 35 in 2011 to 55 in 2012. In addition, Bushnell named SU OPTICAL the best OEM Company that it sources products from. SU OPTICS is a small firm, even among SMEs; however, its success story is a prime example of how an SME responds quickly and takes advantage of changing environments.

6. Conclusion

Trade and investment were unarguably the main drivers of Korea's outstanding economic development. Heavy intervention by the government, together with the private sectors' continuous efforts to innovate, propelled growth during the second half of the 20th century. The Korean government realized the benefits of international trade, exports in particular, and aggressively pursued export promotion. Such measures were aimed at exporting firms during the 1960s and 1970s when Korea was the heaviest user of export subsidies and included tax exemptions and reductions.

Trade and investment are still very important components of the Korean economy in the age of globalization. Even though the kinds of policies pursued previously are no longer viable, the public and private sector are taking various measures to further promote trade and investment and sustain the fruits of economic development. Since the 1980s, direct export subsidies decreased and have been replaced by indirect export promotion measures such as the utilization of the duty drawback and export insurance schemes. In addition, strengthening production capacity, particularly in the technology intensive industry, has been pursued by the government through active promotion of R&D activities since the early 1980s. Such export

and R&D promotion policies have led to the rapid increase of export values and the increasing export share of value-added, technology-intensive products.

The fruits of economic growth, however, were not distributed equally. Policies favoring LEs rather than SMEs were hugely successful overall but also had their downsides. The SMEs, which have always been an important part of the Korean economy in terms of employment and output, were neglected in the export-promotion strategy of economic development. This caused a serious imbalance between LEs and SMEs. But the Korean government has begun to realize these problems and is taking various measures to promote SMEs to achieve more equal growth.

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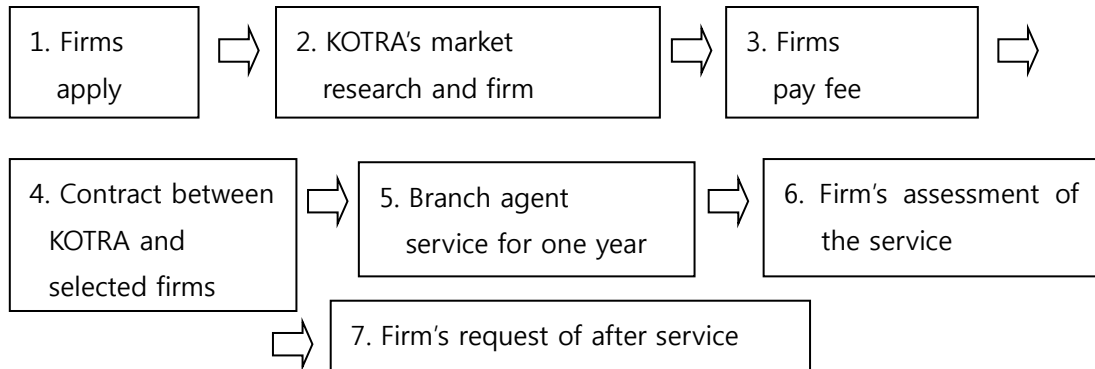
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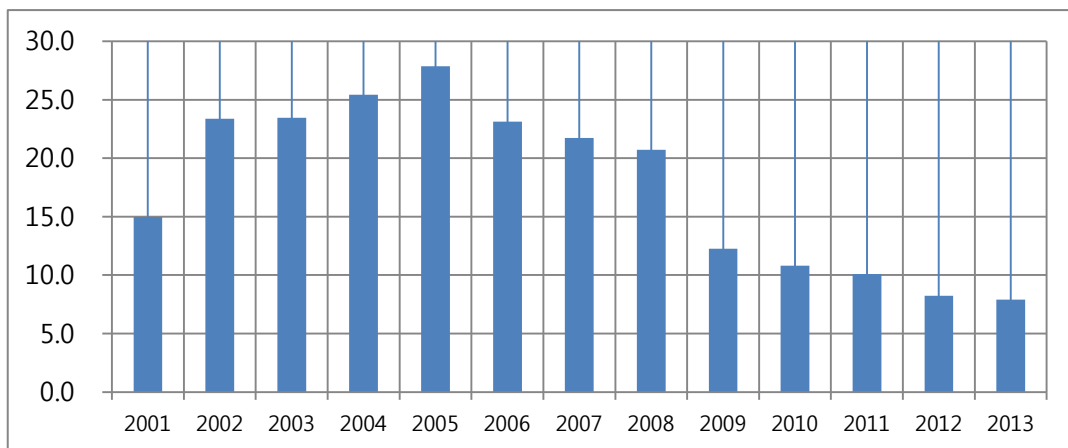
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Appendix: Figures and Tables

<Figure 1a-1> The Branch Agent Service Process

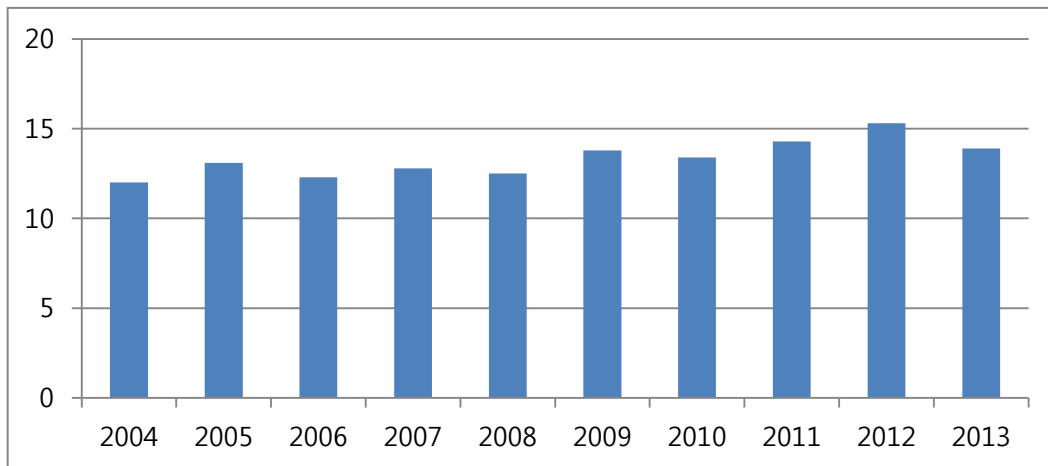


<Figure 1a-2> SMEs' Share of Foreign Investment (%)



Source: Small and Medium Business Administration (various years).

<Figure 1a-3> The Share of R&D for SMEs (percent)



Source: Small and Medium Business Administration (various years).

<Table 1a-1> Economic Growth, Export Expansion and Exports/GDP of Korea

Years	Real GDP growth rate(%)	Goods export values (US\$ billion)	Exports of goods and services/GDP(%)
1962-1966	8.0	1	7.7
1967-1971	9.7	3	13.7
1972-1976	8.0	22	27.8
1977-1981	6.2	77	31.5
1982-1986	8.7	141	34.4
1987-1991	9.4	307	32.3
1992-1996	7.3	510	28.7
1997-2001	3.9	734	40.6
2002-2006	4.0	1,239	31.2
2007-2011	3.4	2,209	46.1
2012	2.3	603.5	56.3
2013	3.0	617.1	53.9

Source: Bank of Korea (various years).

<Table 1a-2> Trend of FDI Inflows (Approval Basis)

Year	Number	Amount (US\$ million)	FDI inflows/GDP (%)
1970	136	76	0.94
1980	101	143	0.22
1990	482	803	0.30
1995	877	1,970	0.38
1998	1,401	8,858	2.56
1999	2,104	15,545	3.49
2000	4,145	15,256	2.98
2005	3,668	11,565	1.46
2010	3,110	13,071	1.19
2013	2,608	14,548	1.12

Source: data until 2005: from Bae and Mah (2008); data from 2010: Bank of Korea (various years).

<Table 1a-3> Duty Drawback Scheme

Years	Amount of Duty Drawback (trillion won)	Duty Drawback /Export Values (percent)	Duty Drawback /Tariff Collection (percent)
1975	0.1	0.3	n.a.
1990	1.2	2.6	24.0
2000	2.2	1.0	21.0
2013	4.3	0.6	40.9

Sources: Mah (2011); Bank of Korea (various years); Korea Customs Office (2015).

<Table 1a-4> Export Insurance Scheme of Korea

(units: US\$ 100 million, percent)

years	export values (A)	insured amount (B)	premium revenue (C)	claims paid (D)	recoveries	utilization ratio(E) (B/A:%)	loss ratio (D/C:%)
1983-1985	1,053.9	42.5	0.28	0.06	0.01	4.0	22.1
1992-1994	2,705.8	118.2	0.77	1.45	0.11	4.4	187.9
2003-2004	4,481.2	970.4	2.12	6.90	1.75	21.7	325.2
2008-2009	8,065.0	2,444.1	5.94	7.14	2.57	30.3	122.2
2012	5,480.0	1,293.3	4.71	3.07	1.30	23.6	46.1
2013	6,171.0	1,860.1	4.16	6.30	1.26	30.1	102.3

Sources: Korea Export Insurance Corporation (various years); K-sure (various years).

<Table 1a-5> Trend of Export Values by Firms in Masan FTZ

(unit: US\$ million, percent)

	1972	1973	1980	1990	2000	2010	2013
Exports of Masan FTZ (US\$ million, A)	10	70	628	1,405	4,442	3,774	1,528
A/total exports of Korea (%)	.6	2.2	3.5	2.2	2.6	0.8	0.3

Source: Masan Export Free Zone Administration Office (1995).

<Table 1a-6> Main Activities of KOTRA

Export and Overseas Investment Promotion		
Global Trade Promotion	Global Business Partnership	
- Business Matchmaking	- Global Partnering	
- Trade missions	- Korea Auto parts Plaza	
- Exhibitions and Conventions	- ICT Road show	
- Cultural Media Business	- Global Energy Plaza	
Global Trade Investment Information	Trade and Investment Infrastructure Support	
- Overseas Market Research	- Training Programs	
- Overseas Market Seminar/Consulting	- Global Human Resources	
- Overseas Investment Support		
Foreign Investment Promotion (Invest Korea)		
Support for potential investors and investment projects	Research/Consulting	PM (Project Manager) System Implementation
Administrative Support	Investor Support	Post-Investment Service

Sources: Korea Trade-Investment Promotion Agency (2014).

<Table 1a-7> Growth Decomposition of Variables of Interests

		1960s (63-69)	1970s (70-79)	1980s (80-89)	1990s (90-99)	2000s (00-11)	1963-2011
No. of firms	SME	94.0	94.8	99.4	102.2	100.6	99.6
	LE	6.0	5.2	0.6	-2.2	-0.6	0.4
No. of employees	SME	38.1	47.1	81.9	-6.8	95.4	78.2
	LE	61.9	52.9	18.1	-93.2	4.6	21.8
Value-added	SME	25.7	35.7	47.7	50.5	45.1	47.3
	LE	74.3	64.3	52.3	49.5	54.9	52.7

Source: Small and Medium Business Administration (various years).

Note: From 1963 to 2006 an SME in the manufacturing sector was defined as having between 5 and 200 employees and since 2007 it was defined as having between 5 and 300 employees.

Part 2: Free Trade Agreements and Trade Facilitation between Korea and LAC

1. Introduction

A decade ago, Korea ratified a free trade agreement with Chile, its first among the LAC countries. Korea also concluded FTAs with Peru and Colombia and is negotiating an FTA with Mexico. These four countries got together in 2011 to establish the Pacific Alliance. The Pacific Alliance is a deep, integrated agreement with the objective of moving steadily towards the free circulation of goods, services, capital, and people largely through trade facilitation and customs cooperation. In addition to integration among themselves, a key focus of the Pacific Alliance is deepening economic ties, interregional cooperation, and policy dialogue with Asia.

More recently, on March 11, 2014, Korea and Mexico signed a mutual recognition agreement (MRA) to recognize the companies certified by each other's authorized economic operator programs. Such programs provide for the accreditation and certification of trusted traders and are a key element in expediting customs procedures and ensuring supply chain security.

In light of the foregoing agreements, this is an opportune time to review and evaluate the accomplishments and effectiveness of such FTAs and how to facilitate and secure trade between Korea and LAC countries.

To this end, this study consists of six chapters. The introductory chapter outlines the purposes of the study. The second chapter analyzes economic relations between Korea and LAC focusing on trade and investment relations. The third chapter evaluates FTAs between Korea and LAC, especially FTAs with Chile, Peru and Colombia based on the Korean perspective, and presents the future of Korea-LAC FTAs. The fourth chapter deals with both achievements and challenges after the Korea-Chile FTA. This chapter specifically deals with the empirical results of the Korea-Chile FTA's impact on Korea's trade with Chile. The fifth chapter closely discusses facilitation of trade between Korea and LAC, focusing on Korean experiences such as Single Window and AEO. Finally, the concluding chapter includes some suggestions about how Korea and LAC can develop balanced and sustainable economic relations.

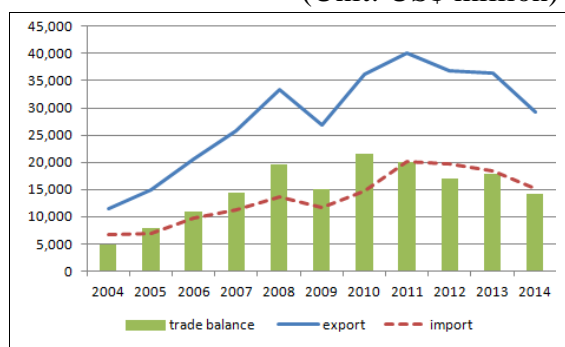
2. Trade and Investment Relations between Korea and LAC

2.1 Trade Relations

Bi-regional trade relations advanced remarkably in the 2000s. In 2013, Korea's trade volume with LAC amounted to US\$54.7 billion (exports of US\$36.3 billion and imports of US\$18.4 billion), accounting for 5.1 percent of Korea's total trade. The share of exports to the region took up 6.5 percent of Korea's total exports, while imports' share accounted for 3.6 percent. In the 2000s (2000-2013), Korea's trade growth with LAC was significant, averaging 11.9 percent and surpassing Korea's total trade growth rate of 9.4 percent.

<Figure 2-1> Korea's Trade with LAC

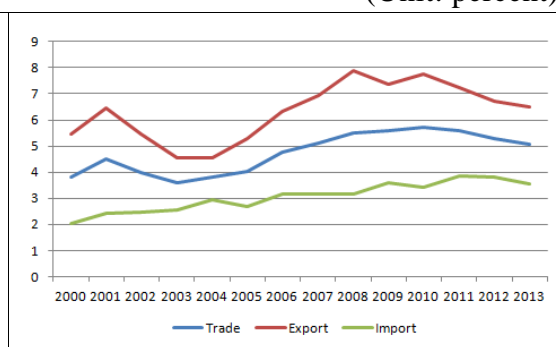
(Unit: US\$ million)



Source: KITA (2014).

<Figure 2-2> Shares of LAC in Korean Total Trade

(Unit: percent)



Source: KITA (2014).

We now turn to the main characteristics of Korea-LAC trade. First, the development of trade relations between Korea and LAC has been unbalanced. Since 1987, Korea has enjoyed trade surpluses with most LAC countries. In particular, since 2009, the trade surplus for Korea has increased rapidly. In 2013, the amount reached US\$17.9 billion, accounting for 40.8% of Korea's total trade surplus.

Second, when analyzing Korea's trade partners in LAC, one finds that Korean exports are concentrated in a limited set of countries. In 2013, exports to the three main countries (Mexico, Brazil, and Panama) made up 63.1 percent of Korea's total exports to LAC. Dependency on these three export markets has deepened, if you compare trade to 2004 when exports to these countries accounted for 52.2 percent (See figures 2a-1 and 2a-3).

Third, like exports, imports are concentrated in certain countries. In 2013, imports from the three main countries (Brazil, Chile, and Mexico) accounted for 68.2 percent of Korea's total imports from LAC. We also identified that the dependency on the three import

markets has heightened. However, some countries with abundant resources such as Peru, Bolivia and Trinidad and Tobago have become major import markets (See figures 2a-2 and 2a-3).

Fourth, in terms of trade structure, inter-industry trade or North-South trade patterns were consolidated. The composition of Korea's exports is overwhelmingly based on manufactured goods such as machinery, including transport, electrical, and electronic products. On the contrary, Korea's import basket from LAC is based solely on primary products or low value-added primary processed goods such as copper, iron ore, steel, aluminum, pulp, and agricultural goods (see table 2a-1).

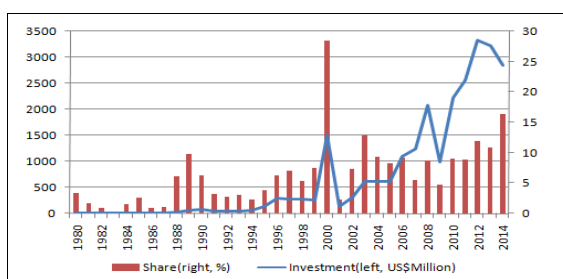
Finally, Korea's exports to LAC have been closely aligned to Korea's investments in the region. In Mexico and Brazil where Korean companies have manufacturing production plants, Korean investments have been playing a crucial role in promoting Korea's exports. For example, in 2013, imports from Korean companies in Brazil from abroad totaled US\$6.8 billion, accounting for around 60% of Korea's total exports to Brazil.

2.2 Investment Relations

Given the increasingly strategic importance of the LAC economy, the pace of investment by Korean companies in the region has been accelerating since 2004. As of September 2014, investment had reached US\$25 billion (based on accumulation), accounting for 9.2 percent of Korea's total FDI. Entering the 2000s, the LAC region has become one of the fastest growing regions for Korean investors.

<Figure 2-3>The Trends of Korean FDI in LAC

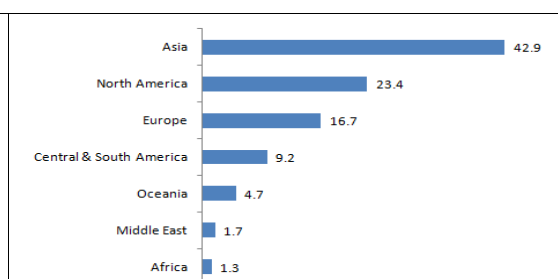
(Unit: percent)



Source: Korea Eximbank(2014).
Note: as of September 2014

<Figure 2-4>Shares of Korean FDI Stock by Region

(Unit: percent)



Source: Korea Eximbank(2014).
Note: as of September 2014

We must consider the major characteristics of Korean FDI in LAC as well. First, with

respect to destination, Korea's FDI to LAC has shown different characteristics over time. From 1986 to 1990, the period when Korean FDI in LAC was becoming meaningful, the Central American Common Market (CACM) became a preferred location for Korean firms. Since the early 1990s, Mexico has been an attractive destination for Korean investors due in part to the effects of the newly launched North American Free Trade Agreement (NAFTA). Nevertheless, in the mid-1990s, MERCOSUR became the most attractive location for Korean investors. In the beginning of the 21st century, for the first time the Andean Community (CAN) began to gain the attention of Korean investors as a promising place to invest. More recently, the Pacific Alliance including Mexico, Chile, Colombia and Peru has been receiving strong attention from Korean companies thanks to a good business environment, stable economic growth and, with the exception of Mexico, as having FTAs with Korea.

Second, like exports, Korea's investments in LAC show the tipping effect by both industry and country. Industry wise, Korea's investments in LAC are concentrated in the manufacturing and mining industries, notwithstanding its finance and insurance investments in tax havens.⁶ Investments within the manufacturing industry center on communications equipment, automobiles, and textile and clothing sectors (see table 2a-2). In addition, the investments in manufacturing are limited to Mexico, Central America, and Brazil. By country, Korean investments in LAC have been concentrated in Brazil, Mexico, and Peru, excluding again its investments in tax havens. The Pacific Alliance accounts for 20.5 percent of Korean FDI in LAC (See figure 2a-4 and 2a5).⁷

Third, by firm size, mainly large Korean corporations invest in LAC. For instance, SMEs have found it easier to enter markets in Mexico and Central American countries. On the other hand, SME investments in South America, including Brazil, are nearly nonexistent.

Fourth, Korea's investment strategies differ by sub region and country. The efficiency-seeking strategy to indirectly enter the US market is noticeable in Mexico and Central America. On the other hand, the market-seeking strategy to target the region's domestic markets is apparent in South America, especially in Brazil.

Lastly, despite a rapid increase in Korea's FDI flows to LAC, LAC countries' investments in Korea have remained low. As of 2014, LAC investment in Korea amounted to US\$9.5 billion (based accumulation). However, the majority of investment comes from tax haven countries such as the Cayman Islands, Bermuda, the U.S. Virgin Islands, Panama, and the Bahamas (See figure 2a-6).

3. Free Trade Agreements of Korea and LAC

3.1 An Evaluation of Signed FTAs (Chile, Peru and Colombia): A Korean Perspective

The Korea-Chile FTA celebrated its 10-year anniversary in 2014. As Korea's very first FTA, it symbolized a new milestone for Korea's trade policy and provided an appropriate foundation for continuous FTA policy enforcement for future years. The Korea-Chile FTA was an innovative turning point in Korean trade policy. It symbolized a substantial shift in Korea's trade policy from multilateralism, focusing on WTO, to bilateralism, based on free trade agreements. The Korea-Chile FTA was also significant because it was the first agreement between East Asia and LAC, connecting the only remaining missing link between the two regions during a period of global regionalism.

There are several reasons why Korea chose Chile as its first FTA partner. Most importantly, Korea believed that the impact of the FTA on the Korean economy would be modest because Chile is a small economy and the trade structure between the two countries is more complementary than competitive. Second, Chile was geographically distant from Korea and located in the Southern Hemisphere. Farmers in both countries harvest their crops at different times of the year; imports from Chile would have little impact on Korean farmers.⁸ Third, Korea believed that Chile's open trade policy and its wide experience in developing FTAs would be helpful in enhancing Korea's negotiating skills and serve as a guide to conducting successful negotiations.⁹ Finally, Chile would serve as a foothold for Korean companies to enter into the LAC market because Chile has established wide FTA networks with neighboring LAC countries.

The Korea-Peru FTA came into effect in August 2011, seven years after the Korea-Chile FTA. It is Korea's seventh agreement and it is the second FTA in LAC. In June 2012, the Korea-Colombia FTA, which is Korea's tenth FTA, was signed (see table 2a-3).

Like the FTA with Chile, the FTAs with Peru and Colombia present three advantages for the Korean economy. First, they represent Korea's foresight about potentially important growth engines in LAC. Peru and Colombia, boosted by their market-oriented economic policy and active development of abundant natural resources, are emerging economic stars among LAC countries. Second, these two FTAs are important in terms of securing a stable supply of natural resources for Korea. Both countries are rich in natural resources such as copper, tin, zinc, oil, coal, and nickel. Lastly, the FTAs with both countries represent a bridge for Korean companies to enter the broader LAC market. Both countries are ideal for Korean

enterprises to advance further into LAC because of their favorable business environments and geographical locations.

3.2 Future of Korea-LAC FTAs

In the future, Korea-LAC FTAs needs to be pursued through a three-pronged approach. First, existing FTAs such as the FTA with Chile and Peru need to be upgraded. For example, Korea wants Chile to remove additional tariffs on steel, refrigerators, washing machines and other goods. Meanwhile Chile, in its own interest, seeks greater access to the Korean agricultural market.

Second, FTAs with small LAC countries, such as those in Central America, need to be developed. Korea completed a joint research project on an FTA with five Central American countries in April 2011 and held a feasibility review meeting in October 2012. We expect that the FTA negotiation with Central American countries will begin no later than 2015.

Finally, FTA negotiations with mega economies such as Mexico and MERCOSUR need to resume. In February 2006, Korea and Mexico started official negotiations for an FTA. The two countries signed a Strategic Economic Complementation Agreement (SECA) and initiated a negotiation in 2007 to develop SECA for a comprehensive free trade agreement. Since 2008, Korea-Mexico FTA negotiations have stopped following Mexico's decision to halt discussions and have yet to resume. The grounds for this decision were that an FTA with Korea would bring more harm than good because of a large trade imbalance and Mexican concerns over their domestic manufacturing sector's lack of competitiveness.¹⁰ Despite this development, the Korean government and the private sector have continued their efforts to resume negotiations with Mexico. The Korean government frequently suggests FTA negotiations as a subject at high-level meetings between both countries. The comprehensive FTA remains out of the realm of possibility for the near future as long as Mexico adheres to its position. Fortunately, the Korean government's announcement to join the TPP (Trans Pacific Partnership) has rekindled the possibility of concluding an FTA with Mexico.

As for the Korea-MERCOSUR FTA, both parties agreed to launch a joint feasibility study in November 2004 on a possible Korea-MERCOSUR FTA and completed the study in October 2007. In November 2008, Korea suggested that MERCOSUR consider a follow up action regarding the result of the joint Korea-MERCOSUR Trade Agreement feasibility study. In July 2009, both sides signed an MOU for the "Establishment of a Joint Consultative Group to promote trade and investments between the Republic of Korea and MERCOSUR." Despite the Korean government's strong interests in an FTA with MERCOSUR, discussions of an

FTA have gone in circles over the last six years due to MERCOSUR’s reluctance to create an FTA with Korea.

4. Balance of Achievements and Problems after Korea-Chile FTA

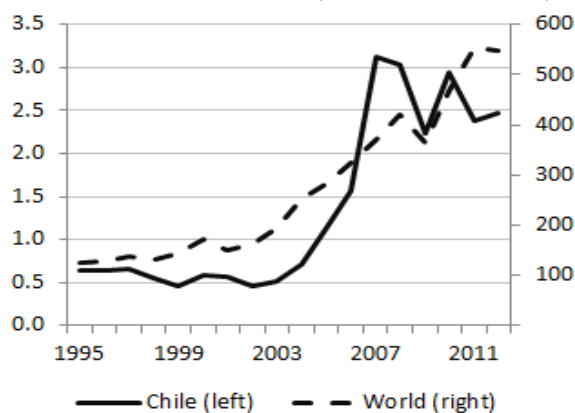
In this section, we shed light on the impact of the Korea-Chile FTA on the Korean economy.¹¹ In particular, we pay attention to changes in bilateral trade flows before and after the Korea-Chile FTA and its economic implications.

4.1 Changes in Trade before and after the Korea-Chile FTA

Since the Korea-Chile FTA came into force in 2004, trade between Korea and Chile has dramatically increased. Korea’s exports to Chile reached US\$2.5 billion in 2012, up from US\$0.5 billion in 2003, with an average annual growth of 19%. Korea’s imports from Chile increased to US\$4.7 billion in 2013, up from US\$1 billion in 2003, with an annual average growth of 18%. These rates are impressively high given that Korea’s total exports and imports grew at about 12 percent per year over the same period. Furthermore, average annual growth of exports and imports between Korea and Chile showed only -2.5 percent and 1.1 percent, respectively, during the pre-FTA period of 1995 to 2003. The trade data suggest that the Korea-Chile FTA is likely to be a milestone for closer trade relations between the two nations.

<Figure 4.1> Korea’s Export to Chile (World)

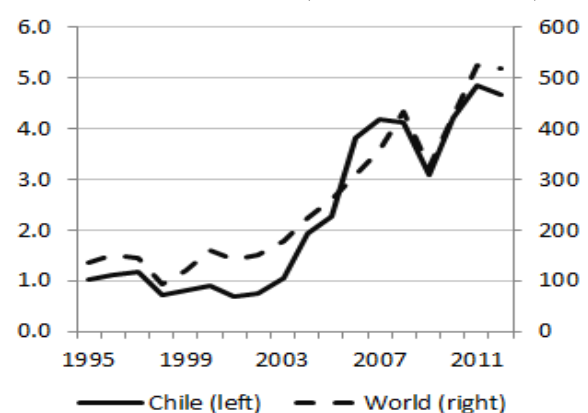
(Unit: US\$ billion)



Source: UN Comtrade (2014).

<Figure 4.2> Korea’s Import from Chile (World),

(Unit: US\$ billion)



Source: UN Comtrade (2014).

Since the Korea-Chile FTA, certain product categories have dominated trade among the two countries. Korea has mostly exported industrial products to Chile. Korea's major exports were motor vehicles and chemical products, which accounted for 47 percent and 29 percent of Korea's total exports, respectively, between 2010 and 2012. On the other hand, Korea has mainly imported copper and copper-related products such as copper ore and concentrates, copper cathodes, and other refined copper, which accounted for more than 70 percent of Korea's total imports. Although agricultural and fishery products that include crops, livestock, and fish accounted for only 9 percent of Korea's total imports from Chile, they have increased rapidly, recording an average annual growth rate of 22 percent since the FTA. Korea's primary agricultural imports from Chile included fresh grapes, kiwi fruit, pork, and various processed foods (see figures 2a-13 and 2a-14).

After the FTA's implementation, SMEs' exports were remarkable. From 2007 to 2013, SMEs' exports to Chile increased 4.6 percent on average, while large companies' exports decreased 6.3 percent. The reason for large companies' decreased exports is that price competitiveness of Korean products weakened after the Japan-Chile and China-Chile FTAs went into effect. On the other hand, the reason why Korea's SMEs' exports increased is that they pioneered a new market in Chile based on the FTA. As a result, the share of SMEs in total exports increased from 16.5 percent to 27.3 percent between 2007 and 2013. By contrast, the export share by large corporations decreased from 83.5 percent to 71.6 percent during the same period.

The Korea-Chile FTA contributed significantly to diversifying trade. Korea's export items (HS 10 digit) to Chile increased by 66.5 percent from 938 items in 2003 to 1,562 items in 2013 supported by an expansion in items such as machinery, chemicals, and electronics. During the same time, import items from Chile also expanded from 168 items to 386 items due to scaling up of imports of agro-fishery products (see figure 2a-7).

The Korea-Chile FTA played an important role in expanding the number of exporting firms. The number of firms multiplied around threefold from 733 firms in 2003 to 2,096 firms in 2013 as more than 200 new entrants continued to enter the Chilean market every year (see figure 2a-8).

Last but not least, the utilization rate of the FTA's preferential tariff¹² was high in the Korea-Chile FTA. Based on trade in 2013, the utilization rate on preferential tariffs for exports was 78.4 percent and the rate on imports reached 98.3 percent. These rates exceeded the overall average utilization rate of Korea's preferential import and export tariffs, which was 67 percent and 69 percent, respectively. Why did the Korea-Chile FTA enjoy such a high

FTA preferential tariff utilization rate? Because Chile has accumulated a lot of experience and knowledge through signing several FTAs.¹³ Taking into account firm size, the utilization rate by large firms (82.7 percent) was much higher than that of SMEs (70.6 percent) (see figures 2a-9 and 2a-10).

4.2 Impact of the Korea-Chile FTA on Bilateral Trade: Empirical Analyses

In this section, we seek to find empirical evidence of the impact of the Chile-Korea FTA on bilateral trade between Chile and Korea. A standard gravity model is augmented with dummy variables that indicate the FTAs, which each country has arranged, as follows:

$$M_{ijt} = \exp(\beta_1 \ln GDP_{it} + \beta_2 \ln GDP_{jt} + \beta_3 CKFTA_{ijt} + \sum_m \beta_m OFTA_{ij}) \eta_{ij} \quad (2.1)$$

M_{ijt} are country i 's imports from country j at year t . Chile's (Korea's) imports from its 198 partners are employed as a dependent variable to estimate the effect on Korea's exports (imports) of the Korea-Chile FTA ($CKFTA$) and their other FTAs ($OFTA$).¹⁴

The dataset covers bilateral import flows between 1995 and 2012. All the variables are expressed in 2005 price levels. Information on the FTAs of Chile and Korea is obtained from WTO. The gravity equations are estimated by incorporating the partner country's fixed effects within the transformation. The unobservable year's characteristics are controlled for by a set of year dummies. More importantly, we address the problem of zero import flows in a given year between Chile (Korea) and its partners. Zero values occupy 53% (27%) of the total number of observations for Chile's (Korea's) import flows. We adopt a Poisson Pseudo-Maximum Likelihood (PPML) technique suggested by Santos Silva and Tereyro (2006).¹⁵ The Poisson estimator naturally includes zero trade flows because it is not specified with the logarithmic value of the dependent variable. In addition to the country level estimation, we investigate the effect of the Chile-Korea FTA on bilateral trade in three broad sets of industries: agriculture, mining, and manufacturing. In doing so, we modify the FTA dummies so that they become interaction terms of FTA and industry dummies.

<Table 2a-5> provides the results from PPML estimations for equation 2.1. The second and third columns present the estimates of equation 2.1 that use Chile's imports from Korea as a dependent variable. In the second column the estimated coefficient of $CKFTA$ is

statistically significant at the 5 percent significance level, implying that the Chile-Korea FTA has increased Korea's exports to Chile by 30.3 percent ($=\exp^{0.2646}-1$) as a whole. In the second and third columns the estimates of *CKFTA* and *CKFTA_M* (manufacturing) have almost the same magnitude, meaning that the Chile-Korea FTA's effect on Korea's exports to Chile is explained largely by manufactured exports. Although the estimated coefficients of *CKFTA_A* (agriculture) and *CKFTA_I* (mining) are very high, they don't actually tell us much because the export values are very small in those industries.

In the last two columns of <Table 2a-5> the dependent variable is Korea's imports from Chile. The estimate of *CKFTA* implies that Korea's imports from Chile have increased by 53.2% ($=\exp^{0.4267}-1$) with the presence of the Chile-Korea FTA. When looking at the FTA's impact on Korea's imports from Chile in three sectors in the last column, the estimates suggest that the FTA led to a 216 percent ($=\exp^{1.152}-1$) increase in agriculture (*CKFTA_A*), a 119 percent ($=\exp^{0.7842}-1$) increase in mining (*CKFTA_I*), a 21.1 percent ($=\exp^{0.1917}-1$) increase in manufacturing (*CKFTA_M*). Given the amounts of sectoral imports in <Figure 2a-14>, the effect in the mining and non-ferrous metal manufacturing sectors would account for a substantial portion of the total effect of the Korea-Chile FTA.

4.3 Assessment from the Korean Perspective: Beneficially and Adversely Affected Sectors

It appears at first that one of the results of the Chile-Korea FTA is that Korea imports more from Chile than it exports to Chile. It is obvious that Korea's trade deficit with Chile has steadily increased since the Korea-Chile FTA came into effect in 2004 (see Figure 2a-15). As seen in the previous sections, however, raw materials for producing manufactured products make up a considerable part of Korea's imports from Chile. This suggests that the Korea-Chile FTA is likely to contribute substantially to Korea's overall export activity. According to a KIEP report, Chilean copper made up around 50 percent of total copper imports included in Korea's eventual exports between 2005 and 2009.¹⁶ As a result, it seems that Korea's trade deficit with Chile is related to its trade surplus with the rest of the world, implying that the two countries' industrial structures are complementary. It is highly likely that the Chile-Korea FTA has had a positive effect on the Korean economy as a whole.

There might be, on the other hand, an adverse effect on domestic agricultural production. Since the Korea-Chile FTA, Chilean agricultural products have been rapidly penetrating the Korean market, especially its fruit and pork markets. For example, Korea's

imports of Chilean fresh grapes and processed food accounts for over 80 percent of total crop imports from Chile. These imports have increased at an average rate of 26.9 percent per year from US\$32 million in 2005 to US\$169 million in 2012. Korea's pork imports from Chile reached US\$126 million in 2012 from US\$80 million in 2005.¹⁷ Nevertheless, the cultivation area for greenhouse grapes in Korea, which was predicted to be the most vulnerable to the Korea-Chile FTA, has been steadily growing rather than declining. Meanwhile, domestic pork production has also been rising, thanks to increased per capita consumption of fruit and pork in Korea. Hence, it is hard to conclude that the potential damage of the Korea-Chile FTA to the Korean agricultural sector has been realized (see Figure 2a-11 and 2a-12).

5. Facilitation of Trade between Korea and LAC

5.1 Importance of Trade Facilitation

One of the serious obstacles that Korean exporting firms face in the LAC market is non-tariff barriers. According to a survey conducted by the Korea Institute for International Economic Policy (KIEP)¹⁸, Korean companies have a strong interest in the removal of non-tariff barriers (31.3 percent of all respondents) as well as the elimination of tariffs (40.3 percent) in FTAs with LAC countries. Korean companies pointed at ex-ante licenses and approvals for imports (19.4 percent) as the most serious non-tariff problems. Other major non-tariff barriers identified in the survey include additional taxes and other charges (17.3 percent), excessive imposition of duties caused by arbitrary customs' valuation (14.3 percent), customs clearance delays (7.1 percent), solicitations for bribes by customs officers, and deliberate delay of administrative procedures (5.1 percent) were indicated.¹⁹ Taking these concerns into account, trade facilitation measures such as Single Window and Authorized Economic Operator (AEO) are crucial for reducing or eliminating non-tariff barriers to trade.

5.2 The Role of Korea in Trade Facilitation of WTO and APEC

5.2.1 WTO

Agreement on Trade Facilitation (TFA) regulates the transparency of trade regulations, release and clearance of goods, and goods in transit, among other things. Negotiations over the Trade Facilitation Agreement were concluded at the Bali Ministerial Conference in December 2013. In November 2014, WTO members adopted a Protocol of Amendment in order to include the new Agreement in Annex 1A of the WTO Agreement. Once two-thirds

of the member countries accept and complete their respective domestic processes, the TFA will become effective.

The Republic of Korea has actively supported that negotiations over its membership in the Colorado Group be completed even though it is not categorized as a developed country. In particular, it has contributed to the negotiations by recommending various trade facilitation measures (i.e. single windows, use of risk management, establishment and publication of average release times) and has succeeded in including them in the final agreement. Korea has classified all the obligations on TFA as category A, given prior advance on May 28, 2014, and encouraged other members to adopt the agreement.

One of the reasons that Korea was able to play a leading role in TFA's creation was that it was implementing most of its obligations under the TFA. It is less burdensome for Korea to accept the whole agreement and relatively easier for it to adopt many other new obligations compared to other member countries. At the same time, it is expected that once the agreement takes effect, the trade transaction costs will be reduced and customs clearances will improve, resulting in increased trading volumes.

In anticipation of further progress for the TFA, Korea will make the necessary domestic reforms, such as any statute revisions, prior to the upcoming 2014 General Council of WTO. Also, in cooperation with WCO and WTO, Korea will support the implementation of the agreement for LDCs through international workshops and remove non-tariff barriers.

5.2.2 APEC

Promotion of regional economic integration was one of the major agendas of the 2014 APEC Economic Leaders Meeting. During the meeting, various issues such as support and encouragement of the Bali Package's implementation and anti-protectionism, among others, were discussed.

The leaders of APEC, including the Republic of Korea, have also discussed the TFA agenda and supported the strengthening of the multilateral trade system. They have expressed concerns about the failure of TFA adoption and made it clear that they will make every effort to reach a settlement of DDA, implement the Bali Package, and make a work plan for post-Bali.

5.3 Korean Experiences: Single Window and AEO

5.3.1 Single Window: UNI-PASS

The “Single Window,” regulated in WTO TFA article 10.4, is a system that enables traders to “submit documentation and/or data requirements for importation, exportation or transit of goods” through a single entry point. However, it does not have a clause that requires the use of an international standard.

Korea has strongly suggested that TFA (TN/TF/W/18) include single window and submitted a proposal to that effect (TN/TF/W/100, TN/TF/W/138). One can conclude that Korea’s suggestions were successfully reflected in the agreement.

UNI-PASS is the brand name of Korea’s e-clearance system that actually refers to seven systems that perform the export/import e-Clearance core functions on a consistent basis: the export clearance system, import clearance system, duty collection system, export/import cargo management system, duty drawback system, and clearance Single Window. Traders can access the Internet Clearance Portal through UNI-PASS and complete government requirements such as food inspection with a one-time submission of declaration data. UNI-PASS has also adopted global standards to maximize its effect on trade.

Furthermore, in 2003, the Korean government included Risk Management (TFA Article 7.4) in the UNI-PASS. Since 2011, Korea has been operating the “IRM-PASS” system to deal with the possible risks in the customs administration process by systematically managing internal and external information.

UNI-PASS is facilitating Korea’s trade and contributing to its economic growth. However, UNI-PASS is also limited in that its system excludes several authorities or agencies that are related to the customs clearance.

Korea is an information technology (IT) powerhouse, a leading country in the e-clearance system, and possesses outstanding hardware as well as software capabilities. In addition, it has been rapidly expanding the export of this e-clearance system and is competitive in this area. For instance, Korea Customs Service and Korea International Cooperation Agency (KOICA) train customs officials in developing countries as part of its official development aid.

The demand for the service is particularly strong among Latin American countries that have recently introduced automatic clearance systems. These countries include The Dominican Republic, Ecuador, Costa Rica, Colombia, Guatemala and Bolivia (see Table 2a-6).

A country may accept the UNI-PASS system, but using it is an entirely different matter. For example, in July 2010 Mongolia adopted an e-Customs system based on the UNI-PASS

system. However, the system is not yet universally applied in import and export processing. The superficial reason for this failure turned out to be a lack of IT infrastructure and professional personnel who could manage the system. However, the fundamental reasons were more socio-political – the digitization process was likely to reduce the need for substantial human resources.

5.3.2 Authorized Economic Operators (AEO)

Each country has its own Authorized Economic Operators (AEO) program, which is responsible for giving validated companies certificates. In a global environment, the AEO program still needs to harmonize systems from different countries, mutually accept them, and exchange necessary information to ensure system survival. According to WCO, as of March 2014, 168 out of a total 179 member countries have signed Letters of Intent that commit them to implementing the SAFE Framework. A total of 63 countries are already implementing the AEO program and there are currently 23 Mutual Recognition Arrangements for AEO. In Latin America, 12 countries are adopting this AEO program and there are 250 enterprises validated through the system. Korea has signed MRA with Mexico in 2014.

The contents of WCO's AEO program are also reflected in the WTO's TFA in article 7.7, Trade Facilitation Measures for Authorized Operators. The AEO program is focused on following the obligations/protocol so that the security of the value chain is ensured.

The AEO program has been implemented and maintained based on international standards such as the SAFE Framework of Standards and Revised Kyoto Convention. However, AEO is not yet standardized and each country has a distinct system.

Korea adopted the AEO program in April 2009. It is willing to adopt TFA article 7.7 because the domestic measures to implement the AEO program will become less burdensome. Even though Korea was a relatively late adopter, it is considered an exceptional case for the having made the AEO program's procedures and implementation quick and thorough.

The four criteria to become an AEO validated company are: Law Compliance, Internal Control System, Financial Solvency, and Security Management.²⁰ Based on these four criteria, AEO authorization levels are given an A, AA, or AAA rating. As of December 2014, there were 624 companies authorized by the AEO program. Benefits are granted differently depending on the rating (see table 2a-7).

The Korea Customs Service offers various benefits such as simplified inspections and processes and easing of financial burdens. Once admitted, an authorized company is

incentivized to maintain their customers and business. Through the program's benefits, a business can improve its competitiveness, reduce costs, and save time. Today more countries are paying attention to this AEO program and include AEO authorization as one of their requirements for trade relations.

The spread of the AEO program can contribute to the standardization of the customs administration. In 2013, five hundred sixty one companies authorized by AEO accounted for 40% and 23% of Korean exports and imports, respectively. In the meantime, SMEs are having difficulties in the authorization process due to a lack of capital and professional (trained) labor. The SME compliance rate is relatively low and their record keeping capabilities are insufficient.

Korea is putting more effort into improving the AEO program by spreading and increasing its use, giving support to SMEs, inventing new benefits, measuring its effects, reinforcing program monitoring and management, and expanding MRA. However, more than anything, the mutual implementation of the program and signing of AEO MRA should be preceded. As of June 2014, Korea has signed AEO MRAs with nine countries: The United States, Canada, Singapore, Japan, New Zealand, China, Hong Kong, Mexico, and Turkey. Also, it is now negotiating and conducting joint research for AEO MRAs with India, Israel, The EU, Chinese Taipei, Peru, Colombia, Jordan, and Thailand.

The most recent MRA that Korea signed was with Turkey. This MRA is more meaningful because Turkey has accepted Korea's AEO program. The AEO program's companies account for 30% of Korea's exports to Turkey. As the MRA takes effect, the portion of exports that AEO companies account for will grow even more.

Korea and China signed an AEO MRA in 2013. The two countries conducted a pilot AEO MRA for three months and measured its effectiveness before starting official implementation on April 1, 2014. The two countries measured the time it took to clear customs and compared these times before and after the three month AEO pilot. It turned out companies from both countries saved time in clearing customs as a result of the AEO program's benefits. The AEO program reduced Korea's exporting companies' customs clearance time from 10.17 hours to 3.52 hours and the Chinese exporting companies' times were reduced from 5.10 hours to 2.16 hours. Based on this performance, the president of Korea insisted on the full implementation of the AEO program and even cited the Korea-China AEO MRA as a success story during the APEC Economic Leaders' Meeting in 2014.

6. Conclusions

Since the early 2000s, Korea-LAC economic relations in terms of trade and investment have developed in size but not substance. In the 2000s (2000-2013), Korea's trade with LAC averaged 11.9 percent, surpassing the 9.4 percent growth rate of Korea's total trade. In spite of the rapid increase in both sides' trade, trade relations have developed unevenly. LAC's trade deficit with Korea has deepened. The Inter-industry trade structure has been cemented. The high dependency on some countries and items in terms of exports and imports has been consolidated. Investment relations between both sides have showed patterns similar to trade relations. While Korea's FDI flows to LAC have increased rapidly since 2004, LAC countries' investments in Korea are still minimal except for in tax haven countries. By country and industry, Korea's investments are excessively concentrated in certain countries such as Brazil, Mexico, and Peru, and in certain sectors such as mining and manufacturing. Korean companies' participation in LAC's local supply chains is still developing.

The Korea-Chile FTA, Korea's first, has contributed both quantitatively and qualitatively to upgrading trade relations between Korea and Chile. First, the FTA with Chile led not only to trade expansion, but also the diversification of trading sectors and importing and exporting firms. Second, the Korea-Chile FTA contributed to expanding SMEs' exports. The LAC market is one that Korean SMEs typically avoid getting into because of linguistic and cultural differences and long distance. In this circumstance, signing an FTA between the two countries helped break down physical and psychological barriers and promoted SME advancement. Third, FTA between Korea and Chile was highly utilized. A high utilization rate indicates that firms in both countries are actively enjoying preferential tariffs. This rate surpassed the overall average utilization rate of Korea's preferential import and export tariffs.

However, in spite of these positive outcomes, there are several areas for improvement to maximize the FTAs' effects. First, despite the Korea-Chile FTA's achievements, Korea's post-FTA export base has weakened in the Chilean market. The advantages from being a 'first mover' have begun to wane and competition with later FTA partner countries such as Japan and China have intensified.

In order to maintain mutually beneficial momentum through the Korea-Chile FTA, it is necessary to diversify the level of cooperation between the two countries. This would entail moving away from just trade oriented economic cooperation and towards comprehensive cooperation that includes industry, investment, services, education, and technology. Second, while the Korea-Chile FTA is highly used, there is a discrepancy in its use between large

firms and SMEs.²¹ Thus, both countries must work to enhance the SME FTA utilization rate so that they can reap its rewards. Third, the Korea-Chile FTA greatly contributed to boosting trade between the two countries but its effect on increasing mutual investment is more modest. In 2004, when the Korea-Chile FTA went into effect, Chile was regarded as an important gateway for Korean companies to advance into the LAC market. However, there are almost no examples of Korean firms taking advantage of the FTA to enter into the LAC market.

One serious obstacle that Korean exporting firms face in the LAC market is non-tariff barriers. Considering the experiences of Korean firms, trade facilitation measures such as Single Window and Authorized Economic Operator (AEO) are crucial for removing non-tariff barriers. Trade facilitation is one of the more significant opportunities to reduce trading costs between Korea and LAC. UNI-PASS has, on the whole, contributed to economic growth and improvement of the business environment in developing countries including those in Latin America. Among LAC countries, The Dominican Republic and Ecuador successfully adopted an e-clearance system based on UNI-PASS. Authorized economic operator (AEO), one of the main trade facilitation measures, has been playing a crucial role as a trade facilitator between both countries as witnessed in the case of trade between Korea and China. Despite being a latecomer in AEO adoption, thanks to its extensive application and swift enforcement of the program Korea is now regarded as an AEO leader. Korea has now signed MRAs with 10 countries including Mexico.

To develop balanced and sustainable economic relations between Korea and LAC, the following must occur: First, Korea and LAC need to make active efforts to expand new FTAs and upgrade existing FTAs. Most of all, Korea should make a breakthrough in FTAs with Mexico and MERCOSUR by pursuing projects such as trade facilitation agreements and signing agreements in specific sectors. Also, Korea should initiate FTA negotiations with Central American countries in which Korea's SMEs are operating. The FTA negotiations with Central American countries where the least developed countries are concentrated especially demand a new negotiation strategy that focuses on development and cooperation.

Second, both sides need to support LAC countries' insertion into the global supply chain by transferring Korea's economic development experiences and technologies. Policies and projects that support LAC' components and materials industries' insertion into the global supply chain will simultaneously solve LAC's manufacturing sector challenges and create a friendly environment for Korean businesses seeking to enter the market.

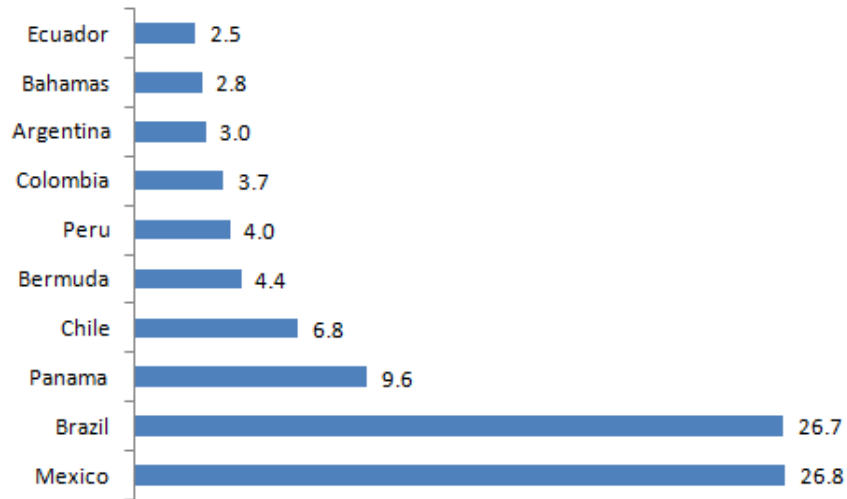
Third, Korea and LAC need to foster shared FDI. The Korean government should actively attract FDI from LAC, especially from Multilatinas, which are LAC multinational

firms. As for stimulating the investment of Multilatinas in Korea, Invest Korea should institutionalize investment promotion through a 'Latin America Desk' or 'Multilatinas Desk'. Korea also needs to increase Multilatinas' awareness of Korea's positive business environment. On the other side, LAC companies can devise strategies to enter Asian markets, for instance China, by using Korea's logistical and FTA strengths as a gateway to Asia.

Lastly, Korea and LAC need to boost cooperation in trade facilitation to expand LAC countries' electronic trade, Single Windows, and AEO programs. They also need to foster their respective MRAs like Korea-Mexico. For this, Korea should increase exports of the UNI-PASS system to LAC countries and initiate joint research for the AEO MRA that includes a measurement of program effectiveness.

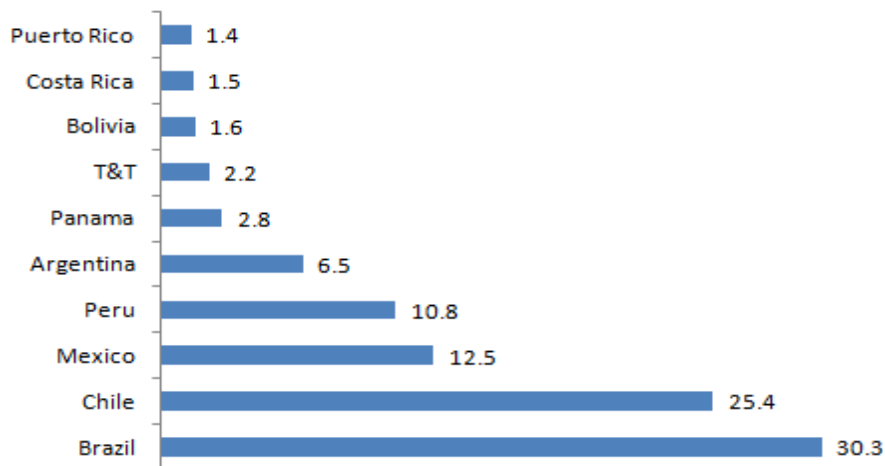
Appendix: Figures and Tables

<Figure 2a-1> The 10 Largest Partners in Korea's Exports to LAC (2013)
(Unit: percent)



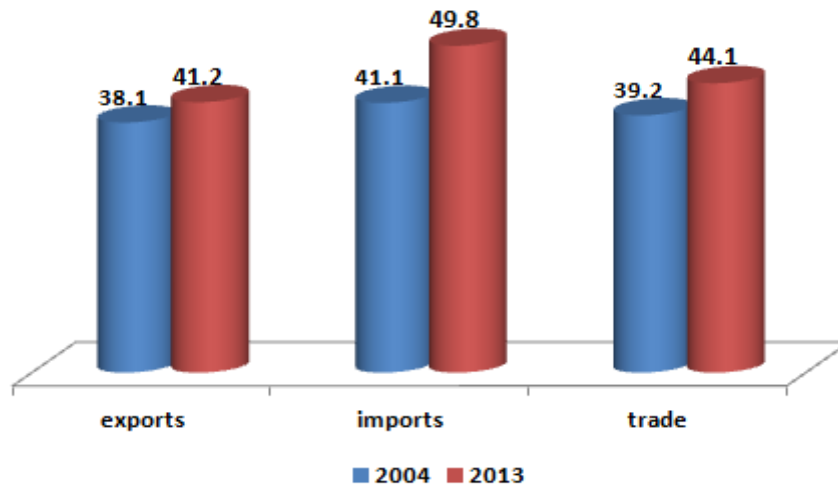
Source: KITA (2014).

<Figure 2a-2> The 10 Largest Partners in Korea's Imports from LAC (2013)
(Unit: percent)



Source: KITA (2014).

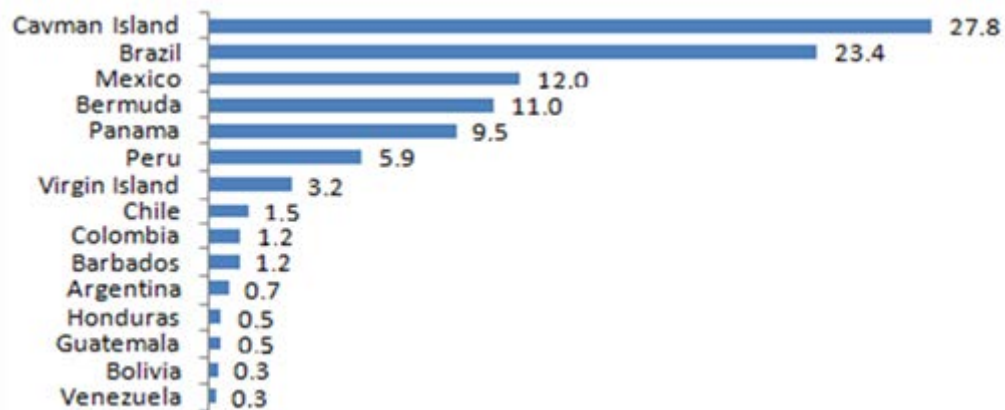
<Figure 2a-3> Share of Pacific Alliance in Korea's Total Trade with LAC
(Unit: percent)



Source: KITA (2014).

<Figure 2a-4> Share of Korea's FDI in LAC by Country (as of September 2014, based on Accumulation)

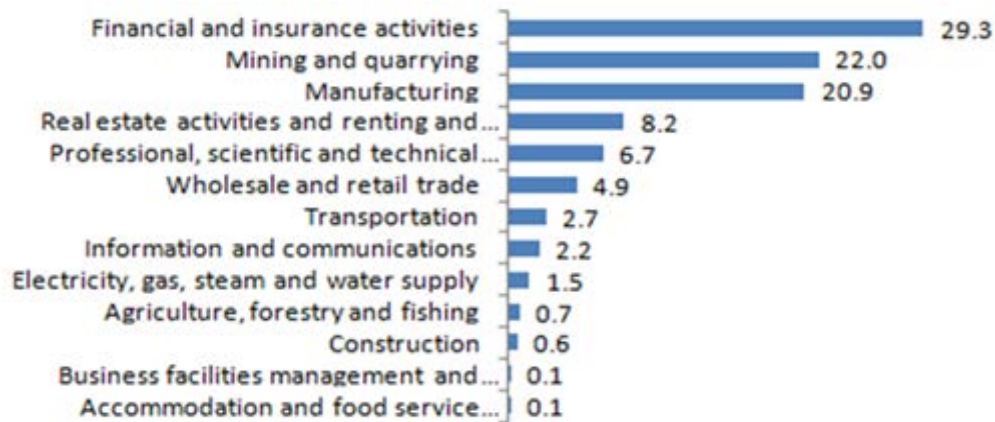
(Unit: percent)



Source: Korea Eximbank (2014).

<Figure 2a-5> Share of Korea's FDI in LAC by Sector (as of September 2014, based on Accumulation)

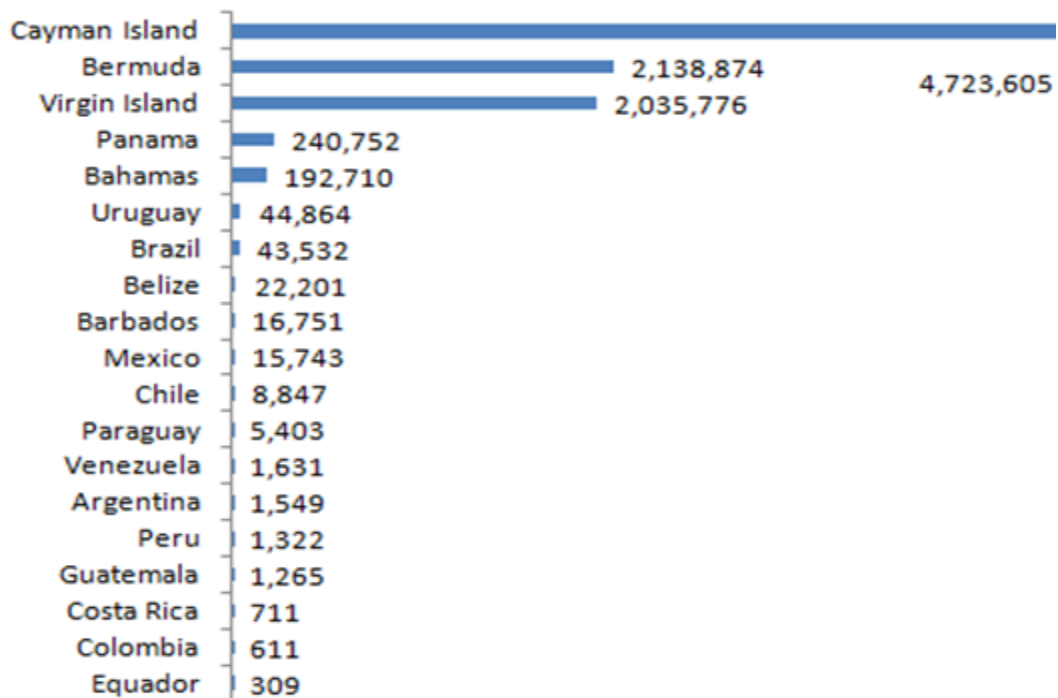
(Unit: percent)



Source: Korea Eximbank (2014).

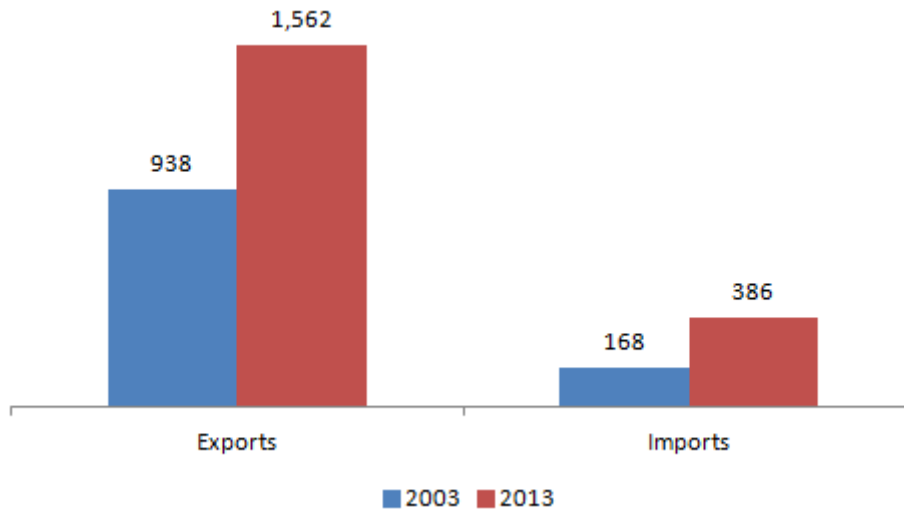
<Figure 2a-6> LAC's FDI in Korea (as of 2014, based on Accumulation)

(Unit: US\$ thousands)



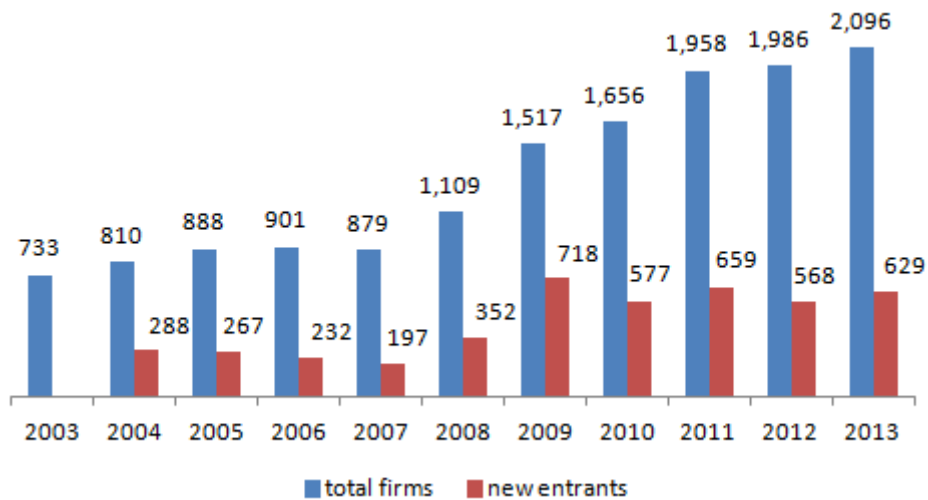
Source: Ministry of Trade, Industry & Energy (2014).

<Figure 2a-7> Increase in Trade Items after Korea-Chile FTA



Source: Je (2014), p. 15.

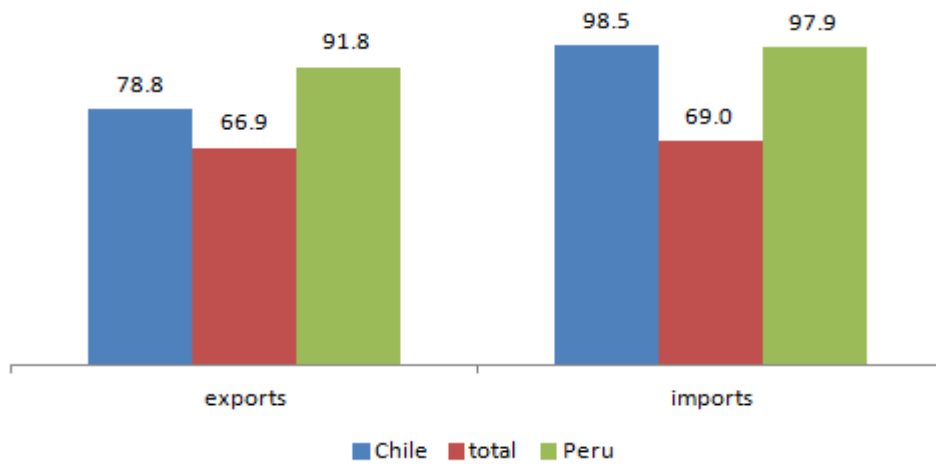
<Figure 2a-8> Number of Exporting Firms after Korea-Chile FTA



Source: Je (2014), p. 18.

<Figure 2a-9> Comparison of FTA Utilization Rate with Chile, Peru and the World

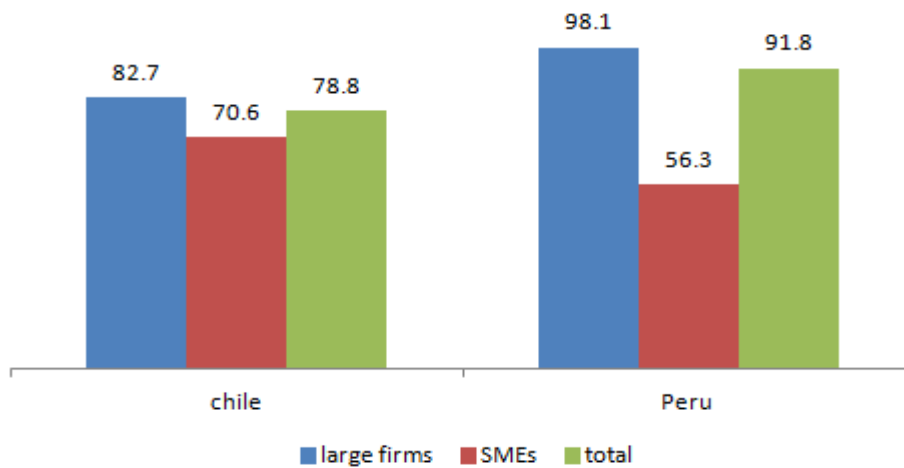
(Unit: percent)



Source: Myoung, *et al.* (2014), p. 26.

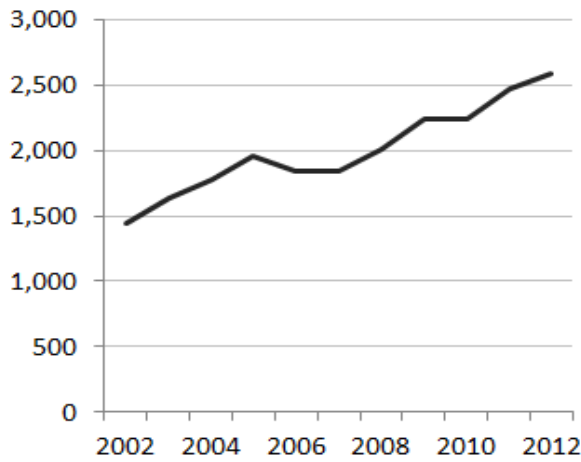
<Figure 2a-10> Comparison of FTA Utilization Rate by Large Firms and SMEs

(Unit: percent)

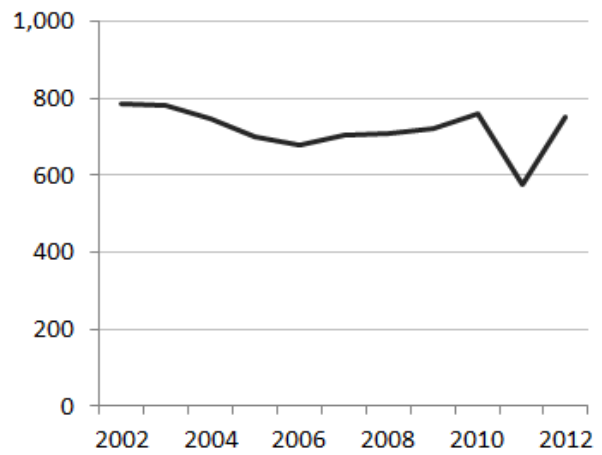


Source: Myoung, *et al.* (2014), p. 28.

<Figure 2a-11> Cultivation Area for Greenhouse Grapes in Korea
(Unit: hectare)



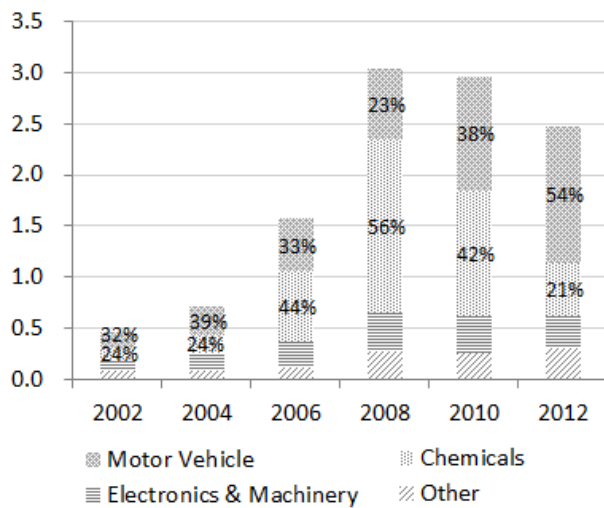
<Figure 2a-12> Pork Production in Korea
(Unit: thousand ton)



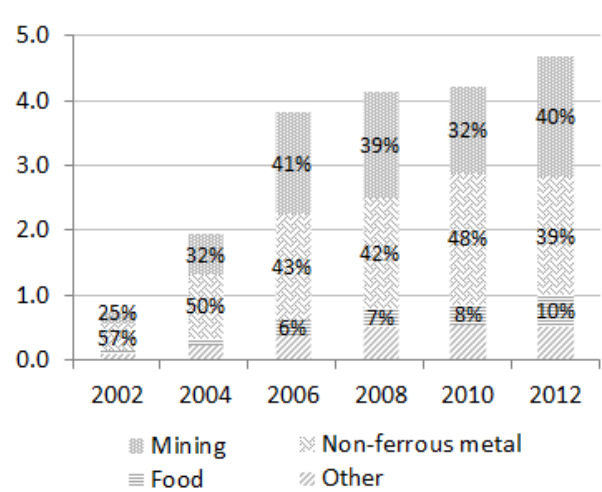
Source: Statistics Korea (2014), National Agricultural Cooperative Federation (2014).

Note: In 2011 there was a sharp drop in pork production due to foot-and-mouth disease (FMD).

<Figure 2a-13> Korea's Major Exports to Chile
(Unit: US\$ billion)



<Figure 2a-14> Korea's Major Imports from Chile
(Unit: US\$ billion)



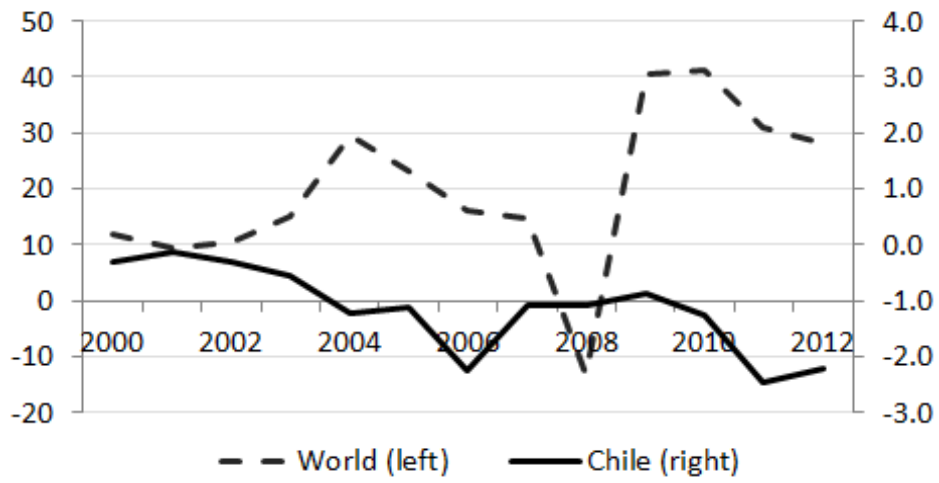
Source: UN Comtrade (2014).

Note: 1. Percent (%) indicates the share of the total amount.

2. Food includes crops, livestock, fishery, and processed food products.

<Figure 2a-15> Korea's Trade Balance with the World and Chile

(Unit: US\$ billion)



Source: UN Comtrade (2014).

<Table 2a-1 > The 10 Largest Products in Korea's Trade with LAC (2013)

(Unit: US\$ million, percent)

	Exports			Imports		
	Product	Amount	Share	Product	Amount	Share
1	SHIPS, BOATS AND FLOATING STRUCTURES	6,723	18.5	COPPER ORES, CONCENTRATES COPPER MATTES, CEMENT COPPER	2,316	12.6
2	MOTOR CARS AND OTHER MOTOR VEHICLES	4,582	12.6	MAIZE (NOT INCLUDING SWEET CORN), UNMILLED	2,009	10.9
3	TELECOMMUNICATIONS EQUIPMENT, N.E.S.	4,120	11.3	IRON ORES AND CONCENTRATES	1,828	10.0
4	PARTS OF THE MOTOR VEHICLES OF GROUPS 772, 781, 782, 783	2,718	7.5	ORES AND CONCENTRATES OF BASE METALS, N.E.S	1,715	9.3
5	OPTICAL INSTRUMENTS AND APPARATUSES, N.E.S.	2,131	5.9	COPPER	1,660	9.0
6	THERMIONIC, COLD CATHOD OR PHOTO-CATHODE VALVES, TUBES	1,143	3.1	NATURAL GAS, WHETHER OR NOT LIQUEFIED	883	4.8
7	PETROLEUM OILS AND OILS FROM BITUMINOUS MINERALS	699	1.9	FEED FOR ANIMALS	575	3.1
8	FLAT-ROLLED PRODUCTS OF IRON OR NON-ALLOY STEEL	670	1.8	ORES AND CONCENTRATES OF PRECIOUS METALS	520	2.8
9	ELECTRICAL APPARATUSES FOR SWITCHING	651	1.8	PULP AND WASTE PAPER	471	2.6
10	ELECTRICAL MACHINERY AND APPARATUSES, N.E.S.	644	1.8	SHIPS, BOATS AND FLOATING STRUCTURES	380	2.1
	Subtotal	24,081	66.3	Subtotal	12,357	67.3
	Total	36,328	100.0	Total	18,364	100.0

Source: KITA (2014).

<Table 2a-2> KIA Establishes Manufacturing Plant in Mexico

Kia Motors Corporation is a Korean manufacturer of motor vehicles. It has 10 manufacturing and assembly operations in The United States, China, Slovakia and 5 other nations. It employs about 48,000 workers worldwide and has annual revenues of over US \$43 billion.

Kia announced its plan to build a plant in Pesquería in the state of Nuevo Leon, Mexico. It will be its 6th overseas manufacturing operation and is the first investment by a South Korean car-maker in Mexico. Kia will invest around US \$1.5 billion and the new plant will be completed in the first half of 2016. Its production capacity will be 300,000 vehicles annually. After completion of the plant, Kia's annual production will reach 3.37 million vehicles with 1.69 million in Korea and 1.68 million abroad.

Kia already has a production site in Georgia, USA with a manufacturing capacity of 360,000 vehicles. Since that plant has been operating at full capacity, Kia decided to construct an additional plant in Mexico to alleviate the supply shortage. There are several reasons why Kia chose Mexico. First, Pesquería is located on the border between Mexico and the U.S. allowing the new plant to cover supply to both markets. Second, because of NAFTA the vehicles produced in Mexico can be exported to the U.S. with no tariffs. Moreover, Mexico has signed free trade agreements with about 40 countries providing KIA potential access to many other markets. Third, Mexico is one of the major markets where Kia does not have a sales presence. Fourth, it is easy to access Central and South American markets from Mexico. Kia plans to utilize the plant as a foundation for expanding its sales to the continent. Finally, Mexico has an abundance of skilled and low cost labor for car production.

<Table 2a-3> Current Status of Korea's FTA with LAC

Status	Partner	Description
In effect	Chile	In effect since April 1, 2004.
	Peru	In effect since August 1, 2011.
Signed	Colombia	FTA officially signed on February 21, 2013.
Awaiting negotiations to resume	Mexico	Negotiations launched in February 2006, but stalled soon thereafter. Negotiations resumed in December 2007 with the 2 nd round held in June 2008 to elevate SECA into FTA.
Under review/in joint research	Central America	Joint research completed in April 2011. Feasibility review meeting held in October 2012.
	MERCOSUR	Final joint study report received in October 2007. MOU on Korea-MERCOSUR Trade Agreement signed in July 2009.

Source: Myoung, *et al.* (2014), pp. 11-12.

<Table 2a-4> Macroeconomic Impact of FTA Korea-Chile on Korean Economy

	Tariff effects	Non-tariff effects	Total effects
Real GDP (%)	0.02	0.02	0.04
Level of welfare (US\$ mil.)	119	166	285

Source: KIEP (2014), p. 224.

<Table 2a-5> Effects of the Chile-Korea FTA on Bilateral Trade

	Dependent variable: Chile's imports		Dependent variable: Korea's imports	
<i>lnGDP_j</i>	.3774 (.4804)	.3774 (.4804)	1.126** (.1488)	1.126** (.1488)
<i>CKFTA</i>	.2646* (.1322)		.4267** (.0816)	
<i>CKFTA_A</i>		.4477** (.1322)		1.152** (.0816)
<i>CKFTA_I</i>		3.006** (.1322)		.7842** (.0816)
<i>CKFTA_M</i>		.2643* (.1322)		.1917* (.0816)
Fixed effects	partner, year	partner-industry, year	partner, year	partner-industry, year
Observations	7,828	7,828	9,692	9,692

Note: 1) *A, I, M* indicates Agriculture, Mining, and Manufacturing respectively.

2) Robust standard errors are in parentheses.

3) ** and * indicate significance at 1% and 5% respectively.

4) *lnGDP_{it}* is dropped by the inclusion of year dummies.

5) Estimates on *OFTA* and other dummy variables are not reported.

<Table 2a-6> Korea's Cooperation on UNI-PASS with LAC

▶ Dominican Republic

·October 2006: Korea signed a contract to export UNI-PASS and offered to train Dominican customs officials.

·July 2007: Korea Customs UNI-PASS Information Association (CUPIA) signed an audit and consulting contract for the establishment of UNI-PASS.

·April 2008: UNI-PASS Operator was selected (AutoEver Systems) and the system was launched (December 2009).

※ The head office of Dominican Customs was connected to 33 of its local offices by through an Import and Export Clearance, Cargo Management, and Clearance Portal system. The necessary IT infrastructure was built to support the system.

※ Approximately 1,000 services in 17 fields were developed. For example, the number of customs procedure stages was reduced from 5 to 2.

※ To improve efficiency, the system incorporates functions such as electronic payments, an intelligent cargo system, an interface system between government authorities, and risk management. Also, security solutions for hardware and software were introduced and a computing center was established for disaster recovery and system management.

▶ Ecuador

·September 2010: After signing a contract for the export of UNI-PASS, Korea sent customs administration experts and provided training programs for local officials to successfully implement the system.

·February 2013: Single Window and the One-stop Clearance System (Ecu-PASS) were initiated.

·Ecuador reduced its clearance time (from 7 to 5 days) and logistics costs (32 billion Korean Won annually) by adopting UNI-PASS and eventually won the Customs Innovation Award in December 2013 for its contribution to trade facilitation.

▶ Costa Rica

·November 7, 2013: Korea introduced UNI-PASS to the vice-president of Costa Rica, Luis Liberman Ginsburg, and discussed the ways to strengthen cooperation between the two countries by improving customs operation of Costa Rica through UNI-PASS.

·May 23, 2014: Korea and the e-Government Agency of Costa Rica discussed the export of UNI-PASS and cooperation plans.

▶ Colombia

·Since the first Korea-Colombia Commissioners Meeting (December 2011), Korea has established a foundation for the exportation of UNI-PASS by holding a second commissioners meeting, inviting high-level officials, and supporting a customs administration modernization project for the National Tax and Customs Directorate (DIAN) of Colombia (2013).

·December 2, 2013: MOU to cooperate to export UNI-PASS was signed.

·November 5, 2014: KCS and DIAN negotiated the schedule and cooperative plans to export UNI-PASS.

▶ Bolivia

·November 2011: "MOU on the support for the modernization of customs administration in Bolivia" was signed at the first Korea-Bolivia Commissioners Meeting.

※ The MOU includes plans to develop an e-Clearance system, offer training courses for Bolivian customs officials, and send experts to share Korea's experiences of the operation.

·December 3, 2013: Korea and Bolivia signed an MOU on cooperation to export UNI-PASS.

<Table 2a-7> Korea's Authorized Economic Operator

Legal Base	<ul style="list-style-type: none"> • Article 255-2 of the Customs Act • Article 259-2 and Article 259-3 of the Enforcement Decree of Customs Act • Enforcement Rule of Authorization and Management on AEO Companies
Date of implementation	April 15 th , 2009
Authorization Criteria	Law Compliance, Internal Control System, Financial Solvency, Security Management
Levels	<ul style="list-style-type: none"> • Level "A" is for companies with a score of 80 or more on Law Compliance. • Level "AA" is for companies with a score of 90 or more on Law Compliance. • Level "AAA" is for authorized companies with a score of 95 or more on Law Compliance based on results of a comprehensive audit and with recognition of having best practices of other companies with respect to the improvement of Law Compliance.
Expiration	<ul style="list-style-type: none"> • Level "A": 3 years (after a comprehensive audit, 5 years) • Level "AA": 3 years (after a comprehensive audit, 5 years) • Level "AAA ": after a comprehensive audit, 5 years
Benefits	Simplified inspections & processes, easing financial burdens, and providing diverse convenience
Authorized companies	As of December 2014, 624 companies are authorized.
MRA signed countries	China, USA, Japan, Canada, Singapore, New Zealand, Hong Kong, Mexico, and Turkey

Source: Korea Customs Service (2014).

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¹ When K-sure, the export credit agency in Korea, pays claims to the exporter, K-sure gets the right of indemnity. In this case, "recovery" denotes the amount that K-sure receives a part of total export values from the importer.

² Most of the official statistics regarding SMEs are not available until the 1990s but the situation prior to the 1990s would have been similar.

³ KFSB, *Chungsokiup Siltae Jonghap Tongyejib* (The Comprehensive Statistics on the State of Small Business, various years).

⁴ There are official export statistics for SMEs from 1995 but they include medium-sized firms as SMEs. According to the definition, a medium-sized firm employs more than 300 employees and it does not match the international consensus of what an SME is.

⁵ It is 21.1, 21.1, 18.3 and 18.8 percent in 2009, 2010, 2011 and 2012, respectively.

⁶ Including Korean investments in tax havens, by industry, Korean FDI flows mainly into finance and insurance, manufacturing, and mining. Finance and insurance accounts for the largest share (29.3%), followed by mining (22%) and manufacturing (20.9%). Korean FDI is concentrated in finance and insurance because FDI into tax havens belongs in the finance and insurance classification. Other sectors on the list are Real estate activities (renting and leasing) (8.2%), professional, scientific and technical activities (6.7%), and wholesale and retail (4.9%).

⁷ Including Korean investments in tax havens, by country, Korean investment to Latin America has been concentrated in Caribbean countries. The Cayman Islands is in first place in terms of the stock of real Korean FDI, followed by Brazil, Mexico, Bermuda, Panama and Peru. The Cayman Islands is the main destination of Korean FDI in the finance and insurance sector and accounts for 27.8% of total FDI in LACs. Investment in tax havens such as Bermuda and the Cayman Islands represents over 52.7% of total FDI into the region. When excluding tax evasion countries, Brazil (23.4%) took top place followed by Mexico (12%), Panama (9.5%) and Peru (5.9%).

⁸ Myoung, *et al.* (2014), p. 4.

⁹ Sohn (2001), p. 7.

¹⁰ Other factors also make Mexico reluctant to resume negotiations: low levels of technology transfer from Korean firms, insufficient policy measures to compensate the loss from FTA, and scant collaboration between Korean and Mexican business sectors.

¹¹ According to KIEP's research, it is estimated that real GDP showed an additional increase of 0.04% and consumer welfare increased US\$285 million more with the effects of tariff and non-tariff reductions between 2004 and 2012 (see table 2a-4).

¹² Usage rate of preferential import/export tariff treatment is a percentage of the import/export amount that benefited from preferential tariff treatment within the total import amount that is eligible for preferential tariff treatment. KIM(2009), p. 8.

¹³ Cheong(2010), pp. 26-27.

¹⁴ In equation 2.1, $\ln GDP_{it}$ and $\ln GDP_{jt}$ are the logarithmic values of GDP in country i and j at year t , respectively, and η_{it} is a usual error term.

¹⁵ In particular, as the most desirable property of PPML, in the presence of heteroskedasticity it produces unbiased and consistent estimators, which is highly probable in the estimation of gravity equations. See Santos S. and S. Tenreyro. 2006. "The Log of Gravity." *Review of Economics and Statistics*, 88(4): 641-658.

¹⁶ See KIEP. 2014. *Report on the Implementation of the Chile-Korea FTA* (written in Korean). Ministry of Trade, Industry & Energy.

¹⁷ The source of data is Korea Agro-Fisheries & Food Trade Corporation (www.kati.net).

¹⁸ Kwon, *et al.* (2009), pp. 209-210.

¹⁹ Kim, *et al.* (2011), pp. 223-224.

²⁰ (1) In terms of Law Compliance, companies should have no reason to be disqualified in accordance with regulations enacted by the Commissioner and have a certain level above compliance; (2) Internal Control System refers to a self-established system to enhance Law Compliance, and it should be above a level described in the Enforcement Rule of AEO; (3) In terms of Financial Solvency, companies should maintain business records more than a certain size per sector and should have no arrears; and debt ratio of them should be within 200 percent of an average in the same field or they should be eligible to be invested; and (4) Security Management consists of 8 categories such as business partners, vehicle security, access control management, personnel management, procedural security, facilities & device security, information & technology security and security training, which are above a certain level described by the Commissioner.

²¹ Particularly, in case of the Korea-Peru FTA, the utilization rate of large firms on exports reaches 98.1%, whereas the utilization rate of small and medium companies appears to be only 56.3%.