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**ECONOMIC GLOBALIZATION:
A STUDY OF FOREIGN DIRECT INVESTMENT'S
IMPACT ON U.S. WAGES**

BY: PETER VAHLE

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5/3/16

I, Peter Vahle, hereby accept membership in the Skidmore College community and, with full realization of the responsibilities inherent in membership, do agree to adhere to honesty and integrity in all relationships, to be considerate of the rights of others, and to abide by the College regulations.

Introduction:

The United States labor market is undergoing seismic changes as it becomes more intertwined with the global economy. But this reality is not unique to the United States; technological innovation and the globalization phenomenon are shaping a world that is more socially, politically, and economically integrated than ever before. The Merriam Webster dictionary defines globalization as “the development of an increasingly integrated global economy marked especially by free trade, free flow of capital, and the tapping of cheaper foreign labor markets.” The definition alone indicates that globalization capitalizes on international labor market inequities. The question immediately arises; is this a good thing or a bad thing for the average worker in the United States? What about other countries? Or maybe a better question would be even more general; who benefits from globalization and why? Answering these questions is crucial to understanding transformations within the labor market. This paper is an investigation of how free trade and free flow of capital influences US wages. Ultimately, its aim is to inform policy to anticipate shifts in demand for skilled and unskilled workers alike. This research contributes to the large body of literature focused on ensuring that the United States’ labor market is as robust, efficient, and just as possible.

As universal internet access expands, and economic and financial market integration occurs, international business is increasing as trade restrictions are decreasing. Trade liberalization will naturally allow for market integration, much to the delight of both prospective businesses looking to internationalize, and established multinational enterprises who seek to expand their operations abroad. Although businesses enjoy capitalizing on opportunities abroad, it is largely unknown whether or not workers should be celebrating their newfound roles within an integrated global economy. This is the more urgent political question that lies at the heart of

international economic relations. The truth is that the welfare of different workers depends on a myriad of factors – including but not limited to skill level and global location. Acknowledging that each type of worker in each region of each country faces unique experiences in respect to globalization, makes it difficult to perceive the overall consequences. That being said, it is always in the best interest of a country to support and protect its labor force against domestic and international labor shocks. It is not enough to protect a section, or a part of the labor force, but there should be no discrimination in a country's protection of all of its workers. After all, acclaimed economist David Hume said – and many economists would agree – “you need not ask, who is the master of the feast? The man, who sits in the lowest place, and who is always industrious in helping every one, is certainly the person,” implying that the workforce is the backbone of any economy (and ignoring any other political undertones) (Hume, 1994, pg. 215). Here, Hume is also emphasizing the importance of the unskilled worker to the overall health of an economy. Before commercial aircrafts and modern transportation accelerated international business, and excluding economies of colonialism, countries had to rely on their domestic labor force for almost all production and services. The global economy has changed so rapidly into an interdependent environment where countries are relying heavily on multinational labor for their own business interests. The concept of domestic businesses establishing international business operations and hiring foreign workers is not new to the 21st century, however the technological boom over the last 15 years has further challenged the traditional role of domestic labor forces. This paper seeks to understand if and how a globalizing economy impacts skilled and unskilled workers in the United States.

There are a number of ways to evaluate the well-being of the US labor market; by analyzing different unemployment level indicators or real wages, one can interpret the macro

trends in the labor market. But what's more important is understanding the causes of these macro trends. For example, the macroeconomic U.S. data suggested that inflation and unemployment were around target levels leading up to the 2008 financial crisis, which were signals of a healthy and growing economy. But when the housing bubble burst, the economy went over the cliff and unemployment rose to around 9% in 2008. Although the inflated housing prices were just a small factor in determining labor market stasis, when the market crashed, the labor market was severely crippled. Were economic and political experts able to diagnose these convoluted and illegitimate activities, then something could have been done to counter the negative effects of the housing market crash, and therefore provide protection for the nearly 9 million people who lost their jobs, 60% of whom earned meager salaries of between \$14-\$21 an hour (Plumer, 2012). With this case in mind, I stress the importance of understanding how economic developments directly affect the labor market. In this paper, I seek to discover how globalization, through foreign direct investment and multinational enterprise expansion, affects workers in the United States. In anticipation of exponential technological advancement and growing international financial investment, research must be done that elucidates both the benefits and harms of such developments. In many situations of massive economic downturn, the unskilled workers and those making meager salaries (which often times is one and the same) are most negatively affected. If Hume was right, and the working class, including unskilled laborers are truly the backbone of an economy, wouldn't it be disastrous for any country to jeopardize their welfare? As I hypothesize in this study, globalization will benefit corporations and the highest earners (assumed to be skilled) in the U.S. significantly more than the lowest earners (assumed to be unskilled), which will contribute to increasing wage inequalities.

Here, I am introducing the relevant concept of US income inequality, which has been rapidly widening since 1980. Robert Reich, the ex-secretary of treasury in the Clinton administration, blames lackluster economic growth and widening inequality since 1980 on the stagnation of median wages and the divergence of average CEO-employee compensation ratios, among other things. The trend in CEO-employee pay ratios reflects this growing wage disparity: “CEO pay is about 277 times an average worker’s pay, compared to 1965 when CEOs made only 20 times more than their workers” (Stevenson, 2011). A study by Saez presents that around 58% of new income is going to the top 1% of American households. Statistics such as these have catapulted concern for economic inequality into mainstream of American politics. This paper is concerned with inequality because there seems to be a shift in the United States labor market, which is demanding more skilled labor and less unskilled labor. This sort of shift in labor demand is detrimental to unskilled workers’ interests, because it means that a lot of unskilled workers will be chasing fewer jobs, therefore putting downward pressure on their wages. CEO payment ratios pertain to this research, as I have found that CEOs, financial executives and other powerful corporate positions have seen huge pay increases relative to middle and low income workers dating back before 1998 (data for this research begins in year 1998). Using this thought framework; by understanding *why* demand for unskilled labor is decreasing, one can pinpoint an economic (or political) prognosis to combat the issue. The literature review will delve into shifts in U.S. demand for skilled vs. unskilled labor. This paper will not assess whether or not overall income inequality is good or bad for economic growth. Rather, the investigation attempts to discover why income inequality might be widening, and what is causing it?

There is a vast collection of literature (as described in the next section) that covers the relationship between globalization and corresponding labor market outcomes. Globalization’s

progress has been lauded for bringing together millions of people from all reaches of the world; but this same interconnectedness has also been criticized for proliferating inequality in the United States. Dreher's analysis of his globalization index shows that globalization does indeed lead to economic growth, but this growth is not equally distributed around the world (Dreher, 2006, pg. 18). A lot of literature related to this topic has vigorously attempted to find out how globalization affects the wages on United States' workers. Harrison et al. (2011) and Brainard et al. (1997) have quantified the effects that Multinational Enterprises (MNE) and Foreign Direct Investment (FDI) have on wage earners in the United States economy. Given the complexities and unprecedented dynamic nature of globalization, the overall consensus on globalization's impact on the labor market is inconclusive. There are many contradicting and disproving studies, which weave a web that is so intertwined and obfuscating, that the economic literature's failure to simplify this subject may actually reflect the complexities of reality. The only meaningful way to understand how the integration of global markets has affected corresponding labor markets is to concentrate on specific case studies. Quantifying globalization (in its abstract) is a futile and inconclusive endeavor, as the collection of relevant literature has corroborated. Globalization's benefits, contributions, and costs are all situation-specific – dependent upon controlled, targeted microeconomic relationships. These type of asymmetric effects parallel Dreher's findings.

Tackling this macroeconomic phenomenon through microeconomic slices is the only way to truly comprehend the individual market outcomes in a meaningful way. For example, the movement of capital abroad is going to affect each state in the U.S. differently, and each region within a state differently depending on numerous factors. I believe skill level and industry are two of the most important factors that determine how globalization affects U.S. labor. Before continuing it is important to provide definitions for some of the key terms used in this study. As

defined by OECD, FDI, or direct investment abroad, is the “direct or indirect ownership of 10% or more of the voting power of an enterprise resident in one economy by an investor resident in another economy” (OECD). FDI can be the case of a business opening a franchise abroad, or buying a foreign company. A U.S. Parent Company, or simply “parent” in this paper, is a company that engages in FDI. A foreign affiliate, or MNE affiliate, is a foreign business in which the U.S. parent has direct investment. The MNE is the combined operations of the parent and its affiliate (Mataloni, 1995, pg. 38). MNEs are synonymous with multinational corporations. These definitions and acronyms are important, as they populate the entirety of this research. I am exploring these international relationships because they have become highly politicized, and the United States should adopt international business policy that defends US workers. That being said, each autonomous nation should have the agency to adopt certain policies based on their unique orientation with the global economic conditions. It is obvious that a developed nation such as the United States must confront globalization differently than a developing nation such as Venezuela. It would be neither useful nor informative to conduct research designed to quantify the overall effects of globalization if the end result does not provide insight into any one political economy.

There is no feasible way to account for globalization’s effect on labor market outcomes without controlling for technological process and vice versa. Both of these influences have been compared and contrasted ad nauseam in an effort to try to explain the changing dynamics in the workplace. This paper is not concerned with how technology has changed the work environment, despite how salient it may be. Rather, the goal of this research is to isolate “globalization” so as to quantify the shifts in wage distribution due to MNE behavior. Through this channel, I analyze the change in United States wages and interpret it as a microcosm of how labor competition and

corporate migration abroad has affected the wages of United States' workers. In other words, I am using FDI as a proxy for globalization, even though I acknowledge that it is only a small portion of the phenomenon as a whole.

A paper by Tracy C. Miller, *Impact of Globalization on U.S. Wage Inequality* discusses how outsourcing and offshoring affects wage inequality in the U.S. labor market. This gets at the heart of the topic at hand, which proposes that skilled workers and unskilled workers are experiencing different wage outcomes. Miller's work, like Feenstra and Hanson (2006) is not able to definitively isolate skill-bias technology changes from outsourcing, and therefore cannot claim exactly how much either factor leads wage inequality. They state that "90% of increase in wage inequality is associated with differences in investment between sectors, outsourcing, technical change, or something else" (240, Miller. 2001). The essence of these trends has not been explained. They propose that limiting outsourcing and offshoring might decrease the gap between skilled and unskilled workers in the U.S., however this might also make it more difficult for MNEs to compete with competing global corporate entities.

The following section will provide a brief rundown of the literature relevant to the topic. Next, will be the conceptual framework and the economic theory derived from the literature. After the explanation of the theory, I discuss the research methodology and then analyze the empirical results. Policy recommendations are presented based on the findings in the data. Then, the paper wraps up with the conclusion.

Literature Review:

Much of the relevant literature (Harrison et al. (2011), Brainard & Riker (1997), Lipsey (2004)) on this topic has focused on the United States because of its accessible data and its

strong influence in the global market. Following WWII, the United States emerged as the leader in outward direct investment, and continues to be one of the most active participants of international business and trade today (Lipsey, 2004). Studies done by Harrison et al (2004), Brainard et al. (1997), Grossman et al. (2008) et al, and Lipsey (2004) have covered the relationship between FDI and home country wages, largely through the lens of isolated parent-affiliate comparisons and shifting demand for skilled and unskilled labor. Brainard's work focuses more on the organizational structure to provide reasons for FDI expansion, while Harrison (2004), Feenstra (2006), Miller (2001), and Borjas (1997) focus more on the labor market outcomes. Miller and Borjas's studies address and emphasize the high inequality in wages, which they attribute to growing globalization. The most relevant research to this study, (Harrison (2004, 2011), Brainard & Riker, Lipsey) investigates the relationship between MNE activity and corresponding labor market outcomes of the home country. Now, it is important to note that the term "labor market outcomes" encompasses a wide variety of labor market variables, and uses an even wider variety of metrics to explicate them. Since this paper concentrates on MNE behavior, in the form of FDI, and how it relates to labor market outcomes, this paper examines the many ways economists have used MNE data to explain *wage* changes in the United States, thus choosing wages as the sole labor market outcome considered. A majority of research on this topic (Harrison (2004), Lipsey(2004)) looks into how MNE expansion abroad affects the demand for labor back home; commonly measuring labor demand by unemployment levels. Although this paper addresses wage levels, it is critical to understand factors of labor market outcomes which influence wages. to analyze how cross-industry wages are impacted by increases in MNE activity abroad. Analysis of these methods reveals that there is no uniform approach for testing the relationship. This paper is unique in its measurement of FDI's impact

wages of skilled versus unskilled workers. It gathers specific occupation wage data from ten industries to control for inter-industry discrepancies, and allows for insight on a microeconomic level.

A large assumption made in this work postulates that MNE activities are representative of economic globalization – this is an oversimplification given the political and cultural determinants of globalization. However, for the purpose of this study, MNE activity serves as a proxy for globalization. Brainard et al. (1997) defend the use of MNE data, saying that it is more relevant than ever because they articulate an international link in labor demands, which cannot be represented by trade. Using MNE data is fruitful because it allows for more flexibility regarding MNE characteristics (number of employees, total assets, etc.). This study does not look into how wages are affected differently in each industry. Further industry-specific analysis is a logical continuation of this study, and is a recommended future endeavor. This development on the topic is important, for example, because a lot of research argues that the manufacturing industry is most severely affected by globalization because the nature of the industry, given the heavy reliance on production, companies can take advantage of cheaper factors of production. Brainard and Riker (1997), McMillan (2004), and Grossman (2008) all use cost functions to discuss this idea of capitalizing on foreign labor markets.

Anne E. Harrison and Margaret S. McMillan have conducted extensive research on overseas investment, US multinationals, and US wages and employment. Their study from 2004 studies the effects of an increase in mobility of US investment capital on labor market outcomes (Harrison, Ann 2004). They test the relationship between outsourcing and labor's share of income and US employment. Because capital has become a much greater portion of national income in the United States and labor's share has declined, they argue that the bargaining power

for American workers is diminishing. Thomas Picketty's acclaimed work, *Capital*, provides an extensive framework through which we can interpret the shift from the labor economy to the capital economy. He argues that when the growth rate of capital exceeds the growth rate of the economy, as is the case in some advanced nations today, labor significantly loses its bargaining power and as a result propagates the divide between the "haves" and "have nots" (Piketetty). This divide between the haves and have nots, or in the case of this paper, between the skilled and the unskilled, is discussed in greater detail in the conceptual framework section.

Since capital's share of income is becoming increasingly greater, the mobility of capital investment becomes even more crucial in the context of offshoring labor and capital. As do most studies on this topic, Harrison et al.'s work concentrates on how a US firm's relocation abroad impacts (hypothetically lowers) the wages of the remaining workers in the U.S. parent company. This is the framework for their regression modeling: the parent-affiliate relationship. My study is differentiated in a number of ways; notably, it does not restrict itself to intra-firm analysis. According to Harrison et al. "The framework for this research is based on a model of imperfect competition, where firms receive excess profits and firms and workers bargain over those profits. If firms find it easier to relocate to regions with lower labor costs, this gives them a bargaining advantage, resulting in lower wages for workers remaining in the United States" (4, Harrison, Ann 2004).

Harrison and McMillan also discuss the *threat effect*. They note that, "there is plenty of anecdotal evidence which suggests that US firms are using the threat of relocation to keep wages down in the US, there has been very little academic research which focuses on this issue." (Harrison, Ann 2004). Although their quantitative analysis on the *threat* effect is limited, their hypothesis that this effect exists and puts downward pressure on wages is hard to deny, and it

supports the theory of greater labor competition in the globalized economy. To complement their findings regarding the *threat effect*, they use preliminary results to estimate that an increase in bargaining power of capital negatively affects labor market outcomes in the U.S. Regarding their tests on real wages, they find that an increase in the number of foreign affiliates has a negative effect on the real wages of workers in the US parent. Additionally, a 1 percent increase in the rate of return on capital abroad lowers real wages by 1 to 3 percent in the US parent. This study has great implications, because they have drawn a link between diminished US wages as a result of MNE expansion. Additionally, they show that wages fall as a result of higher capital returns. Additional results capture the effects of increased capital mobility on the manufacturing industry. They also find that labor's share of income has fallen dramatically (both in the U.S. and abroad) and wages have remained flat. According to these findings, there is a significant relationship between FDI and home country wages. Now, it is interesting to consider how wages are affected differently. A great deal of research looks into the impact that globalization and MNE activity has on skilled versus unskilled workers.

Another study by Harrison and McMillan (2011), *Outsourcing Jobs: Multinationals and U.S. Employment*, focuses on how changes in foreign affiliate wages affect US manufacturing employment. Like their 2004 study, this paper also uses MNE data, however this study is exclusive to the manufacturing industry. It breaks down firms' foreign investment into two fundamentally different structures: vertical and horizontal. With horizontal investment, firms hire employees abroad that do the same thing as employees in the home country. Harrison et al. find that for firms that use this horizontal strategy, foreign and domestic employees are substitutes. This means that for horizontally organized firms, outsourcing is likely to replace jobs in the United States because a company can find unskilled labor anywhere there is a labor force. The

alternative way to invest abroad is to use the vertical foreign investment strategy, which signifies that employees hired abroad are doing different work than the domestic employees. This study finds that for firms that use vertical foreign investment, foreign and domestic employees are complements. The findings here suggest that when a vertically organized firm makes foreign investment (or hires employees abroad), employment in both the parent and affiliate companies will increase.

Lipsey (2004) builds off the work of Harrison et al (2011), suggesting that one implication of vertical organization might be “multinationals based in rich countries might allocate their more labor-intensive production to their affiliates in poor countries, while concentrating their more capital-intensive or skill intensive operations at home” (341, Lipsey). He goes on to reference his study from 1995, where he found a negative relationship between affiliate net sales and parent employment. In his work studying the United States (1997), he found increased production in developing countries led to less labor-intensive activities at home. Because these two foreign investment styles affect demand for domestic labor inversely, Harrison et al. admit that the effects of offshore activities can be contradictory – therefore neither entirely good nor bad for the economy (Harrison, Ann 2011).

Brainard and Riker’s work, *Are U.S. Multinationals Exporting US Jobs*, makes further inquiries into the nature of MNE foreign investment and their impact on the US labor market. Similar to the methods employed by Harrison and McMillan (2004), Brainard and Riker inspect the relationship between employment in parent and affiliate companies. They estimate labor demand as a function of wages in different locations. So, here, they are using international wage data (based on geographic location) to observe how US parent companies respond. Their model estimates the elasticity of substitution within firms between overseas affiliate employment and

US parent employment directly. In other words, how easily can employees be replaced overseas? They use labor demand as their dependent variable, and use wages as a variable in the offshore production function. Their results suggest that foreign affiliate employment substitutes modestly at the margins for U.S. parent employment. There is much stronger substitution between workers at affiliates in alternative low wage locations. They find that parent employment responds very little when foreign affiliate wages fall, because the alternative affiliate employment (spread out between different countries) is what is affected by these falling wages. They suggest that elasticity of labor demand is strongly dependent on differences in affiliate wage. To understand this effect, consider a company that has affiliate companies established in two different developing nations. If the average wage compensation for employees in one country increases, then employment will shift between affiliates to the country with lower wages. Using these findings, they state “the story that U.S. jobs are ‘exported’ to low cost production sites is supplanted by the suggestion that employment shifting takes place predominantly between offshore affiliates in less developed countries” (2, Brainard, S. 1997). But this simplifies the story to only include outsourcing as a function of foreign wages, and focuses only on horizontally organized firms, where employees are substitutable by nature. Comparing outsourcing in developed versus developing countries is another angle a lot of economic take to contribute to this research. My study does not take into account geographic location (nor corresponding foreign wages per country). Work done by Slaughter (1993), as referenced in Brainard and Riker’s study, complements the latter’s research. Slaughter finds that that domestic industry employment and overseas affiliate employment are complementary, but only weakly related (Slaughter, Matthew 1993). The shortcomings of this study, as with others referenced in this literature review, are that it focuses solely on one industry: manufacturing. While it is

important to understand the depths of specific industry, I am interested in clarifying the effects of FDI across industries.

To understand MNE's effects on domestic industry labor outcomes, I must also address the case of international trade, as trade is an endogenous piece of globalization. Grossman develops a framework in which falling costs of offshoring can lead to wage gains for workers at home in their paper *Trading Tasks: A Simple Theory of Offshoring*. (Grossman, Gene 2008). Similar to Feenstra and Hanson (1996), their research concentrates on international trade proposes that modern trade operates by trading *tasks* rather than always complete goods. This new way of trading increases trading frequency, globalization, and outsourcing, and manifests Adam Smith's theory of the division of labor. Put simply, they have observed how specialization has shifted in the international trade environment. They break down the factors of production to isolate different tasks. The goal is to determine what affects factors of production in this new trading tasks world – and how do improvements in the opportunities for offshoring affect the wages of different types of labor? (5, Grossman, Gene 2008). “In General, a fall in offshoring costs for low-skill tasks induces a *productivity effects*, a *relative-price effect*, and a *labor-supply effect* on low-skill wages” (Grossman, 2008, pg. 6). Basically, this means that when it becomes cheaper to offshore, firms will be able to achieve higher productivity and lower costs.

Borjas, Freeman, and Katz (1997) find that increased trade with developing countries depresses wages at the bottom of the income distribution. They suggest that while trade has had minor effects of labor supply of the less skilled, the changes in import technology (cheaper, more efficient imports) in the manufacturing industry has put significant pressure on the wages of the lowest skilled workers, or specifically the production workers.

The literature regarding demand for skilled versus unskilled labor takes on a variety of approaches, using different theoretical models and variables. The consistent theme throughout the literature is that the globalization effect, as measured by the increased mobility of capital and trade liberalization, has put downward pressure on a large portion of U.S. wages. The studies by McMillan et al., Borjas et al., and Brainard et al., all suggest that movement of capital abroad is suppressing domestic wages for workers in parent MNEs. But surely, this affects more than just the employees of an MNE. There is a consensus that when factor prices, such as labor, fall abroad, then there is a business incentive to move capital and investments to a new location where things can be produced at a lower cost. These studies indicate that this decision by MNEs to move abroad is detrimental to the employees that work at the parent firm – both wages fall and unemployment rises. Even when offshoring does not take place directly, the effects of moving abroad represent a significant pressure on the low wage earners, or the unskilled workers, in the US labor market.

The ambition of this study is to look towards globalization's effects on the US labor market as a whole rather than just the employees who work for a parent company of a multinational enterprise. Then to compare how skilled labor and unskilled labor are being impacted. Based on the literature review, I hypothesize that low-skilled wages will be much more negatively impacted than skilled wages. To create my experiment, I extract the organizational structure analysis by Harrison et al. (2011) and Lipsey (2004) to develop a theory to explain different international labor relationships. I will build upon the literature that suggests that there is downward pressure on the wages of both unskilled workers and workers at MNE parent firms.

Conceptual Framework/Theoretical Model:

Theory of vertical and horizontal firm structure:

Up to this point, I have vaguely outlined the conceptual framework on which this research is based. A survey of the relevant literature combined with economic theories of labor supply and demand has solidified an economic foundation for my argument. The pertaining question is: does Foreign Direct Investment affect the wages of skilled and unskilled workers in the United States? Specifically, do the activities of MNE affiliates, which I am using as representative of FDI activity, affect U.S. wages? If so, how do these effects differ between the skilled and unskilled workers? I have encountered many theories in the literature, which propose that an integrated global market promotes increased flow of capital goods. Depending on the way that a firm is structured, their investment abroad will have different implications for US workers. According to Harrison et al. (2011), for firms that use a horizontal strategy, foreign and domestic employees are substitutes. This means that for horizontally organized firms, offshoring is likely to replace jobs in the United States because a company can find unskilled labor anywhere there is a labor force. In this scenario, unskilled labor, or alternatively those earning the lowest wages, fare the worst because their jobs are replaceable.

Another way in which firms invest abroad is by using the vertical foreign investment strategy; a strategy in which employees hired abroad are responsible for different tasks than the domestic employees working in the parent firm. According to the theory, within firms that use vertical foreign investment, foreign and domestic employees are complements. This suggests that when a vertically organized firm makes foreign investment (or hires employees abroad), employment in both the parent and affiliate companies will increase.

The key link to understanding how domestic and foreign structures affect U.S. workers as a whole is the breakdown of skilled and unskilled occupations in the United States. Workers earning minimum-wage-style jobs in the United States are the least skilled of the labor force. Cashiers, waiters, and manual laborers are all examples of unskilled occupations. Assuming that horizontally organized MNEs can hire employees abroad if there are cheaper labor costs in other countries, then firms would outsource employment when possible, such as in the manufacturing industry. But there is a second scenario, in which a firm's employees are not substitutable because they are part of a service industry – think a waiter or a cashier. In this case, the firm cannot directly offshore this employee because they need to be present in the restaurant, and therefore unskilled employees cannot be offshored, and their labor remains in the United States. But for those unskilled workers whose work is so transferable, even though their jobs may not necessarily be outsourced, they are competing with more unskilled workers around the world than ever before. The abundance of unskilled labor (worldwide) leads to great competition, forcing them to accept lower wages in order to continue working, which also puts them in indirect competition with their foreign affiliate employee, as their employer who is always seeking to lower costs may shift operations out of the U.S. or keep wages very low – or both. Consequently, horizontally structured firms can offshore certain employees, but not all employees. Overall, due to this effect of offshoring and seeking foreign labor, the demand of unskilled labor decreases when more substitutable jobs are available abroad. Refer back to the *Threat Effect*. This is largely because globalization has created a more competitive international labor market.

For vertically organized firms, the story is a little bit different. Since this type of MNE organization seeks varying levels of workers abroad, they are not directly replacing the

employees in the parent firm. The goal of these types of firms is to expand abroad through growth rather than through cost-lowering offshoring. Consider the difference between high skilled workers in the U.S. such as CEOs and surgeons, and unskilled workers, such as cashiers and waiters, keeping in mind that the United States has high labor costs relative to the rest of the world. As vertically-structured MNEs invest abroad, they hire both skilled and unskilled workers. But because the costs of hiring skilled and unskilled workers may *both* be cheaper than hiring corresponding workers in the U.S., there is no incentive to hire one type of worker over another. As a result, these type of firms expand abroad and hire both skilled and unskilled workers, which theoretically will in turn increase demand for both skilled and unskilled workers back in the U.S. So, when the FDI of horizontal and vertical firms is combined, the theory suggests that demand for unskilled workers will decrease more than the demand for skilled workers. All other things constant, a decrease in demand for unskilled workers will put downward pressure on their wages.

Another important part of this theory includes the types of jobs that benefit from international investment. Non-depository Credit (financial institutions) and large wholesale companies are two of the industries that have the most MNE affiliate companies as well as most investment. My data show that the packagers, for example, are making meager wages compared to the financial executives and CEOs of the firm in these industries where there is a lot of FDI. Why is this? Because the skilled occupations are more closely tied to and influenced by firm growth and internationalization. CEOs, financial executives, marketing managers, are all examples of top earners who receive compensation directly from expansion and moving business and jobs abroad. In other words, big corporations are winning big and seeing large profits, but these profits are only going to the top managers, executives, and most “skilled” employees

within each firm. The wages of janitors, manual laborers, and packagers that work at the bottom end of the big corporations do not necessarily rise as the company's bottom line increases; their wages remain suppressed, or at the bottom, because their labor is "unskilled," and therefore transferable. Again, this can be seen as an example of substitutability and the demand for the position. Since the financial executives are skilled, and there is high demand for them, their wages are going to be high – the demand for them is inelastic. This is also reflected in the increasing return to capital. Since firms are investing more abroad, whether it be through financial instruments or infrastructure, there is a greater emphasis on capital expenditures rather than labor, given that return to capital has been increasing relative to return to labor rapidly over the last decade. This puts even more pressure on firms to look for offshore production opportunities where labor is cheaper.

All things considered, my hypothesis states that increased FDI, which represents the allocation of resources from the U.S. abroad, is going to cause wages for skilled workers to grow at a faster rate than unskilled wages. This is a result of a greater decrease in the demand for unskilled relative to skilled labor and the rising return on capital. I am confident that my hypothesis is supported by my data analysis.

Research Methodology:

Before describing my research methodology in detail, it is imperative to address the liberties taken and assumptions made in the research process. In this chapter, I will make sure to note the limitations of my study as they apply to each step of the research. I use specific MNE affiliate statistics because they represent the holistic FDI picture. As a reminder, MNE affiliates are companies abroad that are entirely owned by U.S. corporations, or have at least 10% U.S. ownership through direct investment. In broad terms, this research tests the relationship between

these MNE affiliate variables and different U.S wages brackets in an attempt to show that increases in FDI leads to divergence in U.S. wage growth. This study utilizes multiple forms of empirical analysis to assess the impact of this relationship. The first part of the empirical analysis includes observations of the U.S. wage growth across industries. This part is more qualitative in nature, as FDI's influence on wage growth is derived from a theoretical standpoint. The second part of the empirical analysis consists of econometric regressions to test the relationship between the MNE variables and U.S. wages. The second part includes a much more quantitative approach.

Introduction to Research Methodology:

Before getting into the results of the experiment, each variable included in the research must be explained. This section introduces the variables used in the research and offers general reasoning for setting up the research this unique way. The wage data used in this research comes from the U.S. Department of Labor – the Bureau of Labor Statistics' Occupational Employment Statistics Survey database. This database organizes wages by industry and occupation. Each occupation's wages are broken down into average and median, annual and hourly rates, as well as total employment. This study focuses on the average hourly wage rates for each occupation. Using the average hourly wage rates is appropriate for the purpose of this study because there are about 200-400 occupations within each industry, which means that the occupations are relatively fragmented, so averaging the wages is not compromising the integrity of the wage data. Another defense of using average hourly wages is that it innately controls for full-time work versus part-time work. Standalone annual wages can be distorted by the the nature of part-time employment because the data does not indicate the percentage of full-time versus part-time workers for each occupation. Thirdly, all of the wages analyzed in this study are calculated the same way,

meaning they are consonant with one another, so hourly wages remain comparable across years and industries. All of the wages have been converted to real wages using the CPI deflator.

The U.S. multinational enterprise data is extracted from the Bureau of Economic Analysis (BEA) within the U.S. Department of Commerce. The BEA's data on FDI, which is categorized as U.S. Direct Investment Abroad, contains statistics on the activities of multinational enterprises – covering both their U.S. (parent) and foreign (affiliate) operations – and are collected from mandated surveys conducted by the BEA. By incorporating MNE affiliate data, there is flexibility to choose between different statistics from the MNE affiliate's financial profile. For example, this study uses independent variables such as MNE affiliate's sales, total assets, employee compensation, and number of affiliates. By investigating MNE affiliate activities through these different characteristics, there is more room to understand how the different aspects of FDI affect the U.S. labor market. Since the inspiration for relating FDI to U.S. wages is to dissect the forces of globalization, I have made the decision to interpret increases in FDI as a proxy for increasing economic globalization. It might make more sense to think of FDI as a proxy to represent global economic integration. The rationale for this has been explained in the literature review. Unfortunately, there are significant gaps in some of the MNE data depending on the category and year. This reduces the number of observations in the experiment, indicating that the results of the study may well be skewed to the extent the data is missing.

The other variables included in the econometric empirical tests are: U.S. research and development (as a percentage of GDP), real minimum wage, number of affiliates, affiliate total assets, affiliate total sales, and affiliate employee compensation. Research and development (R&D) is included because it controls for technological advancement. Globalization and

technological advancement perpetuate each other and both have been proven to have profound impacts on wages. For this reason, the variable is included so that its effects on wages can (potentially) be isolated from FDI's effects. Including technology is important because it isolates the effects of MNE's (or globalization). Real federal minimum wage is included in the study because it serves as the wage floor, and as the minimum wage increases, so do the lowest wages in an economy. This variable serves as a way of controlling for the overall wage increases in the labor market. The MNE affiliate variables, number of affiliates, affiliate total assets, and affiliate total sales, all represent increases or decreases in FDI across different industries between 1998 – 2011, and as a result these variables are collinear, so we ran multiple regressions see how different measures of FDI growth affect U.S. wages. Affiliate employee compensation represents how much affiliates pay their employees. This variable was created by dividing the real compensation of foreign employees by the number of foreign employees. It is included because it is insightful to see how rising wages abroad affect U.S. wage growth.

To make the study more robust, we have broken down wages and FDI into different industry groups. The ten industries represented in the analysis are Mining, Manufacturing, Retail, Whole Sale, Finance, Agriculture, Education, Health, Real Estate, and Construction. This study controls for discrepancies between wages in different industries and sizes of different industries by matching the MNE affiliate's industries with corresponding industries of U.S. occupations. In other words, the wage data and the FDI data are grouped by industry and year, so each wage is only compared to wages in that same industry and is regressed against FDI in the same industry. I did have to make some assumptions regarding industry classification. I had to equate industries that were not necessarily broken down to the same level of specificity. For example, within the generic mining category, I used the industry "Metal Ore Mining" as the U.S. industry that

corresponds to the broader MNE affiliate industry “Mining.” I have done the same thing with finance. Because US labor statistics are broken into many narrow categories, I am using “Non-depository Credit Intermediation” occupations as the match to the “Finance” industry for FDI data. This industry assimilation was necessary because the data sets were not broken down using the same industry headers. Of course, this is not the ideal way to test the relationship, but I believe that these proxy industries will reflect the impact FDI has had on their greater respective industries. Since this study will not explore industry-specific wage changes, but rather the aggregate effects, then this assumption of industry assimilation will not cause significant bias.

By categorizing the wage and FDI data by industry, it allows for much more concise and conclusive analysis. There is no research to my knowledge that has quantified globalization’s effects on wages of the skilled versus unskilled workers across industries, using the method employed in this study. Much of the literature looks specifically into the manufacturing industry because that is where a majority of outsourcing of US labor has been incurred. Manufacturing is also used frequently because the workers in this industry can easily be categorically divided into production or non-production workers – or skilled versus unskilled. However, this paper’s primary aim is not to understand the offshoring effect alone, but rather *who* it affects. In order to generalize the results for all American workers, I need to consider a diverse pool of industries; so I am focusing on the aforementioned 10 industries.

In the description of my research methodology, I have spoken generally about finding explanations for changes in U.S. wage growth. To study the effects skilled and unskilled workers differently, each wage group (high and low) is regressed against the independent variables. It is important to note that this approach differentiates the skilled and unskilled workers into different categories based on their respective wages. This assumes that workers earning wages around the

minimum wage are unskilled, and workers earning wages at the top 5% (roughly) of their respective industries are highly skilled – find this to be true in my data. I have compared the top 10 earners (skilled) and bottom 10 earners' (unskilled) wages of each industry over the time period 1998 – 2011. This paper takes a creative approach in the way it divides and analyzes wage group is a value-add in itself. For example, for the agriculture industry in 1998, I have collected the 10 lowest paying occupations and the 10 highest paying occupations, and ignored all of the other occupations. So, there are 20 average hourly wage data points for each industry for each year ($20 \times 10 \times 16 = 3200$ data points). The point of conducting empirical analysis this way is so that I can compare how the lowest wage earners (unskilled) have fared compared to the highest wage (skilled) earners. The significance of the relationship, which will be explained later, will show how MNE factors affect each wage bracket differently. As the hypothesis stated, I expect that FDI will cause the lower wages to rise at a rate significantly slower than the high wages. One shortcoming of this study is that it will not recognize the varying levels of influence FDI has in the different industries. This paper is designed to assess the the aggregate effects of the skilled and unskilled workers.

Another key consideration in the research is the structure of the datasets. For the U.S. labor data, most occupations overlap between industries. For the U.S. labor data, each industry category contains some of the same unskilled occupations such as cashiers, service workers, janitors. The same holds true for the skilled occupations found within each industry: accountants, sales agents, and CEOs. Since these occupations exist in every industry, it is important to note that there may be some inter-industry labor migration. However, inter-industry shifts will be accounted for because if accountants are migrating to a specific industry, the flooded industry's wage and employment data will be affected, and therefore the annual occupation data will

accurately reflect these changes. Arguably the more significant implication of this data structure is that the conclusions for one industry will most likely be applicable to the next industry, and therefore the aggregated analysis is appropriate.

Empirical Analysis pt. 1:

The first portion of the empirical analysis covers observations of trends in wage growth for skilled and unskilled workers. Again, the unskilled workers are assumed to be those who make the lowest wages in a particular industry, whereas the skilled workers earn the most.

Tables 1 and 2 exhibit wage statistics derived from data extracted from the BLS database.

Table 1:

	High/Low Wage Ratio (AVGS)
Agriculture	
1998	3.89
2013	4.86
Construction	
1998	3.79
2013	5.00
Education	
1998	3.89
2013	6.52
Finance	
1998	4.06
2013	6.53
Health	
1998	4.69
2013	10.90
Manufacturing	
1998	3.74
2013	5.98
Mining	
1998	3.28
2013	3.60
Real Estate	
1998	4.82
2013	7.29
Retail	
1998	4.32
2013	6.11
Wholesale	
1998	4.36
2013	6.18

Table 2:

	↑ in Low wage (1998-2013)	↑ in High wage (1998-2013)	Difference in Wage Growth	↑ in Highest wage (1998-2013)
Agriculture	134%	167%	33%	205%
Construction	177%	234%	57%	250%
Education	139%	233%	94%	262%
Finance	143%	230%	87%	273%
Health	129%	300%	171%	230%
Manufacturing	149%	238%	89%	267%
Mining	133%	146%	13%	139%
Real Estate	147%	223%	76%	261%
Retail	142%	201%	59%	206%
Wholesale	139%	197%	58%	232%

Table 1 presents the ratio of the average wages of the top earners relative to the average wages of the bottom earners. For each industry, the average wages of the skilled workers have increased greater than the unskilled workers' wages. This clearly shows that the skilled workers are experiencing much more success in the labor market relative to their unskilled counterparts. It is very likely that this trend dates back before 1998, however based on the available data, this study focuses on this narrow time period. Table 2 reiterates some of the information presented in Table 1. In all industries other than mining and agriculture, the skilled workers' wages grew by at least 57% more than unskilled workers in the same industry. The health care industry has seen the most dramatic divergence in wage growth, as the skilled workers have experienced wage growth of 300%, compared to the wages of the unskilled who have only seen their wages rise 129%. This disparity is the most extreme of any industry analyzed. Education, manufacturing, and finance have the second highest growth difference between skilled and unskilled workers.

Another intriguing inclusion in Table 2 is in the fourth column, which shows the change in the highest individual wage for each industry over the time period. Excluding mining, the highest wage in each industry grew more than 200%, which is significantly greater than the

change in the average wages of the skilled workers. Chart 4 below illustrates how unskilled workers have seen almost uniform growth across industries, which is considerably less than the skilled workers wage growth for each industry. In contrast, the skilled workers' wage growth is a little more volatile, which indicates that there is substantial for potential wages to increase near the top, despite the stagnation of the lowest wages.

Empirical Analysis pt. 2:

Please find the regression model below, which spans the years 1998-2013:

$$\text{Wage} = \beta_0 + \beta_1 \text{NA} + \beta_2 \ln \text{Ass} + \beta_3 \ln \text{S} + \beta_4 \ln \text{Comp} + \beta_5 \text{MW} + \beta_6 \text{RD} + \alpha_h + \alpha_h \ln \text{Ass} + \alpha_h \ln \text{Comp} + \alpha_h \text{RD} + \alpha_h \text{NA} + \varepsilon$$

Wage = real average hourly wages

NA = affiliate number of foreign employees

S = affiliate total sales (\$US)

Ass = affiliate total assets (\$US)

Comp = affiliate compensation of foreign employees (\$US)

MW = United States Federal minimum wage

RD = research and development in the U.S. (as a percent of GDP)

α_h = control for hreal dummy variable

$\alpha_h \text{Ass}$ = Ass effect on high wage group

$\alpha_h \text{Comp}$ = Comp effect on high wage group

$\alpha_h \text{RD}$ = RD effect on high wage group

$\alpha_h \text{NA}$ = NA effect on high wage group

ε = Error

The regression above is sorted by groups according to industry and year. By grouping the data in this way, a cross-sectional regression will suffice. Essentially, this “grouping” command creates dummy variables for the industry and year variables, which allows them to be isolated into separate categories in the regressions. The variable, *wage*, represents the real U.S. average hourly wages, and is treated as a dummy variable in this regression. The bottom wages are given a value of 0, and the top wages are given a value of 1. The results of the regression above show the

coefficients of each variable for both of these wage brackets, allowing for comparison. Table 3 below shows the results of the regression.

Table 3:

Variables	Model 1
hreal (Dependent Variable)	
Const.	-91.29 (38.99)
lnAss	-1.827*** (.403)
lnComp	1.064*** (.243)
MW	26.629** (11.556)
RDofGDP	12.914*** (2.778)
NA	.000 (.000)
αh	-9.424** (4.193)
αhlnASS	2.65*** (.137)
αhlnCOMP	-1.99*** (.216)
αhRD	23.785*** (1.393)
αhNA	.000*** (.000)
Industry Code	Yes
Year Code	Yes
R² (Adj.)	87.52%
N	2,479

All standard errors (se) are in parentheses

* indicates significant at 10% level of significance

** indicates significant at 5% level of significance

*** indicates significant at 1% level of significance

The total number of observations ultimately included in the econometric analysis was reduced to 2,479 because the years 2012 and 2013 were omitted due to collinearity. It is not apparent as to why these years were dropped, however it does pose a substantial limitation to this empirical study. For the ordinary least squares regression, the adjusted R^2 value, which is a measurement of how well the dependent variable is explained by the linear regression, is 87.52%. These values are important because they verify that the independent variables in the model do have significant affect on the U.S. wages. The results are broken down as follows; the *wage* variable (or hourly real wage), which is the dependent variables tested in the regression, appears in Table 4. *Wage* is broken down into two categories (high wage and low wage) by creating a dummy variable. The reason the low wage and high wage workers are grouped separately is because they were categorized as dummy variables, meaning that the wage earners were assigned a 0 and high wage earners received a 1. The variable α_h represents the adjustment for the *wage* dummy variable, which simply controls for the difference between high and low skill wages for each independent variable tested. For all of the coefficients of the variables in Table 4 without the symbol α , they represent the effects on the low wage earners. All of the coefficients of the variables including the α represent the effects on high wage earners. Now that the variables' effects on *wage* can be interpreted, what impact do the independent variables have on wages?

The best way to analyze the results is to compare the variable's coefficients on the low wage earners versus the effects on the high wage earners. By comparing and contrasting the coefficient values, the relationship between wage earners can be better understood. For all coefficients discussed here on out, assume that all of the p-values are less than .05 unless otherwise noted. If a coefficient has a p-value greater than .05, then the coefficient is statistically

significant at the 5% level, which is the standard of significance used in this study. The affiliate's total assets, *Ass*, has a -1.82% effect on the low wage earners. This means that for every 1% increase in foreign assets, there is a 1.82% decrease in the unskilled worker's wages. For the skilled workers, their wages increased 2.65% as affiliates assets increase. (The high wage group effect is found by calculating the difference between the low and high wage group coefficients). These results show that affiliate assets have a much more negative impact on unskilled wages relative to the skilled wages.

The *Comp* variable aims to see how much employee compensation abroad affects U.S. wages. This variable reflects how much the affiliates pay their employees in total \$U.S. The results show that as compensation for the affiliate's employee's increases, there is a positive effect on wages for unskilled workers in the United States, while there is a significant negative impact on the skilled workers. These results reflect the vertical structure, in which unskilled workers' wages are complementary at home and abroad. It is surprising that the wages of the skilled workers experience such a strong negative relationship with increased affiliate compensation, however the negative relationship is logical. It might be due to the fact that when compensation of affiliate employees increases, so do associated costs. Assuming the highly skilled workers at the top of the wage tier are most closely connected with profits abroad, it can be inferred that rising costs are more negatively impacting the high U.S. wages. This variable comes with its limitations, as it does not analyze the composition of the compensation variable. It would be more useful to compare how an increase in wages or an increase in overall number of employees are contributing differently to rising U.S. wages. An alternate variable was created that divided the overall compensation by the number of employees, however the results turned out being negligible.

The Research and Development variable (*RD*) has the expected effect on U.S. wages. For every increase in research and development as a percentage of GDP, the wages of both the skilled and unskilled workers increase, although the wages of the skilled workers increase at a rate almost double that of the unskilled workers. The minimum wage (*MW*) also shows the anticipated effects, as an increase in minimum wage leads to a substantial increase in wages for the unskilled workers. The variable for number of affiliates (*NA*) ended up being statistically insignificant, and the coefficients were very small. A better approach to studying the effects of FDI on each industry would be to break down the study into a separate regression for each industry, controlling for the number of employees in each industry, the unemployment rate in each industry, which would reveal more about the inner workings of each industries relationship with globalization and foreign investment.

Policy Implications:

Policy recommendations based on empirical analysis pt. 1 & 2:

Based on the literature review and the empirical analysis in this paper, there seems to be a shift in the United States favoring skilled labor. It is possible that this is a consequence of a divergence between skilled and unskilled workers in the labor force or that employers in the U.S. have less need for unskilled labor or both. In either of these scenarios, it is irrefutable that employees at the bottom of the wage spectrum are suffering from lack of wage growth relative to the rest of the work force. My research suggests that much of this is a result of heightened access to unskilled labor abroad as well as technological innovation which is continuously making unskilled jobs obsolete. However, patterns outside of this study also show that the education attainment is also creating a divide, which may be representative of widening skill levels. For

example, a college degree has become all but necessary to succeed in the work force. But Rampell (2013) notes that even a college degree is sometimes only a path to a minimum wage job. The idea that a college degree is the new high school degree indicates a new binary: college graduates and everyone else (Rampell, 2013). It's very difficult to say whether or not there is a fundamental divide within the United States' population between workers who are "skilled" (or at least capable of working technical jobs) and those who are deemed "unskilled," or if there is truly a declining need for unskilled, transferable employment. My research implies that FDI has led to less demand for skilled labor, however I propose that both of the explanations have merit, and the following policy recommendations will address the both situations of low wages growth for the bottom wage earners.

The first and foremost solution to empowering unskilled workers is to provide greater access to technical or vocational education. General education empowers people by giving them knowledge, assets, and abilities to leverage in the work force. The drawback to a diverse and broad general education is that it becomes hard to gain expertise. Although some jobs and institutions offer training programs, many do not. Vocation or technical programs provide specific and refined curriculums to develop high-levels of skill within a particular field. This would be beneficial for people in primary or secondary education – or even beyond – because they could participate in programs that are designed to develop skills relevant to the current labor market. Expansion of these opportunities could lead workers into more skill-oriented roles, which would theoretically lead to higher wages. This is a solution that addresses the problem of a declining demand, and stagnate compensation, for unskilled workers in the United States.

Free trade policies, especially the North American Free Trade Agreement (NAFTA), the Central American Free Trade Agreement (CAFTA), and the Trans-Pacific Partnership (TPP),

have been criticized for perpetuating offshoring activities by MNEs. As the regression results indicate, an increase in affiliate assets has caused unskilled worker's wage to grow significantly less than the skilled wages. So, because free trade programs reduce trade barriers between participating countries, they lead to more international investment and more United States' assets are moved abroad. If my results hold true, and the literature's conclusions that MNE expansion puts downward pressure on parent employees, then these repercussions of the free trade agreements must be considered very closely. Concerns for domestic employees go beyond offshoring; trade agreement's effects on the welfare of all employees must be taken into consideration, and it seems that there is a demographic that is suffering from such international trade policies.

To complement foreign trade policies, domestic policy must actively serve all workers in the United States, including programs that allow unskilled workers to mobilize. There has been concern that since the recession, there has been a spike in the number of "overqualified" employees working menial jobs, which also indicates decreasing demand for unskilled labor, which forces the more qualified employees to settle into low wage, unskilled jobs, hence crowding out the bottom and increasing competition. Domestic policy is capable of doing a lot to empower the bottom of the labor force. Redistributive taxation is one way to reallocate some of the wealth of top wage earners to the rest of society. By doing so, this will compensate for the lack of wage growth experienced by the smallest earners in an economy, and hopefully give them more economic power to seek self-betterment opportunities such as education.

Another aspect of domestic policy that must be reviewed is that of the minimum wage. With the bottom ten earners in each respective industry hovering around the minimum wage level, the question must be asked: is it fair that the economy, including the top earners has been

growing significantly over the past thirty years, yet median wages have basically stagnated and minimum wages have only incrementally rose? As a result, economic inequality has jumped into mainstream politics, arousing constant discussion about the minimum wage. Although increasing the minimum wage would not solve the lack of demand for unskilled labor, it would provide resources for striving towards things such as education, which could mobilize low-paid workers.

Conclusion:

Lipsey's extensive literature review (2004) surrounding MNEs, FDI, and home country effects, summarizes the comprehensive findings of this paper, stating that there are many indications that MNE activity has created a more capital and skill-oriented production sector of the U.S. economy. This can be corroborated by the growing share of capital's return to income relative to labor's return to income. The trends presented in this paper indicate a fundamental shift in the U.S. labor market favoring the skilled, high-earning workers. The research shows that as a MNE affiliate gains more assets, the average wages of the unskilled U.S. workers are negatively impacted, while the wages of the skilled workers are significantly positively impacted. Also, the findings show that in a situation when foreign employees' compensation increases, the lowest wage earners experience more wage growth than the highest wage earners. This is indicative of a vertical organizational structure's relationship with costs abroad. It implies that the highest wage earners' wages are more closely tied to foreign costs, and when foreign costs go up, there is a negative impact on the top wages. These results support the initial hypothesis, and highlight FDI's effects on wage divergence. This paper focuses on globalization from an economic integration perspective, but geopolitical relationships and technological innovation are equally as important in redefining the roles each country finds itself in in this evolving global landscape.

Even if economic globalization is leading to soaring MNE profits and higher overall levels of GDP, the fabric of the U.S. labor market is being re-woven, and the United States' policies must be geared towards bolstering and sustaining the economic well-being of all workers, not just those who are currently reaping the benefits. By empowering the unskilled individuals in the United States through educational training, domestic policy such as the minimum wage, and protection from harmful trade policies, the work force as a whole will mobilize to become more efficient, durable, and unified. By adjusting domestic and international policies to defend its labor force, the United States will emerge as the benefactor of responsible and profitable process of globalization.

Chart 3:

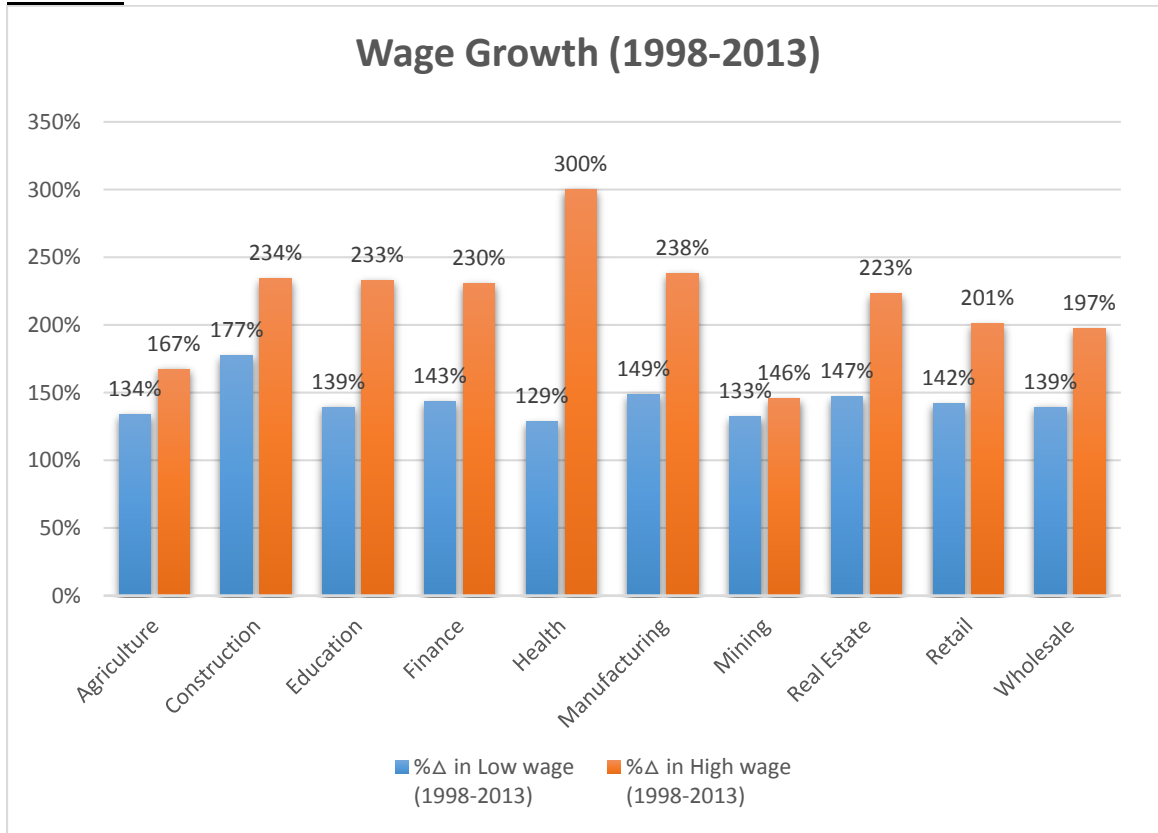


Chart 4:

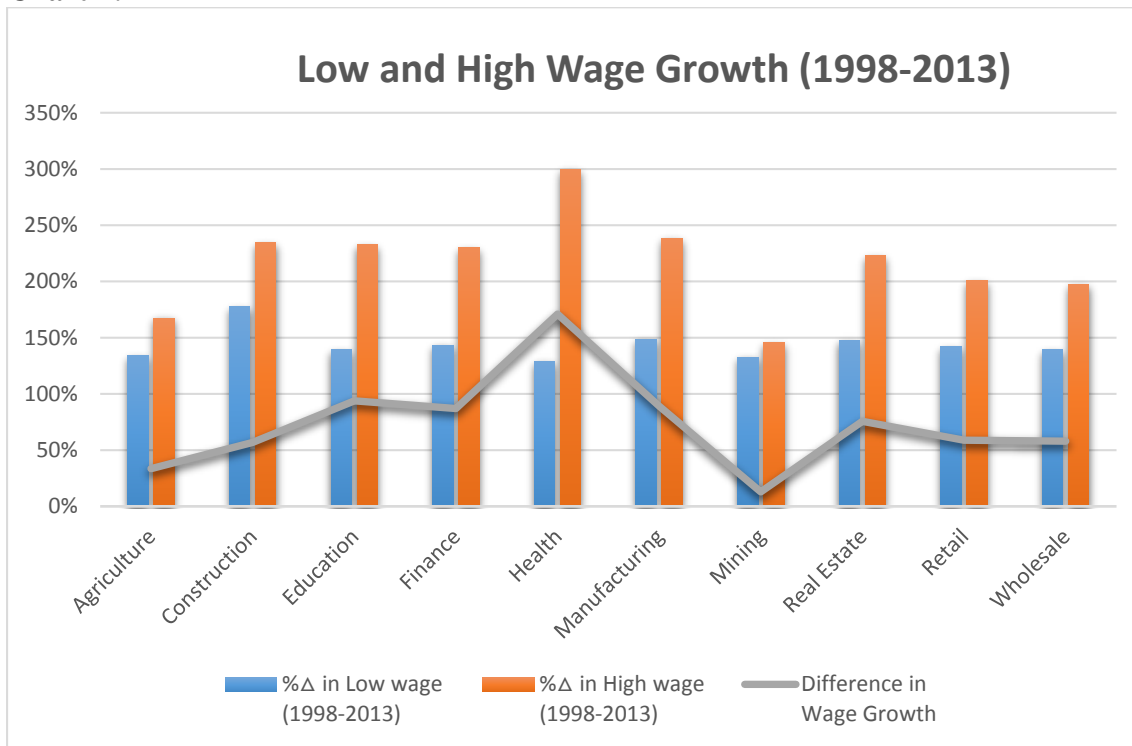


Chart 5:

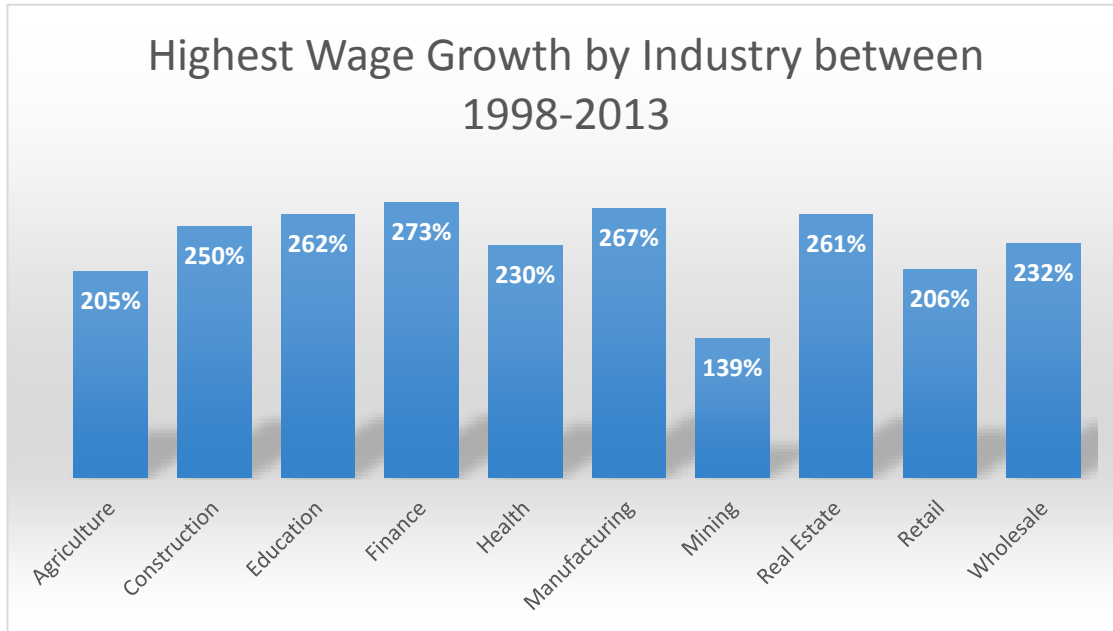
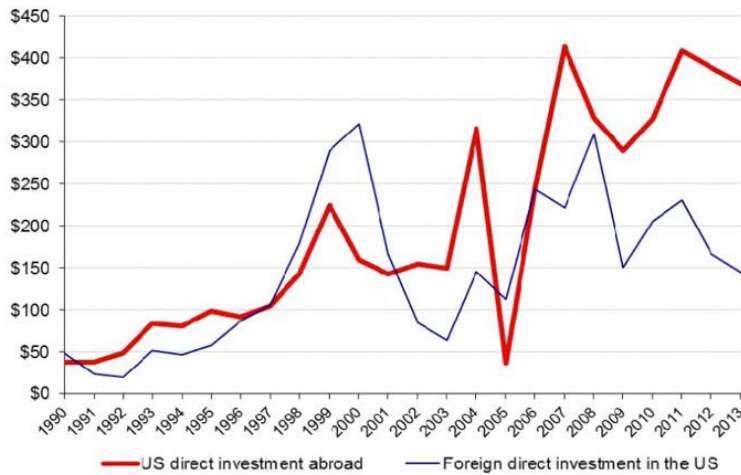


Chart 6:

Figure 1. Foreign Direct Investment in the United States and U.S. Direct Investment Abroad, Annual Flows, 1990-2012 (in billions of dollars)



Source: U.S. Department of Commerce.

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