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Intra-Industry Trade, a comparative analysis of the Mexican and the Korean automotive sector

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Julieta Gomez Hernandez

Intra-Industry Trade, a comparative analysis of the Mexican and the Korean automotive sector

Thesis Presented

by

Julieta Gomez Hernandez

to

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in Partial Fulfillment of Requirements

for the Degree of Master

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Abstract

Intra-Industry Trade, a comparative analysis of the Mexican and the Korean automotive sector

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The increase of Intra-Industry Trade in the world trade dynamics is opening not only the discussion about its relation with Free Trade Agreements but also its development in non Free Trade Areas and its influence on investment.

According to the measurement and analysis of the Intra-Industry Trade within Free Trade areas, the behaviour of IIT with the adoption of a Free Trade Agreement between Mexico and Korea can be predicted as these trading partners have the same level of specialization in the automotive sector. The position of Mexico within NAFTA, and the trade flow in Asia with Korea as one of the main participants, offer a relevant sample of the new trends for

trade. Free Trade Agreements have a relevant impact on Intra-Industry Trade specifically on the automotive sector for Mexico and Korea, considering also, that these trading partners have a significant participation in the global production in the sector.

Private investment in Mexico is increasing with its levels of IIT principally because of NAFTA, but its relation with other trading partners without the scope of a Free Trade Agreement is leading to re think the advantages of achieving agreements with Asia to boost investment and trade.

Key words: Intra-Industry Trade, Free Trade Agreements, automotive sector, investment.

Student Number: 2013-22746

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Abbreviation

ASEAN	Association of Southeast Asian Nations
EFTA	European Free Trade Association
FDI	Foreign Direct Investment
FTA	Free Trade Agreement
IIT	Intra-Industry Trade
MERCOSUR	Mercado Comun del Sur (Southern Common Market)
NAFTA	North American Free Trade Agreement
OECD	Organization for Economic Cooperation and Development
RTA	Regional Trade Agreements
SITC	Standard International Trade Classification

1. INTRODUCTION

According to data provided by the Mexican Trade and Investment Promotion Agency (PROMEXICO) the automotive industry in Mexico accounts for 4% of the GDP, 20% of manufactured goods, and 27% of total exports, which is offering the opportunity of creating new jobs and therefore, it is encouraging the Mexican government to attract more investment in this sector considered as strategic. In this regard it is worth noting that even though Mexico relies on the foreign investment as it doesn't hold a national automotive industry with domestic brands, it plays an important role as an exporter and as big market as well.

The automotive sector which includes parts and accessories of motor vehicles has been driven by the presence and investment of worldwide renowned car assembly companies that are producing over 40 different models of automobiles and trucks for different industries in the country. Assemblers in Mexico rely on the supply of auto parts by companies located around them to ensure the optimal operation and meet the specific requirements and delivery times.

The automotive industry in Korea represents one of the most competitive in the world, achieving the development of its own brands and obtaining the acknowledgment of these brands worldwide. The car makers have managed to unfurl their operations in the country through the establishment of a well organized system of clusters with Korean companies that provide them with

auto parts and other supplies needed by the industry.

Korea and Mexico have strong commercial ties, but regarding the Intra-Industry Trade (IIT) the automotive sector has been experiencing an increase of volume. Compared with other members of the OECD, Mexico has one of the highest rates of IIT, mainly in sophisticated manufactured goods, which is boosting the economy and contributing to the competitiveness of the country. Although this can be explained as a consequence of NAFTA, there are new trade actors that contribute to the increase of these trade flows. Regarding this, the example of Korean companies investing in Mexico can be taken.

In 2013 Hyundai Motor decided to increase its activities in the Mexican market by finishing the partnership it had with Chrysler and opening its own automobile dealerships in the main cities of the country. Negotiations for the opening of an automobile manufacturing plant in Northern Mexico, where companies like LG or Samsung have operations, were successfully concluded. Therefore, the expansion of Hyundai Motor in Mexico can lead to think that the IIT in the sector will be increased in the upcoming years.

The relation between actual FTA's and IIT can forecast the behaviour of trade in the automotive sector for Korea and Mexico while it also provides a global picture for the trade flow of these actors in the sector. The research here presented is based on the studies that argue that IIT will increase inside Free Trade areas among countries with the same level of specialization, which will also lead to integration of the industries in these economies.

It is also the goal of this research to determine what the real impact of FTA's on IIT is and if FTA's are essential to increase the levels of IIT between the economies involved in regards to the automotive sector.

2. LITERATURE REVIEW

The Intra-Industry Trade has been extensively studied after the emergence of trade blocks and economies of scale. Researchers argue that a deep integration within trade blocks lead to high levels of IIT. As an example, the case of the European Economic Community can be taken. Here it can be observed how the IIT among developed countries increases due to the configuration of the RTA.

According to Kim and Lee (2003) the IIT increases within RTA's for the cases of middle-income developing countries with medium to large economic size such as the case of MERCOSUR, mostly because some of the member economies have industries characterized by economies of scale and take the benefits that regional integration offers to make their own industries more productive. However, this model cannot be equally applied to RTA's which members are represented by less developed countries, where the industry is not led by economies of scale and there is no trade diversion to improve welfare.

Regarding the automotive sector in the IIT, Gachuz (2011) presents evidence that shows that the crisis after 2008 has not affected all the countries in the same way, emerging countries such as India and China have experienced better performance as the demand of vehicles in this markets is increasing. This behaviour may be beneficial for countries like Mexico that is receiving foreign investment in the sector and it is in need to see its exports

diversified. This as well can lead to trade diversion being of benefit especially to the Mexican exports. In this regard it is worth noting that U.S. automotive companies are the most disadvantaged and damaged causing a decline in investment at the expense of the Mexican market considering the high levels of IIT in the sector due to NAFTA.

The investment of non U.S. companies in benefit of specific trading partners such as Mexico without the framework of a Free Trade Agreement represents a relatively new scenario that has not been widely studied yet as researchers focus on RTA's and FTA's to explain IIT and the behaviour of developing economies is creating a new pattern in the trade flow leading to re think ¿the real need of FTA's to increase welfare as a consequence of trade.

3. METHODOLOGY

3.1 Research Questions

The questions that this research aims to address are based on the following objectives:

- To determine the degree of IIT in the automotive sector of Mexico within NAFTA and Latin America.
- To analyse the behaviour of the Korean foreign investment in the automotive sector based on IIT with its free trade partners in Europe and Asia.
- To determine the degree of trade diversion in the automotive sector for partners without a Free Trade Agreement and its influence on investment.

As mentioned in the literature review, the existing studies don not deal with the relation between IIT and non free trade areas, therefore, the research questions have the purpose to reach a conclusion on the scope of FTA's for the behaviour of IIT and the level of specialization of Mexico in the automotive sector based on the data provided and its interpretation. Accordingly, the findings will address the questions raised below:

- What is the relation between Free Trade Agreements and IIT in the automotive sector?

- Would a Free Trade Agreement between Mexico and Korea increase the IIT in the automotive sector?

- What are the implications of a Free Trade Agreement between Mexico and Korea for the attraction of investment in the automotive sector in Mexico?

3.2 Intra-Industry Trade

The study of Intra-Industry Trade acquired relevance after the formation of Costumes Unions in Europe that aimed to set up a trade bloc with a common external tariff which represented the beginning of economic integration on the region and what lately would become the trend of the commerce on a global scale with the emergence of FTA's.

The internationalisation of the production and the economies of scale have nowadays greater effects on trade, as developed and developing countries are trading goods with the same level of specialization. In 2002 the OECD determined that in North America, Mexico along with the United States have high and increasing IIT whereas other OECD economies in different regions have low but increasing IIT levels.

The most widely used method to measure IIT is based on the Grubel-Lloyd Index. According to Grubel and Lloyd (1975) the IIT of a given country with specific trading partners can be calculated with the formula shown bellow. The OECD defines IIT as the two-way exchange of goods within the same industrial classification and commodity group transactions. The Grubel-Lloyd

Index is defined as:

$$GL_{ij} = 1 - \frac{\left|X_{ij} - M_{ij}\right|}{X_{ij} + M_{ij}}$$

Where exports (*X*) and imports (*M*) to a country *j* for an industry *i* are considered. As the level of IIT increases, the results will show a number closer to 1, whereas results near to 0 imply that either exports or imports are dominant.

3.3 Data Sources

In order to conduct a quantitative analysis, the empirical results are based on the data available at the UN COMTRADE data base published by United Nations at SITC 3 digit level. Also, the commodities used for the analysis are detailed by UN COMTRADE as “Production of cars, trailers and trucks”, by the codes 781, 782,783 and 784. Parts and accessories are also considered.

3.3 Description of the automotive sector

Mexico has one the highest levels of IIT with the United States according to OECD data. In addition, the highest contribution to the IIT Index among these two trading partners is represented by the automotive sector including the input necessary for the industry.

The automotive sector in Mexico relies on the FDI and the companies that supply the automobile manufacturing plants and work as a cluster. The most important automobile manufacturing companies are established in Mexico near their suppliers to complete and effective chain of production. The crisis in 2008 did not cause the closure of foreign plants in the country, even though Mexico's excessive dependence on the U.S. market and economic behavior. However, not only U.S. automobile manufacturers are well established in the country, European and Japanese car makers also take the advantages that a manufacturing plant in Mexico offers expanding their operations in the North and South American market.

Table 1. Automobile manufacturers in Mexico and its location

Manufacturer	Location
Toyota	Baja California
Nissan	Aguascalientes/Morelos
Honda	Aguascalientes/Guanajuato
Mazda	Guanajuato
General Motors	Guanajuato/Mexico State/Coahuila/San Luis Potosi
Volkswagen	Guanajuato/Puebla
Chrysler	Mexico State/Coahuila
FIAT	Mexico State/Coahuila
BMW	Mexico State
Ford	Mexico State/Sonora/Chihuahua
Audi	Puebla

*Source: Promexico. Diagnostico automotriz 2013.

As shown in the previous figure, automobile manufacturers develop their operations in the same industrial zones that correspond mainly to the north and center of the country where clusters are established and the network of distributors ensure the production in the manufacturing plants. In this regard it is worth mentioning that the Mexican government is interested on attracting investment in these industrial zones that provide skill labor by offering tax benefits.

The recent negotiation for the construction of a manufacturing plant in Mexico by KIA that will start in 2015 in the northern industrial zone near the clusters of other manufacturers is the result of the pursuit of the company to cover the increasing domestic market and make use of the advantages of Mexico's exporting capacities.

Table 2. Sales of the main companies in the automotive sector in Mexico 2012

Manufacturer	**Sales (US Million Dollars)**
General Motors	15,935
Ford	13,550
Volkswagen	13,026
Nissan	11,268
Chrysler	10,500
Honda	2,480
Toyota	2,430
Mazda	717

* Source: Promexico. Diagnostico automotriz 2013.

Sales and demand of automobiles in Mexico are proportional to the number of manufacturing plants of each company in the industrial zones. General Motors, which is the most important distributor and seller in the country, has four manufacturing plants in the central and northern region whereas Mazda with the lowest sales in the domestic market relies on one plant in central Mexico.

Table 3. Mexican exports of vehicles 2012

Destination	Units	Share in the total
United States	1,504,364	63.9%
Canada	160,086	6.8%
Latin America	366,133	15.5%
Europe	212,792	9.0%
Others	30,815	1.3%
Asia	46,640	2.0%
Africa	34,734	1.5%
Total	2,355,564	100%

* Source: Promexico. Diagnostico automotriz 2013.

From last figure it can be appreciated the high dependence on the U.S. market for the Mexican exports specially in the automotive sector as more than 60% of the total production is exported to this market. Canada and the United States as part of NAFTA are meant to be included in the indicators as one region, however, the dramatic difference of the behavior of the Mexican exports to these markets, makes relevant to separate them in different sections. Latin America also represents an important market for the Mexican exports in

the automotive sector by having higher participation than Canada.

Table 4. Mexican imports of vehicles 2012

Origin	Units	Share in the total
Asia	241,441	38%
NAFTA	202,165	32%
European Union	115,748	18%
MERCOSUR	75,099	12%
Total	634,453	100%

* Source: Promexico. Diagnostico automotriz 2013.

The previous figure displaying Mexican imports of vehicles in 2012, gives evidence of the statement made by Kim and Lee (2003) about the degree of integration among developed and developing countries. It can be observed that the exports and imports of countries with similar level of specialization are equivalent.

Mexican imports in the automotive sector are at first sight lower than the exports; however, the calculation of IIT in the next section will draft a real picture of the behavior of trade among Mexico and Korea and their trade partners.

Asia is the origin of the highest imports of automobiles in Mexico whereas the Mexican exports occupy the third place. Nevertheless this situation can be reversed as new competitors and producers are settling in the country without the scope of an FTA.

Mexico's automotive sector relies on the promotion of FDI to keep on providing jobs and to maintain working the supplying companies. Therefore, the industry have shown efforts to improve manufacturing competitive costs, tax benefits, skilled labor and effective supplying chain.

4. EMPIRICAL RESULTS

In order to conduct the analysis about the impact of RTA's and FTA's on the IIT, the results were organized in free trade and non free trade partners. In the case of RTA's the trade with these countries was combined according to the Agreement they belong to; results are shown per FTA.

The data set used from UN COMTRADE corresponds to the two years before and after the entry into force of the Agreement for the cases of countries with FTA and two years before and after the crisis of 2008 that affected the automotive sector worldwide for the cases of counties that are not currently relying on an FTA.

The results are divided into "Reporter" and "Partner". Reporters are represented by Korea and Mexico and the partners group is composed by both, free trade and non free trade partners.

As the goal of this research is to make an analysis of the impact of IIT in the automotive sector for Mexico y Korea, and its increasing interest to invest in Mexico, the results aim to establish the relation between the levels of IIT and Free Trade Agreements as the IIT improves productivity and competition for economies of scale.

First, results of Korea's IIT in the automotive sector will be shown.

Table 5. Korea's IIT in the automotive sector with all FTA partners

	-2	-1	FTA	1	2
Chile	0.00	0.00	0.00	0.00	0.00
Singapore	0.25	0.39	0.30	0.25	0.10
EFTA	0.47	0.21	0.31	0.31	0.50
ASEAN	0.11	0.12	0.11	0.08	0.09
India	0.06	0.12	0.38	0.07	0.22
EU	0.26	0.32	0.28	0.32	0.27
Peru	0.00	0.00	0.00	0.00	0.00
United States	0.06	0.10	0.08	0.08	-

*Source: Calculated using UN COMTRADE dataset

For the case of Korea and its free trade partners, it can be broadly observed a less stable behaviour on the one hand with low or inexistent levels of IIT or on the other hand, with volatile conduct with some periods of high and low IIT.

EFTA shares the highest levels of IIT with Korea according to the Grubel-Lloyd Index. It can also be observed that after two years of the FTA's entry into force the IIT increased but not at dramatically higher levels than the levels seen before the FTA.

The lower or inexistent levels of IIT are shared with Chile and Peru, which can suggest either evidence of the lack of specialization in the sector from this economies or that Korea is getting supplies from other partners in the region such as Brazil.

The European Union shows a stable behaviour with relatively low levels of IIT as well as Singapore that contrary to what was expected saw its levels of IIT in the sector decrease after the entry into force of the FTA. This diversion surely occurred in benefit of other productive industries for both partners.

India represents an important partner in the automotive sector for Korea, even though the levels of IIT are not as representative as the other partner's; its highest peak was reached during the year of the sign of the Agreement. However it should be noted that India represents the most important supplier of vehicles in the region, leaving the Asian market to other suppliers.

As a representative example of RTA, ASEAN saw its levels of IIT decreasing with Korea as its levels of specialization in the sector differ drastically.

Table 6. Korea's IIT in the automotive sector with non FTA selected partners

	2006	2007	2008	2009	2010
Japan	0.18	0.27	0.24	0.22	0.17
China	0.36	0.44	0.42	0.24	0.28
Canada	0.37	0.28	0.25	0.12	0.11
Brazil	0.19	0.19	0.01	0.01	0.00
Mexico	0.14	0.09	0.07	0.13	0.12

*Source: Calculated using UN COMTRADE dataset

For the case of Korea's IIT levels with non free trade partners, it can be

observed that in general the indicators are higher than those with free trade partners. For four cases above presented, the IIT has decreased from 2006 to 2010, however for the case of Mexico, has been steadily increasing up to 2009, and in 2010 showed a slight decline along with Canada and Brazil.

Even though the levels of IIT with China are decreasing, its indicators are higher in comparison with the other selected trading partners, (FTA and non FTA partners) what suggests that the production in the automotive sector is integrated.

The indicators show that the highest levels of IIT are shared with the European Union, EFTA and China. However, the IIT in the automotive sector is higher for trading partners without the scope of an FTA than those with Agreements. Korea is negotiating FTA with China and Japan and it can be foreseen the IIT of these trading partners will increase at least in the automotive sector that includes not only the trade of vehicles but also the trade of supplies for its manufacture (calculation of trade in auto parts is included in the results provided). The economies of scale in Asia are promoting and sustaining the formation of clusters that in this particular sector is maintaining the chain of production as the behaviour of IIT for Korea with China and Japan is proving. Inside the region, the trade with ASEAN is not significant for the sector. Nevertheless it is important to consider that for purposes of this research, the trade of partners with low levels of specialization was combined with stronger economies that compete in the automotive sector, and therefore it can be expected to obtain low level of IIT

for RTA's such as ASEAN.

By analyzing the behaviour of Korea's IIT, it can be said that as its levels are not too close 1, it is maintained at a medium range for the automotive sector. Mexico represents another partner with high specialization in the sector. Below, results for Mexico's levels of IIT are presented.

Table 7. Mexico's IIT in the automotive sector with all FTA partners

	-2	-1	FTA	1	2
NAFTA	0.24	0.31	0.32	0.38	0.40
Costa Rica	-	-	0.01	-	-
Nicaragua	-	-	-	-	-
Chile	0.16	0.35	0.60	0.67	0.75
EU	0.29	0.24	0.28	0.28	0.24
Israel	0.23	0.54	-	-	-
Northern Triangle	0.00	0.01	0.02	0.01	0.15
EFTA	0.20	0.41	0.27	0.44	0.01
Uruguay	0.54	0.45	0.24	0.30	0.50
Japan	0.13	0.05	0.19	0.14	0.14
Colombia	0.35	0.16	0.03	0.25	0.14
Peru	0.04	0.03	0.04	0.01	-
Bolivia	-	-	-	-	-
MERCOSUR	0.34	0.24	0.19	0.15	0.18

*Source: Calculated using UN COMTRADE dataset

Mexico relies on free trade partners to spread its trade around the world.

However since NAFTA entered into force in 1994, the dependence on the U.S. market has increased and it is becoming a burden for the Mexican economy. As established before, Mexico has one of the highest levels of IIT within the OECD and with the United State and consequently, as they have similar levels of specialization in the sector this case is not the exception.

The levels of IIT with Chile show the greatest increase within the two years after the Agreement's entry into force in comparison with other trading partners. The increase of IIT seen with NAFTA were not dramatic but it has to be considered that for the calculation of its levels, the trade with Canada and United States were combined and valued while the trade with the U.S. is bigger than with Canada. As in the case of ASEAN with Korea, all parties of the RTA were considered as what it is been measured is the effectiveness of Free Trade Agreements on IIT.

Trading partners such as Costa Rica, Nicaragua, Peru and Bolivia show extremely low or inexistent levels of IIT, mostly due to the fact that these economies are not intensive in the automotive sector and also are linked to RTA's in South America. Trade (exports and imports) from these partners is based mainly on low aggregate value goods.

The Central American Northern Triangle shows higher IIT levels than the partners mentioned before, this behaviour can be explained by the proximity to Mexico and the formation of clusters to provide the input for the industry. The Northern Triangle is the only case were the level of IIT increased steadily after the FTA's entry into force starting from a low level during the two

immediate years before of the FTA.

MERCOSUR represents the most important trading block in South America, even though it also showed increase of IIT after the FTA, it took off after the decrease of the levels during the year of entry into force (2003). Indicators of IIT showed to be higher two immediate years before the Agreement. For the case of MERCOSUR it is worth noting that Mexico is not part of this RTA or has a general Agreement with its contracting parties. However in 2003 Mexico signed an Economic Complementation Agreement (ACE 53) to open the automotive sector to MERCOSUR and increase the volume of trade in the industry for both parties. In any case, the completion of the Agreement could have helped the levels of IIT to take off as two years before 2003 these indicators dropped.

For the period of time measured, Uruguay shows the highest level of IIT among Mexico´s free trade partners for the second year after the Agreement entered into force and developed a better performance than other partners such as Colombia or Israel. This last case showed completely opposite results to what was expected as it fell from high levels of IIT before the Agreement to almost cero in its indicators during the next two years of the entry into force in 2000.

To show and interpret the behaviour of Mexico's IIT with its major volume trading partners in Asia, the following table is included with the IIT levels shared with China.

Table 8. Mexico's IIT in the automotive sector with non FTA selected partners

	2006	2007	2008	2009	2010
China	0.36	0.44	0.47	0.23	0.14

*Source: Calculated using UN COMTRADE dataset

Mexico has multiple Free Trade Agreements with the most important economic blocks worldwide; however, despite the approach of countries like Korea, the Mexican Government has been reluctant to sign Agreements with other Asian countries after 2005 that signed its last FTA in the region with Japan.

For purposes of this research the case of China was considered as it had one of the best performances after the world crisis of 2008, when automotive companies had to close manufacturing plants around the world due to the economic slowdown and decrease in the demand of goods in the automotive industry.

After the year 2008, IIT levels with Mexico decreased due to reduction of trade in the sector boosting China's exports to Mexico. In 2008 the IIT reached its highest peak since 2006 and decreased until 2010. On average China, Korea and Japan have IIT levels of 0.13 with Mexico which can be consider low. Japan showed a volatile behaviour before and after the FTA suggesting that FTA's are not decisive for the flow of trade in the automotive sector for these trading partners.

4. CONCLUSION

The Grubel-Lloyd index used in this research measures the level of integration of economies in special sectors. Having shown these indicators it can roughly be inferred that the level of IIT for both reporters is similar for FTA and non FTA partners. IIT tends to increase within regional Free Trade Agreements such as NAFTA in the case of Mexico but decreases or it is low for the case of ASEAN with Korea, whose major partner on IIT is represented by EFTA that also shares significant but volatile levels of IIT with Mexico.

The low levels of IIT in cases such as ASEAN with Korea and "Northern Triangle" with Mexico can be attributable however to the state of complementary economies that these set of countries mutually represent.

Mexico and Korea IIT in the automotive sector still represents a median number compared to the results showed by the analysis of the IIT with the European Union, EFTA and NAFTA. In addition, as the indicators exhibited, Free Trade Agreements do not seem to have a clear and marked effect in the increase of IIT in the automotive sector.

As for the research questions previously raised, for the automotive sector it can be concluded that adoption of Free Trade Agreements does not determine the increase of IIT more than the development of specialized industry in non free trading partners. The second question regarding an increase of IIT between Mexico and Korea after a Free Trade Agreement is being address considering the current investment companies such as KIA and its suppliers

are making in Mexico. According to the behaviour of other trading partners with the scope of FTA it can be foreseen that the IIT would slightly increase without a significant impact. On the other hand, the attraction of Korean investment in Mexico seems to be more motivated because of the location of the country in Latin America and the benefits an economy of scale offers as a part of NAFTA than looking for the adoption of an FTA or the benefits the Korean automotive industry would get inside its scope.

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Appendix

A. Korea's Free Trade Agreements (year of entry into force)

Chile	2004
Singapore	2006
EFTA	2006
ASEAN	2007
India	2010
European Union	2011
Peru	2011
United States	2012

B. Mexico's Free Trade Agreements (year of entry into force)

NAFTA	1994
Costa Rica	1995
Bolivia	1995
Nicaragua	1998
Chile	1999
European Union	2000
Israel	2000
Northern Triangle	2001
EFTA	2001
MERCOSUR (Automotive sector)	2003
Uruguay	2004
Japan	2005
Colombia	2011
Peru	2012

C. Members of trade blocs calculated

ASEAN	Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam.
EFTA	Iceland, Norway, Switzerland.
European Union	Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxemburg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, United Kingdom.
NAFTA	Canada, Mexico, United States.
Northern Triangle	El Salvador, Guatemala, Honduras.
MERCOSUR	Brazil, Uruguay, Paraguay, Argentina.

D. Codes used to calculate IIT from SITC Rev.3 (UN COMTRADE)

78	Road Vehicles.
781	Motor cars and other motor vehicles principally designed for the transport of persons (other than motor vehicles for the transport of ten or more persons, including the driver), including stations-wagons and racing cars.
782	Motor vehicles for the transport of goods and special-purpose motor vehicles.
783	Road motor vehicles.
784	Parts and accessories of the motor vehicles of groups 722, 781,782 and 783.

논문초록

산업 내 무역, 멕시코와 한국 자동차 부문의 비교 분석

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세계 교역 역동 속에서 산업 내 무역의 증가는 자유 무역 협정에 대한 논의를 시작하게 하였고 비자유 무역 지역 내에서의 산업 내 무역 발전과 그 투자에 대한 영향까지 고려하게 하였다.

자유 무역 지대의 산업 내 무역에 대한 측정 및 분석 연구에 따르면, 멕시코와 한국 양측 무역국은 자동차 부문에 동일 수준의 전문성을 갖추었기 때문에 두 국가의 자유 무역 협정 채택은 산업 내 무역(IIT)의 작용을 예측해 볼 수 있다.

북미 자유 무역 협정 (NAFTA) 에 입지를 굳히고 있는 멕시코와 아시아 무역 흐름의 주도국 중 하나인 한국은 무역의 새로운 트렌드를 보여주는 중요한 표본이 된다. 세계 자동차 생산에 멕시코

와 한국이 차지하는 점이 크다는 것을 고려해 본다면, 자유 무역 협정은 특히 양국의 자동차 분야에 관련된 산업 내 무역에 상당한 영향을 끼칠 것이다.

멕시코의 민간 투자(율)은 산업 내 무역의 레벨과 함께 증가하고 있다. 주요 원인은 북미 자유 무역 협정 (NAFTA) 이지만, 반면에 멕시코 민간 투자율과 자유 무역 협정 범위 밖에 있는 다른 무역 상대국들과의 관계는 무역과 투자의 부흥을 일으키는 아시아와의 협정 체결 이점에 대해서 재고하게 만든다.

주제어: 산업 내 무역, FTA, 자동차 부문의, 투자.

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