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Labor Economics

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Labor Economics

Abstract

The authors hypothesize that most labor economists "sooner or later had to incorporate at least the appearance of institutional concerns in their papers to avoid indigestion whenever lunching with colleagues outside the field of economics" They add: "If the new interests of modern labor economics are in fact driven by the imperatives of science, then the institutionalist and the neoclassical approaches may well synthesize".

Keywords

labor economics, institutionalism, neoclassicism, wages, labor supply, labor demand

Disciplines

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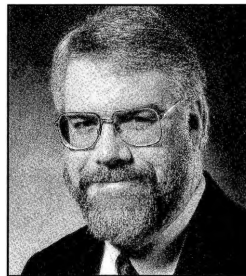
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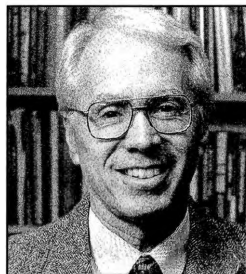
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The authors hypothesize that most labor economists “sooner or later had to incorporate at least the appearance of institutional concerns in their papers to avoid indigestion whenever lunching with colleagues outside the field of economics.” They add: “If the new interests of modern labor economics are in fact driven by the imperatives of science, then the institutionalist and the neoclassical approaches may well synthesize.”



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George Boyer and Robert Smith

LABOR ECONOMICS

THE DEVELOPMENT OF LABOR ECONOMICS IN THE postwar period can be characterized as a struggle for dominance between two species of *genus economicus* that skinned the labor-market cat quite differently. The roots of one group were in the “institutionalist” approach to the subject, typified by a textbook on American labor issues, entitled *Labor Problems*, published in 1905 by Thomas Adams and Helen Sumner. The authors state in the preface that “the principal aim of this book is to furnish a convenient collection of facts that will facilitate the study and the teaching of the American labor problem. . . . There has been given no statement and little intimation of the general social theory which most logically and consistently explains the facts cited” (pp. v–vi).

The book has two parts: “Evils” and “Remedies.” “Evils” contains chapters on female and child labor, immigration, the sweating system, and poverty. “Remedies” includes chapters on unions, profit-sharing, cooperation, industrial education, labor laws, and the

material progress of the wage-earning classes. The book contains very little economics, although both Adams and Sumner were members of the Department of Political Economy at the University of Wisconsin. As suggested here and argued in the next section, the heart of institutionalism is a detailed description of the practices and institutions affecting workers. The *soul* of institutionalism, however, is reformist; markets are generally seen as harsh institutions whose outcomes must be ameliorated by some form of collective action if social equity is to be achieved.

The other group of economists had its roots in the approach taken by neoclassical analysis,¹ which characterizes the current textbook of choice (at least one of us would like to think): *Modern Labor Economics*, by Ronald Ehrenberg and Robert Smith of Cornell University’s School of Industrial and Labor Relations. The focus of this text is on economic theory, and its sections are organized along the lines of “demand,” “supply,” and “market” issues. Labor problems are seen far more as opportunities for the application of theoretical

The authors, both born and bred in the neoclassical tradition, would like to thank our colleagues Robert Aronson, Ronald Ehrenberg, Gary Fields, Robert Hutchens, George Jakubson, and Marcus Rebeck for their perspectives on postwar labor economics and careful reading of a draft of this essay, and Hampton Finer for his excellent research assistance. They should in no way be blamed for either the essay’s incautious tone or any of its (probably numerous) departures from evenhandedness.

analysis than as evils to be remedied; in fact, the word “evil” does not appear anywhere in the book (although Smith regularly cites Knievel in his class lectures as an example of someone who was handsomely rewarded for taking on risky work).

In the neoclassical view, markets improve social welfare by reallocating resources through the voluntaristic mechanism of mutually beneficial transactions. Taking some initial distribution of resources as given, neoclassical theory focuses on voluntary transactions that simultaneously reallocate these resources and leave the affected parties better off; such transactions are said to promote “economic efficiency.” Thus, neoclassical theory separates the issues of distribution (equity) and allocation (efficiency), and it gives much more attention to the latter. Government interventions in markets, often advocated by one or more groups as promoting equity (however defined), are resisted or only cautiously approved by neoclassicists because such interventions tend to suppress voluntary transactions.

This essay chronicles the intellectual ferment that was created as institutionalism flourished and then was overwhelmed by the neoclassical approach, only recently to make signs of a recovery. The ferment really concerns the larger issue of how to approach a social science, and to follow the action we must start with some background, which is covered in the following section.

Introducing the Institutional Leopard and Neoclassical Tiger

Put in one sentence, the focus of institutional labor economics is on “labor,” while the focus of the neoclassical approach is on “economics.” But what does this pithy sound-bite mean? To gain a fuller view of these two competing approaches to the subject of labor economics, it is useful to consider how each camp answers three questions.

What Are the Motives for Studying the Labor Market?

Underlying the institutionalist approach to the study of employment issues is a strong propensity toward social reform. To a large extent, the self-evident evils of low wages, poor working conditions, and worker powerlessness are seen as remedied by unionism or protective labor legislation. Indeed, the writings of institutionalists are often characterized by a passionate advocacy that can be traced back to the days when labor courses were taught in ethics departments (McNulty, 1984: 148).

The writings of neoclassical economists are at least superficially devoid of passion. This approach to the field strives to apply the principles and systematic analysis that characterize economic theory to employment issues, and in the past three or four decades the features and problems of the labor market increasingly have been seen as fertile ground for the testing of economic hypotheses. Thus, whereas the institutionalist would see certain outcomes of labor markets as problems (even evils) to be remedied, the neoclassicist—even when agreeing with that ethical viewpoint—would first focus on understanding the market forces underlying such outcomes.

Which Approach Cares More about Workers?

Institutionalists have often claimed the moral high ground in their intellectual battles with neoclassicists, and defense of this ethical turf is relatively easy because of their tendency to focus on the plight or the behavior of specific individuals or groups. Like the congressional committee seeking to build support for some piece of reform legislation, institutionalists can easily identify and bring forth either victims of market forces whose suffering is palpable or employers whose behavior is reprehensible. Those who place the focus of their analysis and concern elsewhere do so at the grave risk of being labeled hard-hearted or—that word again—evil.

While some neoclassicists give little thought to the institutionalist charge of moral vagrancy, those who do feel the need to link their efforts to issues of social betterment reply that social well-being is a function of the *totality* of individuals, and that both gains *and* losses (benefits and costs) should be analyzed when making policy.

Claiming to focus on the forest of *consumer* welfare rather than the trees of *producer* (including worker) interests, neoclassicists view the labor market as the primary means of directing labor resources to the production of socially desired goods and services. The *competition* among all sorts of producers that is spawned by freely functioning markets is seen as more socially desirable (because it advances consumer interests) than the *protection* of specific groups that is often created by political intervention in the marketplace.

What Scientific Methodology Is Used?

The institutionalist approach to the field of labor economics tends to be *inductive* and “fact-based.” The analysis begins with certain facts, and the focus on individual behavior and outcomes lends itself to a case-study approach toward data gathering. From the intensive, often historical, study of individual cases come detailed *descriptions* about how various labor markets operate. Institutionalists defend their approach as based on reality, not on abstraction, but Ronald Coase, the 1991 Nobel laureate in economics, sees the contributions of institutionalists differently: “Without a theory they had nothing to pass on except a mass of descriptive material waiting for a theory, or a fire” (Posner, 1993: 206).²

Neoclassical labor economics, with its focus on overall outcomes, tends to employ data from larger samples, but that is not the most striking difference between the two approaches. The neoclassical approach to labor economics tends to be theory-driven and therefore largely *deductive* and ahistorical in nature. One starts with certain fundamental principles, and from theoretical analyses are drawn conclusions or hypotheses that are then tested with data from the labor market. The neoclassical economist is looking for central social tendencies, not for individual pathologies—for analysis, not for description. In fact, the modern use of statistical techniques to ferret out a central tendency delegates deviations from these tendencies to the “error term” of the estimating equation. Caring deeply about market victims, institutionalists are understandably offended when harsh market outcomes seem to be dismissed by neoclassicists as “unexplained variation.”

How the Institutional Leopard Acquired (at Least a Few) Economic Stripes

In the years immediately after World War II, institutionalist labor economics was in full bloom. Yale’s Lloyd Reynolds published a textbook entitled *Labor Economics and Labor Relations* in 1949, and it was firmly institutionalist in approach. The book’s first sentence proclaimed it to be an “introduction to the study of labor”; note that despite its title, it was not introduced as a study of economics. The first 60 percent of the book was devoted to unions (including chapters on union history, governance, and politics), and the chapters in the “economics” section mainly described practices followed by firms and industries in setting wages. Filled with descriptive narrative on unions, government regulations, and employers’ practices, and sprinkled with a handful of tables and charts describing trends and conditions, the book contained virtually no discussions or analyses of how supply and demand affect the price of labor. The text had only one theory-related graph (p. 435), which purported to explain how the additional output derived from an additional labor-hour falls if more labor is hired with capital held constant. This graph, central to an understanding of labor demand, was completely mislabeled, and the reader was led to thoroughly confuse the extra output of the first and last hours of labor hired. One can only surmise that neither the author nor the readers found this graph to be an important pedagogical device!

Why the author of a book with so little theory in it put “economics” in the title is a question that immediately comes to mind. The 1930s had seen the rise of a neoclassical analysis of the labor market with the publication of two books of the same title, *The Theory of Wages*, by John Hicks (1932) and Paul Douglas (1934). Hicks wrote that the purpose of his book was to restate “the theory of wages in a form which shall be reasonably abreast of modern economic knowledge” (1932: v).³

Similarly, Douglas stated that “the patient accumulation of facts will in itself avail us little unless these facts are subjected to mathematical and statistical analysis to determine their inner relationships. . . . The author . . . feels that the sooner economists come to use facts as means rather than as ends, the more rapid will be the progress of economic science” (1934: iii).

Thus, an approach to the subject of labor economics that emphasized general principles rather than descriptive detail was neither unknown nor awaiting discovery. Instead, it was explicitly *rejected* by many of those who called themselves labor economists in the 1930s and 1940s—driving Hicks into mathematical theory (see note 5) and Douglas into the Marines and later the U.S. Senate. Why those who studied labor issues called themselves economists but explicitly rejected neoclassical theory can be explained by a catastrophe and a coincidence.

The catastrophe, of course, was the Great Depression. Unemployment rates of 25 percent, closed banks, bread lines, and the specter of revolution focused the attention of the thoughtful on individual suffering rather than abstraction. The market had clearly failed, and when unions gave “voice” and power to a large segment of the working class, they were justly regarded as saviors of our market system from more revolutionary, collectivist forces. It is little wonder that unions were accorded such prominence in postwar textbooks—and that market forces, in both theory and practice, were either dismissed or considered evils to be vanquished. In the second edition of *The Theory of Wages*, Hicks himself lamented that “1932 was not a lucky date for the appearance of a book like this. It was the blackest year of the Great Depression; there has been no date in this century to which the theory that I was putting out could have been more inappropriate. . . . So, soon after its birth, *The Theory of Wages* began to look like the last gasp of an *ancien régime*” (1963: 305).

The coincidence was that the first academic study of the American labor movement had been published (in 1886) by an economist, not by a historian, sociologist, or scholar from some other social science. Richard T. Ely, a founder of the American Economic Association and, coincidentally, a friend of Cornell’s A. D. White, had learned his economics at Columbia and in Germany just as “classical” economics was becoming transformed into the neoclassical tradition. The classical economics of Adam Smith and David Ricardo had focused on economic growth in a market economy, and it regarded human welfare as roughly proportional to the volume of output. A central purpose of classical analysis was to reveal how changes in the quality and quantity of labor supply affected the growth of aggregate output.

The “new” classical economics that flowered in the late nineteenth century diverged in two ways: (1) it emphasized the maximization of *utility* (happiness), not wealth, as the key to human welfare; and (2) it stressed the allocation of a *given* set of resources, not secular growth, as the central “problem of economics” (Blaug, 1962: 273–74). According to the English economist Joan Robinson, classical economics was concerned with “big questions”: the long-term growth of the economy and the distribution of output among wages, rent, and profit. Neoclassical economics, on the other hand, was concerned with “little questions,” such as

why does an egg cost more than a cup of tea? It may be a small question but it is a very difficult and complicated one. It takes a lot of time and a lot of algebra to work out the theory of it. So it kept . . . [economists] occupied for fifty years. They had no time to think about the big question, or even to remember that there was a big question, because they had to keep their noses right down to the grindstone, working out the theory of the price of a cup of tea. (Robinson, 1953: 22)

The attention given by neoclassical economists to prices and their underlying demand and supply conditions in allocating resources permitted analytical techniques that were abstract and (ultimately) mathematical. Ely came to regard the economics of the neoclassicists as “dry bones,” and he turned his attention to the study of practical

Early Labor Economics at Cornell

In 1885–86, a Cornell economist by the name of Henry Carter Adams taught a course in political economy in which unions, protective labor legislation, and free trade were discussed. In March 1886, Adams delivered a paper before the Constitution Club in New York City, in which he argued against laissez-faire capitalism and in favor of government intervention in the economy. Later that spring, at a symposium on the “Labor Problem” held at Cornell, Adams defended the labor movement, and in particular the Knights of Labor in its strike against Jay Gould’s Southwestern Railroad System.

These papers apparently infuriated Henry Sage, a major Cornell benefactor and chairman of the Board of Trustees, who was not in favor of “self appointed reformers,” especially when they happened to be on Cornell’s faculty. As a result, Adams’s contract was not renewed when it expired in 1887, despite the support of his students and Richard Ely. He obtained a faculty appointment at the University of Michigan, and went on to become president of the American Economic Association in 1896 (Dorfman, 1954: 28–37).

No separate courses in labor were offered by the economics department at Cornell for some two decades, until a brave soul by the name of Robert Hoxie undertook to do so from 1905 to 1907. He, too, soon left Cornell’s

employ—although presumably voluntarily—and no labor specialist was on the faculty until Sumner Slichter came in the 1920s (McNulty, 1984: 149–50).

Between 1938 and 1945, Cornell labor economist Royal Montgomery and coauthor Harry Millis of the University of Chicago published a three-volume study, *The Economics of Labor*. Despite its title, the two-thousand-page study concerned much more than economics, with most of the economics confined to volume 1, written mainly by Montgomery.

Olin Library’s copy of *The Economics of Labor* contains some interesting handwritten commentary by Montgomery’s students, reflective of 1940s humor. One student wrote, “This book reads just like he talks,” to which another responded, “Oh yea! Where are the gestures?” As a check on labor economics students of today, we perused Catherwood Library’s eight copies of *Modern Labor Economics* by Ehrenberg and Smith. We found prolific underlining but only one marginal note (“LEARN!”), written next to a section on income and substitution effects in the labor supply chapter. One can variously hypothesize that the subject matter is now more absorbing, students are more serious (we hesitate to say “sober”), professors are more venerated, or that in this age of television, students are less inclined to engage in writing of any sort!

problems using a variety of methods, including historical. His interests were so wide that his graduate students later became professors of sociology and history, not just of economics. In 1892 the University of Wisconsin hired Ely to be director of the newly formed School of Economics, Political Science, and History, and in 1904 he hired John R. Commons, who was to become the founder of the “Wisconsin School” of institutional economics.

Because the boundaries of the social sciences in the late nineteenth century were much more flexible and permeable than they are now, intellectually vigorous social scientists of any stripe could have stepped forward to claim “labor problems” as the domain of their field. It is largely happenstance that Ely, Commons, and a handful of

other economists, such as a short-term Cornellian named Henry Carter Adams (*see box above*), did so for the field of economics.⁴ Thus it was that “labor problems,” which at the time was also claimed by the field of ethics, came into the domain of economics. And to economics departments, then, were attracted students of society who were inductive in their method and reformist in their motive. These “institutionalists” were not suffered gladly by those mainline economists intent on building a science in the image and likeness of physics, but they insisted on calling themselves economists and putting “economics” in the titles of their books.

Putting the Tiger of Theory in the Tank of Labor Issues

A half century ago institutionalist-based labor economics was clearly the dominant approach, but it was ripe for attack. Neoclassical theory had been newly invigorated by the application and extension of calculus to the analysis,⁵ unions were so powerful that they had lost some of the underdog status that had attracted early social reformers, and the profound fears of permanently high unemployment were becoming a distant memory. Even those with institutionalist roots began to speak of the need for general principles to help make sense of descriptive facts,⁶ although—as we shall see—rhetoric preceded reality.

In 1941, Princeton's Richard Lester published a textbook entitled *Economics of Labor*. He wrote that the book is “analytic rather than encyclopedic. The emphasis throughout the book is upon economic principles rather than upon particular events or ephemeral facts” (p. vii). Lester had by no means rejected institutionalism, however, as can be seen by the titles of the book's three major parts: “Labor's Economic Problems”; “Organization and Labor Relations”; and “Collective Bargaining in Certain Industries.” Moreover, Lester eschewed the very generalization that theory seeks: “Generalization is especially difficult when each problem that arises may be unique because it presents a slightly different combination of factors or a new set of circumstances” (p. 38).

Carroll Daugherty, who was strongly critical of the institutional approach in a 1945 paper on the labor field in the *American Economic Review*, was clearly underwhelmed by Lester's text: “There is, in fact, no labor textbook which satisfactorily employs and integrates the tools of economic analysis in its discussions. The best thing thus far in this respect is R. A. Lester's *Economics of Labor* . . . and labor teachers and writers are greatly in his debt. But Lester, after berating his competitors in front of his textbook audience . . . misses the trapeze in midair and is fortunate to land in the safety net of confusion” (p. 655).

Despite his harsh words for Lester, Daugherty by no means rejected the need for understanding facts and institutions in the study of labor markets. Like the institutionalists, Daugherty maintained that “a good labor textbook and course” should still focus on “the several ‘problems’ of labor” and the efforts of workers, employers, unions, and the government to solve these problems. He added, however, that the material in such a textbook or course “should be not just descriptive but also and primarily analytical. . . . Every effort and every proposal to ‘solve’ a labor problem requires appraisal in economic terms and with the use of economic-analytical methods” (p. 653). In fact, deficiencies in their training in these methods explained why institutionalists were looked down upon by economists at large:

The fact that “price” economists have looked down their noses at teachers of labor courses is almost entirely the fault of the latter. The ranks of labor teachers have contained too many sociologists, political scientists, and historians, whose education, if any, in the use of the tools of economic analysis has been distressingly inadequate, and it is a feeble defense at best for such teachers to accuse the price economist of ivory-towerism and devotion to impractical theory. The same thing is true of some labor textbook writers. (Daugherty, 1945: 653)

Daugherty's call for more analytic labor texts was a generation ahead of its time. Market forces are strong, and the market for analyses of the labor market was still dominated by institutionalists. A text by Orme Phelps, a former student of Paul Douglas and an undergraduate mentor of ILR's Smith, illustrates the economic realities of peddling labor economics texts to economists. In its first edition, published in 1950, Phelps's *Introduction to Labor Economics* explained that labor economics is

concerned primarily with principles, secondarily with facts. That is not because facts are unimportant in labor economics. They are vitally important . . . [but] facts change with great rapidity . . . and those already collected, while helpful for purposes of interpretation, often do not apply to the current problem. It is different with principles. The facts presented in

this book will therefore be intended as primarily illustrative, and emphasis will be concentrated on the methods of dealing with them in the solution of problems. (Phelps, 1950: 3–4)

True to this theme, the first nine chapters of this text were devoted to issues of wages and unemployment; these were followed by the obligatory chapters on unions, of which there were also nine.

By his second edition in 1955, however, Phelps bowed (we presume) to market pressures and reorganized his text to place ten chapters describing unions ahead of six chapters on wages and employment. The 1955 text even added a wonderfully institutionalist chart describing labor's "All-American Union Team" (Chart 4–5, p. 91), depicting George Meany as the fullback (and captain), John L. Lewis as the quarterback, the Teamsters' Dave Beck as right halfback, Walter Reuther as left halfback, and Harry Bridges as left end. We confess to eagerly scanning Phelps's 1961 edition to see if the 1959 allegations of bribery against Jimmy Hoffa merited his listing as a "wide receiver," only to find Phelps had dropped the chart. We were rewarded, however, with a detailed list of Hoffa's alleged crimes and the colorful names of mobsters from whom it was said Hoffa had "received"; among them, the student is informed, were "Tony Ducks" Corallo, "Shorty" Feldman, and Paul "The Waiter" Ricca (p. 93). Institutionalism in labor texts was clearly alive and well in the early '60s.

Given the views of Daugherty and the dissonance between cognition and content displayed by Lester and Phelps, there was clearly intellectual unrest in the field of labor economics in the postwar period. Although it was waged over a full generation, the battle between institutionalists and neoclassicists was formally joined in the mid-1940s through two widely followed debates: one on the marginal productivity theory of labor demand, and one on the usefulness of economic theory in explaining wage rates in the union sector.

Debate on the Marginal Productivity Theory of Demand

The reader may recall from a distant—and probably required—course that underlying the concept of labor demand by firms is the notion

that adding workers while holding capital constant increases output. These increments to output ("marginal productivity") are assumed to diminish, however, as more and more labor is added, and a profit-maximizing firm will stop hiring when the value of labor's marginal product falls below the cost of hiring this extra labor. Thus, theory implies that when a wage increase causes the costs of hiring labor to rise, firms will cut their use of labor in order to bring the value of marginal productivity back in line with marginal labor costs. The concept of diminishing marginal productivity and the chain of reasoning underlying the postulated profit-seeking behavior are what underlie the downward-sloping labor demand curve.

Professor Lester took issue with the relevance of this theory of labor demand in an article published in 1946. His interviews with business executives (note the case study approach) led him to conclude that these decision makers neither thought in terms of marginal productivity nor, as a practical matter, could they explicitly calculate labor's marginal product with any degree of confidence. He therefore concluded that "much of the economic reasoning on company employment adjustments to increases or decreases in wage rates is invalid, and a new theory of wage-employment relationships for the individual firm must be developed" (Lester, 1946: 71).

Professor Fritz Machlup, then at the University of Buffalo, sprang to the defense of neoclassical theory by arguing that Lester misunderstood the role of theoretical models in analyzing behavior. Machlup argued that a driver of a car deciding whether to overtake a truck proceeding slowly in front of him on a two-lane road will not explicitly measure or calculate in a formal way all the variables involved in making a decision about overtaking the vehicle. However, if scientists were to *model and predict* this driver's behavior, they would have to formally adopt and numerically solve such a model. Machlup argued that

the explanation of an action must often include steps of reasoning which the acting individual himself does not *consciously* perform (because the

action has become routine) and which perhaps he would never be able to perform in scientific exactness (because such exactness is not necessary in everyday life). To call, on these grounds, the theory “invalid,” “unrealistic” or “inapplicable” is to reveal failure to understand the basic methodological constitution of most social sciences. (Machlup, 1946: 535)

Machlup’s arguments carried the day, and even texts grounded in the institutionalist tradition, such as those by Reynolds and Phelps, continued to analyze the demand for labor in terms of the marginal productivity model.⁷

Debate on the Relevance of the Economic Theory of Wage Determination

The second debate was joined by John Dunlop and Arthur Ross, two prominent economists who held differing views on how to analyze the wage policies pursued by unions. Dunlop called for a more analytical application of economic theory and argued that a theory of union behavior “requires that the organization be assumed to maximize (or minimize) something.” The subject of unionism “cannot be left any longer merely to institutional and historical methods” (Dunlop, 1944: 4).

Ross, rising to the defense of the institutionalist approach, answered that union wage policy could not be understood by “the mechanical application of any maximization principle” and that unions were not primarily economic organizations. Ultimately, Ross argued that wages had less to do with economics than with social, political, and moral forces: “There are forces in society and in the economy making for uniformity in the wage structure but they are not merely the forces of supply and demand. . . . Equity and justice have long permeated industrial society, but the growth of organization has endowed them with compelling force” (Ross, 1948: 74).

That Dunlop’s call for more use of systematic theory and less reliance on institutional idiosyncrasy eventually prevailed is best seen in the changes that took place in the longest-running institutionalist hit:

Lloyd Reynolds’s *Labor Economics and Labor Relations*. Between 1964 and 1970, Professor Reynolds revised his popular text to place the section called “Economics of the Labor Market” first rather than second. While his text was still clearly institutionalist, the preface to his fifth edition (1970) noted

In this edition, I have reversed the previous sequence and have placed the economic analysis at the beginning of the book. . . . First, labor economics is basic in the sense that the economics of collective bargaining is included within it. . . . Second, research in labor economics is shifting in a quantitative and econometric direction. . . . The wealth of new research material warrants both enlarging the “economic” component of this text and placing it at the beginning of the discussion. (Reynolds, 1970: iv)

More important than the ordering of topics, however, was the increased emphasis on theory. In contrast to that one sorry graph in 1949, fully twenty theory-related graphs could be found in the “economics” part of the book’s 1970 edition—which by then actually had chapters on “demand” and “supply.”

Dunlop’s “victory” provides a good example of the curse of the answered prayer, because thirty years later he was engaged in yet another institutionalist-neoclassicist debate—this one occurring in the pages of ILR’s professional journal, the *Industrial and Labor Relations Review*. In this debate, Dunlop was railing against models uninformed by facts and abstract analyses that were of no practical value to policymakers. In all fairness to Dunlop, he had originally called for a *blend* of theory and fact, but understanding why he felt compelled to speak out against the neoclassicists in 1977 as he had against the institutionalists in 1945 requires a review of developments in the intervening years.

The Tiger on a Rampage

It will come as no surprise that textbooks follow, rather than lead, intellectual trends. The trend that by 1970 had induced a major change in the leading institutionalist text also gave birth to the first two theory-based labor economics textbooks in the postwar period: *Labor*

Economics: Theory and Evidence by Belton Fleisher (1970), and *The Economics of Work and Pay* by Albert Rees (1973).⁸ These texts, which in many ways were quite similar, had surprisingly little in common with the textbooks of the 1940s and 1950s, or indeed even with the 1970 edition of Reynolds's textbook. In his preface, Fleisher wrote, "The analytical backbone of the text is neoclassical economic theory. . . . The major difference between this book and others is that I have maintained a strong position throughout that the economic theory discussed is useful in helping to advance our understanding of real world behavior" (Fleisher, 1970: iv–v).

Rees maintained in his introduction that economists trained in the "institutional tradition have tended to move into industrial relations . . . and [become] somewhat isolated from the main stream of economics." He wrote that his book "does not pretend to cover industrial relations. . . . Rather it will concentrate on the application of economic theory and statistics to the problems of labor markets" (Rees, 1973: viii).

A glance at the tables of contents shows how different the Fleisher and Rees texts were from their predecessors. The long sections on labor history, union organization, and social insurance were gone, as was the mention of labor "problems." They were replaced by chapters on the supply of labor by individuals, human capital, and the demand for labor in competitive markets. Both books contained sections on trade unions, but these were now shorter than the sections on labor supply alone, and the analysis concerned only the "economic aspects" of unions, such as formal models of union objectives and measuring union/non-union wage differentials. Both books were so devoid of descriptive material that neither was as long as three hundred pages (Reynolds's book was by now running nearly seven hundred pages). Their appearance suggests that the market for the neoclassical approach had grown to a critical size by the early 1970s, which in turn suggests that during the 1950s and 1960s some very important groundwork had been laid.

The Pathbreakers

Economics, like many sciences, can be divided roughly into theoretical and applied fields. While theoretical fields in economics are abstract and attract those inclined to see the beauty of mathematics, the applied fields attract scholars interested in practical problems and issues of public policy. Labor market scholars are usually of the latter variety, and for these scholars to become convinced that economic theory was relevant to their concerns demanded intellectual leadership of two kinds.

Judging Economic Models. First, theoretical models had to be seen as legitimate by applied scholars, which required no small change of attitude in the labor field. Institutionalists were inclined to think and write about the enormous complexities of the labor market, while the whole purpose of models is to strip away complexity and idiosyncrasy to reveal underlying tendency. Models are necessarily based on assumptions that serve to simplify behavioral issues so that prediction is possible. Thus it is commonly assumed, for purposes of making predictions about labor market behavior, that workers are well informed about the important aspects of their job offers and have a wide range of job choice available to them. If theories are to be judged on the realism of their assumptions, as the institutionalists were wont to do, then one must question the usefulness of models based on such optimistic views of labor market conditions.

In the early 1950s, however, Milton Friedman (1953)—later a Nobel laureate in economics—argued for judging theories by the quality of their predictions, not the realism of their assumptions. If a theory predicts behavioral tendencies often enough to find support in the data, then it is useful even if its underlying assumptions do not always and everywhere hold. Friedman's assertions, like those of Machlup earlier, helped to legitimize the theoretical approach of the neoclassicists.

Areas of Inquiry. Science generally proceeds through a process in which the seminal efforts of highly creative scholars open up fields of inquiry and are then followed by numerous extensions and replications performed by what may best be described as the academic rank and file. In the 1950s and 1960s several areas of inquiry to which economic theory could be usefully applied were opened up for exploration.

One pathbreaker—widely recognized as the father of modern labor economics—was H. Gregg Lewis, an economist at the University of Chicago and a student of Paul Douglas.⁹ Lewis was a demanding, painstaking scholar who published only two books and scarcely a half-dozen articles, yet it is difficult to find a leading scholar in the field of analytical labor economics who was neither a colleague of his while formulating a seminal work nor among the ninety Ph.D. students he supervised. In 1963 Lewis published a book that analyzed a traditional topic, unions, in a new way. Instead of focusing on the history, governance, and tactics of unions, as had the institutionalists, Lewis devoted the entire book to carefully measuring the *effects* of unions in raising members' wages.¹⁰ His works have been called “models of how economic theory, statistical and econometric methods and painstaking handling of data can be joined to produce masterly professional contributions” (*American Economic Review*, September 1982, caption to frontispiece). Following Lewis's economic analysis of unions, Orley Ashenfelter and George Johnson (1969) published an article that analyzed collective bargaining as a tripartite process involving workers, union leaders, and employers—thus satisfying both Dunlop's call for theory and Ross's emphasis on such “noneconomic” forces as union politics.

A second major pathbreaker was Gary Becker, winner of the 1992 Nobel Prize in economics. Becker made three major contributions to the development of labor economics during this period. In 1957 he published *The Economics of Discrimination*, in which he posited that a

person with a “taste for discrimination” will act “as if he were willing to pay something, either directly or in the form of a reduced income, to be associated with some persons instead of others” (Becker, 1957: 14). Based on this concept, Becker provided a framework with which to analyze and measure a problem (yes, an evil) that was—and is—too important to be poorly understood.

Becker also was one of the pioneers, along with Theodore Schultz (1963) and Jacob Mincer (1962b), in the development of the theory of human capital. In *Human Capital* (1964), he argued that education and on-the-job training should be viewed as forms of investment and that individuals' decisions concerning the amount to invest are based on a comparison of costs with the expected returns to these investments later on. This theory opened up serious study of behaviors that critically affect the acquisition of skills and hence the level of individual wages, the distribution of earnings, and the demand for formal and informal schooling (which together create the skills that constitute almost half of our stock of national wealth).

Becker's third major contribution has become known as the theory of household production. In his 1965 paper “A Theory of the Allocation of Time,” Becker viewed household activities as the combination of time and goods to produce commodities that yield happiness: meals, leisure activities, clean living spaces, and the like.¹¹ The cost of time at home is measured by forgone earnings; thus labor supply and household decisions are intertwined. Becker's work on household production, along with Mincer's 1962 paper “Labor Force Participation of Married Women,” represented attempts “to place the theory of labour supply in the context of family decision-making, combining non-market household behaviour with market behaviour” (Blaug, 1985: 165). Mincer (1962a) found that married women's participation rates were negatively related to their family's income (the “income effect”) and positively related to their own wage rates, holding income constant (the “substitution effect”). His careful measurement and empirical estimation of income and substitution effects marked the beginning of “modern research on labor supply” (Pencavel, 1986: 5). The work on labor supply by Becker and

Mincer permitted and encouraged widespread analysis of the rising labor force participation of women and the labor supply effects of social welfare programs.

The final pathbreaker to be discussed here is George Stigler, the 1982 winner of the Nobel Prize in economics. In two papers published in the early 1960s, Stigler developed the economic theory of information and its labor subfield, the theory of job search. He argued that information is a valuable resource that is costly to obtain. An unemployed person looking for work, “unless his degree of specialization is pathological,” faces “an immense number of potential employers” and needs to determine “how to acquire information on the wage rates, stability of employment, . . . [and working conditions] which would be obtained from every one of these potential employers” (Stigler, 1962: 94). Information is obtained by engaging in the costly activity of “job search,” and Stigler argued that a maximizing worker will continue to search “until the expected return equals the marginal cost of search” (1962: 96). Because search is both necessary and often cheaper when one is unemployed, and because the presence of unemployment insurance effectively subsidizes continued search, Stigler’s contribution opened up insights useful to the analysis of unemployment and its remedies.

Research in the 1970s and 1980s

By the early 1970s, neoclassical labor economics was an active field whose members wrote increasingly more like neoclassical theorists and less like the institutionalists. For example, at the beginning of a work on labor supply might be the following prelude: “We assume a person maximizes his utility subject to the constraints given by the production functions and full wealth. If the utility and production functions are twice differentiable, necessary conditions for an interior maximum include . . .” (Ghez and Becker, 1975: 5). The statement would then be followed by a series of mathematical equations which a graduate student or journal referee might spend the better part of an hour trying to understand, but over which a more casual reader would skip in search of the next block of English text.

In addition to articles full of equations and Greek letters, labor economics papers became highly statistical. Because computers made it possible for the most ordinary, uninventive scholar to analyze large data sets, there was a virtual flood of empirical papers on labor supply behavior, rates of return to schooling and other forms of training, and wage differentials (by race, gender, and union status). Whereas institutionalists had relied on case studies, with personal interviews of from five to perhaps fifty sample participants, the new labor economists relied on data collected by the government (mostly for purposes other than the research at hand) and reported results from statistical samples that often contained thousands of observations.

Institutionalists criticized the new research on grounds that the researchers were naive (they tried to reduce behavior to statistical equations) and lazy (in that they did not “know” their data and thus had little idea of their quality). Even the dean of Cornell’s ILR School in 1983, Charles Rehmus, publicly scolded modern labor economists in a speech at the University of Hawaii:

Institutional “Wisconsin-School” training in labor economics—strong on history, doubtful of market restraints, fairly supportive of unions, and favoring ameliorative social legislation—is no longer the mode. Instead, neoclassical econometrics has come to dominate the field of labor economics. Excruciatingly detailed analysis of available statistics gives the impression that modern economists believe that numbers constitute the real world, that correlations prove econometric causality and that regression results verify the broadest theories.

Dean Rehmus’s remarks did—for a time at least—divert the intellectual energy of ILR’s labor economists from number-crunching to the writing of angry memos. The department’s annual report that year, usually a dry, perfunctory recitation of professional accomplishments, began with a three-page, single-spaced explanation to the dean (surely no one else reads these reports!) about the theoretical and em-

pirical methods employed by labor economists. The feelings that underlay the institutionalist-neoclassicist debate can be guessed from the report's second paragraph:

Unfortunately, however, some of the criticism that we sustained this year seems to many of us to go beyond academic dialogue, addressing instead our motivation for employing our craft. We are all-too-often seen as rather insensitive to the interests of working people, uniform in our political ideology, and trying to fit the square peg of reality into the round hole of quantification. It is these questions about our intellectual integrity that disturb us the most, and it is to these questions that the introduction to this report is addressed.

Institutionalist criticisms did nothing to stop the flood of analytical papers in the field; in fact, during the very year of Rehmus's speech a new journal (the *Journal of Labor Economics*) was founded—in part because the supply of analytical papers in the field far exceeded the space for them in existing journals. The ease and enthusiasm with which theory was now being applied by labor economists to social issues, and even to such “nonmarket” activities as household production, also led to applications well beyond the bounds most people set for economics: articles or books with economic models of church attendance, marriage, and even extramarital affairs cropped up.¹² These wide-ranging extensions led to further criticisms that in their secular vein decried “economic imperialism” and in their more ecclesiastical versions asked, “Is nothing sacred from the rational modeling of economists?”

In 1977, John Dunlop again spoke out with a public critique of methodology. In contrast to his comments in the 1940s on the need for more theory, Dunlop now argued (in the *Industrial and Labor Relations Review*) that neoclassical analyses had gone so far in their abstraction as to be useless for policy purposes: “Tests of the elegance, coherence, and generality of economic and industrial relations mod-

els and theories are intellectually exciting and challenging, but their relevance and application to policy making is scarcely within the reach of most researchers” (Dunlop, 1977).

ILR's Ronald Ehrenberg (Ehrenberg et al., 1977) strongly demurred, arguing with others that the Carter administration's policy decision to tax unemployment insurance benefits was but a recent example of the influence on public policy of neoclassical analysis (which had demonstrated, after Stigler, that higher benefits encourage longer spells of joblessness). Indeed, throughout the 1980s members of Ehrenberg's department were hired to work for, or with, three different agencies within the U.S. Department of Labor, three within the Department of Health and Human Services, four international development agencies, the Equal Employment Opportunity Commission, the Small Business Administration, Congress, several state agencies, and even the CIA! In fact, neoclassical labor economists became so involved with policy analysis that, as we argue below, they became more institutionalist!

The Tiger Is Tamed (and Acquires Some Spots)

The greater involvement of analytical labor economists with public policy issues forced three major changes in their research. First, because one cannot understand public policy issues without a thorough grounding in institutional detail, labor economists necessarily became more “institutional” in their interests. Seemingly small administrative details about how unemployment or workers' compensation insurance premiums are set have huge implications for the layoff or safety behavior of employers; labor economists wanting the ear of policymakers—or, for that matter, a publication in a leading journal—had better know these details. Moreover, institutions have histories that both reflect and affect behavior; the ahistorical approach of neoclassical theory might yield behavioral *tendencies*, but in some cases a larger context is required if sensible policies are to be promulgated.

Second, along with greater prominence in public policy came greater responsibility for the accuracy and credibility of empirical re-

sults. Few in society care in the abstract about whether coal is produced under conditions of constant elasticity of substitution between capital and labor, but if the structure of a black lung benefits tax is at issue, the conditions under which coal is produced matter very much because real jobs are on the line. The quality of one's data and statistical methods began to really matter when the answers started to affect lives instead of "dry bones" abstractions.

Third, greater policy prominence required labor economists to write for new audiences—people who are intelligent but not necessarily schooled in the use of economic jargon or patient with complex equations resembling the Athens phone book. This forced many in the discipline of labor economics to use ordinary English instead of jargon. Congressman Lee Hamilton once wrote, "For me, the most important quality for economists to have when they are testifying or advising policy-makers is the ability to express their ideas on important policy issues clearly and simply, without jargon" (Hamilton, 1992: 61).

Jargon is not only confusing to outsiders, but in economics it can border on "offensive speech." As an example of the latter, economists had frequently used a piece of jargon, "the value of life," when trying to value the benefits of risk reductions mandated by federal safety programs. In fact, this offensive term is really shorthand for "the aggregate of what individuals are willing to spend for small reductions in risk." An economist wanting to be heard on the issue of safety programs must either avoid the offensive shorthand or be prepared to rebut charges that he or she is willing to contemplate industrial genocide.

Recent years, therefore, have seen a movement away from some of the more objectionable features of "pure" neoclassical analyses and toward some of the less objectionable characteristics of the institutionalist approach. More researchers are collecting their own data, and more are now relying on case studies involving some exogenous economic or policy change to create the comparisons needed for hypothesis testing. Even controlled experiments have been run, both in the laboratory and out.

But more than sampling methodology has changed. Economists have begun to widen their "homo economicus" view of economic

Is Studying Neoclassical Economics Socially Harmful?

Professor Robert Frank, a Cornell economist who splits his time between the Arts College and the Johnson School of Management, recently researched the question of whether those trained in economics are less likely to act in communitarian ways and more likely to act selfishly. Frank points out that economic theory defines "public goods" as those, such as over-the-air television shows or national defense, whose consumption cannot be denied to nonpayers. The theory implies that those who wish to maximize their utility will accept a "free ride" by enjoying the good but taking advantage of those who pay by withholding their own financial contribution. Frank and two psychology professors at Cornell hypothesized that those familiar with the free rider problem—i.e., those trained in economics—will be more likely themselves to be free riders.

While apparently no less likely to vote or engage in volunteer activities, economics professors do apparently give less to charity than do others, and economics majors are less likely to act cooperatively in experimental bargaining games. While clearly reluctant to shoot the messenger who says that free rides are possible, Frank and his colleagues point out that maximizing one's utility over time may require a more complex set of considerations than the narrow model with which most neoclassicists typically work. They argue that other market participants can identify potential free riders, and if given the opportunity to choose with whom to interact, they will potentially shun free riders. Thus, free riding may be personally as well as socially dysfunctional, and "with an eye toward both the social good and the well-being of their own students, economists may wish to stress a broader view of human motivation in their teaching" (Frank et al., 1993: 171).

agents as narrowly self-serving and autonomous, to include considerations of social interdependency and context. Papers or books by labor economists have recently appeared with such titles as "The Fair Wage-Effort Hypothesis and Unemployment" (Akerlof and Yellen, 1990), *The Labor Market as a Social Institution* (Solow, 1990), "Fairness

as a Constraint on Profit-Seeking: Entitlements in the Market” (Kahneman et al., 1986), and *Choosing the Right Pond: Human Behavior and the Quest for Status* (Frank, 1985). Cornell economist Robert Frank, in fact, has explicitly called for economists to reflect in their teaching and research a view of human motivation broader than the narrow self-interest usually stressed (see box, above).

One of the most important ways in which analytical labor economics is becoming more like earlier institutionalism lies in the attention given to wage setting practices by individual employers. Institutionalists, it will be recalled, described such practices in detail but offered no general principles underlying them. Neoclassical economics provided a useful alternative by emphasizing market forces, which allowed for the delineation of general principles, but it initially ignored what appear to be practices that are inconsistent with such principles. Issues of why some employers pay wages that are above the market wage, why older workers are sometimes paid more than they are worth, and how perceptions of relative status and fairness of treatment affect behavior have only recently concerned neoclassical labor economists. Unlike the older institutionalists, however, analytical economists studying these issues seek to establish the general principles underlying practices and social conventions that at first glance appear to conflict with the behavior anticipated by simple economic models.

Even the study of unions has changed. During the 1960s and 1970s most neoclassical economists who studied unions followed the trail blazed by Gregg Lewis, focusing on estimating unions’ monopoly wage effects. In 1984, however, two neoclassical labor economists, Richard Freeman and James Medoff, published a book entitled *What Do Unions Do?*, which offered “a new portrait of U.S. unionism.” Freeman and Medoff argued that neoclassical economists had produced “very little quantitative evidence concerning the impact of U.S.

unionism on outcomes other than wages,” and that analytical labor economists generally ignored the institutionalists’ view that unions often raise productivity and induce better management. They used newly available “computerized data files, which contain vast amounts of information on thousands of individuals, establishments, and companies,” to statistically analyze “many of the nonwage effects of trade unions” (pp. 4–5). Their results indicated that many of the institutionalists’ hypotheses concerning unions were correct. In particular, they found that unions raised productivity in many sectors of the economy, largely as a result of lower rates of turnover under unionism and of “improved managerial performance in response to the union challenge” (pp. 21–22). Freeman and Medoff concluded that the positive aspects of unionism stressed by institutionalists usually outweighed the negative (monopoly) aspects stressed by most neoclassical economists, and therefore that “unionism generally serves as a force for social and economic good” (p. 247).

Can this new “creeping institutionalism” be explained solely as the response of autonomous maximizers to the economic incentives offered by government consultancies or the psychic utility of influencing public policy? Being thoroughly modern ourselves, we think not—and we offer two social/psychological explanations as supplements. First, only the most emotionally secure (or deranged) economists were unaffected by the charge of trying to put round empirical pegs in square theoretical holes. We hypothesize that most found the “you just don’t understand” responses no more useful in their professional than in their private lives; sooner or later they had to incorporate at least the appearance of institutional concerns in their papers to avoid indigestion whenever lunching with colleagues outside the field of economics.

Second, we suspect that modern labor economists are similar to their institutional colleagues in their fundamental desire to understand how employers and employees really behave. “Dry bones” theory provided skeletal support for the modern analyses, but empirical flesh and blood still provided the motivation. Early empirical work using large data sets and advanced computing techniques provided

general support for *some* theoretical implications, but offered disappointing results regarding others; further scientific advances required taking more sophisticated account of social and institutional idiosyncrasies. If the new interests of modern labor economics are in fact driven by the imperatives of science, then the institutionalist and neoclassical approaches may well synthesize—and the debates between the two that characterized the past half century may well seem incomprehensible in much of the next. ■

Notes

- 1 What was “new” about neoclassical economics will be described later.
 - 2 It must be said that Coase is not very fond of what replaced institutionalism, either. Concerning “high theory,” Coase writes: “In my youth it was said that what was too silly to be said may be sung. In modern economics it may be put into mathematics.” Concerning regression analysis, the primary statistical tool of modern labor economics, Coase writes: “If you torture the data enough, nature will always confess.” (Both quotes are cited in Posner, 1993: 198–99.)
 - 3 Hicks’s book was important for several reasons. For one thing, it contained one of the earliest discussions of individuals’ supply of labor. Second, it contained Hicks’s model of the bargaining process between labor and management, which is still taught in both labor economics and collective bargaining courses.
 - 4 Ely, by the way, is honored each year by a “Richard T. Ely Lecture” to members of the American Economic Association, the major professional body of economists. As recently as 1993, the distinguished economist selected as lecturer was insisting that economists use their insights to help improve social welfare.
 - 5 One of the leaders in the application of mathematics to economic theory was John Hicks, whose 1938 *Value and Capital* quickly became a classic.
 - 6 A book edited by Clark Kerr and Paul D. Staudohar, *Labor Economics and Industrial Relations* (1994), offers current perspectives by many of these authors, whom some now call “neoinstitutionalists.” One chapter, by Bruce Kaufman (“The Evolution of Thought on the Competitive Nature of Labor Markets”), presents an interesting “history of thought” organized around the question whose answer more or less divided the institutionalists from the neoclassicists: How competitive is the labor market?
 - 7 Lester’s text, of course, professed the irrelevance of marginal analysis, although he did not replace traditional labor demand theory with any other.
- Some of his views on worker productivity, however, were atheoretical precursors to the modern development of “efficiency wage” theory, which asserts that under certain conditions, higher wages increase workers’ effort (and therefore their productivity).
- 8 A third book, Richard Freeman’s *Labor Economics* (1972), could also be included in this list. Freeman’s book is theory-based, but it is quite short and was not intended to be a text for a full semester course in labor economics.
 - 9 A series of comments honoring Lewis can be found in Ashenfelter, 1994.
 - 10 In what can only be marvelled at as an act of extreme perseverance, Lewis continued to study the issue and published a second book on the union wage effect more than two decades later: see Lewis, 1986.
 - 11 More recently, Becker has generalized his theory of the allocation of time to include various aspects of family behavior. In *A Treatise on the Family* (1981), he analyzes “marriage, births, divorce, division of labor in households, prestige, and other nonmaterial behavior with the tools and framework developed for material behavior” (p. ix). It is no wonder that an article has been written about him entitled “Gary S. Becker: The Economist as Empire-Builder” (Shackleton, 1981).
 - 12 See Ehrenberg, 1977; Becker, 1981; and Fair, 1978.

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