

The Impact of Foreign Direct Investment on Economic Growth (a Causal Study in the United States)

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Article Info

Abstract

DOI:

<http://dx.doi.org/10.20961/bise.v4i1.21422>

Keyword: Foreign direct investment, economic growth, the United States, Investment, Sector, Development

JEL Classification:
F43

International investment is strategic step for country due to lack of capital and technology transfer and it is generally well known as Foreign Direct Investment (FDI). Many policy makers and academics contend that FDI can have important positive effects on a host country's development effort. This research examines the impact of Foreign Direct Investment on Economic Growth in the United States by multiple linear regression model and its estimation using ordinary least squares (OLS). This research classifies all the sectors to be 10 sectors. This research uses data for the period 2000 –2017 and suggests that not all forms of foreign investment seem to be beneficial to host economies. Some sectors provide positive correlation to economic growth and some provides negative effect. Nevertheless, it is significant yet, this is because there is different characteristic between developed and developing countries. Economic growth in the U.S is mostly driven by personal consumption.

INTRODUCTION

The globalization is still debatable until people gain a firm understanding of how globalization affects human welfare. Since economic growth has become measurement of country welfare from international point of view, people must get a better handle on globalization's effects on economic growth. Globalization covers a wide array of economic activities, including international trade, international migration, and international investment. An accurate assessment of whether globalization is good for economic growth requires that we examine the growth effects of all of the components of globalization. Not all these components have been studied thoroughly, and empirical evidence suggests that each of the activities that make up globalization may have very different growth effects. International investment is strategic step for country due to lack of capital and technology transfer and it is generally well known as Foreign Direct Investment (FDI). Many policy makers and academics contend that FDI can have important positive effects on a host country's development effort. In addition to the direct capital financing it supplies, FDI can be a source of valuable technology and know-how while fostering linkages with local firms, which can help

jumpstart an economy. Based on these arguments, industrialized and developing countries have offered incentives to encourage foreign direct investments in their economies. Recently, the special merits of FDI and particularly the kinds of incentives offered to foreign firms in practice have begun to be questioned. Fueling this debate is that empirical evidence for FDI generating positive spillovers for host countries is ambiguous at both the micro and macro levels.

US has been the best country for their FDI level among all countries throughout the world, it is really attracting for international investors. The growth effects of foreign investment in the United States are an interesting research topic for two further reasons. First, the United States has been open to foreign investment longer than most countries and thus provides longer time-series data for examining the growth effects of FDI than are available from most other countries. Second, the U.S. has been running huge and growing current account deficits that have been financed by equally large investment inflows. Whether the growing U.S. trade deficit is sustainable hinges, in part, on whether investment inflows enhance U.S. productivity. It is the reason why the importance of institute a study about the impact of FDI on economic growth in US.

Previously, Forte (2013) conducted research about linkage between foreign direct investment and economic growth in some developing as well as developed countries. Data from different countries are accumulated into one database to get more samples. However the conclusion said that the effect of foreign direct investment depends on domestic condition of the host country. Another research done by Kastrati (2013) for the same subject, then result revealed that although in overall foreign direct investment affected positively to economic growth, but foreign direct investment is not all good no bad since potential negative impact still exists. Moreover, Iqbal et al (2014) conducted the same research in Pakistan and proved that foreign direct investment affected economic growth. In last of their paper, they also said that the effect may be varying based on cultural difference which indicated that the study of economic growth should be done per country.

Therefore this paper responds to the research gap by focusing on single country of the United States, a novelty of this research is also produced by innovatively conduct the research for each sectors instead of whole country economy. This is to prove that potential negative impacts come from several because growth in 1 specific industry does not mean growth in all other industries. Foreign Direct Investment into the United States has been an important factor in the U.S. economy for a number of years, with FDI totaling \$1.7 trillion over the last ten years. It would be interesting to know what the effect of FDI on their growth is. The role of foreign direct investment (FDI) in the growth process has for long been a topic of intense debate. Although this debate has provided rich insights into the relationship between FDI and growth, there is very little empirical analysis of the issue, partly because of the lack of a conceptual design and a succinct testable hypothesis.

LITERATURE REVIEW

Concept of Economic Growth

According to Nekipelov (2011), economic growth is dynamics of the volume of final goods and services (“aggregate product”) produced during a selected time unit. There are different concepts of economic growth and ways of measuring it, but the core definition is in terms of growth in the long run productive capacity of the economy, typically measured by real growth in Gross Domestic Product (GDP). Gross Domestic Product is defined as the sum of all goods and services produced in a country over time, without double counting products used in other output. It is a comprehensive measure, covering the production of consumer goods and services, even government services, and investment goods (Lequiller et al, 2004). This production includes that by the United States-owned companies as well as by production plants located in the United States and owned by foreign companies. As GDP increases, there is a tendency for company profits and interest rates to rise as well. Conversely, as GDP decreases, there is a tendency for company profits and interest rates to also decline. GDP Growth can be measured in terms of demand (total expenditure on goods and

services), or supply (total goods and services produced). The growth in demand can outstrip supply for a while by borrowing, but is ultimately constrained by the income generated by supply. There are two kind of popular GDP growth in economic study, those are nominal and real GDP growth, **Nominal GDP** is GDP evaluated at current market prices. Therefore, nominal GDP will include all of the changes in market prices that have occurred during the current year due to **inflation** or **deflation**. Inflation is defined as a rise in the overall price level, and deflation is defined as a fall in the overall price level. In order to abstract from changes in the overall price level, another measure of GDP called **real GDP** is often used. Real GDP is GDP evaluated at the *market prices of some base year*.

According to Kuznets (1934), GDP can be determined in three ways, all of which should, in principle, give the same result. They are the product (or output) approach, the income approach, and the expenditure approach. Expenditure approach is taken in this research by consideration that FDI as the object of this research is measured as gross investment from abroad which is calculated in bask of expenditure approached GDP.

The Expenditure Method of calculating GDP (aggregate demand)

This is the sum of spending on produced goods and services measured at current market prices. The full equation for GDP using this approach is

$$GDP = C + I + G + (X-M) \dots\dots\dots (2.1)$$

- C: Household spending
- I: Capital Investment spending (include FDI)
- G: Government spending
- X: Exports of Goods and Services
- M: Imports of Goods and Services

Concept of Foreign Direct Investment

According to the United Nations Committee on Trade and Development (UNCTAD) in 2012, foreign direct investment (FDI) is defined as an investment involving a long-term relationship and reflecting a lasting interest and control by a resident entity in one economy (foreign direct investor or parent enterprise) in an enterprise resident in an economy other than that of the foreign direct investor (FDI enterprise or affiliate enterprise or foreign affiliate).

FDI implies that the investor exerts a significant degree of influence on the management of the enterprise resident in the other economy. Such investment involves both the initial transaction between the two entities and all subsequent transactions between them and among foreign affiliates, both incorporated and unincorporated. FDI may be undertaken by individuals as well as business entities. Flows of FDI comprise capital provided (either directly or through other related enterprises) by a foreign direct investor to an FDI enterprise, or capital received from an FDI enterprise by a foreign direct investor. FDI has three components: equity capital, reinvested earnings and intra-company loans. From the investor's point of view there are in general two types of FDI, namely export-oriented and domestic-market-oriented FDI depending on his aims.

Table 1. Types of Foreign Direct Investments

Type of FDI	Definition	Main Goals and Motivation
Export Oriented or Vertical FDI:	FDI inflows are only for the production and the manufactured goods will be exported again. The host market doesn't consume the produced goods.	Reduction of production costs by using the abundant supply of cheap labour in the host country. Cost competitiveness as a main driving force.
Domestic Market Oriented or Horizontal FDI:	FDI inflows are for market penetration and expansion of the investing corporation, the produced goods will be sold in the host country.	Business expansion and growth of the Multinational Corporations (MNCs).

Source: OECD (2000), Tseng and Zebregs (2002)

Main Determinants of FDI Inflows

The increasing attracting of foreign direct investments is considered as one of the main driving forces of the U.S. economic growth since a long time ago. According to the United Nations Committee on Trade and Development (UNCTAD, 2012), FDI inflows comprise of capital provided (either directly or through other related enterprises) by a foreign direct investor to a FDI enterprise, or capital received by a foreign direct investor from a FDI enterprise. Based on our global corporate location selection experience, we have structured the corporate drivers to engage in FDI in four categories, i.e. Market seeking, Resource seeking, Efficiency seeking and Strategic Asset seeking.

Source of FDI in the United States

According to Organization for International Investment in 2012, most international investment in the United States originates from OECD countries. Belgium was the leading foreign investor in the United States in 2011, investing \$43,8 billion last year, followed by Switzerland as \$29,2 billion and Luxemburg at \$19.4 billion. Canada, Japan, the Netherland, and Germany also ranked among the leading foreign investor countries in 2011. Together the seven countries represented 72% of all foreign direct investment in the United States in 2011. If all is presented in percentage, Belgium accounted for 20 percent of all foreign direct investment in the United States, followed by Switzerland (13 percent), Luxemburg (9 percent), Japan (9 percent), Canada, (7 Percent), Netherlands (7 Percent), Germany (7 Percent) and the rest, 28 percent is from other countries (U.S. Bureau of Economic Analysis, 2012).

Previous research

The countries throughout the world are continuously striving for rapid economic growth and as a result they are inviting more and more investments by allowing foreign investors to invest in their land. Broadly, “new generation” investment policies are characterized by recognition of the role of investment as a primary driver of economic growth and development and the consequent realization that investment policies are a central part of development strategies (World Investment Report UNCTAD, 2012). Differences in the growth rates of the countries are explained by the differences in the endowments or levels of these factors (Dondeti and Mohanty, 2007). FDI has long been recognized as a major source of technology and know-how to developing countries. Indeed, it is the ability of FDI to transfer not only production know-how but also managerial skills that distinguishes it from all other forms of investment, including portfolio capital and aid.

Ram and Zhang (2002) said that FDI can promote economic growth because FDI can provide financial resource for a country and it will increase a country's competitiveness in global market. Generally, FDI supports a country to be ready and provide it access to global market, so it can globalize (Dondeti and Mohanty, 2007). However, FDI can increase growth rate if only its inflows are well managed (Bezuidenhout, 2009). The relationship between FDI and macroeconomic growth, and the stability of this growth, is a central consideration as host countries evaluate the trade-offs associated with foreign entry. Borensztein, De Gregorio, and Lee (1998) found a positive correlation between FDI and economic growth, they point out that human capital improvement in the host country should be sufficient in order to achieve the beneficial growth effect of the foreign inflow. Moreover, Alfaro (2003) conducted the similar research about how FDI in primary, manufacture and service sector affect economic growth, they pointed out the fact that inflow FD in different sector will affect economic growth differently.

Therefore, based on objective and literature review of this research, the author has formulated some hypothesizes as follow:

Hypothesis 1: Foreign direct investment in all sectors simultaneously provides a positive significant impact on economic growth in the United States

Hypothesis 2: Foreign direct investment in partially provides a positive significant impact on economic growth in the United States

Hypothesis 2.1: Foreign direct investment in manufacture sector provides a positive significant impact on economic growth in the United States

Hypothesis 2.2: Foreign direct investment in wholesale trade sector provides a positive significant impact on economic growth in the United States

Hypothesis 2.3: Foreign direct investment in retail trade sector provides a positive significant impact on economic growth in the United States

Hypothesis 2.4: Foreign direct investment in information sector provides a positive significant impact on economic growth in the United States

Hypothesis 2.5: Foreign direct investment in banking sector provides a positive significant impact on economic growth in the United States

Hypothesis 2.6: Foreign direct investment in finance sector provides a positive significant impact on economic growth in the United States

Hypothesis 2.7: Foreign direct investment in insurance sector provides a positive significant impact on economic growth in the United States

Hypothesis 2.8: Foreign direct investment in real estate, rental and leasing sector provides a positive significant impact on economic growth in the United States

Hypothesis 2.9: Foreign direct investment in professional, Scientific and technical service sector provides a positive significant impact on economic growth in the United States

Hypothesis 2.10: Foreign direct investment in other industries sector provides a positive significant impact on economic growth in the United States

METHODOLOGY

This research uses secondary data from The U.S. Chamber of Commerce to gain detail number of FDI value by sectors in US, the financial inflows has been minus with outflow without current-cost adjustment, so the data is based on historical cost. The type of data is quantitative data, the term quantitative data is used to describe a type of information that can be counted or expressed

numerically. This type of data is often collected in experiments, manipulated and statistically analyzed. Author classify all data in 10 sectors following the classification from the U.S. chamber of commerce, this is to make US government easier to take advantage of this research as they already understood the characteristic of these sectors as they made it by themselves. It is taken from 2000 to 2011 to avoid bias and result in more convincing study. The data of real GDP growth of US is taken from US Department of Commerce: Bureau of Economic Analysis. The main advantage of using secondary data is assumption that the data is valid and reliable.

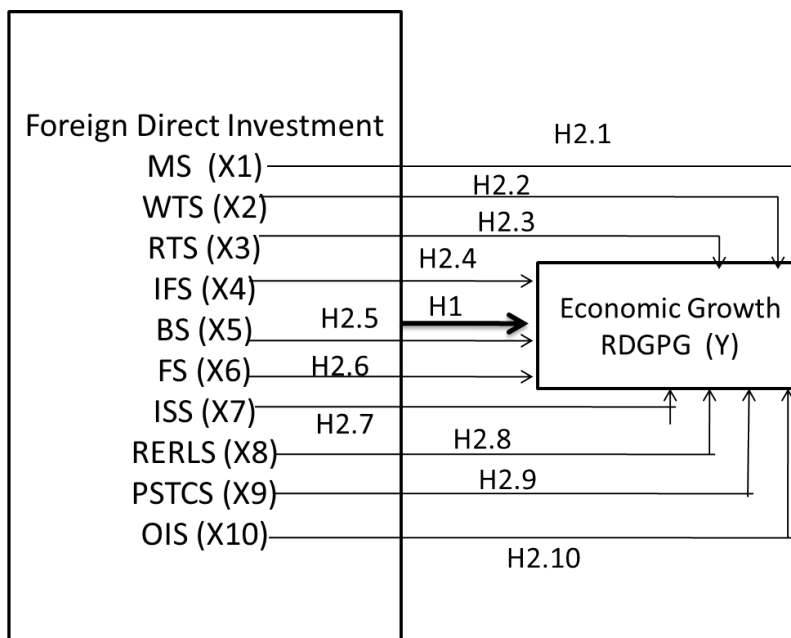


Figure 1. Research Framework

The data is collected by literature study and documentation, literature study is to find information about each variables used and what the correlation between independent and dependent variable. Documentation technique is used to find time series data about the related variables, author searches the data from government website so that reliability and validity of the data can be guaranteed, and this is to make a very convincing study and high value of the research that it can bring a lot of advantages to any parties (Santoso, 2000).

The econometric method will be used in this research is multiple linear regression model with ordinary least square method. The general purpose of multiple regressions is to learn more about the relationship between several independent or predictor variables and a dependent or criterion variable. The analysis process will utilize SPSS to find the result easily. Multiple linear regression attempts to model the relationship between two or more explanatory variables and a response variable by fitting a linear equation to observed data.

DATA ANALYSIS

The descriptive analysis from overall data result in the table below, this is result from SPSS 22 which shows number of data or n, minimum, maximum, mean, standard deviation and a little bit discuss about the skewness and kurtosis.

Table 2. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Y-RGDPG	18	-3.1	4.1	1.792	1.9176	-1.635	.637	3.342	1.232
X1-MS	18	18235	105119	6.55E4	32299.465	-.271	.637	-1.486	1.232
X2-WTS	18	-5339	52501	2.18E4	15132.736	.160	.637	.653	1.232
X3-RTS	18	-2201	7203	2622.42	2708.602	-.072	.637	-.505	1.232
X4-IFS	18	-11929	51472	1.02E4	17639.078	1.168	.637	1.555	1.232
X5-BS	18	-804	24752	1.06E4	7632.211	.317	.637	-.697	1.232
X6-FS	18	-3541	67989	1.67E4	18839.248	1.953	.637	5.039	1.232
X7-ISS	18	-12105	37500	1.25E4	15125.579	.414	.637	-.311	1.232
X8-RERLS	18	-4753	7776	614.08	3348.534	.429	.637	.877	1.232
X9-PSTCS	18	1122	34136	7757.17	8717.909	2.901	.637	9.291	1.232
X10-OIS	18	12873	71510	3.26E4	19124.090	.945	.637	.014	1.232
Valid N (listwise)	18								

Source: the secondary data is computed in SPSS 22

According to the data above, all variables use data in 12 years and from 12 data, the minimum number of FDI in manufacturing sector is 18.235 million dollars with maximum number of 105.119 million dollars. Standard deviation of manufacturing sector is higher than its mean. It indicates that there is extreme data which is usually known as outlier, however it is still proceed in regression because that is the original data of FDI which is definitely fluctuate from year to year depend on the business activity of companies. To read another sector, it is exactly the same way as manufacturing sector data read.

F-Test Finding

F-Test or Analysis of Variance (ANOVA) basically show whether all independent variables in the model do contribute significantly to dependent variable or not simultaneously. Here is the finding from SPSS 22 of F-test.

Table 3. Table of F-Test Finding

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	35.932	17	3.593	.796	.712 ^a
	Residual	4.517	1	4.517		
	Total	40.449	18			

a. Predictors: (Constant), X10-OIS, X9-PSTCS, X3-RTS, X7-ISS, X4-IFS, X5-BS, X6-FS, X1-MS, X8-RERLS, X2-WTS

b. Dependent Variable: Y-RGDPG

Source: the secondary data is computed in SPSS 22

To test whether the model fit or not is from the comparison between sig. in the ANOVA table and alpha 0,05%. If sig. > 0,05 then model is rejected but if sig. < 0,05 then model is accepted. From the finding above, it can be concluded that model is rejected and all independent variables simultaneously don't provide significant impact on dependent variable, it can also be explained that H₀ is accepted and H₁ is rejected.

t-Test Finding

t-test basically show whether all independent variables in the model do contribute significantly to dependent variable partially. Here is the finding from SPSS 22 of t-test.

Table 4. Table of t-Test Finding

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.892	1.972		.959	.513
X1-MS	-.001	.000	-.446	-.507	.701
X2-WTS	-.002	.001	-4.310	-1.031	.490
X3-RTS	-.005	.003	-7.487	-1.739	.332
X4-IFS	.000	.000	1.861	1.852	.315
X5-BS	.000	.000	1.945	1.223	.436
X6-FS	.000	.000	.533	.388	.765
X7-ISS	.002	.000	.737	.759	.587
X8-RERLS	-.002	.001	-4.287	-1.714	.336
X9-PSTCS	.001	.001	5.507	1.532	.368
X10-OIS	.000	.000	3.131	1.447	.385

a. Dependent Variable: Y-RGDPG

Source: the secondary data is computed in SPSS 22

To test whether each independent variables has significant impact or not on the dependent variable, we can observe it from the comparison between sig. in the table above and alpha 0,05%. If sig. > 0,05 then alternative hypothesis is rejected and null hypothesis is accepted but if sig. < 0,05 then alternative hypothesis is accepted and null hypothesis is rejected. From the table above, sig. of all independent variables show insignificant impact because those are more than 0,05 and therefore H₀ is accepted and FDI in 10 sectors don't provide significant impact on economic growth. Manufacturing, wholesale trade, retail trade and real estate, rental, leasing sector are even proven give negative impact on economic growth, it means that when FDI in those sector increase, the real GDP growth will decrease insignificantly.

Coefficient of Determination (R²) Finding

R² is to determine the strength and power of the impact of independent variables on dependent variable, the table below will explain the finding from SPSS 22 in more detail.

Table 5. Table of R² Finding

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.943 ^a	.888	.828	2.1253

a. Predictors: (Constant), X10-OIS, X9-PSTCS, X3-RTS, X7-ISS, X4-IFS, X5-BS, X6-FS, X1-MS, X8-RERLS, X2-WTS

Source: the secondary data is computed in SPSS 22

The value of R square is equal to 88,8%, it means that 88,8% of real GDP growth is influenced by FDI in 10 sectors and 11,2% is influenced by other variables out of the model. Adjusted R square is 82.8% which means that 82.8% of economic growth in the U.S is affected by foreign direct investment in those 10 sectors, while 17.2% is affected by other variables out of the research model.

Coefficient of Partial Determination (Partial r²) Finding

Table 6. Table of Partial r² Finding

Model	Correlations				
	Zero-order	Partial	Part	Partial R ²	Ranking
1 (Constant)					
X1-MS	.088	-.452	-.169	.028	9
X2-WTS	.313	-.718	-.345	.119	7
X3-RTS	-.406	-.867	-.581	.337	2
X4-IFS	.214	.880	.619	.383	1
X5-BS	-.372	.774	.409	.167	6
X6-FS	-.314	.361	.130	.016	10
X7-ISS	.072	.605	.254	.064	8
X8-RERLS	.412	-.864	-.573	.328	3
X9-PSTCS	.438	.837	.512	.262	4
X10-OIS	-.309	.823	.484	.234	5

a. Dependent Variable: Y-RGDPG

Source: the secondary data is computed in SPSS 22 and author self-computation

The column “Part” refers to the semi-partial correlation coefficient. The squared semi-partial coefficient for variable X2 equals the R-square change value from the hierarchical regression when variable X2 is added to the model already including variable X1 and soon. It means that part value describe R² for each independent variables to the dependent variable or named partial R². After ranking process, the table of ranking result can be present as follow:

Table 7. Table of Contribution Ranking

Ranking	Name of Sector	Contribution to real GDP growth (%)
1	Information Sector	38,3%
2	Retail Trade Sector	33,7%
3	Real Estate, Rental and Leasing Sector	32,8%
4	Professional, Scientific and Technical Service Sector	26,2%
5	Other Industry Sector	23,4%
6	Banking Sector	16,7%
7	Wholesale Trade Sector	11,9%
8	Insurance Sector	6,4%
9	Manufacturing Sector	2,8%
10	Finance Sector	1,6%

Source: self-organized computation, 2012

Information sector seems to have the biggest contribution, real GDP growth is 38,3% explained by FDI in that sector. In contrast to information sector, finance sector can't explain real GDP growth as it has the least R² of 1,6%. This ranking is an essential step for a country to make priority and policy in increasing economic growth. Since the sectors are classified more in more detail, author can figure out that not all service sectors provide positive significant impact on economic growth, finance is recognize as service business but it is proven in the last rank of the table.

DISCUSSION

The macroeconomic literature had focused on total FDI inflows or stocks, in part due to data limitations. This work suggests that not all forms of foreign investment seem to be beneficial to host economies. FDI in some sectors such as manufacturing, wholesale trade, retail trade and real estate, rental, leasing sector are found negatively correlated to the economic growth while the others like information, banking, finance, insurance, professional, scientific technical service sector and other industry has positive correlation to economic growth of the United States.

Nevertheless, it has not yet been established as a significant determining factor for the economic growth of the United States. When the coefficient is insignificant, no inference can be drawn from the result under the used data set and the model. Net foreign investment in information sector is the best one explains the economic growth in the U.S while finance sector has no relevance with economic growth. Since no previous study concerned to different characteristic of industry's influence to economic growth, this research has answered the curiosity above, the finding also leads author to object the previous time-series research that FDI provides significant contribution to economic growth is not applied to all countries equally. In this research, author find new contrast empirical finding to the previous research said that FDI contribute to economic growth significantly, foreign investment in all sectors definitely don't provide any significant impact on economic growth. The empirical finding of this research is not consistent with Borensztein, De Gregorio, and Lee (1998) research said that there is a positive relationship between FDI and economic growth, here FDI in 4 sectors are found to have negative effect to economic growth as it is broken down to be 10 groups, and moreover FDI doesn't not significantly influence economic growth. This empirical finding is in line with Frenkel et al (2004) and Ram and Zhang (2002) who confirmed that FDI does contribute to economic growth. Alfaro (2003) argued that total FDI exerts an ambiguous effect on growth but in this research, it is not proven. Sector really a matter for both researches, but this research classify in more detail compared to research of Laura Alfaro and

others, Laura Alfaro's empirical finding also represent the impact on FDI in many countries with different characteristics that the result is ambiguous therefore it is not wise to compare that to this research which specifically discuss about the U.S as a developed country and most attractive destination for foreign direct investment.

All researches above didn't find answer about the impact of FDI on economic growth in the U.S only, the U.S is only one of the samples used in their researches, therefore there is a tendency that significant impact was not come from the U.S data of FDI but mostly influenced by other countries with their different characteristics to The U.S. Author argues that the both positive and negative significant empirical findings of researches above are mostly influenced by developing country samples. This argument stands in line with Johnson (2006) whose research found that there was a difference between the impacts of FDI on economic growth in the group of developing countries and developed countries. His paper contributes to the mixed results of earlier empirical studies by the finding that FDI inflows have a positive effect on host country economic growth for developing but not for developed economies. The analysis was not able to find any indications that FDI inflows affect host country economic growth in developed economies.

The empirical finding of this paper is logic because developed country like the U.S does not really need technology transfer from outer countries since the United States remains the world leader in scientific and technological innovation. One interesting fact that the U.S economic growth didn't depend on foreign investment, personal consumption has been dominating contribution to GDP since a long time ago. It leads author to argue that actually the contribution of investment especially the foreign one, is relatively small to GDP in the U.S therefore, it definitely contribute insignificantly to economic growth. Rapidly growing developing countries tend have more investment than consumption, perhaps that behavior is influenced by awareness of the opportunity from high unemployment and easy competition in the market. It will lead to lower labor cost and higher market demand, therefore is absolutely logic that investments spring to the countries. Theory said that motive of foreign investor investing in a country because they seek market, resource and operation efficiency. Foreign investment will like to execute their portfolio and market development into developing countries more than developed countries because it is still rich of buried potential resource and labor need to welfare is still relatively simpler than people in developed countries. GDP in developed countries is not significantly contributed by foreign direct investment. Personal consumption is the driver of GDP in developed countries including the U.S then perhaps it is the reason why investment does not contribute significantly to real GDP growth.

In addition, there are some researches who found consistence result with this research, Hanson (2001) argues that evidence that FDI generates positive spillovers for host countries is weak. Surveying the macro empirical research led Lipsey (2004) to conclude that there is no consistent relation between the size of inward FDI stocks or flows relative to GDP and its growth. He further argues that there is need for more consideration of the different circumstances that obstruct or promote spillovers. Manufacturing and trading foreign companies are negatively correlated to reap GDP growth in the U.S probably because manufacturing foreign companies after stand in the land if the U.S imports a very large amount of material and work-in-process good even more than the investment value itself, while foreign wholesaler and retailer also build a branch in the U.S so that they can easily distribute the competitive product from their home country in the U.S market. The negative relationship could also be as a result of insufficient FDI fund invested into the American economy which has not been able to exert enough impact to make it positive or growth enhancing, it may applicable to real estate, rental and leasing sector.

CONCLUSION

The research found that FDI in 10 sectors used simultaneously provide a significant impact on economic growth, real GDP growth is explained 90,4% by FDI growth while 9,6% is explained by other variables out of the model. However there are some differences occur in the result,

manufacturing, wholesale trade, retail trade, information, real estate, rental, leasing and other industries contribute significantly and positively to the economic growth in the U.S, it is stand in line with previous studies while insurance, professional, scientific and technical service sector contribute significantly and negatively to the economic growth. Two industries: banking and finance sector don't provide significant impact in confidence level of 95%.

Insurance sector contribute significantly and negatively because the disability of insurance companies to pay claim had lower the productivity in the U.S. FDI in professional, scientific and technical service sector also contribute significantly and negatively as it just makes the expense and productivity of companies become lower as the worse quality of foreign professionals. The U.S. manufacturing has help to increase GDP since a long time ago from export and investment. Manufacturing represents nearly 60% of total U.S. exports in 2017. it provides positive and significant impact on economic growth. The foreign investment in both wholesaler and retail trade sector has increased consumption in the U.S. Personal consumption historically represents 70% of our nation's GDP therefore it provides positive and significant impact on economic growth. The U.S. continues to be the largest telecom market in the world and is expected to grow faster than most other developed countries to a total of \$721 billion by 2015, or 3.7 percent every year, therefore foreign investment in this sector will provide positive and significant impact on economic growth.

The stability of U.S. property markets still make them attractive destinations for FDI and it provides positive and significant impact on economic growth. Growing consumer demand and world class innovation – combined with a competitive workforce and supply chain capable of building, installing and servicing all energy technologies – makes the United States the world's most attractive market in the \$6 trillion global energy market. It attracts more FDI to come and provide positive and significant impact on economic growth. Finance sector does not provide significant impact on economic growth in the U.S because finance sector are dominated by local investors and banking sector also does not provide significant impact on economic growth as people in U.S tend to spend their money for investment than saving.

However this research had some limitations 1) This research uses only one source to seek for data, it is from the U.S. Chamber of Commerce because there is tendency that ratio data from different sources cannot be exactly the same when the objective is macroeconomic data in which survey must be conduct to cover very large area, 2) This research only uses real GDP growth to represent economic growth and there is no externality or other relevant explanatory variables involved in this research and 3) This research does not provide detail information about the reason of each sector impact on economic growth.

Future researchers is suggested to collect more data about foreign direct investment in each industry from more than one source so that they can obtain more observation and prevent bias better than this research did. The measurement welfare of a country can also be observed from another indicator instead of GDP such as income equality, GDP per capita and so forth. The next researcher is also expected to conduct a research for one specific sector by using the result of this research as their hypothesis, this is important to know what factors make that sector contribute like this empirical finding say and it can be conducted in the United States again.

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