5-2013

Relationship between Globalization and Wage Inequality

Yingruo Yan
Clemson University, yingruy@g.clemson.edu

RELATIONSHIP BETWEEN GLOBALIZATION AND INCOME INEQUALITY

A Thesis
Presented to
the Graduate School of
Clemson University

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts
Economics

---

by
Yingruo Yan
May 2013

Accepted by:
Dr. Michal Jerzmanowski, Committee Chair
Dr. Scott Baier
Dr. Kevin Tsui

ABSTRACT

The paper explores the impact of globalization on income distributions among high income, middle income and lower income workers. In general, globalization boosts FDI, wage and productivity (Pica 2007). However, according to the past research, wage inequality in a given country was becoming wider and wider as globalization increased (McLaren, 2010). Using the panel data of 26 countries over a period 38 years from 1970-2011, we set up three regression models in order to test the relationship between globalization and income inequality. We measure income inequality by taking average income of the top 1%, 5% or 10% of the distribution and dividing it by the mean income in the population. We measure the impact of globalization by regressing income inequality measures on (1) Foreign Direct Investment flows and (2) an index of globalization. The globalization index measures restrictions on international trade as well as other economic, social and political dimensions of globalization. In the regression results, we find that the coefficient on FDI/GDP is positive, which implies that income inequality increases as FDI/GDP increases. The results also show that political and cultural aspects of globalization are not significant. This means lower trade barriers and similar culture do not have a significant impact on income inequality.

DEDICATION

I would like to dedicate this work to my mother, Weixia Huang, my father, Yichang Yan. Without their support, and encouragement this could not have been possible.

ACKNOWLEDGMENTS

I would like to sincerely thank my advisor, Dr. Michal Jerzmanowski, for his guidance, encouragement, and patience. I would like to thank Dr. Scott Biaer and Dr. Kevin Tsui for serving on my thesis committee. I would also like to thank all past and current class members I have worked with while completing my Master's for their friendship and assistance.

TABLE OF CONTENTS

Page

LIST OF TABLES

CHAPTER ONE

RELATIONSHIP BETWEEN GLOBALIZATION AND INCOME INEQUALITY

Introduction

The concern about the enlarging gap of income inequality has always been in the hotspot of discussion among economic publications. Research points out that a shared global technology is the main cause that raised the gaps of income distribution (Sunil Mani, 2001). We are going to discuss the important consequences of the enlarged income gaps. Firstly, the enlarged gap between rich and poor has a very negative impact on the socio-economic development (Vernellia R. Randall, 2011). This negative effect will produce a series of cyclic reactions. Insufficient consumption reduces the demand in buyer's market, which puts many of the weaker SMEs go bankrupt due to the inefficient competition. Under this circumstance, business efficiency decreased. Since the SMEs went bankrupt, the unemployment rate increased. Socio-economic growth will slow down, state revenue growth will also slow down, and then policymakers have to relocate social wealth and reduce funding efforts to support low-income and low-income areas (Giovannie Pica, 2007). In this way, the reverse impact of the expansion of the income gap creates a vicious cycle. Second, the income gap between the rich and the poor is harmful to a society (Vernellia R. Randall, 2001). A peculiar phenomenon is a contradiction of the current stage of Chinese society: during the ultra-high-speed economic development, the happiness index and the masses of the standard of living of feelings did not go with the GDP rise (RuutVeenhoven, 1999). On the contrary, people feel that life is hard. The education fee is so high that people are afraid of not being able

to afford school. Those who went to school and graduated from college are also facing low hiring rates. In the city, the housing price is so high that most people cannot afford a home. In 2005, according to the minimum standards of the United Nations, the number of people under the poverty line in China has nearly reached 200 million, second only to India, the second largest in the world. In other words, fast GDP growth also comes with the problem of income inequality. It is always a big concern for policy makers when it comes to maximizing the social welfare and also trying to keep up with the GDP growth rate. So income inequality is a big problem both in developing countries and developed countries. It is important for us to look into the causes of income inequality. Foreign direct investment (FDI) is an economic behavior conducted by investors who can either invest capital or other production factors overseas in order to obtain the control over the local business so that the investors gain profit or acquire scarce resources that cannot be obtained domestically. There is a widely discussion about the distributional effect of globalization. FDI is the main method of overseas investment (McLaren, 2010). The learning cost is lower in a globalized world compare to a closed economy. Lower learning cost makes FDI more likely to happen. FDI grew dramatically in the last 15 years of the 20th century. FDI takes place mostly between developed countries so that the learning cost for entrepreneurs is lower (Pica, 2007). Baldwin, Braconier and Forslid (1999) show that FDI positively affects wages using industry-level data for 7 OECD countries. Keller and Yeaple (2003) provide firm-level evidence from the US showing that FDI spillovers account for about 14% of productivity growth in US firms between 1987 and 1996. The set-up of this paper is as the following. First of all, it provides some

backgrounds and introduction on globalization and FDI. In the second section of this paper, several literature reviews on the topic of the distributional effect of globalization, technology spill over and FDI are included. The third section of this paper talks about the data, methods and model. At last we discuss about the empirical results and come to the conclusion that globalization decrease income inequality.

Literature review

Globalization and Income Inequality

Income inequality has numbers of external and internal reasons. Globalization is an external reason. Globalization lowers the learning cost so that people with higher talent who adjust to advanced technology is likely to gain from globalization. FDI flows also increase the demand for labor service and make the low-talent labor better off. These are the main perspective from the second part of Giovannie Pica and Jose V. Rodriguez Mora's discussion distribution effect of globalization. Giovannie Pica and Jose V. Rodriguez Mora' point out that income distribution is formed as a U shape. FDI increases wage and productivity, which makes high-talent worker and low-talent worker better off, and make middle talent workers worse off. In other words, Giovannie Pica and Jose V. Rodriguez Mora's conclusion indicate that the middle class will vanish as the growth of globalization. In ALmas Heshmati's paper "The relationship between income inequality and globalization", author detect there is no significant correlation between globalization and inequality. The globalization index used in the paper is introduced by Kearney. The four indices are: economic integration, personal contact, technology and political

engagement each generated from a number of variables. The globalization index explains 7/11 of the variance in income inequality. The result from regression analysis shows different outcomes for four components. Personal contacts and technology transfers reduce inequality. Economic integration increases inequality. Political engagement found no significant on income inequality. There are some links between globalization and income inequality. In the paper "Who is Afraid of a Globalized World? Foreign Direct Investments, Local Knowledge and Allocation of Talents" reports that the level of globalization affects foreign direct investment between two countries. Since the higher similarity in language and regulation, the learning cost of building a company in the foreign land is lower than learning cost of building a company in other place with different language and distance. However, not everyone is a winner under this circumstance. Pica separates the entrepreneurs into three types with the assumption that every individual can choose occupation with the knowledge of local economy environment. The paper proves that high income and low-income agents benefit the most from globalization. And the middle-income agent is worse off from the existence of globalization. High income agents are always competitive in both foreign and domestic market. Low income worker gains from the increase demand of low-income worker and wage raise induced by FDI. Middle-income agents lose because they lost the competition in local economy without gaining from foreign markets (Pica et al., 2007). In John McLaren's paper "recent findings on trade and inequality", author pointed out a raising number of research have been done on the topic of which trade can affect income inequality not only in developed countries, but also in developing countries. John

McLaren's paper mainly gives a review of older and recent research have done on the topic of trade and income inequality. The Hecksher-Ohlin (HO) model was widely used to explain the link between trade and income inequality until 1990's. The HO model tells that countries export factors most abundantly supplied. Stolper-Samuelson Theorem emerges after this model. The theorem implies that "trade increases the real return to the factor that is relatively abundant in each country and lowers the real return to other factor" (McLaren, 2010). That means income inequality increase as trade increases for developed countries with abundantly supplied high skilled workers (McLaren, 2010). But the theorem also implies that income inequality decrease as trade increases for developing countries with abundantly supplied low skilled workers (McLaren, 2010). However, our findings are different to the implications of the Stolper-Samuelson Theorem.

FDI and Distance

The trend of globalization grows fast over time and there is a lot of research on the topic. The growth of globalization promotes FDI between countries. Most of the FDI happens between developed countries. FDI flows between countries with smaller distance, which means same language and similar political and cultural background. This topic is discussed in the paper "Egalitarianism, Cultural Distance, and FDI: A New Approach by Jordan I. Siegel Amir N. Licht Herzliya, Shalom H. Schwartz. The paper examines the relationship between cultural distance and FDI. Unlike Giovannie Pica and Jose V. Rodriguez Mora's paper, Jordan I. Siegel Amir N. Licht point out that Cultural

distance can be either an asset or a liability to FDI flows. Cultural distance labeled as egalitarianism, which means the degree of societal intolerance of market abuse and political power. There is a negative influence of egalitarianism on FDI flows. Firms with higher level of tolerance are more likely to engage in FDI. The empirical result shows egalitarianism is negatively correlated with numbers of FDI flows with a high significant level, which indicate that egalitarianism is a major determinant of FDI Flows. So egalitarianism works as liability to FDI. When label the cultural distance as harmony distance, it shows positively related with FDI. So harmony distance works as an asset to FDI. The result also shows legal family and physical geographic distance is negatively correlated with FDI.

FDI and technology spillover

Technology spillover is a major consequence of FDI (Mani, 2001). Countries with less advanced technology adjust to advanced technology via globalization. The share of advanced technology increases so that less developed countries benefit from globalization. In Giovannie Pica and Jose V. Rodriguez Mora's paper, they did not stress the relationship between FDI and technology spillovers. Author believes worker who can easily adjust to advanced technology is more talented so that they gain more from globalization. In Sunil Mani's paper "Globalization, Markets for technology and the relevance of innovation policies in developing economics", Mani test the hypothesis of whether the technology market becomes more competitive than pre-globalization phase. Mani uses Singapore and Malaysia as evidences of technology spillover. Then, Mina

comes to the conclusion that a shared global technology do not affects developing countries. The market for technology is shrinking and become less competitive. More and more technology transfers to developing countries through non-market method, like FDI. Sunil Mani's make the conclusion that the technology market is shrinking as the non-market form method increases, like FDI. The empirical results suggest that technology spillover to domestic countries is decrease. So developing countries should promote their own innovations of advanced technology.

Data

The income data, such as top 1% income, top 5% income, top 10% income, average data and bottom 90% income, is *Alvaredo, Facundo, Anthony B. Atkinson, Thomas Piketty and Emmanuel Saez, The World Top Incomes Database.* The income data is average income for a certain share of people. Top 1% income represents the average income of people whose earning is in the higher top 1% compare to the rest. It is an annually data for 26 countries. Table 1, table 2 and table 3 present a summary of income data. FDI data is acquired from the United Nations Conference on Trade and Development website. Both FDI inward and FDI outward are used in the regression as two separate variables. Total FDI is calculated by adding FDI inward and outward. Since the size of GDP may affect the wage inequality, we adjusted FDI to the current year of total GDP. The variable FDIinward_over_GDP is calculated using nominal FDI over nominal total GDP. The variable FDIoutward_over_GDP is calculated using nominal FDI outward over nominal total GDP. The variable Total_FDI_over_GDP is calculated

by adding nominal FDI inward and nominal FDI outward over nominal total GDP. Total GDP and real GDP per capita are collected from the United Nations Conference on Trade and Development website.

Method and Model

In this section, we are going to introduce the method and model used to examine the relationship between foreign direct investment, globalization and income inequality. Since we are interested in the relative income change of workers in different economic class, in this paper we use the income premium measured by the ratio of high income to average income, the ratio of high income to low income, the ratio of high income to low income and the low income to average income to proximate the income change, or equally saying, the change of income inequality. Pica's theory convinced us that globalization propagates its effects on the income inequality through foreign direct investment (Pica et.al, 2007). So in this section, we are going to exam whether the globalization has effect on the change of income inequality, but we also want to know whether FDI itself can change the wage inequality. Because through this method we can understand whether the FDI is one essential medium of globalization to change the income of workers in different class or globalization only change worker's income through some different ways.

We conduct the test in use the following statistical model:

$$\mathbf{wage\_inequality}=\beta_0+\beta_1\,\mathbf{(FDIinward\_over\_GDP)}+\beta_2\,\mathbf{(FDIoutward\_over\_GDP)}$$
$$+\beta_3\,\mathbf{(globalization\ index)}+\beta_5\,\mathbf{(ln\ (GDP))}+\beta 6\,\mathbf{(year)}+\xi$$

First of all, we included a measurement of KOF index of globalization in the model to measure the level of globalization. The KOF index was created to measure economic, social and political dimensions of globalization. Each of the parts of the index was calculated on a scale from 0 to 100. Overall, the index gives a clear sight of globalization level for each country (Dreher, 2006). Because the KOF index has incorporated FDI stock in the economic dimension, to examine the real effects of FDI flows and exogenous process of globalization on income inequality accurately, we need to eliminate the FDI flows out of the globalization index. Globalization index is recalculated by averaging the remaining three parts in the KOF index, specifically, in the model we calculated the globalization index by averaging the index of economic restrictions (which measures the import barriers, tariffs, taxes on international trade and capital account restrictions, higher index means lower economic restrictions), social globalization (which measures the communications between foreigners and domestic persons, cultural similarities and information flows between domestic country and the rest of the world, higher index means more socially globalized) and political globalization (which measures the participation in the international affairs, also higher index means higher degree of globalization). We considered that different GDP size may affect the FDI. We adjusted the nominal inward FDI and nominal outward FDI to the nominal GDP. To be more precise, we separate the FDI into two parts so that we will see the impact on wage inequality of inward FDI and outward FDI separately. Pica suggests that FDI inward may improve the workers with low income, harm the medium income workers; FDI outward may improve the entrepreneurs' economic situation significantly

by obtaining higher profits abroad (Pica, et al. 2007). It is worth noting that when we are examine how the income inequality is affected by FDI itself, we need to put the globalization index as a control variable since we need to guarantee that globalization index is not omitted (because it tends to affect both the income inequality and FDI). The Years variable is added to the regression to represent the time trend in the regression model. The variable ln(GDP) is included in the regression since many empirical researchers suggest that there is a relationship between GDP per capita and income inequality, furthermore GDP per capita may also potentially affect the FDI-GDP ratio and globalization of a country. Without including it in the model, we may have an omitted-variable problem. Empirical research suggests that countries with higher GDP per capita tend to have lower income inequality (Lee, Dylan B, 2012). The left side variable income inequality is composed using the top 1% income over average income. In order to make the result more persuasive, we also formed an income inequality measurement using the top 5% income and top 10% income over average income. This is the measurement of income inequality between high income class and middle income class. There is another measurement created to examine the income inequality between high income class and low income class. The method used to measure income inequality is by taking top 1% average income divide over average income. It shows the gap between high income and the average income of the country. We used the same method to calculate two measurements of income inequality between high income and average income using top 5% average income divide average income and top 10% average income divide average income. Bottom 90% average income divide average income tells

us whether low income people becomes poorer or richer compare to the average income. The choice of measurement for income inequality distinguished our paper from the previous researchers. In the paper "Rising Income Inequality: Technology, or Trade and Financial Globalization?" Jamotte used the GINI index as the measurement of income inequality since they want to see the big picture of how globalization, technology and FDI affect wage inequality (Jaumotte, 2008). However, our paper focuses on examining whether globalization and FDI enlarge the income gap for different income levels.

It is also good to know how the total FDI flow changed the income inequality. Since wage may be a big cause of FDI flow, if the lower workers' wage is relatively high, manufactures tend to source out to seek low labor cost; if the lower workers' wages are relatively low, manufactures tend to source in to seek low labor cost. As result higher ratio of upper class people's income to lower class people's income tend to have a higher FDI inward; and lower ratio of upper class people's income to lower class people's income tend to have a higher FDI outward. So income inequality tends to be negatively correlated to FDI outward and positively correlated to FDI inward. By adding FDI inward and FDI outward, we can partly cancel out this intrinsic correlation.

Results

The results are presented as the following. Table 1 is a summary statistic of the data used in the model. Table 2 presents the estimation of income inequality of top 1% over average income on FDI inward, FDI outward, total FDI, globalization index, Log GDP and years. The coefficient of FDI inward is positive, which means income

inequality increases as FDI inward increases. The coefficient of FDI outward is negative, which means income inequality decreases as FDI inward increases. Both FDI inward and FDI outward are significantly correlated with the income inequality; however, it is not highly consistent with the theory. Probably, because of income may be an important factor to determine the change of FDI inward and FDI outward. The coefficient of total FDI is positive but has a low significant level. However, the total FDI GDP ratio tends to negatively affect the income premium of the people with top 1% income level. Putting total FDI in the regression will partly eliminate the endogeneity problem of FDI inward and FDI outward which exists when they are regressed in the model separately, however the coefficient makes less sense and hard to interpret. The significance of coefficient before total FDI only can help us conclude that FDI-GDP ratio plays an important role in determining the income change of those people with high income. Table 3 presents the result of income inequality of top 5% over average. FDI inward shows positive coefficient and high correlation with income inequality of top 5% over average. FDI inward has negative coefficient and low correlation with income inequality of top 5% over average. Total FDI has a positive coefficient with income inequality. Globalization index is highly correlated with income inequality. But the coefficient of globalization index is negative and very significant, which means the level of globalization decrease income inequality between the people whose income is at the top of 5% and a people in average. In other words, people whose income was in the top 5% category are moving toward to average income category. Table 4 presents the results of income inequality of top 10% over average. FDI inward and FDI outward show a high correlation with

income inequality of top 10% over average. Total GDP is also highly correlated with wage inequality of top 10% over average with a positive coefficient. Compare among table 2,table 3 and table 4, we found that the coefficient of total FDI to income inequality of top 1% over average come out to be the highest , which means top 1% gains the most from globalization. The coefficient of globalization index is positive but insignificant for income inequality of top 10% over average. Table 5 presents the result of income inequality of top 1% income over bottom 90% income. FDI inward and FDI outward is highly correlated with income inequality of top 1% income over bottom 90%. The coefficient of FDI inward is positive and highly significant. The coefficient of FDI outward is negative and highly significant. This means that FDI flows have a high impact on income distributions. Total FDI is also highly correlated with income inequality of top 1% over bottom 90%. We can tell from the coefficient of total FDI that globalization enlarges the gap between top 1% income category and bottom 90% income category. The coefficient of globalization index of income inequality of top 1% over bottom 90% is negative with high significant level. These results further prove that the gap between top 1% income category and bottom 90% income category was reduced by increasing the level of globalization. The results from Table 6 and table 7 are consistent with what we found in table 5. Table 8 shows the result of wage inequality of bottom 90% over average. The purpose of this regression is to tell whether bottom 90% benefit from globalization. The result shows that both FDI inward and FDI outward are significant. The coefficient of FDI inward is negative which means income inequality increases as result of increase in FDI inward. The coefficient of FDI outward is positive which means

income inequality decrease as result of increase in FDI outward. Total FDI is negatively correlated to income inequality of bottom 90% over average. It means that income inequality also increases as total FDI increases. That is, the bottom 90% income category decreases as the level of globalization increase. We do not rely on the results with fixed effect because the lack of data for this project. In general, the result shows that globalization narrows the gap between top income category and bottom income category.

Conclusion and Concerns

According to our research and study, globalization does highly affect income inequality. In this paper we found that bottom income category benefit the most from globalization. However, people with high income category and low income category tend to move toward average income category. In other words, in contrary to the theory Pica and Jose suggested increase in globalization does eliminate the problem of income inequality. FDI-GDP ratio indeed highly affects the change of relative income; probably, we can say that FDI is an approximate reason that eliminates inequality and globalization can be considered as an ultimate reason that eliminates inequality. Here is one concern we have encountered. In the model, we adjusted FDI inward, FDI outward and total FDI to total GDP so that see the share of FDI in the GDP. However, GDP grows a lot faster than FDI. Under this circumstance, the coefficients estimation of FDI inward, FDI outward and total FDI are not very accurate. Another concern is that the revers effect may still exist in the model. For future research, we should look for an instrumental variable to eliminate the reverse effect of income and globalization.

Table1: summary data

	Obs	Mean	Std. Dev.	Min	Max
Country	0				
Year	325	1989.089	10.46193	1970	2009
FDIinward/GDP	325	.0260276	.0368791	-.0317034	.2362135
FDIoutward/GDP	325	.0211358	.0281744	-.0407145	.2283552
Top1%/average	325	8.067359	3.080737	2.64847	18.327
Top5%/average	325	4.115557	1.009941	1.960291	7.0944
Top10%/average	325	3.223889	.8647393	1.73713	10.259
Top1%/bottom90%	325	10.84157	5.200977	2.88474	30.35724
Top5%/bottom90%	325	5.47397	1.844716	2.135169	13.10946
Top10%/bottom90%	325	4.290678	1.650214	1.8921	18.95719
Globalization index	325	73.53218	12.10087	25.0512	91.13425
Ln(gdp)	325	9.982813	.915079	5.929247	11.1194

Table 2 Income inequality _top1% over average

	Wageinequality_top 1%/average	Wageinequality_top1%/average	Wageinequality_top 1%/average
FDIinward over GDP	14.649*** (3.64)		
FDIoutward over GDP	-11.502 (5.98)		
globalization index	-0.032* (0.02)	-0.034* (0.02)	-0.028 (0.02)
ln(GDP)	0.712*** (0.18)	0.649*** (0.18)	0.633*** (0.18)
Total_FDI		5.707* (2.23)	
year	0.098*** (0.01)	0.091*** (0.01)	0.097*** (0.01)

Table 3 Income inequality _top 5% over average

	Wageinequality_top5%/average	Wageinequality_top5%/average	Wageinequality_top5%/average
FDIinward over GDP	4.427** (1.47)		
FDIoutward over GDP	-4.23 (2.37)		
globalization index	-0.022*** (0.01)	-0.022*** (0.01)	-0.020*** (0.01)
ln(GDP)	0.539*** (0.08)	0.499*** (0.08)	0.481*** (0.08)
Total_FDI		1.394 (0.86)	
year	0.029*** (0.01)	0.027*** (0.01)	0.029*** (0)

Table 4 Income inequality _top10% over average

	Wageinequality_top 10%/average	Wageinequality_top10%/average	Wageinequality_top 10%/average
FDIinward over GDP	3.399***		
	(1.02)		
FDIoutward over GDP	-2.132		
	(1.82)		
globalization index	0.004	0.003	0.006
	(0.01)	(0.01)	(0.01)
ln(GDP)	0.192*	0.176	0.14
	(0.1)	(0.1)	(0.09)
Total_FDI		1.701*	
		(0.7)	
year	-0.002	-0.004	0
	(0)	(0)	(0)

Table 5 Income inequality top 1% over bottom 90%

	Wageinequality_top1%/bottom	Wageinequality_top1%/bottom	Wageinequality_top1%/bottom
FDIinward over GDP	51.765*** (8.5)		
FDIoutward over GDP	-47.428*** (12.72)		
globalization index	-0.146** (0.05)	-0.176** (0.05)	-0.146** (0.05)
ln(GDP)	3.194*** (0.61)	2.966*** (0.63)	2.664*** (0.63)
Total_FDI		14.088** (4.47)	
year	0.199*** (0.03)	0.181*** (0.03)	0.196*** (0.03)

Table 6 Income inequality top 5% over bottom 90%

	Wageinequality_top 5%/bottom90%	Wageinequality_ top5%/bottom 90%	Wageinequality_top 5%/bottom90%
FDIinward over GDP	17.015*** (3.18)		
FDIoutward over GDP	-15.190** (4.76)		
globalization index	-0.029 (0.02)	-0.038 (0.02)	-0.028 (0.02)
ln(GDP)	0.840*** (0.23)	0.766** (0.24)	0.662** (0.23)
Total_FDI		4.783** (1.66)	
year	0.049*** (0.01)	0.043*** (0.01)	0.048*** (0.01)

Table 7 Income inequality top 10% over bottom 90%

	Wageinequality_top10%/bottom90%	Wageinequality_top10%/bottom90%	Wageinequality_top10%/average90%
FDIinward over GDP	14.893*** (3.16)		
FDIoutward over GDP	-10.234* (4.57)		
globalization index	-0.046* (0.02)	-0.054** (0.02)	-0.043* (0.02)
ln(GDP)	0.746*** (0.21)	0.685** (0.22)	0.583** (0.22)
Total_FDI		5.196** (1.73)	
year	0.021* (0.01)	0.017 (0.01)	0.026* (0.01)

Table 8 Income inequality bottom 90% over average

	Wageinequality_bottom90%/average income	Wageinequality_bottom90%/average income	Wageinequality_bottom90%/average income
FDIinward over GDP	-0.530*** (0.12)		
FDIoutward over GDP	0.477** (0.18)		
globalization index	0 (0)	0.001 (0)	0 (0)
ln(GDP)	-0.030*** (0.01)	-0.028** (0.01)	-0.025** (0.01)
Total_FDI		-0.148* (0.06)	
year	-0.001 (0)	-0.001 (0)	-0.001* (0)

APPENDIX

List of countries mentioned

Country	Developed/developing
Australia	Developed
Canada	Developed
china	Developing
France	Developed
Netherlands	Developed
Norway	Developed
Portugal	Developed
Singapore	Developed
South Africa	Developing
Sweden	Developed
Switzerland	Developed
United states	Developed

References

1. **Harrison, Ann, John McLaren, and Margaret S. McMillan**. 2010. Recent findings on trade and inequality.
2. **Heshmati, Almas**. 2003. The relationship between income inequality and globalization. April 25, 20.
3. **Jaumotte, Florence, Chris Papageorgiou, and Subir Lall**. 2008. Rising income inequality: technology, or trade and financial globalization? .
4. **Kazuyuki, MOTOHASHI, and YUAN Yuan**. 2009. Technology Spillovers from Multinationals to Local Firms: Evidence from Automobile and Electronics Firms in China.
5. **Mani, Sunil.** 2001. Globalization, Markets for Technology and the Relevance of Innovation Policies in Developing Countries. Nairobi: African Technology Policy Studies Network Special Paper 2, 2001-2003.
6. **Pica, Giovanni, and Jos é V. Rodr ǵuez Mora**. 2011. Who's afraid of a globalized world? Foreign Direct Investments, local knowledge and allocation of talents. Journal of International Economics 85, no. 1:86-101.
7. **Schwartz, Shalom H., Amir N. Licht, and Jordan I. Siegel**. 2008. Egalitarianism, Cultural Distance, and FDI: A New Approach. American Law & Economics Association Papers1-47.
8. **Vernellia R. Randall.** "Widening Gap Between Rich and Poor. "http://academic.udayton.edu/race/06hrights/georegions/northamerica/china03.htm. Accessed Mar. 2013.2008.