

# **Evaluating the Social Justice Implications of the New Theory of Dynamic Monopsony**

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*This paper describes current theoretical developments in labor economics that are likely to change how we understand the compensation of employees in a wage economy. The new theory of dynamic monopsony theorizes that imperfect labor markets where employees do not get paid their full marginal revenue product are the norm, rather than the exception. Recent empirical work published in a highly ranked, peer-reviewed labor-economics journal provided empirical support for the model. I discuss the implications of these developments in labor economics on the justice of wages within the framework provided by Catholic Social Teaching.*

Since the 1940s, neoclassical wage theory has dominated theoretical discussions of wage determination.<sup>1</sup> From a scientific point of view, there are a number of well-documented anomalies that the neoclassical theory cannot explain. Although there have been several approaches (e.g., efficiency wages, hedonic wages, etc.) to modify neoclassical wage theory to explain one or another of these anomalies, none of them has displaced neoclassical wage theory as the dominant model for the employer-worker relationship. In 2010, *The Journal of Labor Economics*, one of the leading journals in the field, dedicated its April issue to the new dynamic theory of monopsony. This new theory of monopsony encompasses current neoclassical theory as a particular case and has been able to explain a large number of important anomalies. Because the adoption of a new wage theory will have important normative implications, it is important to analyze its normative and practical implications in light of a comprehensive ethical framework, such as that provided by Catholic social teaching (CST).

## **DEFINITION OF TERMS**

*Monopsony* is defined as an exchange situation in which there is only one buyer.<sup>2</sup> In the labor context, this implies only one employer. Oligopsony in the labor market is defined as a situation where there are only a few employers for any given category of workers, each possessing sufficient market power to set wages. In practice, monopsony is used to mean monopsonistic competition, a situation where several employers have market

power by offering different types of employment. This usage of *monopsony* is very close to the traditional meaning of *oligopsony*. Although this paper focuses on labor issues, there is literature on monopsony in other contexts, including trade and the markets for raw materials and agricultural products.<sup>3</sup>

## **WHY PAY ANY ATTENTION TO DEVELOPMENTS IN WAGE THEORY?**

In capitalistic economies, the quality of wages is a central indicator of how well the economy is functioning (Pope John Paul II, *Laborem Exercens*, no. 19). Although modern economists attempt to create positive, value-free theories of wage determination, once adopted, these theories are used for normative purposes in discussions of public policy. As Milton Friedman stated in his famous *Essays in Positive Economics*, most policy makers generally agree on policy goals (e.g., economic growth, lower unemployment, low inflation, and better living conditions for vulnerable populations), thus policy advocacy often depends critically on whether the theory one adopts predicts a link between the proposed action and the intended policy goals.<sup>4</sup> Although philosophical questioning and empirical research has shown that the connection between normative and positive economics is more complex than Friedman believed,<sup>5</sup> yet it remains accurate to state that policy advocates use dominant wage theories to understand social reality, and to make their case to stakeholders that their proposed action will lead to desirable policy goals. It is in this sense that the term “normative implications of theory” should be understood throughout this article.

## **WAGE THEORIES BEFORE THE NEOCLASSICAL THEORY**

Initially, economists were interested in what determined the societal level of wages for the common worker. Ricardo argued that real wages would always tend to provide bare subsistence because any temporary increase in wages would result in an increase in the population of workers, which over time would depress wages down to the subsistence level.<sup>6</sup> This theory, termed the “iron law of wages” by Lassalle, was predicated on Malthus’ population theory. Normatively, this theory resulted in arguments to avoid all direct assistance to workers, because any such assistance was believed to cause only temporary well-being until further population growth eliminated such short-term gains. Consequently, population control was thought to be the *only* means of increasing the welfare of the lower classes. The eugenic normative implications of the theory and its negative impact on

humanity followed.<sup>7</sup> The theory was unable to explain contemporary increases in real wages in industrialized countries with growing populations.

In contrast with the iron law of wages, Marx explained that workers were paid subsistence level wages because capitalists used their strong bargaining position to extract surplus value precisely by not paying the workers proportionally to what they produced.<sup>8</sup> Marx believed that labor was the sole cause of wealth (the *labor theory of value*), and that change was only possible by violent class warfare and revolution. This theory, known as the *exploitation theory of wages*, had well known normative implications resulting in class warfare, revolution, and communism. Contrary to theory, communism impoverished workers.<sup>9</sup>

Normatively, both theories reinforced each other, creating serious threats to the common good. The lack of assistance and aid to workers in poverty promoted by Ricardo's theory only compounded the need for revolution fueled by Marx's theory. The result was a sharp division of classes, the real threat of revolution, large inequalities in income, political destabilization and much misery, as *Rerum Novarum* explicitly noted in 1891. Meanwhile, pragmatic statesmen gave worker unions legitimate status. Leo XIII and the subsequent Catholic intellectual tradition strongly supported responsible non-Marxist worker associations aimed at the common good.<sup>10</sup>

With the advent of Marshallian economics, economists shifted their interest from macroeconomic wage theories to the determination of wages at the firm level. The most important contribution of this new approach was the development of neoclassical wage theory, which has become the most influential firm-level wage theory.

## NEOCLASSICAL WAGE THEORY AND ITS PREDICTIONS

Neoclassical wage theory is integrated into the wider neoclassical free-market framework in products and resources. The theory assumes frictionless markets with perfect information and no transaction costs. It states that faced with competitive markets in products and labor, profit maximizing firms will have no choice but to pay wages that equal the worker's marginal revenue product. The marginal revenue product is defined as the revenue brought forth by the sale of the portion of the product the worker has contributed to making. This theory is much liked because of its symmetry: The labor market is treated as any other resource market in an analogous manner to product markets. In the theory, labor is a commodity,<sup>11</sup> wages are just another price, and all prices are set at the marginal revenue products by impersonal market forces. The firm pays that wage because it cannot pay any other. Employers and employees are wage-takers.

It is this core prediction that wages are set by impersonal market forces that removes the wage decision from considerations of justice. Because the theory predicts that employers can only pay wages equal to marginal revenue products, employers have no choice and bear no responsibility. In the view of the theory, those who advocate higher wages are advocating for businesses to become uncompetitive by increasing their labor costs without a concomitant increase in productivity. Because any governmental intervention (e.g., minimum wage) in the labor market mechanisms will distort the equality between wages and marginal revenue products, policy advocates often use the neoclassical theory to argue for non-interventionist labor policies. In the neoclassical world, only the worker is responsible for his or her wages by taking responsibility to raise his or her marginal revenue product. This leads to normative prescriptions to invest in oneself and work hard.

The modern monopsony theory undermines this central prediction of equality between wages and marginal revenue products, while replacing the whole of neoclassical wage theory by positing that the labor markets are typically noncompetitive. The equality of wages with marginal revenue product is the central focus of this article because of this important difference between the positive predictions of the theories. While we are aware that there have been many newer models that modify neoclassical wage theory to fit a particular set of empirical facts (e.g., human capital, efficiency wages, etc.), these approaches have been largely unsuccessful in replacing neoclassical wage theory and remain *ad hoc* approaches. These modifications are not the focus of this article.

## **MARGINAL REVENUE PRODUCT NOT DIRECTLY OBSERVABLE**

The fundamental prediction of neoclassical wage theory is that wages equal marginal revenue products. Under most normal circumstances, this fundamental prediction is not empirically testable. This is because it is extremely difficult to devise a marginal revenue product measure that separates the part of production caused by labor alone. This phenomenon was well understood from the very beginning of the development of the theory, as evidenced by John Bates Clark, who illustrated it with the simplest form of economic production, a single man fishing:

Let a man fish from a dugout, with the simplest line and hook he can make. The fish that he will bring to the shore are the product of labor and capital. Effort aided by instruments has secured them. How much of the catch is due to the man and how much

to the canoe and the fishing tackle? Not for his life can the man himself tell. Can he put the fish into two piles, and say, “This pile is due to my effort only, and that pile to my equipment?” Every single fish is a joint product—indeed, every fin or scale of the fish is so; and the difficulty is that it is impossible to divide a single one of them into fractions due to the producing agencies.<sup>12</sup>

If this is the case in fishing, how can marginal revenue products be measured in real life to make sure everyone is paid their fair share? For almost all occupations, the fundamental prediction of neoclassical wage theory is not a directly testable hypothesis. A review of the literature found no estimates of marginal revenue products except in the sports literature (see below). Thus, for the vast majority of occupations, there has been no significant progress in measuring marginal revenue products since the theory was formulated more than a century ago. In some sports, however, performance of a subset of employees (the players) is both public and largely unrelated to the performance of co-workers, thus making estimation of marginal revenue product possible in principle. Even in these occupations, as the next subsection details, measuring marginal revenue product is not without serious difficulties.

### *The Interesting Case of Baseball*

A review of the literature (EconLit database) discovered only one field (baseball player performance) in which there were recurrent, systematic attempts to measure marginal revenue products. In baseball, a worker’s performance is both readily observable and largely independent from the rest of the team, thus it provides a natural field to measure marginal revenue products. Initially, estimates of marginal revenue product were calculated by the Scully method.<sup>13</sup> This method estimates a player’s marginal revenue directly from the player’s performance, the team results and the associated revenue.<sup>14</sup> Researchers concluded that players were paid significantly lower than their marginal revenue products. This evidence did not contradict the neoclassical theory because baseball labor markets in the 1970s were not free markets. In another example of how quickly positive wage theory becomes normative, research evidence was used in arguments for free agency. When free agency arrived, baseball players’ salaries increased dramatically, thus lending support for the claim of previous exploitation.

Neoclassical theory predicts that marginal revenue product is equal to the wages under free agency. When estimates of the marginal revenue product of baseball players under free agency still showed wages below

marginal revenue products, this evidence was not interpreted as a falsification of the neoclassical prediction. Rather, after demonstrating that Scully estimates were quite sensitive to minor changes in specification,<sup>15</sup> a new method of estimating marginal revenue product was proposed. This new method, called the free-market approach, assumed neoclassical theory was correct and measured marginal revenue product in a manner that aligned them with current wages.<sup>16</sup> In the words of the author of that study, “our method is based on the intuitive notion that the intense bidding process that determines free agent salaries should align wages to marginal revenue products.”<sup>17</sup> Consequently such estimates cannot ever falsify the neoclassical theory. This process is a textbook example of the difficulty economists have recognizing empirical anomalies to the established neoclassical scientific paradigms, a phenomenon quite common in the history of science.<sup>18</sup>

### **KNOWN ANOMALIES TO THE NEOCLASSICAL WAGE THEORY**

Neoclassical theory has been quite successful in explaining how wages respond to external shocks in demand and supply, the bread and butter of undergraduate exercises with the model. However, over time economists have documented many anomalies that do not fit with neoclassical wage theory. The theory predicts that similar employees would receive the same wage, which is contradicted by good evidence on wage dispersion<sup>19</sup> and the need for laws to mandate equal pay for equal work. The theory predicts that gaining and losing jobs would be a matter of little importance, but evidence shows that people consider getting and losing jobs important life events.<sup>20</sup> The theory predicts that firms would not pay for general training of workers, because that would only allow other employers to benefit from their largesse, yet firms often provide general training. The theory predicts that wages would have no reason to rise in a concave manner with age, but younger workers experience a faster wage growth than experienced workers. The theory predicts that wages would be independent of employer size, but economists have repeatedly reported that larger firms pay better wages. The theory predicts employers and employees would never bargain on the terms of contract since both are wage takers, yet we observe lengthy and costly interviewing processes. The theory predicts that in response to a decrease of wages, all employees would quit instantaneously; we simply do not observe those behaviors. The theory predicts nominal wages would rise and fall quite normally, but falling nominal wages are rare. Indeed, the theory predicts that the wages would fluctuate just as fast, as often, and as unpredictably as the prices of actively traded commodities in the stock market, but wages simply do not behave in this manner.

The theory predicts no gender wage gaps, but gender wage gaps remain. In sum, many important wage-related phenomena are unexplainable by neoclassical theory.<sup>21</sup>

As mentioned before, economists have devised *ad hoc* models to account for one or two of the anomalies. Efficiency wage theory may explain why larger firms pay better. Hedonic wages may explain some wage dispersion. Human capital theories explain growth of wages over time. Yet, these theories often create predictions that result in additional anomalies. For example, human capital add-ons to neoclassical theory predicted firms would never offer general training. In sum, the effort has been unsatisfactory from a scientific point of view, generating almost as many models as phenomena needing explanation. What is needed is a theory that can do what the neoclassical theory does well, and explain most or all of these anomalies better. Dynamic monopsony theory claims to have done just that.

### TWO THEORIES OF MONOPSONY

#### *Classical Theory of Monopsony*

The classical theory of monopsony was developed in the 1930s.<sup>22</sup> The classical model establishes that profit-maximizing firms would use their power to set wages to pay workers less than their marginal revenue product. Pigou proposed an exploitation measure as the amount of marginal revenue product not paid to the worker divided by the wage. In this metric, zero indicates no exploitation and any positive measure indicates both monopsony power and some level of worker exploitation. This measure has been shown to be the reciprocal of the wage elasticity of labor supply faced by the firm. Under perfect competition, the elasticity of supply faced by the firm is infinite (a horizontal line in standard diagrams), while a monopsonist faces an upward sloping labor supply curve. It is this prediction of monopsony theory, not direct measures of marginal revenue products, that has been used to determine whether labor markets are competitive. Because the classical monopsony model described a world with only one employer, it had very little applicability, and the model has not been used much in labor economics, deserving only brief mention in the textbooks.<sup>23</sup>

#### *Modern Dynamic Monopsony Theory*

The dynamic theory of modern monopsony was presented in 2003 by Alan Manning in a scholarly book titled *Monopsony in Motion*,<sup>24</sup> then restated in summary form as an entry in the *New Palgrave Dictionary of Economics*<sup>25</sup> and as a chapter for *the Handbook of Labor Economics*.<sup>26</sup> The modern theory was the focus of the April 2010 issue of *The Journal of*

*Labor Economics*,<sup>27</sup> a leading peer-reviewed scholarly journal. These are all indicators that this theory is being considered seriously at the highest levels of the profession.

The dynamic models of monopsony are truly oligopsony models because they result in firms having wage setting power in the presence of competitors,<sup>28</sup> due to imperfect information or high levels of differentiation among jobs. The basic foundation for the dynamic theory of monopsony is the fact that the firm can set wages, and thus manage the flows of workers who leave the firm or are hired. In steady state, both flows are equalized.

The dynamic theory of monopsony is different in its assumptions and results from neoclassical wage theory. First, the model makes few and plausible assumptions at the level of the firm. It assumes that workers leave firms at a rate that is a function of the wage, and that the firm is able to recruit workers at a rate related to the wage level. There is no formal profit maximization, no discussion of other factors of production, and indeed, other than the fact that employees are leaving and entering solely as a function of the wage, there is no implication that labor is a commodity that is sold and bought.<sup>29</sup> Workers are simply attracted by high wages and repelled by low wages. It is only because of pervasive neoclassical thinking that we immediately associate wages with prices, but in this model wages are simply a monetary incentive to join or leave a firm.

The theory predicts that wages will be lower than marginal revenue products if non-wage labor costs increase with employment. Non-wage labor costs include coordinating costs, managing costs, equipment costs, training costs, general infrastructure costs (e.g., office space) and the like. Therefore this condition is readily verified in reality.

Importantly, the theory does not negate the results of neoclassical wage theory. Perfect competition is a very special and unlikely case of dynamic monopsony. Only when there is a very high arrival rate of job offers (i.e., other employers actively attempting to hire each worker in the firm) does perfect competition obtain. In Manning's words:

As the result implies that perfect competition is a special (but extreme) case of our labor market, conclusions reached using a competitive analysis are not inevitably wrong; they will be correct or nearly correct if labor market frictions are small. But it is important to correct the impression that those who believe employers have some market power over workers are extremists—the reality is that those who believe in perfect competition are the fanatics [sic] as perfect competition is one point at the



edge of the parameter space and every other point in the parameter space gives employers some monopsony power.<sup>30</sup>

The modern monopsony theory is able to explain a number of anomalies including (a) the existence of wage dispersion, (b) why earnings grow faster at the beginning of a person's career, (c) the existence of substantial earning losses by displaced workers, (d) the absence of wage differentials, (e) why employers provide general training to employees, (f) the employer size wage effect, (g) why non-union employers pay better wages in labor markets with strong union presence, (h) the controversial evidence on lack of unemployment losses associated with the minimum wage in the U.K., (i) the existence and persistence of a gender pay gap, and (k) why people consider obtaining and losing jobs an important life event.<sup>31</sup>

### **MEASURING THE PRIMARY INDICATOR OF MONOPSONY: THE ELASTICITY OF SUPPLY**

Table 1 shows the relationship between elasticity of labor supply, the pigovian exploitation index, and the percentage of marginal revenue product paid as a wage. Under perfect competition, the elasticity is infinite, the exploitation is zero, and the wage is 100 percent of the marginal revenue product. In addition to the traditional ways of measuring the elasticity of labor supply faced by the firm, the dynamic theory of monopsony implies that the elasticity of labor supply to the firm is twice the elasticity of the quit rate with respect to wage, a much easier construct to measure.<sup>32</sup> Because the dynamic theory of monopsony contains perfect competition neoclassical wage theory as a particular case, this new approach of measuring elasticity can be used to scientifically test if perfectly competitive conditions are present.

In 2003, using some of the largest and most commonly used secondary datasets available in the US and Britain (the Panel of Income Dynamics (US), The National Longitudinal Survey of Youth (US), the British Household Panel Survey, and the Labour Force Survey (UK)), Manning estimated that the elasticities of labor supply to firms were very small (around 1.0), thus empirically rejecting the hypothesis that labor markets are competitive and implying that firms have substantial monopsony power.<sup>33</sup> Based on these estimates, workers in the US and Britain receive around 50 percent of their marginal revenue products. This is substantial exploitation in the traditional pigovian formulation.

**Table 1. Relationship between wage elasticity of labor supply, Pigovian exploitation and percentage of the marginal revenue product paid as wage.**

Elasticity of Labor Supply faced by the Firm	Pigovian Exploitation	Percentage of MRP paid as Wage
Infinite	0.00	100.00%*
4	0.25	80.00%
3	0.34	75.00%
2	0.50	66.67%
1	1.00	50.00%
0.5	2.00	33.34%
0.1	10.00	9.09%

Note: \* denotes perfect competition. MRP = marginal revenue product

The 2010 April issue of *The Journal of Labor Economics* was highly influential, because in it, international researchers estimated elasticities of labor supply facing individual firms with a variety of methods and datasets, for a variety of types of employment and occupations, in various countries. Some studied traditional markets thought to be monopsonistic (e.g., nurses) and obtained very low elasticities (around 0.1) indicating severe exploitation (only 9 percent of MRP paid as wages).<sup>34</sup> Some studied large datasets that linked employees to firms across many industries. These estimates (2–4 range) indicated that workers were paid between 66 percent and 80 percent or their marginal revenue products.<sup>35</sup> Some studied in detail a single firm, obtaining a comparable estimate.<sup>36</sup> Others estimated the elasticity of labor supply for a single occupation, teachers.<sup>37</sup> In all cases, estimates were in the 0 to 4 range, implying substantial monopsony power and wages substantially lower than the workers’ marginal revenue products. While this evidence does not prove that all workers are underpaid, it established that a substantial percentage of wage workers do not receive their marginal revenue products, because markets are not frictionless. In sum, Ashenfelter and his colleagues concluded that “[t]he papers in this issue provide remarkable evidence that labor markets are far from competitive. The evidence comes from a variety of countries and labor markets using a variety of econometric techniques and models.”<sup>38</sup>

### A CST-BASED NORMATIVE EVALUATION

This section of the paper first reviews the practical character of economics and how wage theories are used for normative purposes, then evaluates the new theory using the CST framework.

*On The Practical Character of Economics, Including Wage Theory*

Heinrich Pesch, S.J., is entirely correct when asserting that economics is a practical science,<sup>39</sup> meaning a science that is used to determine how to structure national economies and orient them towards the common good and their objective purpose (the satisfaction of material needs and wants). This is most evident in the way wage theories have been used for normative purposes. As mentioned before, the subsistence theory of wages was used to create a minimalist conception of the state that failed to aid the workers living on the margin of subsistence and that instead promoted population control. Simultaneously, Marx's wage theory of exploitation stated that the only resolution to the problem of employers not paying the workers their contribution to production was violent class warfare and social revolution. Normatively, neoclassical wage theory has resulted in conceptualizing policies designed to redistribute income as unjust policies, precisely because the theory posits that each worker is paid justly his or her marginal revenue product. In this theory, unionization is nothing more than collective action to obtain wages higher than productivity, a form of employer exploitation (societal exploitation in the case of public unions) that endangers businesses' competitive position and future employment opportunities. Thus, the legitimacy of unions is often questioned. Finally, economic policy concentrates on attracting business by providing tax breaks and other corporate welfare because doing so will result in jobs that will pay justly. With increased globalization, this approach has resulted in a race to the bottom where countries compete to exempt business from taxes, environmental requirements, and labor requirements. Not surprisingly, the economy has been tending towards reduced state intervention; unionization has decreased substantially; businesses seek the country with most favorable conditions (lower taxes and wages, fewer regulations); and employers negotiate with individual workers one-on-one (as a result, for example, of right to work legislation). This is the neoclassical path to maximum welfare. Worldwide economic policy is made based on this neoclassical model recipe for maximum growth. Hence, theory drives policy, as Pesch recognized almost one hundred years ago.

Wage theories are not anomalous in shaping public economic policy. In 2000, Alan Blinder, a professor of economics at Princeton, reflected on the character of economics in the context of the economic boom of the 1990s. He argued persuasively that after decades of neoclassical economics, the world economy had come to resemble the neoclassical model much more than when the theory was first formulated. In his argument, Blinder observed how we are much more likely to treat workers as com-

modities, treat the wage as simply a price, privatize services previously operated by public authorities, concentrate almost exclusively on profit maximization, directly use economic theory in the pricing of complex securities, promote market mechanisms to regulate the environment, and many other changes.<sup>40</sup>

Thus, he independently rediscovered the Peschian conclusion, namely that theory is used to shape the economy:

However, I do perceive a general pattern, and it is an ironic one. One might have assumed that economists would have to adjust their models to fit reality, rather than the other way around. That's certainly the way it works in the natural sciences. Germs did not change their behavior to accommodate Pasteur's theory, nor was Mercury's orbit perturbed so that Einstein wouldn't be. But economists appear to have bent reality (at least somewhat) to fit their models. That's quite a feat.<sup>41</sup>

In addition to shaping public economic policy, O'Boyle has noted that it was advocacy by neoclassical theorists, in particular Milton Friedman, that resulted in changes to corporate codes of ethics.<sup>42</sup> Thus, neoclassical theory impacts the economy on both public and private fronts. Importantly, the normative character of economics shapes consideration of justice for public economic policy and the economic behavior of private actors. Thus, any new wage theory must be assessed within a comprehensive ethical system capable of ordering economics to its objective purpose and the common good.

### *An Evaluation of the Normative Impact of Dynamic Monopsony in Light of CST*

I use Catholic Social Teaching here, because it is the most sophisticated and internally coherent system of ethics to evaluate economies and societies. CST is part of an ancient tradition with roots in classical philosophy and the bible. Since 1891, CST has been developed directly by the popes in a series of encyclical letters that cover modern social, ethical, and scientific questions. While other ethical traditions concentrate on one or another relevant economic aspects, CST is integrated with a well-grounded vision of the dignity of the human person, the purpose of human life, the importance of families and civil society, the role of the state, and the functioning of the economy.<sup>43</sup>

From an economic point of view, wage theories are central to the functioning of the economy for two reasons. First, the marginal revenue products of workers' efforts are impossible to observe, and thus differences of

opinion about the justice of wages are always present. Economists have been unable to persuade the general public that impersonal market forces set their individual wages exactly at their marginal productivity levels. Sometimes these differences of opinion about the justice of wages are quiet and beneath the surface, but when economic crises occur, these differences of opinion always arise in the form of new social movements. Second, in current economies, wages are the primary form of subsistence for the majority of the population. Thus, they are naturally central for the objective purpose of the economy, the satisfaction of material needs and wants.<sup>44</sup>

What can one expect from the new dynamic monopsony theory with regards to its practical and normative character? First, this theory shows that most workers are paid compensation lower than their productivity. This result stems mostly from the fact that labor is not a commodity. Workers cannot easily move locations in pursuit of the best job (the labor market is not frictionless) precisely because they have personal and family obligations of various kinds. Although the advent of remote working via the web may reduce frictions, the notion that employers are receiving rents from workers<sup>45</sup> will be seen, no doubt, as fundamentally unfair by the general public. Importantly, dynamic monopsony removes the neoclassical logic that employers do not set wages. This is consistent with CST's call to return economics to the realm of moral action.<sup>46</sup>

Second, these theories evaluate public policies such as the minimum wage quite differently, because they do not predict that the policy will increase unemployment for small changes in the wage.<sup>47</sup> Therefore, one can expect a more interventionist government role in wage matters, if monopsonistic theory becomes a dominant paradigm. Given the economic crises, this theory will result in intellectual support for new social labor movements and for the claims that either fundamental wage reform or redistributive economic policies have a strong basis in justice. This is also generally consistent with CST.<sup>48</sup>

Third, in a world where many employers are not paying the marginal revenue product, unions will no longer be seen as coalitions to exploit employers by artificially raising the wage, but as needed collective action to protect workers.<sup>49</sup> Thus, dynamic monopsony theories will legitimize unions.<sup>50</sup> Again, this is a development welcome by CST, provided that unions keep to the requirements of the common good.<sup>51</sup>

Fourth, perhaps most important in the long run, dynamic monopsony theory will weaken the conceptualization of labor solely as a commodity. Because the frictions in the labor market it accounts for are precisely stemming from obligations of workers to their families and society (which

often appear as unwillingness to move to seek better wages), the social conversation may be refocused towards how economic institutions can result in families making a decent and prosperous living while not neglecting personal and family obligations. This is a welcome development from the CST perspective<sup>52</sup> since conversations on how to make the economy function well for all people is the objective purpose of the economy.<sup>53</sup>

In sum, dynamic monopsonistic theory provides a more suitable lens for discussion of justice in wages than neoclassical wage theory. This conclusion is predicated mostly on the fact that neoclassical wage theory hid the morality of the wage-setting actions behind the excuse of impersonal market forces, a finding clearly incompatible with the CST framework and everyday experience. Dynamic monopsony returns the discussion to the realm of morality.

From a Catholic perspective, understanding developments in labor economics should inform our evaluation of the justice of wages, in our region of the country, and in societies around the world. Contemplating the principles of just wages outlined in the Church's doctrine in light of these developments reveals that it is important to carry out further empirical research on these matters that have great practical implications to people of all faiths, particularly those with least material means. We also have to use current research to offer concrete solutions that bring greater justice to workers in labor markets characterized by high levels of monopsony power.

### Notes

1. The author thanks *CSSR* editor Kevin Schmiesing and the anonymous reviewers for assistance with this manuscript.

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