



Cornell University  
ILR School

**ILR Review**

---

Volume 63  
Number 3 *April 2010*

Article 4

---

April 2010

# Institutional Economics and the Minimum Wage: Broadening the Theoretical and Policy Debate

Bruce E. Kaufman  
*Georgia State Univ, bkaufman@gsu.edu*

Follow this and additional works at: <http://digitalcommons.ilr.cornell.edu/ilrreview>

---

---

# Institutional Economics and the Minimum Wage: Broadening the Theoretical and Policy Debate

## **Abstract**

Debate among labor economists on the pros and cons of a minimum wage law has come to focus on whether labor markets are competitive or monopsonistic. The purpose of this paper is, first, to suggest that this perspective is too narrow and, second, to use principles and concepts of institutional economics to demonstrate why. In particular, I use institutional theory to develop four theoretical rationales for minimum wage legislation: imperfect competition and inequality of bargaining power; involuntary unemployment and destructive competition; efficiency and growth; and labor market externalities and social costs of labor. One revisionist implication is that a minimum wage under plausible conditions may increase economic efficiency even in a purely competitive labor market.

# INSTITUTIONAL ECONOMICS AND THE MINIMUM WAGE: BROADENING THE THEORETICAL AND POLICY DEBATE

BRUCE E. KAUFMAN\*

---

Debate among labor economists on the pros and cons of a minimum wage law has come to focus on whether labor markets are competitive or monopsonistic. Using principles and concepts of institutional economics, the author argues that this perspective on minimum wages is too narrow. In particular, he uses institutional theory to develop four theoretical rationales for minimum wage legislation: setting a floor on wages to offset imperfect competition and inequality of bargaining power; promote macroeconomic stabilization and full employment; contribute to long-term efficiency and growth; and incorporate labor market externalities and social costs of labor. One revisionist implication is that a minimum wage under plausible conditions may *increase economic efficiency* even in a *purely competitive* labor market.

---

**T**he minimum wage once had strong support among labor economists, most of whom were affiliated with or sympathetic to the institutional school. Among this group were self-professed institutionalists, such as John R. Commons and his colleagues of the Wisconsin School; more mainstream but institutionally sympathetic labor economists of the 1930s and 1940s, such as Chicago labor economists Paul Douglas and Harry Millis; and post-World War II “industrial relations” labor economists, such as Dunlop, Kerr, Lester, and Reynolds (Reder 1982; Prash 1998; Kaufman 1988, 1994). Institutionalism also provided the economic rationale for the quasi-revolution in labor policy during the New Deal period of the 1930s, including enactment of the National Labor Relations Act, Social Security Act, and Fair Labor Standards Act. Central to the important role

played by Wisconsin institutionalism in these developments were the writings of Commons, whom Boulding (1957:7) described as “the intellectual...origin of the New Deal, of labor legislation, of social security, of the whole movement in the country toward a welfare state.”

Debate on the minimum wage continues unabated, but the contribution and influence of institutionalism have sharply declined, particularly in mainstream journal literature. One consequence, I argue, is that the theoretical and policy debate in labor economics over the pros and cons of minimum wage laws has become unduly narrow and, as a consequence, negatively biased against a minimum wage. The purpose of this paper is to take a first step in correcting this problem by using concepts and principles of institutional economics to further develop the positive case for minimum wage legislation. In particular, the paper outlines the core theoretical principles of institutional economics as articulated by Commons and Coase; applies these principles to the analysis of a minimum wage law; and demonstrates why many institutional economists believe a minimum wage is on balance good policy on

---

\*Bruce E. Kaufman is Professor of Economics and Senior Associate of the W.T. Beebe Institute of Personnel & Employment Relations at Georgia State University in Atlanta, Georgia, and Research Fellow of the Griffith Business School and Centre for Work, Organization and Wellbeing at Griffith University in Brisbane, AU.

both efficiency and equity grounds. I note that the discussion that follows is confined almost entirely to issues of theory and is necessarily a summary of key points and ideas; also, while the discussion has a “history of thought” element, the theory and policy discussion applies directly to today’s economy.

### The State of the Minimum Wage Debate

Academic debate in the United States on minimum wage legislation goes back a century (Lees Smith 1907; Webb 1912; Prash, 1998; Neumark and Wascher 2008). At the start, the chief protagonists tended to divide into two groups. On the con side were adherents of orthodox economics (with some prominent if qualified exceptions, such as J.B. Clark, A. Pigou, and F. Taussig), meaning neoclassical Marshallian/Walrasian price theorists, as well as conservative adherents of the legal doctrines of freedom of contract and substantive due process; on the other side were institutional economists, law scholars from the Legal Realism movement, and various social reformers. The latter group, heterodox to varying degrees, formed the *first law and economics movement* (Hovenkamp 1990; Fried 1998; Kaufman 2009a).

During the first five decades of the twentieth century the intellectual tide waxed and waned but on balance favored the institutionalists. Their greatest moment of achievement was passage of the New Deal labor program in the mid-1930s, including the minimum wage provision in the Fair Labor Standards Act (FLSA). During the 1950s labor economics was largely under the sway of the neo-institutionalists, and the minimum wage continued to find widespread support. One well-known advocate was Richard Lester (1964).

The tide turned in the 1960s, when neoclassical economics (NE) reclaimed the intellectual high ground in labor economics (Boyer and Smith 2001). The center of the counter-revolution was the University of Chicago, where Milton Friedman and George Stigler led the charge (Reder 1982; Freedman 2008; Kaufman 2010). They and their colleagues and students were strikingly successful in resurrecting and broadening

neoclassical price theory and adapting it to labor market analysis. The Chicago School also spawned what Hovenkamp (1990) called the *second law and economics movement*, led by Coase and Posner.<sup>1</sup> Neoclassical economics and modern law and economics now include a wide range of models and cover many diverse market and non-market subjects. Most people (for example, Kniesner and Goldsmith 1987; Manning 2003; Cahuc and Zylberberg 2004) agree, however, that the paradigm’s core remains the model of a self-regulating market, exemplified by the theory of perfect competition and the demand/supply (D/S) diagram.<sup>2</sup> One area in which this model finds continued wide application is in the analysis of a legal minimum wage (Neumark and Wascher 2008).

It seems safe to say the more one believes in the competitive model as an approximation of the actual operation of labor markets the more one is likely to oppose employment regulation, such as a minimum wage law.

<sup>1</sup> Part of Coase’s work, such as the Coase Theorem (named and articulated by Stigler), is congenial to neoclassical economics and modern law and economics; another part, centered on positive transaction cost, provides the foundation for “new” institutional economics (NIE). Coase distanced his work from the old institutional economics, but Medema (1996) demonstrated the numerous points of overlap.

<sup>2</sup> Neoclassical economics is defined here as the theory of a (mostly) competitive market economy with Walrasian general equilibrium theory as its exemplar representation. Consistent with this interpretation, Boyer and Smith (2001: 212) described NE as “a sparse model of maximizing behavior in the face of competition and constraints.” In the last two-three decades economic theory has expanded beyond NE (as historically defined) to “mainstream” economics (ME). ME is broader because it moves the competitive model to deep background, or abandons it altogether, and instead makes rational choice, incentives, the law of demand, and formal model building the core components of economics. I focus on NE because the competitive model continues to form the heart of modern analysis and critique of the minimum wage (see Neumark and Wascher 2008); ME, on the other hand, is so eclectic in its assumptions and models that it falls on both sides of the minimum wage debate. Although less central to modern economics, the competitive model is hardly dead; Nobel laureate Robert Lucas (quoted in Samuelson and Barnett (2007:64)) asserts, for example, “About 99% of all successful applied economics is still based on the idea of a competitive equilibrium.”

Stigler certainly exemplifies this generalization, for in an early article he (Stigler 1946) used the competitive model to analyze and critique the minimum wage and then later offered this adverse assessment: “One evidence of professional integrity of the economist is the fact that it is *not* possible to enlist good economists to defend...the minimum wage laws” (Stigler 1982:60). Of course, Chicago economists and law and economics scholars do not speak for all mainstream labor economists, but certainly the Chicago School’s large influence on post–World War II labor economics, as well as the general shift of the field from an institutional to a neoclassical orientation, noticeably moved the center of intellectual gravity in the 1960s, 1970s, and 1980s toward a more critical-to-skeptical position on the merits of minimum wage legislation (for example, Rottenberg 1981).

The Chicago/neoclassical position was strongly challenged in the 1990s by research on the “new economics” of the minimum wage, led by David Card, Alan Krueger, and Lawrence Katz. They suggested that perhaps the institutionalists had more of the story right than Stigler and allies had allowed. In particular, they found in a variety of contexts and data sets that an increase in the minimum wage did not reduce employment as price theory predicts. Their core findings were presented in Card and Krueger’s (CK’s) book *Myth and Measurement* (1995). CK dedicated the book to Lester and reached a very Lesteresque conclusion; they stated, for example, that their empirical findings “suggest that the direct test posed by the minimum wage fails to confirm the predictions of the conventional [competitive] model” and “All this evidence suggests to us that the conventional model is *incomplete*” (p. 397, emphasis in original). CK went beyond Lester, however, by developing a formal model of dynamic monopsony that helped give theoretical grounding to the empirical findings.

The work of Card, Krueger, and Katz stirred up a lively and long-running controversy—largely centered on their empirical findings on the lack of a negative employment effect—the dust of which is only now settling. Three salient points about this follow-up literature deserve brief discussion here.

First, on the surface the amount of scholarly heat generated by CK’s book is surprising, given the well-worn nature of the subject and the fact that the minimum wage affects less than 5% of the American work force. The reason, Leonard (2000:118) claimed, is that the minimum wage adherents are seen as mounting a direct and potentially highly damaging attack on the competitive core of neoclassical microeconomics, thus raising the intellectual stakes from an argument over a specific labor policy to a strategic battle over the theoretical integrity of the field’s central paradigm. On this matter he states,

The core of modern economics—neoclassical price theory—is seen to be at stake. In particular, minimum-wage research has come to be seen as a test of the applicability of neoclassical price theory to the determination of wages and employment.... [It] is not just a technical quarrel over the sign and magnitude of wage-elasticity coefficients; it is the latest chapter in a longstanding methodological dispute over whether and in what domains neoclassical price theory can be said to properly apply.

Second, the popular interpretation is that this paradigm battle is at its core a dispute over whether labor markets are best modeled as competitive or some version of monopsonistic. For example, Neumark and Wascher (2007:1, 123) observed that the debate set off by CK is about “alternative models of the labor market” and described this battle of models as a contest to establish “whether the *monopsony* model or the *competitive* model better characterizes the low-wage labor market” (emphasis added).

Third, given that the contest is between the competitive and monopsony models, the key behavioral relationship focused on in empirical research is the employment effect of a minimum wage. If the employment effect is negative and significant (statistically and quantitatively), the conventional interpretation is that the evidence supports the competitive model; if it is approximately zero or even positive, then the evidence is taken to be consistent with a monopsony model. The large preponderance of studies, according to Neumark and Wascher (2007) in a detailed

survey of the post-CK empirical literature, find the minimum wage has a statistically significant negative effect on employment, leading them to conclude (p. 123), “The low-wage labor market can be reasonably approximated by the neoclassical competitive model.” This conclusion dovetails exactly with Stigler’s (1946:359) original claim that “low wage industries are competitive.”

### Purpose of the Minimum Wage

Part of my argument in this paper is that the “competitive versus monopsony” way of framing the minimum wage debate is too narrow. In particular, it ignores most of the theory and policy rationale advanced by institutional economists for a minimum wage. One can legitimately disagree with most or all of the institutional side of the argument but, surely, it (like other heterodox perspectives) at least deserves an open hearing and careful examination. Thus, I endeavor to fill in this lacuna by sketching the institutional case for a legal minimum wage, drawing on several articles and books written by other institutionally oriented economists that have so far remained outside the mainstream literature (for example, Linder 1989; Craypo 1997; Prashc 1998; Power 1999; Levin-Waldman 2001, 2009). I start with the stated purpose of the minimum wage, with attention on the American case.

Nearly every mainstream article of the past several decades asserts that the first-order purpose of a minimum wage is to reduce household poverty; other purposes frequently cited are to redistribute income from rich to poor, to protect unions from low-wage competition, and to promote social justice and other normative/ideological goals. This perspective was given its imprimatur in Stigler’s (1946) article on the minimum wage, described by Leonard (2000) as the “locus classicus” of the modern literature. According to Stigler (p. 358), “The popular objective of minimum wage legislation—the elimination of extreme poverty—is not seriously debated.” In a more recent article, Sobel (1999:763) asserted that the minimum wage has two major goals: “lifting families out of poverty” and

“alter[ing] the distribution of income in favor of low-income households.”

Given these imputed goals, many assess the policy negatively. Opponents, for example, cite a number of reasons why a minimum wage is a very blunt and sometimes perverse instrument to reach these goals: it reduces jobs for low-wage workers, increases unemployment, does little to reduce poverty (because the majority of minimum wage workers do not live in such households), reduces training opportunities for youth, and reduces wages for low-skilled workers in uncovered jobs (see Neumark and Wascher 2008).

All of these criticisms and negative findings are plausible and in some cases likely true, even if the magnitudes are open to considerable uncertainty and debate. They also, however, are only loosely and often indirectly related to evaluation of the *real purposes* of the minimum wage, as originally stated in the Fair Labor Standards Act and contained in the voluminous Congressional testimony that preceded its enactment in 1938. Illustratively, Stigler asserted that the primary goal of the FLSA is poverty reduction, but it is revealing that he gave no citation or other evidence to support this claim—perhaps because, as Blum (1947:646) observed in his comment on Stigler, “This writer is not aware of anyone who has advocated minimum wages as a means of eliminating poverty as such.”

Neither recent books (for example, Neumark and Wascher 2008) nor mainstream journal articles of the last three decades examine the stated reasons for enactment of the FLSA. The first section in the FLSA, “Congressional Finding and Declaration of Policy,” outlines the goals of the legislation. One immediately notes that this section says nothing explicitly or implicitly about reducing poverty. Reducing poverty was expected to be a benefit of the FLSA, but an *indirect* benefit achieved by accomplishment of other *direct* goals. What were these direct goals? A reasonably close synthesis of the language of the section leads to these four:

- eliminate labor standards that are so low they harm the ongoing efficiency, health, and well-being of workers.
- prevent unrestrained competition in labor markets from further lowering labor

standards in affected industries, or spreading low standards to other industries.

- prevent low labor standards from interfering with attainment of full employment and sustainable economic growth.
- eliminate low labor standards because they lead to labor disputes and divisive relations between employers and employees, thus further harming economic activity.

Confidence in this assessment is further increased by considering the conclusions of other economists who wrote on the matter at the time. First in credibility among them was Paul Douglas, faculty member at Chicago and foremost analytical labor economist of that era in the United States. He wrote two lengthy articles on wage regulation and the FLSA (Douglas 1938; Douglas and Hackman 1938) and gave an in-depth appraisal of the goals of minimum wage legislation.<sup>3</sup> Douglas listed five objectives of the FLSA that exactly parallel the four stated in the act, with the modest difference that he decomposed the third objective in the FLSA into two separate parts: to augment purchasing power, and to improve productivity and growth.

It is significant that Douglas began his analysis with consideration of goal #1—establishing a minimum level of labor standards below which employers and competition cannot go—and immediately referenced Sidney and Beatrice Webb and their book *Industrial Democracy* (1897). The Webbs, proponents of a social and institutional type of economics and co-founders of the field of industrial relations, are generally credited with presenting the first and most influential theoretical rationale for a minimum wage (as well as other institutional mechanisms to establish minimum labor standards, such as unions and collective bargaining). They framed the mini-

imum wage as a device to end “sweating” in the labor market, defined by one person as “the payment of an employer to his work people of a wage which is insufficient to purchase the necessities of life” and by another as “the unfair exploitation by unscrupulous employers of the necessities of the poor and more helpless class of workers” (quoted in Nordlund 1997:2). It may be noted that in some places the Webbs used the term “minimum wage” interchangeably with “living wage,” but in their time the two concepts were regarded as distinct though substantially overlapping. A minimum wage, designed, for example, to end sweating, was a wage to provide a bare subsistence (socially defined); a living wage was at a higher level set to provide a “decent standard of living” (Glickman 1997). The distinction is important.

#### **Institutional Theory: Core Concepts and Principles**

The stated objectives of the FLSA reflect, in part, the economic concerns and problems of the time, most notably the collapse of labor market standards during the Great Depression. They also reflect, however, long-standing theoretical and policy principles put forward by institutional economists that were articulated as part of a larger program of early twentieth-century labor market reform and stabilization—a program, I note, developed to solve the many perceived labor problems of an era when labor markets were closer to “competitive” than at any time before or since (Fishback 1998; Kaufman 1997, 2003). The idea that the objectives of the FLSA reflect institutional theoretical principles will surely strike many readers as a stretch, given the widespread belief among modern economists that the institutional labor economists not only lacked a theoretical framework but were often hostile to theorizing *per se* (Boyer and Smith 2001). As I have tried to show in various publications (for example, Kaufman 1988, 2007a; also see Champlin and Knoedler, 2004), this belief is quite inaccurate. Commons, for example, devoted his last three books to theory and Dunlop and other neo-institutional labor economists likewise wrote numerous books and articles on the theory

---

<sup>3</sup> Stigler was a graduate student at Chicago in the 1930s and surely knew of Douglas’s publications on the minimum wage and the pros and cons of wage regulation, yet he omitted citation to them in his 1946 article. Although conjecture on my part, one possible reason is that Douglas was considered by his Chicago colleagues to be an institutionalist and Stigler was well known as a staunch critic of institutionalism and government interference with the price system (Reder 1982; Freedman 2008).

of wage determination and other labor topics. Given space constraints and the present article's focus on the minimum wage, this is not the place to elaborate on the institutional theory of labor economics and labor markets. At least a brief summary, however, is necessary to provide the logical foundation for the institutionalist's advocacy of a legal minimum wage. It may also be helpful as a way to broaden the modern theory and policy debate.

Before proceeding, I should note that the theory I develop comes principally from the original institutional economics (OIE) and, in particular, the writings of John Commons. But at key points I bring in complementary ideas and concepts from Coase and the new institutional economics (NIE). The synthesized institutional economics (IE) presented here also has numerous overlaps and similarities with Austrian, behavioral, post-Keynesian and radical economics (for example, Darity and Goldsmith 1995; Schmid 2004; Bowles 2004) and, indeed, much of the mainstream literature on incomplete contracts, property rights, and strategic bargaining and the burgeoning institutionalist literature in economic sociology.

*Conceptualizing the economic problem.* IE contends that traditional neoclassical economic price theory—certainly its core competitive market model that to this day is the principal tool used in analyzing the minimum wage—assumes away the most important and difficult part of the economic problem. The typical analysis of a minimum wage law explicitly or implicitly starts with “assume a competitive labor market” and then shows how demand and supply via self-interest, market competition, and the Invisible Hand leads to an efficient, welfare-maximizing configuration of prices and quantities. The competitive model, and price theory in general, lead to certain powerful insights but also sidestep the central determinant of whether a country is rich or poor and its people contented or dissatisfied. This is the challenge of devising and strengthening an efficient and just *institutional order* that promotes material abundance and social advance when individual agents have limited brains and a propensity to selfish, short-sighted, and emotionally driven

behavior, and when conflicts, power plays, and non-cooperative behavior define the base-line state of nature. In this spirit, Coase stated that institutional economics studies “the workings of the social institutions which bind together the economic system” in a world where human beings are dominated by “self-love but not without concern for others, able to reason but not necessarily in such a way as to reach the right conclusion, seeing the outcomes of [their] actions but through a veil of self-delusion” (Coase 1994:41,116). Commons (1924:363) asserted that IE is a “return to the true spirit of Adam Smith,” which is to say an exercise in political economy and comparative institutional design with the object of studying how imperfect human beings struggle to collectively construct a prosperous, progressive social order amidst scarcity, conflict, and greed.

*Core concepts and principles.* Listed below are core concepts and principles in IE theory.

**Ownership and property rights:** ownership and property rights are the foundation of IE theory, for they determine the institutional structure of an economy and how it performs; without prior specification of property rights and ownership, fundamental economic constructs such as commodities, production functions, demand and supply curves, and efficient allocations have no basis.

**Institutions:** institutions are bodies of rules, both formal and informal and explicit and tacit, that are built out of property rights (broadly defined) and define the rules of the economic game and the resources, constraints, opportunity sets, incentives, and strategic interdependencies faced by economic agents. Institutions determine the structure (and existence) of labor markets, which in turn determine their behavior and performance.

**Sovereignty:** economics is always “political economy” because the institutions and their derivative rules are in part determined through a political process in which people individually and collectively seek to capture and use the power of sovereignty to shape the institutions and rules to promote their interests and ethical viewpoints.

**Behavioral/social model of the human agent:** people are modeled as largely pur-

poseful and self-interested, but decision-making is subject to bounded rationality and behavior is influenced by social interdependencies, emotions, and ethical precepts. Workers are an expressly human factor of production.

**Transactions and transaction cost:** a transaction is a legal transfer of ownership; transaction cost is the real resources used to effectuate and enforce this transfer.

**Modes of coordination:** economies have alternative institutional modes for coordinating transactions, including markets and organizations. Markets use prices as the coordinating device; organizations use command and administration.

**Power:** power is the ability to satisfy one's desires and obtain a greater share of an institution's scarce goods (material and non-material).

**Reasonable value:** economic agents individually and collectively have a notion of what is fair and reasonable; whenever an outcome or process falls outside the bounds of reasonableness, they undertake action to redress the imbalance and alter the institutional matrix of rules and rights.

**Evolution:** the interaction between outcomes and institutional structure causes economies to evolve over time in a process of cumulative causation along different path-dependent trajectories.

Both Commons and Coase are explicit that IE is not meant to completely replace NE; rather, IE is a partial complement to NE (IE "rounds-out" orthodox theory, says Commons (1934:6)) in that it brings into conventional microeconomic analysis subjects and concepts (for example, institutions) either omitted or treated as exogenous background factors. Nonetheless, at strategic places IE inevitably becomes a substitute paradigm, since taking into account NE's omitted and taken-for-granted factors leads to negation of core NE theorems and a substantially different view of how economies work (Kaufman 2007a). Indeed, Coase (1992:713), in his Nobel address, went so far as to say that IE will "bring about a complete change... in what is called price theory or microeconomics." In this spirit, IE argues the centerpiece propositions of neoclassical economics, embodied in

the two "fundamental welfare theorems," to be substantially flawed and inaccurate.

### Analysis of the Minimum Wage

I now proceed to use these IE principles and concepts to analyze the consequences of a minimum wage law. Four rationales for a minimum wage are discussed, all of which lie partially or completely outside the mainstream debate (e.g., none are substantively examined in Neumark and Wascher's recent book *Minimum Wages* (2008)). Each is illustrated with the help of Figures 1 and 2. Since the case against a minimum wage is well known, I focus here on the case for it. This tack is taken for purposes of exposition; in practice, IE economists recognize that a minimum wage has both benefits and costs and that a portion of the neoclassical critique is well founded. Hence, many IE economists favor a minimum wage but some oppose it.

### Imperfect Competition and Inequality of Bargaining Power

The first IE rationale for a minimum wage law is that workers suffer an *inequality of bargaining power* (IBP) because imperfect labor markets and a lopsided distribution of resources and rights put employers in the dominant position in wage bargaining and the individual worker in a weaker and dependent position (Commons and Andrews 1936; Kaufman 1989). With IBP, market competition cannot fully protect the wages and conditions of labor, and thus a countervailing institutional mechanism must be introduced to ensure efficiency and equity. The primary objectives are *protection* of labor and *balance* in social outcomes.

In developing the IBP idea, I proceed in two steps. The first is to consider the role of imperfect competition in labor markets; the second is to consider the role of lopsided resources and rights. The two are distinct and need to be treated separately.

*Imperfect competition.* A situation of equal bargaining power exists in a competitive labor market since both employer and employee are wage takers, meaning neither has power to raise or lower the wage (and other conditions)

above or below the competitive market rate. This yields economic efficiency. At least by one standard the competitive outcome is also ethically just—what Budd (2004) called the standard of “marginal productivity justice” (the fact that under competition workers are paid the value of their marginal product). The labor market also provides full protection to workers since with zero cost they can quit and find jobs elsewhere and, conversely, competition forces firms to provide economically optimal terms and conditions of labor.

But what if labor markets are imperfect? In theory, an imperfect market may give the power advantage to either the employer or employee. Although an imbalance either way can occur, the IE position is that most often it is the workers—particularly those with fewer skills, less education, or from disadvantaged gender and ethnic groups—who suffer IBP. The reasoning is simple: who feels the greater pressure to reach an agreement and fill the job, and who has the greater resources and alternative options to fall back on if an agreement is not reached—the company or the worker? In most circumstances, the answer is the company. A rationale for a minimum wage (or union) is thus to “protect the underdog” and “level the playing field.”

The IE position is that in both theory and practice labor markets are always imperfectly competitive, albeit to varying degrees and in varying ways. We first start with the *transaction* concept advanced by Commons (1934) and integrate it with the *transaction cost* idea of Coase (1937). The model of perfect competition entails an implicit assumption that property rights to goods and services can be exchanged at zero cost (Dow 1997). A logical implication of such a world of zero transaction cost (TC), Coase argues, is that multi-person firms should vertically disintegrate into single-person entities, such as sole proprietorships and independent contractors. The reason is that with zero TC the market is more efficient at coordinating economic activity than are organizations and management and, hence, the latter disaggregate to their irreducible minimum. Single-person firms, however, have no employees (by definition), so labor factor markets, employment relationships,

and the labor demand/supply diagram also disappear by implication (Kaufman 2007b, 2008). In their place, the single-person firms (perhaps some with large capital stocks) obtain labor services through competitive *product markets* in the form of *intermediate goods/services* sold by independent contractors, such as John Jones Auto Assembler, Inc. and Nancy Smith Legal Services Ltd. Turning the logic around, if labor markets exist, then they must be imperfectly competitive, since their existence rests on a necessary condition of positive TC—itsself a product of imperfect information, fundamental uncertainty, and other such market imperfections. These conditions, in turn, necessarily make *labor contracts incomplete*, opening the door to a host of contracting problems and market failures, such as principal-agent conflict, moral hazard, and externalities.

IE cites a second reason why labor markets are always imperfect. An essential condition of the competitive model is that labor is a *homogeneous* (undistinguishable) commodity. But this condition is violated by the very nature of the employment relationship. The reason is that labor services are embodied in the worker (a form of indivisibility) and cannot be separated at the time of sale; thus the worker and employer form a personal relationship at the point of production (Prasch 2004). This fact distinguishes “outsiders” from “insiders,” which, along with search and mobility costs due to imperfect information (an attribute of positive TC), makes incumbent employees preferable to external labor market job candidates as a source of labor services for firms. Hence, workers are not homogeneous but heterogeneous, leading to a situation of monopsony (broadly defined to include structural and dynamic monopsony, oligopsony, monopsonistic competition, and so on) in which the labor supply curve to the firm is upward-sloping (Card and Krueger 1995; Bhaskar and To 1999; Manning 2003; Erickson and Mitchell 2008).

The implication of the two preceding lines of argument is that as a matter of theory and logic, labor markets are *always and everywhere imperfectly competitive*. Thus, from a theory perspective, imperfect competition should be the base-line for analysis, particularly when

efficiency comparisons are made among alternative labor market outcomes, and the competitive model should be downgraded to a special and somewhat *ad hoc* case. A convenient but also incomplete representation of imperfect competition is the standard monopsony diagram, shown in panel (1) of Figure 1. In a monopsony labor market the wage is set by the firm, implying, as IE economists (for example, Dunlop 1944; Lester 1964) have long maintained, that wage rates are an *administered price*—a price set by employers who operate in labor markets with some degree of discretion and wage-making power. If this potential market power is exercised (for qualifications, see Bronfenbrenner 1956), the imperfectly competitive wage  $W_1$  will be lower than the competitive wage  $W_2$ . For inframarginal workers this may take the form of salary compression. The impediments to mobility and limits on competition provide firms an opportunity to practice some degree of compression, discrimination and exploitation in terms and conditions of employment, possibly by providing a wage below the competitive level for new hires, less than competitive pay increases or promotions for tenured employees, or, alternatively, sub-competitive benefits, working conditions, or treatment. In any of these cases, the workers are at an IBP disadvantage; a minimum wage, in these conditions, helps to balance bargaining power and eliminate this less-than-competitive outcome. If well positioned (for example, set at  $W_2$ ), a minimum wage may also lead to an *increase*—not decrease—in employment, such as from  $L_1$  to  $L_2$ .<sup>4</sup> IE recognizes, of course, that the *extent* of structural or dynamic monopsony-like power available to firms in low-wage labor markets may be modest; nonetheless, empirical evidence suggests that even here the labor supply curve to firms is often less than perfectly elastic (Manning 2003), particularly for inframarginal workers (Young and Kaufman 1997).

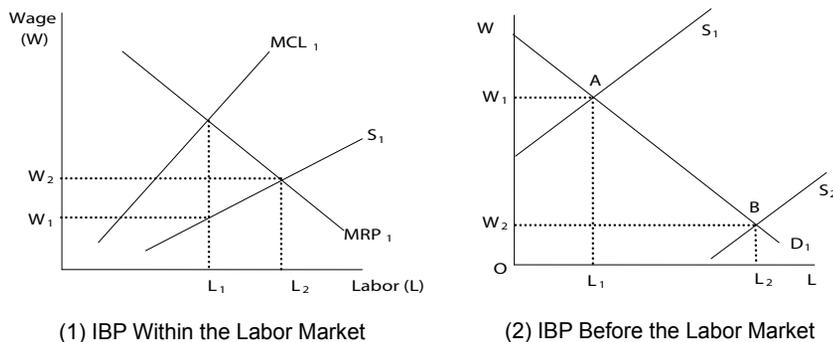
<sup>4</sup>The employment increase in surviving firms may be partially or completely offset, however, by employment declines from firms that go out of business. A monopsony firm need not be profitable and, indeed, may be able to remain in business only with the “subsidy” gained from labor exploitation.

This analysis has important implications for the debate about the employment effect of a minimum wage. For example, if the baseline is a model of imperfect competition then the predicted effect of a minimum wage (or increase thereof) on employment is uncertain, particularly for a small-to-modest boost. In support of this proposition, Doucouliagos and Stanley (2009) find in a recent meta-analysis of dozens of minimum wage studies that after correcting for publication bias the estimated employment effect is not statistically different from *zero*.

Also, one must note that at a theory level the negative employment criterion is a biased test in favor of the competitive model. As Becker (1962) showed, the law of demand is a fundamental fact of scarcity and is not a unique conclusion of any one theory (for example, it emerges even if people behave irrationally). This implies that a negative employment effect is not discriminating evidence in support of the NE competitive market model. Rather, the real issue separating IE and NE is the *tightness and strength of this relationship*. NE price theory posits a monotonic well-defined negative relationship between the wage and quantity demanded of labor; IE, on the other hand, posits that the labor demand relationship over a moderate range is “loose” (that is, is discontinuous in places, and forms a “band”) and may have a vertical or positive-sloped section. IE recognizes, on the other hand, that over a large range of wage variation the labor demand curve is surely negatively sloped, particularly in the long-run.

The fundamental divergence between the two theories, therefore, rests on their portrayal of labor and labor markets. With respect to the latter, the competitive model assumes firms are wage takers and labor is divisible and akin to a commodity input (Addison and Hirsch 1997), thus yielding a technologically determined marginal product and a continuous negative wage/labor relationship. IE, however, assumes the opposite and gets a less negative and perhaps zero or positive wage/labor relationship. Also, elementary price theory shows that a monopsonistic firm—broadly defined to include any firm with a less than perfectly

*Figure 1. Imperfect Competition and Unequal Bargaining Power Rationales*



(1) IBP Within the Labor Market

(2) IBP Before the Labor Market

elastic labor supply curve—does not have a well defined conventional labor demand curve, just as a monopoly firm does not have a well defined product supply curve (Fleisher and Kniesner 1980; Manning 2005). The result is a more complex wage/employment relationship and potential irregularities in the law of demand.<sup>5</sup>

With regard to the labor input, IE insists that workers be modeled as psychological and sociological beings, implying bounded rationality, interdependent preferences, and volitional labor supply are essential parts of the theory of the economic agent *quaworker*.

<sup>5</sup> Many economists claim NE is “value-free” and bristle at charges of “bias.” IE claims all theories are “value-laden” (including IE) because a theory depends on choice of assumptions and the factors given little versus much emphasis, both of which turn on underlying human preferences (values). Illustrative of this problem, one can look far and wide in the conventional minimum wage literature and never find mention of the fact that a conventional labor demand curve does not exist in imperfect (labor) competition, despite the centrality of the law of demand to the debate. Related examples are equating the broad field of imperfect competition with the narrow model of monopsony and neglecting other types of non-competitive theory (including transaction cost); ignoring aggregate demand effects, and omitting the labor supply effect of fixed subsistence costs. Are these randomly distributed and harmless omissions, or conscious choices that bias the conclusions of NE research?

Bounded rationality creates positive TC, and incomplete labor contracts and effort supply can therefore vary with wages, morale, fairness, and other factors, as represented in different strands of efficiency wage theory (Akerlof and Yellen 1986; Ippolito 2003; Bowles 2004). The result is that the workers’ marginal product is variable (perhaps greatly so) and may increase with a minimum wage over a certain range, creating the possibility of a zero or even positive wage-employment effect—just as found by Card and Krueger (1995).

NE theory can also explain CK’s results with various amendments and qualifications to the competitive model that are surely reasonable (for example, costs of adjustment), leading to some unavoidable overlap in theoretical predictions and loss of discriminating power in empirical tests. Setting up the NE competitive model as an overly narrow straw man is thus neither fair nor productive in these debates; by the same token, it seems equally reasonable to insist that meaningful restrictive boundary conditions be placed on extensions of the competitive model lest they become non-falsifiable and clever exercises in *ex post* rationalization.

*Unequal resources and rights.* Labor may also suffer from a bargaining power disadvantage even in a perfectly competitive labor market if the distribution of rights and resources is skewed in favor of employers. I call this a case

of IBP *before the market*, in contrast to the case previously described, which might be called IBP *within the market*. The insight here is that labor market outcomes narrowly viewed may appear competitive but broadly viewed may considerably favor employers due to disguised forms of market power emanating from socially determined pre-market inequalities.

An IBP-before-the-market perspective examines the wage/employment outcome with regard to how alternative distributions and specifications of property rights and ownership influence the bargaining power of workers and employers. The adopted hypothesis is that workers with more resources and rights will enter wage bargaining with (*ceteris paribus*) a higher reservation wage, mapping into a “higher” supply curve in the market.

We again need a base-line in order to compare situations of equal and unequal bargaining power. For this purpose Commons (1934:683–84) invented the concept of *reasonable value*. Reasonable value is the community’s conception of the legitimate, morally justifiable upper and lower bounds to the wage bargain, given the economic fundamentals existing at the time and the range of feasible or practical alternatives facing both parties (McIntyre and Ramstad 2002). Reasonable value is inherently subjective and contingent over time and place, yet it is also determinate in that a sovereign governmental body, such as the U.S. Supreme Court (from which Commons derived this concept), has to determine the boundary lines between legitimate and illegitimate contract terms. To do this, the Court devised in the early twentieth century the doctrines of “reasonableness” and “conscionability.” The idea is the Court refuses to set aside voluntarily negotiated contracts unless the negotiation process or terms are deemed unreasonable or unconscionable by prevailing community standards.

IBP before the market, therefore, corresponds to wages and other conditions outside the range of reasonable value, outcomes that would ordinarily arise only when bargaining power is sufficiently lopsided to violate community standards of legitimacy. From this perspective, the proposition that there is freedom of contract and that “all sides gain

from trade” can be a cruel fiction allowing one side to impose onerous and exploitative terms on the other. As before, in theory IBP before the market can favor either employer or employee; in practice, however, IE argues that it usually favors employers and works against individual workers, particularly in early phases of economic development. With regard to resources, for example, employers have far deeper pockets than workers who live paycheck to paycheck, and can thus survive much longer if no deal is struck. Likewise, employers are less pressured to strike a deal since their revenue stream typically continues even if one job is vacant, while a worker’s revenue stream typically ceases without that job. Also important, the number of alternative job seekers from whom employers can choose typically is higher than the number of alternative job openings for an individual worker (that is, workers are usually on the “long side” of the labor market).

Rights are a second determinant of bargaining power. IE contends that in all capitalist societies legal rights start out heavily skewed in favor of employers (Commons 1924). One reason is that capital is typically scarce while labor is cheap and, therefore, societies give little regard to protecting labor; another is that employers have preponderant access to and influence in the legislative and judicial arenas (Commons 1934:673). Thus, while NE theorizes that the evolution of the common law is driven by pressures of efficiency (for example, Posner 2007), IE posits that in addition to efficiency pressures the common law also evolves from political contestation—that is, the process whereby social “outsiders” struggle to become “insiders” and, to the degree they are successful, judges re-interpret the common law to incorporate their interests.

As seen in IE, many legal rules a century ago, and some today, regarding ownership and property rights create IBP before the market (Adams 1886; Commons and Andrews 1936). One current example is employment-at-will. In any real world labor market the costs of employment-at-will fall disproportionately on workers, undercutting their bargaining (hold-out) power, reducing their minimum supply price, and shifting the

labor supply curve to the right. Also relevant is immigration law. A legal rule that allows large immigration or lax enforcement also shifts the labor supply curve to the right, substantially lowering wages and conditions for domestic workers.

The effect of these considerations is illustrated in panel (2) of Figure 1. Two alternative supply curves are depicted: the “high” supply curve  $S_1$  reflects a very favorable regime of labor rights and resources, and the “low” curve  $S_2$  reflects the opposite. These different regimes of resources and rights are outcomes of the political process and presumably reflect the differential power in the polity of capital and labor as organized interest groups or classes (e.g.,  $S_1$  = Europe; Massachusetts,  $S_2$  = USA; South Carolina). When NE theorists analyze a minimum wage law using a D/S diagram, they insert a supply curve, such as  $S_1$  or  $S_2$ , and find the competitive wage, such as  $W_1$  or  $W_2$ . As long as this wage is competitive, no further questions are asked about its welfare properties. IE insists, however, that economists look deeper and, in particular, examine the relative income shares of employers and workers. If the supply curve is  $S_1$ , the largest income share goes to workers and the smallest to the owners of capital (labor gets the rectangle  $OW_1AL_1$ , capital gets the triangle above it); conversely, if the supply curve is  $S_2$  and the demand curve is inelastic (a reasonable assumption), the opposite is the case—capital gets much and labor gets little (compare the rectangle  $OW_2BL_2$  to the triangle above it). The contention of IE is that for the bottom part of the work force the regime of rights and resources most likely resembles the low supply curve  $S_2$ . The idea of reasonable value, in turn, is that every society accepts some (possibly large) inequality in the group incomes of capital and labor, but not beyond some limit. If supply curve  $S_2$  is “very low,” then the resulting (but still competitive!) wage  $W_2$  and the labor share of income  $OW_2BL_2$  fall outside the range of reasonable value. In this case, labor is on the losing side of IBP before the market; workers also suffer from *institutional exploitation*—the difference between a minimally reasonable wage and set of employment conditions and the actual level resulting from the skewed

rules of the game (Taylor 1977). Enactment of (or an increase in) a minimum wage is one action that can reduce or eliminate this form of social inequality and exploitation.

Before moving on, it is useful to point out that employers are not the only or perhaps even the main party using government to skew the rules of the game against the interests of workers. Consumers also have an incentive to do so, as explicated by the Webbs (1897) in their famous “chain of bargains” argument. Consumers have dual interests to the degree they not only buy goods but also sell labor. Nonetheless, IE surmises that their self-interest on balance tilts toward lower-priced goods, given that lower prices of consumer goods in the economy improve every consumer’s welfare but most forms of higher labor standards improve welfare for only a subgroup. If we look at a minimum wage, for example, most people work at companies that pay considerably above this level, so voting for political candidates who favor a minimum wage increase is likely to reduce the voters’ real income (via higher prices) without any compensating gain in wages. Examined this way, consumers and firms have a shared preference for laws, regulations, and an institutional infrastructure that promote lower labor cost (Freeman 1996). A political economy perspective suggests, therefore, that the erstwhile competitive labor market may well be in fact a site of IBP, absent progressive social norms and labor policies.

### Macroeconomic Stability and Full Employment

The second IE rationale for a minimum wage is that it promotes macroeconomic stability and full employment. This argument has been entirely ignored in the modern debate on minimum wages and, until recent months, would have been quickly dismissed by most mainstream economists as irrelevant “history of thought” or anachronistic “depression economics.” However, the specter of economic depression that emerged in 2008–2009 gives the macroeconomic dimension of the minimum wage new relevance and life.

IE pinpoints three positive macroeconomic roles for a minimum wage: first, to

boost employment by augmenting household income and aggregate demand; second, to prevent ruinous deflation and “destructive competition” in labor markets; and third, to maintain a better balance between spending and production both by counteracting greater inequality in income and by promoting a more broad-based sharing of the fruits of productivity growth. I discuss each in this order.

Commons (1934:804) asserted that chronic unemployment is the greatest cause of labor problems and capitalism’s greatest vulnerability; the IE case for minimum wage legislation, in turn, rests as much on the evils of *excessive competition* in labor markets as on the evils of restricted competition. The early institutionalists were “proto-Keynesians”; that is, they rejected Say’s Law, emphasized the link between purchasing power and employment, and rejected wage reductions as a method to eliminate unemployment (Kaufman 1997). Indeed, recent research shows that part of Keynes’ theoretical inspiration for the *General Theory* came from Commons and Wisconsin institutionalism (Whalen 2008; Kates 2008).<sup>6</sup> Thus, progressive economists promoted minimum wage laws to offset the downward drag on labor standards caused by unemployment and to augment aggregate demand and job creation.

Neoclassical economists draw the D/S diagram and start the analysis of a minimum wage law at the equilibrium market wage without noting one hugely important assumption—namely, that the labor market is thereby presumed to be at a point of *full employment* (number of jobs offered equals number of job seekers), indicated by an equality between labor demand and labor supply (with, in reality, some positive frictional unemployment).<sup>7</sup> This presumption rests, in

turn, on the most celebrated idea of Adam Smith and the core proposition of Marshallian/Walrasian neoclassical economics: the idea that a competitive market economy is *self-regulating* and flexible prices rise or fall to bring the market back to a demand/supply equilibrium located on the production possibility frontier (Kniesner and Goldsmith 1987). Yes, neoclassical economics recognizes that many frictions and imperfections may impede and interfere with this process, but nonetheless its adherents hold that as a central tendency the demand/supply model and Invisible Hand theory capture the reality of a market economy (Reeder 1982; Lazear 2000). IE, in contrast, explicitly denies both the Invisible Hand theory and Say’s Law.<sup>8</sup> The first part of the IE argument is that involuntary unemployment is the normal or “default” condition in the aggregate labor market. The only necessary change in assumptions from the NE model is that economic agents, to better reflect reality, are modeled as *human beings*. The rest flows as a matter of logic.

Why is involuntary unemployment the default option in a capitalist labor market? According to competitive theory, persistent involuntary unemployment is a logical impossibility, illustrated by Reynold’s (1991:176) assertion that “all unemployment is by choice...it all boils down to a question of price.” But involuntary unemployment is

---

however, a partial equilibrium model of an industry or sector is used, or a model with a covered and uncovered sector. The former hides by construction the effect of a minimum wage on aggregate demand, and the latter (for example, Mincer 1976) typically demonstrates how a minimum wage may generate greater unemployment from higher labor cost but then ignores potential employment gains from greater consumer spending.

<sup>8</sup>For example, institutional economist Rexford Tugwell commented on the lesson of the Great Depression (quoted in Gruver 1972:936): “The Cat is out of the Bag. There is no invisible hand. There never was. If the depression has not taught us that, we are incapable of education.” More recently, Nobel laureate Joseph Stiglitz (2002:1) reiterated this same proposition, stating, “Adam Smith’s invisible hand—the idea that free markets lead to efficiency as if guided by unseen forces—is invisible, at least in part, because it is not there.” These views are diametrically opposed to self-adjusting macro models of both Walrasian general equilibrium and Chicago-inspired “new classical” macroeconomics, as well as the NE first fundamental (“Invisible Hand”) welfare theorem.

---

<sup>6</sup> On this matter, Keynes’ biographer Robert Skidelsky (1992: 229) writes: “Commons, an institutional economist who taught at Wisconsin University, is an important, if unacknowledged, influence on Keynes. Indeed, Keynes wrote to him in 1927 that ‘there seems to me to be no other economist with whose general way of thinking I feel myself in such general accord.’”

<sup>7</sup> Since the U.S. federal minimum wage covers at least 90% of the work force, economists should presumably use a model of the aggregate labor market. Most often,

a logical impossibility in NE competitive theory only because workers are modeled as quasi-lifeless human commodities rather than thinking, feeling people. By substituting a social/behavioral model of the human agent for *homo economicus*, economists have demonstrated that firms may actually maximize profit by paying above-market wages as a deliberate strategy to attract and retain the best workers and motivate them to contribute maximum cooperation and work effort (Akerlof and Yellen 1986). They do so for at least two separate reasons (Slichter 1931; Bowles 2004): because of asymmetric information and price/quality interdependence (for example, as in signaling models of labor selection), and because of the positive link between high wages and work effort/cooperation (for example, as in efficiency wage models). Above-market wages, in turn, lead to a semi-chronic condition of excess labor supply in this part of the aggregate labor market—absent, of course, other forms of intervention, such as activist government fiscal and monetary stabilization programs.

In proceeding, it is next useful to introduce the institutional concept of segmented labor markets (Kerr 1977), such as in a dual labor market model (Dickens and Lang 1988). If the aggregate labor market is prone to chronic unemployment and jobs are in short supply in primary sector firms, it is likely that a portion of the job seekers will spill into the low-wage secondary sector as they become more desperate for work (Bulow and Summers 1986). Similar to a NE minimum wage model with a covered and uncovered sector (for example, Mincer 1976), the result is a rightward shift of the labor supply curve in the secondary sector and downward pressure on this already low wage. When NE economists draw a D/S diagram and start the analysis of a minimum wage law at the “competitive” wage, they are thus engaging in a partial equilibrium exercise that hides the reality that involuntary unemployment in the overall market has earlier forced this wage down to a level that would not exist in a *truly competitive* (full employment) world. If panel (2) of Figure 1 is taken to represent the low-wage secondary labor market, its supply curve shifts rightward from  $S_1$  to  $S_2$  due

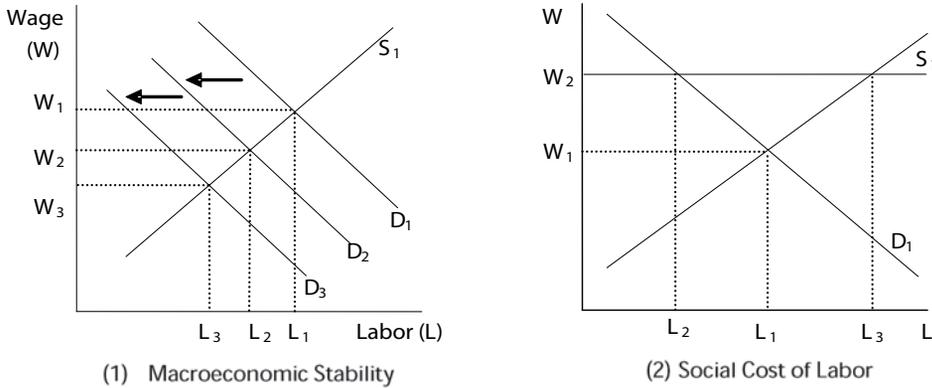
to this spill-over effect from unemployment, leading to a form of “crowding” that lowers wages for people already at the bottom end of the pay scale.

But the situation in low-wage labor markets can be much worse, which brings us to the second macroeconomic role for a minimum wage: preventing destructive competition. According to NE theory, the solution to an excess supply of labor is a fall in the wage until labor demand and supply are equal. But IE argues this logic is false and, in fact, claims that the process of wage reduction (and deflation in general) is likely to make unemployment worse, not better. There are two steps in this argument.

The first is to show that wage reductions, even in a perfectly competitive economy, cannot cure unemployment. This proposition was embraced by Keynes (1936, Chap. 2) and is the revolutionary part of his message. Keynes advanced two reasons, neither of which depends on wage/price rigidities. The first is that the capitalist macroeconomy suffers a coordination failure due to a “missing institution”; that is, workers cannot “buy” a job because the property right they have to trade—a lower *money* wage—is not commensurable with the property right employers want for their job opportunity—a lower *real* wage. In practical terms, a money wage cut leads to a price cut, thus preventing a fall in the real wage. The second reason is that a reduction in money wages not only reduces the cost of labor and moves firms *down* their labor demand curves (toward a new full employment equilibrium) but also reduces aggregate income and expenditure and thus *shifts* labor demand curves leftward. The result is to perpetuate and worsen macroeconomic disequilibrium and unemployment (with debt deflation offsetting other presumed corrective forces outside labor markets, such as a fall in interest rates).

IE goes a step farther and demonstrates that wage reductions can lead to more harm by unleashing a dynamically destabilizing downward spiral in wages and prices, potentially culminating in an economic catastrophe. IE theorists call this process *destructive competition* (an oxymoron term in NE); today it is also referred to as a “race to the bottom”

Figure 2. Macroeconomic and Social Cost Rationales



(Culbertson 1985; Kaufman 1997). The key conditions leading to destructive competition in the macroeconomic labor market are an excess supply of labor, large fixed costs for workers (ongoing costs of food, shelter, health care, and so on), limited mobility to other more buoyant labor markets (for example, immigration to Europe or Australia), and lack of a social safety net (for example, no unemployment insurance). Workers, squeezed financially by fixed survival and family costs as their spell of unemployment lengthens, bid down wages and working conditions in an increasingly desperate effort to get jobs. In NE theory, this process of wage reduction leads to a demand/supply equilibrium and full employment (Say's Law); in IE and Keynesian theory, it shifts the aggregate labor demand curve leftward from  $D_1$  to  $D_2$  to  $D_3$  in panel (1) of Figure 2, and wages and employment spiral downward. A legal minimum wage (along with other protective laws, such as those placing a ceiling on allowable hours of work and banning child labor) prevents destructive competition from proceeding by establishing a wage floor in the labor market, such as at  $W_1$ .

The third IE macro role for a minimum wage is to help ensure that the gains from productivity growth are distributed in a balanced way between labor and capital and rich and poor, thus ensuring that consumer spending keeps pace with expansion in pro-

duction capacity. Absent a minimum wage law, a welfare state with a progressive income tax, or some form of collective bargaining, it is likely that a growing share of the national income will be paid to capital owners and the top tier of the professional/managerial class. The reason is that unskilled labor, having the most elastic supply curve, receives proportionately the fewest economic rents from growth, while capital and skilled labor receive larger (sometimes very large) rents as their demand curves shift rightward along inelastic supply curves (Bok 1993; Frank 1995). The modern-day exemplar of this process is the meteoric rise in CEO compensation relative to the average hourly earnings of production workers. The result from the early 1990s to 2007—parallel to the 1920s—is a growing maldistribution of income, a booming stock market, and a growing imbalance as aggregate demand growth is able to keep up with aggregate supply growth only through massive increases in debt among the middle and lower classes and luxury spending among the affluent. This imbalance is ultimately unsupportable and the economy goes into recession or depression for lack of broad-based purchasing power. Key to preventing this underconsumption scenario is an institutional mechanism to ensure that some of the income gains and economic rents from productivity growth are channeled back to

the middle and working classes to maintain strong demand growth. A minimum wage is one such device.

Although these IE macroeconomic arguments for a minimum wage are conspicuously omitted from today's mainstream research, they were key considerations that led not only to the passage of the FLSA in the 1930s but also to much of the rest of the New Deal labor program (Mitchell 1986; Linder 1989; Kaufman 1996). These macroeconomic rationales, along with other institutional ideas such as IBP, lost salience, however, after World War II with the revival of neoclassical economics, the spread of the modern welfare state and associated safety net programs, and the success of Keynesian countercyclical fiscal and monetary policies. Indeed, growing postwar concerns about inflation caused the minimum wage and collective bargaining to become increasingly seen as a macro "minus" on the supply side of the economy (a source of cost-push pressure) rather than a macro "plus" on the demand side. Recent events suggest, however, that the IE demand side rationale for a minimum wage retains relevance as depression fears re-emerge and policy makers desperately strive to prevent the deflation in wages and prices that NE textbooks teach is the market's mechanism for regaining full employment.

### Efficiency and Growth

The third rationale advanced by IE economists for a minimum wage law is that it promotes greater long-term *economic efficiency and growth*. The hallmark of the NE criticism of a minimum wage is that it distorts the price system and leads to resource misallocation and static inefficiency. This is one side of the story, and certainly one that IE admits has some truth. But IE points out a different and more positive side that is widely neglected—factors that lead to gains in both static and *dynamic* efficiency. The entry point is the concept of ownership and property rights, claimed by Commons (1934:5) to be the foundation of institutional economics. Secure property rights are crucial to the success of a market economy, and one of the core functions of government in the neoclassical/

neoliberal paradigm is to protect and enforce these rights. Who will invest in productive enterprise, after all, if one's property can be easily confiscated without compensation? An insight of IE is that a competitive labor market puts the worker exactly in this situation, leading to under-investment in work effort and human capital (Commons 1921).

The neoclassical conception of property in a market exchange context is a "commodity," typically some physical or measurable good or service. Perfect competition assumes, in turn, that all aspects of a commodity's property rights are well defined, priced, and protected. In *Legal Foundations of Capitalism* (1924), Commons described in considerable detail the evolution of the legal conception of property. A great transformation, he wrote, occurred in the late nineteenth century, when the U.S. Supreme Court ruled that property is not only the physical item itself (use value) but also the *exchange value* of the item. This distinction arose, among other places, in labor disputes where the Court granted firms an injunction against striking employees, not because they were damaging the employer's physical property but because they damaged the market value of the property by keeping away customers and preventing the shipment of goods.

This expanded notion of property opens up a Pandora's Box for NE theory, however. Perfectly secure property rights are a cornerstone of the competitive model, but if secure property rights are taken to mean *legally guaranteed exchange values*, then prices/wages can never deviate from some original equilibrium level (at least without offsetting compensation). That is, a change in D/S leads to a change in the value of property, and part of the property belonging to the parties against whom the price works is "stolen" by the market just as surely as if a thief trespassed and carried it away. Absolute security of property, therefore, can only be attained by rigidly fixed prices, no doubt much to the harm of allocative efficiency.

On the other hand, if property rights are taken to mean only secure use values, then large changes in D/S and market price can dramatically alter the exchange value of property. NE labels this a "pecuniary exter-

nality,” but concludes it does not interfere with attainment of efficiency. IE suggests, however, that pecuniary externalities, and more generally the much-touted “flexibility” of competitive markets, may actually reduce efficiency in an economy of real people. This proposition rests on the observation that competitive markets create large amounts of insecurity for economic agents and that greater insecurity, beyond some point, makes workers less productive (an inverse U relationship). Here are two reasons why.

Employment insecurity—the opposite of entitlement—up to some point is a positive, constructive force that motivates workers to perform well and do what is best for the long-run interests of the firm; beyond some point, however, greater insecurity reduces work motivation and performance by creating dysfunctional levels of stress, impaired decision-making and attention (bounded rationality), constant job search, and unduly short time horizons (Polanyi 1944; Kaufman 1999b).<sup>9</sup>

Second, it is widely recognized that workers develop a stronger perceived property right in their jobs as they accumulate additional years of tenure with the firm (“sweat equity”), even though, of course, the courts and legislatures have generally refused to legally recognize such a right (Fogel 1982). When firms cut wages or benefits (or both) or order layoffs, as would routinely happen in a competitive market, workers instinctively regard these actions as tantamount to theft of part of their property right in the job, leading them to react in a variety of ways that erode efficiency (Perlman 1928; Polanyi 1944). Examples include reduced work effort, greater absenteeism, and calling in the union organizer. Thus, measures that reduce excessive wage/employment insecurity—without going to the other extreme of a completely rigid wage/employment system—promote efficiency. This idea is one of the foundation stones for the modern welfare state, and labor law and social insurance plans are vehicles

for implementing it (Moss 1996).

Much the same idea applies to investment in human capital. An NE indictment of any form of labor market regulation that puts a floor on wages is that it reduces firms’ willingness to provide general on-the-job training (OJT), since workers can no longer offer to work for a lower wage to compensate firms for the cost of the training. As in all these matters, however, there is another side to the story. Rarely asked is this question: will firms invest in specific OJT, and will such training be attractive to workers, if the value of this asset is at great risk from layoffs due to large shifts in D/S in laissez-faire labor markets? Probably not. According to Galbraith (1967), firms are unwilling to invest the billions needed to finance new products and plants without stable market conditions; similarly, in the case of labor markets, without stabilization firms cannot risk the fixed costs of internal labor markets (ILMs), implying that competitive labor markets are destructive to the extent they undermine ILMs and the many efficiency advantages they bring (Doeringer and Piore 1971; Williamson 1985). The heretical conclusion, therefore, is that the optimal (most efficient) level of labor market competition is *not* the maximum amount associated with perfect competition and as envisioned in NE’s first fundamental welfare theorem but, rather, some intermediate and balanced level, as with some degree of *imperfect competition* and *market regulation*. A minimum wage is one essential element in achieving this needed market stabilization.

Labor market regulation and mandates may promote greater efficiency and growth through several other channels. All involve an aspect of human agency and incomplete contracts. One example is the IE “shock effect” argument. Institutionalist Sumner Slichter (1931) argued that collective bargaining and minimum wages might not produce a negative employment effect because the increase in labor cost shocks management into tightening up on other elements of cost in order to maintain profitability. NE economists (for example, Stigler 1946) typically dismiss this argument as *ad hoc* or lacking empirical evidence. IE, however, provides a logical account for the shock effect. Assuming economic

<sup>9</sup> To better appreciate this point, the reader may wish to consider the research productivity of professors starting from 0 job security (a daily spot market) to 100% lifetime tenure protection.

agents approximate human beings, managers and workers have bounded rationality, volitional effort supply, and face positive TC. The first casualty is the NE hypothesis of cost minimization and profit maximization. Positive TC and incomplete contracts open the door for the principal-agent problem in firms. The interest of the owners is maximum profit, but the interest of the salaried managers is their own utility maximization—a function of many things not only in addition to profit (required to keep their jobs) but at the expense of profit (for example, big expense accounts, shorter work hours). Institutionalist such as Berle and Means (1932) have labeled this the “separation of ownership and control,” and they note that it can lead to satisficing behavior with regard to cost and profits (Simon 1982; Kaufman 1999a; Altman 2001). Satisficing behavior, in conjunction with a minimum required profit level, leads management to tolerate organizational slack and above-minimum costs. A rise in labor cost from a labor law or mandate does not, therefore, necessarily translate into a decrease in employment or efficiency, since the managers may well be able to find equivalent cost savings in other areas, including their own effort supply and (in some cases) multi-million-dollar compensation.

Minimum wage laws may enhance efficiency in another way as well, by protecting not only workers but also “high road” employers who make long-term investments in human capital, physical capital, and R&D. Research shows that productivity is higher at firms using a high performance work system (HPWS) with self-managed work teams, job security provisions, extensive training, employee involvement methods, and formal dispute resolution programs (Appelbaum, Berg, Kalleberg, Bailey 2000). These kinds of organizational investments are crucial for long-run growth but may be seriously impeded by the instability and hyper short-term competition found in competitive markets. A minimum wage law can protect and encourage new forms of work organization, such as HPWS, by putting a floor under competition so “low road” firms are not able to undercut and drive out high road firms.

Last but not least, we come to the link between efficiency and fairness. This link was already touched on with regard to efficiency wages, but it has a much broader and more compelling role to play. An implication of the second NE fundamental welfare theorem is that the attainment of Pareto efficiency in a competitive economy is independent of fairness in endowments and outcomes (Stiglitz 2000). IE denies this proposition at both a micro and macro level. The micro-level insight is that whereas commodities do not care if they receive a high or low price and have no conception of fair treatment, people do. Research in behavioral and experimental economics systematically shows that when procedural and distributive norms of fairness in the workplace are violated, workers retaliate by reducing work effort, cooperation, and organizational citizenship behavior, thus exacting a reciprocal “price” in the form of reduced profit and efficiency (Falk, Fehr, and Fischbacher 2003; Schmid 2004). Fairness also promotes efficiency and growth at the macro level (Kitson, Martin, and Wilkinson 2000). Societies that have a more balanced income distribution (at least up to a point) show higher growth rates (Gobbin, Rayd, and Van de Gaer 2007). One reason for this is that when people at all levels of a society feel they are sharing equitably in the fruits of productive enterprise, they also feel more committed to and respectful of the enterprise. This sense of shared gain and social solidarity helps maintain and expand both a firm’s and a nation’s *single most productive asset*—a cohesive, cooperative, and lawful *institutional order*. Without such an institutional order, and the sense of inclusion and fair treatment it rests on, organizations and societies fall into the Pareto suboptimal trap of the Prisoner’s Dilemma game (Miller 1991). Labor market regulations, such as a minimum wage, are one solution to maintaining cooperation and social justice—and avoiding industrial conflict and adversarial employment relations.

### Externalities and Social Costs of Labor

The fourth rationale advanced by IE economists for a minimum wage law concerns *labor market externalities* and *social costs of labor* (Blum

1956; Stabile 1993, 2008; Power 1999; Prasch 2005). NE typically brings externalities into the analysis as “exceptions” to the operation of competitive markets, but IE maintains that externalities are logically present in *all* labor market situations because, as earlier noted, the employment relationship always and everywhere involves an incomplete contract. An externality arises any time one or more dimensions of a good or service are not fully priced and covered in a complete contract, thus causing part of the benefits or costs to be omitted and shifted onto third parties. When this happens, there develops a divergence between the private benefit/cost realized by the buyer and seller and the social (or total) benefit/cost realized by the buyer, seller, and all affected third parties. Since buyers and sellers make decisions based on private benefits/costs, this divergence leads to incorrect decisions, false price signals in the market, and economic inefficiency from misallocated resources and inequity from misplaced or unanticipated gains/losses in exchange.

The externality and social cost ideas have several applications to the minimum wage debate.<sup>10</sup> A serious gap in NE labor supply theory (see Killingsworth 1983), for example, is the focus on marginal cost (the trade-off between income and leisure) and neglect of most elements of fixed living cost. In contrast, in nineteenth-century classical economics, labor’s subsistence wage (where “subsistence” is defined relative to prevailing socioeconomic conditions) was a central focus of attention. Adam Smith (1937:67) noted, for example, that “a man must always live by his work, and his wages must be at least sufficient to maintain him.” This insight was later developed by Sidney and Beatrice Webb (1897) and John M. Clark (1923) into a social rationale for a “national minimum” in terms of wages, earnings, and benefits. This national minimum is sometimes called the “social wage.”

Sidney Webb explains the idea behind the

social cost rationale for a minimum wage in his article in the *Journal of Political Economy* (1912:986–87):

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.

The idea is that the wage paid workers must cover not only the opportunity cost of leisure but also the maintenance and depreciation of their human capital, or otherwise private production cost understates social production cost. This means that the wage must cover all items that define the long-run subsistence cost of labor, such as minimal necessary health expenditure, minimal retirement income, minimal income support during periods of unemployment, and minimal income for dependent children (so the nation has a future work force). Firms, however, may be able because of market imperfections and incomplete contracts to partially or completely avoid paying these costs, which in effect also shields consumers from these costs in the form of higher product prices. Instead, the costs are shifted to the workers themselves, their families, local communities, or the nation at large. For example, a firm may be able to obtain employees at a low wage and not pay health insurance; or it may opportunistically renege on pension payments by firing workers when they get closer to retirement age; or it may routinely continue to pay the maintenance cost of capital during slow periods but shift the maintenance cost of labor to third parties

<sup>10</sup> The social cost rationale for a minimum wage is developed in considerably greater detail in Kaufman (2009b). Also see Power (1999).

through layoffs. Consumers and firms are, in Webb's term, "parasitic" in that they enjoy lower prices and more material abundance at workers' expense—particularly low-wage workers who often work in unsafe jobs, have the least financial ability to withstand ill health, and have the least income for and access to alternative suppliers of health care.

A shifting of social labor cost is also facilitated by a second factor—a large supply of labor in the market. Even in a perfectly competitive labor market, the wage may not cover the subsistence cost of labor. A huge supply of firms, for example, floods the market with product, causing the price to fall until enough firms "die," which constricts supply and restores profit to a normal ("subsistence") level. The same process works in labor markets. Assume that the labor market is opened to unrestricted legal and illegal immigration. To balance supply and demand, the wage may have to fall so far that it does not cover the minimum subsistence costs of labor. The parallel market solution is for some workers to "go out of business" so that the labor supply shrinks until wages again cover minimum fixed and variable labor cost. This process may happen in a variety of ways: for example, workers may withdraw from the labor market and maintain themselves through crime or in the underground economy; they may become homeless and beg for food and live in community shelters; or they may die through sickness and starvation. If, however, workers had a recognized legal and human right to the social wage, the social cost problem would disappear. Commons (1898) proposed this solution (a right to work, or the minimum income therefrom) but was denounced as a radical (Kaufman 2003); it is, however, a logical step in making the competitive labor market even more "perfect" by filling in a missing human property right. Absent this step, a better-than-nothing solution is a minimum wage.

These arguments are demonstrated in panel (2) of Figure 2. When NE economists analyze the economic effects of a minimum wage law, they draw a diagram with demand and supply lines  $D_1$  and  $S_1$  and a "competitive" wage labeled  $W_1$ . But in doing so they elide several considerations about the location of

the supply curve, including not only all the factors that create IBP and cause the supply curve to lie further rightward but also the social wage that covers the full cost of the labor input. For purposes of illustration, assume the social wage is  $W_2$ . In fact, the social wage may be above, equal to, or below the prevailing market wage, determination of which is ultimately an empirical issue.<sup>11</sup>

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 2, the difference  $W_2 - W_1$  represents the per-unit *social tax* on labor and "social subsidy" to capital and consumers.<sup>12</sup>

Given this market failure, Coase (1960:18) argued, "The problem is one of choosing the appropriate social arrangements for dealing with harmful effects." Clearly, a legal minimum wage is one such social arrangement.

<sup>11</sup> The social wage differs across demographic groups; for example, it is lower for teenagers and higher for married adults with children. A uniform national minimum wage is therefore a relatively blunt instrument for solving the social cost problem, and is becoming more so as the work force becomes more diverse. To solve this "one size fits all" problem, the early institutional economists advocated creation of tripartite wage boards that could tailor different minimum wage rates by state and industry (and also introduce greater economic democracy). This idea was incorporated in the FLSA but eliminated shortly after World War II in favor of a uniform national standard.

<sup>12</sup> To the degree that long-run competition erodes profits to a normal break-even level, the entire social subsidy eventually passes to consumers. But not all consumers benefit equally, since consumer spending varies with income. Krugman noted in 2002 that the 13,000 richest American families had more income than the poorest 20 million (Krugman 2002)—thus, the rich and affluent most likely disproportionately gain when there is no minimum wage to end the social cost subsidy (embedded in lower prices), while the working poor bear the largest share of the "tax."

The idea is to set the minimum wage at the level of the social wage  $W_3$ , 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 by the solid horizontal line at  $W_3$ . A yet higher income floor, such as is envisioned with a "living wage," would lie above  $W_3$ .

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 (2009) confirmed in their meta-analysis, that a moderate minimum wage hike has on average a close-to-zero employment effect. Assume for purposes 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  $L_2$ . 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 pollutants into a river. 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 using 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 at a competitive equilibrium (for example,  $W_2$ ,  $L_2$ ). 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? Moreover, 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 observed, "The 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" (1897:727–28). The Webbs also noted 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, capital investment, and improved business methods, that collectively promote higher dynamic efficiency.

Critics may nonetheless assert that 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 numerous other protective labor laws, such as occupational safety and health or even 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, whereas on normative grounds they represent a retrogression to inhumane labor conditions that advanced societies 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 have a beneficial and constructive side. If the minimum wage is  $W_2$ , unemployment is  $L_3 - L_2$ . The portion represented by layoffs and reduced hiring is  $L_1 - L_2$ . For reasons just cited, the “new unemployed” in this group are being inefficiently utilized, and the disappearance of their jobs allows them to shift to more productive employment (or requires society to adopt other policy measures to create such work). 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 or black market work; also, encouraging people to seek gainful employment is often espoused as a desirable social value, which is exactly what a minimum wage does.

One observation and two caveats are required. First the observation. The social wage, expressed on an annual basis, is approximated by the federal government’s “poverty line.” As noted earlier, however, the direct purpose of the minimum wage is *not* poverty reduction; rather, the objective is (in part) to cover the full social cost of labor. Thus, if the market wage is less than the social wage, a valid case exists on economic efficiency grounds to enact a minimum wage *even if* the labor demand curve is elastic and the higher wage reduces total labor earnings (the wage bill), or many minimum wage workers are not in poverty households, or both. But these problems—admittedly a large concern for policy—are muted in significance since empirical studies find that in most cases labor demand curves are inelastic (Hamermesh 1993) and, further, that on balance a higher minimum wage may well reduce—albeit perhaps quite modestly, particularly given the increasingly diverse

nature of the work force—the number of poverty households (Card and Krueger 1995; see Neumark and Wascher 2002 for conflicting evidence). Thus, I conclude that a minimum wage law is potentially a double win—it can not only directly contribute to increased efficiency but also indirectly contribute to poverty reduction. It then holds the potential for a triple win if we also count a more balanced and just society.

Now the 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, one or more of which 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 2 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 that it closes the social cost gap and *increases* employment (Macpherson 2004). Yet a third approach is an income supplement for low-wage workers, such as the Earned Income Tax Credit (EITC) in the United States (Neumark and Wascher 2008).

A complete analysis of the minimum wage, therefore, requires a comparative institutional analysis of the pros and cons of alternative policy instruments. I do not undertake that project 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 as a country’s social welfare program expands in breadth and depth (as in many European countries), in part because these other instruments fill the social cost gap. Going further, even in lightly regulated neo-liberal labor

markets a legislated minimum wage could be a second-best solution 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, consistent with Commons's observation that "the problem is one, not of ideals, but alternatives" (1919:185). What they do not countenance, on the other hand, is doing nothing when a first-best solution is unattainable but an admittedly imperfect but helpful second-best option is available.

### Conclusion

Anyone who has completed elementary economics and can draw a demand/supply diagram knows the essence of the neoclassical critique of a legal minimum wage. The institutional position is that this diagram, and the critique that flows from it, provide useful insight on aspects of the minimum wage issue and labor markets in general. For example, institutional economists would not claim that the minimum wage can be substantially raised all at once without engendering a significant negative employment effect, nor would they dismiss the many virtues of free, flexible labor markets. They do not view the competitive model of labor markets as completely wrong or useless; rather, their position is that it provides certain useful insights and ways of thinking about markets but is also prone to yield systematically misleading answers and conclusions because it unduly neglects human and institutional considerations (Dunlop, 1984). In this spirit, Commons (1919:17) remarked, "The commodity theory of labor... is not false, it is incomplete"; in the same vein, Coase (1992:714) called NE theory "a great intellectual achievement" but also stated, "What we have is a very incomplete theory.... [it] lives in the minds of economists but not on earth." The incomplete nature of conventional theory was, as earlier noted, also the critique made by Card and Krueger (1995).

Following in this line of thought, my contention is that reliance on the NE paradigm tends to yield a narrow and one-sided portrait of the minimum wage. It puts most of the emphasis on negative features of a minimum

wage, places excessive weight on the employment effect at the expense of other economic and social considerations, and downgrades or omits numerous positive features. As evidence, compare the truncated list of positive rationales for a minimum wage given in Klein and Dorn (2007) (reproducing a survey sent to hundreds of economists about the pros and cons of a minimum wage) with the broader list given here. Also instructive are these anomalies. According to a 2006 national poll 83 percent of the American public said they favored a \$2.00 increase in the minimum wage, even though economists have been criticizing the minimum wage for decades.<sup>13</sup> Similarly, despite the highly negative picture of the minimum wage painted in neoclassical economics, Britain recently adopted a national minimum wage with little subsequent measurable negative effect (Arrowsmith, Gilman, Edwards and Ram 2003; Metcalf 2004). Lastly, since publication of CK's *Myth and Measurement* (1995), the economists who have most actively and influentially led the countercharge against the minimum wage are Neumark and Wascher. In their book *Minimum Wages* (2008: 289) they conclude, "we find it very difficult to see a good economic rationale for continuing to seek a higher minimum wage." The evidence they advance to support this conclusion is detailed and impressive; it is also adduced, however, with little-to-no substantive attention to the four positive rationales presented here or in earlier IE-related studies. Possibly, therefore, a more balanced and inclusive theoretical analysis would have led to a more balanced and inclusive empirical investigation and policy conclusion.

In fairness, one must also admit that institutional economists have not done well in putting forward their case for the minimum wage, thus allowing neoclassical economists to more easily and legitimately pass it by. To remedy this situation, I have endeavored in this paper to re-broaden the theory and policy debate on the minimum wage by outlining the core arguments advanced

<sup>13</sup> Reported in <http://pewresearch.org/pubs/18/maximum-support-for-raising-the-minimum>.

for it by earlier generations of institutional economists. Emphasized here are efficiency arguments, although normative arguments are also important. The institutional case for a minimum wage law is partially distinct but substantially complementary to the theory presented by other supporters, such as Card and Krueger. In addition, the analysis presented in this paper also helps integrate OIE and NIE.

I do not deny that some or many of the IE arguments cited in favor of a minimum wage can be captured in some expanded/amended NE-based model; I do claim, however, that if carried too far, this risks making NE a “theory for all seasons” and therefore fundamentally *ad hoc* and non-falsifiable. More important than critiquing NE is demonstrating that IE has an analytical core and provides labor economists with an alternative paradigm and perspective on labor issues. In addition, the NE/IE dichotomy usefully puts into the open fundamental issues that are often sidestepped, assumed away, or ignored; for example, that labor markets either are or are not self-correcting, the Invisible Hand in labor markets either achieves efficient outcomes or does not, and relatively unrestricted free trade in labor either promotes or harms the social interest. The answers to these questions mark the ultimate divide between orthodox and heterodox in contemporary labor economics, an area in which NE

and IE occupy overlapping but nonetheless distinct spaces.

In keeping with the evolutionary character of IE, the benefits and costs of a minimum wage vary by country, stage of economic development, extent of unemployment, and the breadth, depth, and structure of the labor market regulatory regime. Certainly some of the rationales for a minimum wage advanced in the 1930s are less important today (because of successful institutional innovation and regulation!), whereas other rationales may be of equal or greater importance. A pragmatic weighing of the evidence is required, with a balanced consideration of the costs of market failure versus the costs of government (and union) failure. Furthermore, IE is not committed to a minimum wage *per se*, and if other means can accomplish the same purpose (for example, an Earned Income Tax Credit, universal health insurance) but in a more efficient way, then they should be adopted. Thus, on one hand IE is open about means and welcomes market solutions; on the other hand, it is also convinced that relatively unfettered laissez-faire in labor markets is detrimental to social welfare, and that some degree of social protection and regulation of labor is therefore in the public interest. *Balance, pragmatism, progress, and human values* are the leitmotifs of institutional economics (and industrial relations) in this and all other policy issues.

## REFERENCES

- Adams, Henry. 1886. “Relation of the State to Industrial Action.” *Publications of the American Economics Association*, Vol. 1, No. 6, pp. 7–85.
- Addison, John, and Barry Hirsch. 1997. “The Economic Effects of Employment Regulation: What Are the Limits?” In Bruce Kaufman, ed., *Government Regulation of the Employment Relationship*, pp. 125–78. Madison, Wis.: Industrial Relations Research Association.
- Akerlof, George, and Janet Yellen. 1986. *Efficiency Wage Models of the Labor Market*. New York: Cambridge University Press.
- Altman, Morris. 2001. *Worker Satisfaction and Economic Performance*. New York: M.E. Sharpe.
- Appelbaum, Eileen, Peter Berg, Arne Kalleberg, and Thomas Bailey. 2000. *Manufacturing Advantage: Why High Performance Work Systems Pay Off*. Ithaca, N.Y.: Cornell University Press.
- Arrowsmith, James, Mark Gilman, Paul Edwards, and Monder Ram. 2003. “The Impact of the National Minimum Wage in Small Firms.” *British Journal of Industrial Relations*, Vol. 41, No. 3, pp. 435–56.
- Becker, Gary. 1962. “Irrational Behavior and Economic Theory.” *Journal of Political Economy*, Vol. 70, No. 1, pp. 1–13.
- Berle, Adolf, and Gardiner Means. 1932. *The Modern Corporation and Private Property*. New York: Macmillan.
- Bhaskar, V., and Ted To. 1999. “Minimum Wages for Ronald McDonald Monopsonies: A Theory of Monopsonistic Competition.” *Economic Journal*, Vol. 109, No. 455, pp. 190–203.
- Blum, Fred. 1947. “Marginalism and Economic Policy.” *American Economic Review*, Vol. 37 (September), pp.

- 647–52.
- \_\_\_\_\_. 1956. “The Social and Economic Implications of the Fair Labor Standards Act: An Interpretation in Terms of Social Cost.” *Proceedings of the Ninth Annual Meeting of the Industrial Relations Research Association*. Madison, Wis.: IRRA, pp. 167–83.
- Bok, Derek. 1993. *The Cost of Talent*. New York: Free Press.
- Boulding, Kenneth. 1957. “A New Look at Institutionalism.” *American Economic Review*, Vol. 47 (May), pp. 1–12.
- Bowles, Samuel. 2004. *Microeconomics: Behavior, Institutions, and Evolution*. Princeton: Princeton University Press.
- Boyer, George, and Robert Smith. 2001. “The Neoclassical Tradition in Labor Economics.” *Industrial and Labor Relations Review*, Vol. 54, No. 2, pp. 199–223.
- Bronfenbrenner, Martin. 1956. “Potential Monopsony in Labor Markets.” *Industrial and Labor Relations Review*, Vol. 9, No. 4, pp. 577–88.
- Budd, John. 2004. *Employment with a Human Face*. Ithaca: Cornell University Press.
- Bulow, Jeremy, and Lawrence Summers. 1986. “A Theory of Dual Labor Markets with Application to Industrial Policy, Discrimination, and Keynesian Unemployment.” *Journal of Labor Economics*, Vol. 4, No. 3 (Part 1), pp. 376–414.
- Cahuc, Pierre, and André Zylberberg. 2004. *Labor Economics*. Cambridge, Mass.: MIT Press.
- Card, David, and Alan Krueger. 1995. *Myth and Measurement: The New Economics of the Minimum Wage*. Princeton: Princeton University Press.
- Champlin, Dell, and Janet Knoedler. 2004. *The Institutional Tradition in Labor Economics*. Armonk, N.J.: M.E. Sharpe.
- Clark, John M. 1923. *Studies in the Economics of Overhead Costs*. Chicago: University of Chicago Press.
- Coase, Ronald. 1937. “The Nature of the Firm.” *Economica*, Vol. 4 (November), pp. 386–405.
- \_\_\_\_\_. 1960. “The Problem of Social Cost.” *Journal of Law and Economics*, Vol. 3, pp. 1–44.
- \_\_\_\_\_. 1992. “The Institutional Structure of Production.” *American Economic Review*, Vol. 82, No. 3, pp. 713–19.
- \_\_\_\_\_. 1994. *Essays on Economics and Economists*. Chicago: University of Chicago Press.
- Commons, John R. 1898. “The Right to Work.” *The Arena*, Vol. 21, pp. 132–41.
- \_\_\_\_\_. 1919. *Industrial Goodwill*. New York: McGraw-Hill.
- \_\_\_\_\_. 1921. *Industrial Government*. New York: Macmillan.
- \_\_\_\_\_. 1924. *Legal Foundations of Capitalism*. New York: Macmillan.
- \_\_\_\_\_. 1934. *Institutional Economics: Its Place in Political Economy*. New York: Macmillan.
- \_\_\_\_\_, and John Andrews. 1936. *Principles of Labor Legislation*, 4th ed. New York: Harper & Bros.
- Craypo, Charles. 1997. “Alternative Perspectives on the Purpose and Effects of Labor Standards Legislation.” In Bruce Kaufman, ed., *Government Regulation of the Employment Relationship*. Madison, Wis.: Industrial Relations Research Association, pp. 221–51.
- Culbertson, John. 1985. *Competition: Constructive and Destructive*. Madison, Wis.: 21st Century Press.
- Darity, William, Jr., and Arthur Goldsmith. 1995. “Mr. Keynes, the New Keynesians, and the Concept of Full Employment.” In Paul J. Wells, ed., *Post-Keynesian Economic Theory*, pp. 73–94. Boston: Kluwer.
- Dickens, William, and Kevin Lang. 1988. “The Reemergence of Segmented Labor Market Theory.” *American Economic Review*, Vol. 79, No. 2, pp. 129–34.
- Doeringer, Peter, and Michael Piore. 1971. *Internal Labor Markets and Manpower Analysis*. Lexington, Mass.: Lexington Books.
- Doucouliaqos, Christos, and T. D. Stanley. 2009. “Publication Selection Bias in Minimum-Wage Research? A Meta-Regression Analysis.” *British Journal of Industrial Relations*, Vol. 47, No. 2, pp. 406–28.
- Douglas, Paul. 1938. “The Economics of Wage Regulation.” *University of Chicago Law Review*, Vol. 5 (February), pp. 184–218.
- \_\_\_\_\_, and Joseph Hackman. 1938. “The Fair Labor Standards Act of 1938.” *Political Science Quarterly*, Vol. 53, No. 4, pp. 491–15.
- Dow, Gregory. 1997. “The New Institutional Economics and Employment Regulation.” In Bruce Kaufman, ed., *Government Regulation of the Employment Relationship*, pp. 57–90. Madison, Wis.: Industrial Relations Research Association.
- Dunlop, John. 1944. *Wage Determination under Trade Unions*. New York: Macmillan.
- \_\_\_\_\_. 1984. “Industrial Relations and Labor Economics: The Common Frontier of Wage Determination.” In *Industrial Relations Research Association, Proceedings of the Thirty-Seventh Annual Winter Meeting*, pp. 9–23. Madison, Wis.: IRRA.
- Erickson, Christopher, and Daniel J.B. Mitchell. 2008. “Monopsony as a Metaphor for the Emerging Post-Union Labor Market.” *International Labor Review*, Vol. 146, No. 3–4, pp. 163–87.
- Falk, Armin, Ernst Fehr, and Urs Fischbacher. 2003. “On the Nature of Fair Behavior.” *Economic Inquiry*, Vol. 41, No. 1, pp. 20–26.
- Fishback, Price. 1998. “Operations of ‘Unfettered’ Labor Markets: Exit and Voice in American Labor Markets at the Turn of the Century.” *Journal of Economic Literature*, Vol. 36, No. 2, pp. 722–66.
- Fogel, Walter. 1982. *Job Equity and Other Studies in Industrial Relations: Essays in Honor of Frederic Meyers*. Los Angeles: Institute of Industrial Relations, UCLA.
- Frank, Robert. 1995. *The Winner-Take-All Society*. New York: Free Press.
- Freedman, Craig. 2008. *Chicago Fundamentalism: Ideology and Methodology in Economics*. Hackensack, N.J.: World Scientific.
- Freeman, Richard. 1996. “The Minimum Wage as a Redistributive Tool.” *Economic Journal*, Vol. 106, No. 436, pp. 639–49.
- Fried, Barbara. 1998. *The Progressive Assault on Laissez-Faire: Robert Hale and the First Law and Economics Movement*. Cambridge, Mass.: Harvard University Press.
- Galbraith, John Kenneth. 1967. *The New Industrial State*. Boston: Houghton-Mifflin.
- Glickman, Lawrence. 1997. *A Living Wage: American Workers and the Making of Consumer Society*. Ithaca, N.Y.: Cornell University Press.
- Gobbin, Niko, Glenn Rayp, and Dirk Van de Gaer. 2007. “Inequality and Growth: From Micro Theory to Macro Empirics.” *Scottish Journal of Economics*, Vol. 54, No. 4, pp. 508–30.

- Hamermesh, Daniel. 1993. *Labor Demand*. Princeton: Princeton University Press.
- Hovenkamp, Herbert. 1990. "The First Great Law and Economics Movement." *Stanford University Law Review*, Vol. 42, No. 4, pp. 993-1058.
- Ippolito, Richard A. 2003. "The Impact of the Minimum Wage if Workers Can Adjust Effort." *Journal of Law and Economics*, Vol. 46, No. 1, pp. 207-27.
- Kates, Steven. 2008. "American Economics and the Crafting of the General Theory." Paper Presented at the 2008 History of Economic Thought Society Conference (Toronto). Melbourne: RMIT University.
- Kaufman, Bruce. 1988. *How Labor Markets Work: Reflections on Theory and Practice by John Dunlop, Clark Kerr, Richard Lester, and Lloyd Reynolds*. Lexington, Mass.: Lexington Books.
- \_\_\_\_\_. 1989. "Labor's Inequality of Bargaining Power: Changes over Time and Implications for Public Policy." *Journal of Labor Research*, Vol. 10, No. 3, pp. 285-98.
- \_\_\_\_\_. 1994. "The Evolution of Thought on the Competitive Nature of Labor Markets." In Clark Kerr and Paul D. Staudohar, eds., *Labor Economics and Industrial Relations: Markets and Institutions*, pp. 145-88. Cambridge: Harvard University Press.
- \_\_\_\_\_. 1996. "Why the Wagner Act? Reestablishing Contact with Its Original Purpose." In David Lewin, Bruce Kaufman, and Donna Sockell, eds., *Advances in Industrial and Labor Relations*, Vol. 7, pp. 15-68. Greenwich, Conn.: JAI Press.
- \_\_\_\_\_. 1997. "Labor Markets and Employment Regulation: The View of the 'Old Institutionalists.'" In Bruce Kaufman, ed., *Government Regulation of the Employment Relationship*, pp. 11-55. Madison, Wis.: Industrial Relations Research Association.
- \_\_\_\_\_. 1999a. "Expanding the Behavioral Foundations of Labor Economics." *Industrial and Labor Relations Review*, Vol. 52, No. 3, pp. 361-92.
- \_\_\_\_\_. 1999b. "Emotional Arousal as a Source of Bounded Rationality." *Journal of Economic Behavior and Organization*, Vol. 38, No. 2, pp. 135-44.
- \_\_\_\_\_. 2003. "John R. Commons and the Wisconsin School on Industrial Relations Strategy and Policy." *Industrial and Labor Relations Review*, Vol. 57, No. 1, pp. 3-30.
- \_\_\_\_\_. 2004. "The Institutional and Neoclassical Schools in Labor Economics." In Dell Champlin and Janet Knoedler, eds., *The Institutional Tradition in Labor Economics*, pp. 13-38. Armonk, N.J.: M.E. Sharpe.
- \_\_\_\_\_. 2007a. "The Institutional Economics of John R. Commons: Complement and Substitute for Neoclassical Economic Theory." *Socio-Economic Review*, Vol. 5, No. 1, pp. 3-46.
- \_\_\_\_\_. 2007b. "The Impossibility of a Perfectly Competitive Labor Market." *Cambridge Journal of Economics*, Vol. 31, No. 5, pp. 775-88.
- \_\_\_\_\_. 2008. "The Non-Existence of the Labor Demand/Supply Diagram, and Other Theorems of Institutional Economics." *Journal of Labor Research*, Vol. 29, No. 3, pp. 285-99.
- \_\_\_\_\_. 2009a. "Labor Law and Employment Regulation: Institutional and Neoclassical Perspectives." In Kenneth Dau-Schmidt, Seth Harris, and Orly Lobel, eds., *Labor and Employment Law and Economics*, pp. 3-58. Northampton, Mass.: Edward Elgar.
- \_\_\_\_\_. 2009b. "Promoting Labor Market Efficiency and Fairness through a Legal Minimum Wage: The Webbs and the Social Cost of Labor." *British Journal of Industrial Relations*, Vol. 47, No. 2, pp. 306-26.
- \_\_\_\_\_. 2010. "Chicago and the Development of Twentieth-Century Labor Economics." In Ross Emmett, ed., *The Elgar Companion to the Chicago School of Economics*. Northampton, Mass.: Elgar, forthcoming.
- Kerr, Clark. 1977. *Labor Markets and Wage Determination*. Berkeley: University of California Press.
- Keynes, John M. 1936. *The General Theory of Employment, Interest, and Money*. New York: Harcourt Brace.
- Killingsworth, Mark. 1983. *Labor Supply*. Cambridge: Cambridge University Press.
- Kitson, M., R. Martin, and F. Wilkinson. 2000. "Labor Markets, Social Justice, and Economic Efficiency." *Cambridge Journal of Economics*, Vol. 24, No. 6, pp. 631-41.
- Klein, Daniel, and Stewart Domsle. 2007. "Reasons for Supporting the Minimum Wage: Asking Signatories of the 'Raise the Minimum Wage' Statement." *Econ Journal Watch*, Vol. 4, No. 1, pp. 125-67.
- Kniesner, Thomas, and Arthur Goldsmith. 1987. "A Survey of Alternative Models of the Aggregate U.S. Labor Market." *Journal of Economic Literature*, Vol. 25, No. 3, pp. 1241-80.
- Krugman, Paul. 2002. "For Richer or Poorer." *New Times Magazine* (October 20), pp. 62-67.
- Lazear, Edward. 2000. "Economic Imperialism." *Quarterly Journal of Economics*, Vol. 115, No. 1, pp. 99-145.
- Lees Smith, H. B. 1907. "Economic Theory and Proposals for a Legal Minimum Wage." *Economic Journal*, Vol. 17, No. 68, pp. 504-12.
- Leonard, Thomas. 2000. "The Very Idea of Applying Economics: The Modern Minimum-Wage Controversy and Its Antecedents." *History of Political Economy*, Vol. 32 (supplement), pp. 117-44.
- Lester, Richard. 1964. *Economics of Labor*, 2<sup>nd</sup> ed. New York: Macmillan.
- Levin-Waldman, Oren. 2001. *The Case of the Minimum Wage: Competing Policy Models*. Albany: State University of New York Press.
- \_\_\_\_\_. 2009. "The Minimum Wage and Competing Ethical Conceptions." In David Lewin and Bruce Kaufman, eds., *Advances in Industrial and Labor Relations*, Vol. 16, pp. 181-210. London: Emerald.
- Linder, Marc. 1989. "The Minimum Wage as Industrial Policy: A Forgotten Role." *Journal of Legislation*, Vol. 16, No. 1, pp. 151-71.
- Macpherson, David. 2004. "Living Wage Laws and the Case for a Targeted Wage Subsidy." In Deborah M. Figart, ed., *Living Wage Movements: Global Perspectives*, pp. 43-50. London: Routledge.
- Manning, Alan. 2003. *Monopsony in Motion*. Princeton: Princeton University Press.
- \_\_\_\_\_. 2005. "Monopsony and Labour Demand." *Brussels Economic Journal*, Vol. 48, No. 1-2, pp. 95-112.
- McIntyre, Richard, and Yngve Ramstad. 2002. "John R. Commons and the Problem of International Labor Rights." *Journal of Economic Issues*, Vol. 36, No. 2, pp. 293-301.
- Medema, Steve. 1996. "Ronald Coase and American Institutionalism." In *Research in the History of Economic Thought and Methodology*, pp. 51-92. Greenwich, Conn.:

- JAI Press.
- Metcalf, David. 2004. "The Impact of the National Minimum Wage on the Pay Distribution, Employment, and Training." *Economic Journal*, Vol. 114, No. 494, pp. C84–C86.
- Miller, Gary. 1991. *Managerial Dilemmas*. New York: Cambridge University Press.
- Mincer, Jacob. 1976. "Unemployment Effects of Minimum Wage Changes." *Journal of Political Economy*, Vol. 84 (August), pp. S87–S104.
- Mitchell, Daniel J.B. 1986. "Inflation, Unemployment, and the Wagner Act: A Critical Appraisal." *Stanford University Law Review*, Vol. 38 (April), pp. 1065–95.
- Moss, David. 1996. *Socializing Security: Progressive Era Economists and the Origins of American Social Policy*. Cambridge, Mass.: Harvard University Press.
- Neumark, David, and William Wascher. 2002. "Do Minimum Wages Fight Poverty?" *Economic Inquiry*, Vol. 40, No. 3, pp. 315–33.
- \_\_\_\_\_. 2007. "Minimum Wages and Employment." IZA Discussion Paper 2570. Bonn, Germany: IZA.
- \_\_\_\_\_. 2008. *Minimum Wages*. Cambridge, Mass.: MIT Press.
- Nordlund, Willis. 1997. *The Quest for a Living Wage: The History of the Federal Minimum Wage Program*. Westport, Conn.: Greenwood.
- Perlman, Selig. 1928. *A Theory of the Labor Movement*. New York: Macmillan.
- Polanyi, Karl. 1944. *The Great Transformation: The Political and Economic Origins of Our Times*. Boston: Beacon.
- Posner, Richard. 2007. *Economic Analysis of Law*, 7<sup>th</sup> ed. Amsterdam: Wolters Kluwer.
- Power, Marilyn. 1999. "Parasitic-Industries Analysis and Arguments for a Living Wage for Women in the Early Twentieth-Century United States." *Feminist Economics*, Vol. 5, No. 1, pp. 61–78.
- Prasch, Robert. 1998. "American Economists and Minimum Wage Legislation During the Progressive Era, 1912–1923." *Journal of the History of Economic Thought*, Vol. 20, No. 2, pp. 161–75.
- \_\_\_\_\_. 2004. "How Is Labor Distinct from Broccoli? Some Unique Characteristics of Labor and Their Importance for Economic Analysis and Policy." In Dell Champlin and Janet Knoedler, eds., *The Institutionalist Tradition in Labor Economics*, pp. 146–58. Armonk, N.J.: M.E. Sharpe.
- \_\_\_\_\_. 2005. "The Social Cost of Labor." *Journal of Economic Issues*, Vol. 39, No. 2, pp. 1–7.
- Reder, Melvin. 1982. "Chicago Economics: Permanence and Change." *Journal of Economic Literature*, Vol. 20, No. 1, pp. 1–38.
- Reynolds, Morgan. 1991. "The Myth of Labor's Inequality of Bargaining Power." *Journal of Labor Research*, Vol. 12, No. 2 (Spring), pp. 167–84.
- Rottenberg, Simon. 1981. *The Economics of Legal Minimum Wages*. Washington, D.C.: American Enterprise Institute.
- Samuelson, Paul, and William Barnett. 2007. *Inside the Economist's Mind: Conversations with Eminent Economists*. Oxford: Blackwell.
- Schmid, Allan. 2004. *Conflict and Cooperation: Institutional and Behavioral Economics*. Malden: Blackwell.
- Simon, Herbert. 1982. *Models of Bounded Rationality*, Vol. 2. Cambridge, Mass.: MIT Press.
- Slichter, Sumner. 1931. *Modern Economic Society*, 2nd ed. New York: Holt.
- Sobel, Russell. 1999. "Theory and Evidence on the Political Economy of the Minimum Wage." *Journal of Political Economy*, Vol. 107, No. 4, pp. 761–85.
- Stabile, Donald. 1993. *Activist Unionism: The Institutional Economics of Solomon Barkin*. Armonk: M.E. Sharpe.
- \_\_\_\_\_. 2008. *The Living Wage: Lessons from the History of Economic Thought*. Armonk, NY: M.E. Sharpe.
- Stigler, George. 1946. "The Economics of Minimum Wage Legislation." *American Economic Review*, Vol. 36, No. 3, pp. 358–65.
- \_\_\_\_\_. 1982. *The Economist as Preacher and Other Essays*. Chicago: University of Chicago Press.
- Stiglitz, Joseph. 2000. "Democratic Development as the Fruits of Labor." *Perspectives on Work*, Vol. 4, pp. 31–38.
- \_\_\_\_\_. 2002. "There Is No Invisible Hand." *The Guardian* (December 20).
- Taylor, James. 1977. "Exploitation through Contrived Dependence." *Journal of Economic Issues*, Vol. 11 (March), pp. 51–59.
- Webb, Sidney. 1912. "The Economic Theory of a Legal Minimum Wage." *Journal of Political Economy*, Vol. 20, No. 10, pp. 973–98.
- \_\_\_\_\_, and Beatrice Webb. 1897. *Industrial Democracy*. London: Longmans, Green.
- Whalen, Charles. 2008. "John R. Commons and John Maynard Keynes on Economic History and Policy: The 1920s and Today." *Journal of Economic Issues*, Vol. 42 (March), pp. 225–42.
- Williamson, Oliver. 1985. *The Economic Institutions of Capitalism*. New York: Free Press.
- Young, Madelyn, and Bruce Kaufman. 1997. "Interfirm Wage Differentials in a Local Labor Market: The Case of the Fast-Food Industry." *Journal of Labor Research*, Vol. 18, No. 3, pp. 463–80.