

Research proposal on empirical project proposal

[Finance](#), [Investment](#)



- Introduction

The proposed study shall examine the effects of Foreign Direct Investment (FDI) after implementation of the North American Free Trade Agreement in Mexico. The purpose of this paper is to establish the effect of the North American Free Trade Agreement, otherwise known as NAFTA on the foreign direct investments that Mexico has received as an effect of the implementation of the NAFTA. Mexico, along with the United States and Canada, has created a trilateral trade block that came into force on January 1, 1994. The goal of the NAFTA is to promote trade and investments between the three member countries through several mechanisms that include removal of tariffs for export and import of goods, elimination of non-tariff trade barriers, improved intellectual property rights protection. One of the effects of NAFTA on the economy of Mexico is the change in the Foreign Direct Investments (FDI) made. Foreign direct investments are defined as investments that are made into a country for the establishment of production facilities or business ventures. These include the expansion of existing operations, transfer of operations from one country to the host country, or the purchase of a local company by a foreign company. FDI does not include passive investments such as stocks, bonds or other forms of securities.

Starting in 1994, Mexico's economy has experienced very high growth and the country has become a mature economy in terms of foreign investment and trade. This growth coincides with the ratification and implementation of the provisions of the NAFTA leading to many widely published scholarly works on the effect of NAFTA for Mexico, the US and Canada. Such scholarly

works focus on the trade implications of NAFTA for Mexico, the variances in the FDI growth for Mexico and other NAFTA members and the benchmarking of the predictions of the NAFTA against actual performance. This study proposes to pick up from the last, by determining the effect of NAFTA, 18 years hence.

Villareal (2010) in a paper for the CRS Report for Congress stated that since January 1994, since the implementation of the North American Free Trade Agreement (NAFTA), the relationship between the United States and Mexico has improved greatly. Significant issues such as health, environment, domestic and border issues and most importantly policy, trade and investment issues are determined by both countries under the NAFTA framework. More importantly, there is focus on the welfare of Mexico as a trade partner and participant of NAFTA, which was discussed in the 111th United States Congress. The effect of NAFTA on the Mexican economy is manifested clearly through the economic development of the country. Mexico, from a difficult and poor economy in the 1980s, has emerged as a developed economy that employs highly skilled laborers enjoying better wages and living a higher state of economic being. That being said, it seemed that NAFTA had managed to reduce the discrepancy between the economic living states of the United States and Mexico. Still there are a lot of issues for Mexico and its NAFTA trade partners. Sullivan and Beittle (2008), in their paper entitled Mexico-US Relations: Issues for Congress stated that Mexico requires several fiscal and pension reforms as well as judicial and energy reforms from 2007 to 2008. Compounded with the slowdown in the global economy, the challenges for Mexico remains broad and daunting.

According to Waldrich (2008), the impact of the FDI on Mexico's manufacturing industry is significant. Mexico's industrial productivity and wages have increased significantly in the first 10 years, according to Waldrich, due particularly to the implementation of the NAFTA. The NAFTA has made Mexico a destination for foreign investments, manufacturing and exports. The measurement of the country's Total Factor Productivity (TFP) is positive and has not affected the wage levels of the country negatively. The increase in FDI comes from the US pouring investments into Mexico due to NAFTA, with other countries having very little documented effect on the increase in FDI. But with all the documented increase in the FDI into Mexico, researchers have asked the fundamental question, did the NAFTA and the increase in FDI really help Mexico transition from a developing economy into a highly industrialized country? Has Mexico's economy improved and have Mexicans been better off with the implementation of the NAFTA? Elizabeth Malkin of the New York Times (2010) wrote in her article "Did NAFTA actually help Mexico?" stated that it seemed initially that the North American Free Trade Agreement has helped Mexico due to the decline in the jobs in the US Manufacturing sector, indicating that manufacturing has moved south to Mexico. However studies indicate that the NAFTA failed to deliver on its promise of growth and development for Mexico. NAFTA may have increased the level of exports coming from Mexico due to FDI increase as well as the increase in manufacturing productivity (by about 80 percent). However, according to experts from Carnegie Endowment and the Global Development and Environment Institute, Mexico's economic growth grew only by an average of 1.6 percent per capita per year. This low growth was

experienced from the implementation of NAFTA (1992) until the time of the study (2007). Researchers believe that the economic strategy of implementing NAFTA has disregarded the local businesses to the point where domestic investments have failed to increase. This may be due to the fact that the local companies could not find themselves competitive enough to go head to head with MNCs thereby limiting their investment opportunities detrimentally. Researchers also found out that the investments made by domestic industries was just 19% of total investments made compared to a similarly industrializing country like China, whose domestic investments rose to 40% within the same examined period. Amy Clark of CBS News (2009) however claims that the NAFTA has put American farmers in jeopardy thus making the whole NAFTA argument valid from both sides.

This study is significant in determining the effect of trade blocs to domestic economy growth. However, it is recognized that the effect of NAFTA on the Mexican economy, particularly the changes experienced by Mexico by way of FDI is too difficult to isolate from the economic shocks experienced by Mexico and the world since 1994. Therefore, this research shall focus on the growth of Mexico's economy by examining the growth of FDI into the country as explained solely by the implementation of the NAFTA. To approximate the value or significance of that growth as an effect of NAFTA, this study shall also examine the relative change in FDI in the US and Canada within the same period to determine if all three member countries received similar economic benefits. Based on the current level of Mexico's economy, it is hypothesized that the NAFTA contributed to the expansion of FDI's into Mexico and is generally beneficial to the country.

- Empirical Model

A statistical model shall be developed to determine the effect of NAFTA on the FDI into Mexico. A regression analysis will be utilized in the determination of the correlation between the presence of NAFTA and FDI through a trend comparison of relevant data before the implementation of NAFTA (1994) and during the implementation of the trade agreements enclosed within the NAFTA (1995 to present). The comparison shall include time series data in US Dollars particularly:

- A comparison of Mexico's Gross Domestic Product between the period prior to 1994 and from 1995 to present.
- A comparison of Mexico's received FDI between the period prior to 1994 and from 1995 to present.

These two comparative analyses would indicate the improvements on Mexico's economy as an effect of NAFTA given that two periods are compared. The use of the country's GDP and FDI comparison would indicate the occurrence of factors outside NAFTA that may have influenced Mexico's economic growth. The factors that affect GDP will be FDI prior to and during the implementation of the NAFTA. The econometric equation for determining the effect of NAFTA on FDI growth in Mexico follows the equation formulated by Manuel Sanches and Nathaniel Karp (2000) in their study, " NAFTA's economic effects in Mexico" shall be:

$$FDI = FDI_{n-1} + Q_{n-1} + W_{n-1} + X_{n-1} + NT + Constant$$

Where:

- Foreign direct Investment (FDI), a function of previous year's FDI
- Labor productivity (Q)

- Wages (Q)
- Exports (X)
- NAFTA, as a dummy variable
- A constant for other variables not considered in the equation.

The effect of FDI on GDP is examined as well, given by the formula shown below:

$$\text{GDP} = \text{FDI} + X + \text{US GDP}$$

Where:

- GDP is Mexico's annual GDP measured in US Dollars
- FDI is the corresponding FDI for the year, as calculated above
- Exports (X) in the corresponding year
- US GDP as a measure of the trade flows between Mexico and the USA resulting from the implementation of the NAFTA

The data that will be utilized for the examination of the effect of NAFTA on Mexico's GDP as described as an effect of the changes in FDI shall be acquired from Mexico's economic and statistical agencies such as the Mexico Economic Development Department as well as NAFTA's International Economic Authority. These agencies provide updated economic data as well as relevant government policies and various updates. The acquired data shall be in annual figures in US dollar terms, corrected through a deflationary constant (i. e. real terms versus nominal terms). Whenever needed, acquired data shall be modified to fit the convention stated above. The use of ordinary least square (OLS) regression analysis and the correlation with other data presented about the economy of Mexico in the relevant period will determine

whether NAFTA's implementation has benefited Mexico, or if the economic growth due to FDIs holds little significance to Mexico's marked economic development.

- Data

Relevant information shall be derived from scholarly articles published online and from the ECONLIT page. Currently, there are more than 100 scholarly articles, discussions, and published work related to the topic. While not all of these are relevant to the research objectives, these will be collated, analysed, and incorporated whenever possible, to develop a fuller understanding of the growth of FDIs into Mexico as a result of the NAFTA. The benchmark for the definition and measurement of Foreign Direct Investments is provided by the Organization for Economic Cooperation and Development (OECD). OECD's definition includes all transactions between the host country and the investing country or company within a reference period (normally a year). Like other forms of investments, direct investments are affected by macroeconomic factors such as the foreign exchange rate between the host and investing country or company, relative prices of other investments, and others. The FDI is an accumulation of flows and the changes in one sector over the other may lead to a negative value for foreign direct investments (consider for example loan payments from the host country to an external debtor). Thus the direction of the FDI as exhibited by its numerical value provides information on what the FDI is and where it is directed or heading to. Scholarly work on the effect of FDI on economic progress indicates that FDIs translate to transfer of critical technology that spurs domestic economic growth. Studies also support

findings indicating that the stronger the human capital stock of a host country, the better the transference of technology, thus the higher the pace of economic development. However there clearly is much more to FDI, especially when framed under a trade scenario that focuses on improving investment relationships across international borders.

References

- Clark, A. 2009. Is NAFTA Good for Mexico's Farmers? CBS New. Retrieved from http://www.cbsnews.com/8301-18563_162-1773839.html
- Cuevas, A., Messmacher, M., Werner, A., 2005. Foreign Direct Investment in Mexico since the Approval of NAFTA. *World Bank Economic Review* 19, 473-88. Retrieved from <http://wber.oxfordjournals.org/content/19/3/473.short>
- Görg, H., Greenaway, D., 2004. Much Ado About Nothing? Do Domestic Firms Really Benefit from Foreign Direct Investment? *World Bank Research Observer* 19, 171-86.
- Hanson, G. H., 2007. Globalization, Labor Income, and Poverty in Mexico. In: Ann Harrison (Ed.) *Globalization and Poverty*. Chicago: University of Chicago Press and the National Bureau of Economic Research, 417-456.
- Malkin, E. 2010. Did NAFTA Actually Help Mexico? *New York Times*. Retrieved from <http://economix.blogs.nytimes.com/2009/12/10/did-nafta-actually-help-mexico/>
- Monge-Naranjo, A., 2002. The Impact of NAFTA on Foreign Direct Investment flows in Mexico and the Excluded Countries. Department of Economics, Northwestern University. Retrieved from <http://www.econ.psu.edu/~aum26/NaftaFDIexcludedCountries.pdf>

Villarreal, M. A. 2010. NAFTA and the Mexican Economy. Congressional Research Service. Retrieved from <http://www.fas.org/sgp/crs/row/RL34733.pdf>

Waldkirch, A. 2008: The Effects of Foreign Direct Investment in Mexico since NAFTA. Retrieved from <http://mpira.ub.uni-muenchen.de/7975/>