6-15-2024

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Document Type

Masters Thesis

Degree Name

M.A. in Economics

First Advisor

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Keywords

Economic research design, Institutional models, Labour economics, Minimum wage, Neoclassical labour economics

Subject Categories

Economics | Economic Theory | Labor Economics | Other Economics | Social and Behavioral Sciences

Minimum Wage: Theoretical and Empirical Debates

A Thesis

Presented to

the Faculty of the College of Arts, Humanities and Social Sciences

University of Denver

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

by

Ghofran ALRebh

June 2024

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Title: Minimum Wage: Theoretical and Empirical Debates
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Acknowledgements

To the one who has upheld the pillars of our universe with her constant prayers, to the unsullied purity, verdant paradise, and the Sidra which around God's prophets and saints pray... to my mother Sadiqa.

First and foremost, I would like to express my gratitude to my father, younger sisters Zainab and Zahra, family, and friends for their endless love, unwavering belief in me, and constant support. Their strong backing, sacrifices, and commitment to my education have been the cornerstone of my accomplishments. I am deeply grateful for the values they have instilled in me and the opportunities they have given me.

I would especially like to extend my deep appreciation to Dr. Markus Schneider, my advisor, for his invaluable guidance and mentorship. His expertise, constructive feedback, and consistent support have played a pivotal role in influencing the development of this thesis. I am sincerely thankful for his unwavering dedication and investment in my academic and personal advancement throughout graduate years.

Moreover, special thanks to Dr. Robert Urquhart, Dr.Yasar Yavuz, Dr. Chiara Piovani, Dr. Juan Lopez, and Dr. Henning Schwardt for their significant influence in shaping my economic knowledge.

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Chapter One: Introduction

The field of economics has witnessed several significant transformations in research methodologies over time, particularly in the context of economic debates. These debates serve as critical catalysts for intellectual progress, leading researchers to adopt new approaches and methodologies to better understand complex economic phenomena. One such debate that has sparked methodological evolution is the discussion surrounding the minimum wage, which has seen divergent perspectives and approaches from the neoclassical and institutional schools of thought.

The minimum wage debate has been a subject of intense scrutiny and analysis, as it encompasses multifaceted issues related to labor markets, income inequality, and social welfare. Neoclassical economics, rooted in rational choice theory and market efficiency, has been dominant for much of the 20th century and until now. However, the institutional school, with its emphasis on historical context, social structures, and power dynamics, has emerged as a formidable challenger to the neoclassical approach.

This thesis aims to explore the evolution of research methodologies in the minimum wage debate, focusing on the contrasting perspectives of the neoclassical and institutional schools. By examining the changes in research methodologies employed by economists from these two schools, this study seeks to shed light on the shifting paradigms and the impact of these changes on our understanding of minimum wage policies and their implications.

To achieve this, the thesis will first delve into the historical development of the minimum wage debate, highlighting key milestones and influential research works that have shaped the discourse. It will then provide an overview of the neoclassical and institutional schools, outlining their core tenets, theoretical frameworks, and methodological preferences. Next, the thesis will assess the empirical research methodologies employed by economists, analyzing the strengths and limitations of each approach in examining the effects of minimum wage policies. The comparative analysis will consider various methodological aspects, such as data collection, modeling techniques, and analytical frameworks utilized by economists. Additionally, it will examine how the evolving methodologies have contributed to the understanding of the minimum wage debate and influenced policy recommendations put forth by each school.

By critically examining the research methodologies employed by neoclassical and institutional economists in the minimum wage debate, this thesis aims to contribute to the broader understanding of how economic debates drive methodological changes. It will provide insights into the evolving nature of economic research and offer several perspectives on the minimum wage debate, showcasing the significance of research methodologies in shaping economic discourse and policymaking.

Chapter Two: The Economics of Minimum Wage

The analysis of minimum wage policy (MW) has been the focus of extensive research and debate among economists. The International Labour Organization (ILO) defines MW as the minimum amount of payment that employers are required to provide to employees for their work during a specific time period, which cannot be reduced by collective agreement or individual contract. While this definition is widely accepted among economists, it fails to address how wages are determined or the significance of implementing or not implementing MW. This failure has sparked widespread debate among economists about the purpose and goals of MW.

In the following sections, the focus will be narrowed down to two specific models, namely the neoclassical (NC) and institutional (IE) approaches due to their significant contributions in this field with a focus on how their arguments are approached using various methodologies. While acknowledging two critical aspects. First, the presence of other schools of thought, such as the Marxian and behavioral school, which have also studied MW, their analysis may not be as extensive as that of the NC and IE approaches. The second is the challenge to categorize economists into specific economic schools, such as the neoclassical school or others. This challenge arises from the interdisciplinary nature of economic analysis, where scholars may draw from multiple theoretical frameworks and methodologies, making it challenging to fit their perspectives into rigid

school-based categories. Considering this, this chapter aims to avoid the specific and focus on general beliefs.

The Neoclassical Model of Minimum Wage

The neoclassical model, which is the dominant theoretical approach of MW analysis in economic textbooks and research, provides a theoretical framework for analyzing the effects of MW in competitive markets. This section briefly explores the key assumptions and general predictions associated with the neoclassical model of MW.

The neoclassical standard model considers labor as just similar to other goods of production factors. Thus, it assumes that employment is determined by supply and demand. It suggests that in a perfectly competitive market, a single firm or employer has no influence on wage determination. According to this model, the operation of the market must be left to self-regulate to ensure economic efficiency. If the government intervenes and sets MW that is higher than the equilibrium wage determined by the market, negative outcomes may arise. Crucially, the standard neoclassical model assumes that there are no market imperfections, such as monopolies or monopsonies. It assumes that there is a large number of firms and workers in the market, and no single agent has the power to affect the price or wage level. These two assumptions lead to the prediction that a MW will result several negative consequences (Wilson, 2012).

One of the most widely discussed consequences of setting MW is the possibility of disemployment, which refers to the loss of jobs or a decrease in employment levels.

When MW is set higher than the equilibrium wage, employers tend to demand less labor, resulting in higher rates of unemployment. The extent of this reduction in employment depends on the magnitude of the wage increase and how sensitive employers are to changes in wages. The impact of MW on overall welfare also depend on the elasticity of labor demand. While some workers benefit from higher wages and improved working conditions, others who have lower productivity may face job losses or reduced working hours. When considering employment as the quantity of labor, the wage gains of those who remain employed must be weighed against the wage losses experienced by those who become unemployed (Leonard, 2000). This outcome logically arises once the following are valid: companies aim to maximize their earnings, and the market for low-skilled workers functions is perfect competition, indicating that employers lack the power to control wages (Kennan, 1995).

In addition to reducing employment, NC suggests that MW puts businesses under pressure to make various adjustments to maintain their competitiveness and profitability. These adjustments may include such as cutting back on job training, reducing worker benefits, substituting more skilled labor for less-skilled labor, reducing employee turnover, and being more selective in hiring. Additionally, when investors face challenges in certain industries due to high wages, they may choose to reduce investments in those sectors until normal returns are regained over time. This strategic decision allows

companies to reallocate resources to more profitable areas and optimize their overall portfolio for long-term success (Wilson, 2012).

In general, NC economists assess the impact of implementing MW by considering its influence on both employment levels and the poverty threshold. In 1946, Stigler restricted the discussion surrounding MW to its effectiveness in reducing poverty and whether it is the sole and unique solution for achieving this goal. He wrote (1946):

> The popular objective of minimum wage legislation—the elimination of extreme poverty— is not seriously debatable. The important questions are rather: (1) Does such legislation diminish poverty? (2) Are there efficient alternatives? … Some readers will probably know my answers already ("no" and "yes," respectively); it is distressing how often one can guess the answer given to an economic question merely by knowing who asks it.

Milton Friedman also observed: "The real tragedy of minimum wage laws is that they are supported by well-meaning groups who want to reduce poverty. But the people who are hurt most by higher minimums are the most poverty stricken." (Leffler, 1978). He argued against the implementation of MW, primarily based on the belief that it ultimately harms low-skilled workers and creates unintended consequences in the labor market.

According to Milton Friedman and Stigler (1946), MW laws are the most anti-labor legislation in the United States. They implicitly argue that in a capitalist system, human laborers are used as sources of energy to perform tasks, but with technological advancements, machines have become capable of performing many of these tasks. They argued that in a competitive environment, setting MW works against laborers because

capitalists compare the cost of human labor to the cost of using machines. If machines are more cost-effective, capitalists will mechanize operations, leading to unemployment for workers. Therefore, artificially high wage rates created by MW laws can result in systematic and institutional unemployment.

Additionally, Thomas Sowell argues that the term "minimum wage" is misleading because, in reality, many inexperienced and low-skilled workers end up receiving no wage at all due to legislation that prohibits paying them what they are truly worth to an employer. In the labor market, workers compete amongst themselves to secure jobs and higher wages, while employers compete to find the most qualified workers. This means that low-skilled workers are competing directly with high-skilled workers. When MW is artificially increased, low-skilled workers who would have been employable at a lower wage become unemployable (Sowell, 2000). This highlights the paradoxical cruelty of MW laws, as they ultimately harm the very workers they are intended to assist according to Stigler, Friedman, and Sowell, and some other neoclassical economists who agree with their argument.

The assumptions underlying the previous effects of MW are based on the conception that labor is treated similarly to other goods in a perfect competitive market. Once this assumption is dropped, the positive effect of MW becomes much clearer. In a such a case when a firm has monopsony power in the labor market, it has the ability to pay wages lower than what would prevail in a competitive market even according to NC. As a result,

the firm hires fewer workers than it would under competitive conditions and pays them less than their marginal productivity. However, if MW is introduced, it is expected to have a positive effect on employment levels. MW would raise wages to a level closer to the competitive equilibrium wage, leading the monopsonistic firm to hire more workers up to the point where MW equals the competitive equilibrium wage. In other words, the introduction of MW in a monopsonistic labor market helps to address the power imbalance between the firm and workers. By setting a wage floor, MW ensures that workers are paid a fairer wage closer to their marginal productivity. This, in turn, incentivizes the firm to hire more workers, increasing employment levels. The point at which MW equals the competitive equilibrium wage represents a balance between ensuring fair wages for workers and maintaining a level of employment that is consistent with market conditions (Polachek and Siebert, 1993).

Contrary to this argument, proponents of the neoclassical approach often argue that monopsonistic conditions are not typically observed in the real markets where MW laws are in effect. Institutionalists criticize this perspective as a misunderstanding of market dynamics. Consequently, most institutional economists generally support the establishment of MW standards. The subsequent section will delve into the institutional model of minimum wage. The next section discusses the institutional model of MW.

Institutional Model of Minimum Wage

Institutional proponents of MW argue against neoclassical model by focusing on beyond its effect on employment. They suggest that the introduction of a legally mandated MW not only support both employees and employers, but it also promote long-term economic efficiency and productivity. For example, employers who follow ethical practices, often referred to as "high road" employers, may experience higher production costs due to the implementation of MW. As a result, they are compelled to enhance their production methods by investing in new technologies, research and development, and human capital (Kaufman, 2010).

The previous shift towards upgrading production methods can lead to several benefits. Firstly, the adoption of new technologies can enhance productivity and efficiency, allowing employers to produce more output with the same or fewer resources. Secondly, investing in research and development can lead to innovation and the development of new products or services, thereby expanding business opportunities and potential revenue streams. Lastly, investing in human capital, such as training and development programs for employees, can improve their skills and knowledge, ultimately contributing to higher productivity levels within the organization. Therefore, the implementation of MW not only ensures fair compensation for workers but also acts as a catalyst for positive changes within businesses. It encourages employers to adopt a more

strategic and progressive approach, which can ultimately lead to improved economic outcomes for both employers and employees.

Furthermore, if MW is enforced at a higher rate than the competitive market wage, it will promote firms to reevaluate their hiring policies. In this scenario, firms will prioritize the recruitment of permanent and skilled employees, leading to a reduction in the number of low-quality and temporary workers (Kaufman, 2010). This shift in hiring practices can have positive implications for workers. With firms seeking capable and long-term employees, there is an incentive for workers to enhance their technical skills and qualitative characteristics in order to become more competitive in the job market. By actively improving their technical dexterity and qualitative attributes, workers can increase their chances of securing permanent positions and enjoying the associated benefits, such as job stability and higher wages. This process of self-improvement can also empower workers to take control of their career development and strive for continuous growth. Overall, the enforcement of MW higher than the competitive rate can lead to a transformation in firms' hiring strategies, favoring the recruitment of skilled workers. Simultaneously, it encourages workers to invest in themselves and strive for improvement, ultimately fostering a more competitive and capable workforce.

Additionally, proponents of MW believe that implementing this law is a way to prevent the worsening of labor conditions caused by unfavorable economic situations, such as high unemployment rates. According to institutionalists, unregulated markets

give employers the ability to exploit workers' desperation for employment, resulting in lower wages, poorer working conditions, and the prevalence of illegal labor with extremely low or no salaries. Furthermore, workers often lack the power to respond to these exploitative conditions, as they are easily replaceable and have a strong need to secure any form of employment, regardless of the labor price offered to them (Commons and Andrews, 1916). In other words, this power dynamic between employers and workers undermines the idea of fair negotiations and creates an imbalance in favor of the stronger party. In this case, employers hold the upper hand, leaving workers at a disadvantage. As a result, implementing MW can help address this inequality in bargaining power. By setting MW, the measure acts as a safeguard to ensure that workers are not subjected to exploitative labor conditions. It establishes a baseline level of compensation that employers must adhere to, preventing them from taking advantage of workers' vulnerability and desperation for employment. In essence, the introduction of MW aims to level the playing field and provide workers with a degree of protection and bargaining power. It helps to reduce the disparities in power between employers and workers, promoting a fairer negotiation process and contributing to a more equitable distribution of resources and opportunities.

Theoretically, economists recognized the potential of MW to not only improve workers' incomes but also stimulate aggregate demand and promote macroeconomic stability. By providing workers with higher wages, they believe that it would lead to

increased consumer spending, business investment, and ultimately contribute to a healthier and more stable economy (Kaufman, 2010). They believe that implementing MW laws could contribute to boosting aggregate demand. In the context of macroeconomics, aggregate demand refers to the total amount of goods and services that consumers, businesses, and the government are willing to purchase. By increasing MW, workers' incomes rise, leading to an increase in their purchasing power. As a result, they are able to spend more on goods and services, thereby stimulating demand in the economy. This boost in aggregate demand can have positive effects on the overall macroeconomic stability. Increased consumer spending can lead to higher revenues, which in turn can encourage businesses to invest in expansion and create more job opportunities. This cycle of increased spending and investment can contribute to economic growth and stability.

Proponents of MW, mostly institutional economists, present additional counterargument to the neoclassical viewpoint by asserting that the main purpose of MW is not necessarily to alleviate poverty, but rather to enhance the bargaining power of workers. While these laws may not be highly effective in directly reducing poverty rates, their primary goal is to empower workers in negotiations with employers. Institutional economists argue that MW aims to address power imbalances in labor markets and ensure that workers receive fair compensation for their labor. By setting a legal minimum

for wages, these laws provide a baseline standard and prevent the exploitation of vulnerable workers who may lack sufficient bargaining power.

Considering former objectives, critics often arrive at a negative evaluation of MW. Opponents present several arguments against the effectiveness of MW as a tool to achieve these goals: it leads to job losses for low-wage workers, increases unemployment rates, has limited impact on poverty reduction (as most minimum wage workers are not from impoverished households), diminishes training prospects for young individuals, and lowers wages for low-skilled workers in sectors not covered by MW. It is important to consider that these objections are not directly aligned with the intended purposes MW as stated in the Fair Labor Standards Act (FLSA). Furthermore, the claim that poverty reduction is the primary objective lacks substantial evidence and support.

It is important to note, however, that these criticisms are only loosely connected, often indirectly, to the actual objectives of MW as outlined in the Fair Labor Standards Act (FLSA) and the extensive Congressional testimony that preceded its enactment in 1938. For instance, Stigler (1946) argues that poverty reduction is the primary aim of the FLSA. However, it is noteworthy that he does not provide any citation or evidence to support this assertion. Blum, in his response to Stigler, points out that there is no known advocate who has promoted MW as a mean to eradicate poverty per se (Blum, 1947: 646).

It is evident that the Declaration of Policy section of FLSA does not explicitly or implicitly mention the goal of reducing poverty. While reducing poverty was anticipated to be a positive outcome of the FLSA, it was seen as an indirect benefit resulting from the achievement of other primary objectives. The Declaration of Policy section of FLSA does not explicitly or implicitly address the objective of reducing poverty. However, reducing poverty was anticipated as a positive outcome of the FLSA, albeit achieved indirectly through the accomplishment of other more immediate goals.

Upon careful analysis of the language used in the FLSA, it becomes evident that the FLSA sought to achieve four primary goals. Firstly, the act aimed to eliminate labor standards that were excessively low and had detrimental effects on the ongoing efficiency, health, and overall well-being of workers. By establishing higher standards, the FLSA aimed to protect the rights and welfare of employees, ensuring they were not subjected to exploitative working conditions. Secondly, the FLSA aimed to prevent unregulated competition in labor markets from further eroding labor standards in affected industries, as well as from spreading these low standards to other sectors. This objective aimed to maintain a level playing field and prevent a downward spiral in labor practices. Thirdly, the FLSA sought to prevent low labor standards from hindering the attainment of full employment and sustainable economic growth. By implementing and enforcing fair labor standards, the act intended to create an environment conducive to employment opportunities and promote economic stability. Lastly, the FLSA aimed to eliminate low

labor standards due to their tendency to lead to labor disputes and create divisive relationships between employers and employees. These conflicts could have adverse effects on economic activity and impede overall productivity. Although the Declaration of Policy does not explicitly mention poverty reduction as an objective, it was expected that the accomplishment of these direct goals would indirectly contribute to poverty alleviation. By establishing and enforcing higher labor standards, the FLSA intended to enhance the well-being and economic conditions of workers, ultimately reducing poverty levels. In conclusion, while the Declaration of Policy section of the FLSA does not explicitly address poverty reduction, it outlines several direct goals aimed at improving labor standards and promoting a more equitable society. The achievement of these goals was expected to lead to indirect benefits, including the reduction of poverty (Kaufman, 2010).

By analyzing the argument against MW solely based on its potential to increase unemployment and subsequently exacerbate poverty, it is important to recognize that MW legislation was not initially established with the primary goal of reducing poverty. While even if theoretically that MW might have an impact on employment levels, it is a narrow perspective to solely focus on this aspect without considering the broader objectives and societal benefits of MW. It is essential to acknowledge that the relationship between MW and employment is complex and multifaceted. Thus, group of

economists found that it is crucial to adopt a comprehensive approach that incorporates both theoretical and empirical perspectives.

Neoclassical economists and institutional economists hold differing views on MW due to their distinct theoretical perspectives on the labor market and their utilization of different empirical tools. The upcoming chapters will delve into the roots of these disagreements, shedding light on the contrasting approaches taken by these two schools of economic thought.

Chapter Three: Theoretical Perspectives of Labour Market

The labor market, a vital component of any economy, has long been a subject of debate among economists. It refers to the marketplace where employers and workers interact to exchange labor services. It is a mechanism through which individuals offer, what Becker (1994) called their "human capital" such as skills and abilities, and time in exchange for wages or benefits or salaries from employers. In the labor market, employers seek to hire workers who can perform specific tasks or jobs, while workers seek employment opportunities that match their skills, qualifications, and preferences. Market power in the labor market refers to the ability of employers or workers to influence wages and employment conditions based on the extent of their power in the market. It represents the extent to which an economic agent, worker or employer, participate actively or passively in the labor market. The status of market power is one of the central points of contention in the economic research. In general, economists argue about whether the labor market operates under perfect competition or falls into the realm

of imperfect competition. This question holds significant importance in understanding the dynamics of the labor market which mainly involve the level of employment and wages.

Understanding market power in the labor market is crucial for various reasons. First, it is essential for promoting fairness and equity in the labor market. Market power can lead to wage disparities and unequal bargaining power between employers and workers, contributing to income inequality (Stiglitz,2012). Moreover, market power has implications for worker mobility and job opportunities. Concentration of market power among employers can limit worker mobility and restrict job options. Alan B. Krueger and David Card (2015) emphasize the importance of understanding market power in relation to worker mobility and its potential impact on job opportunities. Third, Economic efficiency is another critical aspect influenced by market power in the labor market. Market power can result in inefficiencies and misallocation of resources (Manning,2003).

Addressing labor market discrimination is also a key reason for understanding market power. Market power can perpetuate discrimination, leading to unequal treatment and opportunities for certain groups of workers. Claudia Goldin and Lawrence F. Katz (2008) stress the importance of recognizing market power in relation to discrimination and the need for policies that promote equal treatment and opportunities for all workers. Understanding market power allows policymakers to implement measures that promote competition and enhance efficiency in the labor market or leave the market operates without obstacles to achieve the efficiency.

The objective of this chapter is to review literature in labor economics by providing insight into perfect competition model and imperfect competition model, offering an analysis of the practical implications associated with adopting each of these models. The chapter is divided into two primary sections. The first section explores the dominant neoclassical model of labor market that is perfect competition market. The second section analyzes the imperfect competition model.

Neoclassical Economic Theory of Labor Market (Perfect Competition Model)

Neoclassical labour economics (NCL) could be described as a movement since it is based on what Hovenkamp (1990) called “second great law and economics movement”. Hence, it is linked with the field of law due to it aims to explain the role of law on shaping economic systems. Furthermore, it explores the origins of law, whether it stems from state-enacted legislation or is rooted in fundamental principles of natural law. The perspective of NCL is shaped by the way neoclassical school assumes positive and normative assumptions underlying its theories. It is associated mainly with Chicago economists such as Becker, Friedman and Stigler, and it is grounded on traditional NC microeconomics.

According to NC, the efficient allocation of limited resources (land, capital and labor) is considered the central economic problem. This concept is commonly attributed to Lionel Robbins, who defined economics as "the science which studies human behavior as a relationship between ends and scarce means which have alternative uses" (Robbins,

1945). Scarcity implies that the resources are limited, but individuals' desires are largely unlimited. NC economists argue that an economy should operate in a way that maximizes the overall satisfaction or utility of individuals, subject to the constraints imposed by scarce resources. The efficient allocation leads the economy to operate on its production possibility frontier. Thus, the objective of efficiency is wealth maximization (Posner, 2007). NC economists emphasize the importance of market mechanisms, such as supply and demand, in achieving efficiency. The interaction of supply and demand, along with flexible prices, will naturally guide the economy towards utilizing all available resources and achieving full employment of labor (Kates, 1998). Grounded in NC Welfare theory, and the 1st and 2nd Welfare Theorems, NC theory claims that the non-regulated market reaches the efficiency in a perfectly competitive market.

One of the key assumptions of perfect competition in the labor market is that workers are homogeneous, implying that they possess identical skills, abilities, and productivity levels. Additionally, they have perfect mobility, allowing them to move freely between firms and industries without any barriers or costs. They also have access to perfect information regarding job opportunities, wages, and working conditions, enabling them to make informed decisions about employment. In neoclassical theory, individuals are assumed to make rational choices, prioritizing their own self-interests (Brožová, 2018). Both employers and workers in a perfectly competitive labor market lack market power and must accept prevailing wage rates that are determined naturally in the market without

any intervention. In other words, the interaction of supply and demand naturally determine the level of employment and wage rates. The intervention is viewed as it is an obstacle for the economic system to work efficiently. In this context, the neoclassical model posits that the labor market operates in a manner similar to that of the market for goods and services (Vercherand, 2014). This means that the principles of supply and demand that govern the market for goods and services also apply to the labor market. The demand for factors of production is directly influenced by the demand for the final products or services that these factors are used to produce. The demand for labor rises in response to an increase in the demand for the laborers' contribution to the production process. The demand for labour will vary inversely with its price that is wage rate according to the law of diminishing returns. This law states that if a firm employs more of a variable factor, such as labour, assuming one factor remains fixed, the additional return to extra workers will begin to diminish. Labour supply slope, in the other hand, is positive indicating that as its price, wage rate, increases, the quantity of labor supplied also increases (Sharif, 2008). John Bates Clark contributed to the law of diminishing returns by his explanation of the marginal productivity. He emphasizes that as more and more units of labor are employed in the production process, the additional output or productivity gained from each additional unit of labor will eventually decrease. His marginal productivity theory, also known as the marginal productivity theory of distribution, posits that the distribution of income is determined by the marginal

productivity of factors of production. According to this theory, the income earned by a factor of production, such as labor or capital, is based on its contribution to the total output of production (Clark, 1899). Thus, wages are determined by the marginal productivity. Employers will employ workers up to the point where the marginal benefit equals the marginal cost of labour which in this case is the wage rate. As more workers are hired, the productivity of each additional worker is assumed to decline due to the law of diminishing marginal returns.

Based upon the above, it could be concluded that NC economists often construct simplified labor models because they aim to understand and analyze economic phenomena by isolating key variables and relationships. These simplified models allow them to make assumptions about human behavior and market conditions, which in turn enable them to derive theoretical insights and predictions. By simplifying the complexity of real-world situations, NC economists can focus on fundamental economic principles and explore the effects of changes in specific variables (Mankiw, 2014). However, it is important to note that NC economists argue against government intervention in labor market not only because these simplified models predict the negative side of intervention, but also due to the following arguments.

Firstly, adopting perfect competition in the labor market implies that legal regulation of the labor market is unnecessary, leading NC economists to generally argue against state intervention in this area. However, it is important to note that NC economists

acknowledge that the competitive model does not fully reflect the complexities of real labor markets. They recognize that market imperfections, or what they call it as market failures, can occur, including situations of imperfect information, non-rational agents, or the presence of monopsony power. Despite recognizing the existence of market failures, NC economists contend that government intervention, often in the form of protective labor laws, social mandates, and regulatory agencies, may result in negative consequences that outweigh the benefits. They argue that such interventions can lead to the creation of large bureaucracies, high compliance costs, inflexible rules, and widespread corruption and inefficiency, ultimately imposing significant costs and diminishing social welfare (Coase,1992). Additionally, NC economists often consider market imperfections to be relatively minor issues, comparable to a mild skin disease that primarily affects the surface and does not generally necessitate corrective measures (Friedman and Friedman, 1980).

Secondly, according to some NC economists, employment regulation is purportedly advocated for the benefit of the public, but in reality, it is either intentionally designed or manipulated to serve the narrow interests of specific groups and institutions through rent-seeking behaviors and regulatory capture. Rent seeking refers to the phenomenon where groups allocate resources towards acquiring laws and regulations that grant them exclusive privileges and profits, known as monopoly rents. On the other hand, regulatory capture happens when a regulatory institution is compromised and manipulated to

advance the interests of the parties being regulated, rather than serving the broader public interest. An illustration of this is when unions advocate for MW, purportedly to alleviate poverty, but in reality, it is believed to be driven by the desire to diminish the competitive advantage of nonunionized workers who earn lower wages (Rottenberg 1981).

Coase theorem, which was built by Coase (1960) and explained by Stigler (1966), supports neoclassical position and argues against government intervention. According to the theorem, when transaction costs are negligible, economic agents are motivated to engage in private bargaining to reallocate resources for their most productive utilization. This suggests that labor market inefficiencies resulting from externalities and public goods issues may not always necessitate government intervention through laws or regulations. Instead, the involved parties can often reach a mutually beneficial and efficient resolution through negotiation and compromise (Coase, 1960).

NC economists have strengthened their positions against market regulations by incorporating empirical evidence alongside their theoretical arguments. Several studies have investigated the cross-sectional association between the extent of labor market regulations in a given political jurisdiction (e.g., state, province, or country) and a metric of economic performance, such as output or productivity growth. Koedijk and Kremers (1996) conducted a study that found a negative relationship between labor market regulation and wealth creation. They argued that increased regulation restricts labor market flexibility, leading to lower productivity and hindered economic growth. Barro

(2001) also explored the impact of labor market regulations on economic performance across various countries. The study found that countries with more stringent labor market regulations experienced slower economic growth and lower levels of wealth creation compared to countries with more flexible labor markets.

While NC theory of labor market has dominated economic mainstream for decades, it has not been shielded from criticism. Various economic schools of thought offer critiques of NCL.

Among the most prominent ones is Marxist Economics which argue that the neoclassical labor theory fails to adequately address the power dynamics between employers (capitalists) and workers. They believe that NC theory neglects the exploitation of labor by capital, and instead, advocates for a labor theory of value where the value of goods and services is determined by the amount of socially necessary labor time required for their production. Post-Keynesian Economics also challenge the neoclassical labor theory by emphasizing the role of aggregate demand in determining employment and wages. They argue that unemployment is not solely a result of wage rigidities, as suggested by neoclassical theory, but can also be caused by insufficient aggregate demand in the economy. Moreover, Feminist economists critique the neoclassical labor theory for its failure to account for gender inequalities in the labor market. They argue that the theory assumes a gender-neutral labor market, ignoring the fact that women often face discrimination and lower wages compared to men. These are

just a few examples of economic schools that critique the neoclassical labor theory. Each school offers its own unique perspective and alternative explanations for labor market dynamics. Due to the scope of the thesis, the rest of this chapter will shed the light into the most debated economic model that is Institutional labour economics.

Institutional Labour Economics (Imperfect Competition Model)

Institutional economic (IE) thought is highly associated with what Hovenkamp (1990) called as "the First Great Law & Economics Movement". This movement emerged during the period from 1885 to 1940 and drew a significant inspiration from the historical school in Germany (Pearson 1997; Mackaay 2000). IE reached its peak between 1935 and 1945, during the New Deal era, particularly when it successfully enacted the three seminal bills: the Social Security Act (SSA), National Labor Relations Act (NLRA), and FLSA (Millis 1942; Douglas 1939). Founding the American Economic Association (AEA) in 1885 by Richard Ely facilitated phase of evolving new economics, particularly institutional economics (Rader, 1966).

During this phase, the advent of new economics marked a revolutionary shift that differentiated orthodox followers of classical/neoclassical economics from a somewhat unconventional group of intellectual rebels. The new economics brought about a revolution in three crucial areas: methodology, theory, and policy. In terms of methodology, the new economics brought about a paradigm shift by endorsing a research methodology that emphasized induction, empirical analysis, and interdisciplinary

approaches (Dorfman 1949; Pearson 1997). Regarding the theory, the new economics aimed to construct a theory of the capitalist economy that was more comprehensive, dynamic, and grounded. This theory placed a greater emphasis on human agency, recognizing the presence of imperfections in both human behavior and markets. It also acknowledged the significant influence of legal, social, and business institutions, as well as ethical considerations related to public interest and social purpose. Furthermore, in terms of policy, the new economics challenged the laissez-faire implications of classical and neoclassical theory. It aimed to offer an alternative intellectual justification for increased government economic regulation, the promotion of trade unionism, and the redistribution of rights, power, and wealth (Hodgson 2001; Mirowski 1991).

IE economists critique NC theory for its assumption of perfect competition and its failure to consider the role of institutions and social norms in shaping labor markets. They argue that the theory overlooks the importance of labor market institutions, such as unions and MW laws, in determining wages and working conditions. As previously mentioned, NC school considers labor as just as other regular commodity in the market. Its consideration is an application of economic imperialism which evaluates non-market institutions and behaviors, such as the family, crime, employment preferences, based on the traditional price theory (Lazear 2000; Van Overtveldt 2007). As a practical matter, the employment relationship was largely regarded as simply another species of commercial transaction between buyer and seller and, thus, was governed by the same

generic body of contract law (Epstein, 1983). In contrast, IE economists argue against economic imperialism through methodology, and provide a fundamental proposition that is since labor markets and the employment relationship deal with a uniquely human commodity — labor — they require a more complex, interdisciplinary, and social-oriented theory to adequately understand them. Thus, IE develop engaged in a three-fold practices: development of an alternative theoretical base for economics, use of this alternative theoretical base to craft and implement a program of social reform and expanded market regulation, and promulgation of a more humanistic ethical credo to guide research and policy. While it could be argued about IE achieving fully comprehensive theoretical framework, it is beyond doubt IE has been provided insightful thoughts when it comes to shaping public policy. The assumptions made by IE scholars shed light on various aspects of how institutions and economic systems interact, and how these interactions influence policy outcomes.

Different from NC, IE assumes that goal of economy should be to enhance human well-being not to maximize wealth. IE economists consider efficiency as a tool to serve human ends, not as an economic objective (Slichter,1931). The definition of serving human ends may vary depending on different perspectives, but it undoubtedly encompasses more than just the efficiency criterion. It involves elements such as increased economic stability, fairness in processes and distribution, and ample opportunities for personal growth and self-fulfillment (Sunstein, 2004). IE economists

advocate that economic policies should aim to position society on the production possibility frontier. However, they emphasize that the definition of "goods" or "social wealth" used to calculate this frontier should extend beyond traditional GDP-related goods. It should encompass essential aspects such as economic security, social justice, meaningful employment, and healthy working conditions. Without this broader perspective, the well-being of individuals, including workers, becomes secondary to the narrow objective of efficiency and materialistic welfare. In such cases, the focus shifts towards prioritizing what benefits the economy rather than structuring and operating the economy to truly serve the best interests of people.

Secondly, in contrast to NC that considers labor merely as a factor of production, IE economists recognizes labor as inherently human. Instead of treating labor as a mere input in the production process, IE acknowledges the unique qualities and characteristics that individuals bring to their work. This perspective values the dignity, well-being, and potential of workers, going beyond a purely instrumental view of their contribution (Commons 1934b;Spector ,2006). Grouping this assumption with the objective of economy assumption indicates that the welfare of individuals as workers should be taken into account, going beyond their mere contribution to production and fulfillment of consumer needs. By giving due consideration to the welfare of workers, the focus shifts from solely maximizing production and satisfying consumer demands to creating conditions that promote fair treatment, safe working environments, reasonable working

hours, and opportunities for personal and professional growth. This approach recognizes that the well-being of workers is essential for sustainable economic development and the overall welfare of society.

Third, the IE approach assumes that institutions encompass a framework of rules, both formal and informal, explicit and tacit, that are constructed around property rights (in a broad sense). They establish the guidelines for the economic game, defining the constraints, opportunities, incentives, and strategic interdependencies encountered by economic actors (Coase, 1992). These institutions play a crucial role in shaping the behavior and interactions of individuals within an economic system. They provide a structure that guides decision-making, allocation of resources, and the functioning of markets. Formal institutions, such as laws and regulations, are explicitly defined and enforced by governing bodies. Informal institutions, on the other hand, consist of unwritten norms, customs, and social expectations that influence economic behavior. Property rights, which form the foundation of institutions, extend beyond mere ownership of physical assets. They encompass a broader understanding of rights and entitlements, including intellectual property, contracts, and the ability to use and transfer resources. These rights define the boundaries within which economic agents operate, ensuring that transactions and exchanges are conducted fairly and efficiently.

By establishing the rules of the economic game, institutions shape the incentives and opportunities available to individuals and organizations. They determine the extent to

which markets are open and competitive, the level of trust and cooperation among participants, and the degree of accountability and transparency in economic interactions. Understanding and analyzing institutions is crucial for comprehending how economies function and evolve. By assessing the formal and informal rules that govern economic systems, policymakers, economists, and stakeholders can identify areas for improvement, address inefficiencies, and promote inclusive and sustainable development. Institutions, therefore, play a fundamental role in shaping the economic landscape and influencing the behavior and outcomes of economic agents.

Additionally, individuals are generally portrayed as driven by their intentions and self-interest in economic models. However, IE suggest that the decision-making process is limited by bounded rationality, meaning that individuals have cognitive limitations that prevent them from fully processing and analyzing all available information. Additionally, human behavior is significantly influenced by emotions, social connections, and ethical beliefs (Sunstein 2000; Schmid 2004). While economic models often assume that individuals are purely rational and solely motivated by self-interest, this perspective recognizes that human decision-making is more complex. People are not always able to make perfectly rational choices due to cognitive limitations, time constraints, or incomplete information. As a result, their decisions may not always align with optimizing their own self-interest. Furthermore, emotions play a significant role in shaping human behavior. Feelings such as fear, happiness, or empathy can influence decision-making,

sometimes leading individuals to prioritize emotional satisfaction over purely rational outcomes. Social interdependencies also exert a strong influence, as people are influenced by the actions and opinions of those around them. This can lead to conformity, imitation, or the desire for social approval. Ethical precepts and moral considerations also impact decision-making. Individuals may be guided by personal values, cultural norms, or ethical principles that go beyond self-interest. This recognition acknowledges that people often consider the broader consequences of their actions and strive to adhere to principles of fairness, justice, and integrity. By acknowledging the limitations of rationality and incorporating the influence of emotions, social dynamics, and ethical considerations, economic models can provide a sophisticated comprehension of human behavior. This perspective recognizes the multidimensional nature of decision-making and highlights the importance of considering these factors when analyzing economic outcomes and designing policies.

Having examined the differences between NC and IE in terms of their underlying assumptions and methodologies, it could be generalized that the degree of presence of bargaining power is what differentiated NC model and IE from each other. NC model assumes that bargaining power has no role in determining not only wages but also all labor circumstances since the competition is perfect. Thus, there is no room for negotiation or bargaining between workers and employers. Labor market institutions, such as unions or MW laws, are considered unnecessary in this model as they are seen as

potentially distorting the market equilibrium. In contrast, in the imperfect competition model, bargaining power and labor market institutions play a more significant role. Imperfect competition refers to situations where firms have some degree of market power, allowing them to influence wages and employment conditions. In this context, workers may have the ability to negotiate wages and working conditions with employers, and labor market institutions can help regulate these negotiations. Bargaining power in the imperfect competition model can be influenced by factors such as the concentration of firms in the market, the presence of unions or collective bargaining, and the level of worker organization. When workers have more bargaining power, they can negotiate higher wages and better working conditions. Labor market institutions, such as unions, can enhance workers' bargaining power by providing collective representation and facilitating negotiations with employers.

Next chapter focuses on adopting empirical approach to analysis MW, aiming to develop a more comprehensive understanding of how different economic approaches can shape public policies particularly MW.

Chapter Four: Empirical Analysis of Minimum Wage Policy

In addition to employing theoretical models, economists have utilized empirical methodologies to examine the effects of MW. Just as debates on theoretical perspectives arise from varying assumptions and methodologies, economists present differing views on the effectiveness of incorporating empirical tools in economic analysis and, consequently, the selection of suitable methodologies. Categorizing economists into distinct economic schools, such as NC or others, based on their stance on MW policy poses a challenge. Therefore, this chapter seeks to classify economists according to their positions on MW, as determined by the specific empirical tools they employ in their research.

The empirical approach in economic analysis has evolved significantly over time, reflecting advancements in data availability, computational power, and the development of new statistical techniques. Essentially, empirical analyses of MW have undergone significant shifts over time, with notable changes occurring prior to the 2000s, in the 1990s, and continuing to the present day. These shifts reflect evolving perspectives and approaches in studying the effects of MW. The empirical approach in analyzing MW has undergone significant changes over time as economists strive to understand its effects on

various economic outcomes. The following sections explore the evolution of the empirical approach in studying MW, highlighting key developments and methodological shifts.

Early Simple Regression Model

The prevailing tendency in pre 2000s empirical research on MW suggests a general opposition to its implementation, with varying justifications and empirical approaches employed. These studies were characterized by their relative simplicity by relaying on simple regression models and descriptive statistics to evaluate its effects. Most of these empirical papers utilize a regression model that incorporates a specification similar to the following:

$Y = f (MW, D, X_1 ...X_n)$,

In this context, the regression model commonly employed by most empirical papers includes the variable Y, representing labor force status (such as labor force participation ratio, employment-population ratio, or unemployment rate). MW denotes a measure of MW, while D represents a business cycle variable that adjusts for fluctuations in overall economic activity. Additionally, X_i is an exogenous variable used to control for factors like labor supply, school enrollment, participation in the armed forces, and other relevant considerations (Brown, Gilroy, and Kohen 1982, 497). In some cases, a time trend is incorporated into the specifications, as demonstrated by Mincer (1976). While there are

variations in the functional forms used, almost all studies rely on data from the Current Population Survey (CPS).

In their extensive review of early literature, Brown, Gilroy, and Kohen (1982) provide a comprehensive analysis of early economic studies which analyzed MW. They reveal that the majority of these studies reach a consistent conclusion: a 10 percent increase in MW leads to a reduction in teenage employment ranging from 1 percent to 3 percent. Similarly, in their subsequent work (Brown, Gilroy, and Kohen, 1983), they find that employment declines between 0.5 percent and 1.5 percent for every 10 percent increase in MW. The elasticities of teenage employment rates range from approximately -0.1 to -0.3. However, they emphasize that the lower end of this range is more favorable. When it comes to young adults aged 20-24, the impact of MW on employment is negative, but the effect is comparatively smaller than it is for teenagers (Brown, Gilroy, and Kohen, 1983). These findings were particularly significant to economists as they not only aligned with theoretical predictions but also highlighted the potential intrusiveness of government intervention in the market.

Moreover, these findings align with other surveys and collections conducted around the same time, supporting these conclusions in general. Despite the uncertainty surrounding the effects of adult employment, the prediction of disemployment appears to be well-established by the 1980s, as supported by Alston, Kearl, and Vaughan in 1992. Although there may have been disagreements regarding the specific extent of the impact

on employment, there was a consensus that the effects did exist (Deere, Murphy, and Welch 1995, 232).

During the mid-eighties, there was a lack of empirical research focused on MW. However, several factors led to a change in this situation. Firstly, the limited new time-series estimates that did incorporate data from the eighties indicated that the relationship between MW and employment elasticity was becoming less responsive. Secondly, while the federal MW remained unchanged at $3.35 per hour from 1981 to 1990, various states decided to raise their own MW rates, providing an opportunity for cross-sectional studies. Lastly, the growing income inequality in the 1980s promoted political efforts for redistributive actions. As a result, MW research experienced a revival in the 1990s, leading to significant outcomes (Leonard,2000).

The approach used in early empirical research involved analyzing aggregate data and conducting case studies in specific industries. Researchers often compared prevailing wage areas with non-prevailing wage areas or analyzed employment trends before and after MW changes. However, it is important to note that these early studies had limitations. They faced challenges in isolating the effects of MW changes from other factors influencing employment levels. Additionally, the findings of these studies were not always consistent, and there were differing views even within the dominant belief that MW increases led to job losses (Leonard,2000)

For a period of ten years, the conclusions reached by the previous studies were widely accepted within the field of economics. However, in the early 1990s, a group of researchers started to reexamine MW from a new perspective. This new approach, known as "the new MW research," introduced innovative methods such as analyzing "natural experiments" and exploring differences in the impact of MW across different states (Schmitt,2015). The next section sheds the light into this new research.

David Card and Alan Krueger Contributions

David Card and Alan Krueger (CK) have made significant contributions to the field of labor economics, particularly in understanding the effect of MW. Their groundbreaking research challenged conventional economic theories and provided valuable insights into the effects of MW on employment, wages, and overall economic outcomes. This section aims to analyze and discuss their influential work and highlight their key findings as well as the criticisms they have faced.

One of the most notable studies conducted by CK was published in 1994, titled "Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania." This study focused on investigating the effects of MW increase on employment in the fast-food industry, utilizing a unique approach that deviated from traditional economic models.

CK implemented a method that involved analyzing the impact MW using the difference-in-difference approach within a natural experiment conducted among fast-food

restaurants. They conducted a study in which they gathered data on employment from a sample of about 400 fast-food restaurants in New Jersey and Pennsylvania in order to investigate the potential impact of the New Jersey minimum-wage increase on employment. The data they collected were used to construct measures of full-time equivalent employment, hourly wages, prices, and so forth. The fast-food outlets were contacted by telephone during late February and early March 1992, shortly before the April 1 minimum-wage increase in New Jersey, and again in November and December 1992. The reasons for studying the fast-food industry include the sizable number of low-wage workers employed, the expectation that the industry would comply with legal regulations, the job and service offerings being fairly similar, the ability to create a sample frame with relative ease, prior research on Texas indicating a high level of response, and the high rate of job turnover allowing for quick adjustment of employees.

CK concluded from their results that it doesn't matter whether the comparison is between low-wage restaurants in New Jersey to those in Pennsylvania or restaurants in New Jersey that were already paying as much as the newly increased MW; the rise in MW appears to have resulted in an increase in employment. It has been found that, similarly to New Jersey, the implementation of MW increase in Texas was linked to a growth in the number of employers that had to raise their pay to abide by the law. In summary, their results seem to suggest that employment effects are likely to be small but more likely to be positive than negative. (Card & Krueger, 1993). CK's study contributed

to the reevaluation of the traditional economic theory of MW effects. Their findings challenged the widely held belief that MW hikes inevitably lead to job losses. They suggest that employment effects are likely to be small but more likely to be positive than negative. Their findings indicated also that labor markets are more complex as well as the relationship between MW and employment than previously assumed.

CK's study stimulated a considerable amount of subsequent research that aimed to test their findings in different contexts and industries. Some of these studies supported their conclusions, further strengthening the argument that MW increases do not necessarily lead to job losses, while others critique CK findings and arguing against MW. One of these studies is conducted by Neumark and Wascher (2008) using new generation of time-series analyses typically applies modern econometric techniques to state-level panel data. Neumark and Wascher's research on the effects of MW has generated mixed findings. While their earlier work suggested that higher MW led to negative employment effects, more recent studies have shown a more complex picture.

In their influential book "Minimum Wages," Neumark and Wascher conducted a comprehensive analysis of the minimum wage's impact on employment. They found that higher MW tend to reduce employment opportunities for low-skilled workers, particularly for teenagers and young adults. However, their findings also indicate that the employment effects of MW changes vary depending on the specific context. They observed that the impact was more detrimental in industries with a higher concentration

of low-wage workers and in regions with lower average wages. Furthermore, Neumark and Wascher's research suggests that the negative employment effects of MW might be more observed during economic downturns. They argue that during periods of economic expansion, the negative employment effects may be partially offset by increased labor demand. It is important to note that their findings have been also subject to ongoing debate and criticism.

Doucouliagos and Stanley (2009) conducted a meta-analysis that aimed to examine and critique the research conducted by Neumark and Wascher on the effects of MW. Their critique highlighted several methodological concerns and limitations in Neumark and Wascher's work (2008). One of the main criticisms is the issue of publication bias. They argued that Neumark and Wascher's studies, which found negative employment effects of MW, were more likely to be published, while studies with contrary findings were less likely to be published or included in their analysis. This potential bias could skew the overall conclusions. Additionally, Doucouliagos and Stanley argued that Neumark and Wascher's analysis did not adequately account for the presence of "unobserved heterogeneity" across studies. They suggested that variations in study designs, data sources, and other factors may have influenced the divergent results found in the literature. Furthermore, they criticized Neumark and Wascher's exclusion of studies that did not meet specific criteria, which could introduce selection bias. By excluding

certain studies, the overall analysis may not have represented the full range of research on the topic.

Moreover, Dube, Lester, and Reich (2010) conducted a highly significant and influential study on MW, which is widely recognized as one of the most important papers in the field over the past decade. Their study, referred to as DLR, provided a thorough reassessment of both the latest research on MW and the criticisms directed towards it. The study centered on a crucial methodological advancement that expanded upon Card and Krueger's New Jersey study to encompass a representative sample of the entire country. It also identified a noteworthy flaw in prior research on MW, which primarily relied on analyzing state-level employment patterns without adequately accounting for regional variations in employment growth that were unrelated to changes in MW.

The most compelling criticism of CK's study on the increase in the MW in New Jersey compared to Pennsylvania was that it is challenging to draw broad conclusions from a single case study. It is argued that even if CK's study was flawlessly executed, it represents only one possible outcome among many. Without additional evidence, their findings provide the best estimate of the true impact of MW, but it is not possible to definitively rule out the possibility that the effects of MW could be different than what was observed in the specific case of New Jersey in 1992.

To address the previous issue, DLR replicated the experiment conducted by CK in New Jersey and Pennsylvania on a much larger scale. They compared employment

variations across adjacent counties in the United States that had different MW levels. DLR utilized data from the Quarterly Census of Employment and Wages to create a comprehensive dataset of restaurant employment in 1381 counties from 1990 to 2006. They then matched this employment data with the corresponding MW level (federal or state) in each county for each quarter of each year in the sample. DLR specifically focused on a subset of 318 pairs of neighboring counties where the prevailing MW could differ based on federal and state regulations.

Their approach effectively extends the findings of CK's study in New Jersey and Pennsylvania, but with several notable advantages. Firstly, their larger sample size enables them to examine a wider range of employment outcomes compared to the single case of the 1992 increase in MW in New Jersey. Secondly, by tracking counties over a 16-year period, they were able to assess potential long-term effects. Lastly, as the MW varied across counties over time, there was a greater range of experimental variation compared to the New Jersey-Pennsylvania study and similar ones. Utilizing this extensive dataset of border counties and leveraging these statistical advantages, DLR discovered significant increases in earnings and no negative impact on employment from MW raises.

DLR's study also uncovered a significant drawback in earlier research on MW, which primarily examined state-level employment patterns. They demonstrated that overall employment trends differ greatly across regions, with regions having lower MW (such as the South) experiencing rapid employment growth, while regions with higher MW (such

as the Northeast) experience slower growth. Since it is widely believed that MW levels in the United States have had minimal impact on overall employment levels, DLR argued that failing to account for these regional employment differences can introduce bias into statistical analyses of MW. Standard statistical methods that do not consider this "spatial correlation" in MW may mistakenly attribute better employment outcomes in low-minimum-wage states to the lower MW itself, rather than the other factors driving overall job growth in those regions (such as favorable weather conditions). When DLR expanded their dataset to include restaurant employment in all counties (not just those along state borders) from 1990 to 2006, their findings aligned closely with earlier research that found job losses associated with MW. However, once they controlled for regional differences, the same statistical techniques showed no employment losses. DLR concluded that the significant negative effects observed in the traditional analysis were primarily influenced by regional and local employment trends unrelated to MW.

Neumark, Salas, and Wascher (2014), referred to as NSW criticize DLR for their extensive use of geographic controls. NSW argue that the regional controls and state-level time trends suggested by DLR to address “Spatial Correlation” among states eliminate too much of the identifying variation in the data, which explains why DLR did not find clear negative employment effects. NSW believes that DLR discards a significant amount of valid identifying information while attempting to MW variation that may be confounded with other factors affecting employment change.

In response, Allegretto, Dube, Reich, and Zipperer (2013), referred to as ADRZ, counter that both DLR's and their own expanded models retain enough variation in the data to identify substantial effects of MW on low-wage workers' earnings. They argue that the small, estimated employment effects observed when using these controls simply reflect the minimal impact of MW on employment. ADRZ's spatial controls also maintain sufficient variation in the data to establish a connection between MW increases and significant declines in labor-market flows, as demonstrated by Dube, Lester, and Reich (2013) in a separate analysis. Dube (2013), using similar spatial controls across states, successfully identifies a statistically significant effect of MW on increasing family incomes and reducing poverty rates.

Allegretto, Dube, and Reich (2011), referred to as ADR, utilized the findings of DLR to examine data on teen employment from 1990 to 2009. ADR's research made two significant contributions. Firstly, they focused on teen employment rather than industry employment, which allowed for more direct comparisons with earlier studies on MW. Secondly, they incorporated data from the deep recession that occurred between December 2007 and June 2009, enabling them to assess any potential interactions between MW and severe economic downturns. ADR analyzed data from the Current Population Survey (CPS) for the years 1990 to 2009. However, due to limitations in the CPS sample size and its reporting of city or county-level data, ADR instead examined teen employment at the state level. Initially, when ADR conducted standard statistical

analyses commonly used in previous research on teen employment since the mid-1990s, they obtained results similar to previous studies, indicating that a 10-percent increase in MW leads to a slight reduction of slightly over 1 percent in teen employment. However, by following DLR's approach and accounting for different regional trends, the estimated employment effects of MW vanished and turned marginally positive, although not statistically significantly different from zero. ADR also investigated whether the impact of MW is greater during economic downturns and found no evidence to suggest that the effects differ significantly between periods of high and low overall unemployment rates.

Hirsch, Kaufman, and Zelenska (2011), referred to as HKZ, contributed several contributions to MW analysis. They conducted a study on the impact of the 2007-2009 increases in the federal MW on a sample of eighty-one fast-food restaurants in Georgia and Alabama. Although MW increase was theoretically the same for all the restaurants, the actual impact varied due to differences in pay among the restaurants. HKZ collected two types of data for their study. The first type was electronic payroll records obtained from the three owners of the eighty-one establishments. These records covered a period of three years from January 2007 to December 2009, which encompassed the increases in the federal MW in July 2007, July 2008, and July 2009. By analyzing these data, the researchers were able to compare changes in wages and employment before and after MW increases at the restaurants. If MW had a negative impact on employment, they would expect to see larger wage increases at restaurants with lower wages, accompanied

by greater declines in employment. However, their findings were consistent with other recent studies, showing that the measured impact on employment varied across establishments but was not statistically significant. Similarly, there was no significant negative effect on employee hours, even when examined over the three-year period.

HKZ also obtained data by conducting interviews with managers and employees, utilizing a survey specifically designed to explore different ways in which businesses adjust to MW, aside from altering employment or hours. The survey examined various channels of adjustment, such as price increases, modifications to the internal wage structure (including slower wage growth for higher-paid employees), decreases in staff turnover, improvements in operational and human resource efficiencies, reductions in non-labor expenses, changes in customer service, and impacts on profits.

Moreover, the main contribution of HKZ's research is to redirect the discussion towards understanding why it has been challenging to determine the labor market effects of MW, despite decades of research. The conventional competitive model provides predictions regarding the impact of MW on employment: if MW is binding, it will result in some low-wage workers losing their jobs and will undeniably lead to a decrease in overall employment. However, despite this prediction, the majority of the most reliable statistical evidence on the employment effects of MW consistently indicates minimal or negligible impacts on employment. HKZ proposed "channels of adjustment" framework to explain this conflict. HKZ examine the potential avenues of adjustment highlighted by

three distinct theoretical frameworks for understanding MW: the standard competitive model, the "institutional" model, and the dynamic "monopsony" model.

The competitive model primarily focuses on adjustment through reductions in employment or hours. However, this model acknowledges the possibility of alternative channels, such as increased prices for consumers, reductions in non-wage benefits like health insurance and retirement plans, decreased investment in employee training, and changes in the composition of the workforce. The presence of these and other potential channels of adjustment implies that MWmay have minimal or no impact on employment, even within the framework of a standard competitive labor market perspective (Hirsch, Kaufman, and Zelenska, 2011).

Even in a competitive framework, employers might respond to MW increase by reducing the hours of their workers instead of reducing the total number of workers on their payroll. If firms were to solely adjust by cutting hours, MW increase could still improve the living standard of MW workers, even in a competitive labor market model. For instance, if MW increased wages by 20 percent and lowered the number of hours worked by 10 percent (with a labor demand elasticity of -0.5), a part-time worker who previously worked 20 hours per week would experience a 10-percent reduction in hours to 18 hours per week but would be paid 20 percent more for each of these 18 hours, resulting in an 8 percent net increase in weekly pay. Even if the reduction in hours was so significant that it precisely balanced out the increase in the hourly wage (with a labor

demand elasticity of -1.0), minimum wage workers would still be better off since they would earn the same as before but work fewer hours per week to achieve their previous weekly wage. Only if the reduction in hours exceeded the increase in wages would workers potentially experience a decline in their standard of living (Michl, 2000)

The institutional model, according to HKZ, rejects the notion of a clearly defined downward sloping labor demand curve and instead views labor markets as imperfectly competitive, socially embedded, and prone to excess supply. This model considers technological and psycho-social factors as determinants of cost and productivity within firms. Additionally, the institutional approach allows for additional channels of adjustment, with productivity being a crucial factor. Employers may respond to a MW increase by exerting greater managerial effort to enhance productivity through various means such as work reorganization, higher performance standards, or increased work intensity. In contrast to the competitive model, the institutional framework assumes that firms often operate below peak efficiency, and a higher MW provides incentives for employers to adopt additional productivity-improving practices. Additionally, a higher MW can also boost productivity through "efficiency wage" effects, where higher wages motivate workers to work harder to retain their jobs or in response to the increased compensation. Furthermore, the institutional model suggests that a higher MW, by increasing the spending power of low-wage workers, can act as an economic stimulus, stimulating greater demand for firms' output and partially offsetting the rise in wage

costs. Considering these alternative channels of adjustment, the institutional model proposes that MW may have little to no significant negative impact on employment, and in some cases, it may even have a small positive effect, particularly in the short run.

The dynamic monopsony model, presents a third theoretical approach to the labor market, introducing additional channels of adjustment. The primary distinction between the monopsony model and the standard competitive model relates to the challenges employers have in attracting and retaining employees. Employers can hire as many workers as they like under the competitive model by paying the going rate in the market. If a worker quits, employers can quickly replace them with another worker who is just as productive but makes the same salary. In contrast, the dynamic monopsony model imposes actual costs on employers—even those in low-wage labor markets—when they hire new employees. These expenses result from the labor market's unavoidable frictions. Employees must restrict their job searches to positions that meet their geographic, transportation, and other requirements in order to avoid incurring additional costs (such as time, effort, and money).

These frictions appear to be biased against low-wage employers at first because they need to offer higher wages to draw in new employees. Though, low-wage employees are significantly disadvantaged in comparison to their employers because of frictions. Employers are forced to pay more than the going rate in order to fill positions faster (or to wait until the position is filled at the going rate) because jobless workers face obstacles in

finding suitable employment, including those related to transportation, scheduling, information, finances, and other factors. Employers that pay low wages are well-positioned to profit from these challenges. In markets with dynamic monopsony, employers can pay their current employees less than their "marginal product," just like in the classic monopsony model.

Employers under the monopsony model are unlikely to willingly pay higher wages to fill open positions because doing so would force them to increase the pay of their current employees to compensate for the salary of their most recent hire. Because of this, employers in monopolistic settings typically run their businesses with open positions rather than increasing wages across the board. In this situation, increasing MW has the potential to create jobs by bringing current workers' wages up to a "competitive" level (i.e., no jobs are lost because workers were earning less than their "marginal product") and by filling open positions, which creates jobs overall (Hirsch, Kaufman, and Zelenska, 2011).

Building upon the analysis of empirical economic research on MW, particularly focusing on the contributions and criticisms of prominent scholars like CK, it becomes evident that the debate in this area will persist and may not be definitively resolved. While the work of researchers like CK has significantly advanced our understanding of the effect of MW policies, criticisms and limitations continue to be identified, casting doubt on the validity of certain findings. The evolving nature of economic systems,

coupled with the complexities of human behavior and market dynamics, ensure that new challenges and complexities will continue to surface, perpetuating the ongoing debate and necessitating further investigation and refinement. Embracing this inherent uncertainty and remaining open to diverse perspectives will be essential in advancing empirical economic research and fostering a more nuanced understanding of the intricate relationships within the realm of MW.

Chapter Five: Conclusion

The ongoing debate surrounding MW and the disagreements among economists regarding its effectiveness shed the light on two critical economic affairs.

First, under mainstream economic discipline where market deregulation is emphasized, the primary motivation for rational agents is profit maximization, which can create a contradiction when it comes to ensuring workers receive their deserved compensation. Employers, who focus on maximizing profits, may be hesitant to sacrifice their profit margins to provide fair wages to workers. While there may be situations where employers choose to pay fair wages to attract and retain skilled employees, in low skilled markets fair wages may not always be prioritized voluntarily without regulations.

Regulations such as setting fair wages and unions not only solve the contradiction arises from the inherent tension between the pursuit of financial gains and the ethical responsibility to compensate workers appropriately, but they also provide multiple economic benefits. Regulating the labor market through MW implementation can empower workers and help address power imbalances. By setting a MW, the government establishes a baseline level of compensation that employers must adhere to, ensuring that workers receive a fair and livable wage. This empowers workers by providing them with a level of economic security and stability. Without regulation, employers have the upper hand in negotiations, often being able to dictate wages and working conditions. The significance of government intervenes is to level the playing field, give workers more

bargaining power, and reduce the potential for exploitation. Furthermore, MW helps to reduce income inequality. It ensures that even the lowest-paid workers receive a decent wage, reducing the wealth gap and promoting a more equitable distribution of income, saving middle class from shrinking, and helping lower class to moving up.

Secondly and most importantly, MW debate has brooked out the revolution against traditional economic models which fail not only to reflect human nature that is fundamental pillar in any economic transaction, but also to satisfy economic objectives that is human satisfaction. This revolution calls for a more holistic approach to economics, one that considers the intrinsic value of human beings and seeks to create a more equitable and fulfilling economic system. By addressing the limitations of traditional models, MW debate is driving a shift towards a more human-centered approach to economics.

MW debate has promoted a critical reevaluation of the method of economic research design. It has played a role in leading a divorce from depending only on a theatrical approach to towards adopting an evidence-based approach that reflects reality. In the past, economic analysis and policymaking often relied heavily on theoretical models and assumptions that may not accurately reflect the complexities of the real world. The divergent views and ongoing discussions within the field have highlighted the limitations of solely relying on one economic school of thought in shaping policy decisions and understanding complex socio-economic phenomena. The contentious nature of MW

debate underscores the need for a more interdisciplinary and holistic approach to economic research. By considering insights from various economic schools, such as neoclassical, Keynesian, institutional, and behavioral economics, researchers can develop a more understanding of the multifaceted effects of MW policies on labor markets, income distribution, and economic growth.

Moving forward, it is imperative to embrace methodological pluralism and draw upon a diverse range of theoretical frameworks and empirical methodologies in economic research. By avoiding overreliance on any single economic school, policy makers can foster a more inclusive and comprehensive analysis of economic issues, leading to more informed policy decisions and a deeper understanding of the complexities inherent in real-world economic phenomena.

In essence, the debate surrounding MW economics serves as a compelling reminder of the importance of intellectual diversity and methodological flexibility in economic research. Embracing a pluralistic approach not only enriches the understanding of economic dynamics, but it also enhances the robustness and relevance of economic analysis in addressing contemporary challenges and shaping a more equitable and sustainable economic future.

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