BOOK REVIEWS

Myth and Measurement: The New Economics of the Minimum Wage

David Card and Alan B. Krueger

Princeton, N.J.: Princeton University Press, 1995, 422 pp.

This volume (beginning with its title) exudes hubris. The myth, which the authors promise to debunk, is that increases in the minimum wage have negative employment effects. This is to be replaced by a "new" economics of the minimum wage. Their book probes aspects of intellectual history, propounds some novel theoretical and methodological ideas, lectures its readers on technical aspects of econometrics, and prescribes

public policy, despite frequent disclaimers.

In the introductory chapter, Card and Krueger resurrect the 1946-47 Stigler-Machlup-Lester debate on the role of marginalism in the analysis of wages and employment. Richard Lester, something of an apologist for the trade union movement, argued that marginalism was irrelevant, while Fritz Machlup and George Stigler claimed it was crucial. Card and Krueger unabashedly try to revive Lester's arguments. They praise him, dedicate their book to him, and complain that he has been neglected and too infrequently cited in the professional literature (while themselves ignoring Machlup). Their attempt at rehabilitation begins with a discussion of theoretical and methodological issues. The authors dismiss the marginal productivity theory that underpins the concept of the individual firm's downward sloping demand curve for labor; they dispense with aggregating employers' labor demands to produce a "market demand for labor," which would also be negatively sloped. Instead, they assume that all employers behave independently and function as monopsonists in the Joan Robinson mode. These few paragraphs are a substitute for a derivation of a model and a rigorous application of the model to empirical situations.

On the methodological front, Card and Krueger advocate the use of a technique that involves comparisons of the behavior of a sample group with some control group in "before and after" scenarios. They call these "natural" experiments and assert their superiority to the more conven-

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tional modes of analysis, econometric studies of time-series and cross-sectional data. Of course, both their natural experiments and the more standard analytical methods are simply different ways of attempting to satisfy the ceteris paribus conditions that are so critical in economic analysis. Why their method should be inherently superior is not obvious. As Card and Krueger describe them, natural experiments occur when there are two situations that are essentially identical except for a change in a critical policy variable. In such circumstances, they maintain that the ceteris paribus conditions are satisfied. The concept of natural experiments is useful, although the question of who is to decide whether they truly satisfy the ceteris paribus assumption is as difficult as the creation of adequate statistical controls in econometric analyses of data. Much more than a simple assertion is required to establish the superiority of one technique over another.

Chapters 2 and 3 present case studies of the use of this "new" methodology. Comparisons are made between employment in fast-food establishments before and after minimum wage increases in New Jersey (April 1992), Texas (April 1991), and California (January 1988). In each of these cases, the authors chose what they regarded as an appropriate "control group." For New Jersey, they chose fast-food establishments in eastern Pennsylvania; for Texas (in a study conducted by Lawrence Katz and Krueger), they chose fast-food firms unaffected by the April 1, 1991 increase in the federal minimum wage; and for California, they chose fast-food workers in Arizona, Florida, Georgia, New Mexico, and the Dallas-Fort Worth area in Texas.

The Pennsylvania-New Jersey comparison has drawn the most attention. In this case the authors chose to construct and use data obtained from a 24-question telephone survey. Only one question in this survey pertained to minimum-wage employment, and it is somewhat imprecise with respect to what constitutes full-time and part-time employment. The authors are to be commended for making their data sets available (in a sanitized fashion) through e-mail, but that is not enough. The quality of their data may be critically flawed so as not to satisfy the ceteris paribus assumption.

The Pennsylvania-New Jersey data were collected in two waves of telephone interviews, one before the minimum-wage increase (in February) and one after (in November). There are serious questions concerning the accuracy of that information. Studies using the official payroll records of fast-food firms in the relevant geographic areas had significantly different results and reached opposite conclusions. The major challenge has come from the Employment Policies Institute (EPI), which issued a report titled, "New Evidence on the Minimum Wage: The Crippling Flaws in the New Jersey Fast Food Study," in April 1995. EPI made its data available to David Neumark and William Wascher. They found that the employment effects of the New Jersey minimum-wage increase were negative and quite consistent with the prevailing wisdom.

In the case of the payroll data, employers and the tax-collecting agency have strong financial incentives to ensure that the total dollar volume of payrolls is accurately stated. There is no such incentive for accuracy in the telephone surveys. Thus, there is a strong presumption of correctness in favor of the payroll data. We would urge the disputants in this issue to attempt to reconcile the two databases, perhaps by making them available in sufficient detail to enable some neutral third party, sworn to confidentiality, to exactly match the data, record the aggregate totals, and then destroy the individual firm information. Until the questions concerning the Card-Krueger data are resolved, their natural experiment analysis must remain suspect.

In chapter 6, Card and Krueger evaluate the validity of the various time-series analyses of the employment effects of minimum wages. They painstakingly reproduce and update several of the numerous studies that have explored the issue in that way. The sample of studies examined is limited and focuses on those with less robust statistical results. In choosing which ones to include in their examination, the authors claim to have used a "rigorous selection process." They invoke the 1982 survey article by Charles Brown, Curtis Gilroy, and Andrew Kohen, in which 26 articles are examined. They select *only* the 18 studies that examine the effect on employment, rather than unemployment. Next, they limit their analysis to studies that focus on "all teens," ignoring any analysis dealing with nonwhite, nonwhite male, or nonwhite female teens, groups where the effect of minimum-wage increases are much greater.

To those 18 studies, they add three more recent investigations to bring the total to 21. They then subtract 6 studies, those not using quarterly data, to arrive at their final sample of 15 studies. In an effort to discredit those studies they employ a variety of tests, such as regressing the square root of the degrees of freedom against the t-ratio associated with the minimum-wage variable. They conclude that, contrary to expectations, the t-ratio falls, rather than rises, as the sample size increases. However, an inspection of their regression results reveals that in no case is the relationship they observe statistically significant. Further, the scatter diagram they provide suggests quite strongly that without the inclusion of study number 15 (by Jacob Klerman [1992]), the last study inserted, not even the negative regression coefficients would have been obtained. There is nothing about their results that is statistically robust, despite frequent claims to the contrary.

Despite the above mentioned shortcomings, the Card-Krueger findings have been seized upon, both in the United States and abroad, as providing support for increasing the minimum wage. Initially, there was a rush to judgment and a rush to celebrate and acclaim the results. With the emergence of major questions concerning the accuracy of the basic data in their major natural experiment, there has been some retreat from that position. We think this retreat is wise. Certainly, until some of the major questions are resolved, it might be well to accept the statement made by Krueger at a Milken Institute conference, where he stated, "I want

to emphasize that my comments should not be interpreted as support for the position that increasing the minimum wage is sound public policy" (Krueger 1993:11).

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References

Brown, C.; Gilroy, C.; and Kohen, A. (1982) "The Effect of the Minimum Wage on Employment and Unemployment." Journal of Economic Literature 20: 487–528.

Klerman, J. (1992) "Study 12: Employment Effects of Mandated Health Benefits." In *Health Benefits and the Workforce*. U.S. Department of Labor, Pension and Welfare Benefits Administration. Washington, D.C.: U.S. Government Printing Office.

Krueger, A.B. (1993) "Have Increases in the Minimum Wage Reduced Employment?" Jobs and Capital 2 (Summer): 11.

Beyond Politics: Markets, Welfare, and the Failure of Bureaucracy William C. Mitchell and Randy T. Simmons San Francisco: Westview Press and the Independent Institute,

1994, 234 pp.

This is the book I have been waiting for for at least 15 years. It is an eminently readable statement of the revival of political economy within the economics profession, as spawned by public choice scholars—such as James Buchanan, William Niskanen, Mancur Olson, and Gordon Tullock—some 35 years ago.

"Politics and economics cannot be separated," William Mitchell and Randy Simmons state in their preface. "Economies do not exist in a vacuum and neither do politics. Political systems shape, sometimes control, and often misdirect economic systems. Likewise, economic interests

shape, sometimes control, and often pervert politics."

Those truths were accepted until about the 1920s, when theoretical "welfare economists" began devising elaborate theories of "market failure" that compared real-world markets to an unachievable utopian ideal called "perfectly competitive equilibrium." If the real world comes up short, as it inevitably does, the theorists condemn markets and call for government intervention. Renowned welfare economists such as Arthur C. Pigou and, several decades later, Paul Samuelson, Francis Bator, and William Baumol, paid no attention at all to the possibility that government might also "fail." "Imperfect" markets justified government control of the economy.

Until public choice theory revived the study of *political* economy, this biased method of analysis dominated the economics profession and still