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# Impact of Japanese direct investment in Mexico : the case of Japanese immigration and automotive industry in Bajio region

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## Japanese migration focused on FDI in Mexico

Martha Elena Campos Ruiz

#### Abstract

Migration is a subject that has never gone out of fashion. Speaking of the migration between Mexico and Japan, has a link since the 19th century, where as part of the policy, the Japanese were transferred to Mexico by contract to work in different sectors. With the passage of time, migration also undergoes changes as an effect of globalization. Regarding the current Mexico-Japan relationship, there is a drastic increase in Japanese FDI in Mexico, particularly in the automotive sector. Likewise, every day more is becoming noticeable a new Japanese migratory generation in Mexico for the first time in its history to 10 thousand Japanese in Mexico in 2016.

This article will make a brief reflection on the flow of Japanese FDI and Japanese migration, and their interrelation between these two elements and impact in Mexico.

### Introduction

Migration is one of the issues that has never gone out of fashion, no country has been free of this phenomenon, but on the contrary today this issue has also undergone changes by globalization in comparison with past years.

Migration is one of the components of demographic dynamics and its behavior is also influenced by the population growth. To understand this topic of great interest, migration is defined as the change of residence of an individual from the

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place of birth to the place of destination crossing borders, boundaries, or regions of a country.

Migratory processes are part of the social dynamics that are influenced by political, psychosocial, economic, cultural, demographic and structural phenomena in such a way that migrations bring together individual and social interests. Migration can be studied from two points of view: internal migration and international migration. The first is understood as the changes of residence of individuals in the interior of the country (rural-rural, rural-urban, urban-urban and urban-rural) and the second is understood as the change of residence crossing borders. The objective of this study is to analyze international migration focusing on the Japanese community in Mexico and foreign direct investment (FDI).

## FDI in Mexico

As the regulator of FDI, Mexico has the Foreign Investment Law. The objective of this law is to determinate rules of FDI and channel it for the development and economic and social growth of the country.

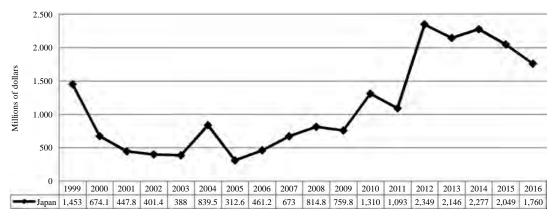
FDI is a part of the fundamental economic policies in Mexico. The Foreign Investment Law was modified in 1993, before signing to the World Trade Organization (WTO) and the North America Free Trade Agreement (NAFTA), that have contributed to changes in political, economic and social terms, which caused FDI to increase in the following years. During 1999-2016, Mexico received an average annual FDI amount of 21,164.5 million dollars.

#### Japanese FDI

Muñoz (2002) mentions the effects of globalization on international migrations and emphasizes that Japan is a country that invests in other countries, worrying about perfecting its production system by creating international supply networks where its suppliers comply with the quality standards to that their assembly plants follow. According to data from the Secretariat of Economy of Mexico, the main investor countries in Mexico according to the total FDI in the 2005-2015 period, the United States is the first investor with 46.3%, in second Spain with 10.4%, third Canada 7.8%, fourth Belgium 5.3%, fifth Japan 4.5%, sixth Netherlands 4.2%, Germany is in seventh place with 3.3%, eighth United Kingdom 2.9% and the rest of countries represents 15%. The manufacturing sector dominates more in the FDI flow, that is, it represents 58.6% of the total FDI, followed later by the service sector with 9.3% (Secretaría de Economía, 2017).

In April 2005, the Mexico-Japan Economic Partnership Agreement (MJEPA) enters into force, where both countries strengthen their commercial relations in which they complement each other economically, and at the same time promote the development of their countries. It is observed that after 2005 the Japanese FDI flow increased and later presented a decrease in 2008 due to the economic crisis, and for 2011 it reduced by natural factors (earthquake and tsunami) that affected the economy of the country, but Japan somehow increases its investment in 2012, staying at the levels and it is estimated that investment will decrease slightly from 2016 due to the uncertainty that Mexico, United States and Canada are going through (see Graph 1).

Japan is waiting for the revision of NAFTA, but this is not a factor to slow down the flow of investment in Mexico, but on the contrary each year 100 Japanese companies arrive, according to the comment of Mr. Tadashi Minemura, JETRO



Graph 1 : JAPANESE FDI IN MEXICO 1999-2017

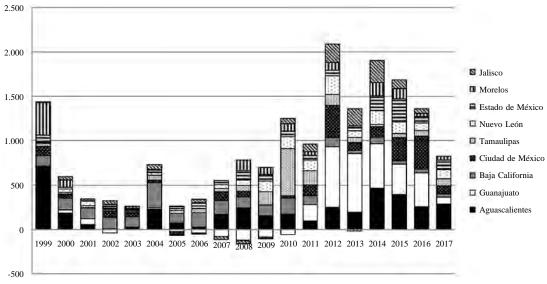
SOURCE: Prepared by the Secretary of Economy (2017)

Mexico's managing director, in a periodic interview<sup>1</sup>.

During this period (1999-2017) the sum of Japanese FDI is strongly concentrated in 9 States of the Mexican Republic, as the first recipient is Aguascalientes (19%), then, Guanajuato (12%), Baja California (10.3%), Mexico City (8.7%), Tamaulipas (7.5%), Nuevo León (6.8%), State of Mexico (6.2%), Morelos (5.8%) and Jalisco (5.1%) (see **Graph 2**). According to the behavior of the FDI, Japanese manufacturing companies have increased and the labor migration also have increased follows it, as will be observed later.

Most of the Japanese FDI in Mexico (90%) had been dropped in the automotive and auto parts industry, this behavior has been intensive during 2010-2016 according to the data of the Ministry of Foreign Affairs of Japan from which they are classified as follows:

Foreign companies tend to spread either by investing in other companies, by generating new branches or by partnering with other companies. When observing the



Graph 2 : BEHAVIOR OF JAPANESE FDI IN THE NINE STATES OF MEXICO 1999-2017

SOURCE: Prepared by the Secretary of Economy (2017) Note: The data for 2017 represent the total for the third quarter of the year.

1) Consulted on September 11, 2017, in the newspaper El Milenio:

http://www.milenio.com/ negocios/empresas\_japonesas-mexico-japon-jetro-ina-guanajuato-queretaro-jalisco-milenio\_0\_957504505.html

incursion form of the Japanese companies during the period 2010–2016, the strategic alliance is the most adopted form with the increase of 402% in the period. It is followed by the one of 100% contribution by Japanese companies in Japan with a 234% increase. Likewise, it is interesting to see the increase of the companies founded by the Japanese residents in Mexico, which show the increase of 309% in the period. These companies do not seem to be the result of Japanese FDI, however, they will be relevant when studying the behavior of Japanese migration in Mexico, since, in this case, Japanese residents are supposedly adapted to Mexico. (see **Table 1**)

STRATIFICATION	SUB-STRATIFICATION	2010	2011	2012	2013	2014	2015	2016
Proper Japanese companies	(a) Branch offices	18	19	16	22	18	24	25
(without legal personalization)	(b) Representation offices	18	21	18	27	26	26	32
Companies with their own	(c) Affiliated companies that japanese companies contribute in100%	313	312	371	429	558	651	735
	(d) Affiliated companies to which Japanese companies and other foreign companies contribute in a joint venture		53	55	75	133	155	193
legal status abroad (in Mexico)	<ul><li>(e) Branches (or subsidiaries) that the affiliated companies referred to (c) and (d) established in Mexico</li></ul>		35	43	77	26	42	58
	(f) Companies that Japanese residents in Mexico founded		24	42	49	53	58	65
Unidentified companies						1	3	
Total	428	464	545	679	814	957	1111	

Table 1 : TYPES OF JAPANESE COMPANIES<sup>2)</sup> IN MEXICO

Source: Own elaboration with the data of MOFA (2011-2017)

2) The "Japanese companies" are divided into two categories: I. Proper Japanese companies: Which are the companies or establishments that have not been established according to the law of the foreign country. In the survey, this type of companies represents only 7.1% of all Japanese companies in the world (in 2016), which are subdivided into (a) Branches; (b) Representation offices: II. Companies with their own legal status abroad: Which are the companies that have been constituted according to the law of the foreign country, which represent 50% of all Japanese companies in the world (in 2016), which are subcategorized in (c) Affiliated companies that Japanese companies contribute in 100%; (d) Affiliated companies to which the Japanese company and other foreign companies contribute in joint venture; (e) Branches or subsidiaries established by the affiliated companies referred to (c) and (d); and (f) Companies that Japanese residents abroad founded. In case a Japanese companies or establishments, and therefore they will be considered as companies or establishments, and therefore

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STATES-RECEPTORS OF JAPANESE FDI								
		2010	2011	2012	2013	2014	2015	2016
NORTHWEST	Baja California	64	64	65	73	64	68	62
	Baja California Sur	1	2	2	2	2	2	2
	Chihuahua	13	14	15	15	17	18	24
	Durango	1	1	1	1	2	2	2
	Sinaloa	1	1	1	1	4	4	4
	Sonora	0	0	2	4	4	4	5
NORTHEAST	Coahuila	11	14	14	20	30	30	31
	Nuevo León	60	67	71	76	74	83	91
	Tamaulipas	12	14	15	15	11	16	18
WEST	Colima	0	0	1	2	4	4	4
	Jalisco	24	27	28	34	45	53	68
	Michoacán	0	0	0	1	1	1	1
	Nayarit	0	0	0	0	1	1	1
EAST	Hidalgo	2	0	1	1	1	1	1
	Puebla	2	2	2	2	4	4	4
	Tlaxcala	0	1	1	1	1	1	1
	Veracruz	1	1	1	3	4	4	3
NORTHERN CENTRAL	Aguascalientes	24	25	33	52	72	94	119
	Guanajuato	10	14	47	92	150	187	234
	Querétaro	16	14	19	28	42	63	88
	San Luis Potosí	6	5	10	21	34	46	53
	Zacatecas	1	2	2	4	5	9	9
SOUTH	Ciudad de México	157	153	163	172	177	197	215
CENTRAL	México	32	28	29	32	32	34	36
	Morelos	4	5	6	7	12	11	10
SOUTHWEST	Chiapas	0	0	1	1	1	1	6
	Guerrero	1	1	1	1	1	1	1
	Oaxaca	0	0	0	0	0	0	0
SOUTHEAST	Campeche	0	0	2	2	2	1	1
	Quintana roo	6	6	10	12	13	13	13
	Tabasco	0	0	0	0	0	0	0
	Yucatán	2	3	3	4	4	4	4

## Table 2 : NUMBER OF JAPANESE COMPANIES OF THE MEXICAN STATES-RECEPTORS OF JAPANESE FDI

Source: Prepared by the author with data from the Embassy of Japan in México, Consulate General of Japan in León  ${\rm Guanajuato}^{3)}$ 

3) There is difference in the figure for 2010 between the data of Embassy of Japan and that of MOFA, and also there is difference in the figures for 2012 between the date of Consulate General of Japan in León, Guanajuato and that of MOFA.

Likewise, automotive assemblers have been developing activities with their growth strategies in which some sought to acquire capacities through alliances, mergers and acquisitions, concentrating the industry horizontally, while others acquired capacities through internal growth and learning (Álvarez, 2002).

It should be noted that the installation of new Japanese companies in Mexico is gradually occupying important segments in the market by which a consolidation of some regions such as the Northwest and Northeast regions is done (**Table 2**).

### Previous studies on Japanese migration

Some scholars on the subject of international migration point out that diplomatic relations between Mexico and Japan were established until 1888 despite the efforts made by some government officials ... to foster ties between nations as well as Japanese immigration to Mexico from the decade of the 60s of the 19th century (Peddie, 2006).

Other authors consider that the Japanese migration in Mexico has occurred in different stages. The researcher of the Colegio de México, Dr. María Ota Mishima, in her study covers the Japanese migration movement the period from 1890 to 1978. She divides the Japanese migration in seven stages from 1890 to 1901 in which the first two types of immigrants arrived, by contract (agricultural settlers) and by free voluntary. The free migrants were those who arrived, bought and worked their land, and the second, who arrived under contract, were only employed to provide services to the companies; the period 1900-1910 refers to the Japanese migration under contract, who arrived in Mexico due to lack of labor for the mining industry, the construction of railroads and the agriculture sector; from 1900 to 1940, the fourth, fifth and sixth type of illegal immigrants, skilled immigrants and other Japanese arrived on demand, known in Japanese as yobiyose (called workers), that is, those Japanese who installed in the country, invited their compatriots through letters and in some way they were authorized for their stay in the country. The seventh stage is also characterized (when it starts to mobilize capital around the world together with the displacement of technicians) in which technicians and professionals arrived according to the needs of the companies and also through this route, the number of marriageable Japanese women immigrants was increased.

That is, in the postwar period while Japan regained its economy and managed to reach other developed countries, Japanese companies began to internationalize by entering other countries establishing their production systems, which was intensified after the 80s and was encouraged by the overvaluation of the yen through the Plaza Agreement (Okabe, 2009). Here we can observe a change in the behavior of Japanese migration that differs from that of the previous stages.

### Japanese migration in Mexico

Mexico has been characterized as an expelling country of natives, at the world level Mexico occupies the second place, -according to the report of international migration by United Nations 2015-, in this term, and Mexican natives not only emigrate to the United States, they but also look for other countries. On the other hand, it is also a nation where citizens from other countries immigrate, such as North Americans, Canadians, Europeans, South Americans, Central Americans, Asians, etc.

In the 80s the Japanese migrant population decreases when Mexico was going through an economic crisis, that induced the loss of purchasing power, unemployment and inflation, etc.

During this period, Mexico restructures its political, economic and social system. It was a decade of economic stagnation. It was also when Mexico incorporated into the General Agreement on Tariffs and Trade (GATT). Subsequently, these restructuring policies were reinforced through the privatization of state enterprises and organizations and reduction of public expenditure, etc.

From the 1990s to 2000, the number of immigrants increased. According to the Population Census of 2000, there was a total of 492,617 inhabitants with other nationality with a 3.71% growth rate and the Japanese migrant population with an average of 2.04% (see **Table 3**). Japanese migration reflects the same increasing behavior. In this decade, Mexico signs the NAFTA that came into force in 1994.

#### Japanese migration focused on FDI in Mexico

Years	FOREING POPULATION	JAPANESE POPULATION
1980-1990	2.43	-2.08
1990-2000	3.71	2.04
2000-2010	6.47	0.22

Table 3 : GROWTH RATES OF FOREIGN AND JAPANESE POPULATION IN MEXICO

Source: Own elaboration with INEGI data

## Labor migration

Mosqueda points out the following as part of the objectives of an FDI recipient country: "... to seek the admission of trained workers, temporary workers, workers more productive than native workers, workers that do not involve high costs, and to promote transnational ties and the peaceful integration of immigrants with all natives with the aim of promoting legal migratory flows for the recipient countries" (Mosqueda, 2014).

Likewise, the MJEPA in its chapter 10 makes reference about the entry and temporary stay for business purposes, where indicates the flexibility by both parties in the entry and stay of people that should carry out measures and procedures regarding the stay in a transparent manner and also guarantee the security of permanent employment and the borders of both parties, in which each party will apply their respective measures for the proper functioning of the agreement in trade and goods and services as well as conducting investment activities.

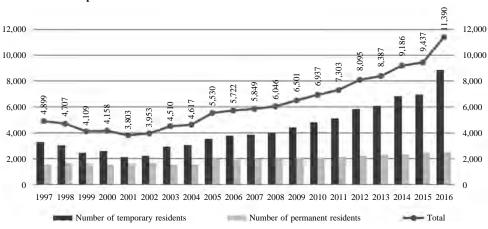
In the matter of job search, measures that affect nationals will not be applied. Those measures are applied through the National Institute of Migration, governed by the Migration Law, which establishes in Title IV, Chapter II, that foreigners can remain in the country as visitor, temporary resident and permanent resident, that always meet the requirements determined in the same law, its regulations and other applicable legal provisions<sup>4)</sup>.

<sup>4)</sup> Title IV refers to the international movement of personnel and the stay of foreigners in national territory, that consists of two chapters, the first for entries and exits from the national territory and the second focuses on the stays of foreigners.

The flows of FDI related to economic globalization generates a constant labor mobility in the matter of international migration where the migrants remain in different countries temporarily or permanently.

According to data from the Ministry of Foreign Affairs of Japan in 2016, 100 percent (11,390) - as will be seen later in **Table 5** - of migrants in Mexico, of which long-term residents (Persons residing abroad for more than 3 months and who consider temporary stay in that country and who intend to return to Japan) represent 77.7% and permanent residents (Persons residing abroad for more than 3 months and that have the permanent migratory form granted by the country of residence and that have transferred the base of life to that country from Japan) figure 22.3% (**Graph 3**).

This mobility of workers rotates temporarily in the new companies installed in the different countries where they train their employees to assume the jobs in the different countries according to the required needs. The training of workers lies in being sent to take capacitation courses at the head office.





Source: Own elaboration with the data of MOFA (2011-2017)

### **Migration focused on FDI**

In the flow of Japanese FDI in the northern central region, the States of Aguascalientes and Guanajuato in recent years has been receiving higher investment flows of the Nissan in Aguascalientes, and of Mazda and Honda in Guanajuato, which began the automobiles manufacture from the years of 2013 and 2014 respectively. A large number of sources of work has been generated. As indicated in **Graph 2**, the Japanese FDI occupation in the total investment received by Guanajuato and Aguascalientes is relatively high. The corresponding figure in Jalisco, San Luis Potosí and Queretaro has been limited, however, it tends to increase in recent years.

The increase of the companies in the States presented in **Table 4** represents 90% of the companies distributed in the Mexican Republic during the last years. The same can be said that during the same period the population growth of the Japanese community has increased with a growth rate of 8.2 percent of the year from 2011 to 2016 according to the data of the Ministry of Foreign Affairs of Japan.

In 2016, based on the records, there are a total of 11,390 Japanese inhabitants providing services in companies in Mexico, most of which are concentrated in the following states: Mexico City (3,418); Guanajuato (2,144); Aguascalientes (1,340); Nuevo León (660); and Jalisco occupies the fifth place with 665.

It is estimated that the respective Japanese companies become the source of employment where the Japanese people work. In this sense, the greater the number of Japanese companies, the greater the Japanese migrants will be. Of course, it is observed that there are more temporary migrants than permanent migrants (see **Graph** 3), which coincides with the trend of Japanese migration in Mexico as referred to above.

It is notable that the behavior of both types of resident varies with the exception of Mexico City. As shown in **Table 4**, it illustrates that according to the number of companies, the number of inhabitants of Japanese nationality increases. Regarding permanent residents, there is a greater number in Mexico City, and the

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THE MAIN TEN STATES OF MEXICO 2011-2010						
	2011	2012	2013	2014	2015	2016
	14	47	92	150	187	234
GUANAJUATO	201	692	904	1,208	1,430	2,144
CD. DE MEXICO	153	163	172	177	197	215
CD. DE MEXICO	2,991	3,181	3,086	3,278	3,210	3,418
	25	33	52	72	94	119
AGUASCALIENTES	592	718	740	831	920	1,340
NUEVO LEÓN	67	71	76	74	83	91
NUEVO LEON	654	704	621	648	607	660
QUERETARO	14	19	28	42	63	88
QUERETARO	184	208	298	358	429	644
JALISCO	27	28	34	45	53	68
JALISCO	510	548	525	527	525	665
BAJA CALIFORNIA	64	65	73	64	68	62
BAJA CALIFORNIA	149	146	146	159	159	164
SAN LUIS POTOSÍ	5	10	21	34	46	53
SAN LUIS POTOSI	65	63	72	131	223	321
MÉXICO	28	29	32	32	34	36
	476	463	442	461	468	466
COAHUILA	14	14	20	30	30	31
COARUILA	117	135	141	144	138	144

 Table 4 : JAPANESE COMPANIES AND JAPANESE RESIDENTS IN

 THE MAIN TEN STATES OF MEXICO 2011-2016

Column above: Number of Japanese companies

Column below (orange): Number of Japanese residents

Source: Own elaboration with the data of MOFA (2011-2017)

States of Mexico and Jalisco follow it. Likewise, the States that concentrate between 100 and 117 Nipponese are Morelos, Guanajuato, Nuevo León and Aguascalientes, as shown in **Table 5**.

This increase in companies and Japanese population has prompted Guanajuato which is one of the States with the highest Japanese investment reception as indicated above - to provide services in the Japanese language, human resources training in services, as well as the capacitation of human resources in upper secondary and higher education according to the profile of the jobs of Japanese companies (person in charge of the National Institute of Migration of the State of Guanajuato)<sup>5)</sup>. And bilingual schools have been created, such as Japanese schools

<sup>5)</sup> Consulted on November 25, 2017, in the financial: http://www.elfinanciero.com.mx/economia/

#### Japanese migration focused on FDI in Mexico

TOTAL PERMANENTS RESIDENTS					TOTAL TEMPORARY RESIDENTS					
TOTAL	2,544 (2	2.3%)			TOTAL	8,846 (7	.7%)			
STATE		TOTAL RESIDENTS	STATE	TOTAL RESIDENTS	STATE		TOTAL RESIDENTS	STATE	TOTAL RESIDENTS	
CD. MEXICO.		1,029	CHIAPAS	23	CD. MEXICO		2,389	VERACRUZ	50	
ESTADO DE ME	EXICO	250	YUCATAN	18	GUANAJUATO		2,029	TAMAULIPAS	42	
JALISCO		204	SONORA	18	AGUASCALIEN	TES	1,239	OAXACA	40	
MORELOS		117	SAN LUIS POTOSI	15	QUERETARO		581	YUCATAN	28	
GUANAJUATO		115	OAXACA	15	NUEVO LEON		558	GUERRERO	25	
NUEVO LEON		102	TAMAULIPAS	13	JALISCO		461	CHIAPAS	25	
AGUASCALIEN	TES	101	HIDALGO	13	SAN LUIS POTO	SI	306	MICHOACAN	23	
BAJA CALIFOR	NIA	79	COLIMA	12	ESTADO DE ME	XICO	216	DURANGO	22	
PUEBLA		75	SINALOA	12	QUINTANA ROO	)	210	COLIMA	18	
QUINTANA ROO	С	69	GUERRERO	9	COAHUILA		96	HIDALGO	15	
QUERETARO		63	NAYARIT	7	BAJA CALIFORM	JIA	85	SINALOA	13	
VERACRUZ		53	DURANGO	4	MORELOS		75	NAYARIT	13	
COAHUILA		48	ZACATECAS	2	PUEBLA		74	SONORA	12	
BAJA CALIFOR	NIA SUR	26	CAMPECHE	2	CHIHUAHUA		73	TABASCO	12	
CHIHUAHUA		24	TABASCO	1	BAJA CALIFORNIA SUR		53	CAMPECHE	8	
MICHOACAN		24	TLAXCALA	1	ZACATECAS		53	TLAXCALA	2	

#### Table 5 : JAPANESE RESIDENTS IN MEXICO 2016

Source: Own elaboration with the data of MOFA (2017)

with recognition of the Japanese educational authorities where their own fellow teachers teach the courses to the children of employers and workers.

In Aguascalientes the authorities have worked to provide the infrastructure and services to the Japanese citizens, that is, hospitals, basic education schools with recognition of the Japanese education system, support networks, security, restaurants of Japanese gastronomy, etc.<sup> $6^{0}$ </sup>

Likewise, the participation of Japanese women in the working area is minimal, as quoted by researcher Shinji Hirai, "It should be noted that the male predominates this type of labor and rotational migration in Nuevo León. To date I have not met or seen any women who came to Nuevo León as an expatriate" (Hirai, 2016).

Also, one of the results, that were reflected in the survey realized by PROMEJ  $2015^{7}$ , is that most of the residents are married, to which the academic Hirai

japoneses-segundos-extranjeros-en-guanajuato.html

<sup>6)</sup> Consulted on December 28, 2017, on the website of the Government of the State of Aguascalientes: http://www.investinaguascalientes.gob.mx/multiculturalidad.html

<sup>7)</sup> The PROMEJ designed and applied a survey in the State of Guanajuato to analyze in general terms how the Japanese community lives in that State and how they feel in Mexico, and also to

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Year	Man	%	Woman	%	TOTAL
2010	3,702	53.4	3,235	46.6	6,937
2011	3,902	53.4	3,401	46.6	7,303
2012	4,430	54.7	3,665	45.3	8,095
2013	4,695	56.0	3,692	44.0	8,387
2014	5,208	56.7	3,978	43.3	9,186
2015	5,389	57.1	4,048	42.9	9,437
2016	6,572	57.7	4,728	41.5	11,390

Table 6 : TOTAL JAPANESE RESIDENTS IN MEXICO BY SEX 2010-2016

Source: Own elaboration with the data of MOFA (2011-2017)

mentions "Some of those who came for the first time to do the labor service abroad are single, but many are newlyweds or have just become parents. In the case of newly married expatriates, it is common to bring their wives and children a few months after they have settled in Nuevo León" (Hirai, 2016). Likewise, they occupy positions of trust as technicians or executives, as is the case of migrants over 50 years of age occupying the positions of president or director of the subsidiary, and the technicians or executives are over 40 years of age, that is what Dr. Hirai points out in his study.

In this way we can say that the number of Japanese male inhabitants in Mexico is greater than that of women, which reflects an inverse behavior to the female as it is reflected in **Table 6**. As a result, men are more susceptible to accept to migrate in a temporary way to other countries.

## Conclusions

Migration focused on FDI is an instrument that Japan has always considered in its policies during the course of its history. The Japanese have kept in contact with their nationals in the different countries. Since 1888 with the Treaty of Friendship the free immigration, between both Mexico and Japan occured. As part of the policy, the

suggest that the governmental authorities can promote an improvement of life of the Japanese. The survey was formed in eight sections such as: transportation, health, education, housing, stores and shopping malls, basic food basket, other matters related to lifestyle. See: Campos (2015)

Japanese were transferred to Mexico by contract to work in different sectors such as mining, agriculture and in the construction of railways. Likewise by letter invitation by his countrymen who were installed in Mexican lands. On the other hand, there were illegal immigrants who were pressured in the United States, adding those who came from other countries in the South America. In order to control the entry of foreigners as technicians, professionals and business people, the General Population Law came into force in accordance with the political reforms that had been implemented. Subsequently, the National Institute of Immigration was created. On the other hand, business activities and the production process were globalized, which impact on the movement of personnel where the enterprises transfer their employees as immigrants to different countries, including Mexico.

As is to be observed, the central region is the most favored zone, especially the States of Guanajuato and Aguascalientes. These are the entities that have received the greatest Japanese investment flow in recent years that, as mentioned above, have created a source of work, as well as the greater number of companies were installed. In spite of the changes that have been made in political matters to favor FDI successfully and boost the competitiveness and development of the domestic market of automobiles in investment of infrastructure for automotive production, as a receiving country, all opportunities must be seized for integrating local suppliers according to the level - how to disseminate information through all the media-, and increasing training and development programs. Not all States are taking advantage of these opportunities.

Therefore, it is necessary to fulfill challenges and commitments of both countries from which they have developed initiatives for the updating of study and training programs at the level of upper secondary and higher education to improve both national and international competitiveness.

As an example the State of Guanajuato has been aware of being at the forefront in all aspects of innovation, infrastructure development, education, services and information in Japanese, close communication between the government and Consulate General of Japan. Thus, in 2016, 700 Japanese people came to the State newly, for a total of 2,144 Japanese population, and in addition, 47 new companies arrived, which gave a total of 234 companies installed in the entity.

The State of Aguascalientes is an entity that is already adapted to accommodate Japanese population, since the entity has maintained good relations with the Japanese and negotiations for many years.

FDI generates the mobility of the personnel of the different companies where the matrix is located in the country of origin from which its personnel is distributed according to their skills and work capacities. There is an immigration of qualified personnel and it is noted that the male predominates.

Thus, the higher the number of companies the greater Japanese labor migration as mentioned, and also the companies give job opportunities of that government authorities at all levels must be conscious to work assisting and improving infrastructure services, security, information, etc. It should be noted that Aguascalientes is an entity that has achieved part of this objective in making the Japanese feel at home, as it is a small state in density compared to others and has achieved national and international recognition.

As part of the present study, we will continue working on different stages of the topic focused on the behavior of Japanese migration, according to time of stay, dedication of temporary and permanent residents, etc., that is, topics related to employment and business culture, continuing with the quality of life, in order to understand more the movement of Japanese migration in Mexico.

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## The automotive industry in Mexico from an FDI perspective: the case of Japanese investment in the Bajio Region

Leo Guzman-Anaya Maria Guadalupe Lugo-Sanchez

#### Abstract

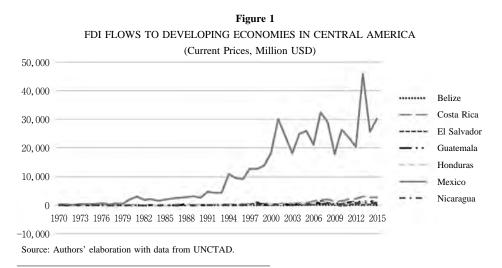
Since Mexico liberalized its economy in the 1980s, the Mexican government actively pursued to attract FDI. This was achieved by transitioning from a closed import-substitution type of development strategy to an open export-promotion strategy where FDI played a central role. Japanese FDI to Mexico showed a first wave of investment after the signing of NAFTA and later after the implementation of the EPA between Mexico and Japan in 2005. This second flow of investment sought to access the North American market (U.S. and Canada), the South American market (Brazil) and the internal market mainly in the automotive industry. The location of the automotive industry investment has clustered in the Bajio region in Mexico with the arrival of major assemblers and automotive suppliers in the states of Guanajuato, Aguascalientes, Queretaro and Jalisco. This region accounts for 51% of total Japanese FDI giving it an important economic dynamism in terms of production, employment, exports and human capital training. Further inclusion of local suppliers is desired to boost positive externalities in the region.

## Introduction

Empirical and theoretical economic literature recognizes Foreign Direct Investment (hereafter FDI) as a factor that stimulates economic growth. FDI can be beneficial to host countries through spillover effects; therefore, Governments from both developed and developing nations seek the positive externalities associated to this type of investment. Mexico was among the Latin American countries that sought to attract FDI to achieve economic growth and development. The federal government implemented public policies in order to attract FDI offering foreign companies tax incentives and subsidies since the 1980s.

The policies implemented in Mexico were effective, compared to other countries in Central America, and the Mexican experience has been recognized as a successful case in studies related to FDI attraction. **Figure 1** shows FDI flows to Central America registered from the period 1970-2015. As it can be seen in the figure, Mexico experienced a rapid FDI inflow growth after the liberalization of its economy in the late 1980s making it one of the most attractive countries for foreign investment in the developing world.

After the debt crisis of 1980s Mexico restructured its economy and policies, transitioning from import-substitution type of development strategy to an exportpromotion industrial economy. Restrictions to FDI were relaxed, and this type of investment became the main source of financing during the early 1990s (Gurria, 1994); in the process of liberalization the Mexican government sought strategic partners in other economies that allowed to stimulate trade<sup>1)</sup>. The signing of the

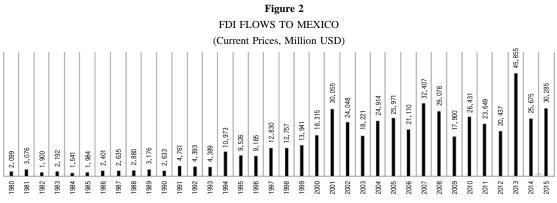


<sup>1)</sup> Mexico currently has a network of 12 Free Trade Agreements with 46 countries, 32 Reciprocal

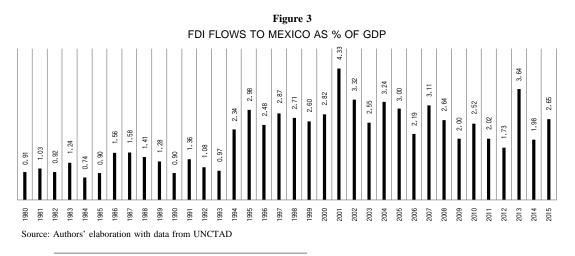
The automotive industry in Mexico from an FDI perspective: the case of Japanese investment in the Bajio Region

North American Free Trade Agreement (NAFTA) was crucial for promoting Mexico's manufacturing exports that were based on FDI; trade increased between Mexico and the United States and investment flows to Mexico registered an upward trend with the arrival of manufacturing plants to the Mexico-U.S. border.

Mexico attracted around USD 2,000 million in FDI in the 1980s but the effects of the new liberalization policies were reflected a decade later, when FDI flows reached USD 18,315 million placing Mexico as the most important recipient of investment flows in Latin America.



Source: Authors' elaboration with data from UNCTAD



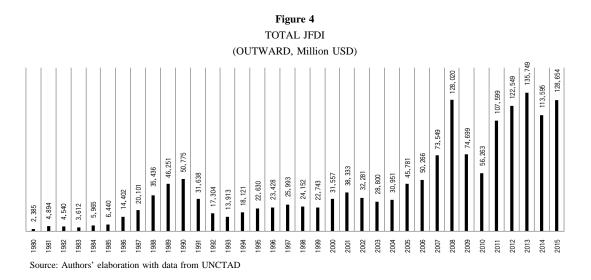
Investment Promotion and Protection Agreements (RIPPAS) and 9 Trade Agreements (Economic Complementation and Partial Scope Agreements) within the framework of the Latin American Integration Association (ALADI). (Secretariat of Economy (S.E.) of Mexico, http://www.gob.mx/se/)

In 2013, the highest amount of FDI was recorded at USD 45,855 million (**Figure 2**). Comparatively, during the beginning of the 1980s, FDI flows accounted for around 1% of the national GDP doubling in 1994, when NAFTA was signed. During the last few years, FDI flows represent between 2% and 3% of GDP (**Figure 3**).

The manufacturing sector has historically been the main receptor of FDI; in particular, the automotive industry captures the greater proportion of this investment, exhibiting growth despite the various financial crises that the country has gone through. The search for business partners has provoked positive impacts on the growth of the sector: first with the signing of NAFTA and years later with the Economic Partnership Agreement (EPA) between Mexico and Japan.

## Japanese FDI to Mexico

On the other hand, outflows of Japanese direct investment increased during the 1980s (**Figure 4**). The Plaza accord signed in 1985 led to an appreciation of the Japanese Yen, losing product competitiveness in international markets, predominantly in the United States that led Japanese firms to seek for alternative markets for their exports. NAFTA was one of the key factors that motivated Japan



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to sign an EPA with Mexico in 2004 (the first EPA for Japan with a western country); for Japan signing the EPA granted access to North American markets.

Among other benefits, Japan received preferential treatment and access to Mexican markets, protection to Japanese firms investing in Mexico and approval to participate in public government bids. The EPA represented an opportunity for Mexico of market diversification for trade and investment in Asia: a chance to attract investment flows to diverse sectors, to export Mexican products and import high technology products and gaining the benefits of bilateral cooperation; from an FDI perspective, the EPA opened the possibility for Mexican suppliers to join Japanese productive chains.

From 2005, when EPA came into force, Japanese FDI flows to Mexico have increased and are mainly directed towards the automotive sector: in 2003 FDI flows from Japan to Mexico were around USD 140 million, but by the end of 2015 the amount registered was USD 1,329 million<sup>2</sup>. The investment announced between that period accounts for USD 22.95 billion; however new investment projects were announced for 2016 from Toyota, which may further increase the amount of investment announced in Celaya, Guanajuato. Production of automobiles in Mexico will increase up to 5 million units by 2020, positioning the country as one of the five major auto producers in the world, according to the Secretariat of Economy<sup>3</sup>.

The arrival of Japanese multinational companies of the automotive sector to Mexico's Bajio region have strengthened the economic relationship between those two countries: from 2009, the number of Japanese companies in Mexico was approximately 400, increasing dramatically to 1,000 in 2017. Besides the growth in investment, bilateral trade flows have increased as well particularly after the entry into force of the EPA (Lugo Sánchez, 2015).

Japan became the fifth largest country in 2005 among developed economies to destine FDI flows to Mexico, preceded by investment from United States, Spain, the Netherlands, the UK and Germany (Dussel Peters, Galindo Paliza, Loria & Mortimore,

<sup>2)</sup> Secretariat of Economy (S.E.) of Mexico, https://www.gob.mx/se/.

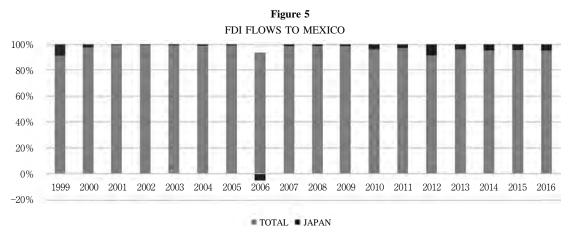
http://www.elfinanciero.com.mx/empresas/toyota-invierte-mil-mdd-para-nueva-planta-en-celaya. html

2007).

As mentioned previously, Japanese FDI concentrates mainly in the manufacturing industry, with a larger percentage of participation in the automotive and electronics sector of 76.3%. **Figure 5** shows total investment flows from Japan vs total FDI flows to  $Mexico^{4}$ .

In terms of FDI location, Japanese investors were moving their production plants from the United States to the northern states of Mexico during the second half of the 1990s, however, the arrival of Nissan to the Mexican Bajio region managed to attract more investment to the area, following the establishment of its two plants in the states of Aguascalientes and Morelos, starting a trend location of Japanese FDI.

Among the contributions of Japanese FDI are the training and development of human capital, participation in Mexico's main macroeconomic variables, and, as a result of its involvement with the automotive industry, the establishment of different Information Technology (IT) centers. The Technological Development Center of Nissan is the first of its kind, employing 366 engineers of local origin whose main objective is the development of new technologies to reduce pollution, collaborating closely with their peers in research centers located in United States and Brazil.



Source: Authors' elaboration with data from SE

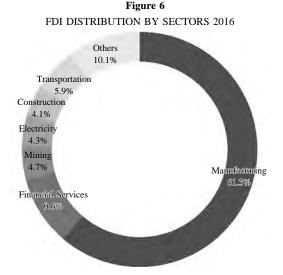
<sup>4) 2006</sup> shows a negative percentage of JFDI to Mexico, caused by disinvestment by large transnational companies in Japan, which slowed outward Japanese flows to developed and developing economies, including Mexico.

## Japanese Automotive FDI in the Bajio Region.

The manufacturing sector in Mexico traditionally has been the main attractor of FDI. From 1980 to 1988 the percentage of FDI registered around 66% with 12% destined to the automotive sector. From 1989 to 1993 FDI grew at a slower rate registering 28%. On the next period, marked by the signing of NAFTA, FDI flows increased as expected; however, a financial crisis occurred in Asia, Russia and Brazil with financial instability that affected FDI flows to Mexico (Dussel Peters, 2000). Still, the sector of manufacture was a preferred destination for FDI, over agriculture and services. This period the automotive sector attracted around 9.3% of total FDI flows.

FDI distribution by sectors in 2016 is shown in **Figure 6**: Manufactures captured 61% of total FDI received during that year, followed by other sectors and financial services.

According to Kumaran (2008) the growth registered on the automotive industry was a significant effect of FDI, and resulted in strong backward and forward linkages in Mexico's economy. On the other hand, the boost of production in the automotive industry can also be considered as a result of the liberalization trend of



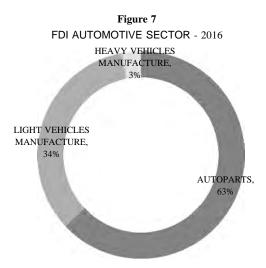
Source: Authors' elaboration with data from SE

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the neoliberal model adopted during the decade of 1980s, that pushed economies to open their markets, increasing the global demand of products. Developing economies sought to participate in global markets knowing the benefits of hosting multinational companies: technology transfer, improvement of existing industries, higher rates of employment and export promotions.

Because it is considered a key sector to achieve industrial development in Mexico, the government has closely accompanied the evolution of the automotive industry, through programs known as "decrees" to guide the development of the industry. Those decrees regulated sales and production, approved of the number of companies that could participate in the industry, protected internal market and restricted foreign investment, as well as agreed on the percentage of local contents per unit of production even before the liberalization of the markets started (Brown, 1999).

The automotive and auto parts industry in Mexico has been able to position the country as the fourth largest exporter and seventh largest producer, globally. From 2013 to date, the sector has perceived around USD 23 trillion in new investment. In 2013 Mexico ranked 8<sup>th</sup> place among the largest manufacturers of vehicles, producing 3 million units in cooperation with the 19 most important car companies installed across 14 states, surpassing two of the countries with longest tradition in



Source: Authors' elaboration with data from SE

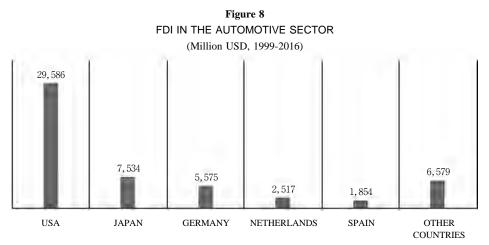
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the automotive sector: Spain and France.

The sector has contributed to the country's main economic indicators. The share of GDP participation was 2% during 2013, 15% of manufacturing production, 9% of FDI and 30% of total exports. United States and Canada are the main destination of Mexico's vehicle exports, receiving 77% of domestic production, followed by 13% destined to Latin America, 6% goes to Europe and 3% to Asia. The automotive sector records the highest paid wages in the manufacturing industry, increasing 35% during the period 2006-2013 (ProMexico, 2015).

In the automotive sector, FDI flows distribute as follows: 63% is destined to auto parts production; 34% to light vehicles manufacture and, 3% to heavy vehicles manufacture. During the period of 1999 to 2016 United States participated with 54% of FDI to Mexico, followed by Japan with 15%. Germany's share accounted for 11% while the Netherlands and Spain percentage were 5% and 4%, respectively. Proximity and historical trade relations have favored investment flows from United States to Mexico (**Figure 8**).

Japanese FDI has presence in the northern border states, but has clustered in the Bajio region of the country, located on the west. In particular, the states of Guanajuato, Aguascalientes and Queretaro (where Mazda, Honda, Toyota and Nissan plants are located, see **Figure 9**), and in a lesser proportion, Jalisco, have attracted Japanese companies. The Bajio region is an area where an automotive cluster has



Source: Authors' elaboration with data from S.E.

formed, and is characterized by labor force specialization, road and rail infrastructure that facilitates the transportation of finished products to North American markets, easing the distribution to South America too. In Jalisco, automotive Japanese FDI arrived with Honda, that established a plant located in El Salto.

Of the total investment in the country, the Bajio region is the destination of 51% of Japanese FDI, making it the most dynamic region in terms of FDI from this country. During the last four years (2012-2016), investment from Japan has quintupled having a positive impact on employment, increase of exports and training of human capital (Falck Reyes, 2012).

However, even before the EPA was signed, Japanese investment had positive impacts over employment: according to a study conducted by JETRO-Mexico (2004) in 2004, 3 out of 100 formal jobs were created by companies of Japanese origin

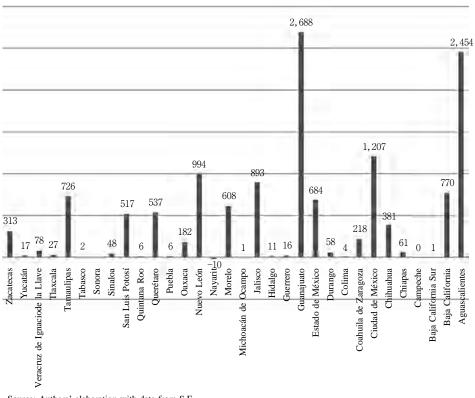


Figure 9 JFDI BY STATE, Million USD (1999-2016)

Source: Authors' elaboration with data from S.E.

established in Mexico.

**Figure 9** shows Japanese FDI distribution by State for the years 1999 to 2016. Guanajuato is the main recipient of FDI flows in the Bajio region with USD 2,687 million followed by Aguascalientes (USD 2,453 million), Jalisco (USD 893 million) and Queretaro (USD 536 million). The arrival of this automotive industry investment has allowed the region to establish a solid automotive supply network in the Bajio region, promoting trade and human capital development. However, further inclusion of local suppliers is desired to further generate positive externalities in the region.

## Conclusions

As a result of FDI flows to Mexico, it has been possible to stablish a solid automotive supply network in the Bajio region, that promotes trade, has a sophisticated operation logistics and, offers highly qualified human resources. On the other hand, Japan supplies capital resources, technology, knowhow and advanced managerial skills; for those reasons, Japan and Mexico are considered complementary partners.

The automotive cluster located in the Bajio region gained momentum with the arrival of Nissan to Aguascalientes in the 1960s that later would translate in an important cluster for the region. Nissan has created a strong distribution, cooperation and supply network during the last five decades, teaming with government officials and academic researchers to solidify their position as a leading company in the automotive industry.

Mexico has become an attractive destination for investment, ranking 8<sup>th</sup> place globally by offering a stable macroeconomic environment and legal protection to investment, and by becoming an advanced manufactures exporter. Local governments perform an important role, working towards the promotion and improvement of their states to become more competitive and attract FDI through the design and implementation of public policies. A number of universities located in the region participate in the triple helix dynamics, with the support of local governments to create new research centers that would promote technological development. Further support to local suppliers is desired to further advance positive externalities in the form of technological or knowledge transfer in the region.

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#### 付記

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