# Public policy as a determinant for attracting foreign direct investment in Mexico since 2000 – 2013

Juan Carlos Botello Osorio and Martín Dâvila Delgado

Universidad Popular Autónoma del Estado de Puebla, A.C.

Mexico

# Keywords

Public policy, theories, resources, factor endowment, foreign direct investment

# Abstract

One of the drivers of economic globalization in recent decades has been the decline in trade barriers impeding the free flow of goods, services and capital. Foreign direct investment (FDI) in recent years has grown faster than trade and global production for various reasons such as political and economic changes in many developing countries, which is characterized by the conversion to democratic political systems and by changes to economic systems oriented towards trade liberalization.

According to UNCTAD reports on investments 2000 to 2012, FDI flows have increased significantly, which suggests that changes brought benefits to the host countries. Thus, a country's public policy decision on attracting FDI is part of a government's concerns. There are several FDI theories that explain the behavior of international FDI flows. The Mexican case for FDI attraction during the period of 2000 and 2012 is based on classical FDI theories. This research demonstrates how Mexico has applied those theories to increase the amount of FDI flows.

# 1. Introduction

One of the drivers of economic globalization in recent decades has been the decline in trade barriers to the free flow of goods, services and capital. FDI occurs when a firm invests directly in facilities and economic resources to produce or market a product in a country different from the home-base of the company. In recent years, FDI has grown faster than trade flows and global production for various reasons such as political and economic changes in many developing countries, which are characterized by the change to democratic political systems as well as changes toward economic systems oriented in the direction of trade liberalization.

According to the world reports on investments of the UNCTAD, FD Iflows have increased significantly, which suggests that change brought benefits to many countries. Thus, the posture which a FDI recipient country must assume has to be considered within public policy decisions that decide and effect how foreign resources are to be attracted even though, Hill (2008) maintains that this is done in many countries by investors negotiating with the host government the conditions underlying such investment. It is a fact that investment and government spending are linked to the mobility of the factors of production, as noted by Tiebout (1956) in their location models. The argument suggests that government spending for the benefit of investors could have a positive effect in attracting FDI. Considering the above, it is assumed that the government agenda should focus on making the country more attractive for FDI, especially in times of crisis when traditional determinants are put to the test and inspire proposals for new opportunities. Popovici (2012) notes that the idea of entering a new era of determinants of FDI is not new as there are several studies that highlight the key factors for attracting FDI within which are the institutional factors in the host country as are factors such as infrastructure quality.

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This emphasizes that the classical theories of FDI probably should be changed and others should be based on the emergence of new local capacities. This study reviews some typical theories on FDI and thereafter addresses the behavior of FDI in Mexico from 2000 to 2012, explaining investment flows and identifying major sectors which attracted these economic resources state by state and also explains the relationship between these theories and the behavior of flows by means of various econometric models based on the national reality in the states that attract greater flows of FDI in the manufacturing sector.

# 2. Literature review

Most of the literature related to the attraction of FDI by countries is based on different theories such as localization economies and their determinants or related to trade and resource endowments. In that sense, the eclectic paradigm of Dunning (1988) argues that the path FDI takes is partly due to the specific advantages which one country has, based upon its regional geographic location and / or location in the world. These advantages arise from using resource endowments and / or assets held abroad by some countries in the world which are attractive to a company by combining them with its own resources. That combination suggests that if a foreign company wants to use the resources of a country, it should establish a subsidiary by initiating a flow of FDI and then establish a start-up of an operating facility (Hill, 2008).

Likewise, the theory of international production suggests that the decision of a company to start manufacturing operations in other countries depends on certain attractions that the country of origin of the company has compared to the resources and benefits that it will obtain in locating a manufacturing subsidiary abroad (Morgan and Katsikeas, 1997). The theory of trade and resource endowment explains that FDI is directed toward countries with low wages and abundant natural resources that provide inherent differences of opportunity and initial favorable conditions for businesses.

There is a consensus as to the characteristics required for a host country to attract FDI which is that it depends on the motivations that foreign investors have in relation to their investment projects . According to Dunning (1983), the first reason is related to the market, whose main purpose is to serve local and regional markets from the FDI host country if the market grows and generate some return for the investor, the second relates to the investment made by a company in acquiring resources that are not available in the country of origin such as natural resources and low-cost inputs including labor. The latter corresponds to the level of efficiency achieved through the dispersion of value chain activities considering that the geographical proximity to the country of origin will minimize transportation costs. All this suggests that the direction, in which FDI is aimed, is highly related to the comparative advantages (Kinoshita, 2003) of a given country. Then, one country that has, among other determinants, access to markets as well as cheap labor and abundant natural resources will attract large inflows of FDI.

Kinoshita (2003) in turn, maintains that the most important determinants a country has to attract FDI are government institutions, natural resources and economies of agglomeration. Government institutions are one factor contributing to decisions by investors as to whether to invest or not in a particular country because these institutions directly affect the operating conditions of enterprises. The investment cost for companies is not only economic but they also have to fight against entrenched practices in countries such as bribery and time lost in engaging in diverse and various negotiations resulting from the arrival of the company to a new market. Therefore, for the operating conditions of a company to appear reliable to the investor, there are two institutional variables to be considered: The legal system and the quality of the bureaucracy. As for the legal system, both its impartiality as well as popular perception of it is good determinants of the reliability of legal institutions in the country. Likewise, the variable related to the quality of the bureaucracy describes a non-political and professional bureaucracy which in turn facilitates the procedures for staff to be hired. With respect to agglomeration economies, investors seek those markets where there are benefits derived from the concentration of economic units which results in positive externalities (benefits and technological spill, use of skilled labor and concentrated in specific locations and links forward and backward with related industries) but also by investments made by other investors which can be seen as a positive sign of favorable investment conditions reducing uncertainty.

Other studies describing the FDI determinants indicate that the infrastructure, good governance, taxes and the labor market are conditions that governments must maintain (Bellak, et. al., 2010). Groh and Wich (2009) describe the attractions to attract FDI in a country as labor costs, quality and the provision of quality infrastructure and legal systems. On the other hand, some authors consider that the provision of infrastructure should be a precondition for companies to establish subsidiaries in foreign markets as are a major emphasis on the provision of transport infrastructure as well as information and communication technologies (Botric and Skuflic, 2006, Goodspeed, et. al., 2009).

According to the research studies mentioned above, there are similarities in the description of the traditional determinants that explain the attractiveness of a country with respect to foreign capital which suggests that the design of public policy in some countries and Mexico in particular, in relation to attracting financial resources from abroad, is very similar. In the case of Mexico, the statistics of attracting FDI for the period covering 2000 to 2012 show that relationship. During this period, Mexico captured on average \$ 85, 573.00 USD billion in the manufacturing sector in first place, followed by the services sector with \$ 66, 998.00. In third place is the area called mass media information with a sum of \$ 38, 553.00 , fourth is the trade sector with \$ 23, 180.00, fifth place is occupied by the mining sector with \$ 16, 486.00, sixth place is occupied by the energy sector with \$ 12, 439.00, in seventh place is the construction sector with \$ 7, 874.00 , eighth place is the transport sector with \$ 6, 998.00 , in ninth place is the "other" services sector with \$ 1, 474.00 and last in attracting foreign resources is agriculture with \$ 1, 350.00 million, as shown in Table 1.

| Variable     | Obs  | Mean     | Std. Dev   | Min                 | Max        |
|--------------|------|----------|------------|---------------------|------------|
| agricultura  | 595  | 1.350615 | 6.535567   | ′ -4.538836         | 5 93.2968  |
| comercio     | 1422 | 23.1801  | 112.039    | -325.904            | 1874.913   |
|              |      |          |            |                     |            |
| construccion | 781  | 7.874902 | 2 32.05792 | 2 -208.3092         | 2 434.3305 |
| energia      | 235  | 12.43921 | 47.91255   | 5 -208.3092         | 2 434.3305 |
| manufactura  | 1520 | 85.573   | 264.2643   | 3 -930.8497         | 7 4751.091 |
| informacion  | 389  | 38.55347 | ' 241.2892 | 2 -2371.506         | 5 2686.481 |
| minero       | 717  | 16.48693 | ; 77.4155€ | • <b>-191.388</b> 3 | 3 1180.415 |
|              |      |          |            |                     |            |
| transporte   | 477  | 6.998841 | 73.80493   | <b>-566.600</b> 4   | 1257.423   |
| servicios    | 1382 | 66.99835 | 5 515.9908 | 3 -3591.409         | ) 14829.23 |
| otros        | 532  | 1.474085 | 5 8.171183 | 3 -54.49759         | 90.95559   |

Table 1 Unit: US thousand dollars

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Source: own with INEGI data.

Since the manufacturing sector in Mexico was the one which captured more resources from abroad in the period under study, it is suggested that occurred because investors sought places that offered benefits for their investment as those described above. In Figure 1, we present the 32 states of the Mexican Republic indicating the amount of investment reached on average in the period studied. In the initial five places first highlighted is the State of Nuevo León, second the State of Mexico, Mexico City Third and fourth: Michoacán, Chihuahua is fifth.





Source: own with INEGI data.

According to the Ministry of Economy, through the PROMEXICO office, Nuevo Leon has an excellent logistic location for conducting business in the North American market. Because of its energy supply, labor productivity and industrial diversification (Kinoshita , 2003), it has attracted more than 2,200 foreign companies in the metal -mechanical sector, automotive, appliance, aerospace and information technology , among others. Manufacturing is the largest contributor to the Gross Domestic Product (GDP) of the state of Nuevo León with 27.5% of the total and in the same way; Nuevo Leon contributes 7.5% to GDP. This sector employed 473,887 workers in 2012. The state's average minimum wage is above the national average. It has skilled work force and the number of researchers by area of specialization is higher than in other engineering disciplines. With respect to infrastructure, it has two airports and 1092 km of railways.

In addition, the National Development Plan 1997-2003, notes that during this period the state of Nuevo León has attracted significant investment resources from abroad through having advantages over the rest of the country for having trained workers, competitive local suppliers and competitive service companies. Through a series of governmental public policy strategies and encouragement of the promotion of the competitive advantage of the state, providing a fiscal stimulus package and the construction of infrastructure for foreign investors is directly reflected in the increase of foreign direct investment through a reliable legal framework. Nuevo Leon's government recognizes that although FDI has increased, this will also generate a greater demand for industrial space and municipalities will require investments accordingly (Goodspeed , et .al., 2010).In the National Development Plan 2004-2009, Nuevo Leon considers it important to rethink the strategy of development and public policies aimed at strengthening the

advantages that the State has. In this way, the road and rail system should be encouraged to take full advantage of the geographical location of the state and strengthen regional integration in telecommunications infrastructure, consequently strengthening the attraction of FDI. The National Development Plan 2010-2015 envisages the creation of a logistics platform for competitiveness including strengthening the road network linked to the development of multimodal inland ports and basic infrastructure, logistics and telecommunications for development of industrial activity in the border region with the United States through fiscal stimulus packages. An important aspect of the plan is the strategy for the expansion of the manufacturing sector, particularly the aerospace industry that will attract resources from the countries of origin of these industries.

The State of Mexico, by itself, has a high level of development in infrastructure and an excellent rate of logistics development. Its population of approximately 24 million represents a market (Kinoshita, 2003) which is very attractive for foreign companies hence; the commercial sector and the manufacturing sector are the ones that have attracted the most foreign resources. Manufacturing is the largest contributor to Gross Domestic Product (GDP) of the State of Mexico with 28.8% of the total and similarly Mexico State contributes 9.3 % to GDP. The retail sector in 2012 employed 1406676 workers and the manufacturing sector employed 1,166,198 workers. The average minimum wage was \$ 256.8 pesos, which is below the national average. It has a specialized technical workforce in engineering and professional work force specialized in social and administrative sciences and engineering. As far as infrastructure is concerned, it has two airports and 1,304 kilometers of railways.

The National Development Plan 1999-2005 of the State of Mexico states that development should be linked to the corridor of NAFTA and the Gulf-Pacific corridor, which involved investments in road infrastructure would advance to a more homogeneous national infrastructure. Similarly, the airport was expanded, and an international logistics and multimodal freight terminal was developed. To attract investment, deregulation was promoted. Similarly, the National Development Plan 2005-2011 highlights the objective of investing in infrastructure for businesses and promotes the attraction of foreign direct investment. The current National Development Plan (2011-2017) also highlights the government's concern to develop skilled work force to serve for utilization in highly productive activities and road infrastructure development.

Both Federal District Development Programs analyzed (2000-2005 and 2006-2012); highlight the government's concern to develop human capital which can adapt to different job opportunities and infrastructure development.

The National Development Plan 2008-2012 of Michoacan, highlights that investment in road infrastructure was a priority program for competitiveness but also emphasizes the education sector particularly undergraduate studies.

Finally, as to the border state of Chihuahua reference is made to the momentum that there should be other and different industries to complement the maquiladora industry, such as aerospace and information- and communication technologies. In that sense, Chihuahua should create mechanisms to support corresponding industries both in work force and in infrastructure.

#### **Objectives, Variables, Hypothesis and Data** 3.

# 3.1 Objetives

This research endeavors to demonstrate that the behavior of foreign direct investment in Mexico from 2000 to 2012 is consistent with location and resource endowment theories proposed by various authors.

# 3.2 Variables

3.2.1 ied (amount of foreign direct investment). Ied has been selected as a dependent variable relative to the amount of Mexico's foreign direct investment inflows from 2000 to 2012 and is also related to the amount of Mexico's foreign direct investment inflows in manufacturing industry from 2000 to 2012.

The independent variables in their different modalities that will be considered for the theoretical models are:

3.2.2 Percalif (qualified personnel). This variable is related to the number of people trained within Mexico and in the top five Mexican States capturing the most FDI from 2000 to 2012.

3.2.3 salariomn (minimum wage). This variable is related to the minimum wage earned within Mexico and in the top five Mexican States capturing the most FDI from 2000 to 2012.

3.2.4inracarr (roads in Km). This variable refers to the extent of paved roads within Mexico and in the top five Mexican States capturing the most FDI from 2000 to 2012.

3.2.5aerop (number of airports). This variable refers to number of airports within Mexico and in the top five Mexican States that captured more FDI from 2000 to 2012.

# 3.3 Hypothesis

**H**<sub>1</sub>: The attraction of foreign direct investment depends on a trained workforce within Mexico and in the top five Mexican States capturing the most FDI from 2000 to 2012.

H<sub>2</sub>: The attraction of foreign direct investment depends on wages earned within Mexico and in the top five Mexican States capturing the most FDI from 2000 to 2012.

 $H_3$ : The attraction of foreign direct investment depends on a trained workforce and wages earned within Mexico and in the top five Mexican States capturing the most FDI from 2000 to 2012.

**H**<sub>4</sub>: The attraction of foreign direct investment depends on the extent of paved roads and the number of airports within Mexico and in the top five Mexican States capturing the most FDI from 2000 to 2012.

# 3.4 Data

Three hundred and ninety six Statistical Reports were reviewed by the authors to build the database for this research. These reports were accumulated by the National Institute of Geography and Statistics of Mexico (INEGI by its acronym for the Instituto Nacional de Estadística y Geografía) and include not only data about Mexico's FDI inflows in ten different types of industries but also data related to labor, salaries and infrastructure, which, according to different FDI theories, are variables considered by companies that want to invest resources abroad.

# 4. Descriptive statistics

The period studied (2000-2012) showed that the maximum intake of foreign resources by any State of Mexico was \$ 5173.00 billion USD while there was also a divested FDI by \$ 584.00. In turn, the maximum number of airports in any state of Mexico is 7 but there are states that do not have any airport. The highest minimum wage for any state was \$ 62.33 pesos while the lowest minimum wage was \$ 35.85 pesos. Qualified personnel refers to the number of undergraduate alumni which as employees would potentially be distributed to enterprises in Mexico , so on average there is a number of 8,454 professionals with a standard deviation of 9,725. Finally, in the area of road infrastructure the miles constructed during the period of study in Mexico are averaging approximately 10,266 with a standard deviation of 6,004(Table 2).

| Variable  | Obs. | Mean  | Std.<br>Dev. | Min         | Max   |
|-----------|------|-------|--------------|-------------|-------|
| :         | 204  | 228.0 |              | <b>F</b> 04 | F170  |
| 1ed       | 384  | 328.9 | /55.116      | -584        | 5173  |
| inracarr  | 372  | 10266 | 6004.8       | 1896        | 26002 |
| percalif  | 379  | 8454  | 9725.81      | 239         | 79251 |
| salariomn | 384  | 47.79 | 7.14037      | 35.85       | 62.33 |
| aerop     | 384  | 2.359 | 1.43293      | 0           | 7     |

Table 2

In the same way, in the period studied (2000-2012) the authors observed that the maximum intake of foreign resources by manufacturing industries for any of the five states of Mexico studied was \$ 5173.00 USD billion while also divestment was \$ 57.8 in any Mexico state. In turn, the maximum number of airports in any of the five states of Mexico studied is 4 but there is a state which only has one airport. The minimum wage for a state peak was \$ 62.33 pesos while the lowest minimum wage was \$ 35.85 pesos. For the variable of qualified personnel, the average is 20,980 professionals with a standard deviation of 17,200 which, as noted, is a number much higher than the national average. While in the area of road infrastructure the authors found an average of 10,137 miles with a standard deviation of 2,906(Table 3).

| Table 3   |      |       |              |       |       |  |  |  |
|-----------|------|-------|--------------|-------|-------|--|--|--|
| Variable  | Obs. | Mean  | Std.<br>Dev. | Min   | Max   |  |  |  |
| ied       | 60   | 699.2 | 1115.44      | -57.8 | 5173  |  |  |  |
| inracarr  | 48   | 10137 | 2906.91      | 5505  | 14709 |  |  |  |
| percalif  | 60   | 20980 | 17200.5      | 3505  | 79251 |  |  |  |
| salariomn | 60   | 48.58 | 7.12731      | 35.85 | 62.33 |  |  |  |
| aerop     | 60   | 2.2   | 0.98806      | 1     | 4     |  |  |  |
|           |      |       |              |       |       |  |  |  |

# 5. Models, Methodology and Results

a. Models

The following equations are the proposal models to prove the hypotheses postulated earlier:  $\mathbf{Model}\ \mathbf{H}_1$ 

 $ied = \beta_0 + \beta_1 percalif$  (1)

#### Model H<sub>2</sub>

 $ied = \beta_0 + \beta_1 salariomn(2)$ 

# Model H<sub>3</sub>

 $ied = \beta_0 + \beta_1 percalif + \beta_2 salariomn(3)$ 

#### Model H<sub>4</sub>

 $ied = \beta_0 + \beta_1 inracarr + \beta_2 aerop$  (4)

# 5.2 Methodology

A linear regression by ordinary least squares was performed to reach the relationships suggested.

#### 5.3 Results

#### 5.3.1 Hypothesis 1

In Table 1A, one sees that FDI flows generally captured in Mexico in the period increased as a function of skilled labor available in the country to investors, or one could say that attracting FDI depends positively on a skilled workforce.

In Table 1B,one sees that the five states of Mexico with greater flows of FDI in the manufacturing sector during the period captured more of these resources for skilled labor than for investors in the same way nationwide.

#### Hypothesis 2

Table 2A shows that one of the determinants for attracting capital from a country corresponds to the minimum wages paid and we can infer from that in general, any kind of salary paid by companies.

In Table 2B, the authors note that the five states in Mexico with greater flows of FDI in the manufacturing sector during the period captured these resources because of the minimum wages paid.

#### 5.3.2 Hypothesis 3

In table 3A we note that during the period study under, FDI flows to Mexico were based on the skilled labor and the minimum wages paid.

In table 3B,one can also notice that the five states in Mexico with greater flows of FDI in the manufacturing sector during the period, captured these resources because of their skilled labor and minimum wages paid.

#### Hypothesis 4

In table 4A, we note that during the study period, FDI flows to Mexico, were aimed toward road infrastructure and the number of airports.

In table 4B one will notice that the five states in Mexico with greater flows of FDI in the manufacturing sector during the period captured these resources for road infrastructure and the number of airports.

#### 6. Conclusions

According to the models presented above, the authors conclude that FDI outflows move according to the determinants each country has. According to the literature reviewed for this research, the most attractive determinants relate to infrastructure, labor and wages (some other

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determinants are outside for this research). Total FDI flows into Mexico captured during the 2000-2012 period are related to the determinants studied in this research. In the same vein, the manufacturing sector was the one which captured the biggest amount of FDI flows by the ten sectors that were analyzed. This emphasizes that the determinants studied, were relevant in relation to the five states analyzed which capture the increased flows of FDI in the manufacturing sector.

Governmental report results for each of the five states of Mexico show that public policy aimed to attract foreign direct investment is based on creating the infrastructure, skilled labor and wage levels sufficiently attractive to the manufacturing sector as shown in the models presented.

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| MEXICO, INSTITUTO NACIONAL DE ESTADISTICA                | Ŷ   | GEOGRAFIA     | (2000), | Anuario    |
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| MEXICO, INSTITUTO NACIONAL DE ESTADISTICA                | Y   | GEOGRAFIA     | (2000), | Anuario    |
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| MEXICO, INSTITUTO NACIONAL DE ESTADISTICA                | Y   | GEOGRAFIA     | (2000), | Anuario    |
| Estadístico del Estado de Coahuila (2000-2012).          |     |               |         |            |
| MEXICO, INSTITUTO NACIONAL DE ESTADISTICA                | Y   | GEOGRAFIA     | (2000), | Anuario    |
| Estadístico del Estado de Colima (2000-2012).            |     |               |         |            |
| MEXICO, INSTITUTO NACIONAL DE ESTADISTICA                | Y   | GEOGRAFIA     | (2000), | Anuario    |
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| MEXICO, INSTITUTO NACIONAL DE ESTADISTICA                | Y   | GEOGRAFIA     | (2000), | Anuario    |
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| Estadístico del Estado de Guanajuato (2000-2012).        |     |               | · · ·   |            |
| MEXICO, INSTITUTO NACIONAL DE ESTADISTICA                | Y   | GEOGRAFIA     | (2000), | Anuario    |
| Estadístico del Estado de Guerrero (2000-2012).          |     |               |         |            |
| MEXICO, INSTITUTO NACIONAL DE ESTADÍSTICA                | Y   | GEOGRAFIA     | (2000), | Anuario    |
| Estadístico del Estado de Hidalgo (2000-2012).           |     |               |         |            |
| MEXICO, INSTITUTO NACIONAL DE ESTADISTICA                | Y   | GEOGRAFIA     | (2000), | Anuario    |
| Estadístico del Estado de Jalisco (2000-2012).           |     |               |         |            |
| MEXICO, INSTITUTO NACIONAL DE ESTADISTICA                | Y   | GEOGRAFIA     | (2000), | Anuario    |
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| MEXICO, INSTITUTO NACIONAL DE ESTADISTICA                | Y   | GEOGRAFIA     | (2000), | Anuario    |
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| MEXICO, INSTITUTO NACIONAL DE ESTADISTICA                | Y   | GEOGRAFIA     | (2000). | Anuario    |
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| MEXICO. INSTITUTO NACIONAL DE ESTADISTICA                | Y   | GEOGRAFIA     | (2000). | Anuario    |
| Estadístico del Estado de Puebla (2000-2012)             | -   | 020010101     | ()      |            |
| MEXICO. INSTITUTO NACIONAL DE ESTADISTICA                | Y   | GEOGRAFIA     | (2000). | Anuario    |
| Estadístico del Estado de Quintana Roo (2000-2012)       | •   | CLC CIU II II | (2000)) | 1 Intuario |
| MEXICO INSTITUTO NACIONAL DE ESTADISTICA                 | Y   | GEOGRAFIA     | (2000)  | Anuario    |
| Estadístico del Estado de Querétaro (2000-2012)          | 1   | GLOGIUIII     | (2000)) | 1 maario   |
| MEXICO INSTITUTO NACIONAL DE ESTADISTICA                 | Y   | GEOGRAFIA     | (2000)  | Anuario    |
| Estadístico del Estado de San Luis Potosí (2000-2012)    | T   |               | (2000)  | 1 11100110 |
| MEXICO INSTITUTO NACIONAL DE ESTADISTICA                 | Y   | GEOGRAFIA     | (2000)  | Anuario    |
| Estadístico del Estado de Sinaloa (2000-2012)            | T   |               | (2000)/ | 1 11100110 |
| Estadistico del Estado de Siliatoa (2000-2012).          |     |               |         |            |

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| MEXICO,   | INSTITUTO  | NACIONAL         | DE      | ESTADISTICA          | Y    | GEOGRAFIA         | (2000),  | Anuario    |
|-----------|--|------------------|---------|----------------------|------|-------------------|----------|------------|
| Estad     | dístico del Esta   | ado de Sonora    | (2000   | )-2012).             |      |                   |          |            |
| MEXICO,   | INSTITUTO  | NACIONAL         | DE      | ESTADISTICA          | Y    | GEOGRAFIA         | (2000),  | Anuario    |
| Estad     | dístico del Esta   | ado de Tabasco   | o (200  | 0-2012).             |      |                   |          |            |
| MEXICO,   | INSTITUTO  | NACIONAL         | DE      | ESTADISTICA          | Y    | GEOGRAFIA         | (2000),  | Anuario    |
| Estad     | dístico del Esta   | ado de Tamaul    | ipas    | (2000-2012).         |      |                   |          |            |
| MEXICO,   | INSTITUTO  | NACIONAL         | DE      | ESTADISTICA          | Y    | GEOGRAFIA         | (2000),  | Anuario    |
| Estad     | dístico del Esta   | ado de Tlaxcala  | a (200  | 00-2012).            |      |                   |          |            |
| MEXICO,   | INSTITUTO  | NACIONAL         | DE      | ESTADISTICA          | Y    | GEOGRAFIA         | (2000),  | Anuario    |
| Estad     | dístico del Esta   | ado de Veracru   | ız (20  | 00-2012).            |      |                   |          |            |
| MEXICO,   | INSTITUTO  | NACIONAL         | DE      | ESTADISTICA          | Y    | GEOGRAFIA         | (2000),  | Anuario    |
| Estad     | dístico del Esta   | ado de Yucatár   | n (200  | 0-2012).             |      |                   |          |            |
| MEXICO,   | INSTITUTO  | NACIONAL         | DE      | ESTADISTICA          | Y    | GEOGRAFIA         | (2000),  | Anuario    |
| Estad     | dístico del Esta   | ado de Zacatec   | as (20  | 000-2012).           |      |                   |          |            |
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# Appendix

Table 1A. Stata's results for Model 1 (Nationwide).

| ied      | Coef.    | Std. Err. | t    | P>t   | [95% Conf. | Interval] |
|----------|----------|-----------|------|-------|------------|-----------|
| percalif | 0.020012 | 0.0038892 | 5.15 | 0     | 0.0123647  | 0.0276593 |
| _cons    | 162.063  | 50.08158  | 3.24 | 0.001 | 63.58877   | 260.5372  |

| Table 1B.Stata's results for Model 1 | To | p five States | with higher | FDI in manufa | cturing industry) | ). |
|--------------------------------------|----|---------------|-------------|---------------|-------------------|----|
|                                      |    |               | 0           |               | 0 //              | /  |

| ied      | Coef.     | Std. Err. | t    | P>t   | [95% Conf. | Interval] |
|----------|-----------|-----------|------|-------|------------|-----------|
| percalif | 0.0241364 | 0.0079033 | 3.05 | 0.003 | 0.0083162  | 0.0399566 |
| _cons    | 192.7928  | 213.6963  | 0.9  | 0.371 | -234.9669  | 620.5525  |

Table 2A. Stata's results for Model 2 (Nationwide).

| ied       | Coef.    | Std. Err. | t    | P>t   | [95% Conf. | Interval] |
|-----------|----------|-----------|------|-------|------------|-----------|
| salariomn | 6.375327 | 5.400958  | 1.18 | 0.239 | -4.244002  | 16.99466  |
| _cons     | 24.14992 | 260.9954  | 0.09 | 0.926 | -489.0175  | 537.3173  |

| Table 2B. Stata's results for Model 2 ( | Top five States | with higher FDI in 1 | manufacturing industry) |
|---|-----------------|----------------------|-------------------------|
|   |                 |                      |                         |

| ied       | Coef.     | Std. Err. | t     | P>t   | [95% Conf. | Interval] |
|-----------|-----------|-----------|-------|-------|------------|-----------|
| salariomn | 70.75471  | 18.32961  | 3.86  | 0     | 34.06402   | 107.4454  |
| _cons     | -2738.297 | 899.8811  | -3.04 | 0.004 | -4539.605  | -936.9891 |

Tabla 3A. Stata's results for Model 3 (Nationwide)

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| ied             | Coef.            | Std. Err.     | t            | P>t            | [95% Conf.    | Interval]      |
|-----------------|------------------|---------------|--------------|----------------|---------------|----------------|
| percalif        | 0.0204506        | 0.0040745     | 5.02         | 0              | 0.012439      | 0.0284622      |
| salariomn       | -2.025626        | 5.543656      | -0.37        | 0.715          | -12.92608     | 8.874827       |
| _cons           | 255.3289         | 260.1244      | 0.98         | 0.327          | -256.152      | 766.8098       |
| Tabla 3B. Stata | a´sresults for N | Model 3(Top f | ive States w | ith higher FDI | in manufactur | ing industry). |
| ied             | Coef.            | Std. Err.     | t            | P>t            | [95% Conf.    | Interval]      |
| percalif        | 0.015189         | 0.0080347     | 1.89         | 0.064          | -0.0009003    | 0.0312783      |
| salariomn       | 56.82604         | 19.39041      | 2.93         | 0.005          | 17.99742      | 95.65466       |
| _cons           | -2380.268        | 900.6936      | -2.64        | 0.011          | -4183.876     | -576.6601      |
| Table 4A. Stat  | a´s results for  | Model 4 (Nat  | ionwide)     |                |               |                |
| ied             | Coef.            | Std. Err.     | t            | P>t            | [95% Conf.    | Interval]      |
| inracarr        | 0.0104974        | 0.0059968     | 1.75         | 0.081          | -0.0012947    | 0.0222895      |
| aerop           | 13.02901         | 25.1011       | 0.52         | 0.604          | -36.33013     | 62.38815       |
| _cons           | 152.7657         | 75.74748      | 2.02         | 0.044          | 3.814789      | 301.7166       |
| Table 4B. Stata | a´sresults for N | Model 4(Top f | ive States w | ith higher FDI | in manufactur | ing industry). |
| ied             | Coef.            | Std. Err.     | t            | P>t            | [95% Conf.    | Interval]      |
| inracarr        | 0.0899284        | 0.0247622     | 3.63         | 0.001          | 0.0400548     | 0.139802       |
| aerop           | 227.0899         | 82.24672      | 2.76         | 0.008          | 61.43653      | 392.7433       |
| _cons           | -974.4591        | 310.8083      | -3.14        | 0.003          | -1600.459     | -348.459       |
|                 |                  |               |              |                |               |                |