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## The Labor Market Effects Of Foreign Direct Investment And Institutional Changes In The United States

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# The Labor Market Effects Of Foreign Direct Investment And Institutional Changes In The United States

## Abstract

The role of foreign capital as a job creator is becoming increasingly important in the context of globalization. Although the purpose and scale of their business activities may vary, foreign investors' entry into a host country often creates a large number of jobs for local populations. In this process, the government usually plays an intermediary role to maximize the benefits generated by foreign firms. This dissertation describes the labor market effects of multinational enterprises (MNEs) in relation to the ways in which government policies and the sources of foreign capital come into play in this process. This study is based on both quantitative and qualitative data. I have drawn data from the U.S. Census Bureau's County Business Patterns (CBP) database, the Bureau of Economic Analysis's (BEA) Foreign Direct Investment in the United States (FDIUS) database, and American Community Survey for quantitative analysis. In addition, I have supplemented the statistical results with in-depth interviews with corporate executives, managers, government officials, and staffing agencies' managers and archival data from both the firms and the local government. The findings focus on labor market changes driven by foreign capital along with institutional shifts. First, I describe the ways in which foreign businesses change their patterns of manufacturing activities and create employment at the state level in response to domestic institutions. Next, I analyze how foreign manufacturing investments originating from different sources result in different labor market outcomes at the local level in response to international institutions. Lastly, I corroborate that state-level institutions, or state governments' economic policies play important intermediary roles in influencing the relationship between foreign investors and the host labor market. I discuss the implications of these findings for research on organizations and the labor market in the global context and for understanding the importance of governmental policies in promoting economic development.

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THE LABOR MARKET EFFECTS OF FOREIGN DIRECT INVESTMENT AND  
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Eunbi Kim

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2018

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## ABSTRACT

### THE LABOR MARKET EFFECTS OF FOREIGN DIRECT INVESTMENT AND INSTITUTIONAL CHANGES IN THE UNITED STATES

Eunbi Kim

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Emilio Parrado

The role of foreign capital as a job creator is becoming increasingly important in the context of globalization. Although the purpose and scale of their business activities may vary, foreign investors' entry into a host country often creates a large number of jobs for local populations. In this process, the government usually plays an intermediary role to maximize the benefits generated by foreign firms. This dissertation describes the labor market effects of multinational enterprises (MNEs) in relation to the ways in which government policies and the sources of foreign capital come into play in this process. This study is based on both quantitative and qualitative data. I have drawn data from the U.S. Census Bureau's County Business Patterns (CBP) database, the Bureau of Economic Analysis's (BEA) Foreign Direct Investment in the United States (FDIUS) database, and American Community Survey for quantitative analysis. In addition, I have supplemented the statistical results with in-depth interviews with corporate executives, managers, government officials, and staffing agencies' managers and archival data from both the firms and the local government. The findings focus on labor market changes driven by foreign capital along with institutional shifts. First, I describe the ways in which foreign businesses change their patterns of manufacturing activities and create employment at the state level in response to domestic institutions. Next, I analyze how foreign manufacturing investments originating from different sources result in different labor market outcomes at the local level in response to international institutions. Lastly, I corroborate that state-level institutions, or state governments' economic policies play important intermediary roles in influencing the relationship between foreign investors and the host labor market. I discuss the implications of these findings for research on organizations and the labor market in the global context and for understanding the importance of governmental policies in promoting economic development.

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## CHAPTER 1: INTRODUCTION

### Motivation

In recent years, the U.S. economy has experienced various labor market transitions including campaigns to double the federal minimum wage, a decline of unionization rates, and passage of right-to-work law. Following the so-called Fight for \$15 movement that started among fast-food and other low-wage workers seeking higher pay, some cities and states have proposed to raise the minimum wage up to the level in the near future. On the other hand, labor unions have continuously lost its members over forty years. As the sole institution representing workers' interests in the labor market, unions intend to maximize the economic well-being of their members by improving wages, benefits, and other working conditions. However, its membership rate has fallen to 10.7% in 2014, which is significantly lower than 23.5% in 1970 (U.S. Bureau of Labor Statistics 2016). Also, after the Great Recession, a few states including those that used to have strong organized labor (i.e. Indiana, Michigan, West Virginia, and Wisconsin) decided to become a right-to-work (RTW) state, granting their workers the right to work without joining a union.

Such changes in the labor environments may not only affect the local economy and American workers but can also change comparative advantage of the U.S. economy and therefore the amount of inward foreign direct investment (FDI). For instance, the growing manufacturing activity in southern states indicates that firms increasingly invest in business-friendly labor environments with lower unionization rates and lower wages. Such a locational pattern has become common among foreign investors as well. Leaving the Midwest where traditional auto production concentrated, many foreign automotive

assemblers and components manufactures moved their manufacturing facilities to the South in pursuit of cheap, nonunionized labor (Johnson 1993; Lopez-de-Silanes, Markusen, and Rutherford 1994). In this trend, foreign business activities and their impacts on American workers have changed and various socioeconomic and institutional transitions in the U.S. have come into play in the dynamics.

In particular, both the Midwestern states (also known as traditional manufacturing states) and the Southern states (or newly growing manufacturing states) have implemented policies to increase manufacturing jobs by collaborating with foreign and domestic businesses. That is, while the role of investors has always been important in improving the U.S. labor market, where the investments come from and how they are supported by local governments can complicate the effects by mediating or moderating the relationship between businesses and the labor market. This dissertation examines foreign capital-driven labor market changes mediated by individual states' institutional shifts.

## FDI and Labor Markets

In the context of globalization, mobility of foreign capital across countries has become an important trend. Many countries, irrespective of their level of development, attract FDI to promote economic development (see Blomström and Kokko 2003). These investments and their effects on the labor market have long been sociological subjects of research and debate. From earlier research based on dependency theory and world system theory (Bornschiefer, Chase-Dunn, and Rubinson 1978; Evans 1979; Wallerstein 1974) to later studies criticizing those theories (Firebaugh 1992; Firebaugh and Goesling 2004),

scholars in sociology of development have given a great deal of attention to assessing developmental effects of FDI and its implications for host populations.

The earliest literature on the role of FDI in economic development theorized that FDI decelerates the periphery's economic growth (Baran 1956; Bornschier et al. 1978). Based on the idea of unequal distribution of wealth within a nation, empirical studies describe the ways in which foreign capital creates labor market inequalities through generating employment in a particular sector (Evans 1979; Evans and Timberlake 1980). However, later research contradicts the findings in prior studies, supporting that foreign capital spurs economic growth and mitigates income inequalities by industrializing poor regions (Firebaugh 1992; Firebaugh and Goesling 2004).

The consensus in the literature is that multinational enterprises' (MNEs) investments, regardless of their country of origin, have distributional impacts on the host economies, creating employment. Apart from attracting highly productive resources to the locations, FDI creates jobs not only in the relevant sectors but also in supportive industries. Aaron (1999) emphasizes that foreign investments can contribute to poverty alleviation and economic development. Taking the case of economic instability and poverty issues that exacerbated during the Asian Financial crisis, Aaron argues that the poorest members of society often do not enjoy the benefits resulting from expansion of the private sector. However, with the help of FDI focused on equitable poverty reduction, policy makers in collaboration with foreign investors can create sustainable employment and thus improve economic conditions in developing countries. Iyanda (1999) also find the similar results in Southern African countries' cases. His research shows that economic liberalization policies adopted in Namibia and Zimbabwe have resulted in increasing domestic and foreign investments in the private sectors and subsequently in greater job creation in both of the economies.

In terms of wages, research shows that foreign companies pay higher wages, on average, than domestic firms, eventually increasing overall income level in the relevant industries (Clerides, Lach, and Tybout 1998; Harrison and McMillan 2011). This is because the firms engaging in cross-border investments tend to be larger, more productive, more capital-intensive, and more technology-intensive. Although some highlight labor-exploitative behaviors of MNEs, it does not necessarily mean that the firms pay lower wages than local firms (see Harrison and Scorse 2010). Any wage difference can be caused by various structural characteristics (e.g. the cost of living, comparability with other firms' wages, sector-level collective agreements, etc., Brown, Ingram, and Wadsworth 2004; Gerlach and Stephan 2006) in addition to the firm-specific characteristics (e.g. size, ownership, performance, etc., Card and De la Rica 2006; Groshen 1991). Due to such wage adjustment, MNEs, regardless of their sources, take industry-level standard wage rates of the host country into account in their pay policies.

#### Importance of Institutions' Roles and Sources of FDI

Although past studies extensively discuss the labor market effects of FDI, some issues remain insufficiently addressed by this literature. For example, MNEs may shape the host labor markets differently depending on the context in which the investments take place and on the country from which the investments originate. In other words, institutional contexts and investment sources may moderate the dynamics.

First, governments play an important role in implementing various regulations (e.g., fiscal policy, monetary policy, and labor market policy) to promote economic growth on one hand and to reduce inequality on the other. In particular, government interventions in the labor market intend to achieve economic growth by increasing labor

market flexibility for businesses (e.g., RTW laws and FDI inducement policies), and economic parity by coordinating the balance of power between employers and workers (e.g., active labor market policy, minimum wage laws, and Employee Free Choice Act). Although many sociologists have focused on how the policy affects workers' well-being (DiPrete et al. 2006; Schrank 2013), a few studies discuss the ways in which organizations respond to labor market regulations and change their economic activities accordingly. These studies show that firms attempt to shift their operations to pro-business locations to maximize profitability by avoiding legal and regulatory variations across countries or regions (Bandelj 2002; Drezner 2001; Murphy 2004). Specifically, businesses tend to locate where they can avoid high tax regulations (White 1983), enjoy low minimum wages (Dube, Lester, and Eidlin 2008), and take advantage of labor market deregulations, all of which signal business-friendly environments (Holmes 1998; Rao, Yue, and Ingram 2011; Stevans 2009).

Also, the theoretical premise that MNEs avoid locations with high production costs has led to empirical studies exploring how various labor market institutions attract or deter foreign investment. As important considerations for organizations' cost-efficient operations, wage rates (Bellak, Leibrecht, and Riedl 2008; Braconier, Norbäck, and Urban 2005; Wheeler and Mody 1992), worker rights (Kucera 2001), and industrial relations systems (Cooke and Noble 1998; Delbecque, Méjean, and Patureau 2007; Ham and Kleiner 2007; Radulescu and Robson 2008) have come to the forefront of the academic discussion. This body of literature effectively explains organizational response to government regulations in the labor market although it mostly addresses the overall business patterns rather than foreign investors' reactions. In sum, existing studies indicate that institutions change the organizations' behaviors, which can eventually affect the labor market outcomes.

Second, the extent of labor market effects may depend on the sources of investments as well (Bagchi-Sen 1991; Little 1986). Competitors in the same industry implement different strategies depending on their market positions. First or early movers have sufficient time to improve their market share by accumulating necessary knowledge, developing sophisticated technology, and establishing their brand reputation (Suarez and Lanzolla, 2005). On the other hand, later entrants lacking such resources find it difficult to differentiate their products. Thus, they often rely on price competitiveness to increase market profitability. This logic applies to the process of international expansion as well. When making investments in foreign countries, firms show variations in their approaches to achieving market success, and such differences are highly associated with where the firms come from.

Bartlett and Ghoshal (2000) argue that late movers originating from nontraditional source countries confront various challenges when entering foreign markets because of their countries of origin (or 'liabilities of origin'). When operating in unfamiliar business environments, every MNE needs to overcome not being local. However, MNEs originating from countries that are not among the most developed in the world are also subject to various disadvantages that are due to their late-mover position as well as domestic institutional constraints (Mathews, 2006; Luo and Tung, 2007). Specifically, the late movers have been relatively less successful in penetrating developed countries than other developing countries, as they have experienced additional burdens and challenges (Cuervo-Cazurra and Genc, 2008). This is because the conditions of the most developed countries differ from domestic institutional and economic environments in which the latecomers have operated successfully, and their firm-specific advantages (FSAs) are not well adapted to the needs existing in the advanced host markets (Meyer et al., 2011). Furthermore, the firms have difficulties acquiring legitimacy for not possessing

reputational capital that protects them from discrimination by competitors, consumers, and host governments (Yildiz, 2014).

These entry barriers require less experienced firms from nontraditional source countries to adopt strategies distinguished from those implemented by established multinationals from developed countries. Comparing the internationalization patterns of multinational firms from emerging, upper-middle-income, or oil-rich countries with those from traditional established economies, Guillen and Garcia-Canal (2009) find that, in order to close the gap with other competitors and overcome their latecomer disadvantages, unconventional multinationals develop strategies of international expansion that are different from those of conventional MNEs. For example, compared to established MNEs seeking gradual expansion, latecomer firms tend to accelerate their pace of internationalization in pursuit of capability upgrading or market reach, or both. In addition, they not only enter into developed and developing countries simultaneously but also select more diverse entry modes (for example, alliances and acquisitions) than conventional MNEs do. Other studies also support that late movers from nontraditional source countries take different approaches from those taken by firms from traditional source countries when engaging in FDI (Luo and Tung, 2007; De Beule, Elia, and Piscitello, 2013). From these findings, I conclude that foreign investors in the same industry entering the same host country may show different investment behaviors depending on their country of origin and market forces. While a majority of past studies focus on investment strategies themselves, I suppose that disparities in the firms' strategies can potentially change their impacts on the labor market in FDI destinations, resulting in different labor market outcomes.



## FDI in the U.S. Labor Market

In this dissertation, I examine the labor market effects of FDI moderated by institutions and investment sources with reference to the case of the U.S. economy. While developed countries also invite FDI for developmental purposes, the majority of existing studies focus on FDI's effects on less developed countries. The relative dearth of research on the cases of developed countries is problematic. As major receivers (as well as senders) of FDI, advanced economies also have relied on foreign capital for economic growth and revitalization (Markusen and Venables 2000; Yeaple 2009). Such a trend is expected to be accelerated by recent economic stagnation as well as a rapid growth and expansion of MNEs from emerging markets (see Guillen and Garcia-Canal 2009).

In particular, the U.S. economy is a good case in which multinationals may strategize to enter. While policy makers have raised offshoring as a growing concern for the economy, the U.S. is still one of the top FDI recipients due to its market size and various trade restrictions. As of 2015, the U.S. has received the highest FDI stock among all countries (3.3 trillions), followed by the U.K. (2.0 trillions) and Hong Kong (1.7 trillions). According to UNCTAD (2016), it also ranked the MNEs' top prospective host economy for 2016-2018, followed by China and India. Although the rank changes across years, the U.S. has remained an attractive destination for foreign investors. The U.S. government also implements various protectionist economic policies that involve tariff and non-tariff barriers in an effort to promote investments and hence revitalize economy. As an example, the North American Free Trade Agreement (NAFTA), which is often held responsible for loss of manufacturing jobs, in fact, led to an increased level of automotive FDI and created jobs thanks to the agreement's auto sector provisions (Johnson 1993; Lopez-de-Silanes, Markusen, and Rutherford 1994).

In addition, changes in foreign investors' activities in the U.S. deserve more attention because foreign companies are important job creators in the U.S. economy, especially in the manufacturing sector (see Sheng 2016). While foreign investors have engaged in business activities and created a significant number of jobs in all sectors of the U.S. economy, manufacturing has been their largest industry. According to the U.S. Bureau of Economic Analysis (2016), manufacturing accounts for more than one-third of the cumulative FDI in the U.S., a total of more than \$1 trillion in investment in 2014. The U.S. labor force employed in the manufacturing industry decreased slightly from 9.9% (14.3 million out of 144 million) to 8.1% (12.2 million out of 150.5 million) during 2004 through 2014 (U.S. Bureau of Labor Statistics 2016). However, during the same period the portion of manufacturing employment by foreign businesses increased from 14% to 20% (U.S. Bureau of Economic Analysis 2016). In other words, one in every five American employees in manufacturing works for affiliates of foreign firms in the U.S. These statistics indicate that foreign investors play a critical role in employing millions of Americans in well-paid jobs.

Despite its growing importance, the extent to which foreign capital impacts American workers is relatively unknown in sociology of labor markets. Explanations for disparities in the labor market outcomes include individual-level differences such as age, gender, race, educational attainment, marital status, nativity, and occupation/industry (Almquist 1987; Browne and Misra 2003; Pager and Pedulla 2015; Witteveen and Attewell 2017). They also include more systematic, structural barriers founded upon a mix of individual characteristics and group dynamics, opportunity structure, and institutional practices (Kornrich 2009; Squires 2007; Zhou 2014). In addition, external factors (i.e. growth of immigrant populations) also generate labor market inequalities (Borjas 1995; Parrado and Kandel 2011). Although these studies have contributed to the understanding

of the association between individuals' labor market outcomes and the larger socioeconomic context in the U.S., they do not sufficiently address the implications of foreign investments in the U.S. labor market.

FDI in the U.S. after Institutional Changes

### *North American Free Trade Agreement*

The intermediary roles of institutional contexts and investment sources have been important in the recent foreign capital-driven U.S. labor market changes. One example is post-NAFTA automotive investments. Debates over whether the NAFTA of 1994 has destroyed manufacturing jobs in the U.S. reached a peak in the months leading to the U.S. Presidential election of 2016. While its impacts on the U.S. labor market remain controversial, foreign automobile assemblers and component manufacturers increasingly entered and engaged in massive investments in North America as a result of this economic shock (Johnson 1993; Lopez-de-Silanes, Markusen, and Rutherford 1994). Specifically, auto sector provisions under NAFTA triggered the earliest entry of German and Japanese assemblers into the U.S., such as BMW (1994), Mercedes-Benz (1997), and Toyota (1999), and most recently the South Korean (hereafter Korean) assemblers Hyundai (2005) and Kia (2009). Foreign automotive firms show similar investment behaviors of choosing the U.S. over Canada or Mexico and also selecting locations in the South rather than traditional auto states in the Midwest. However, within the same state, foreign automakers show disparities in their corporate strategies as well as county-level locational preferences.

According to the U.S. Bureau of Economic Analysis (2014), the share of FDI from nontraditional sources in the U.S. is rapidly growing although its cumulative stock is still

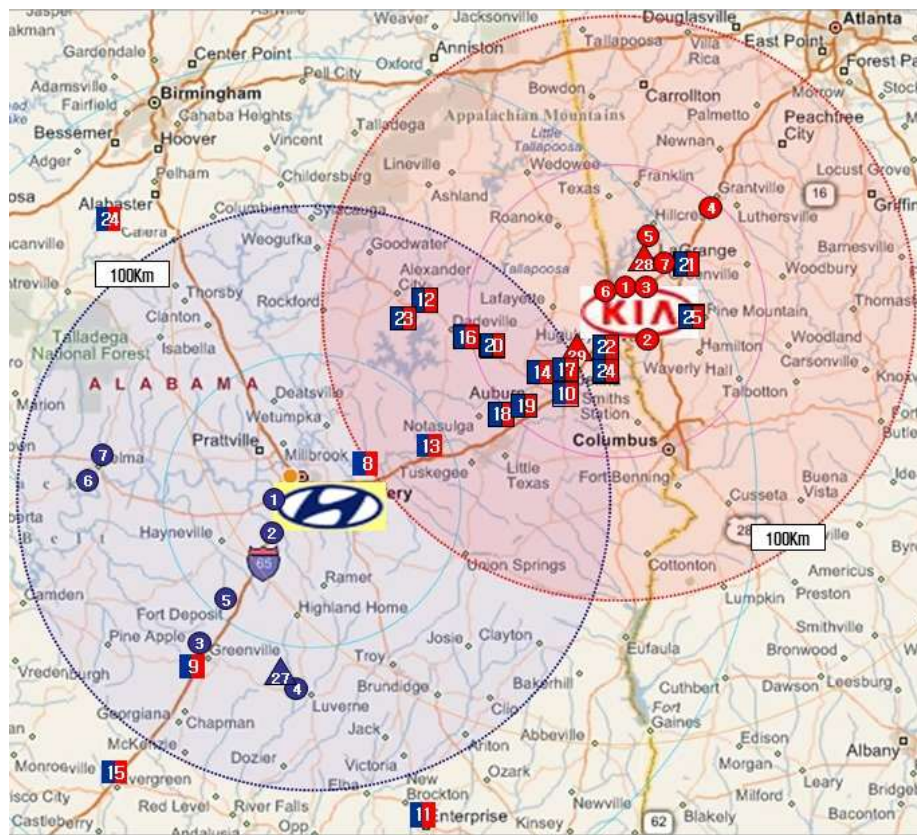
much lower than that of top investors from European countries, Japan, and Canada. In 2009-2014, the growth rates of inward FDI from Korea (1654 percent), Hungary (1533 percent), Venezuela (506 percent), China (94 percent), and India (47 percent) have been enormous. In particular, the economic relations between the U.S. and Korea are noteworthy. Traditionally, the U.S. has been the Korea's most influential economic partner. Not only did Korea rely heavily on economic aid provided by the U.S. government at an earlier stage of development (1950-70s), but the U.S. also has been Korea's number one export destination. Moreover, the U.S. has been the largest foreign direct investor for Korea; the U.S.-originated FDI stock (1990-2008) was \$18.3 billion, which comprised approximately 20 percent of Korea's total stock of inward FDI during the period.

While the U.S. and Korea continue being interdependent, their economic relations have been gradually shifting since the 2000s. Specifically, auto sector provisions under NAFTA and growing trade deficits with Korea in the automotive sector served as a significant turning point in their partnership. The integration of the North American automobile industry attempted in earlier intergovernmental negotiations such as the 1965 Canada-U.S. Auto Pact, as well as the 1988 Canada-U.S. Free Trade Agreement, was finally achieved through NAFTA's ratification (Johnson 1993). While this agreement eliminated tariffs and other barriers to trade in the automotive sector among the NAFTA countries, it also increased protectionist barriers (i.e. tariffs and local content requirements) against imports of automobiles and auto components from other third countries (Lopez-de-Silanes et al. 1994). As a result, many foreign automakers from Europe and Japan entered the U.S. for local production from 1994 onwards. Korean automakers also had little choice but to shift production, and hence jobs, across the Pacific.

In addition, Hyundai Motor's market successes of the late 1990s in North America were perceived as a strong threat to American producers. Accordingly, the U.S.

government took protectionist actions against Hyundai's exports to the North American market while putting economic pressure on the Korean government to increase sales of American automobiles in Korea (Seo 2004). In an effort to cope with these trade barriers, Hyundai decided to make tariff-jumping FDI in 2002. In 2005, Hyundai Motor Manufacturing Alabama (HMMA) produced its first "made-in-USA" vehicles in Montgomery, AL, a move that was followed by several waves of transplant investments of Hyundai's suppliers, its sister company, Kia Motors, and its suppliers (Figure 1).

**Figure 1. Korean First-Tier Suppliers' Complex in Alabama and Georgia**



○: main and branch factories each serving Hyundai and Kia

□: factory serving both Hyundai and Kia

△: factory serving either Hyundai or Kia

Source: Hyundai Motor Company.

Note: Numbers refer to a specific firm's plant(s). Refer to Table A1 for details.

These massive investment projects by Korean automotive firms are one of the key factors that explain the recent reverse trend of capital flows between Korea and the U.S. According to the U.S. Bureau of Economic Analysis (2016), Korea is the sixth fastest-growing source of FDI in the U.S., and its investment in the U.S. has increased significantly in the last decade, from \$3 billion (2001) to more than \$24 billion (2012). Among the top six industry sectors that received the Korean investments, the auto components industry is by far the largest investor (\$5.6 billion), followed by the auto OEM and industrial machinery industries. In contrast, U.S. investment in Korea has shown a much slower growth rate from \$10 billion (2001) to \$35 billion (2012).

In Alabama, following the establishment of German-owned Mercedes-Benz assembly plants in Vance in 1994, Japanese-owned Honda also constructed its production sites in Lincoln in 2001. However, unlike MNEs from these established economies, Korean multinationals, which settled in Montgomery, may experience increased production costs in the U.S. In addition, they have latecomer disadvantages due to a shorter history of investments (as well as failed experiences) in North America. These disadvantages outweigh those experienced by Japanese counterparts that created a substantial wave of transplant investments in 1980s or the German counterparts that have successfully maintained production since the 1990s. Such a disadvantaged status may alter the ways in which Korean firms affect the host labor market.

#### *Post-Great Recession Right-to-Work Legislation*

Another important institutional trend in the U.S. economy in recent years is policy implementation that promotes labor market flexibility. With issues of job loss becoming more prominent after the Great Recession, public concerns over economic conditions in

the industrial Midwestern states have rapidly grown, followed by some of these states' passing the RTW legislation for job creation (see Devinat 2015). It has been controversial whether gradual shifts in manufacturing bases and investors' relocation to the South are driven by this kind of state-level labor market policy, which supposedly increases cheap, nonunionized labor availability. Nevertheless, several Midwestern states, including historical Rust Belt states that are traditionally known for their organized labor (e.g., Indiana, Kentucky, Michigan, Missouri, West Virginia, and Wisconsin), decided to pass RTW legislation, granting their workers the right to work without joining a union. This event was a major breakthrough in that it was the first time for the states of the industrial Midwest to adopt business-friendly labor market policy, ushering in a series of pro-RTW efforts in the area. The policy goes beyond the trend of de-unionization, which has progressed gradually over the last 40 years, and further increases the competitive advantage of the states, potentially changing the business patterns in manufacturing and associated employment growth.

The RTW policy promotes employees' rights not to be compelled to join a union, debilitating workers' collective bargaining power against employers. In other words, RTW legislation, which signals the anti-union sentiment of a state, is an intentional effort by state governments to deregulate the labor market to attract more businesses. This law was primarily passed in the first wave of implementation in the 1940s and 1950s, by U.S. states mostly in the South and additionally in the West. However, it was rarely adopted by other states in the following decades, until it attracted the attention of the Midwestern states again in the early 2010s. After the Great Recession, Indiana (2012), Kentucky (2017), Michigan (2012), Missouri (2017), West Virginia (2016), and Wisconsin (2015), four of which are historically Rust Belt states, passed this law. The historical Rust Belt, once the industrial hub of steel production and manufacturing, has suffered from economic

downturns since the 1970s due to various changes such as restructuring, technological enhancements and automation, national and international relocation (shifts in manufacturing bases), and myriad other factors. Recent industrial trends show that their state governments started to implement various industrial policies and local development plans to compensate for employment loss and to revitalize the regional economy. While many of them have attempted to attract the new technology-based industries, they also have put much effort into regaining their former glory as industrial states for manufacturing. One of these efforts includes the introduction of RTW legislation.

This trend is particularly noteworthy because these new RTW states were traditionally known for their strong unions. De-unionization, which accompanied the shattering of the implicit post-war social contract (also known as the labor-capital accord), has effectively been completed in the current economic structure of the U.S. The labor-capital accord was a stage in which employers and workers had reached a basic agreement on job security and reasonable working conditions, in exchange for industrial stability and productivity during the period from 1948 to 1973 (Bowles and Gintis 1982). Before this social contract for worker–employer relations, workers often engaged in strikes as an effective means to protect themselves from labor exploitation and to improve the quality of working conditions. In order to secure steady and reliable production, employers consented to negotiations, recognizing unions as the representatives of workers’ interests (Rubin, Griffin, and Wallace 1983). However, unions in manufacturing have essentially become powerless in the U.S. economy over the past few decades due to failed international competition and declining profitability (Rubin 1996). In this context, many businesses also left the states with a historical legacy of union friendliness and strong labor standards, for regions where unions have historically been weak or nonexistent. Accordingly, the Midwestern industrial states have continuously lost their manufacturing



jobs and business activities to Southern RTW states. This changing geographic pattern of businesses further explains the Midwestern industrial states' recent adoption of RTW law, long considered a powerful weapon in businesses' anti-union arsenal.

Based on the underlying assumption that the introduction of the RTW law promotes business opportunities, researchers have studied the efficacy of considering RTW law as a catalyst for economic growth. Compared to earlier lines of research in the 1970s and 1980s on the relationship between RTW law and unionism (Ellwood and Fine 1987; Lumsden and Petersen 1975; Warren and Strauss 1979), literature in the late 1990s through the 2000s has given broader attention to how RTW law affects state economies. The studies on the law's impact on state-level labor market outcomes take on a wide range, from employment (Moore and Newman 1985; Moore 1998), wages (Moore 1980; Moore 1998; Stevans 2009) to income (Mencken 2000) to health insurance (Gould and Shierholz 2011). Recently, the endorsement of RTW legislation among Midwestern states rekindled the debate over the socioeconomic role of the RTW law.

As the manufacturing sector tends to be more heavily unionized than other private sectors, RTW law has been particularly appealing to manufacturers. However, there are relatively few studies that discuss the relationship between manufacturing employment and RTW legislation. RTW law has been passed infrequently since the 1950s; consequently, studies on manufacturing employment growth have focused on comparing the existing RTW states and non-RTW states rather than examining changes before and after passage of the law. Because the conventional RTW states not only have various similarities in their state characteristics but also pursue business-friendly state policies that serve as a pro-business climate (e.g., low taxes, high subsidies, and weak environmental/safety regulations), it has been difficult to tease out the effects of the law from other sources of variation. In order to account for systematic differences between RTW and non-RTW

states and resolve the identification problem, Holmes (1998) first classified states as either pro-business or anti-business based on whether they adopted RTW law. He then examined manufacturing activities in the border areas between these two types of states. Holmes found that manufacturing activities increase significantly (on average, by one-third) when one crosses the borders where the policy applies. This indicates that RTW law is being used as a proxy for pro-business climate rather than being a definite policy that brings isolated effects. Thus, Holmes's methodological approach helps explain that state policies contribute to geographic patterns of industrial activity.

Focusing on Idaho's experience as one of the late adopters of RTW law, Dinlersoz and Hernandez-Murillo (2002) also explored the economic impacts of the RTW law on manufacturing sectors. They argued that Idaho is an interesting case distinguished from many other states that passed the law during the earlier period because it is surrounded by three RTW states and three non-RTW states. Based on this geographical particularity, Dinlersoz and Hernandez-Murillo's analyses controlled for substantial region-specific variations of economic conditions by comparing changes in manufacturing sectors of Idaho and its neighboring states in the pre- and post-law periods. According to their findings, both the fraction of total manufacturing employment and the average size of large manufacturing establishments have grown significantly in Idaho after it passed the law. In other words, Idaho has become an attractive destination for manufacturers due to the RTW legislation. Another study finds similar results. Kalenkoski and Lacombe (2006) pointed out that earlier research on the employment effects of RTW law fails to sufficiently address omitted variable bias and to correct spatial autocorrelation. Thus, Kalenkoski and Lacombe improved their estimation by controlling for geographically correlated omitted factors in their models. Their study concluded that RTW legislation is positively associated

with manufacturing employment even after accounting for various county-level demographic characteristics.

While earlier studies consistently found a positive relationship between RTW legislation and manufacturing employment, more recent studies on the other hand have found no positive effect. Eren and Ozbeklik (2011) evaluated the effectiveness of RTW law on manufacturing employment in Idaho and Oklahoma using the synthetic control method, which is designed for policy evaluation when a single group or very few groups undergo a treatment in a given sample period. Since Idaho (1985) and Oklahoma (2001) adopted the RTW law with a long interval between the instances, only one group experienced an intervention in each of the given periods when it passed the law. In order to measure changes before and after adoption of the policy, Eren and Ozbeklik built the weighted average of the non-treated units that best reproduced characteristics of the treatment group prior to treatment, serving as the counterfactual. Then they compared the outcomes of this synthetic control group with those of the treatment group before and after the treatment. Their findings showed that RTW law resulted in increased manufacturing employment for Idaho but not for Oklahoma. Eren and Ozbeklik's (2016) work on the Oklahoma case study also showed that RTW law had no effect on manufacturing employment. They explained that this may be attributed to the fact that Oklahoma was a small state with a relatively low unionization rate in the private sector even before the adoption of the law.

While a few recent case studies found no discernible effect of RTW status on the growth of manufacturing employment, many foreign investors, especially those in manufacturing, have shown a tendency to settle in RTW states for decades (Kotkin 2013). However, existing studies have only focused on exploring the general patterns of manufacturing employment driven by the policy change without accounting for the

sources of employment. That is, they do not address how implementation of this labor market policy affects manufacturing activities of foreign businesses, nor whether changes in their patterns of manufacturing employment differ from those of overall manufacturing employment.

## Methods

In light of these two institutional changes, I examine how foreign firms react and whether the sources of the investments can also result in different labor market outcomes. The first part of this dissertation focuses on whether and how recent RTW legislation in historical Rust Belt states has contributed to foreign investors' manufacturing job creation in the areas relative to their non-RTW counterparts. Specifically, I evaluate the policy intervention in two historical Rust Belt states, namely Indiana and Michigan, by comparing their manufacturing employment growth to that of non-RTW states before and after the passage of the law in 2012. In doing so, I clarify how implementation of this state policy impacts the growth of manufacturing jobs held by foreign businesses with reference to the patterns of total manufacturing employment growth. The second part of this dissertation examines how foreign automotive firms' entry into Alabama affected the local labor market. Specifically, I compare the labor market outcomes of non-traditional FDI with those of traditional FDI in Alabama, expecting differential effects among them. As a first step, I distinguish locales depending on the sources of FDI they received and consider differences in contextual-level conditions across areas. Second, I estimate and compare the effects of FDI from different sources on the changes in each locale's employment rates and wage levels across years. Third, I examine whether FDI from different sources continues to produce a unique effect on the dependent variables once the changes in local

demographics and labor market conditions are taken into account. That is, I explore whether the changes are a simple function of contextual-level variables or whether a unique benefit can be attributed to FDI penetration. Finally, the last part of this dissertation explains results from the earlier parts in relation to importance of domestic institutions' roles.

Methodologically, I base my dissertation as a whole, on both quantitative and qualitative methods. I take a quantitative analytical strategy to assess the labor market effect of the RTW legislation that was signed in Indiana and Michigan in 2012, specifically on employment growth in the manufacturing sectors of those states. The focus of my analysis is on yearly changes in the number of manufacturing jobs held by total businesses and foreign businesses. The data for the analysis comes from a four-year sample of 50 U.S. states (2007, 2009, 2011, 2013) in the U.S. Census Bureau's County Business Patterns (CBP) database and the Bureau of Economic Analysis's (BEA) Foreign Direct Investment in the United States (FDIUS) database on *Employment of Majority-Owned Non-Bank U.S. Affiliates*. The primary geographic unit of analysis is the state. The end product is panel data of 50 U.S. states in 2011 and 2013, estimating manufacturing employment of total and foreign businesses in each of the states. These are thus observations before and after the passage of the RTW law.

The analysis focuses on changes in the manufacturing employment by total and foreign businesses in 50 U.S. states at one time point: 2013. The temporal and spatial variations in the panel data design are particularly well suited for the difference-in-difference (DID) method used to evaluate the effect of the RTW law on outcomes. This is a type of fixed effects estimation based on panel data that have been commonly used for policy evaluation, by comparing outcomes before and after an intervention in one intervention group and one control group. In this case, passing RTW law is treated as a

policy intervention that affects the labor market, specifically manufacturing employment growth, in the localities where the law is adopted. With the DID approach, I compare the difference between the number of manufacturing jobs held by total and foreign businesses before and after the passage of RTW law in the localities affected by the policy (i.e., the treatment group) to the same difference for unaffected areas (i.e., the control group). Average changes over time in the states that recently passed the RTW law are then subtracted from average changes over time in areas without the law. Using this DID method, I can rule out the effect of time-varying changes in the intervention group that are irrelevant to the treatment, in addition to controlling for unobserved, preexisting differences between the treatment and control groups. Ultimately, I can substantially alleviate the issue of endogeneity (i.e., omitted variable bias).

Use of the DID approach allows for comparison between the intervention and control groups, based on the assumption that the intervention group is randomly assigned (Meyer 1995). I will further improve this comparability by expanding the two-group comparison to multiple-group comparison. Also, in order to more accurately investigate the hypotheses and remove alternative explanations, my analysis includes controls of prior conditions, as well as relevant labor market covariates other than the policy intervention, in a regression framework. I use ordinary least squares (OLS) regression to obtain estimates and standard errors of the DID models, explore the effects of RTW law on an additional comparison group, and determine the influences of prior conditions and other labor market changes. Since I look at average changes between two time points, I follow a simple first difference specification.

Additionally, I introduce lagged dependent variables as one of the explanatory variables into the OLS regression model to reduce the possibility of autocorrelation. The lagged dependent variable specification is designed for policy evaluation, based on the

assumption that the effect of policy intervention is conditional on the outcome variables as well as the permanent characteristics of the groups. Inclusion of the lagged dependent variable as covariates in the models increases comparability of the treatment and control groups in terms of their pre-intervention conditions. For a robustness check of the results, I run both the fixed effects and lagged dependent variable models and compare their estimates.

In order to analyze the effects of Korean automotive investments on the Alabama residents' labor outcomes, I employed DID estimation again. The focus of my analysis is on yearly changes to two main labor market outcomes: employment rates and logged median weekly wage levels. The data for analysis comes from a seven-year sample of individuals (2005–11) of the American Community Survey (ACS; Ruggles et al. 2010). My analytic strategy is to assess the local labor market effect of reverse FDI at an aggregate-level. As the simple OLS or logit regression analyses with cross-sectional data cannot compare outcomes before and after a treatment among groups, I first created area-level panel data by aggregating individual-level information of the ACS data to the Public Use Microdata Area (PUMA) – an indicator of the local labor market – level. Then, I ran the DID models with area and time fixed effects. By doing so, I could estimate whether Korean and non-Korean FDI inflows have changed the local labor market outcomes.

In the models of employment rates, I include Census 2000 data in addition to the ACS data (2005-11). I restrict the sample to the non-institutionalized, non-student population aged 18 to 64 to capture prime working ages. In the models of wage, I further restrict the sample to those who are employed. The sample includes residents of the 30 PUMAs in Alabama, and the primary unit of analysis is the PUMA. The end product is panel data of 30 PUMAs spanning 2000 and 2005-2011 estimating employment rates and

logged median weekly wage levels for the local area. This yields 480 observations and 420 observations in the models of employment and the models of wage, respectively.

Moreover, I supplemented the statistical results with qualitative data. Having made trips to Alabama four times between 2012 and 2014, I not only conducted in-depth interviews with corporate executives, managers, government officials and staffing agencies' managers, but I also collected archival data regarding human resource management (HRM) processes from both the firms and the local government. This qualitative research has been very labor-intensive. I spent, on average, two to three hours interviewing each of the twelve interview participants. I relied on both quantitative and qualitative methods because selecting only one of these methods would have provided limited insight; combining the two methods was the best way to answer the central questions of my research.

## Chapter Outline

This dissertation contains three substantive chapters. I begin with a chapter on the ways in which foreign businesses in the U.S. change their patterns of manufacturing activities and create employment at the state level in response to domestic institutions. The next chapter analyzes how foreign manufacturing investments originating from different sources result in different labor market outcomes at the local level in response to international institutions. The final chapter discusses how state-level institutions, or state governments' economic policy, play important intermediary roles in influencing the relationship between foreign investors and the host labor market.

The second chapter analyzes the growth of manufacturing employment after the recent RTW policy implementation. Of particular interest is the intervention effects of



RTW law on manufacturing employment by foreign investors with reference to changes in the general patterns of manufacturing employment. Using the U.S. Census Bureau's CBP data and the BEA's FDIUS data, I compare changes in the number of manufacturing jobs held by total and foreign businesses in Indiana and Michigan, two states that passed RTW legislation in 2012, with those in non-RTW states. Ultimately, this chapter explains the ways in which foreign firms' attributes distinguished from those of domestic firms, combined with domestic institutional shifts, lead to different employment outcomes in the affected states.

The third chapter focuses on the changes in labor market outcomes in response to post-NAFTA automotive FDI. Specifically, I examine the labor market effects of FDI originating from a nontraditional source country like South Korea in comparison to investments by European or Japanese firms, which tend to compete on the basis of quality as opposed to low cost. Using 2005-2011 ACS data, I compare changes in employment rates and median weekly wages depending on where the investments each locale has received originate from: traditional sources (i.e. Germany and Japan) vs. non-traditional sources (i.e. Korea). This chapter explains how FDI sources are an important moderator of the labor market changes driven by foreign investors under the same international and domestic institutional contexts. That is, strategies taken by multinationals from different countries can result in different labor market outcomes for the host populations, simply by virtue of their host country.

Finally, based on the findings described in the previous two chapters, the fourth chapter explains why and how domestic institutions affect foreign investors' settlement and expansion in the host economy. In particular, I discuss the role of state governments in attracting and supporting the MNEs' investments in an effort to improve labor market conditions. Qualitative analysis based on in-depth interviews and archival data

demonstrates that state governments make various strategic efforts in collaboration with multinational firms. Rather than simply observing foreign investors' practices, some local governments actively provide institutional support of MNEs' recruitment, selection, training and retention of local employees. Ultimately, this chapter concludes that a possible shift in local labor market conditions can be explained not only by the FDI itself, but also by the partnership between corporations and the government.

Collectively, these chapters suggest that foreign investors shape the host labor market in different ways depending on their countries of origin and that these labor market impacts are mediated by domestic institutions, such as state governments' economic policy. Indeed, foreign investors are important job creators in the host economy, but their impacts on the labor market cannot be independent of the institutional environments in the host country.

## CHAPTER 2: FDI AND LABOR MARKETS IN RESPONSE TO RTW LEGISLATION

In this chapter, I investigate the labor market effects of FDI in response to RTW legislation, which is a domestic institutional change intended for labor market flexibility. My expectation is that foreign businesses create more manufacturing jobs after RTW legislation. Theoretically, efficiency is a key consideration for organizations in the process of internationalization; MNEs, like most other organizations, have efficiency-based goal orientations. According to theories explaining motives for FDI, many MNEs attempt to undertake FDI in countries with cheaper costs in pursuit of efficiency. Dunning (1977) established the eclectic paradigm, also known as the OLI model, to examine why and how firms engage in FDI and where they are more likely to invest. He argued that firms make the decision for international production based on three advantages: ownership advantages, location advantages, and internalization advantages. Among these advantages, he emphasized the MNEs' efficiency-seeking behaviors in regard to location advantages; if a firm is to engage in FDI, it must be less costly for it to produce goods in the foreign country than at home. Thus, the firm takes various costs (e.g., labor costs, transport and/or trade costs, or costs of natural resources) into account to evaluate the attractiveness of potential destinations for investment.

Based on the OLI framework, Dunning (1993) further identified the three most common motivations for FDI: resource seeking, market seeking, and efficiency seeking. MNEs undertake resource-seeking FDI when particular types of resources are unavailable at home or those resources are cheaper to acquire in other countries. Market-seeking MNEs, on the other hand, enter foreign markets to search for and exploit new markets and to better cater to their customers' needs in existing markets. Most importantly, MNEs engage in efficiency-seeking FDI to take advantage of factor price differentials across

countries and to reduce production costs. Dunning's notion of efficiency-seeking investment behavior of firms is consistent with the theoretical premise that organizations make an effort to improve efficiency by lowering costs. This paradigm remains as the most highly applicable approach to explaining international production in the host country, despite a recent theoretical extension to explore FDI outflows from the home country perspective (see Alderson 2004).

As summarized above, labor costs are one of the primary considerations for foreign investors in pursuit of organizational efficiency, and their investment behaviors are known to be influenced by labor market characteristics and contexts of the FDI locations. The implementation of RTW policy also signals lower labor costs as well as a business-friendly climate in a given state economy, which can gain the favor of foreign businesses—or of any businesses in general—looking to operate efficiently. Accordingly, this notion may in turn accelerate business activities of MNEs in the affected areas, resulting in greater incoming investment. Thus, I expect a positive association between RTW legislation and manufacturing employment by foreign firms. Specifically, I expect that the states that had recently passed the RTW law would experience a higher growth rate of foreign manufacturing employment (as well as total manufacturing employment) compared to their counterparts without the law.

Hypothesis 1: Adoption of RTW legislation increases foreign businesses' manufacturing employment.

In addition, I expect foreign businesses to increase manufacturing employment to a greater extent than total businesses following RTW legislation. Studies provide evidence that foreign companies face competitive disadvantages arising from their lack of

knowledge of the host country relative to indigenous companies (e.g., Hymer 1960; Johanson and Vahlne 1977; Luo and Peng 1999). Zaheer (1995) coined the term “liability of foreignness (LOF)” to address this phenomenon. In order to overcome LOF, MNEs implement various strategies. For example, research on location patterns of domestic and foreign investors in the U.S. has shown that foreign businesses prefer different state characteristics when compared with domestic firms in making location decisions (Daniels 1970; Ulgado 1996). While examining locational attributes highly sought after by foreign and domestic establishments, Shaver (1998) found that foreign firms, compared to their U.S. counterparts, tend to favor states with weaker organized labor, low wage rates, and RTW status. Although all manufacturers have an incentive to move to locations with cheaper production costs, foreign firms tend to be more sensitive to labor costs than domestic firms. Shaver explained that the costs of adjusting to the U.S. business environment can be substantially reduced when foreign investors locate to states with lower labor costs. In other words, foreign companies attempt to offset their disadvantages, such as limited access to local knowledge and operational difficulties, by selecting efficiency-oriented locations.

Although research focused on comparing the survival and growth of foreign and domestic firms primarily discusses LOF, other studies highlight foreign firms’ greater degree of flexibility. Literature on strategic management recognizes the importance of a firms’ organizational flexibility to adjust operations, with quick and smooth reallocation of resources in response to institutional changes being critical (Aaker and Mascarenhas 1984). According to De Toni and Tonchia’s (2005) classification, there are two types of organizational flexibility: strategic flexibility and operational flexibility. Strategic flexibility is a radical type of flexibility that leads to fundamental shifts in the nature of firm activities and strategy. Operational flexibility, on the other hand, refers to temporary

changes in the routine activities of a firm such as adjustments in its manufacturing, distribution, or financial operations. From the operational flexibility perspective, researchers argue that MNEs tend to be intrinsically more volatile and footloose than domestic counterparts. They appear to be less attached to their host market and more responsive to institutional changes than domestic counterparts (Alvarez and Gorg 2005; Flamm 1984).

At the macro level, MNEs adopt flexible arrangements because they can consider alternative locations more easily than domestic firms when conditions in the host economy become less attractive (Boddeyn 1983; Kogut and Kulatilaka 1994; Pinkse and Kolk 2011). For MNEs, their scope of the market and production network typically spans across many countries. Accordingly, these firms perform economic activities in a particular country via systematic and integrated approaches based on efficiency-seeking strategic choices. These choices are made within larger, interdependent networks in multiple countries (Belderbos and Sleuwaegen 2005; Ernst 1997). This greater geographical range of options allows foreign firms to show different behavioral patterns from domestic firms when responding to changes in environment. At the micro level, managers responsible for operational decisions are less emotionally involved with foreign subsidiaries than their domestic parent company (Boddeyn 1983). As an example, in the divestment process of a unit, managers personally involved with the unit tend to resist strongly not only because their jobs may be at stake but also because they are emotionally attached to the business (Nees 1981). However, as much of the decision-making in the investment and divestment processes of foreign operations is made at the headquarters and not at the subsidiaries, managers take a more flexible stance based on a lower level of attachment to the host country (see Ghertman 1988).

Although not as highly discussed in existing literature, employment growth of MNEs' affiliates may also follow a similar pattern. Compared to local firms, MNEs may be more willing to adjust employment in its affiliates in response to various labor cost developments in countries where they manufacture. Past studies show that unfavorable evolution of labor costs has a strong negative impact on overseas affiliates' employment growth (Belderbos and Zou 2007). Conversely, in the case of positive labor market developments in the host institutional environment, foreign firms may be more willing to increase their production and employment capacity than domestic counterparts. Thus, I expect RTW legislation to have a greater impact on the growth of manufacturing jobs held by foreign businesses than those held by total businesses.

Hypothesis 2: Adoption of RTW legislation increases foreign businesses' manufacturing employment to a greater degree than that by all businesses.

#### Model Specification

The focus of the analysis is on changes to manufacturing employment by total and foreign businesses in 50 U.S. states between 2011 and 2013. The intervention group includes two states, Indiana and Michigan, who both passed RTW laws during 2012. The control groups include 26 non-RTW states, and 22 RTW states who have had the law for significantly long periods.

**Table 1. Unionization Rates, Absolute Change in Manufacturing Employment of All and Foreign Businesses, and Manufacturing Employment Growth Rates, 2011-2013**

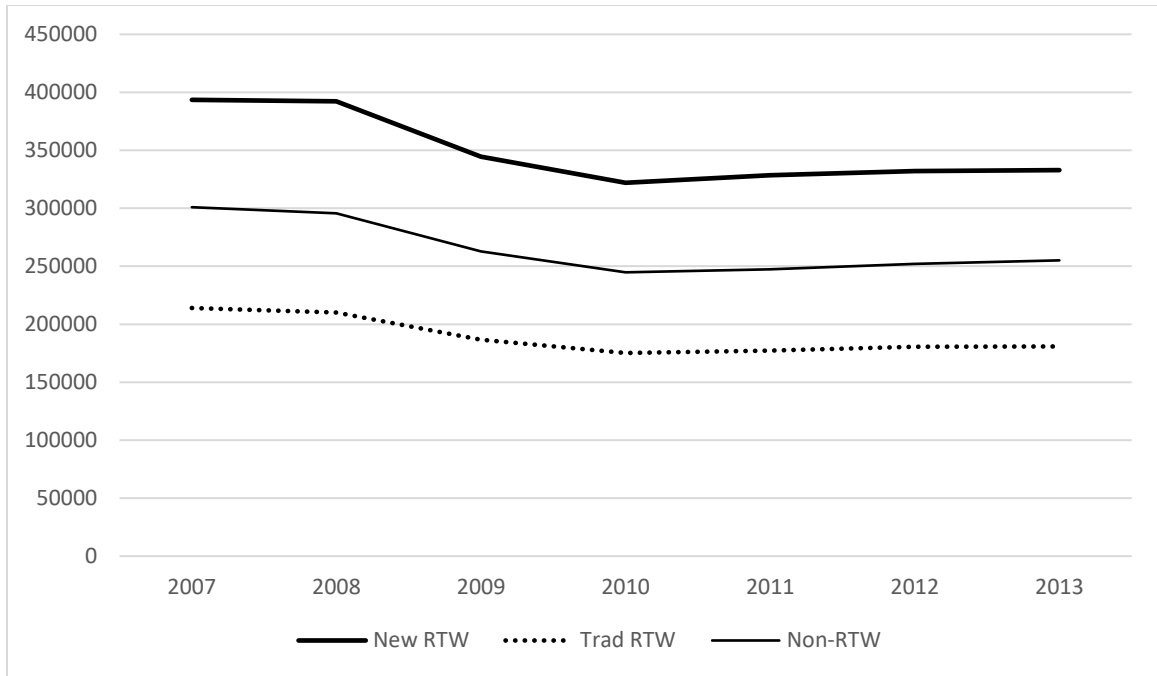
	Unionization, 2011 (%)	All		Foreign	
		Absolute Change	(%)	Absolute Change	(%)
New RTW					
Indiana	11.3	26,160	6	10,000	10.1
Michigan	17.6	48,535	10.2	22,500	16.6
Non-RTW					
Alaska	22.2	-719	-5.5	200	15.4
California	17.4	12,648	1.1	18,900	8.7
Colorado	8.2	891	0.8	-1,900	-6.5
Connecticut	16.8	2,724	1.8	-1,400	-0.6
Delaware	10.5	-1,476	-5.3	-3,000	-26.1
Hawaii	21.6	54	0.4	600	16.1
Illinois	16.3	8,274	1.5	11,000	8.4
Kentucky	9.0	12,756	6.2	5,800	11.4
Maine	11.4	-2,459	-4.8	1,000	12.8
Maryland	12.5	-3,973	-3.8	-2,200	-2.3
Massachusetts	14.7	2,559	1.1	4,800	5.9
Minnesota	15.3	8,104	2.8	4,100	8.6
Missouri	10.9	2,916	1.2	5,000	10.9
Montana	13.2	661	4	600	23
New Hampshire	11.2	1,654	2.5	3,000	17.4
New Jersey	16.2	-13,087	-5.6	4,100	3.3
New Mexico	6.8	332	1.2	1,500	25.4
New York	24.1	-5,605	-1.3	4,000	0.5
Ohio	13.5	18,695	3	13,400	10.3
Oregon	17.5	7,312	5.1	1,800	9.5
Pennsylvania	14.7	-7,381	-1.3	5,700	6.8
Rhode Island	17.4	-2,364	-5.9	800	9.1
Vermont	12.2	-195	-0.6	-100	-4.4
Washington	19.3	19,644	8.7	1,500	7.5
West Virginia	13.9	-2,629	-5	700	4.9
Wisconsin	13.5	10,249	2.4	500	1.5
Traditional RTW					
Alabama	10.0	14,465	6.4	6,900	14
Arizona	6.0	-888	-0.6	2,200	9.9
Arkansas	4.3	-2,313	-1.5	2,400	9.1
Florida	6.4	5,500	2	3,000	5.2
Georgia	4.0	11,266	3.4	2,500	3.4
Idaho	5.3	3,637	6.8	1,400	25
Iowa	11.4	8,378	4.2	6,600	28.1
Kansas	7.7	6,388	4.2	2,600	8.4
Louisiana	4.5	516	0.4	1,900	10.1
Mississippi	5.0	-77	-0.1	3,500	30.7
Nebraska	8.1	138	0.2	5,400	38.3
Nevada	14.7	331	0.8	900	11.1
North Carolina	2.9	5,093	1.3	19,600	20.6
North Dakota	6.4	161	0.7	-400	-6
Oklahoma	6.5	6,578	5.2	4,500	23.4
South Carolina	3.4	10,232	5	9,800	15.6
South Dakota	5.2	3,418	8.5	4,000	95.2
Tennessee	4.6	10,484	3.6	7,100	12
Texas	5.3	56,133	7.7	6,600	3.8
Utah	5.8	5,369	5	1,800	14.1
Virginia	4.6	2,600	1.1	6,300	14.4
Wyoming	7.3	342	3.5	1,000	40



Table 1 lists the states included in the intervention and control groups, together with their unionization rates in 2011, and shows the pattern of manufacturing employment by total and foreign businesses in each state from 2011 to 2013. Most of the states in the South adopted RTW legislation in the 1940s and 1950s and have had a relatively low level of union representation since then. The non-RTW states are from the Northeast, Midwest, and West and have a higher level of union density than the RTW states.

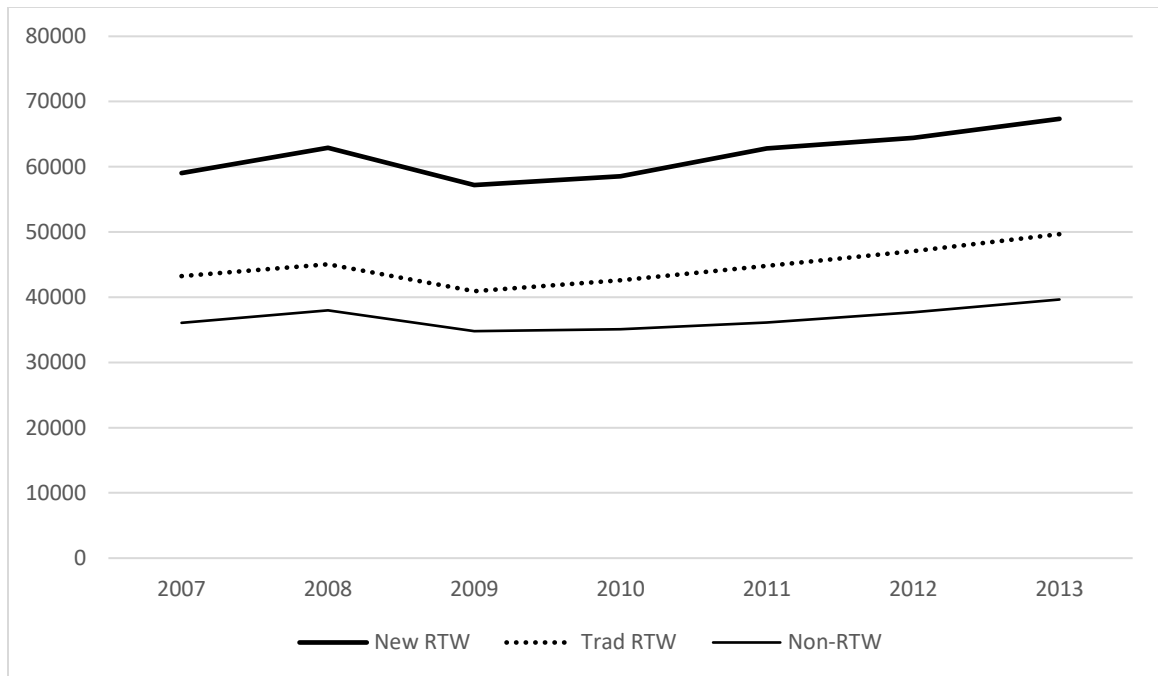
Descriptive results plotting the distribution of the dependent variable show that the majority of new and traditional RTW states witnessed an increase in manufacturing employment by all and foreign businesses between 2011 and 2013. The highest gains occurred in Texas, where the employment from businesses total increased by 56,133, and Michigan where the employment by foreign businesses increased by 22,500 during the same period. However, approximately half the states in the non-RTW group experienced a negative change in manufacturing employment in all businesses (i.e., Alaska, -719; Maryland, -3,973; New Jersey, -13,087; New York, -5,605; Pennsylvania, -7,381; Rhode Island, -2,364; Vermont, -195; West Virginia, -2,629) and of foreign businesses (i.e., Connecticut, -1,400; Maryland, -2,200; Vermont, -100). Interestingly, on average, much more dramatic increases in manufacturing employment by foreign investors occurred during the period than in that of all businesses. In light of this, I can say that foreign businesses had a higher manufacturing employment growth rate than domestic businesses between 2011 and 2013.

**Figure 2. Size of Manufacturing Employment of All Businesses by Right-to-Work Status of the States, 2007–2013**



To further investigate the role of RTW legislation, Figure 2 and 3 track the average number of manufacturing jobs held by all and foreign businesses, separating the states by their RTW status during the period of 2007–2013. The three-group comparison of all businesses (Figure 2) shows that employment significantly dropped since 2008 but started growing again in 2010 to 2013. However, the increase in manufacturing employment was not dramatic in the group that recently passed RTW legislation. Also, between 2011 and 2013, manufacturing employment by all businesses increased by 1.4% in new RTW states on average, compared to an increase of 2.1% in traditional RTW states and an increase of 3.1% in non-RTW states.

**Figure 3. Size of Manufacturing Employment of Foreign Businesses by Right-to-Work Status of the States, 2007–2013**



In the case of foreign businesses’ manufacturing employment (Figure 3), an employment boost happens between 2007 and 2008 but significantly drops in 2009, presumably due to the Great Recession. However, compared to the employment patterns of all businesses, foreign investors have a quicker recovery, with their employment increasing from between 2009 and 2010 and onwards. When comparing the trend based on the three-group specification, traditional RTW states have the highest growth rates (21.4%) between 2009 and 2013, followed by new RTW states (17.7%) and non-RTW states (13.9%). However, during the period of 2011–2013, new RTW states have shown the lowest growth rates. Specifically, new RTW states experienced an increase of 7.2%, whereas traditional RTW states increased by 10.8% and non-RTW states by 9.8%. All in all, the employment patterns shown in Figure 2 and 3 indicate that passage of the RTW law did not have any discernible employment effect, and that new RTW states experienced an even smaller employment growth than other groups. That is, it is possible that job creation has

resulted merely from economic recovery rather than domestic and foreign businesses' response to the new legislation.

**Table 2. Summary Statistics and Correlations of Control Variables**

Variable	Summary Statistics				Correlations											
	Mean	SD	Min	Max	1	2	3	4	5	6	7	8	9	10	11	
1. All mnfg. employment size, 2011 (000s)	219.7	219.2	9.6	1134.2	1.00											
2. Foreign mnfg. employment size, 2011 (000s)	41.7	42.1	1.7	175.1	0.95	1.00										
3. Minimum wage, 2011 (\$)	7.4	0.4	6.2	8.7	-0.03	-0.03	1.00									
4. Unionization rates, 2011 (%)	11.0	5.5	2.9	24.1	-0.05	0.02	-0.11	1.00								
5. Unemployment rates, 2011 (%)	8.1	1.9	3.5	13.1	-0.17	-0.18	-0.30	-0.10	1.00							
6. Employed in auto manufacturing, 2007 (%)	10.3	6.7	1.8	29.4	0.22	0.26	0.16	-0.10	-0.15	1.00						
7. Employed in manufacturing, 2007 (%)	11.3	4.3	2.8	20.6	0.28	0.24	-0.11	-0.17	0.06	0.45	1.00					
8. Employed in highly skilled sector, 2007 (%)	16.1	3.6	9.9	25.0	0.29	0.29	-0.01	0.05	0.24	0.00	-0.21	1.00				
9. Mnfg. Employment growth rate, 2009-2011 (%)	-5.2	3.2	-9.6	10.0	0.03	0.07	-0.20	0.13	0.14	0.19	0.26	-0.16	1.00			
10. Investments from coordinated market economy, 2011 (%)	44.5	8.2	29.2	63.4	-0.01	-0.05	0.14	-0.29	-0.09	-0.05	0.03	0.17	0.04	1.00		
11. Investments from liberal market economy, 2011 (%)	16.5	5.9	4.7	36.2	-0.03	-0.04	-0.10	-0.09	0.19	-0.22	-0.18	0.25	-0.17	-0.18	1.00	

Before concluding that there was no employment effect of RTW legislation, my models include the following set of controls (Table 2). While fixed effects estimation controls for the effects of all the unobserved variables that do not change over time, my models include contextual controls that change over time. In the regression specification, I include variation over time, in addition to the policy intervention, which can encourage business activities and enhance employment growth. This allows me to investigate the role of other labor market changes that might have resulted in the adoption of RTW law and/or employment growth.

The effect of other labor market conditions is measured by including changes in labor market characteristics from the prior year such as minimum wages, unionization rates, and unemployment rates. Combining data from the basic minimum wage database and the union membership statistics of the U.S. Department of Labor, I construct and include data on minimum wages and unionization rates by state and year. For analysis, minimum wages of the U.S. states are deflated by the Consumer Price Index and placed in 2014 constant dollars. In addition, I include measures of changes in unemployment rates, as they could stimulate the state governments to implement policies intended for investment attraction and employment growth, including passage of RTW legislation. I also include the share of the population employed in the auto manufacturing industry, the share of the population employed in the manufacturing industry, and the share of the population employed in the highly skilled sectors (i.e. information, finance and insurance, professional, scientific, and technical services, and management of companies and enterprises). I include these factors because the treatment and control groups vary in the size of their initial employment in different sectors and industries, and a greater employment starting size implies greater potential for increases. As the introduction of RTW legislation might have been influenced by employment growth coupled with

decreased job creation, I include as a covariate the total and manufacturing employment growth rates in each particular locale between 2009 and 2011, prior to policy changes. Lastly, I include the share of investments originating from coordinated market economies (i.e. France, Germany, Japan, Netherlands, Switzerland) and the share of investments from liberal market economies (i.e. Canada, United Kingdom). The reason for their inclusion in the models is that different types of capitalist economies treat their labor relations differently (Hall and Soskice 2001), and that MNEs may also hold different attitudes towards labor unions depending on institutional environments of their country of origin.

**Table 3. Difference-in-Difference Estimates of the Average Change in Manufacturing Employment of All and Foreign Businesses by Right-To-Work Status, 2011-2013**

	All			Foreign		
	Non-RTW (1)	RTW		Non-RTW (1)	RTW	
		New (2)	Traditional (3)		New (2)	Traditional (3)
Average number of employees in						
2011	229,724	457,117	186,196	40,885	101,000	37,318
2013	232,401	494,464	192,911	43,977	117,250	41,845
Change (2013-2011)	2,676	37,348	6,716	3,092	16,250	4,527
Difference-in-difference estimates						
Reference group (1):		34,671	4,040		13,158	1,435
N (states)	26	2	22	26	2	22

Table 3 reports the DID estimates of the average increase in the number of manufacturing jobs held by all and foreign businesses between 2011 and 2013, separating the states by their RTW status. The group comparison shows that manufacturing employment by all businesses in states that passed the RTW law in 2012 increased by an additional 34,671 relative to areas without the law. It also shows that these new RTW states exhibit a greater average growth in the number of manufacturing jobs held by foreign businesses (+13,158) than in areas without the law. A similar pattern is found between non-RTW states and traditional RTW states, although to a lesser extent. Traditional RTW

states exhibit a greater average growth in the number of manufacturing jobs held by all and foreign businesses (+4,040 and +1,435, respectively) than non-RTW states.

## Results

### *First Difference and Lagged Dependent Variable Models*

The next set of analyses models group differences in the changes in manufacturing employment by total and foreign businesses, controlling for prior employment conditions and changes in labor market characteristics.

**Table 4. OLS Estimates from Difference-in-Differences Models Predicting Change in Total Manufacturing Employment, 2011-2013**

	Total			
	Difference-in-Differences (Change in Employment)		Lagged Dependent Variable (Employment in 2013)	
	(1)	(2)	(3)	(4)
Right-to-work (ref: non-RTW)				
New RTW	34.68 (7.35) ***	22.85 (9.75) *	29.02 (6.40) ***	19.90 (8.54) *
Traditional RTW	4.04 (2.90)	2.70 (3.18)	5.12 (2.48) *	3.97 (2.79)
Minimum wage		1.84 (9.58)		4.76 (8.39)
Unionization (%)		0.86 (1.16)		0.92 (1.02)
Unemployment (%)		-3.84 (2.35)		-1.20 (2.17)
Employed in auto manufacturing (%)		0.37 (0.29)		0.40 (0.25)
Employed in highly skilled sector (%)		0.48 (0.45)		-0.15 (0.43)
Employed in manufacturing (%)		0.46 (0.39)		0.00 (0.36)
Total mnfg. employment size, 2011 (lagged dependent variable)			0.02 (0.01) ***	0.02 (0.01) **
Intercept	2.67 (1.97)	-15.31 (9.87)	-3.04 (2.13)	-2.76 (9.26)
R-squared	0.32	0.47	0.52	0.61
<i>N</i> = 50				

Note: Standard errors in parentheses. All coefficients in thousands.

\**p* < .05; \*\**p* < .01; \*\*\**p* < .001 (two-tailed).

Controls (2): Minimum wage, 2011-2013, Unionization, 2011-2013 (%), Unemployment, 2011-2013 (%), Employed in auto manufacturing, 2011-2013 (%), Employed in highly skilled sector, 2011-2013 (%), Employed in manufacturing, 2009-2011 (%)  
 Controls (4): Minimum wage, Unionization (%), Unemployment (%), Employed in auto manufacturing (%), Employed in highly skilled sector (%), Employed in manufacturing, 2009 (%), Total mnfg. employment size, 2011

Table 4 reports results from OLS first difference and lagged dependent variable models predicting changes in the manufacturing employment of total businesses. The model in column 1, which does not include covariates, reproduces the DID estimates



reported in Table 3. Adding the changes in employment conditions and labor market characteristics as predictors in column 2 reduces the total effect of new RTW legislation on manufacturing employment by all businesses by 34%, from 34.7 ( $p < .001$ ) to 22.9 ( $p < .05$ ). However, it still shows that new RTW legislation has positive impacts on manufacturing employment by all businesses. When comparing non-RTW states with traditional RTW states, there is no statistically significant difference in their employment growth between 2011 and 2013. The lagged dependent variable results in column 3 show that even after conditioning the estimates on the prior manufacturing employment size, states that newly implemented the RTW law experienced increased employment by 29 ( $p < .001$ ). In the lagged dependent variable specification, which relates changes in the size of manufacturing employment by total businesses with other labor market covariates such as the prior size of employment, in addition to policy changes (column 4), the positive effect of new RTW legislation (19.9) persists ( $p < .05$ ). However, traditional RTW states do not have any significant difference compared to non-RTW states in their employment effects.

**Table 5. OLS Estimates from Difference-in-Differences Models Predicting Change in Foreign Manufacturing Employment, 2011-2013**

	Foreign			
	Difference-in-Differences (Change in Employment)		Lagged Dependent Variable (Employment in 2013)	
	(1)	(2)	(3)	(4)
Right-to-work (ref: non-RTW)				
New RTW	13.16 (3.49) ***	10.21 (4.23) *	8.04 (2.50) **	6.93 (3.23) *
Traditional RTW	1.43 (1.38)	0.67 (1.44)	1.74 (0.95)	1.00 (1.08)
Minimum wage		-0.55 (4.28)		0.36 (3.21)
Unionization (%)		-0.07 (0.58)		-0.03 (0.43)
Unemployment (%)		-2.66 (1.02) *		-1.10 (0.82)
Employed in auto manufacturing (%)		-0.14 (0.13)		-0.11 (0.10)
Employed in highly skilled sector (%)		0.53 (0.21) *		0.10 (0.18)
Employed in manufacturing (%)		0.48 (0.18) *		0.26 (0.14)
Investments from coordinated market economy (%)		-0.15 (0.09)		-0.08 (0.07)
Investments from liberal market economy (%)		-0.13 (0.12)		-0.08 (0.09)
Foreign mnfg. employment size, 2011 (lagged dependent variable)			0.09 (0.01) ***	0.08 (0.01) ***
Intercept	3.09 (0.93) **	-4.34 (5.70)	-0.39 (0.80)	-0.10 (4.34)
R-squared	0.23	0.48	0.65	0.71
<i>N</i> = 50				

Note: Standard errors in parentheses. All coefficients in thousands.

\**p* < .05; \*\**p* < .01; \*\*\**p* < .001 (two-tailed).

Controls (2): Minimum wage, 2011-2013, Unionization, 2011-2013 (%), Unemployment, 2011-2013 (%), Employed in auto manufacturing, 2011-2013 (%), Employed in highly skilled sector, 2011-2013 (%), Employed in manufacturing, 2009-2011 (%)

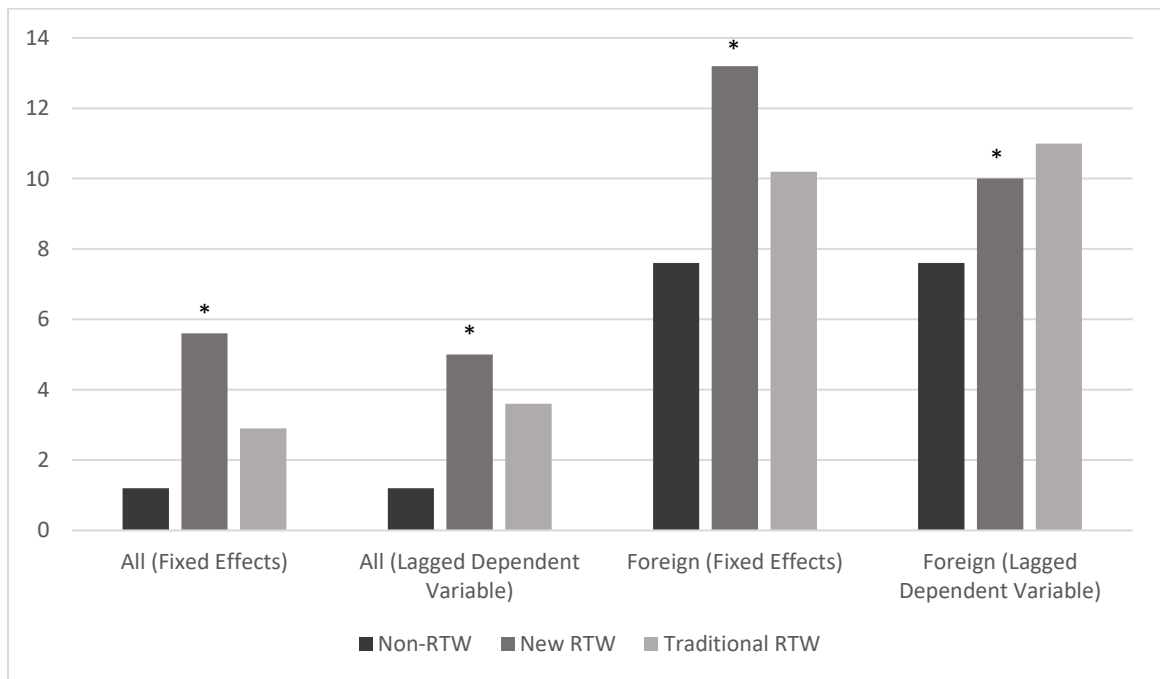
Investments from coordinated market economy, 2011-2013 (%), Investments from liberal market economy, 2011-2013 (%)

Controls (4): Minimum wage, Unionization (%), Unemployment (%), Employed in auto manufacturing (%), Employed in highly skilled sector (%), Employed in manufacturing, 2009 (%), Investments from coordinated market economy (%), Investments from liberal market economy (%), Foreign mnfg. employment size, 2011

Table 5 reports results from the OLS first difference and lagged dependent variable models predicting changes in manufacturing employment by foreign businesses. The model in column 1, which does not include covariates, reproduces the DID estimates reported in Table 3. Also, adding the changes in employment conditions and labor market characteristics as predictors in column 2 does not eliminate the positive effect of the new RTW law on manufacturing employment of foreign businesses. Although the coefficient decreases by 22.7% from 13.2 (*p* < .001) to 10.2 (*p* < .05), new RTW states still experienced a much higher employment growth rate than non-RTW states. The lagged dependent variable results in column 3 show that even after conditioning the estimates on the prior manufacturing employment size in 2011, states that newly implemented the RTW law experienced increased employment by 8 (*p* < .01). In the lagged dependent variable specification, which relates changes in the size of manufacturing employment by foreign

businesses to the prior employment size and other labor market contexts in addition to policy changes (column 4), the positive effect of new RTW law (6.9) persists ( $p < .05$ ). However, in both the DID and lagged dependent variable models, there is no statistically significant difference in the employment growth between traditional RTW states and non-RTW states.

**Figure 4. Differences in Average Growth Rates of Manufacturing Employment Based on Estimates from Fixed Effects and Lagged Dependent Variable Models**



\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$  (two-tailed)

To clarify the magnitude of the effects of RTW legislation, Figure 4 shows the average growth rates of manufacturing employment based on results for the three-group

specification reported in the models in columns 2 and 4 of Table 4–5. In the DID estimation of total businesses, compared to the non-RTW states, new RTW states have experienced a higher growth rate by 4.4 percentage points, followed by traditional RTW areas (1.7 percentage points). Although to a slightly different degree, similar patterns are found in the lagged dependent variable models. Results for the growth rates of manufacturing employment by foreign businesses are consistent. In the DID estimation, new RTW states and traditional RTW states have a higher growth rate of manufacturing employment than non-RTW states by 5.6 percentage points and 2.6 percentage points, respectively. The results from the lagged dependent variable models show similar findings. That is, the passage of RTW law is important in predicting the growth of manufacturing employment by all and foreign businesses between two time periods.

## Discussion and Conclusion

As the importance of the manufacturing sector for economic revitalization increases in the aftermath of the Great Recession, a few Midwestern states have endorsed RTW legislation in order to attract manufacturers. This recent institutional change has rekindled the debate on the government's role in intervening states' economic growth driven by foreign investors. In this sense, this chapter aimed to provide an analysis of the relationship between labor market policy intervention and foreign investors' manufacturing employment effects in the U.S. Based on the cases of Indiana and Michigan, two states that recently passed RTW legislation, this chapter compared their manufacturing employment growth with that of their non-RTW counterparts. I also provided an examination of whether foreign businesses respond differently to the institutional shift from domestic manufacturing businesses in the given areas.

While past studies reached mixed conclusions on the impact of RTW status on manufacturing, my findings concluded that the number of manufacturing jobs increases to a greater extent after passage of the RTW law. In both DID and lagged dependent variable models, I found consistent positive effects of RTW policy on the growth of manufacturing jobs held by both domestic and foreign businesses. Firms tend to respond positively to the policy intervention, given similar labor market characteristics and business climates. Even when prior employment conditions and other variables that attract businesses are taken into account, the effects of the institutional change persist. Also, following theoretical hypotheses, I showed that foreign investors' manufacturing activities are subject to RTW status to a greater degree than in total business patterns. In other words, manufacturing activities increase after RTW legislation, and foreign investors respond to this policy more than total businesses do.

These results are interesting because foreign firms' response to RTW legislation highlights both their efficiency- and flexibility-based attributes. First, the findings provide supporting evidence for my hypothesis on MNEs' efficiency-seeking behaviors. RTW law proxies a pro-business environment because states with RTW legislation historically have pursued various other business-friendly policies (e.g., high subsidies for new factories, low taxes on capital, and lax regulations). The fact that foreign investors have increased manufacturing activities in response to adoption of this pro-business policy is not surprising given that labor costs are often considered an important determinant for organizations' cost-efficient location selection. It is also consistent with Shaver's (1998) point that foreign investors locate in states with low levels of union activities as they intend to minimize unpredictable costs in unfamiliar business environments. Due to growth of emerging market multinationals and their location choices based on other motives (e.g. strategic asset-seeking FDI and resource-seeking FDI), efficiency-seeking FDI has not

received sufficient attention in recent studies (see Wang et al. 2012). However, this study concludes that cost-efficiency is still one of the crucial motivators for MNEs' expansion (as well as their entry), and that institutional changes that potentially lower labor costs in a particular location can promote such behaviors.

Secondly, the results reported in this study also support that foreign businesses, compared to total businesses, show a higher level of flexibility with regards to economic and institutional shifts in the host country. MNEs not only are highly sensitive to labor costs, but they also have stronger preferences for lower labor costs than domestic firms (Daniels 1970; Shaver 1998; Ulgado 1996). This locational preference aligned with foreign firms' footloose-ness results in their swift response to institutional change, as shown in my study. Although both domestic and foreign businesses have decreased their size of manufacturing employment in 2007-2013, foreign investors recovered their business activities at a much faster pace than domestic investors did (Figure 2-3). Also, regardless of the RTW status of the states, the level of foreign manufacturing employment in 2012 surpassed its highest employment level before the economic recession. I then found that MNEs respond to institutional changes to a greater extent than domestic firms. These patterns indicate that foreign businesses may reduce their activities due to economic shock in the host country, but they willingly re-increase their activities in response to institutions promoting labor market flexibility. In other words, foreign firms, which are footloose and flexible, tend to effectively accommodate their production activities to an institutional change that potentially helps cost-efficiency (as well as economic environmental changes) rather than keeping existing manufacturing activities. Labor costs are therefore an important element for organizational efficiency and profit maximization for businesses. Foreign firms' intention to minimize these costs based on their operational flexibility may

have led them to be more responsive to institutional contexts than their domestic counterparts.

### CHAPTER 3: FDI AND LABOR MARKETS IN RESPONSE TO NAFTA

As summarized in Chapter 1, the extent of labor market effects of foreign investments may depend on the sources of investments (Bagchi-Sen 1991; Little 1986). Competitors in the same industry implement different strategies depending on their market positions. First or early movers have sufficient time to improve their market share by accumulating necessary knowledge, developing sophisticated technology, and establishing their brand reputation (Suarez and Lanzolla, 2005). On the other hand, later entrants lacking such resources find it difficult to differentiate their products. Thus, they often rely on price competitiveness to increase market profitability. This logic applies to the process of international expansion as well. When making investments in foreign countries, firms show variations in their approaches to achieving market success, and such differences are highly associated with where the firms come from. Bartlett and Ghoshal (2000) argue that late movers originating from nontraditional source countries confront various challenges when entering foreign markets because of their countries of origin (or 'liabilities of origin'). This is because the conditions of the most developed countries differ from domestic institutional and economic environments in which the latecomers have operated successfully, and their firm-specific features are not well adapted to the needs existing in the advanced host markets (Meyer et al., 2011). Furthermore, the firms have difficulties acquiring legitimacy for not possessing reputational capital that protects them from discrimination by competitors, consumers, and host governments (Yildiz, 2014).

These entry barriers require less experienced firms from nontraditional source countries to adopt strategies distinguished from those implemented by established multinationals from developed countries. Comparing the internationalization patterns of multinational firms from emerging, upper-middle-income, or oil-rich countries with those



from traditional established economies, Guillen and Garcia-Canal (2009) find that, in order to close the gap with other competitors and overcome their latecomer disadvantages, unconventional multinationals develop strategies of international expansion that are different from those of conventional MNEs. For example, compared to established MNEs seeking gradual expansion, latecomer firms tend to accelerate their pace of internationalization in pursuit of capability upgrading or market reach, or both. In addition, they not only enter into developed and developing countries simultaneously but also select more diverse entry modes (for example, alliances and acquisitions) than conventional MNEs do. Other studies also support that late movers from nontraditional source countries take different approaches from those taken by firms from traditional source countries when engaging in FDI (Luo and Tung, 2007; De Beule, Elia, and Piscitello, 2013). From these findings, I conclude that foreign investors in the same industry entering the same host country may show different investment behaviors depending on their country of origin and market forces. While a majority of past studies focus on investment strategies themselves, I suppose that disparities in the firms' strategies can potentially change their impacts on the labor market in FDI destinations, resulting in different labor market outcomes.

Along this line, this chapter focuses on the labor market effects of post-NAFTA automotive investments originating from different source countries. As a type of preferential trading arrangements (PTAs), NAFTA has created liberalized commerce among member countries, namely the U.S., Canada, and Mexico, while discriminating against non-members and reinforcing regional protectionism (Mansfield and Milner 1999). In particular, industrial protectionism in auto sector is noteworthy. The integration of the North American automobile industry attempted in earlier intergovernmental negotiations such as the 1965 Canada-U.S. Auto Pact, as well as the 1988 Canada-U.S. Free

Trade Agreement, was finally achieved through NAFTA's ratification (Johnson 1993). While this agreement eliminated tariffs and other barriers to trade in the automotive sector among the NAFTA countries, it also increased protectionist barriers (i.e. tariffs and local content requirements) against imports of automobiles and auto components from other third countries (Lopez-de-Silanes et al. 1994).

While its impacts on the U.S. labor market remain controversial, foreign automobile assemblers and component manufacturers increasingly entered and engaged in massive investments in North America as a result of this economic shock (Johnson 1993; Lopez-de-Silanes, Markusen, and Rutherford 1994). Specifically, auto sector provisions under NAFTA triggered the earliest entry of German and Japanese assemblers into the U.S., such as BMW (1994), Mercedes-Benz (1997), and Toyota (1999), and most recently the South Korean (hereafter Korean) assemblers Hyundai (2005) and Kia (2009). Foreign automotive firms show similar investment behaviors of choosing the U.S. over Canada or Mexico and also selecting locations in the South rather than traditional auto states in the Midwest. However, within the same state, foreign automakers show disparities in their corporate strategies as well as county-level locational preferences.

Many studies assess whether NAFTA has resulted in changes in various economic measures in the U.S. Prior to the ratification of NAFTA, the U.S. government was concerned about labor market integration due to comparatively low wages in Mexico, monolithic structure of Mexican trade unions, Mexican underground economy, and Mexico's inadequacy in the application of international labor law (Hagen 1994). Early literature shows that the worst fear that U.S. workers may not be able to compete against their Mexican counterparts is overstated. Burfisher, Robinson, and Thierfelder (2001) summarize that NAFTA had a negligible effect on low-wage workers, with an estimate of changes in their real wages being less than one percent. Other researchers also find no

discernable negative employment effects of increased U.S. imports from Mexico (Hinojosa-Ojeda et al. 2000). However, a more recent study by McLaren and Hakobyan (2010) suggests not only that wage growth lowered universally across industries and regions in the U.S., but also that blue-collar workers in the most affected industries and localities were particularly vulnerable to the negative wage effects of NAFTA. While past studies primarily focus on how employment and wages changed due to trade imbalances between Mexico and the U.S. under NAFTA, these studies fail to address that this regional protectionism resulted in increased foreign investments in the auto sector and may have been followed by labor market changes.

This chapter explores the labor market effects of automotive FDI in response to NAFTA. Specifically, I examine the changes in labor market outcomes following FDI that originates from South Korea in comparison to investments by European and Japanese firms in Alabama. In this chapter, I expect that reverse FDI originating from a nontraditional source country may affect employment differently, yet still positively, than FDI from traditional sources. This different effect may be due to a shorter history of reverse FDI in the U.S. as well as differences in its nature (i.e. FSAs). Research shows that firms entering foreign markets follow different stages of expansion (Johanson and Vahlne 1977). The firms gradually increase their resource commitment in the host country as they accumulate the knowledge and experience required to overcome the LOF. As firms engaging in reverse FDI have various disadvantages (i.e. lack of advanced technology and know-how, branding deficiencies, home-country-based constraints, etc.) compared to local or foreign firms from established economies (see Bartlett and Ghoshal 2000; Luo and Tung 2007), they may take a slower move in its expansion and subsequently have a smaller scale of production compared to early movers that have invested in the U.S. for a longer period.

In addition, firms from less developed countries also have lesser FSAs, and thus smaller sizes and lower performance, than mature multinationals do (Guillen and Garcia-Canal 2009). These different levels of FSAs affect the firms' investment behaviors such as locational preferences as well as their mode of entry, subsequently resulting in differential employment effects (Bagchi-Sen 1995; Harrington, Burns, and Cheung 1986). Thus, I expect that reverse FDI may have smaller effects on employment than FDI from traditional sources does.

Hypothesis 1a: Reverse FDI positively affects employment in the affected areas relative to the unaffected areas.

Hypothesis 1b: Reverse FDI positively affects employment in the affected areas to a lesser degree than traditional FDI does.

In terms of wages, I expect that MNEs from nontraditional sources may bring different impacts on wages for the American workers than described in the earlier studies. FDI can take two different forms: market access (horizontal FDI) and comparative advantage (vertical FDI). Horizontal FDI is characterized by same production processes in different locations to save on transport and/or trade costs. Vertical FDI is intended to separate stages of production to exploit factor price differences and hence lower production costs (Yeaple 2003). While MNEs' entry into advanced markets is usually associated with their market access motive, it is essential for the firms to save on their production costs if they engage in up-market FDI. This is because country-specific advantages (CSAs) in relatively "cheap" labor, which often determined competitive advantages of the late movers, are likely to be unavailable in the economically more developed business environments. They may not pay wages lower than local employers'

due to standard wage rates in the host country or due to competition over labor force. However, in order to maintain cost leadership relative to mature multinationals with strong ownership advantages, firms engaging in reverse FDI may still attempt to minimize increasing costs (see De Beule, Elia, and Piscitello 2013). Based on this, I advance the following hypotheses on the level of wages:

Hypothesis 2a: Reverse FDI positively affects the level of wages in the affected areas relative to the unaffected areas.

Hypothesis 2b: Reverse FDI positively affects the level of wages in the affected areas to a lesser degree than traditional FDI does.

#### Data and Method

My analytic strategy is to assess the local labor market effect of reverse FDI at an aggregate level. The focus of our analysis is on yearly changes to two main labor market outcomes: employment rates and logged median weekly wage levels.

The data for analysis comes from a seven-year sample of individuals (2005-2011) of the American Community Survey (ACS; Ruggles et al., 2010). In the models of employment rates, we include Census 2000 data in addition to the ACS data (2005-2011). We restrict the sample to the non-institutionalized, non-student population aged 18 to 64 to capture prime working ages. In the models of wage, we further restrict the sample to those who are employed. The sample includes residents of the 30 Public Use Microdata Areas (PUMAs) – an indicator of the local labor market – in Alabama, and the primary unit of analysis is the PUMA. The end product is panel data of 30 PUMAs spanning 2000 and 2005-2011 estimating employment rates and logged median weekly wage levels for

the local area. This yields 480 observations and 420 observations in the models of employment and the models of wage, respectively.

### Model Specification

The dependent variables are yearly changes in employment rates and logged median weekly wage levels. I analyze the changes in the employment rates at seven time points (2005, 2006, 2007, 2008, 2009, 2010, and 2011) and changes in the wage levels at six time points (2006, 2007, 2008, 2009, 2010, and 2011). For analysis of changes in logged median weekly wages, earnings are deflated by the Consumer Price Index and placed in constant dollars prior to log transformation.

The main explanatory variable of interest is FDI penetration from varying sources in the respondents' residential areas. Combining data from the 2013 Alabama Industrial Database with the Alabama automotive industry profile and supplier list published by Alabama Department of Commerce, I restrict the automotive firms to those with 50+ employees to allow for the supposed impacts on the labor market. Then I distinguish between two area types: PUMAs with no FDI penetration (reference; hereafter NDI) and PUMAs with FDI penetration. The latter area type received FDI from different sources, namely Korean direct investment (hereafter KDI) and other, or non-Korean, direct investment (hereafter ODI). FDI penetration is a continuous variable with numerical values scaled to represent the number of individuals employed by foreign investors of different origins divided by 1,000.

I measure FDI penetration using four dimensions: the firms' location in Alabama, their starting year of production in Alabama, the assemblers' country of origin, and the suppliers' major client. The firms that are incorporated for definition have all arrived in

Alabama since 2005 (the year that KDI penetrated), and they represent FDI penetration in particular areas only after their starting year of production. I also argue that the country of origin of each supplier's main client is a better measure for the source of FDI penetration than the country of origin of each supplier itself. For example, supplier firms that settled in Alabama to serve a Korean assembler are from various countries (including Korea) but are considered a part of KDI for the analysis. This applies the same to supplier firms serving German and Japanese automakers. This is attributed to the characteristics of automobile industries whose commodity chains are subject to assembler-supplier relationships, specifically downward margin pressure based on their vendor contracts and pricing agreements. Thus, I take into account the country of origin of the suppliers' 'main' client; I define KDI as investments made by a Korean automaker and any supplier firms whose main client is the Korean automaker and ODI as investments made by German and Japanese automakers and any supplier firms whose main clients are the German and Japanese automakers.

### *Statistical Specification*

In order to evaluate the yearly effect of Korean and non-Korean investments on the labor market outcomes, I use the DID method. With the DID approach, I compare the difference in the employment rates and wage levels before and after the FDI inflows in the areas affected by the investments to the same difference in unaffected areas. Average changes over time in localities without investments are then subtracted from average changes over time in localities with investments. By using this method of fixed effects estimation, I can substantially reduce the omitted-variable bias (that is, endogeneity) that can be created in the cross-sectional analyses.

My models also include contextual controls that change over time as well as the year dummy variables. The contextual controls are PUMA-level indicators of local area conditions that are constructed by aggregating the individual information to the PUMA level. These include the share of college graduates, total population size (logged), industrial composition (the share of the population employed in the manufacturing industry and the share of the population employed in agricultural industry), the share of the foreign-born population, and the share of the black population. Also included is an interaction term of whether the areas experienced automotive FDI penetration before 2005 (which is constructed using combined data of the 2013 Alabama Industrial Database and Alabama Department of Commerce's supplier list) and how much the areas received KDI. Additionally, I added an interaction term of the share of the population employed in the manufacturing industry and KDI inflows, an interaction term of population size of PUMA and KDI inflows, and an interaction term of prior employment rates and KDI inflows. I include these three interaction terms to take into account that KDI's employment effects can become negligible due to other PUMA-level conditions, such as particular industrial activities, changing labor supply, and prior labor market conditions.

## Results

Table 6 presents descriptive statistics for the dependent variables by FDI typology and sex of resident. Results show that both employment rate and median weekly wages are on average substantially lower in areas with KDI penetration. For instance, men in KDI areas are 9 percentage points less likely to be employed and average nearly \$120 less than counterparts in NDI areas. This pattern is largely true for women, as well, but to a lesser degree. Noteworthy is that, in contrast to the general notion, results show that the



residents of NDI areas are more likely to be employed and earn more than those of areas with FDI penetration.

**Table 6. Descriptive Statistics of Dependent Variables by FDI Typology and Sex of Resident, 2005-2011**

	Men			Women		
	Areas with No Investment	Areas with Korean Investment	Areas with Other Investment	Areas with No Investment	Areas with Korean Investment	Areas with Other Investment
Employed (%)	73.21	64.33	67.61	55.34	50.50	51.92
<i>N</i>	33,935	14,065	21,521	31,775	13,335	19,829
Wages (median)	\$762	\$641	\$706	\$494	\$410	\$463
<i>N</i>	20,527	7,608	11,467	14,953	5,656	8,302

Source: American Community Survey (2005-2011).

Note: The numbers for wage levels represent medians of the total wage and salary income divided by weeks worked reported from 2006-2011.

Before attributing the differences observed in Table 6 to FDI penetration, I must also examine the extent to which local demographics and labor market conditions vary across locales. For example, if the less educated disproportionately reside in areas with KDI penetration, disparities in employment rates and wages might reflect contextual characteristics rather than the effects of FDI penetration. Table A1 reports descriptive statistics for contextual-level control variables. Based on the three FDI typologies, areas with KDI inflows have the least favorable labor market conditions. Specifically, KDI areas have a much smaller share of college graduates than NDI areas and areas with ODI inflows do. In addition, they have greater representation of people in the agricultural and mining industry (5.1%) and the manufacturing industry (23.2%) than other areas have. Moreover, KDI areas have experienced FDI penetration prior to 2005 to a lesser degree (36.0%) than ODI areas have (67.1%). This indicates that employment rates and wage levels may differ due to socioeconomic contexts irrespective of FDI inflows. Thus, I include changes in these indicators as control variables in the fixed effects estimation.

**Table A1. Descriptive Statistics of PUMA-Level Control Variables, 2005-2011**

	Total	No FDI	Korean FDI	Other FDI
% College graduates	22.00	26.30	16.30	19.70
Population size (mean)	169,338	176,479	155,957	168,826
% Foreign-born (mean)	3.45	3.68	2.91	3.47
% Black (mean)	20.14	20.50	28.52	15.79
% Employed in manufacturing industry (mean)	21.13	18.90	23.21	22.29
% Employed in agricultural/mining industry (mean)	3.09	2.00	5.13	3.16
% Pre-2005 FDI penetration	40.00	35.40	36.00	67.10
<i>N</i>	210	83	41	86

The following multivariate models analyze locational differences in changes in the employment rates and wage levels. I control for contextual variables and yearly effects.

### *Effect of KDI Inflows on Employment Rates*

Table 7 presents results from DID models estimating the relationship between inward FDI from different sources and changes in employment rates. The first column includes only yearly controls while the second adds PUMA-level contextual predictors. The reference category is NDI. Focusing on the effect of KDI inflows and changes in the employment rates, results show that KDI inflows positively affect employment growth rates. After accounting for contextual predictors, changes in employment rates for KDI penetration average 10 per cent higher, but not significantly, than those for NDI. However, results are statistically significant separately for men and women living in areas that attracted KDI inflows; men experience a higher employment growth by 12 percent ( $p < .01$ ) and women by 2 percent ( $p < .01$ ) for every increase of one on the scale of KDI penetration. Such positive effects appear only after controlling for various interaction terms and socioeconomic contexts. This suggests that KDI results in a higher growth rate of employment when other intervening local demographic and labor market conditions are held constant.

The pattern is in the opposite direction for ODI inflows; changes in employment rates for ODI penetration average 20 per cent lower, but not significantly, than those for NDI. In other words, compared to NDI, FDI inflows from nontraditional source positively affect employment growth while FDI inflows from traditional source do not affect employment growth rate any differently.

**Table 7. OLS Estimates from Difference-In-Differences Models Predicting Change in the Employment Rates**

	Employment					
	All		Men		Women	
<b>FDI types (ref=no investment)</b>						
Korean Investment	0.09 (0.24)	0.10 (0.32)	0.09 (0.34)	0.12 (0.04) **	0.09 (0.34)	0.02 (0.01) **
Other Investment	-0.24 (0.22)	-0.20 (0.21)	-0.24 (0.31)	-0.28 (0.32)	-0.24 (0.31)	-0.13 (0.34)
<b>PUMA-level contextual controls</b>						
% College graduates		0.05 (0.06)		0.03 (0.05)		0.05 (0.07)
Total pop (logged)		2.33 (1.60)		0.68 (2.29)		3.80 (2.38)
% Foreign-born		0.11 (0.10)		0.03 (0.13)		0.27 (0.19)
% Black		-0.09 (0.05)		-0.16 (0.07) *		-0.01 (0.07)
% Employed in mnfg industry		0.17 (0.04) ***		0.18 (0.06) **		0.13 (0.08)
% Employed in agri/mining industry		0.18 (0.06) **		0.21 (0.08) **		0.21 (0.19)
FDI penetration before 2005 * Korean DI		0.60 (0.88)		0.55 (1.22)		0.65 (1.24)
% Employed in mnfg industry * Korean DI		0.08 (0.22)		0.02 (0.32)		-0.01 (0.01)
Population size of PUMA * Korean DI		0.00 (0.08)		-0.04 (0.03)		0.00 (0.01)
Prior employment rates * Korean DI		0.00 (0.01)		-0.05 (0.06)		0.03 (0.12)
Intercept	71.28 (0.24) ***	43.55 (16.83) *	71.28 (0.35) ***	59.72 (23.88) *	71.28 (0.35) ***	21.50 (25.13)
<i>N</i> (observations)	480	480	240	240	240	240
<i>N</i> (groups)	60	60	30	30	30	30
Adjusted R-sq	0.32	0.37	0.32	0.38	0.32	0.36

Note: Year dummies are included in all equations. Standard errors in parentheses.

\*p < .05; \*\*p < .01; \*\*\*p < .001 (two-tailed).

Table 8 presents results from t-test for testing the significance of the difference between OLS estimates of KDI and ODI penetration. Results confirm that estimates of changes in employment rates for KDI inflows are not significantly different from those for ODI inflows. That is, the effects of FDI from each source on changes in employment rates are indistinguishable.

**Table 8. T-Test between OLS Estimates from Difference-In-Differences Models Predicting Change in the Employment Rates**

	Employment					
	All		Men		Women	
F	1.17	1.08	0.57	0.61	0.57	0.25
Prob > F	0.28	0.30	0.45	0.44	0.45	0.62

*Effect of KDI Inflows on Wage Levels*

Findings for the models predicting the relationship between inward FDI from different sources and weekly wages show that changes in logged median weekly wages for KDI penetration average smaller than those for NDI (Table 9). This holds true separately for men and women living in areas that attracted KDI inflows; men experience stagnated wage growth by 3.1 per cent ( $p < .001$ ) and women by 2 per cent ( $p < .05$ ) for every increase of one on the scale of KDI penetration. Such negative effects appear only after controlling for socioeconomic contexts. This suggests that a lower growth rate of wages may be attributed to KDI penetration rather than local demographic and labor market conditions. In the case of ODI, no relationship is found between FDI inflows and changes in wages. That is, there is no difference in growth of wage levels for ODI penetration and NDI across years. This applies to both men and women.

**Table 9. OLS Estimates from Difference-In-Differences Models Predicting Change in the Weekly Wage Levels**

	Wage					
	All		Men		Women	
<b>FDI types (ref=no investment)</b>						
Korean Investment	-0.002 (0.02)	-0.02 (0.02)	-0.01 (0.01)	-0.03 (0.01) ***	-0.01 (0.01)	-0.02 (0.01) *
Other Investment	-0.004 (0.03)	-0.01 (0.02)	-0.001 (0.02)	-0.01 (0.01)	-0.005 (0.02)	0.002 (0.01)
<b>PUMA-level contextual controls</b>						
% College graduates		0.01 (0.002) ***		0.01 (0.001) ***		0.01 (0.001) ***
Total pop (logged)		0.04 (0.06)		0.20 (0.05) ***		0.09 (0.05)
% Foreign-born		-0.004 (0.004)		-0.01 (0.004) *		-0.001 (0.01)
% Black		-0.001 (0.001)		-0.002 (0.001) *		0.000 (0.001)
% Employed in mnfg industry		0.01 (0.002) ***		0.001 (0.003)		-0.003 (0.003)
% Employed in agri/mining industry		0.01 (0.004)		-0.003 (0.004)		-0.01 (0.01)
FDI penetration before 2005 * Korean DI		-0.04 (0.03)		-0.05 (0.02) **		-0.02 (0.02)
Intercept	6.27 (0.04) ***	5.53 (0.62) ***	6.50 (0.04) ***	4.29 (0.58) ***	6.04 (0.04) ***	4.94 (0.56) ***
<i>N</i> (observations)	420	420	210	210	210	210
<i>N</i> (groups)	60	60	30	30	30	30
Adjusted R-sq	0.24	0.27	0.18	0.21	0.31	0.33

Note: Year dummies are included in all equations. Standard errors in parentheses.

\*p < .05; \*\*p < .01; \*\*\*p < .001 (two-tailed).

Table 10 presents results from t-test for testing the significance of the difference between OLS estimates of KDI and ODI penetration. Results confirm that estimates of changes in wage levels for KDI inflows are significantly different from those for ODI inflows, separately for men and women, when accounting for both yearly and contextual effects ( $p < .05$ ). That is, the effects of KDI on changes in weekly wage levels are statistically smaller than those of ODI.

**Table 10. T-Test between OLS Estimates from Difference-In-Differences Models Predicting Change in the Weekly Wage Levels**

	Income					
	All		Men		Women	
F	0.01	0.02	0.31	4.39	0.04	4.95
Prob > F	0.94	0.88	0.58	0.04	0.85	0.03

The models of wage present interesting results. KDI inflows result in a lower level of wage growth for men and women on average than NDI and ODI inflows. Specifically, men are paid at least 3 per cent less and women 2 per cent less for every increase of one on the scale of KDI penetration. In other words, relative to their counterparts in areas without KDI penetration, men and women in KDI areas work for lower pay. The effect of interaction term of FDI penetration prior to KDI and KDI inflows is also noteworthy (Table 9). In addition to KDI penetration being negatively associated with a change in men's wage levels, the effect is significantly negative for the interaction term. This means that if other foreign automakers have invested in the KDI areas before 2005, changes in wage levels for men average 4.5 per cent lower than those for men in areas without KDI penetration ( $p < .01$ ). That is, men suffer from even lower wages if their residential areas have experienced both KDI and ODI inflows. This also signals that inward KDI itself may be negatively associated with wage growth for both men and women, and in the presence of other foreign automakers, growth rates of wages for men can decrease to an even greater extent for KDI penetration than for ODI penetration.



## Discussion and Conclusion

Despite public concern over losing manufacturing jobs to Mexico, NAFTA contributed to creating employment in the U.S. by triggering a wave of foreign automotive investments. Following the lead of the European automakers that entered the U.S. in the mid-1990s, Japanese and Korean producers established assembly plants in the South during the 2000s. This chapter sought to investigate how post-NAFTA automotive FDI has impacted the U.S. labor market at the local level. Of particular interest in this chapter was the effect of reverse FDI: how foreign investments originating from nontraditional sources shape local labor market outcomes. I investigated the changes in the labor market conditions in Alabama between 2005 and 2011 with emphasis on the effects of Korean automotive investments. Specifically, I examined and compared the extent to which FDI from different sources affected local residents' employment rates and wage levels.

In this chapter, I hypothesized that investments originating from a nontraditional source country (i.e., Korea) will have positive employment and wage effects, but to a lesser degree than will investments originating from traditional source countries (i.e., Germany and Japan). This is because I expected the extent of labor market effects of foreign investments may depend on the sources of investments. Research shows that early movers tend to have better market positions due to their FSAs based on accumulated knowledge, sophisticated technology, and reputation capital. Lacking such resources, late movers, on the other hand, are under the pressure to win the market share through price competitiveness. In the process of international expansion, their competitiveness based on low production costs is likely to become unavailable, thus requiring them to adopt unique strategies that differ from those implemented by established multinationals from developed countries (see Guillen and Garcia-Canal 2009). Along this line, I tested my

hypotheses based on the assumption that foreign investors in the same industry entering the same host country may show different investment behaviors depending on their country of origin and that disparities in the firms' strategies can moderate their impacts on the labor market in the host market.

Results showed a positive relationship between inward KDI and local employment rates, which supports my hypothesis that investments originating from nontraditional source countries lead to higher employment growth for residents compared to NDI. The simple regression of employment with inward FDI from different sources based on 2005-2011 County Business Patterns data also supports that the gap between the number of jobs in Korean-invested areas and that in the areas without inward FDI has been gradually closing since 2008 even if the latter has a higher level of employment across years (see Table A2). This result indicates that more jobs have been created in absolute terms. Interestingly, my findings showed that, when compared to both NDI and inward ODI, inward KDI is associated with a higher increase in employment and a lower increase in wages. In other words, individuals' chances of employment increase to a greater degree, but individuals' wages increase to a lesser degree as a result of KDI.

**Table A2. Coefficients from OLS Models of Employment, 2005-2011**

	Employment						
	2005	2006	2007	2008	2009	2010	2011
<b>FDI types (ref=no FDI)</b>							
Korean DI	-25752.71 *	-28239.04 *	-29171.54 *	-20024.85 *	-11189.02	-11193.16	-10987.64
	(11942.64)	(12358.19)	(12493.75)	(07865.58)	(12196.54)	(11887.18)	(11956.31)
Other DI	13358.06	-2510.74	7964.61	1116.66	12434.38	11968.19	11437.24
	(18396.64)	(17323.13)	(12702.96)	(07806.33)	(12104.67)	(11797.63)	(11869.77)
Intercept	35246.08 ***	40253.85 ***	38632.24 **	32817.95 ***	25811.55 *	25374.52 *	25497.02 *
	(08639.29)	(09558.61)	(11267.40)	(07093.52)	(10999.37)	(10720.37)	(10751.73)
<i>N</i> (counties)	67	67	67	67	67	67	67
Adjusted R-sq	0.05	0.05	0.07	0.07	0.001	0.001	-0.001

Source: County Business Patterns Data (2005-2011).

Note: Standard errors in parentheses.

\**p* < .05; \*\**p* < .01; \*\*\**p* < .001 (two-tailed).

While decreased growth rates of weekly wages are consistent with my hypothesis, it is surprising that KDI has led to higher growth rates of employment than has ODI. Such a change may be attributed to Korean firms' cost-reduction strategies. According to an interview with one of the executives at HMMA (25 February 2012), when Hyundai searched for a potential production site in 2000, the biggest consideration was in labor costs: availability of cheap, nonunionized labor. That is, Korean firms have systematically selected low-growth, low-income areas to invest in. On top of that, Korean firms do not share labor force with other foreign automakers in Alabama due to geographical distance, which enables the firms and supporting industries to monopolize the cheap labor (see Table A1). Accordingly, it may be a rational choice for them to continue to set low wages exercising strong bargaining power over labor force in the areas. This theoretically supports that late movers adopt strategies distinguished from those implemented by established multinationals from developed countries in order to boost price competitiveness.

However, the firms' location strategies are not enough to explain why KDI has resulted in higher employment growth than ODI. By using the DID estimation, I controlled for predetermined conditions and dealt with endogeneity that could have resulted from Korean firms' locational self-selection. Thus, firms' other strategies implemented in reverse FDI may help better explain the results. As mentioned previously, when competing against early movers with strong ownership advantages, late movers usually choose cost-efficiency as their strategy. The cost-effective strategies may become even more important when the firms engage in reverse FDI, as their CSAs are no longer available and they suffer from latecomer disadvantages. Thus, minimizing increasing costs of production is one of the primary agendas for these multinationals. Along this line, Hyundai has implemented

cost-reduction strategy in two areas: assembler-supplier relations and selective production lines.

First, Hyundai chose to use its traditional Korean partners as a primary source of parts supply in the U.S. rather than sharing local or foreign suppliers with other foreign automakers in Alabama. Thus, Hyundai has created manufacturing geographical agglomeration, inviting many of its Korean partners to the location. According to the Alabama Department of Commerce (2013), 165 automotive firms have been established in Alabama since the settlement decision of Mercedes-Benz in 1994. The largest share of them serve Hyundai (70), followed by Mercedes-Benz (49) and Honda (42). When I restrict the firms to those with 50+ employees, the largest share still serves Hyundai (49), followed by Honda (31) and Mercedes-Benz (27). This intensified industrial agglomeration based on a strategic assembler-supplier alliance helps explain why workers were more likely to be employed but paid less.

By having their old partners build local production facilities, Hyundai sought to control product quality and, more importantly, production costs (interview with a purchasing manager at HMMA, 25 February 2012). In the aftermath of the Asian financial crisis of 1997, Hyundai was the sole survivor in the Korean auto industry. Since domestic automotive production began to be operated based on monopolistic relations between Hyundai-Kia Automotive Group and its suppliers, it became easy for Hyundai to exert influence over both domestic and international production networks (Chung and Lee, 2007). Although seen as a form of strategic alliance in principle, Korean automotive suppliers' entrance into the global market has been largely attributed to their absolute dependency on Hyundai in the domestic market (interview with an executive at one of Kia's supplier firms in Georgia, 10 March 2012). Under these circumstances, bringing

suppliers from Korea was a reasonable decision for Hyundai in terms of effective supplier management and hence cost reduction as well as quality control.

This supplier management policy enabled Hyundai and its first-tier Korean suppliers in Alabama to maintain low labor costs by handling the management-labor relations together; the Korean automotive firms in the areas agreed to build production facilities with some distance from one another in order to avoid potential labor disputes (interview with a purchasing manager at HMMA, 25 February 2012). Having previously dealt with frequent labor strikes by strong unions in the domestic market, Hyundai was concerned that within-industry wage differential across Korean firms in Alabama may arouse antipathy among the laborers working at suppliers that pay lower wages. By attempting to keep apart the workers physically, the firms managed their labor costs. Such an effort to reduce costs may have had trickle-down effects, putting pressure on smaller vendors and suppliers who already pay much lower wages than a flagship company. That is, Hyundai's investments may have, as the local government expected, created some high-paying jobs, but they also created a lot more low-paying jobs at the same time. This may explain why Korean investments have led to higher growth rates of employment but lower growth rates of wages than have non-Korean investments as well as no investments.

Moreover, the vehicles produced by each automaker in Alabama support Hyundai's price competitive strategies relative to other foreign automakers'. Both Mercedes-Benz and Honda manufacture mid- or full-size sport utility vehicles (SUV) in their assembly plants whereas Hyundai produces less sophisticated models. Though Mercedes-Benz added a compact (C-Class) production line in 2014, it primarily makes M-Class, R-Class, and GL-Class. Similarly, Honda focuses on Odyssey (a minivan), Pilot (a mid-size SUV), and Acura MDX (a mid-size luxury SUV). In contrast, in Alabama, Hyundai manufactures Sonata (a mid-size sedan) and Elantra (a compact car) – two of its

most basic, price-sensitive car models. As Hyundai begrudgingly started local production in the U.S. in response to protectionism, it was necessary to seek to keep production costs as low as they were in Korea. Accordingly, Hyundai has relied on importing its high-end car models from Korea while only making best-selling, affordable car models on site (interview with a purchasing manager at HMMA, 25 February 2012).

In this chapter, I explored changes in the local labor market outcomes driven by post-NAFTA automotive investments in a quasi-experimental setting. In order to overcome protectionist barriers under NAFTA, many foreign automakers decided to establish local production facilities in North America. Rather than settling in Mexico, which has the lowest wages among the NAFTA countries, these firms migrated to the U.S. in pursuit of labor with at least some sophisticated skills and well-established infrastructure. Also, they invested in the South, which utilizes nonunionized labor, instead of in traditional auto states in the Midwest. However, when these foreign automotive firms entered the same state, they generated different local labor market effects depending on their sources: traditional or nontraditional.

My findings, supplemented with interview data, suggest that corporate strategies as well as location selection of the firms may have created different outcomes. For example, Korean firms, as late movers in the global automobile industry, had no choice but to compete based on price competitiveness against established competitors with higher levels of FSAs (that is, sophisticated technology and reputational capital). Thus, the Korean assembler not only chose a lower-cost-oriented county within Alabama to be their production site, but also implemented cost reduction strategies compared to German and Japanese producers. From the analyses, I conclude that the institutional changes can attract FDI of any sources but labor market outcomes for local populations that result from

these investments can be distinctive depending on the MNEs' country of origin and their corporate strategies.



## CHAPTER 4: STATE GOVERNMENTS' INSTITUTIONAL CHANGES AND ECONOMIC RECOVERY

The results in Chapter 2 and 3 indicate that foreign investors play a critical role in shaping the labor market. Chapter 2 examines how foreign businesses in manufacturing respond to an institutional change, change their investment behaviors, and eventually affect employment outcomes with the cases of RTW legislation in Indiana and Michigan. The findings in Chapter 2 suggest that the number of both domestic and foreign manufacturing jobs increases to a greater extent after the passage of the RTW law, but that foreign investors react to a greater degree than domestic investors do. Chapter 3 explores how foreign investors affect employment and wages once they enter specific locations under international institutional contexts, such as in the case of reverse FDI in Alabama. The findings in Chapter 3 conclude that foreign investors have different impacts on local residents' employment rates and wage levels, depending on their sources. Specifically, reverse FDI originating from relatively less-developed regions leads to increased growth of employment but decreased growth of weekly wages when compared to FDI originating from more developed regions. These findings support my hypotheses that the degree of the labor market effects is associated with foreign firms' inherent characteristics and with their country of origin. However, more importantly, local governments also have been a key agency in these dynamics.

As mentioned in the introduction, governments implement various industrial policies to attract businesses and promote economic development, and such an effort to induce investments has often led to either jurisdictional or regulatory competition. As companies can move their activities between two or more locations under different political or legal systems, a government in each location attempts to appeal to investors by

offering better negotiation terms than its competitors. In particular, many governments are known to adopt lax regulations in the areas of corporate tax (Mendoza and Tesar 2005; Plumper, Troeger, and Winner 2009), labor standards (Chan 2003; Davies and Vadlamannati 2013), and environmental policy (Konisky 2007; Porter 1999; Wheeler 2001). Historically, this type of competition has been fierce within countries operating under federal systems of regulation such as the U.S. (see Butler 1985; Greenwood 2005; Kahan and Kamar 2002). However, in the context of globalization, it has become an important worldwide issue (Chan 2003; Henderson and Millimet 2007; Holzinger and Sommerer 2011).

Although regulatory competition was once considered by lawmakers as the most efficient way to achieve economic success, it has been accused of an unintended negative effect of creating a “race to the bottom” – government deregulation of the business environment and a subsequent reduction in standards among geographic areas that compete over a particular sector or an industry (Berle and Means 1932). According to this theory, environmental law is particularly likely to produce a race to the bottom because any environment damage caused by industries in a specific area is not localized, and the area itself is not held solely responsible for the costs associated with the problem. Based on the State Environmental Managers Survey data, Konisky (2007) examines whether and how state policymakers take into account the competitor states’ environmental regulations in their regulatory decision making. He suggests that state regulators are sensitive to not only whether their regulatory decisions would result in attracting more businesses, but also how competing states would change their environmental policies. Interdependence across countries concerning labor market deregulation is also strong. Using the OECD data on corporate income tax rates and incoming investments, Olney (2013) finds that countries competitively undercut each other’s employment protection standards, though

such competition leads to increased FDI. This tendency is especially found evident among developing countries with weak labor standards (see Davies and Vadlamannati 2013).

However, other studies show that regulatory competitions do not necessarily lead to a race to the bottom. Rather, their effects can take a more complicated form. Fredriksson and Millimet (2002) analyze strategic behaviors of U.S. states with regard to environmental regulations and find that states respond asymmetrically to the regulatory changes in surrounding states. According to their study, states are more responsive when their neighboring states implement higher abatement costs and less responsive when those states lower environmental standards. Research on tax policies also shows mixed evidence on the idea of a race to the bottom. Plumper, Troeger, and Winner (2009) argue that tax competition lowers tax rates on mobile capital but raises tax rates on relatively immobile labor. However, in a later study, Troeger (2013) concludes that tax competition does not lead to a race to the bottom because capital remains “incompletely” mobile and reducing corporate taxes does not always result in capital inflows. Accordingly, countries are not incentivized to respond to international pressures to cut capital taxes. Instead, they adopt diverse strategies to cope with such pressures.

Despite controversies over whether jurisdictional competitions result in a greater good for society in the long run, both political and legal environment of a location are important determinants for investors and play key roles in attracting businesses. In this chapter, I discuss how the U.S. state governments have put efforts into incentivizing investors and how such policymaking processes have impacted neighboring states and resulted in creating more business-friendly environments in some states by focusing on the cases of the Midwest and the South.

## Governmental Efforts in the Midwest

### *Indiana and Michigan State Governments' Institutional Efforts for Economic Revitalization*

In the aftermath of the Great Recession and the near collapse of the auto industry, Indiana and Michigan suffered a heavy loss of manufacturing jobs, as well as significant portions of their populations. However, the economic conditions of these states varied widely in 2007-2009 with Indiana's economy outperforming Michigan's. Hicks and Kuhlman (2011) explain that the two states' different unemployment rates observed during the recession were attributed to several factors such as industrial structure, income and wages, tax climate, expectations of tax increases, foreclosures, and recovery and reinvestment programs. In particular, they argue that Indiana had a much more favorable tax system than Michigan. According to the Tax Foundation (2011), Indiana (21<sup>st</sup>) ranked much higher than Michigan (48<sup>th</sup>) on the Index for Corporate Taxes and the Index for Favorable Business Tax Climate. This better-established corporate tax climate in Indiana facilitated a business-friendly institutional environment, especially during a recessionary period, allowing businesses to retain their employees.

A few institutional changes helped Michigan bounce back, decelerate its out-migration, and become a model comeback state like Indiana. One of the key shifts was tax reform (Hendrie and LaFaive 2018). Since the tax reform in 2011, Michigan Business Tax has been replaced by a 6 percent Corporate Income Tax, which applies only to large companies that issue stock, not requiring small and medium-sized businesses to file returns. Also, the income tax rate has been lowered from 4.35 percent to 4.25 percent, which is the second most favorable rate among the Great Lakes states, led only by Indiana

(3.4 percent). These changes, which were intended to provide businesses and families some level of tax relief, resulted in expansion of both small and large businesses and eventually contributed to creating 500,000+ jobs.

Also, like many Southern states, Michigan established a workforce development program called “Michigan Industry Cluster Approach (MICA)” (Michigan Talent Investment Agency 2018). The workforce development programs have gained popularity among several states in the South (e.g. Alabama, Arizona, Georgia, and South Carolina), which tend to have a lower average education level than other U.S. regions do (Scott 2012; Vickers 2014). Acknowledging a lack of skilled labor as one of their difficulties in attracting high-paying manufacturers, these Southern states decided to generate a state-level employee training program, which is customized to fulfill industry-specific demand. Many of these state programs have been successful and have become an important consideration in businesses’ location selection. Michigan benchmarked these states’ successes and implemented MICA, the similar employee training policy. MICA is designed for employers in the same industry to engage with the industry-focused workforce training to identify and meet industry-level talent demand. In this program, the state-run agency connects employers with education providers, economic development organizations, and other relevant groups and attempts to support a demand-driven workforce system. Initially, the Michigan government focused on its five priority sectors, namely agriculture, energy, health care, information technology, and manufacturing; currently, it is serving more than 40 industry clusters in Michigan, developing statewide workforce policies and providing technical assistance for talent challenges.

In addition, while the automotive sector has lost much of its fame in the Midwest, Indiana and Michigan attempted to retool their economy and attract jobs by implementing various industrial policies. Traditionally, both Indiana and Michigan have focused on the

manufacturing sector as the strongest part of their economy. The two have been among the top 10 states in total manufacturing jobs and for manufacturing's share of non-farm employment over decades (Bureau of Labor Statistics 2017). In particular, one of their biggest manufacturing attributes has been automotive industry. As a leading sector, auto manufacturing created millions of jobs in Indiana and Michigan, but this number has since declined gradually as the South has become a more attractive alternative destination for automotive investments. In response, the state governments of Indiana and Michigan both implemented industrial policies to attract investment in other sectors than their traditional sources of employment.

For Indiana, it was life sciences, which is now comparable with auto manufacturing (Indiana Economic Development Corporation 2018). As medical needs grow at both national and international levels, the Indiana government has made efforts to promote the medical device manufacturing sector, which is not only an important job creator but also a high-paying employer. Michigan, on the other hand, endorsed the information technology industry (Michigan Economic Development Corporation 2018). In competition with Silicon Valley, the Michigan government supported establishment of technology parks called SmartZones, where technology-based firms, entrepreneurs, and researchers work in close proximity to synergistically contribute to the technology industrial community.

Moreover, Indiana and Michigan both adopted the RTW law in 2012 in order to resolve an unemployment issue. In Indiana, the RTW law was passed by Governor Mitch Daniels on February 1, 2012, prohibiting unions from mandating employees to pay fees for union representation. The rationale behind this law was to “create jobs and to help out those workers who are unemployed (Lafer 2012).” However, this legislation did not come

easy, causing strong opposition from members of the Democratic Party. Pat Bauer, the Minority Leader who protested against the passage of the bill, stated:

*“By virtue of Article 4, Section 26 of the Constitution of the State of Indiana, we, the House Democratic Minority, do hereby protest the consideration and action of House Bill 1001, the same being the so-called right to work bill, and our reasons for dissent and protest are as follows: On Tuesday, January 10, 2012, the House resolved itself into, and sat as, the Employment, Labor and Pensions Committee and proceeded to consider House Bill 1001 on its merits without following the proper procedure and protocol for a committee hearing... By virtue of the preceding facts, we respectfully contend the following: 1. A true and formal hearing on House Bill 1001 has not been brought before the Employment, Labor and Pensions Committee as supported by the rules of procedure and precedent governing the House. 2. The Chair of the committee did not have authority to rule that House Bill 1001 was voted out of committee, since there was never a legitimate committee hearing on the issue. 3. The bill as printed carries an erroneous transcript of the proceedings thereon because it contains words from an invalid formal committee hearing, and it is not therefore representative of the committee. 4. Under the rules of procedure governing this matter, House Bill 1001 is not now before the House for any action, because it has not been properly reported out of the Employment, Labor and Pensions Committee, where it now remains.”*

The legislation made Indiana not only the first state in more than a decade to enact the RTW law, but also the first in the traditionally union-friendly Midwestern manufacturing belt to have such a law. Some union supporters resisted implementation of this law, bringing up the issue of freeloaders who can gain union benefits without paying

for membership. Others criticized the “race to the bottom,” where workers increase their employability at the cost of reduced wages and less desirable benefits, and the income inequality that it causes. Despite protests and objections, the Indiana Supreme Court upheld the RTW policy and the law remains in effect.

Michigan’s case is not so different. The RTW law was approved by lawmakers in Michigan in 2012 and took effect in March of 2013 in response to heavy lobbying by business interests and local chambers of commerce, despite mass protests in the Capitol in 2012 (Jesse and Higgins 2012). Although the House passed Senate Bill No. 116 concerning the RTW policy, there were quite a few legislators, who strongly criticized the passage of the law. Rep. Jeff Irwin, a member of the Democratic Party, made the following statement:

*“Mr. Speaker and members of the House: I voted no on (HB 4003, SB 116) as a result of the undemocratic process employed by the Majority party to push divisive legislation that attacks middle class families at the last minute during lame duck session... So-called ‘right-to-work’ legislation will not boost economic growth and will not benefit Michigan or Michigan workers. To the contrary, this legislation will result in lower wages and cuts to other benefits. Lower wages mean people have less money to spend which hurts small businesses and local economies throughout our state. ‘Right to work’ erodes the financial security of all middle-class families, eroding their ability to earn decent wages and have safe, dignified working conditions... We need to fight for families instead of increasing already record-high corporate profits driving down middle-class wages, gutting pensions and endangering worker safety.”*

Another Democrat, Rep. Stacy Erwin Oakes, was also against the legislation:



*“... As long as extreme politicians continue to pursue so-called ‘right-to-work’ legislation that hurts hardworking Michiganders who teach our children, protect our streets, keep us healthy and build our roads and vehicles, I will continue to vote no on all of the legislation before the Michigan House of Representatives. I am taking this dramatic step because of the appalling speed at which Republicans are attempting to undermine collective bargaining rights in our state...”*

According to Bureau of Labor Statistics (2014), under new RTW legislation, Michigan’s union membership rate declined significantly from 16.3 percent (2013) to 14.5 percent (2014) during the first full year. Despite ongoing controversies over the law’s actual effects, Indiana and Michigan actively engaged in the institutional reform that helps lower barriers for businesses’ entry and expansion in those states.

#### *Other Midwestern State Governments’ Responses during the Recessionary Period*

It is noteworthy that the Indiana and Michigan governments made institutional efforts at recovery because not all Midwestern manufacturing states succeeded in economic recovery from the Great Recession. In particular, the case of Illinois is comparable to Michigan’s, but with a very different result (Harwood 2017). Before the Recession, both Illinois and Michigan lost a considerable number of their residents (65,000+) to other states. However, this pattern diverged as Michigan slowly lowered its emigration by taking a pro-business approach, whereas Illinois continued to lose its population and reached its heaviest loss of 105,000 people in 2015. One of the primary reasons for this different path was Illinois’s lack of institutional assistance for industrial

job growth in contrast to Michigan's institutional changes described above. While Michigan has put much efforts into establishing new industrial institutions for economic revitalization, Illinois did not implement any of the pro-growth industrial policies such as tax reform, employee training programs, or RTW legislation, suggested by the Illinois Manufacturers' Association (Lucci 2016). On top of that, a political battle between a Republican governor and Democratic lawmakers over the state's spending plan and the subsequent payment suspension during the impasse strained Illinois's finances for years.

As a result, Illinois is the only state with employment below the pre-recession level among all its surrounding states, which recovered and achieved employment growth. According to the Bureau of Labor Statistics (2017), 144,000 fewer Illinois residents are working compared to the pre-recession period, whereas Illinois' neighbors better positioned themselves for post-recession entrepreneurial investment and outperformed Illinois. For example, Indiana experienced the greatest increase in employment with 148,000 new jobs, followed by Missouri (109,000), Wisconsin (96,000), Michigan (54,000), Kentucky (49,000), and Iowa (33,000). Also, the U.S. Census Bureau (2017) shows that Illinois constantly has lost its population to its neighboring states such as Indiana (119,000), Wisconsin (86,000), Missouri (73,000), Iowa (48,000), and Kentucky (13,000) over the last decade. Interestingly, the flow of Illinois-Michigan migration reversed over the three most recent years. Illinois, which used to enjoy net population gains from Michigan, now sees its residents moving into Michigan (U.S. Census Bureau 2017). This reverse interstate migration pattern may be attributed to RTW legislation, which allowed Michigan to have faster job and income growth than Illinois. Additionally, the notorious tax burden in Illinois faced by both businesses and residents may have driven the residents out to Michigan, where property tax and corporate income tax are approximately 23 percent lower than Illinois's. The Illinois government's institutional

failure, compared to other state governments' successful economic policy implementation, explains why Illinois's competitive advantage has lagged behind its neighbors'.

Unlike Illinois, other neighboring states, namely Wisconsin (2015), Kentucky (2017), and Missouri (2018) followed the lead of Indiana and Michigan by enacting RTW legislation. However, their processes of RTW law passage were also confronted with unions' strong opposition, as was the case in Indiana and Michigan. Wisconsin's Republican governor, Scott Walker, said,

*You are not going to hear me degrade state and local employees in the public sector. But we can no longer live in a society where the public employees are the haves and the taxpayers who foot the bills are the have-nots... Anything from the decertify all the way through modifications of the current laws in place... The bottom line is that we are going to look at every legal means we have to try to put that balance more on the side of taxpayers and the people who care about services...*

When the bill was approved by the Republican-led Wisconsin State Senate in 2015, approximately 5,000 people gathered in Madison to protest the law (O'Brien 2015). Also, the Kentucky State American Federation of Labor and Congress of Industrial Organizations (AFL-CIO) and Teamsters Local 89, which are groups supporting unions in Kentucky, filed a lawsuit to prevent the enactment of the law in the pretext of the Kentucky Constitution violation (Leef 2017). However, this effort has been dismissed by a Franklin Circuit Court judge, and the law was enacted eventually. In contrast to Kentucky, where the unions' attempt to block the legislation was unsuccessful, the Missouri labor unions collected 310,000 signatures for a petition, which is three times the number of signatures required to repeal the RTW law (Hancock 2017). In this process, a number of groups

affiliated with labor unions also made large donations. Liberty Alliance raised \$800,000, Missourians for Worker Freedom raised \$500,000, and American Democracy Alliance raised \$150,000. Accordingly, the initial plan for the state government to enact the RTW law in 2017 was postponed, and voters will decide the future of the law in November 2018.

In sum, the quick economic recovery after the Great Recession experienced by Indiana and Michigan was not coincidental; rather, it was the result of the state governments' institutional endeavor to improve their economic conditions. All of the institutional success and failure cases in the Midwest show that it is not only the businesses but also the governmental policies that drive changes in the labor market and help promote economic revitalization in the states.

#### Governmental Efforts in the South

The Southern U.S. states also implemented similar statewide policies for economic development to those employed by Michigan and Indiana. They made several institutional efforts to attract manufacturing industries, attempting to draw jobs from the traditional manufacturing states in the Midwest. I will discuss the Southern institutional changes below with a particular emphasis on the case of Alabama.

#### *Alabama State Government's Incentive Packages*

Among the structural changes within the American auto industry during the last few decades are the geographical expansion of the Auto Belt into the South. Since the 1980s, many automotive firms left the Midwest, which had been the heart of the nation's auto-manufacturing industry, and started producing auto parts and vehicles in non-

traditional locations (e.g. Kentucky and Tennessee). This trend has been accelerated by Japanese automakers and suppliers, whose preference for greenfield locations were met with union-free labor environments and generous incentive packages in the southern states (Rubenstein 1992). In the process of the auto industry's southern expansion, Alabama transformed itself from a "cotton state" to an "auto state." Before becoming a home for many foreign auto assemblers, furniture and textile industries had been Alabama's main sources of revenue. However, since the downturn of U.S. textile and apparel industries in 1990s, the state government made an active effort to invite investments from foreign automakers. Following German-owned Mercedes-Benz assembly plants in Vance in 1994, Japanese-owned Honda entered Alabama and constructed its production sites in Lincoln in 2001. In the meantime, Hyundai Motor and other Korean automotive firms also made investment decisions to build transplants and produce vehicles in Alabama.

The investment processes of foreign automotive firms and their geographical concentration in the area have been strongly incentivized and supported by the state government with various programs (e.g. tax abatement, capital investment tax credit, site preparation grant program, Alabama Industrial Access Road & Bridge Program, Industrial Development Training program, etc.) because they were expected to revitalize local labor market and promote economic development. In Korean automotive investments' case, city and state authorities of Alabama predicted 2,000 jobs at full capacity at the Hyundai plant alone and 8,000 direct and indirect jobs for Alabama residents in total. Not surprisingly, by 2012, HMMA and its first-tier suppliers reported to have generated approximately 12,000 jobs (3,150 direct jobs and 8,900 indirect jobs), subsequently increasing personal and family income in Montgomery and neighboring counties (HMMA 2012).

When Hyundai searched for a potential production site in 2000, there were four states that participated in bidding wars to attract it: Alabama, Kentucky, Mississippi, and Ohio (Hamilton 2004; Smith 2003). Between the two finalist states, Alabama and Ohio, Hyundai announced in April 2002 that Montgomery would be its new production site. There were several reasons Hyundai selected Alabama: 1) Alabama is an RTW state where the labor force is very unlikely to be unionized; 2) The incentive package provided by the Alabama state government, which included free site purchase and development, utility improvement, road improvement, training assistance, housing assistance, advertising, etc., was more than generous; 3) Alabama's climate and environmental conditions were appropriate to construct production facilities; and 4) Alabama had surplus labor released from the textile industries that have closed in recent years. In particular, a union-free environment and a generous incentive package were considered the most important deciding factors (Seo, 2004).

### *Employee Training Program*

Among the various programs sponsored by the state government, workforce development programs are designed to help both domestic and foreign businesses recruit, select, and train local employees. The ultimate goal of workforce development programs is to promote economic development and enhance economic stability in a given state. It does this by providing low-educated workers with reading and arithmetic skill training and preparing them for labor force participation in a particular sector or industry. These programs also aim to manage the demand for employees by matching workers' skills to industrial needs at the regional level. Although employers still typically provide vocational training on-the-job, practitioners attempt to increase human resource capacity and the

opportunities of their community by offering training programs to low-skilled workers and allowing them to compete for higher-paying jobs.

Traditional theories on organizations' HRM processes are not easily applicable to current workforce development practices (see Cappelli 2008). Firms no longer put effort into training the talent, but "steal" those trained by other employers. In addition, the local governments get involved in and assist with firms' employee training and development. In other words, the conventional roles that businesses in the private sector have played are partially transferred to the public sector, as the local government intervenes in firms' HRM processes. In an effort to create a business-friendly climate, many U.S. state governments develop and support employee training programs, or workforce development programs, as part of their incentive packages provided for businesses. These programs are particularly important for states with a low-educated, low-skill labor force and have become increasingly popular after the Trump administration started promoting them with the pretext of job creation and economic recovery (Klein 2018).

Due to a lack of skilled labor, the Southern U.S. states have pioneered job-training with customized programs to fulfill industry-specific demand. In particular, Alabama has been one of the model job-trainers after taking an initiative to coordinate a workforce development program called the Alabama Industrial Development Training (AIDT). Under this program, a state-sponsored agency evaluates investors' employee needs, screens potential job candidates, and collaborates with investors to build training programs for those who pass the screening process (AIDT 2018). The AIDT program has gained a national reputation for its success in attracting major manufacturers and lowering unemployment. Foreign automotive firms, namely Mercedes Benz, Honda, and Hyundai, are also known to have utilized this program since their moves into Alabama.

For Hyundai, the AIDT program was an important consideration in their locational decision due to their LOF. According to an interview with an HR manager at HMMA (25 February 2012), Hyundai's HR team heavily relied on the program for HR activities ranging from recruitment and selection to training of their employees because of language and cultural barriers. Especially during the selection process before Hyundai's production starting year of 2005, managers and staff from the AIDT program had regular meetings with Hyundai's HR team to provide cultural advice on local populations in preparation for job candidate interviews. Also, these workforce development experts were present during the interviews, not only to assist with language translations, but also to offer cultural and administrative assistance. He said,

*The Alabama government assisted us with HR processes from the beginning. They first sent out the statewide job ads and then asked for help from surrounding states if there were not enough job applications... As not all of our HR staffs were proficient in English, a manager from AIDT program, who was assigned to help us sort out the desirable candidates from the pool, came to the job interviews and gave advice on who seem to have better work ethics. They also explained racial history and inequality in Alabama in terms of education backgrounds, economic status, the type of industries for labor force participation, etc.... It was interesting because Kyungsangnamdo (where Hyundai is located in Korea) has a similar industrial background as Alabama of transforming itself from cotton state to auto state but they [Kyungsangnamdo and Alabama] quite differ in terms of labor.*

An HR manager at one of Hyundai's first-tier supplier firms reported that the retention rate of workers hired through the AIDT program has been much higher than that



of those hired through staffing agencies, emphasizing the strengths of Alabama's workforce development program (7 March 2012). He said,

*As we started building the plants and facilities in 2004, we also hired more than 90% of the production workers so that they could be ready to work by the time we started production in 2005. Once the production began, we hired more employees through staffing agencies upon higher demand... Some workers didn't know how to read or write even if they went to school, which was something we would have never expected in Korea. Like when they need to put the parts they assembled in a large box, they couldn't read the labels attached to the box, which was a serious problem. The AIDT program was very good at teaching the workers basic skills like how to read but also training them to acquire semi-skills needed on site. When it comes to the workers hired through staffing agencies, we needed to train the workers ourselves, and it was a lot of work. These workers also tend to quit more easily and take a day off without notice.*

This indicates that the local government's training program not only successfully supports investors' business activities in general, but also helps foreign investors resolve their liability issues through language and cultural assistance.

Like Alabama, other states also implement job training programs that are appealing to businesses to improve state economic conditions. Georgia's Quick Start, which was founded by policymakers in 1967, has been effective in customizing training to fit individual companies' needs. This program is similar to the AIDT; the state's community and technical college system usually takes trainees (or job candidates) on and helps them pass through skill training required for job performance (Scott 2012). Both Kia Motors and Caterpillar benefited from Quick Start. Like Alabama and Georgia's programs,

South Carolina's readySC utilizes the community and technical college system to identify and address clients' needs, training prospective employees. While attracting new businesses is a critical purpose of these workforce development programs, readySC also focuses on retaining existing companies and facilitating further investment (Scott 2012; Vickers 2014). For example, Boeing, one of the largest clients in South Carolina, built its first South Carolina production facility in 2004 and then second in 2010 and contracted with readySC to train 2,000+ employees.

Louisiana's FastStart is also a good example of a successful workforce development program (Scott 2012; Vickers 2014). After hurricanes Katrina and Rita, Louisiana suffered from high poverty and unemployment rates and was in serious need of an economic boost. In order to attract high-paying jobs that require moderate skills, the local government designed a job-training program called FastStart, which prepares the workforce for incoming investors. The difference between other workforce development programs and FastStart is that training takes place under the control of the Louisiana Department of Economic Development instead of the community college system. This program allowed Louisiana to be one of the U.S. states with the quickest recovery after the Great Recession (Bureau of Labor Statistics 2013) and to build a strong reputation as "outstanding training support (Scott 2012)," drawing industrial operations from the manufacturing-based Midwestern states.

Lastly, One-Stop, Arizona's workforce development program, is funded by the U.S. Department of Labor through the Workforce Investment Act (WIA). Like many other workforce development programs, this program connects qualified job seekers of different types (e.g. youth, adults, veterans, and dislocated workers) to employment, training, and education opportunities (Vickers 2014). In particular, the focus of this program lies on high-tech, high-wage oriented industries such as hybrid technology and biodiesel.

Trainers, managers, and executives in this program survey and investigate employers' shortages and needs and build training and development programs around those needs at local community colleges. Furthermore, they aim to resolve a disconnect between education community and the industry and fill talent gaps in the existing market by conducting interviews with both large and small employers and releasing recommendations for vacant positions.

### *Anti-Illegal Immigration*

Interestingly, many of these Southern job training leaders have also enacted anti-illegal immigration laws in the state. Although having been repealed over the years, the anti-illegal immigration laws endorsed by local xenophobic sentiments prevailed after the Great Recession, starting in Arizona and eventually in Alabama and South Carolina. Arizona SB 1070, one of the strongest anti-illegal immigration legislative acts passed in recent years, required aliens to carry their identification documents and present them when state law enforcement officers stop individuals under reasonable suspicion of being present illegally. This law has received national and international attention, resulted in considerable controversial debates, and was eventually blocked by the federal district and appeals courts for violating the Supremacy Clause of the U.S. Constitution. Georgia also enacted laws targeting unauthorized immigrants but had more employer-focused elements in the laws. Georgia HB 87, which was signed into law in April 2011, required businesses with more than 10 employees to confirm that their prospective employees have a valid work visa through an E-Verify system. Undocumented workers hired without following such processes were subject to harsh punishment of fines and imprisonment. This law received harsh criticism for failing to acknowledge the immigrant community's

contribution to the U.S. economy, but still attempted to address concerns about constitutionality that Arizona law has been blamed for; HB 87 merely allowed police to check the immigration status of suspects. Alabama HB 56 and South Carolina SB 20 (June 2011) were two of the most notorious acts among anti-illegal immigration legislation enacted after the recession. Both are similar to the Arizona law in that they allow police to stop individuals to check their legal status. They also incorporate employer-related elements of the Georgia law by mandating that employers validate the legal status of employees through the E-Verify program. On top of that, Alabama HB 56 prohibited illegal immigrants from receiving public educational services (i.e. attending public higher education institutions) and from renting property.

While all of these state efforts have been blocked or put on hold by the federal court, they all indicate that the local governments attempted to strongly regulate illegal immigration. It is possible that the newly created jobs led to competition between low-skilled local residents and undocumented immigrants. Subsequently, governments may have found it necessary to protect their borders through law enforcement and to ensure that these jobs end up with the “right” people without any competition with undocumented immigrants.

In contrast to theoretical expectations, my findings in Chapter 3 show that KDI has not led to higher employment rates. Instead, KDI has led to decreased growth rates of weekly wages. Such an unusual change may be attributed to undocumented immigrant flows. As shown in Table A1, KDI areas, compared to the other two areas, have a smaller share of college graduates and much larger black populations; both of which often compete in the same labor market as immigrants (see Hamermesh and Bean 1998). Also, the interview with a manager at AIDT (December 18, 2014) has revealed that the majority of job growth after enactment of Alabama HB 56 in 2011 was in the automotive sector.

*Believe it or not, there has been some accusation that Korean suppliers have employed many illegal immigrants. Compared to the northern Alabama where Mercedes and Honda are located, there was a much higher employment growth in Montgomery and the adjacent counties after the law [Alabama HB 56] was passed. In particular, there were more jobs available in the auto sector from 2011 onwards.*

This signals that a large number of undocumented workers may have been employed by foreign automotive firms before the bill was signed. These undocumented immigrants may not only have taken away the new jobs created by Korean investments but may also have depressed wage levels.

According to Bartik (1991), state and local economic development policies intended to promote employment can attract workers from other areas. Thus, while local residents may enjoy the short-run employment benefits, in-migration responds to the increased labor demand and eventually offsets the positive employment effects. Moreover, when immigrants and natives are perfect substitutes, employers can hire workers at a lower wage, which leads to a wage decrease until capital adjustments take place (Borjas 2013: 168). In other words, even if jobs are created, local employment rates may not be affected due to population growth in the areas, which may also contribute adversely to the wage rate. This, in turn, may explain why the Alabama state government implemented anti-illegal immigration act. In theory, negative impacts of the labor supply shock generated by the immigrant influx attenuate in the long run as the economy adjusts to the demographic changes. However, for the sake of local employment, the state government has put much effort into attracting foreign investors. Accordingly, it may be important for

the government to ensure the new jobs created by the investments are held by local residents rather than undocumented workers.

As previously shown, the state of Alabama has been very active in implementing FDI attraction policies and inviting foreign automotive industries since the mid-1990s. The state government has strongly incentivized the foreign automotive firms' geographical concentration in the areas with various programs (for example, tax abatement, the site preparation grant program, and the employee training program). The primary reason for these governmental efforts was to enhance employment and subsequently revitalize local economy (interview with a manager at the AIDT, 18 December 2014). They believed high-paying jobs offered at the auto firms can not only bring the populations released from textile industry back into the labor force but also increase local consumption and invigorate local businesses that are unrelated to the auto industries. Along this line, the state government, after seeing an unexpected increase in the number of undocumented immigrants and the resulting undesirable local employment situation, may have taken institutional action against undocumented workers. The same logic may apply to other Southern states, which are strong job trainers as well as strict regulators of illegal immigration.

### *Strategic Locational Recommendations*

While incentivizing and attracting businesses with various benefits, state governments also strategize to increase equity among their residents by addressing the needs of individuals living in less-advantaged neighborhoods and accommodating them with employment opportunities. One way is to suggest investors to establish production sites within the state. In the context of negotiations with Korean investors, the Alabama

state government specifically requested that firms build production facilities in a particular county. The locations selected for Hyundai and its Korean suppliers in Alabama have created distinctive geographical patterns of automobile production, which is called the “Hyundai-Kia Belt”. The single exception to the pattern of regional concentration is one Korean-owned supplier plant located in Campbellsville, Kentucky, which serves not only Hyundai and Kia but also other American automakers. While supplier firms that established facilities beginning with Kia’s later investments usually selected locations along I-85 to allow accessibility to both Kia and Hyundai, most of the earlier supplier transplants were built either close to Hyundai’s manufacturing plant or, if dispersed, within Alabama’s state lines. In this process, Hyundai and its suppliers agreed to build production facilities with some distance from one another in response to the government’s requests. According to an executive at one of Hyundai’s first-tier supplier firms (15 March 2012),

*Since Hyundai made the decision to establish production facilities in Alabama, supplier firms that agreed to join Hyundai’s expansion plan started to look for locations in Alabama. After the state government recommended a few counties to us, we carefully reviewed their competitiveness in infrastructure and resources. Then we sent investment proposals to the selected counties and negotiated terms individually at the county level... It would be best for Hyundai and all the suppliers to be geographically concentrated in the same county due to logistical reasons. We could have reduced transportation costs if Hyundai were nearby, but the state government insisted that the jobs be dispersed across counties.*

By making the list of counties for potential production sites and nudging it to the investors, the state government attempted to keep production facilities physically separate so that employment created by investors could benefit larger populations in residence. In other words, the geographical patterns of Hyundai's transplant investments are not random; rather, it indicates that Hyundai's construction of a production complex went hand in hand with the state government's careful locational arrangement of Korean partners' investments in the area. As a result, not only are Hyundai and its suppliers' transplant facilities somewhat distant from one another in the Southern part of Alabama, but so are Mercedes Benz's and Honda's in the Northern part of Alabama. The local government's strategic effort has prevented investors from sharing labor while keeping potential competition in the labor market under control and maximizing employment benefits.

Summary of Governmental Efforts in Indiana, Michigan, and Alabama



**Table 11. Summary of State Governments' Industrial Policies and Economic Outcomes**

	State		
	Indiana	Michigan	Alabama
RTW status (political party)	Passed in 2012 (Republican)	Passed in 2012 (Republican)	Passed in 1953 (Democratic)
Corporate tax rate (income tax rate)	6% (3.23%)	6% (4.25%)	6.5% (2% for \$0-\$1,000; 4% for \$1,000-\$6,000; 5% for \$6,000+)
Industrial concentration	Automotive; Life sciences	Automotive; Information technology	Automotive; Chemicals
Employee training program	Indiana Department of Workforce Development Career Training	Michigan Industry Cluster Approach (MICA)	Alabama Industrial Development Training (AIDT)
Anti-illegal immigration act	None	None	Alabama HB 56 (signed into law in 2011)
N of employees in manufacturing, 2007-2016	544,260 → 500,104	579,645 → 579,509	281,601 → 250,252
N of employees in auto manufacturing, 2007-2016	126,817 → 116,173	162,015 → 159,789	34,360 → 45,402
Unemployment rate, 2007-2017	4.5% → 3%	7.2% → 4.7%	4% → 3.8%
GDP per capita, 2007-2017	\$44,145 → \$44,165	\$41,925 → \$45,255	\$37,522 → \$39,976

Table 11 summarizes industrial policies and economic outcomes of the three states, namely Indiana, Michigan, and Alabama, which have been highlighted in Chapter 2 and 3. These states have several commonalities in their business environments. First, they are RTW states and promote labor market flexibility. Second, they have a much more favorable tax system than other states, whose corporate tax rate ranges from 3% (North Carolina) to 12% (Iowa). Importantly, all of these states have continuously reduced both corporate and individual income tax rates in the last decade. Third, they heavily rely on automobile manufacturing industry for revenue. That said, there are some important differences worth noting. In terms of employee training programs, Michigan and Alabama have developed and utilized workforce development programs through an independent agency funded by the state government, whereas Indiana manages career training of their residents in the Department of Workforce Development. Also, Alabama enacted an illegal immigration law and invested in border control to secure local employment, while Indiana and Michigan did not make such an effort.

In 2007-2016, the absolute number of manufacturing jobs decreased in all of these states, and the loss was the greatest in Alabama by 11 percent. However, the number of employees in auto manufacturing increased the most in Alabama by 32 percent (from 34,360 to 45,402), whereas the other two states experienced a decrease in auto manufacturing employment. Both unemployment rates and GDP per capita indicate that economic conditions of these states have improved between 2007 and 2017. Interestingly, Michigan has the most economic achievement among the three states, although its unemployment rate, unlike Indiana's and Alabama's, remains higher than the national average (5% in 2007 and 4.1% in 2017). The dramatic decline in Michigan's unemployment rate when compared to that of the other two auto states implies that Michigan state government's recent institutional attempts may have been effective in other industries,

especially given that the number of employees in auto manufacturing, its traditional source of revenue, has not increased. That is, Michigan's economic recovery in recent years may not be solely due to the auto industry's return to the Midwest, but also due to the institutional shifts initiated by the local governments for a business-friendly environment.

## Discussion and Conclusion

As summarized above, various economic policies have come into effect in the Midwestern and Southern states, and accordingly, the labor market effects of foreign investments have been mediated or moderated by the local host governments. In Indiana and Michigan's cases, the state governments took initiative to enact industrial policies that promoted labor market flexibility (i.e. passage of RTW law) and achieved economic recovery at a much faster pace than surrounding manufacturing states. Following the lead of these two states, other Midwestern states also started building more business-friendly environments. Although different from the traditional manufacturing belt in terms of their industrial structure, infrastructure, and resources, the Southern states like Alabama, Georgia, and South Carolina also strategized to intervene in foreign business activities by providing incentive packages that included tax breaks and employee training programs. Additionally, these states actively engaged in border control so that employment created through new investments could benefit local residents more exclusively.

The Southern states' strategic efforts to boost employment, along with their employee training programs and anti-illegal immigration acts, are particularly noteworthy because they can result in the long-term improvement of the states' workforce. As noted previously, some businesses were reluctant to move their activities to the South due to the region's lack of skilled labor, which is an essential feature of high-tech, high-paying sectors.

However, the state governments' direct intervention in workforce development and border control not only enhanced the talent capacity of the states and prepare their employees for higher-paying jobs, but also suppressed the heated competition between the locals and illegal immigrants for lower-paying jobs. That is, the local governments attempted to attract businesses and provide them with qualified labor, while preventing them from taking advantage of undocumented immigrants. This implies that the state governments made efforts to ensure incoming investments are worthy of their generous incentive packages and eventually bring greater benefits to local populations.

Aside from tax breaks or benefits, which intend to induce investment, a lot of cash flows into providing job-training services each year. For example, annual expenditure for job-training programs in the Southern states has been enormous, with \$38 million in Alabama, \$20 million in South Carolina, \$15 million and \$20 million in Georgia, and \$5 million in Louisiana. Some question why the governments, not the companies, pay for employee training and whether the money is being well spent. However, attracting investment is worth the cost of job training. Economic impact studies estimate that the expected returns on incoming investment range from a variety of sources including personal income taxes and sales taxes and these returns are likely to offset the costs in the long term (Scott 2012). As an example, Alabama, Georgia, Louisiana, and South Carolina, four of the top job-training states, trained 70,000 employees with net gains of 26,300 manufacturing jobs in 2011. This number represents 8 percent of the total U.S. manufacturing workforce. In other words, even if it is unclear whether state-sponsored workforce development programs solely accounted for job gains, a large amount of government investment spent on building human resource capacity paid off in the labor market by enhancing the state economy's productive capabilities.

It is possible that the economic successes of the Midwestern and Southern states described in this chapter may partly be due to luck. After the Great Recession, the manufacturing industry not only has shown a pattern of growth in the South with cheaper resources and less unionized labor than before, but also has returned to the Midwest with well-established infrastructure and skilled labor. In this process, the business-friendly policies like the Midwest's promotion of labor market flexibility and the South's provision of tax breaks and training of employees may have also flourished and attracted more businesses. However, it may not simply be good fortune; by pursuing these policies combined with other policy intervention, state governments have attempted to "retain" jobs in addition to creating them. Despite controversies, the states with those policies have enjoyed more job growth than neighboring states, and more states have eventually followed their economic models. In other words, the state governments play critical roles in improving economic conditions and are most responsible for maximizing employment benefits and attracting a large amount of investments. Their contributions should not be reduced to luck.

## CHAPTER 5: SUMMARY AND CONCLUSION

A variety of changes in the world economy, such as the rise of China, increased international competitions, and MNEs' offshoring to countries with cheaper labor dismantled U.S. economic hegemony and created status anxiety in the U.S. economy. At the national level, the federal government established regional protective institutions against foreign firms' product sales in U.S. markets, inducing firms' local production. At the state level, each U.S. region struggled to share the pie by utilizing various industrial policies. This dissertation showed how foreign investments, supported by the international and domestic institutional contexts created by the U.S. Government, affected labor market outcomes in the Midwest and the South.

First, I analyzed how institutional shifts at the state level mediated the employment effects of foreign businesses in manufacturing after the Great Recession in the U.S. This chapter started its investigation based on the fact that the Midwestern states have gradually lost their manufacturing jobs to the Southern states with non-unionized, cheap labor, but sought a comeback during a recessionary period. In particular, this chapter examined the cases of Indiana and Michigan, two states of the traditional manufacturing belt, which passed RTW law in 2012. I found that both domestic and foreign firms positively responded to the RTW passage, and foreign investors increased their activities to a greater degree. This indicates that domestic institutions oriented toward labor market flexibility appeal to firms from all countries and mediate these firms' (especially foreign firms') impacts on the labor market.

Second, I discussed how foreign investments originating from different countries, mediated by institutional shifts at the international level, impact employment and wage levels in the affected U.S. region. This chapter was inspired by the fact that foreign

automotive firms settled in the U.S. after the NAFTA ratification, but implemented different investment strategies depending on their country of origin. In particular, this chapter examined the case of Korean vs. German and Japanese automotive firms in Alabama, one of the most successful Southern states that transformed itself into the “auto state.” I found that Korean investments led to increased employment growth but decreased wage growth when compared to German and Japanese investments. This shows that international institutions may attract foreign investors to the host country, but the investors’ countries of origin moderate their impacts on the labor market.

Lastly, I explored how state governments developed and utilized different institutions to support business activities. This chapter stemmed from the fact that institutions that mediate the labor market effects of foreign businesses are not limited to those whose roles were tested in the previous chapters, but have come together with a package of industrial policies. In particular, this chapter took the cases of different economic development policies implemented by local governments in the Midwest and the South. I found that, despite some regional variations, many state governments show copycat behaviors, implementing policies that seemed effective in neighboring states’ cases (e.g. tax reform, employee training programs, anti-illegal immigration acts, etc.). This implies that state governments strategize to attract both domestic and foreign businesses through direct and indirect investment inducement policies. Thus, the findings in this chapter once again support that it is not only investors’ behaviors, but also government efforts that go hand in hand to improve economic conditions of a state.

This dissertation adds to the sociology literature on the relationship between labor market and organizations by exploring the patterns of foreign business activities in response to domestic and international institutions. Existing studies examine the impact of foreign capital on the labor market without addressing possible differences in the

impact by institutional context and source of capital. My dissertation not only demonstrates that government intervention in the labor market plays an important role in attracting investors, but also suggests that the same policy intended for pro-business environments can result in different labor market outcomes depending on where the investments come from. In other words, I highlight that organizations do not necessarily change labor market conditions in the same way in response to policy changes; rather, they respond to the policy intervention to varying degrees depending on their inherent attributes and eventually affect the host labor markets differently.

This dissertation also makes contributions to existing literature on labor market inequalities. It corroborates that foreign capital is an important predictor that explains changes in labor market outcomes in the global contexts. It also shows that developed countries are subject to the impacts of foreign investments, especially those originating from nontraditional sources. Compared to the effects of FDI originating from traditional sources, which flows from developed countries to less developed countries, the effects of reverse FDI have been given insufficient academic attention. However, Chapter 3 highlights that foreign capital can affect labor market conditions in host countries that had been considered to be more developed than the firms' country of origin.

FDI from nontraditional sources has different implications for the local labor market than FDI from traditional sources does. Despite the findings in Chapter 3 that show decreased economic rewards, one should not jump to a conclusion that reverse FDI negatively affects labor market outcomes. Before settlement of Korean firms, Montgomery and the adjacent counties had less-advantaged labor market conditions than counties in the northern parts of Alabama where other foreign automakers (from Germany and Japan) were located; the labor force in these counties were not only relatively less educated but also less likely to be employed and had lower income. Also, as Alabama is a right-to-work



state where employment itself has been prioritized over higher wages, there has not been much pressure on net income improvement despite emphasis on an increase in the absolute number of jobs (see Zhao, 1998). In other words, reverse FDI may lead to a trade-off between employment and wages because the MNEs may implement various cost-reduction strategies due to their liability of origin. Still, it can contribute to regional development and the host government can take advantage of reverse FDI inflows in relatively disadvantaged regions within the country that place more emphasis on job creation than income improvement.

In turn, this has policy implications for the MNEs engaging in reverse FDI. The four states that competed to win Korean investments (that is, Alabama, Kentucky, Mississippi, and Ohio) are among the less developed regions in the U.S., although the country itself is economically more advanced than Korea. Also, when searching for a potential production site, Hyundai had important geographical considerations: surplus of cheap, readily available labor and a union-free environment. That is, Hyundai chose a location where its latecomer disadvantages could be easily offset by area-specific contexts – in this case, economically disadvantaged environments. This suggests that late movers can successfully engage in up-market FDI by selecting locations where they will be more favorably received.

On the other side, this dissertation highlights the importance of collaborative governance for regional development. Researchers argue that late movers often experience difficulties acquiring legitimacy in the host country due to their latecomer disadvantages (see Stopford and Strange, 1992). However, this dissertation demonstrates that foreign investments, regardless of their country of origin, can be strongly welcomed when the firms earn host governments' confidence in their capabilities to contribute to local development. Also, while researchers have focused primarily on FDI attraction

policies at the national level to evaluate whether the host country benefits from foreign investments, the findings in Chapter 4 show that the local governments (for example, state- or county-level) are also deeply involved, playing critical roles in coordinating the foreign investment processes on one hand and intervening in labor markets on the other. In particular, they not only put a lot of effort into attracting FDI, but also ensure local populations benefit from an increased labor demand by implementing other institutional supports such as employee training programs and an anti-illegal immigration act. That is, the host governments, irrespective of their levels, attempt to build cooperative relations with foreign investors for economic development.

Along this line, this dissertation has important state policy implications for economic development. The findings in Chapter 2 suggest that the policy intervention of a state is not necessarily effective in attracting businesses from all sources. From a state policy perspective, knowledge of the ways in which domestic and foreign investors' employment patterns vary provides information on whether state policies to attract business activities need to be differentiated by source of capital. For example, each of the states might be comparatively more attractive to either foreign or domestic firms. Thus, state policy makers might benefit from focusing their efforts on attracting a particular group of investors that are more inclined to locate in their states rather than trying to induce other types of investors that are only willing to relocate if they are provided with substantial incentive packages. This is especially noteworthy, given that foreign firms favor certain attributes beyond the scope of policy intervention or require very large investment on the states' side (e.g., port availability and transportation infrastructure for imports). Acknowledging the differences in investors' responses to policy implementation can help states better tailor their pro-business incentive packages.

Despite these theoretical contributions, it is difficult to assess from this dissertation whether the cases of post-RTW foreign manufacturing activities and post-NAFTA automotive investments in the South have wider implications outside the U.S. Although the U.S. has been one of the top FDI destinations, other developed countries (for example, Australia, Canada, France, Germany, and United Kingdom) also have significant FDI inflows. Given that their FDI inducement policies and socioeconomic contexts vary greatly, the applicability of the findings from this dissertation to other destinations remains in question. Thus, in the future, it might be interesting to conduct cross-national research to examine the ways in which multinationals from different sources exercise leverage on other advanced host countries and compare under what institutional contexts their roles are best displayed.

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