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An Analysis of the Restrictions on Foreign Direct Investment in Free Trade Agreements

URATA Shujiro RIETI

John SASUYAWaseda University



The Research Institute of Economy, Trade and Industry http://www.rieti.go.jp/en/

An Analysis of the Restrictions on Foreign Direct Investment in Free Trade Agreements

Shujiro Urata and John Sasuya

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Abstract

The paper analyzes the quality of rules on foreign direct investment (FDI) for seven free trade agreements (FTAs): US-Australia, US-Singapore, Japan-Singapore, Korea-Singapore, NAFTA, Korea-Chile and Japan-Mexico, involving eight countries. We examine the quality of FDI rules in terms of their liberalization or restrictiveness in the following six areas: (a) restrictions on foreign ownership and market access, (b) national treatment, (c) screening and approval, (d) management and composition of board of directors, (e) entry of foreign investors, and (f) performance requirements. The results of our analysis revealed the following ranking from high to low quality, (1) US-Australia, (2) US-Singapore, (3) Japan-Singapore, (4) Korea-Singapore, (5) NAFTA, (6) Korea-Chile and (7) Japan-Mexico. Our analysis also revealed differences in the quality of FDI rules between and among the countries belonging to the same FTA, leading us to further investigate the quality at country levels. The analysis showed the following rankings, (1) US, (2) Singapore, (3) Australia, (4) Japan, (5) Korea, (6) Chile, (7) Mexico, and (8) Canada. The most salient feature of restriction was found on foreign ownership or the degree of participation that foreign investors can influence the enterprise. Among the sectors, the primary sector (especially, mining and agriculture) and services sector (especially, transportation, communications, electricity, financial and insurance) are very restrictive, while there are only a few restrictions on manufacturing sectors.

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1. Introduction

Foreign direct investment (FDI) has increased its importance in international economic activities in recent decades as world FDI has increased much faster than world GDP or world trade. From 1980 to 2004 world FDI increased 11 times while world trade and GDP increased four and five times, respectively. FDI has contributed to the economic growth of FDI recipient countries, because FDI not only generates production and employment but also transfers technology and management know-how, which play important roles in achieving economic growth. Many countries in East Asia, most notably China, have been successful in attracting FDI, which in turn has resulted in rapid economic growth¹.

Rapid expansion of FDI at the global level as well as regional or national levels is attributable to a number of factors. One of the most important factors is liberalization of FDI policies. Realizing the beneficial impacts of FDI, many countries have liberalized FDI policies in order to attract FDI. Some countries have even implemented incentives such as corporate income tax exemptions.

Foreign investors claim there is substantial room for further liberalization of FDI policies, despite the already substantial progress. Such views led to an attempt at the World Trade Organization (WTO) to include the establishment of investment rules as an agenda for multilateral trade negotiations. Developed countries supported the attempt, but it failed largely because of strong opposition from developing countries. Although countries are eager to attract FDI, they would like to maintain the right to regulate or restrict FDI for various reasons, including national security and protection of industries and workers.

Faced with regulations and restrictions on FDI, investor countries began using free trade agreements (FTAs) to liberalize FDI policies in FTA partner countries. The provisions on FDI in FTAs are meant to give investors of the contracting parties more concessions in doing businesses in the contracting countries of the FTAs. These include easier market access and the right of establishment, the rendering of national treatment and the regulation of performance requirements such as local content and employment.

¹ See, for example, Urata, Chia, and Kimura (2006), for the impacts of foreign direct investment on economic growth for East Asian economies.

However, FTAs still contain several safeguard measures that also include restrictions on foreign direct investments based on laws at the national level. This study provides analysis of the quality of FTAs in terms of FDI rules based on eight bilateral and regional FTAs:

, Japan-Mexico, the North American Free Trade Agreement (NAFTA), US-Australia, US-Singapore, Korea-Singapore, and Korea-Chile. Several types of restrictions on FDIs are considered in this study: (a) restrictions on foreign ownership and market access, (b) national treatment, (c) screening and approval, (d) management and composition of board of directors, (e) entry of foreign investors, and (f) performance requirements.

The structure of the remainder of the paper is as follows: Section 2 explains the methodology used for the assessment of FDI rules, Section 3 discusses the results of our analysis, and Section 4 presents concluding remarks.

2. Methodology

Several studies have assessed the restrictiveness of FDI policies. Golub (2003) examined the restrictiveness of FDI for OECD countries in 1998/2000 by examining rules on foreign equity, screening and approval procedure, and other restrictions including those on board of directors, movement of people, and input and operational restrictions. Golub found the United Kingdom the most open country and Iceland the least open country among 28 OECD member countries. The ranking of the countries in our sample is as follows in descending order in terms of openness: the US (14), Japan (21), Korea (22), Australia (24), Mexico (25), and Canada (27). Many Western European countries are ranked highly.

PECC (2002) evaluated FDI regimes of APEC economies by examining wideranging FDI rules on market access, examination procedures, most-favored-nation treatment, profit repatriation, work permits, performance requirements, dispute settlement, investment incentives, and capital exports. PECC found Hong Kong to be the most open and Brunei the least open member among 19 APEC sample economies. The ranking of our sample countries is as follows: Australia (2), Japan and Korea (3), the US (5), Singapore (7), Canada (10), Mexico (14). The PECC study shows that FDI regimes of developing members are more restrictive compared to developed members.

We used a modified methodology adopted by Golub (2003). Our evaluation method is shown in Table 1. We evaluated restrictiveness of FDI rules in six areas: foreign ownership or market access, national treatment, screening and approval procedure, board of directors and management composition, movement of investors, and performance requirement. High scores indicate open FDI rules². Different areas are given different weights. In most FTAs, restrictions are imposed on ownership and control of a local enterprise through a cap on foreign-owned equity. It is given a weight of 0.4 while restriction on national treatment is given a weight of 0.2 for the computation of the overall score. Meanwhile, other restrictions such as screening procedures, composition of management, entry of investors, and performance requirements are given 0.1 each. In this manner, this study avoided the limitations of Golub's analysis wherein some sectors received a score above 1, which is the highest possible coefficient for the degree of restrictiveness. In analyzing subsectors or an industry within a sector, restrictions are given weights based on their importance to the whole sector.

This method has its own limitations. It can be subjected to random and arbitrary weight. However, this is assuaged by using standards on all restriction and by careful analysis, in addition to comparison of the results of one FTA with another one. Additionally, this study aims to capture the effect of policies such as the liberalization of investment sectors through FTAs. This means that this study does not include business or non-business practices that may restrict the flows of investments, such as corruption.

All in all, 21 sectors that include 158 ISIC three-digit subsectors were evaluated in this study.

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² We evaluated FDI rules by sectors, then aggregated them to obtain an overall score by giving equal weight. We used 158 ISIC three-digit industry classification to analyze FDI rules ,then aggregated these detailed results to appropriate aggregation by giving equal weights

Table 1

Assessment of FDI Restrictions

(Maximum of 1.0 = fully liberalized)

Restri	iction on Ownership and Market Access	
	No foreign equity is allowed	0
	1-19 percent is allowed	0.1
	Reservation on ownership and market access	0.25
	20-34 percent is allowed	0.4
	35-49 percent is allowed	0.5
	50-74 percent is allowed	0.7
	75-99 percent is allowed	0.8
	No restriction but unbound	0.9
	Commercial presence is required	0.9
	No restriction	1
Natio	nal Treatment	
	No national treatment	0
	Reservation on national treatment	0.25
	No restrictions	1
Scree	ning and Approval	
	Objections in case the investment is contrary	0
	to national interest	
	Investment is required to show economic benefits	
	before approval	0.1
	Reservations for future limitations	0.25
	Objections based on the size of investment	0.5
	Prior or post notification	0.9
	No restrictions	1

Boar	d of Directors and Management Composition	
	All members of the management should be local	0
	Reservations for future restrictions	0.25
	Majority should be local	0.5
	At least one is local	0.75
	Should be locally license	0.9
	No restrictions	1
Move	ement of investors	
	No entry	0
	Less than one year	0.1
	Reservations for further measures on entry	0.25
	One to two years	0.4
	Three to four years	0.5
	More than four years but less than 10	0.8
	No restrictions	1
Perfo	rmance requirements	
	Local contents	0.75
	Others	0.9

3. Results and Discussion

Different FTAs contain different provisions on investment. However, there are some commonalities. For instance, all the FTAs under study contain a negative list on market access, which means that they had listed sectors that include restriction. All have a national treatment provision on the pre- and post-establishment of a direct investment. While most FTAs have provisions to include local governments in providing favorable treatment, the US-Australia, US-Singapore, and Japan-Singapore FTAs do not include local governments. Some of the FTAs under review provide clauses that allow countries to adopt and maintain laws in the future concerning different restrictions on investment that range from market access to performance requirements that will affect the flow of investment.

Furthermore, reservation, which means that there is currently no available legal restriction but it can be enacted by contracting parties in the future, are considered as restrictions because they give a country the power to limit investment in any sector once it deems necessary based on the concept of safeguarding national interest or in any other circumstances. All in all, 21 sectors that include 158 ISIC three-digit subsectors were evaluated in this study.

3.1. Degree of Restrictions

The degrees and kinds of restrictions on foreign direct investments in selected countries which signed FTAs are shown in Table 2. Results reveal that among the FTAs under study, the agreements between Japan and Mexico and between Chile and Korea are the most prohibitive to foreign investments. The Japan-Mexico Economic Partnership Agreement has a degree of restrictiveness equivalent to 0.687. This is almost identical to the score obtained by the Korea-Chile FTA, which has a 0.688 degree of restriction. Mexico has more restriction on foreign investments as compared to its EPA partner Japan. The score is 0.601, which is the lowest among all countries under study, suggesting that Mexico listed one of the most prohibitive provisions on the entry of FDI to its soil. As shown in the table, Mexico has the lowest scores in the market access of foreign investments. For instance, Mexico defined a restricted zone wherein foreign ownership of land is not allowed. While Japan is not as prohibitive as Mexico, it also provided

restrictions on Mexican investors who would like to invest in Japan. For instance, in all sectors, Japan can prohibit or impose limitations on the ownership of interests or assets by investors from Mexico or their investments when disposing its equity interests in a state enterprise or governmental entity.

Meanwhile, the results suggest that the Korea-Chile FTA is almost as restrictive as the Japan-Mexico EPA. However, there is a difference on the nature of restrictiveness of the two trade agreements. Korea and Chile have almost the same degree of restrictiveness while in the Japan-Mexico EPA, Mexico is more prohibitive than its partner. In all sectors, both Korea and Chile listed reservations pertaining to market access, national treatment, composition of management, and performance requirements. Both are among the countries with the highest restrictions on foreign ownership and market access. They also maintained the highest restrictions for the entry of investors and businesspeople. Both reserve the right to implement future measures regarding limitations on foreign activities when disposing state assets. Both provide a high degree of restriction for the primary sectors. For instance, the Korean-Chile FTA only allows foreign nationals to hold less than 50 percent of a Korean legal entity that engages in farming beef cattle or wholesale of meat. On the other hand, Chile's mining sector is almost closed in such a way that any activities related to this sector are subjected to the decree of Chile's president. Both countries also maintained high degrees of prohibitions in the information and communications and education sectors. In the information and communications sector, the degree of restrictions on foreign investment is the highest among FTA partners as Korea and Chile garnered respective scores of 0.45 and 0.43. Only Australia has higher restriction in this sector. Both countries limit foreign ownership and market access while they also require foreign investors to perform certain obligations such as the broadcast of locally produced programs.

NAFTA and the Korea-Singapore FTA are also restrictive to foreign investments. NAFTA is very restrictive because Canada and Mexico maintained high degrees of restrictions while the US is relatively open. The latter only requires reciprocity from other countries. Canada and Mexico have very high degrees of restrictions on primary sectors. The agriculture sector has an average score of 0.43 while the mining sector is closed in Mexico. Canada obtained a 0.36 score in the mining sector, which means that there is a

high degree on restriction. Canadian restrictions on this sector include limitation of foreign ownership on mining of metal ores (uranium and thorium) to 49 percent and the prohibition to increase any investments that were made prior to December 23, 1987. There is also a similar restriction on investments in crude petroleum and natural gases. In addition to that, all North American countries maintained high restrictions on the financial, transportation, and information and communications sectors. In the case of Canada, the transportation sector is very high at 0.38 while the United States financial sector obtained a 0.58 degree of restrictiveness. In Mexico, the electricity sector is closed.

Table 2. Degrees of Restrictions of Selected FTAs by Types of Restriction

	Limitation of Foreign Ownership/ Market Access	National Treatment	Screening and Approval	Board of directors	Movement of people*	Performance Requirements	Total	Rank
US-Australia							0.838	1
US	0.340	0.174	0.098	0.097	0.100	0.096	0.905	
Australia	0.273	0.164	0.047	0.089	0.100	0.097	0.770	
US-Singapore FTA							0.825	2
US	0.326	0.172	0.098	0.096	0.100	0.096	0.888	
Singapore	0.278	0.157	0.096	0.039	0.100	0.093	0.763	
Japan-Singapore EPA							0.767	3
Japan	0.276	0.157	0.086	0.088	0.048	0.095	0.750	
Singapore	0.343	0.158	0.089	0.045	0.050	0.098	0.784	
Korea-Singapore FTA							0.741	4
Korea	0.259	0.156	0.082	0.083	0.075	0.038	0.693	
Singapore	0.310	0.173	0.095	0.046	0.075	0.088	0.788	
NAFTA							0.710	5
Canada	0.280	0.158	0.009	0.025	0.100	0.049	0.621	
Mexico	0.222	0.135	0.023	0.089	0.095	0.089	0.654	
US	0.292	0.180	0.092	0.094	0.100	0.096	0.855	
Korea-Chile FTA							0.689	6
Korea	0.271	0.146	0.063	0.082	0.050	0.091	0.704	
Chile	0.272	0.142	0.095	0.069	0.050	0.045	0.673	
Japan-Mexico EPA							0.687	7
Japan	0.305	0.162	0.084	0.084	0.048	0.090	0.773	
Mexico	0.234	0.142	0.024	0.065	0.048	0.088	0.601	

In the case of the Korea-Singapore FTA, Korea has maintained most of the restrictions in most sectors on foreign investment as compared to Singapore, which is relatively more open to foreign investment. For instance, in all sectors, Korea reserves the right to prohibit or restrict ownership with respect to the transfer or disposal of stocks or assets held in an existing state-owned or government entity in such industries as electricity and gas. Korea also reserves the right to prohibit or limit the rights of Singaporean investors to control a company or investment created in the transfer or disposal of state assets. Furthermore, Korea reserves the right to adopt or maintain any measure with respect to land acquisition by foreigners. On the part of Singapore, restrictions can be found on the financial sectors and the requirements on investments to have local managers. Nonetheless, both Korea and Singapore have very high limitations on the electricity sector. They also have high restrictions on the transportation, information and communications, education, and public administration, defense and compulsory social security sectors.

The Japan-Singapore EPA (JSEPA), US-Singapore FTA, and US-Australia FTA have lower degree of restrictions among the FTAs under study, as they garnered scores of 0.767, 0.825, and 0.837, respectively. As discussed in the next section, the US is the most open country for investment among countries under study. This explains why the scores of the US-Australia and US-Singapore FTAs are almost the same and have a wide score discrepancy compared to the third most open; the JSEPA.

Likewise, it can be observed from the results that there are differences in scores in FTAs that the same country agreed on. For instance, the US has fewer restrictions on its FTA with Australia as compared to the ones it signed with Singapore and Mexico and Canada. First, the principle of reciprocity is a feature of US FTAs, which means that the US can only open the sector which its partner also opens for its own investors. As Table 3 suggests, Australia and Singapore are more open to the US than Mexico and Canada. There is slight difference between the US FTAs with Singapore and Australia. The reason can be the size of the economy-Australia is more important to the US than Singapore. Furthermore, there are more restrictions on the financial sector in the US-Singapore FTA. The reason may be competition. Singapore's financial sector is relatively open³ and the US investors can

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³ However, this does not mean that the Singapore financial market is totally open for investment. There are still several restrictions that include full license on foreign banks. There are also limitations on the

easily penetrate it, while the US still maintains several limitations on this sector. Thus, the US does not have any reason for further opening while it can maintain the current level of financial restrictions on the entry of Singapore investors into the US financial market.

In the case of Japan, it is more open to Mexico than to Singapore. First, this can be explained by the "learning experience" principle. The Japan-Singapore EPA was the first of its kind for Japan. As a learner during the negotiation and with a relatively closed economy⁴, Japan tried to maintain restrictions that were already in place. And because the Singapore economy was already opened to trade and investment, Japan could ask for and give less. In addition, Singapore had a negligible agricultural sector, in which Japan had quite a large interest. In Japan, that sector remained highly closed. The situation was very different from its EPA with Mexico. Mexico had already signed FTAs with several countries including North American and European countries. And because Japan had to ask more from Mexico than it did with Singapore, such as opening of the automobile market, Japan also had to give more.

3.2 By Country Assessment

Based on Tables 3 and 4, Canada, Mexico, Chile, and Korea are very restrictive when it comes to FDI. They have 0.62, 0.63, 0.67, and 0.70 degrees of restrictiveness, respectively. In all sectors, Canada provides limitations on foreign ownership when disposing state interests. Additionally, "constraints" can be applied when acquiring shares in federally incorporated corporations. Aside from the restrictions on the primary sectors that were discussed in the previous section, Canada also provides restrictions in other sectors such as air transportation. In this sector, non-citizens or non-residents of Canada, corporations incorporated outside Canada, foreign governments, and other enterprises owned or controlled by the abovementioned entities are restricted to owning 25 percent of Air Canada. Only citizens, permanent residents in Canada, or enterprises that are at least 75 percent owned and controlled by Canadian citizens or permanent residents can operate Canadian carriers

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kinds of services that can be provided by the bank, such as establishment of ATM networking or provisions for debit services through an Electronic Funds Transfer at Point of Sale (EFTPOS) network. ⁴ Being a closed economy does not mean that Japan does not trade or invest. Japan's economy is said to be closed because the level of inward investments is low, in addition to a low trade/Gross Domestic Product (GDP) ratio.

for domestic and international flights, both scheduled and not. In addition, Canada reserves the right to implement any measure that restricts the acquisition or establishment of an investment in Canada for the provision of specialty air services. In other sectors such as telecommunications, education, financial, and insurance, Canada maintains the rights for future restrictions on ownership, national treatment, composition of the management, performance requirements, and in other areas.

Furthermore, Canada also requires that in the case of a federally incorporated corporation, a simple majority of the board of directors or of a committee should be resident Canadians. In the case of a holding corporation, at least one-third of the directors should be resident Canadians provided that its earnings in Canada (including those of its subsidiaries) are less than five percent of the gross earnings of the holding corporation and its subsidiaries. In the case of a Special Act corporation, a simple majority of the elected directors must be resident in Canada and be citizens of a Commonwealth country.

Another country that is very restrictive to FDI is Mexico. First, the oil industry and related activities such as refinery and distribution; the supply of electricity, including the generation, transmission, transformation, distribution, and sale of electricity; postal service and; railway transportation are limited to the Mexican state, which means that foreign ownership is not allowed. Additionally, only Mexicans can own land for agriculture, livestock, and forestry purposes. Foreigners are also restricted from owning parcels of land near the borders or areas in which Mexico deems as important to national interest and security. It also limits the foreign ownership in any Mexican cooperative to 10 percent. In other industries such as port operations (services related to water transport), newspaper printing, and telecommunications, Mexico limits foreign ownership to 49 percent. There are also restrictions on financial sector activities. The most salient limitation that Mexico imposes is the screening and approval of foreign investments. Foreign investors are required to show the effect on employment and training of workers, technological contribution, compliance with environmental legislation, and contribution to the Mexican production system of any investment in Mexico. In addition, favorable approval from the Commission on Foreign Investment is needed for investments which constitute 40 percent equity of a Mexican enterprise. Furthermore, Mexico imposes performance requirements on the manufacturing sector. For instance, under the ALTEX Decree (Decree for Promotion and Operation of High Export Firms), for

direct exporters of manufactured goods, investors are required to export annually at least 40 percent of total sales or US \$2,000,000. For indirect exporters of manufactured goods, investors are required to export annually at least 50 percent of their total sales. Mexico also prohibits foreigners from assuming positions on the board of any cooperative enterprise. Like Korea, Mexico reserves its right to adopt and maintain rules in the future concerning market access and other limitations on foreign ownership in some sectors such as the broadcasting industry and recreational services.

Chile also imposes many limitations on foreign investments. When the state sells or disposes its interests or assets in enterprises that it owns, Chile restricts foreign investors' access to market. These limitations are present in almost all sectors. Chile is restrictive mostly in the areas of mining, transportation, and information and communications. The Chilean government requires that any activities related to exploration and exploitation of liquid or gaseous hydrocarbons and deposits in areas classified as important to national security with mining effects be subject to the supreme decree of the President. The Chilean State also has the right of first refusal for buying mineral products from mining operations in the country, when significant amounts of thorium or uranium are present. In addition, the state can demand that producers separate from mining products, the portion of substances which cannot be granted in mining concessions which exist, in significant amounts, in said products, and which can be economically and technically separated, for delivery to or for sale on behalf of Chile. It is also prohibitive in the transportation services sector as it provides several limitations on the market access of foreign investments in addition to limitations on national treatment. It also requires that the president, manager, majority of directors, and administrators of the juridical person in the air transportation sector must be Chilean nationals. In addition, it also requires that the president and the majority of the board members of an entity in the broadcasting sector be Chilean nationals. Chile also obtained the highest degree of restrictiveness in performance requirements as it also requires that enterprises with more than 25 contracted employees have at least 85 percent of those employees be of Chilean citizenship. However, exceptions are given to expert technical personnel who cannot be replaced by national personnel, as determined by the Dirección General del Trabajo.

Like its FTA partner Chile, Korea provides restrictions on foreign ownership and management composition in all sectors when the state sells or disposes its assets.

In addition, in the case of its FTA with Singapore, Korea also requires business establishments in which foreign investors have interest to hire a certain number of disabled locals. There are also requirements for non-residents such as authorization from the Minister of Finance and Economy or the Governor of the Bank of Korea when receiving won-denominated loans or borrowing won-denominated securities from a resident that exceed a certain amount. when issuing won-denominated securities with short-term maturities, or when receiving foreign currency denominated financial credits, guarantees, or collateral from residents. Notifications are also needed for the purchase of lands. Korea is restrictive on agriculture, forestry, and fishing; electricity; information, and communications; transportation; and education. For instance, only Korean citizens can invest in the rice and barley industry. There are also restrictions on ownership in the Korea Electric Power Company and Korea Gas Company and in distribution and transmission of electricity. Neither are foreigners not also allowed to hold interest in any entity that deals with nuclear energy for power generation. Construction related to railways is limited to the Korean government, Korea National Railroad, or Korea Rail Network Authority. In the information and communications sector, there are limitations on the ownership of entities that publish newspapers (30 percent in daily newspapers and 50 percent in other publications) and in the telecommunications subsector (49 percent). Additionally, non-Korean nationals are not permitted to establish radio stations. Korea's FTA with Chile does not allow foreign investors to invest in terrestrial broadcasters, general program or news program providers, and relay-only cable operators and broadcasters. However, a 33 percent share of foreign investment is allowed for cable television system operators, satellite broadcasters, or program providers (excluding general program providers or news program providers) and up to 49 percent is allowed for network operation services. Noticeably, these provisions on restrictions on television broadcasting activities are absent in Korea's FTA with Singapore. Non-Koreans are not allowed to be the editor of any newspaper or engage in the Yonhap News Agency. Furthermore, there are also limitations on the establishment of educational institutions, particularly in the Seoul metropolitan area. In most sectors, Korea reserves its right to adopt and maintain rules in the future concerning market access and other limitations on foreign ownership.

Table 3. Degree of Restrictions of Selected Countries which Signed FTAs by Types of Restrictions

	Limitation of Foreign Ownership/ Market Access	National Treatment	Screening and Approval	Board of directors	Movement of people*	Performance Requirements	Total	Rank
US	0.319	0.175	0.096	0.095	0.100	0.096	0.881	1
Singapore	0.310	0.163	0.094	0.043	0.075	0.093	0.778	2
Australia	0.273	0.164	0.047	0.089	0.100	0.097	0.770	3
Japan	0.291	0.159	0.085	0.086	0.048	0.093	0.762	4
Korea	0.265	0.151	0.073	0.083	0.063	0.064	0.699	5
Chile	0.272	0.142	0.095	0.069	0.050	0.045	0.673	6
Mexico	0.228	0.139	0.023	0.077	0.071	0.089	0.627	7
Canada	0.280	0.158	0.009	0.025	0.100	0.048	0.620	8

Based on Table 3, it can also be concluded that the United States is the most open country when it comes to foreign direct investment. Restrictions by the US are usually in the form of a reciprocity principle. In that way, foreign investors are allowed to hold equity in US companies if the country where investors originated gives the same treatment to US investors to hold interest, such as ownership and management, in their country. The US is relatively open in the primary, manufacturing, and most of the services sectors. Nevertheless, the US placed more restrictive measures on the financial sector. For instance, the establishment of credit unions, savings banks, or savings associations through branches of corporations organized under a foreign country's law is not permitted. Foreign banks with direct deposit-taking branches or bank subsidiaries in the US are not permitted to establish or acquire interests in banks located in some states. In addition, some states do not allow the establishment of a federal branch or agency by a foreign bank. The US also requires all foreign financial institutions to register as financial adviser. With regards to management of a bank, the US requires that all national banks be under US control. The US also received a lower score in transportation, which means that it is relatively restrictive in this sector. Although the US may have higher scores on FDI restrictions on FTA due to its unregulated market, which means that it is relatively less restrictive, Golub (2003) concluded that the US maintains high discriminatory measures against individual foreign firms. Additionally, as the US requires reciprocity from other countries, it suggests that it will not open any sector to an investor whose country of origin is restrictive to US business interests.

Singapore is another country that is relatively open to FDI. However, Singapore imposes limitations of foreign ownership in state-owned assets such as PSA, Singapore Power, Power Grid, Power Supply, Power Gas, Singapore Technologies Engineering, and Singapore Airlines. It also imposes limitations on foreign ownership on housing developed by the state while only the Sentosa Development Corporation is allowed to manage and develop Sentosa and the Southern Islands. There are also limitations on financial services, however this sector is the most prone to prohibitions with countries which sign free trade agreements. Additionally, Singapore requires that foreigners who wish to register a business firm have a local manager and at least one of the directors of

the company be a local resident. All branches of foreign companies should have at least two local agents.

Contrary to popular view, Japan is not too restrictive when it comes to FDI as compared to Korea or Mexico. It obtained an average 0.78 degree of restrictiveness, which makes it comparable in score to Singapore's 0.76. Aside from mining, which is closed, Japan imposes some foreign ownership limitations on the transportation sector, and in NTT Communications (NTT) it requires commercial presence and prior notifications for foreign investors. Nevertheless, in most of sectors, Japan is unbound in terms of market access and national treatment.

Most of the results of this study are comparable⁵ to the results of the previous work of Golub (2003) on restriction on foreign investments of OECD countries. Both studies found that Canada is the most restrictive country while the US is the least. Likewise, both of the observed results concluded that Mexico has a relatively high degree of restriction; it ranked second in both studies. Another similarity of the finding is that Japan is relatively open compared to Korea. However, there is a difference in the case of Australia. This study found that Australia is one of the most open economies for investment while Golub (2003) found that its restrictiveness is comparable to that of Mexico.

3.3 Types of Restrictive Measures

The most salient type of limitation on FDI is in the form of restriction on foreign ownership and market access. Some sectors remained closed. For instance, Mexico restricts foreign ownership in the oil and petroleum sector while Australia restricts ownership on Qantas Airlines and Telstra. Though FTAs are expected to give the same national treatment to the investors of each party involved, the FTAs under study give certain limitations on this aspect. For instance, the United States does not allow foreigners, foreign enterprises, and foreign-controlled domestic enterprises to obtain insurance and loans from the Overseas Private Investment Corporation. Most of the countries also reserve their rights to implement future measures concerning the limitation of national treatment to several sectors, particularly in the services sectors.

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⁵ See Appendix 8.

Canada, Australia, and Mexico provide the highest degree of restrictions on the screening and approval of FDIs. Canada requires that a review on all acquisitions of Canadian businesses, with the value of the assets and the control of that is being acquired, be conducted under the Investment Canada Act. An acquisition of a business that is related to Canadian heritage or culture can be subjected to review by the government in view of national interests. Investments subject to the review can be required to show the net economic benefit for Canada. However, US and Mexican investors will be subjected to a higher value threshold compared with other countries outside NAFTA. This means that, as compared to investors from other countries, US and Mexican investors can make larger investments without fulfilling requirements. All other investments are subjected to prior notifications. Australia also provides certain thresholds for foreign investment that require approval from government authorities. For instance, Australia requires that foreign investments in existing Australian businesses or corporations with total assets exceeding A\$50 million in the transportation and telecommunications sectors can be opposed by the government of Australia.

In the case of movement of investors, countries in an FTA are very open to foreign investors in terms of allowing them to stay for a period of time. The Japan-Mexico and Japan-Singapore EPAs have the highest degree of restriction on the movement of foreign investors. Both obtained a degree of restriction equivalent to 0.0375. Japan and Mexico allow at least one year of stay and possible extensions. However, Japan provides the shortest time of stay for Singaporean investors, which is only one year. Singapore is more open to Japanese investments in terms of the movement of its investors.

Several countries also require investment to meet certain performance requirements. As mentioned above, Mexico requires investors in the manufacturing sector to export a certain amount of goods while Chile requires employment of local people. Theoretically, most of the performance requirements are demanded by developing countries to ensure they receive the benefits of foreign investments such as export promotion and employment. Most of the countries under study belong to the more developed nation categories, and therefore, they may not need to oblige the partner to satisfy certain performance requirements.

3.4 Restrictions on Different Sectors

Table 4. Degree of Restrictions of Selected FTAs by Sectors

	Primary	Secondary	Tertiary
	Sectors	Sectors	Sectors
US-Australia			
US	0.920	0.940	0.901
Australia	0.805	0.850	0.761
US-Singapore FTA			
US	0.940	0.940	0.879
Singapore	0.873	0.885	0.743
Japan-Singapore EPA			
Japan	0.310	0.780	0.797
Singapore	0.825	0.775	0.779
Korea-Singapore FTA			
Korea	0.675	0.675	0.696
Singapore	0.900	0.880	0.789
NAFTA			
Canada	0.395	0.685	0.643
Mexico	0.210	0.555	0.708
US	0.890	0.900	0.848
Korea-Chile FTA			
Korea	0.695	0.750	0.702
Chile	0.520	0.650	0.691
Japan-Mexico EPA			
Japan	0.393	0.730	0.817
Mexico	0.213	0.545	0.648

As shown in Table 4, in most cases, the primary and tertiary sectors have the highest number of restrictions on foreign investments. Specifically, the agriculture, mining, transportation, information and communications, and financial sectors are the most restricted. Mexico and Japan are the most restrictive countries to foreign investors in the primary sectors; respectively they show 0.212 and 0.352 degrees of restrictiveness.

Mexico prohibits foreign participation in the oil industry and related activities while foreign ownership of land for agricultural purposes is not allowed. Similarly, Japan's mining industry is closed to foreign investment. Other countries such as the United States require reciprocity in the mining sector while Chile requires that investments be subjected to decree by its president.

Australia, Canada, Chile, Korea, and Mexico are very restrictive in the tertiary sectors, which are among the most important segment of the economy of the developed countries which joined FTAs. This is one of the reasons why they still choose to protect the sectors. Many countries choose to protect the sectors vital to the economy and not to alienate their own investors. For instance, in the transportation sector, there are limitations on foreign ownership particularly on ocean-going vessels and airlines. Australia, for instance, limits the ownership in Qantas and other Australian airlines flying international routes. Often, concessions for the domestic air transportation sector are provided only to companies with foreign ownership exclusions. In information and communications, Korea, Mexico, and Singapore, for instance, provide foreign limitations on newspaper publishing activities. In addition, Korea, Chile, Mexico, the US, and Australia either provide limitations on foreign ownership or reserve the right to do so in the future. Japan maintains that foreign ownership in NTT is limited to less than one-third of the total share while foreigners are not allowed to serve as director or auditor. Meanwhile, Australia also provides limitation on ownership in Telstra and requires that the majority of board members, as well as the chairperson, are Australian nationals. The financial sector, which includes banking and insurance services, has the highest number of limitations. Aside from foreign ownership, there are also limitations on market access such as primary dealership of government bonds in the case of the US and provision of costumer services such as establishment of ATM networking or provisions for debit services through an Electronic Funds Transfer at Point of Sale (EFTPOS) network in the case of Singapore.

4. Concluding Comments

Although the countries under study aim to liberalize not only trade but foreign direct investment, there are several restrictions that will affect the flow of capital over the borders of FTA signatories. The most salient feature of restriction can be seen on foreign ownership or the degree of participation that foreign investors can influence an enterprise. Within the primary sectors, mining and agriculture are the most restrictive. The same is true for the services sectors, particularly the transportation, communications, electricity, financial, and insurance sectors. There are only a few restrictions on the manufacturing sectors.

The United States and Singapore are among the most open to foreign investment, as the results suggest. The US, for most parts, requires reciprocity by a partner to deregulate its investment sectors. Singapore, by tradition of its policies, is open to foreign investors to shore up its domestic economy. Canada and Mexico, both being NAFTA members, are found to be restrictive in their FDI rules. This may be somewhat surprising as the NAFTA is seen as an FTA having comprehensive FDI rules.

We have an agenda for future research. One area is an assessment of the implementation of FDI rules. We have examined the quality of FDI rules. However, setting FDI rules is one thing and implementation is another. Even if one country sets up liberal FDI rules, FDI may be restricted if liberal FDI rules are implemented effectively. Very often, a lack of transparency in the implementation of FDI rules discourages FDI. In light of these issues, an assessment of the implementation of FDI rules should be conducted. For such an assessment, information collected from multinationals that undertake FDI will be very useful.

Another item on the research agenda is the impact of FDI rules on FDI flows. One would expect that a country with an open FDI policy regime would successfully attract FDI. There have been a small number of studies that examine the impacts of FDI rules on FDI flows. The United Nations Conference on Trade and Development (1998) statistically examined the effect of bilateral investment treaties (BITs) on FDI flows, and found no evidence that BITs increased FDI. Somewhat different from these studies, Urata and Kawai (2000) found that governance, or the rules of law, of the FDI recipient had a positive impact on Japanese FDI. More studies are needed in this area.

References

Golub, Stephen S. (2003) "Measurement of Restrictions on Inward Foreign Direct Investment for OECD Countries," Economics Department Working Papers No. 357, OECD.

PECC (2002) An Assessment of Impediments to Foreign Direct Investment in APEC Member Economies, Japan PECC.

UNCTAD (1998), World Investment Report 1998, New York.

Urata, Shuijro and Hiroki Kawai (2000), "The Determinants of the Location of Foreign Direct Investment by Japanese Small and Medium-sized Enterprises," *Small Business Economics*_15, pp. 79-103,

Urata, Shujiro, Chia Siow Yue, and Fukunari Kimura eds. (2006), *Multinationals and Economic Growth in East Asia*, Routledge, New York.

Appendix 1. Summaries of FDI Restrictions Contained in Japan-Singapore Economic Partnership Agreement

				Japan								Singapore				
Sectors	Limitation of Foreign Ownership/ Market Access	National Treatment	Screening and Approval	Board of directors	Movement of people*	Perfor mance Require ments	Total for the Sector		Limitation of Foreign Ownership/ Market Access	National Treat ment	Scree ning and Appro val	Board of directors	Movement of people***	Perfor mance Require ments	Total for Sector	
	(0.4)	(0.2)	(0.1)	(0.1)	(0.1)	(0.1)	(1)		(0.4)	(0.2)	(0.1)	(0.1)	(0.1)	(0.1)	(1)	
A - Agriculture, forestry and fishing	0.12	0.16	0.09	0.1	0.05	0.1	0.62		0.12	0.06	0.025	0.07	0.05	0.1	0.425	
B - Mining and quarrying	0	0	0	0	0	0	0		0	0	0	0	0	0	0	
C - Manufacturing	0.3	0.14	0.09	0.1	0.05	0.1	0.78		0.22	0.18	0.025	0.07	0.05	0	0.545	
D - Electricity, gas, steam and air conditioning supply	0.04	0.05	0.09	0.1	0.05	0.1	0.43		0.04	0.02	0.025	0.07	0.05	0.1	0.305	
E - Water supply; sewerage, waste management and remediation activities	0.36	0.18	0.09	0.1	0.05	0.1	0.88		0.3	0.18	0.025	0.07	0.05	0.1	0.725	
F - Construction	0.32	0.16	0.09	0.1	0.05	0.1	0.82		0.24	0.16	0.025	0.07	0.05	0.1	0.645	
G - Wholesale and retail trade; repair of motor vehicles and motorcycles	0.36	0.18	0.09	0.1	0.05	0.1	0.88		0.22	0.14	0.025	0.07	0.05	0.1	0.605	
H - Transportation and storage	0.28	0.18	0.09	0.1	0.05	0.1	0.8		0.09	0.1	0.0225	0.05	0.05	0.1	0.4125	İ
I - Accommodation and Food service activities	0.36	0.18	0.09	0.1	0.05	0.1	0.88		0.298	0.18	0.025	0.07	0.05	0.1	0.723	
J - Information and communications	0.12	0.18	0.09	0	0.05	0.1	0.54		0.15	0.1	0.025	0.065	0.05	0.075	0.465	
K - Financial and insurance activities	0.28	0.14	0.09	0.1	0.05	0.1	0.76		0.3	0.18	0.025	0.07	0.05	0.1	0.725	
L - Real estate activities	0.36	0.18	0.09	0.1	0.05	0.1	0.88		0.3	0.18	0.025	0.07	0.05	0.1	0.725	
M - Professional, scientific and technical activities	0.32	0.14	0.09	0.07	0.05	0.1	0.77		0.28	0.1	0.025	0.07	0.05	0.1	0.625	
N - Administrative and support service activities	0.32	0.16	0.09	0.08	0.05	0.1	0.8		0.3	0.18	0.025	0.07	0.05	0.1	0.725	
O - Public administration and defence; compulsory social security	0.36	0.18	0.09	0.1	0.05	0.1	0.88	***	0.3	0.18	0.025	0.07	0.05	0.1	0.725	
P - Education	0.1	0.18	0.09	0.1	0.05	0.1	0.62		0.3	0.18	0.025	0.07	0.05	0.1	0.725	T
Q - Human health and social work activities	0.36	0.18	0.09	0.1	0.05	0.1	0.88		0.28	0.17	0.025	0.07	0.05	0.075	0.67	Ī
R - Arts, entertainment and recreation	0.36	0.18	0.09	0.1	0.05	0.1	0.88		0.28	0.16	0.025	0.065	0.05	0.1	0.68	İ
S - Other service activities	0.36	0.18	0.09	0.1	0.05	0.1	0.88	***	0.3	0.18	0.025	0.07	0.05	0.1	0.725	
T - Activities of households	0.36	0.18	0.09	0.1	0.05	0.1	0.88	***	0.3	0.18	0.025	0.07	0.05	0.1	0.725	
U - Activities of extraterritorial organizations and bodies	0.36	0.18	0.09	0.1	0.05	0.1	0.88	***	0.3	0.18	0.025	0.07	0.05	0.1	0.725	†

^{*} Entry of Singaporean Investors/ Traders to Japan: Permission to stay up to more than one year is allowed. ** Entry of Japanese Investors/ Traders to Singapore: Permission to stay up to two years and can be extended by additional three years *** Although there is no particular provision on this sector to limit investments, there are general provisions regarding restrictions and limitations on all sectors, which logically include this particular sector. This is in addition to some other provisions in the agreement that may affect investments, such as clauses on research subsidies and disposal of public assets.

Appendix 2. Summaries of FDI Restrictions Contained in Japan-Mexico Economic Partnership Agreement

				Japan								Mexico				
Sectors	Limitation of Foreign Ownership/ Market Access	National Treatment	Screening and Approval	Board of directors	Movement of people*	Perfor mance Require ments	Total for the Sector		Limitation of Foreign Ownership/ Market Access	National Treatment	Screening and Approval	Board of directors	Move ment of people***	Perfor mance Require ments	Total for the Sector	
	(0.4)	(0.2)	(0.1)	(0.1)	(0.1)	(0.1)	(1)		(0.4)	(0.2)	(0.1)	(0.1)	(0.1)	(0.1)	(1)	Ī
A - Agriculture, forestry and fishing	0.32	0.16	0.09	0.085	0.05	0.08	0.785		0.6	0	0.01	0.0125	0.0375	0	0.66	
B - Mining and quarrying	0	0	0	0	0	0	0	Closed	1						1	
C - Manufacturing	0.3	0.14	0.09	0.075	0.05	0.075	0.73		0.4	0	0.01	0.0125	0.0375	0.1	0.56	
D - Electricity, gas, steam and air conditioning supply	0.32	0.16	0.09	0.075	0.05	0.075	0.77		0.9	0	0.01	0.0125	0.0375	0	0.96	
E - Water supply; sewerage, waste management and remediation activities	0.32	0.18	0.09	0.1	0.05	0.1	0.84		0.25	0	0.01	0.0125	0.0375	0	0.31	
F - Construction	0.36	0.18	0.09	0.1	0.05	0.1	0.88		0.3	0	0.01	0.0125	0.0375	0	0.36	T
G - Wholesale and retail trade; repair of motor vehicles and motorcycles	0.34	0.18	0.09	0.1	0.05	0.1	0.86		0.4	0	0.01	0.0125	0.0375	0	0.46	Ī
H - Transportation and storage	0.24	0.14	0.075	0.08	0.05	0.09	0.675		0.75	0	0.01	0.05	0.0375	0	0.8475	Ī
I - Accommodation and Food service activities	0.36	0.18	0.09	0.1	0.05	0.1	0.88	***	0.25	0	0.01	0.0125	0.0375	0	0.31	
J - Information and communications	0.16	0.12	0.09	0	0.05	0.075	0.495		0.6	0.05	0.01	0.025	0.0375	0.01	0.7325	
K - Financial and insurance activities	0.31	0.18	0.09	0.1	0.05	0.1	0.83		0.25	0	0.01	0.0125	0.0375	0	0.31	
L - Real estate activities	0.36	0.18	0.08	0.1	0.05	0.1	0.87		0.25	0	0.01	0.0125	0.0375	0	0.31	
M - Professional, scientific and technical activities	0.3	0.18	0.085	0.07	0.05	0.1	0.785		0.25	0.05	0.01	0.0125	0.0375	0	0.36	
N - Administrative and support service activities	0.32	0.18	0.09	0.08	0.05	0.1	0.82		0.25	0	0.01	0.0125	0.0375	0	0.31	
O - Public administration and defence; compulsory social security	0.36	0.18	0.09	0.1	0.05	0.1	0.88	***	0.25	0	0.01	0.0125	0.0375	0	0.31	
P - Education	0.3	0.18	0.085	0.1	0.05	0.1	0.815		0.25	0	0.01	0.0125	0.0375	0	0.31	Ţ
Q - Human health and social work activities	0.36	0.18	0.09	0.1	0.05	0.1	0.88	***	0.275	0	0.01	0.0125	0.0375	0	0.335	İ
R - Arts, entertainment and recreation	0.3	0.16	0.09	0.09	0.05	0.1	0.79		0.3	0.01	0.01	0.025	0.0375	0	0.3825	
S - Other service activities	0.36	0.18	0.09	0.1	0.05	0.1	0.88	***	0.25	0	0.01	0.0125	0.0375	0	0.31	
T - Activities of households	0.36	0.18	0.09	0.1	0.05	0.1	0.88	***	0.25	0	0.01	0.0125	0.0375	0	0.31	
U - Activities of extraterritorial organizations and bodies	0.36	0.18	0.09	0.1	0.05	0.1	0.88	***	0.25	0	0.01	0.0125	0.0375	0	0.31	

Note

^{*} Entry of Mexican Investors/ Traders to Japan: Permission to stay up to either one or three years. ** Entry of Japanese Investors/ Traders to Mexico: Permission to stay up to one year and can be extended four times.

*** Although there is no portional provisions on this sector to limit investments, there are general provisions recepting restrictions and limitations on all sectors, which logically include this particular sector. This is in ad-

^{***} Although there is no particular provision on this sector to limit investments, there are general provisions regarding restrictions and limitations on all sectors, which logically include this particular sector. This is in addition to some other provisions in the agreement that may affect investments, such as clauses on research subsidies and disposal of public assets.

Appendix 3. Summaries of FDI Restrictions Contained in Korea-Singapore Free Trade Agreement

				Korea							Singapo					
Sectors	Limitation of Foreign Ownership/ Market Access	National Treatment	Screening and Approval	Board of directors	Movement of people*	Perfor mance Require ments	Total for the Sector		Limitation of Foreign Ownership/ Market Access	National Treat ment	Screening and Approval	Board of directors	Move ment of people ***	Perfor mance Require ments	Total for the Sector	
	(0.4)	(0.2)	(0.1)	(0.1)	(0.1)	(0.1)	(1)		(0.4)	(0.2)	(0.1)	(0.1)	(0.1)	(0.1)	(1)	
A - Agriculture, forestry and fishing	0.16	0.14	0.085	0.08	0.075	0.025	0.565	Relatively high restrictions, in addition to several reservations to adopt and maintain future measures.	0.4	0.18	0.1	0.045	0.075	0.1	0.9	
B - Mining and quarrying	0.32	0.16	0.09	0.09	0.075	0.05	0.785	***	0.4	0.18	0.1	0.045	0.075	0.1	0.9	
C - Manufacturing	0.28	0.14	0.085	0.07	0.075	0.025	0.675	Relatively high restrictions, in addition to several reservations to adopt and maintain future measures.	0.4	0.18	0.1	0.045	0.075	0.08	0.88	
D - Electricity, gas, steam and air conditioning supply	0.09	0.16	0.075	0.09	0.075	0.05	0.54	Too many restrictions, although not closed.	0.1	0.18	0.1	0.045	0.075	0.1	0.6	re alt
E - Water supply; sewerage, waste management and remediation activities	0.28	0.155	0.09	0.09	0.075	0.025	0.715	Too many reservations.	0.2	0.15	0.1	0.03	0.075	0.08	0.635	To re
F - Construction	0.29	0.16	0.075	0.08	0.075	0.01	0.69		0.4	0.18	0.1	0.045	0.075	0.1	0.9	**
G - Wholesale and retail trade; repair of motor vehicles and motorcycles	0.25	0.15	0.08	0.09	0.075	0.025	0.67	Too many reservations.	0.36	0.165	0.1	0.04	0.075	0.09	0.83	
H - Transportation and storage	0.16	0.155	0.075	0.09	0.075	0.04	0.595	Although, there are some rooms for investments, too many restrictions on the agreement would mean difficulty on establishing an investment in Korea.	0.16	0.16	0.075	0.03	0.075	0.08	0.58	
I - Accommodation and Food service activities	0.32	0.16	0.08	0.09	0.075	0.05	0.775	***	0.4	0.18	0.1	0.045	0.075	0.1	0.9	**
J - Information and communications	0.13	0.16	0.075	0.06	0.075	0.04	0.54	Although, there are some rooms for investments, too many restrictions, in addition to reservations, on the agreement would mean difficulty on establishing an investment in Korea.	0.17	0.15	0.075	0.03	0.075	0.09	0.59	To re

^{*} Entry of Singaporean Investors/ Traders to Korea: Permission to stay up to two years and can be extended up to eight years. ** Entry of Korean Investors/ Traders to Singapore Permission to stay up to two years and can be extended up to eight years. *** Although there is no particular provision on this sector to limit investments, there are general provisions regarding restrictions and limitations on all sectors, which logically include this particular sector. This is in addition to some other provisions in the agreement that may affect investments, such as clauses on financial transactions and disposal of public assets.

Appendix 3. Summaries of FDI Restrictions Contained in Korea-Singapore Free Trade Agreement (...cont.)

				Korea								Singapore				
Sectors	Limitation of Foreign Ownership/ Market Access	National Treatment	Screening and Approval	Board of directors	Movement of people*	Perfor mance Require ments	Total for the Sector		Limitation of Foreign Ownership/ Market Access	National Treatment	Screening and Approval	Board of directors	Move ment of people ***	Perfor mance Require ments	Total for the Sector	
K - Financial and insurance activities	0.32	0.16	0.09	0.09	0.075	0.05	0.785	***	0.4	0.18	0.1	0.045	0.075	0.1	0.9	*
L - Real estate activities	0.28	0.16	0.08	0.0725	0.075	0.025	0.6925	To many reservations in addition to requirements.	0.2	0.15	0.1	0.03	0.075	0.075	0.63	
M - Professional, scientific and technical activities	0.26	0.16	0.07	0.075	0.075	0.04	0.68		0.36	0.18	0.075	0.025	0.075	0.1	0.815	
N - Administrative and support service activities	0.28	0.16	0.08	0.09	0.075	0.04	0.725		0.34	0.15	0.1	0.04	0.075	0.05	0.755	
O - Public administration and defence; compulsory social security	0.3	0.15	0.08	0.07	0.075	0.025	0.7	Too high due to reservations	0.2	0.15	0.1	0.03	0.075	0.075	0.63	R h re to re fe n w S
P - Education	0.17	0.15	0.075	0.07	0.075	0.025	0.565	Too high due to reservations, in addition to requirements.	0.23	0.16	0.1	0.03	0.075	0.075	0.67	H H H H H H H H H H H H H H H H H H H
Q - Human health and social work activities	0.3	0.16	0.09	0.09	0.075	0.05	0.765		0.26	0.16	0.08	0.03	0.075	0.08	0.685	
R - Arts, entertainment and recreation	0.28	0.16	0.085	0.09	0.075	0.05	0.74		0.32	0.2	0.1	0.04	0.075	0.08	0.815	
S - Other service activities	0.32	0.16	0.09	0.09	0.075	0.05	0.785	***	0.4	0.2	0.1	0.1	0.075	0.1	0.975	*
T - Activities of households	0.32	0.16	0.09	0.09	0.075	0.05	0.785	***	0.4	0.2	0.1	0.1	0.075	0.1	0.975	*
U - Activities of extraterritorial organizations and bodies	0.32	0.16	0.09	0.09	0.075	0.05	0.785	安安安	0.4	0.2	0.1	0.1	0.075	0.1	0.975	*

^{*} Entry of Singaporean Investors/ Traders to Korea: Permission to stay up to two years and can be extended up to eight years. ** Entry of Korean Investors/ Traders to Singapore Permission to stay up to two years and can be extended up to eight years. ** Although there is no particular provision on this sector to limit investments, there are general provisions regarding restrictions and limitations on all sectors, which logically include this particular sector. This is in addition to some other provisions in the agreement that may affect investments, such as clauses on financial transactions and disposal of public assets.

Appendix 4. Summaries of FDI Restrictions Contained in Korea-Chile Free Trade Agreement

				Korea						Chile						
Sectors	Limitation of Foreign Ownership/ Market Access	National Treatment	Screening and Approval	Board of directors	Movement of people*	Perfor mance Require ments	Total for the Sector		Limitation of Foreign Ownership/ Market Access	National Treatment	Screening and Approval	Board of directors	Movement of people***	Perfor mance Require ments	Total for the Sector	
	(0.4)	(0.2)	(0.1)	(0.1)	(0.1)	(0.1)	(1)		(0.4)	(0.2)	(0.1)	(0.1)	(0.1)	(0.1)	(1)	
A - Agriculture, forestry and fishing	0.16	0.14	0.07	0.09	0.05	0.1	0.61		0.24	0.14	0.085	0.06	0.05	0.05	0.625	
B - Mining and quarrying	0.32	0.15	0.07	0.09	0.05	0.1	0.78		0.04	0.12	0.08	0.075	0.05	0.05	0.415	
C - Manufacturing	0.3	0.15	0.07	0.09	0.05	0.09	0.75		0.29	0.145	0.09	0.075	0.05	0	0.65	
D - Electricity, gas, steam and air conditioning supply	0.09	0.14	0.05	0.09	0.05	0.1	0.52	Too many restrictions.	0.26	0.14	0.1	0.075	0.05	0.05	0.675	
E - Water supply; sewerage, waste management and remediation activities	0.32	0.15	0.07	0.09	0.05	0.1	0.78		0.3	0.14	0.1	0.075	0.05	0.05	0.715	
F - Construction	0.31	0.15	0.0525	0.09	0.05	0.05	0.7025		0.3	0.14	0.1	0.075	0.05	0.05	0.715	
G - Wholesale and retail trade; repair of motor vehicles and motorcycles	0.32	0.15	0.07	0.09	0.05	0.1	0.78		0.32	0.15	0.0925	0.075	0.05	0	0.6875	
H - Transportation and storage	0.21	0.14	0.05	0.0825	0.05	0.08	0.6125		0.19	0.13	0.09	0.02	0.05	0.05	0.53	
I - Accommodation and Food service activities	0.32	0.15	0.07	0.09	0.05	0.1	0.78		0.32	0.15	0.1	0.075	0.05	0.05	0.745	***
J - Information and communications	0.11	0.14	0.05	0.0525	0.05	0.05	0.4525		0.1	0.13	0.1	0.01	0.05	0.04	0.43	
K - Financial and insurance activities	0.32	0.15	0.07	0.09	0.05	0.1	0.78		0.28	0.14	0.1	0.075	0.05	0.05	0.695	
L - Real estate activities	0.32	0.15	0.05	0.09	0.05	0.1	0.76		0.32	0.15	0.1	0.075	0.05	0.05	0.745	***
M - Professional, scientific and technical activities	0.26	0.14	0.05	0.07	0.05	0.09	0.66		0.27	0.145	0.08	0.075	0.05	0.05	0.67	
N - Administrative and support service activities	0.31	0.15	0.0575	0.09	0.05	0.0875	0.745		0.31	0.145	0.1	0.075	0.05	0.05	0.73	
O - Public administration and defence; compulsory social security	0.3	0.12	0.065	0.07	0.05	0.075	0.68		0.3	0.14	0.1	0.075	0.05	0.05	0.715	
P - Education	0.17	0.14	0.07	0.01	0.05	0.09	0.53		0.3	0.14	0.1	0.075	0.05	0.05	0.715	
Q - Human health and social work activities	0.28	0.15	0.0675	0.09	0.05	0.1	0.7375		0.3	0.14	0.08	0.075	0.05	0.05	0.695	
R - Arts, entertainment and recreation	0.32	0.15	0.07	0.09	0.05	0.1	0.78	***	0.32	0.15	0.09	0.075	0.05	0.05	0.735	
S - Other service activities	0.32	0.15	0.07	0.09	0.05	0.1	0.78	***	0.32	0.15	0.1	0.075	0.05	0.05	0.745	***
T - Activities of households	0.32	0.15	0.07	0.09	0.05	0.1	0.78	***	0.32	0.15	0.1	0.075	0.05	0.05	0.745	***
U - Activities of extraterritorial organizations and bodies	0.32	0.15	0.07	0.09	0.05	0.1	0.78	***	0.32	0.15	0.1	0.075	0.05	0.05	0.745	***

^{*} Entry of Chilean Investors/ Traders to Korea: Permission to stay up to one year and can be extended. ** Entry of Korean Investors/ Traders to Chile Permission to stay up to one year and can extended.

^{***} Although there is no particular provision on this sector to limit investments, there are general provisions regarding restrictions and limitations on all sectors, which logically include this particular sector. This is in addition to some other provisions in the agreement that may affect investments, such as clauses on performance requirements and disposal of public assets.

Appendix 5. Summaries of FDI Restrictions Contained in US- Singapore Free Trade Agreement

				US						Singapo	re					
Sectors	Limitation of Foreign Ownership/ Market Access	National Treatment	Screening and Approval	Board of directors	Movement of people*	Perfor mance Require ments	Total for the Sector		Limitation of Foreign Ownership/ Market Access	National Treatment	Screening and Approval	Board of directors	Movement of people***	Perfor mance Require ments	Total for the Sector	
	(0.4)	(0.2)	(0.1)	(0.1)	(0.1)	(0.1)	(1)		(0.4)	(0.2)	(0.1)	(0.1)	(0.1)	(0.1)	(1)	
A - Agriculture, forestry and fishing	0.36	0.18	0.1	0.1	0.1	0.1	0.94	***	0.36	0.18	0.1	0.045	0.1	0.1	0.885	*
B - Mining and quarrying	0.36	0.18	0.1	0.1	0.1	0.1	0.94	***	0.36	0.18	0.1	0.045	0.1	0.075	0.86	
C - Manufacturing	0.36	0.18	0.1	0.1	0.1	0.1	0.94	***	0.36	0.18	0.1	0.045	0.1	0.1	0.885	
D - Electricity, gas, steam and air conditioning supply	0.36	0.18	0.1	0.1	0.1	0.1	0.94	***	0.04	0.05	0.1	0.045	0.1	0.1	0.435	
E - Water supply; sewerage, waste management and remediation activities	0.36	0.18	0.1	0.1	0.1	0.1	0.94	***	0.3	0.14	0.1	0.0375	0.1	0.08	0.7575	
F - Construction	0.36	0.18	0.1	0.1	0.1	0.1	0.94	***	0.36	0.18	0.1	0.045	0.1	0.1	0.885	*
G - Wholesale and retail trade; repair of motor vehicles and motorcycles	0.36	0.18	0.1	0.1	0.1	0.1	0.94	***	0.36	0.18	0.1	0.04	0.1	0.1	0.88	
H - Transportation and storage	0.2	0.16	0.0525	0.06	0.1	0.075	0.6475		0.18	0.14	0.095	0.03	0.1	0.08	0.625	Ī
I - Accommodation and Food service activities	0.36	0.18	0.1	0.1	0.1	0.1	0.94	***	0.26	0.18	0.1	0.045	0.1	0.1	0.785	*
J - Information and communications	0.28	0.18	0.1	0.1	0.1	0.1	0.86		0.21	0.14	0.1	0.03	0.1	0.0675	0.6475	Ī
K - Financial and insurance activities	0.16	0.05	0.1	0.0475	0.1	0.05	0.5075		0.17	0.125	0.08	0.02	0.1	0.09	0.585	
L - Real estate activities	0.36	0.18	0.1	0.1	0.1	0.1	0.94	***	0.2	0.12	0.09	0.045	0.1	0.1	0.655	
M - Professional, scientific and technical activities	0.32	0.17	0.1	0.1	0.1	0.1	0.89		0.24	0.16	0.08	0.01	0.1	0.1	0.69	
N - Administrative and support service activities	0.36	0.18	0.1	0.1	0.1	0.1	0.94	***	0.34	0.16	0.1	0.04	0.1	0.09	0.83	
O - Public administration and defence; compulsory social security	0.28	0.18	0.1	0.1	0.1	0.1	0.86		0.3	0.15	0.1	0.03	0.1	0.09	0.77	R di re fu w ca m
P - Education	0.28	0.18	0.1	0.1	0.1	0.1	0.86		0.23	0.18	0.1	0.045	0.1	0.1	0.755	
Q - Human health and social work activities	0.28	0.18	0.1	0.1	0.1	0.1	0.86		0.2	0.145	0.08	0.0375	0.1	0.09	0.6525	R di re fu w ca m ao se
R - Arts, entertainment and recreation	0.36	0.18	0.1	0.1	0.1	0.1	0.94	***	0.28	0.16	0.1	0.04	0.1	0.095	0.775	Ī
S - Other service activities	0.36	0.18	0.1	0.1	0.1	0.1	0.94	***	0.36	0.18	0.1	0.045	0.1	0.1	0.885	*
T - Activities of households	0.36	0.18	0.1	0.1	0.1	0.1	0.94	***	0.36	0.18	0.1	0.045	0.1	0.1	0.885	>
1 Tearrines of Households																

*** Although there is no particular provision on this sector to limit investments, there are general provisions regarding restrictions and limitations on all sectors, which logically include this particular sector. This is in addition to some other provisions in the agreement that may affect investments, such as clauses on minority rights, and preferences for disadvantageous members of the society.

Appendix 6. Summaries of FDI Restrictions Contained in US- Australia Free Trade Agreement

				US						Australi	a					
Sectors	Limitation of Foreign Ownership/ Market Access	National Treatment	Screening and Approval	Board of directors	Movement of people*	Perfor mance Require ments	Total for the Sector		Limitation of Foreign Ownership/ Market Access	National Treatment	Screening and Approval	Board of directors	Movement of people***	Perfor mance Require ments	Total for the Sector	
	(0.4)	(0.2)	(0.1)	(0.1)	(0.1)	(0.1)	(1)		(0.4)	(0.2)	(0.1)	(0.1)	(0.1)	(0.1)	(1)	
A - Agriculture, forestry and fishing	0.36	0.18	0.1	0.1	0.1	0.1	0.94	***	0.32	0.1	0.04	0.1	0.1	0.1	0.76	
B - Mining and quarrying	0.32	0.18	0.1	0.1	0.1	0.1	0.9		0.32	0.18	0.05	0.1	0.1	0.1	0.85	***
C - Manufacturing	0.36	0.18	0.1	0.1	0.1	0.1	0.94	***	0.32	0.18	0.05	0.1	0.1	0.1	0.85	***
D - Electricity, gas, steam and air conditioning supply	0.36	0.18	0.1	0.1	0.1	0.1	0.94	***	0.32	0.18	0.05	0.1	0.1	0.1	0.85	**:
E - Water supply; sewerage, waste management and remediation activities	0.36	0.18	0.1	0.1	0.1	0.1	0.94	***	0.32	0.18	0.05	0.1	0.1	0.1	0.85	**:
F - Construction	0.36	0.18	0.1	0.1	0.1	0.1	0.94	***	0.32	0.18	0.05	0.1	0.1	0.1	0.85	***
G - Wholesale and retail trade; repair of motor vehicles and motorcycles	0.36	0.18	0.1	0.1	0.1	0.1	0.94		0.1	0.14	0.04	0.1	0.1	0.1	0.58	
H - Transportation and storage	0.2	0.18	0.0525	0.08	0.1	0.075	0.6875		0.12	0.14	0.045	0.05	0.1	0.08	0.535	
I - Accommodation and Food service activities	0.36	0.18	0.1	0.1	0.1	0.1	0.94	***	0.32	0.18	0.05	0.1	0.1	0.1	0.85	***
J - Information and communications	0.28	0.18	0.1	0.1	0.1	0.1	0.86		0.04	0.1	0.05	0.025	0.1	0.075	0.39	
K - Financial and insurance activities	0.24	0.05	0.1	0.0475	0.1	0.05	0.5875		0.12	0.13	0.01	0.045	0.1	0.1	0.505	
L - Real estate activities	0.36	0.18	0.1	0.1	0.1	0.1	0.94	***	0.32	0.18	0.05	0.1	0.1	0.1	0.85	
M - Professional, scientific and technical activities	0.34	0.18	0.1	0.1	0.1	0.1	0.92		0.28	0.16	0.05	0.09	0.1	0.1	0.78	
N - Administrative and support service activities	0.36	0.18	0.1	0.1	0.1	0.1	0.94	***	0.32	0.18	0.05	0.1	0.1	0.1	0.85	**
O - Public administration and defence; compulsory social security	0.36	0.18	0.1	0.1	0.1	0.1	0.94	***	0.32	0.18	0.045	0.1	0.1	0.1	0.845	
P - Education	0.36	0.18	0.1	0.1	0.1	0.1	0.94	***	0.28	0.16	0.05	0.08	0.1	0.08	0.75	
Q - Human health and social work activities	0.36	0.18	0.1	0.1	0.1	0.1	0.94	***	0.32	0.18	0.05	0.07	0.1	0.1	0.82	**:
R - Arts, entertainment and recreation	0.36	0.18	0.1	0.1	0.1	0.1	0.94	***	0.32	0.18	0.05	0.1	0.1	0.1	0.85	**
S - Other service activities	0.36	0.18	0.1	0.1	0.1	0.1	0.94	***	0.32	0.18	0.05	0.1	0.1	0.1	0.85	**
T - Activities of households	0.36	0.18	0.1	0.1	0.1	0.1	0.94	***	0.32	0.18	0.05	0.1	0.1	0.1	0.85	**:
U - Activities of extraterritorial organizations and bodies	0.36	0.18	0.1	0.1	0.1	0.1	0.94	***	0.32	0.18	0.05	0.1	0.1	0.1	0.85	**:

^{***} Although there is no particular provision on this sector to limit investments, there are general provisions regarding restrictions and limitations on all sectors, which logically include this particular sector. This is in addition to some other provisions in the agreement that may affect investments, such as clauses on minority rights, and preferences for disadvantageous members of the society.

Appendix 7. Summaries of FDI Restrictions Contained in the North America Free Trade Agreement

Sectors				Canada								Mexico								US			
	Limitation of Foreign Ownership/ Market Access	National Treatment	Screening and Approval	Board of directors	Movement of people	Performance Requirements	TOTAL for SECTOR		Limitation of Foreign Ownership/ Market Access	National Treatment	Screening and Approval	Board of directors	Movement of people	Performance Requirements	TOTAL for SECTOR		Limitation of Foreign Ownership/ Market Access	National Treatment	Screening and Approval	Board of directors	Movement of people	Performance Requirements	TOTAL for SECTOR
	(0.4)	(0.2)	(0.1)	(0.1)	(0.1)	(0.1)	(1)		(0.4)	(0.2)	(0.1)	(0.1)	(0.1)	(0.1)	(1)		(0.4)	(0.2)	(0.1)	(0.1)	(0.1)	(0.1)	(1)
A - Agriculture, forestry and fishing	0.23	0.02	0.01	0.025	0.1	0.05	0.435		0.04	0.06	0.02	0.1	0.1	0.1	0.42		0.32	0.18	0.1	0.1	0.1	0.1	0.9
B - Mining and quarrying	0.1	0.1	0.005	0.025	0.1	0.025	0.355		0	0	0	0	0	0	0		0.3	0.18	0.1	0.1	0.1	0.1	0.88
C - Manufacturing	0.32	0.18	0.01	0.025	0.1	0.05	0.685	***	0.24	0.14	0.025	0.05	0.1	0	0.555		0.32	0.18	0.1	0.1	0.1	0.1	0.9 ***
D - Electricity, gas, steam and air conditioning supply	0.26	0.18	0.01	0.025	0.1	0.05	0.625	***	0.04	0.02	0.025	0.1	0.1	0.1	0.385		0.32	0.18	0.1	0.1	0.1	0.1	0.9
E - Water supply; sewerage, waste management and remediation activities	0.32	0.18	0.01	0.025	0.1	0.05	0.685	***	0.3	0.18	0.025	0.1	0.1	0.1	0.805	***	0.32	0.18	0.1	0.1	0.1	0.1	0.9
F - Construction	0.32	0.18	0.01	0.025	0.1	0.05	0.685	***	0.24	0.15	0.025	0.1	0.1	0.1	0.715		0.32	0.18	0.1	0.1	0.1	0.1	0.9 ***
G - Wholesale and retail trade; repair of motor vehicles and motorcycles	0.3	0.17	0.01	0.025	0.1	0.05	0.655		0.15	0.12	0.025	0.1	0.1	0.1	0.595		0.32	0.18	0.1	0.1	0.1	0.1	0.9
H - Transportation and storage	0.11	0.1	0.005	0.0175	0.1	0.05	0.3825		0.17	0.05	0.025	0.05	0.1	0.1	0.495		0.19	0.18	0.05	0.05	0.1	0.075	0.645
I - Accommodation and Food service	0.32	0.18	0.01	0.025	0.1	0.05	0.685	***	0.3	0.18	0.025	0.1	0.1	0.1	0.805	***	0.32	0.18	0.1	0.1	0.1	0.1	0.9
activities J - Information and	0.20	0.14	0.01	0.025	0.1	0.05	0.605	***	0.00	0.1	0.0225	0.065	0.1	0.075	0.4505	***	0.26	0.10	0.05	0.00	0.1	0.05	***
communications K - Financial and	0.28	0.14	0.01	0.025	0.1	0.05	0.605		0.09	0.1	0.0225	0.065	0.1	0.075	0.4525		0.26	0.18	0.05	0.08	0.1	0.05	0.72
insurance activities	0.28	0.14	0.009	0.025	0.1	0.05	0.604		0.2	0.1	0.025	0.1	0.1	0.1	0.625		0.12	0.18	0.04	0.04	0.1	0.1	0.58
L - Real estate activities	0.32	0.18	0.01	0.025	0.1	0.05	0.685	***	0.3	0.18	0.025	0.1	0.1	0.1	0.805	***	0.32	0.18	0.1	0.1	0.1	0.1	0.9
M - Professional, scientific and technical activities	0.29	0.175	0.01	0.025	0.1	0.05	0.65		0.28	0.18	0.025	0.1	0.1	0.1	0.785		0.26	0.18	0.1	0.1	0.1	0.1	0.84
N - Administrative and support service activities	0.32	0.18	0.01	0.025	0.1	0.05	0.685	***	0.3	0.18	0.025	0.1	0.1	0.1	0.805	***	0.32	0.18	0.1	0.1	0.1	0.1	0.9
O - Public administration and defence; compulsory social security	0.28	0.17	0.01	0.025	0.1	0.05	0.635		0.27	0.16	0.025	0.1	0.1	0.1	0.755		0.28	0.18	0.1	0.1	0.1	0.1	0.86
P - Education	0.28	0.16	0.01	0.025	0.1	0.05	0.625		0.27	0.16	0.02	0.1	0.1	0.1	0.75		0.28	0.18	0.1	0.1	0.1	0.1	0.86
Q - Human health and social work activities	0.28	0.16	0.01	0.025	0.1	0.05	0.625		0.27	0.16	0.025	0.1	0.1	0.1	0.755		0.28	0.18	0.1	0.1	0.1	0.1	0.86
R - Arts, entertainment and recreation	0.32	0.18	0.01	0.025	0.1	0.05	0.685	***	0.3	0.18	0.025	0.1	0.1	0.1	0.805	***	0.32	0.18	0.1	0.1	0.1	0.1	0.9
S - Other service activities	0.32	0.18	0.01	0.025	0.1	0.05	0.685	***	0.3	0.18	0.025	0.1	0.1	0.1	0.805	***	0.32	0.18	0.1	0.1	0.1	0.1	0.9
T - Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use	0.32	0.18	0.01	0.025	0.1	0.05	0.685	***	0.3	0.18	0.025	0.1	0.1	0.1	0.805	***	0.32	0.18	0.1	0.1	0.1	0.1	0.9
U - Activities of extraterritorial organizations and bodies	0.32	0.18	0.01	0.025	0.1	0.05	0.685	***	0.3	0.18	0.025	0.1	0.1	0.1	0.805	***	0.32	0.18	0.1	0.1	0.1	0.1	0.9

Notes

*** Although there is no particular provision on this sector to limit investments, there are general provisions regarding restrictions and limitations on all sectors, which logically include this particular sector. This is in addition to some other provisions in the agreement that may affect investments, such as clauses on minority rights, and preferences for disadvantageous members of the society.

Appendix 8. Comparison of the Results to the Study of Golub (2003)

	These Results**	Rank	Golub Results***	Rank
Australia	0.770	3	0.270	4
Canada	0.620	8	0.352	6
Chile	0.673	6	*	
Japan	0.762	4	0.230	2
Korea	0.699	5	0.260	3
Mexico	0.627	7	0.275	5
Singapore	0.778	2	*	
US	0.881	1	0.169	1

Note:

^{*} Chile and Singapore are not OECD members; therefore they are not part of the Golub study.

^{**} This study assumes that the higher the score, the less restriction the country has on FDI, with 1, the highest score, meaning that investment is totally open to foreign investors.

^{***} Golub (2003) assumes that the lower the score the less restriction the country has on FDI, with 1, the highest score, meaning that investment is totally closed to foreign investors.