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## **How a Minimum Wage Can Improve Efficiency Even in Competitive Labor Markets: The Webbs and the Social Costs of Labor**

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Labor Markets: The Webbs and the Social Cost of Labor**

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**Abstract**

Neoclassical economists, using a competitive demand/supply model of labor markets, typically conclude a legislated minimum wage is harmful to economic efficiency and social welfare. The major theoretical counter-attack by proponents of a minimum wage is to argue that low-wage labor markets are better modeled as monopsonistic. This paper develops and formalizes a second theoretical defense for a legal minimum wage law. This defense rests on the concept of the *social cost of labor*, as originally popularized by Sidney and Beatrice Webb and then further developed by American institutional economists. This analysis is unique in that it continues to use the competitive demand/supply model but nonetheless demonstrates that a legislated minimum wage often simultaneously increases *both* economic efficiency and fairness, unlike the neoclassical prediction.

1. Introduction

The founders of the London School of Economics (LSE), Sidney and Beatrice Webb, were among the first in the academic world to make the positive case for a legal minimum wage. The main line of the argument was set out in their monumental book *Industrial Democracy* (1897) and later amplified by Sidney Webb in his article “The Economic Theory of a Legal Minimum Wage” (1912) in the *Journal of Political Economy*. The case built by the Webbs for the minimum wage, as well as for related measures such as collective bargaining, became an intellectual foundation stone for early twentieth century progressive economists and social reformers on both sides of the Atlantic, particularly Commons and the American labor institutionalists (Kaufman, 2004; Thompson, 2007). Among the latter group was Leo Wolman who wrote in his memoirs, “The labor point of view [was] first and most effectively developed by the Webbs... and

there wasn't a man in the United States – or in the world – who taught this stuff... who didn't say this" (1961: 55).

Debate on a legal minimum wage continues unabated more than a century since the Webbs wrote their book and since the first minimum wage laws were enacted in 1896 in New Zealand and Australia. One would think that the Webbs would still be routinely cited in the modern literature on the minimum wage and that their theoretical case for a legal minimum wage would serve as a well-recognized reference point for delineating the “pro” side of the issue. Surprisingly (or not surprisingly), in the last three decades their names and point of view have almost completely dropped from sight in the mainstream economics literature, as has reference to practically any of the pro-minimum wage literature written by other labor progressives of that era. This “disappearing act” coincides closely with the rise to dominance in mainstream labor economics of the neoclassical paradigm, the Chicago School version of “economic imperialism,” and the widespread use of the perfectly competitive labor market model as the base-line theory for policy evaluation (Addison and Hirsch, 1997).

As demonstrated by Stigler (1946) in his equally classic article on the minimum wage, if one starts with a model of a competitive labor market it readily appears that a minimum wage is socially harmful and a bad idea (also see Mincer, 1976; Rottenberg, 1981). If pegged above the market wage, a minimum wage law, according to this simple model, leads to fewer jobs, higher unemployment, higher prices for consumers, reduced profits for firms, lower wages in the uncovered sector, and – most critically -- a general misallocation of resources and loss of efficiency in the overall economy.

Interestingly, the Webbs (p. 655) started their positive case for a minimum wage by also using the Marshallian/Walrasian competitive model as their theoretical base line; the difference is that they then demonstrated using the social cost idea why this model gives a misleading and often incorrect prediction about the effects of a minimum wage law. This idea has retained a presence in national labor policy debates in Britain, Europe and Australasia in recent decades (e.g., Grimshaw, 2004; Buchanan, Watson, and Meagher, 2004; Craig, et. al. 1982; Deakin and Wilkinson, 2005), as well as in certain heterodox areas of economics (e.g., institutional economics, such as Prash, 2005; feminist economics, such as Powers, 1999, and Figart, Mutari, and Powers, 2002; and neo-Marxist economics, such as Barrett and McIntosh, 1980) and among modern-day proponents of a “living wage” (Pollin and Luce, 1998; Figart, 2004; Levin-Waldman, 2005). However, among mainstream labor economists, most prominently in the United States, one can scan the minimum wage (and living wage) literature and fail to find this argument anywhere presented.

My twofold purpose in this paper is, first, to put the Webb’s positive case for minimum wage legislation back on the table for renewed attention and debate and, second, to better formalize and develop the social cost idea in terms of standard economic analysis. Of chief interest, I demonstrate that the Webb’s social cost rationale for a minimum wage leads to the prediction that even in a competitive labor market -- not just a monopsonistic labor market, as examined in Card and Krueger (1995) -- a minimum wage can *increase economic efficiency*, as well as fairness. That is, rather than harm the economy a minimum wage eliminates an often large and mostly hidden social tax on

labor and stops an equally large and hidden social subsidy for capital (“corporate welfare”) and consumers.

## 2. Labor’s Inequality of Bargaining Power

The Webbs’ case for a minimum wage is built on two main pillars. The first is the doctrine of labor’s *inequality of bargaining power* (IBP). Erected on top of this is the *social cost of labor* (SCL) doctrine. I briefly describe each, going in order.

In the modern economics literature, the minimum wage debate has become framed as an issue regarding whether labor markets are best characterized as competitive or monopsonistic (Dolado, et. al. 1996; Neumark and Wascher, 2006; Metcalf, 2008). The competitive model predicts that a minimum wage destroys jobs and harms economic efficiency, while the traditional monopsony model predicts just the opposite – that is, a carefully positioned minimum wage can increase jobs and promote greater efficiency. This juxtaposition has led to a “battle of the models” in labor economics with the central issue in dispute being whether a minimum wage, or rise therein, does or does not lead to a decrease in employment (Card and Krueger, 1995; Manning, 2003). If the former, the evidence seems to favor the competitive model and the critics of a minimum wage, if the latter then the evidence seems to favor the monopsony model and the supporters of a minimum wage. Although opinions vary, my assessment is that the critics of a minimum wage occupy the scholarly high ground, partly because many economists instinctively doubt that most low-wage labor markets have a substantively important element of monopsony and partly because the large majority of published empirical studies find

evidence of a negative employment effect (Neumark and Wascher, 2006. But see Doucouliagos and Stanley, this issue).

The Webbs, the American institutionalists, and many classical and early neoclassical economists (e.g., Adam Smith, Alfred Marshall) believed that labor markets, particularly at the lower end, were dominated by employers (Kaufman, 1994). Monopsony *per se* was a real but only partial contributor, however. Also contributing were four other factors. The five together created what was universally known in the early twentieth century as the worker's "inequality of bargaining power" (Kaufman, 1989). IBP indicates that employers individually and/or as a group enjoy a power advantage in wage determination, even in what modern neoclassical economists would consider a seemingly competitive labor market situation.

The Webbs lay-out the case for labor's IBP in their classic chapter "The Higgling of the Market." In addition to monopsony, IBP also arises, they claim, from the semi-unique characteristics of labor as a tradable good. Labor, observe the Webbs, is a perishable service that must be sold each day or forever lost, while most produced goods can be staggered or inventoried. The worker, as a generalization, is thus under more pressure to sell than the employer is to buy. Likewise, bargaining power depends on which party has the resources to hold out the longest in the negotiations. Here again the average low-skilled worker is under more pressure to reach a deal since he/she typically lives from paycheck to paycheck and has small savings or other income/assets, while the company has much deeper financial reserves and less immediate need to get the job filled. The greater the worker's needs and the thinner the fall-back resources, the more desperate the person becomes for work and the lower the reservation wage -- explaining

in part the low pay and poor conditions of vulnerable groups such as unskilled single women with dependent children (Powers, 1999). The result of workers' fewer choices and resources is to shift the market labor supply curve to the right. The resulting labor market equilibrium is still *nominally* competitive, but the wage is lower than if the market were "*truly*" competitive" (equal bargaining power).

A variety of market imperfections and frictions also create an IBP for the individual worker. Discrimination, for example, narrows job opportunities for women and minority workers and creates a condition of *occupational crowding* in the low-end of the labor market. Certainly in the Webbs' era, and perhaps today, employers also had the advantage in wage determination because they could more easily use collective action. Many low-wage workers had little chance of using collective bargaining to raise wages, while firms frequently combined to "manage" competition and local wage rates through local employment bureaus, personnel associations, and industry associations (Harris, 2000). One can envision occupational crowding and the weakness of individual bargaining as again leading to a rightward shift of the labor supply curve.

A fourth factor arises from pre-market laws and institutions that undercut the worker's bargaining power. The Webbs (pp. 677-88) and the American institutionalists (Commons, 1934) observed that the legal "rules of the game" are determined in a political process that employers and the rich dominate. Not unexpectedly, they fashion the rules of the labor market to promote their interests. Examples include the legal "employment-at-will" doctrine (allowing employers to terminate workers at any moment), lack of a social safety net for workers (e.g., no unemployment insurance program), and "open border" immigration laws that flood the labor market with job



seekers. All of these factors weaken the worker's ability to bargain for a decent wage, in effect again shifting the supply curve rightward in a still seemingly competitive labor market.

The fifth factor, probably the most serious, is the presence in most years of a "reserve army" of unemployed workers. The Webbs, along with John Hobson, Commons and other economic "heretics" (later to include Keynes), denied the validity of Say's Law and the Invisible Hand theorem of neoclassical economics; that is, the propositions that a market economy is self-regulating and has a built-in tendency to operate at full-employment (Kates, 1998). Instead, they thought that a capitalist economy typically operates in a condition of excess labor supply (more job seekers than openings), particularly for the unskilled at the bottom end, and that wage reductions fail to solve the problem. This excess supply of labor in effect puts workers on the "long side" of the market and substantially undercuts their ability to bargain for decent wages and conditions. The Webbs (p. 660) state, for example, "When the unemployed are crowding round the factory gates every morning, it is plain to each man that, unless he can induce the foreman to select him rather than another, his chance of subsistence for weeks to come may be irretrievably lost. Under these circumstances bargaining, in the case of the individual isolated workmen, becomes absolutely impossible." Given a chronic shortage of jobs, workers are forced to yet again lower their reservation wage, which one might picture as another rightward shift of the labor supply curve in a low-wage labor market.

The net outcome of these five developments is to place the individual worker, unaided by a trade union or government law, on a playing field that is seriously tipped in favor of employers. The bottom-end labor market is in many situations highly

competitive – indeed, it is competitive in the classic “dog-eat-dog” way – and workers have no choice but to accept very low wages and unattractive terms and conditions of employment if they are to get and keep a job. Compensating-type wage differentials for job risks and disamenities, if they exist at all, are typically minimal.

The party who seems to most directly benefit from the extra-low wage in labor markets is employers. But employers, note the Webbs, are in many respects the agent of consumers and it is the consumers – particularly affluent consumers who have the disproportionate share of income to spend -- who also benefit from low wage labor in the form of lower prices for purchased goods and services. Consumers sit atop what the Webbs call “the chain of bargains” and have many alternative sources of supply, while manual unskilled workers are at the bottom of the chain and face the alternative of work or starve. In this regard, the Webbs observe, “the impulse for cheapness, of which the consumer is the unconscious source, grows in strength as it is transmitted from one stage of bargaining to another, until at last, with all of its accumulated weight, it settles like an incubus on the isolated workman’s means of subsistence” (p. 674). The Webbs and American institutionalists backed up this grim conclusion with empirical studies of wages and family budgets that demonstrated many manual workers and their families in this period lived below the subsistence level (Booth, 1902; Lauck and Sydenstricker, 1917).

From a neoclassical perspective, where labor is viewed as a commodity like wheat or oil and pre-market institutions and rules of the game are typically taken as datum, a very low market wage is the necessary outcome of demand and supply and is *prima facie* socially beneficial since it reflects the large factor supply and low opportunity cost of labor, thus promoting an efficient allocation of resources and

production of goods and services. If there remains an excess supply of labor, the solution is to lower wages further until a demand/supply equilibrium is reached. The Webbs and other progressive/heterodox economists (e.g., Perlman, 1928), concluded, on the other hand, that the orthodox perspective guaranteed sweatshop jobs and poverty for a large part of the workforce and considerable labor unrest and enthusiasm for socialism.

One social rationale for a legal minimum wage, therefore, is that it offsets the worker's weak bargaining power in the labor market. The penchant of neoclassical economists is to say "assume a competitive labor market," draw a demand/supply diagram, determine the market wage, and then demonstrate that a minimum wage floor set at the market level leads to all the pernicious effects earlier cited. The Webbs and the American institutionalists insisted, however, that economists not simply take the wage outcome of the labor market as a mechanical working out of natural forces but instead look at the human-made factors that determine the position of the demand and supply curves and, therefore, whether the wage is high or low. In the case of the early twentieth century, the five factors enumerated above caused it to be quite low for a large part of the workforce. They also insisted that economists more carefully examine whose interests are promoted and harmed by competitive, unregulated labor markets, and maintained that the benefits flow disproportionately to firms, consumers, and the affluent and the costs disproportionately go to lower-income workers and other property-less groups.

The Webbs and institutionalists concluded, therefore, that labor's IBP – manifested in *sweated labor* -- creates a social rationale on efficiency and fairness grounds for state abridgement of freedom of contract in labor markets. The efficiency rationale rests on the proposition that part of labor's IBP and low wage stems from legal

rules, social norms and market failures that, on balance, favor employers and consumers. A minimum wage, therefore, does not distort a pre-existing balanced and competitive labor market but, rather, helps restore balance and competitive outcomes to low-end labor markets otherwise tilted against the interests of workers. The fairness rationale, in turn, rests firstly on the legal principle that no party should be bound to honor contract terms agreed to under duress (e.g., either work under onerous conditions or face unemployment and destitution) and, secondly, the behavioral principle that workers at some point refuse to constructively participate in an employment relationship when they perceive norms of distributive justice are seriously breached (Miller, 1991; Trebilcock, 1993).

Since the totality of the labor market situation prevents individual workers from bargaining on a more-or-less equal plane with the employer, with resulting losses in efficiency and fairness, a public policy rationale opens up for state regulation of labor markets in order to protect low-wage workers. One way the state can do this is minimum wage legislation. In this spirit, Commons observes: “If they [workers] are to be helped toward an equality of bargaining power, the state must take the initiative. This it does by setting standards below which wages may not be depressed – in other words, by passing minimum wage legislation” (Commons and Andrews, 1936: 43).

#### 4. The Social Cost of Labor

The IBP rationale for a minimum wage leads to and complements the social cost of labor rationale. The latter is in certain ways the more fundamental challenge to the neoclassical critique of a legal minimum wage. It also is a centerpiece argument in the recent rebirth

of cross-country movements to move beyond a minimum wage to a “living wage” (Figart, 2004). The two concepts are closely related, but as generally defined both at the time of the Webbs and now a minimum wage connotes a social subsistence level of earnings while a living wage connotes a somewhat higher level that provides a minimally adequate standard of living (Glickman, 1997; Ciscel, 2004).

The SCL idea starts from the thoroughly orthodox and non-controversial proposition that economic efficiency requires that the price of consumption goods incorporates the full cost of the factor inputs used in producing these goods. If such is not the case, private cost is less than social cost, product prices are too low, and output is too high (Pigou, 1920). This problem is typically treated in neoclassical theory as a negative externality arising from, in Coase’s words (quoted in Stabile, 1993a: 179), an “absence of defined property rights.”

The innovation of the Webbs and the American institutionalists was to apply the negative externality (missing property rights) concept to the employment relationship in order to develop a positive rationale for legal minimum wages and collective bargaining (Blum, 1956; Kapp, 1971; Stabile 1993a,b; Prash, 2005). To start, they note that labor (human capital), like physical capital, requires some minimum ongoing expenditure for upkeep, repair and depreciation if the input is to be maintained for current production and replaced for future production. Some of these minimum maintenance and depreciation costs are variable with respect to hours worked but the bulk are more of a fixed or “overhead” cost (e.g., a cost that does not vary proportionately with output); likewise, some apply only to the individual worker while others extend to dependents and families. Among these labor upkeep and replacement costs, for example, are minimum necessary

expenditures for food, shelter, clothes, health care and old-age support for the worker, as well as minimum support for non-working spouses and children if the workforce is to reproduce itself (the concept of a “family wage”).

The idea of a subsistence wage was a central concept in classical (and Marxist) economics, per the observation of Adam Smith (1937: 67) that “A man must always live by his work, and his wages must be at least sufficient to maintain him.” The key insight is that if product prices are to cover the full social costs of production then firms must pay the worker a wage sufficient to cover the individual and family subsistence costs or, alternatively, provide in-kind compensation, such as company provided health care. If, on the other hand, the wage falls short of the subsistence level then the private cost of labor borne by the firm and its customers falls short of the full social cost. In this case either someone else bears this expense or, socially viewed, the nation’s stock of human capital starts to depreciate and wear-out.

Sidney Webb (1912: 986, 987) describes the situation in these words:

“The continued efficiency of a nation’s industry obviously depends on the continuance of its citizens in health and strength. For an industry to be self-supporting, it must, therefore, maintain its full establishment of workers unimpaired in numbers and vigor, [and] with a sufficient number of children to fill all vacancies caused by death or superannuation. If the employers in a particular trade are able to take such advantage of the necessities of their workpeople as to hire them for wages actually insufficient to provide enough food, clothing, and shelter to maintain them permanently in average health; if they are able to work them for hours so long as to deprive them of adequate rest and recreation; or if they can subject them to conditions so dangerous or insanitary as positively to shorten their lives, that trade is clearly obtaining a supply of labor force which it does not pay for... he [the employer] is clearly receiving a subsidy or bounty ... [and is] economically parasitic.”

Webb’s idea translates into modern employment conditions if we think about health care and retirement income support, say for fast-food workers. Each worker

requires some minimum necessary level of health care to cover physical/mental wear and tear, just as each machine requires ongoing maintenance and repair. Similarly, part of production cost is mothballing and replacing worn-out plant and equipment and what is true for physical capital is equally true for the firm's human capital (or "human machines"). Thus, fast-food product prices to consumers should for efficiency reasons cover these types of labor cost. In the case of health care, this may take the form of direct employer payments for health care, payment of a wage high enough to purchase the health care, or tax payments to finance a government health plan; similar options apply to retirement support. If the firms' prices do not cover these costs, consumers of fast-food benefit from *subsidized prices*, fast-food firms benefit from *subsidized labor costs*, while fast-food workers – or families, communities, and other third parties -- are in effect asked to contribute a *labor tax* to support and maintain the workforce. In these examples, fast-food consumers and firms are, in the Webb's memorable phrase, parasitic in that they benefit from living off the resources of others.

Having developed the social cost idea, the Webbs and institutionalists needed to first present a theoretical explanation for why the actual wage may well fall below the subsistence wage – also called the "social wage" -- and then follow this with an explanation of why a legislated minimum wage can help solve this problem. They developed a two-pronged theoretical argument.

The first prong was to invoke the concept of labor's IBP and then note that labor is embodied in real life human beings. That is, for the five reasons cited above the competitive forces of supply and demand in low-wage labor markets -- in the absence of trade unions, protective labor law, social insurance programs, macroeconomic

stabilization policies, and other such institutional interventions -- are likely to lead to wages insufficient to cover the full cost of the labor input. Such as situation for, say, coal or steel inputs may be easily and efficiently corrected by automatic market adjustments; for the labor input, however, the adjustment process turns into a human life-or-death and “survival of the fittest” problem that takes place with great difficulty, suffering, and possible social and political upheaval. Here is why.

When the price does not cover firms’ minimum average cost of producing coal, the suppliers do not generate enough revenue to cover production cost. Absent a short-run increase in demand, some firms are eventually forced to exit the industry; in effect, these firms die. After enough firms die, the supply curve of coal shifts leftward and eventually the market price rises enough to just cover minimum average cost (yielding normal or “subsistence” profit). A new equilibrium is reached without market regulation and price covers all production cost.

Now repeat this exercise but substitute labor for coal. Due to IBP, the market wage does not cover the minimum social cost of labor. One option is to do nothing and let shifts in labor demand gradually raise the market wage, but this may take many years or supply may grow faster than demand. Hence, in the short-run workers do not generate enough income to cover life needs. One possible response is that family members enter the work force (the “added-worker” effect) and further expand labor supply, driving the wage even lower. Eventually, some-to-many of these workers are forced (or “incented”) by the very low wages to exit the labor market. In neoclassical models, they voluntarily exit to consume more *leisure* (e.g., Lucas and Rapping, 1969), but where they get the income to support themselves is left unexplained. In real life, workers without adequate



labor earnings perforce drift into a life of begging, crime, drug addiction, or work in the underground economy (e.g., prostitution), typically leading to hastened physical/mental deterioration and possible early death for themselves and/or family members (future workers). After enough workers “go out of business,” the labor supply curve shifts leftward sufficiently to raise the market wage to just cover the minimum social cost. As viewed in mainstream economics, the labor market, like other competitive markets, eventually self-corrects a demand/supply imbalance and, in the process, brings the wage to a level where it covers the social cost of labor. No regulation needed!

This type of neoclassical story, from an institutional perspective, is fatally flawed as a theory and a disaster-waiting-to-happen from a policy perspective. At a theory level, aggregate labor markets do not self-correct through wage deflation, as falling wages decrease purchasing power, further restrict product and labor demand, and thus intensify the demand/supply imbalance and pressures for further deflation. Keynes (1936) explained this in terms of economic theory; the Great Depression demonstrated this truth in real life. Thus, efficient use of the nation’s resources is not improved but harmed by allowing competitive forces to solve a social cost gap. From a policy perspective, it might be an efficient use of resources to let some coal or steel firms go bankrupt in order to cure an over-supply and “lack of profit” problem, but it would surely be neither efficient nor humane to try to raise wages by eliminating part of the nation’s workforce. Yet, absent institutional regulation and stabilization of labor markets, the only way the labor market can raise the wage enough to cover the social cost of labor is to eliminate part of the supply.

Is there a better way? Although heretical from a mainstream perspective, the Webbs and early institutional economists – along with Keynes and modern post-Keynesians (e.g., Lavoie, 2006), believe that a legislated minimum wage can contribute to a solution of the social cost problem with far greater efficiency and fairness than can competition and laissez-faire. The idea is to use the minimum wage to set a wage floor in the labor market that approximates the social cost of labor. In this manner, all workers (and dependents) are guaranteed closer to a survival level of earnings from work. If setting the minimum wage involves some initial job loss, the Webbs and early institutionalists view this as a problem society must proactively address, be it through income maintenance, social insurance, job training, or other assistance-type programs. From an efficiency point of view, the minimum wage allows unfettered competition in labor markets as long as earnings are above the social wage level, while it also promotes efficiency by helping to stabilize purchasing power and aggregate demand in business cycle downturns. From a fairness perspective, it seems more humane to try to provide workers with a social wage through a legislated wage floor rather than waiting for either labor demand to slowly lift wages over the long-run or labor supply to do the same through reductions in the workforce.

The second prong of the institutionalist's theoretical analysis of labor's social cost problem focuses on property rights and, in particular, incomplete property rights in labor. As Coase notes (cited above), a negative externality arises from poorly or incompletely specified property rights. That is, for a competitive market to yield efficiency every margin of a good must be priced, which requires that property rights to the good be perfectly partitioned (divisible) and delivered to the seller via a complete contract.

However, in labor markets the employment contract is notoriously open and incomplete, thus opening the door to an externality and social cost problem. The argument is hinted at by the Webbs (e.g., pp. 658, 661), was modestly more developed by Commons in *Legal Foundations of Capitalism* (1924), but found its fullest exposition in *Studies in the Economics of Overhead Costs* (1923) by neo-institutional economist J.M. Clark. Clark demonstrated that the social cost problem is an *inherent feature* of a capitalist employment relationship.

Clark compares the position of the worker (labor) and machine (capital). He, like the Webbs, notes that capital and labor both require on-going expenditures for maintenance, repair and depreciation. What Clark then develops in detail, however, is the argument that the unfunded social costs of labor arise from differences in firms' ownership rights in the factor inputs capital and labor. In particular, Clark argues that firms are likely to cover the full cost of capital but not labor because they typically *own capital* but *rent labor* (since slavery is illegal). When agents own a resource, they have an incentive and responsibility to pay both the fixed and variable costs lest the resource be repossessed, become inoperable, or third parties (e.g., the government) assess fines and penalties for improper maintenance and disposal. When, on the other hand, agents rent a resource their only explicit cost is a variable charge per time period and they do not care if this payment is sufficient to cover the full costs of purchase, maintenance and depreciation.

In a perfect market equilibrium, competition ensures that the cost of ownership and cost of rental are equivalent, so in this case all costs are equally and fully covered. In theory and fact, however, labor markets are *always and everywhere imperfect*, thus

opening the door for employers to shift part of the variable and fixed costs of labor. As I have argued elsewhere (Kaufman, 2007, 2008, building on Commons (1934) and Coase (1937)), on the plane of pure theory a labor market and employment relationship can only exist if there are positive transaction costs for buying and selling labor services. The reason is that with zero transaction costs firms vertically disintegrate until they are sole proprietorships, eliminating the need to hire employees in a labor market; only with positive transaction cost do firms find employees to be a cost effective way to obtain labor services.

Positive transaction cost (TC) arises from a number of factors, such as imperfect information, bounded human rationality, and imperfectly divisible property rights. These conditions cause employment contracts, in turn, to be incomplete. One consequence is that firms can shift some of the *variable* costs of labor to third parties. They do this by various stratagems, such as skimping on work conditions, renegeing on pensions, and firing injured workers. Illustratively, one employer in the days before workmen's compensation remarked, "fingers cost me nothing" (Becker, 1906: 664); alternatively, Sidney Webb (1912) noted that the street railways took better care of their horses than the employees. In modern terms, these types of cost shifting arise from opportunism, moral hazard and asymmetric information – all made possible by poorly specified property rights in incomplete employment contracts. Regardless of the particular reason, consumers and firms are no longer paying the full social cost of labor.

Because of poorly specified property rights, firms may also shift part of the *fixed* cost of labor to third parties. The problem here is that an overhead cost, by its nature, entails an indivisibility and cannot be fully or accurately apportioned among individual

users; further, the individual users have an incentive to dodge their share of the costs and pass them on to others. In the words of Clark, “[T]he overhead cost of labor is a collective burden upon industry in general, but the market does not allocate to each employer the share for which his own enterprise is responsible” (p. 372).

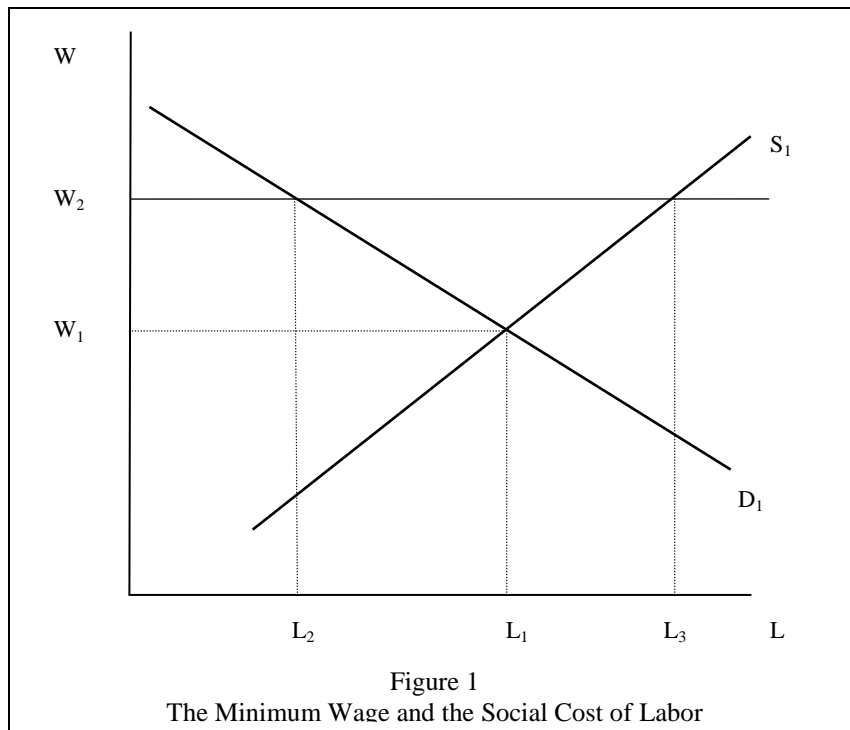
The problem this indivisibility causes in labor markets is very similar to the “tragedy of the commons” that occurs in land markets (Cornes and Sandler, 1986). If a parcel of land is a common resource, individual farmers let their herds over-graze it, causing the land to deteriorate and lose its productivity. Now consider labor. Society is endowed with a resource called an industrial workforce that individual firms selectively utilize but do not own. They utilize it when it profits them to do so and contribute some share of the variable and fixed cost, but in other periods when they do not need the labor they discharge it and let the people who own it – the individual workers, as well as their families, the community, and society at large – cover the cost. From an economic point of view this overhead cost is a part of total production cost, yet firms are able to shift it – and have an incentive to because they only rent the labor. Note, on the other hand, how different the situation is for the capital they own. While unneeded workers are discharged with no further financial support, firms ordinarily continue to spend money on the upkeep of their factories and machines, even if the capital is currently idle and producing nothing (as in a recession). If needed again in the future, then the firms recall the labor and put the machines back into use, but evidently private production cost is less than social production cost since firms have paid only for the ongoing maintenance cost of capital but not of labor.

The end result is that firms and consumers are “parasitic,” just as the Webbs claim, and in effect survive and grow on a social subsidy at the expense of labor. What is the solution? Following Coase, if the problem arises from poorly specified property rights, then one course of action is to change the property rights to promote a more efficient (and equitable) outcome. An obvious solution is to give firms the same ownership right in labor that they have in capital. Slavery, however, is illegal (not to mention ethically unjust), so another option must be found. The solution Commons (1893) proposed a century ago is to create a new property right through legislation. This right states that every person be guaranteed a “right to work,” either in the form of a paying job or the minimum income there from. At the time he was denounced as a radical and proto-Socialist (Kaufman, 2003). In the contemporary U.S., Commons’ “right to work” idea continues to have a radical tinge; in many European countries, on the other hand, the social wage idea gained considerable acceptance after World War II (Boyer, 1993), albeit with some loss of support in recent years due the challenge of neo-liberalism, global competitive pressures, and a paring back of the welfare state (Standing, 2005). If direct provision of a social wage is not politically feasible or only partially accomplished, then alternatives must be found. One such alternative, even if distinctly second-best, is a legislated minimum wage. Although it does not guarantee workers an annual income that covers all social costs, it at least can go some way toward that objective.

## 5. Diagrammatic Representation

It is helpful to put these arguments in diagrammatic form. Doing so illustrates how the Webbs and institutional labor economists turn the neoclassical indictment of minimum wage legislation on its head.

Figure 1 depicts the low-wage labor market. When neoclassical economists analyze the minimum wage, they draw a diagram with the demand and supply lines,  $D_1$  and  $S_1$ , and label  $W_1$  the “competitive” wage. But in this exercise they omit from the diagram one crucial consideration: the social wage that covers the full cost of the labor input. For purposes of illustration, assume the social wage is  $W_2$ . In actual fact, the social wage may be above, equal to, or below the prevailing market wage and determining such is ultimately an empirical issue.



We may call the market wage  $W_1$  a *pseudo competitive wage* – pseudo because, first, it is an illusion obtained only by omitting consideration of the full social cost of

labor and the extra-market sources of labor's IBP; second, because it purports to yield an efficient resource allocation when in fact it yields an inefficient allocation (as with any externality). A market-determined wage at or above  $W_2$ , may be called a *true* (or "full") *competitive wage* since it covers all labor costs and yields economic efficiency. In Figure 1, the difference  $W_2 - W_1$  represents the per unit *social tax* on labor and "social subsidy" to capital and consumers.

Given this market failure, Coase (1960: 18) argues, "the problem is one of choosing the appropriate social arrangements for dealing with harmful effects." Most clearly, a government mandated minimum wage is one such social arrangement. The idea is to set the minimum wage at the level of the social wage  $W_2$ , thus creating a wage floor that covers labor's minimum fixed and variable cost (pro-rated on an hourly basis). This wage floor is depicted in Figure 1 by the solid horizontal line at  $W_2$ .

Now consider the effect of the minimum wage on employment and unemployment. It is possible, as Card and Krueger's (1995) study found and Doucouliagos and Stanley (this issue) confirm in their meta-analysis, that a minimum wage has on average a close-to-zero employment effect. Assume for purpose of debate, however, that the neoclassical theory is correct and the imposition of a minimum wage causes an employment decline, say from  $L_1$  to  $L_2$  in Figure 1. This loss of jobs is at the heart of the neoclassical critique of a minimum wage, but by the welfare standards of orthodox economics it should be *welcomed* rather than deplored.

The reason is that the minimum wage reduces or eliminates the externality-like gap between the private and social cost of labor and thus *improves economic efficiency*. The effect is analogous to placing a tax on a paper mill that dumps pollution in a river.



That is, the higher cost causes the firm to reduce production and cut employment, but economic welfare is improved – not hurt -- because the tax corrects a market failure (a missing property right) that allows the firm to use a valuable social resource (the river) without paying the cost. A minimum wage is also, in effect, a tax on firms, but these firms -- like the paper mill -- are utilizing a resource to make profit without paying the full social cost. The minimum wage, therefore, has exactly the desired effect: it ends (or reduces) the subsidy on low-wage labor and causes firms to cut back on production and employment to the efficient level that would prevail *if* the labor market were truly competitive (e.g.,  $W_2, L_2$ ). Society gains from this loss of jobs because the human capital can be transferred to alternative uses that yield a higher return.

Other indirect benefits also arise. The loss of jobs from a minimum wage (if such occurs) forces society to confront and solve a problem it otherwise prefers to ignore: that is, why do  $L_1$ - $L_2$  workers have such low productivity that they cannot earn at least a subsistence wage? Likewise, not only do some workers potentially lose their jobs, some firms also go out of business. But again this result has to be regarded as in the social interest since it weeds out the least efficient and most backward firms and concentrates capital and managerial talent in the most efficient and advanced firms. In this regard, the Webbs observe: “[T]he Common Rule has another, and even more important result on the efficiency of industry, in that it is always tending to drive business into those establishments which are most favorably situated, best equipped, and managed with the greatest ability, and to eliminate the incompetent and old-fashioned employer” (1897, pp. 727-28). Further, the Webbs also note that the wage floor usefully serves to shift firms’ search for competitive advantage from additional cheapening of already low-priced labor

to other methods, such as technological advance, higher product quality, and improved business methods.

Critics may nonetheless assert it is socially misguided to destroy these  $L_1$ - $L_2$  jobs when they are held by low-wage workers who presumably need them and, further, voluntarily accepted them. Dwelling on this last point another moment, critics will often ask: how can the government in good conscience prevent workers and employers from freely negotiating employment contracts when it is self-evident that both sides gain from the exchange? The answer is given by taking the question in reverse direction. That is, if providing jobs to the poor is the overriding consideration, then why stop at abolishing the minimum wage? Why not also abolish every other protective labor law, including the ban on child labor? Doing so would get rid of additional “burdensome,” “inflexible,” and “inflationary” labor regulations, thus reducing the price of labor and inducing firms to hire more people. All sides gain from trade, so is not welfare increased? The answer is no: on efficiency grounds these outcomes are harmful to both workers and society if the market wage is less than the social wage, while on normative grounds they represent a retrogression to inhumane labor conditions that advanced societies have long ago repudiated.

The unemployment effect of a minimum wage also deserves attention. Critics note that a minimum wage not only reduces employment but most likely increases unemployment in the market. Is this not also a harmful and perverse outcome? Perhaps, but it may also be beneficial and constructive. If the minimum wage is  $W_2$  in Figure 1, unemployment is  $L_3$ - $L_2$ . The portion represented by lay-offs and reduced hiring is  $L_2$ - $L_1$ . For reasons just cited, this portion of the “new unemployed” are being inefficiently

utilized and the disappearance of their jobs, although unfortunate, allows them to shift to more productive employments (or requires society to adopt other policy measures to create such). The  $L_3-L_1$  portion represents new labor force entrants, induced to search for work by the higher wage. This may be judged a social virtue on two counts. Some of these new entrants are presumably substituting toward market work and away from underground/illegal work; also, encouraging people to seek gainful employment is often espoused as a desirable social value which is exactly what a minimum wage does.

Several observations and caveats are necessary. First, an observation.

I noted at the beginning of this article that the contemporary debate in Anglo-American countries about the pros and cons of minimum wage legislation revolve around two central issues: the competitive versus monopsonistic nature of low-wage labor markets and, second, whether the employment effect is negative or zero/positive. We can now see that this way of framing the debate is far too narrow and slanted toward negative conclusions. The positive case for a legal minimum wage developed by the Webbs and early American institutionalists is far broader than an offset to monopsony, suggesting that to frame the debate in this manner is to seriously truncate the affirmative side. Likewise, critics condemn a minimum wage because it (allegedly) leads to a negative employment effect, yet as just demonstrated this loss of jobs and output may be a boon to economic efficiency and welfare rather than a detriment.

Next two caveats. A minimum wage may solve the social cost problem, but as Coase (1960) observed there are also numerous alternative ways to accomplish the same end and, possibly, one or more may be superior.

For example, one approach is to eliminate the gap between the market wage and social wage through government programs that cover the overhead costs of labor, such as universal health insurance and old age pensions. Alternatively, the same could conceivably be accomplished through universal collective bargaining. In effect, government or union provision lowers the wage from work that is necessary to cover labor's social overhead costs, which in Figure 1 is equivalent to lowering the social wage from  $W_2$  to  $W_1$  (thus eliminating the social cost gap). A second approach is to shift the labor demand curve to the right through some type of wage or job subsidy to employers until it intersects the wage floor on the supply curve  $S_1$ . The virtue of this approach is it closes the social cost gap and *increases* employment (Macpherson, 2004). Yet a third is an income supplement for low-wage workers, perhaps along the lines of the Working Families Tax Credit (WFTC) in the U.K. and Earned Income Tax Credit (EITC) in the U.S. (Neumark and Wascher, 2007). The effects of these programs on the labor market vary; a simple but suggestive graphical representation is to observe that the addition of sufficient extra income can close the social cost gap through two channels. The first is to shift the labor supply curve leftward along  $D_1$  (because extra income, by creating a larger demand for leisure, raises the workers' reservation wage), thus raising the market wage; the second is to give workers greater income so they can better cover their overhead costs, which like government or union provision lowers the value of the social wage needed from work.

A complete and rounded-out analysis of the minimum wage, therefore, requires a comparative institutional analysis of the pros and cons of alternative policy instruments. I do not attempt such here. It is worth noting, however, that a minimum wage is likely to

become less useful and attractive as the degree of union organization increases and the breadth and depth of a country's social welfare program expands, in part because these other instruments fill the social cost gap (Deakin and Wilkinson, 2005). Going further, it is quite possible even in lightly regulated neo-liberal labor markets that a legislated minimum wage may be a second-best solution to the social cost problem, relative to one or more of the other approaches cited above. Institutionalists, therefore, take a pragmatic position on the minimum wage and are certainly willing to consider other options, per the observation of Commons that, "The problem is one, not of ideals, but alternatives" (1919: 185), and the comment of his student John Fitch, "It is not legislation as such that we desire, but social advance" (1927, p. 243). The other side of the coin, however, is that institutionalists are also committed to the idea that the best policy should not be allowed to be the enemy of a good policy, implying a minimum wage – even if second-best – is likely better than doing nothing at all or waiting for a superior but politically unrealizable alternative.

A second caveat concerns an equally practical but complex issue about a legislated minimum wage – how to set the value of the minimum wage so it approximately matches the social cost of labor. Labor maintenance and depreciation costs vary by a number of characteristics, such as occupation, industry, gender and demographic group, marital status, family size, and work status (part-time or full-time). One approach used earlier in the twentieth century in Australia, New Zealand, the UK and USA to help solve this problem was to establish some type of tripartite wage council, perhaps for individual industries, and give it responsibility for establishing a structure of minimum wages for individual groups. This approach was pushed by the institutionalists,

partly because it was seen as a good procedure for tailoring minimum wages to fit different groups' social wages and, partly, because it promoted greater industry democracy and worker voice (Kaufman, 2003). All of these countries, however, have moved closer to some type of uniform ("one size fits all") national-level minimum wage. Obviously this shift entails benefits and costs; among the costs is much greater difficulty in setting a single minimum wage to fit multiple social wages (e.g., for a male single person household in a city versus a female head of household with three children in a rural area). Does this mean giving up on the minimum wage idea? Not on *a priori* grounds, but on pragmatic grounds as the workforce continues to diversify other policy instruments may become more effective at covering the social costs of labor.

## 6. Conclusion

At the theory level the recent debate in Anglo-American countries about a legal minimum wage has largely centered on a "competitive" versus "monopsony" view of labor markets. So framed, the proponents of a minimum wage inevitably face an uphill battle since most economists are skeptical that substantively important monopsony conditions pervade low-wage labor markets. I offer here an alternative positive rationale for minimum wage legislation. I wish I could claim it is my idea; the truth is that it goes back more than a century and finds its most eloquent and articulated exposition by LSE founders Sydney and Beatrice Webb in their classic work *Industrial Democracy*.

Their argument is two-pronged: first, manual and unskilled workers in most situations of (truly) free market capitalism suffer from an inequality of bargaining power

which leads to very low wages and working conditions and, second, that often these wages and working conditions do not cover the full social cost of labor. From a production perspective, the result is a misallocation of resources and economic inefficiency; from a distributional perspective the result is that labor subsidizes capital and consumers. So viewed, a legal minimum wage can improve economic efficiency and fairness by raising wage rates for low-paid workers to a level that covers the social cost of their contribution to production.

Critics may respond that these ideas are interesting but also passé since they were developed a century ago in the age of dark satanic mills and laissez-faire capitalism, both of which have passed into history in the modern industrial countries. I view the matter in a different light. Without question, the modern welfare state and Keynesian demand management have considerably reduced labor's IBP, thus removing the most stark and egregious inequalities and inequities of capitalism. This warns us, however, to be skeptical about neo-liberal attempts to substantially gut the modern welfare state and return to a largely deregulated labor market, given that it was exactly this kind of economy that made a minimum wage and other such protective and stabilizing measures necessary. It is also the case that even today millions of workers in the industrial countries labor in jobs that do not pay a social wage. I particularly have in mind countries such as the United States where the legal minimum wage is quite low, collective bargaining covers less than eight percent of the private sector workforce, and other parts of the social safety net are often thin and porous. What we have, therefore, is the continued specter in the early twenty-first century of national governments and business firms shifting part of the social cost of labor on to workers, their families, and the society

at large. Accordingly, a minimum wage retains today a valid social mission as a device to promote both efficiency and equity in labor markets, albeit more prominently so in some countries than others.

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