# INCREASING THE FEDERAL MINIMUM WAGE: AN IMPLICATIONS SIDE-BAR FOR "MOM AND POP" EMPLOYERS 

JAMES S. MOORE<br>Indiana University - Purdue University Fort Wayne


#### Abstract

This article examines the implications of increasing the federal minimum wage in the labor market typically frequented by the entrepreneur and small business owner/operator. As employers, these firms are often heavily dependent upon unskilled/inexperienced workers to provide their goods and services in relatively competitive markets. When confronted with mandated increases in their wage expenses, such small businesses have limited flexibility in adapting to these interventions. The long-run implications of such wage floors will likely be quite distinct from their near-term counterparts. The bottom-line for the "mom and pop" employer may simply be that, unless the added labor expense can be passed on to the firm's customers, the ultimate result of the minimum wage increase is a reluctant curtailment of unskilled labor hours hired and, consequently, either the owner/ operator spends more time working in the business or the scale of the operation contracts.


## HISTORICAL CONTEXT

In a belated response to the low wages and deplorable working conditions prevailing in sweatshops around the turn of the twentieth century, the Fair Labor Standards Act (1938) affected work-age requirements and the length of the workweek, and it established a minimum wage of 25 cents per hour for most
nonagricultural workers engaged in interstate commerce. The laudable intent was to eliminate labor conditions thought to be harmful to the "health, efficiency, and general well-being of workers . . . without substantially curtailing employment or earning power" [1, p. 2]. Moreover, the act sought to eliminate low wages without eliminating jobs among disadvantaged groups such as minorities, teenagers, unskilled workers, and those living in economically depressed regions.
Collectively, retail grocery and eating and drinking places (SIC codes 541 and 581) currently employ roughly one-third of all workers earning at or near the minimum wage. Most minimum-wage jobs are for workers in entry level positions who did not graduate high school, and the wage floor is intended as a "launch pad" for those without skills to get that first job in order to develop skills for upward mobility. Yet in practice, both the intent and the target beneficiaries of the minimum-wage intervention may be compromised. While the government does attempt to measure the minimum income needed to support one's self (or one's family) in defining the poverty line, there has been no parallel attempt to define the minimum wage relative to what is required to support an individual or family. This is evident in that the minimum-wage rate is the same whether the worker is a teenager living with affluent parents, a second earner in a family, or a single parent who is head of a household. Moreover, meeting financial need is not the underlying intent of the minimum-wage mandate. Further, the wage floor does not even effectively target individuals in poor families. Card and Krueger [2], whose work is regularly cited by advocates of minimum-wage increases, affirm a missed target when they report that over 37 percent of laborers whose wages were directly impacted by the 1990 increase in the federal minimum wage were, in fact, members of households in the top half of the income distribution.
George Stigler [3] stimulated awareness of the downside of the minimum wage legislation as early as 1946, when he argued that such wage floors create unemployment and make those who had been receiving less than the minimum wage even poorer. Peterson [4] examined the effects of minimum wages from 1938 to 1950 in three low-wage industries and demonstrated that higher unemployment followed each increase in the wage floor. An expanded study of 14 low-wage industries found that increases in the minimum wage had the most adverse impact on employment for certain classes of labor-blacks, females, younger workers, and workers living in rural areas-the very classes of labor that legislation intended to help [5]. Subsequent empirical studies have documented the discriminatory impact of this wage-induced form of structural unemployment on teens, particularly non-white teens, and females [6-8]. They contend that increases in the minimum wage will reduce the number of entry-level positions that serve as stepping-stones to higher paying jobs, particularly for women and minority teens, who often lack job skills and experience. In the 1970s, Kau and Kau [9] found that the minimum-wage law has indeed played a significant role in
causing unemployment among the very groups that it was intended to benefit. In summarizing previous time-series data, Brown et al. [10] found a 10 percent increase in the federal minimum wage responsible for a reduction in teenage employment of between 1 and 3 percent.
Yet, the literature of empirical evidence supporting an inverse connection between teenage employment and the minimum wage remains mixed. In another highly influential study, Card and Krueger [2] examined the 1990-1991 federal minimum-wage increases as they impacted teenagers in different states. They grouped states by the proportion of workers that were directly impacted by the minimum wage and found no evidence that the increases in the minimum wage during this period had significantly lowered teenage employment rates more in highly affected states than in other states. From this, they inferred that the floor of the minimum wage did not reduce employment. Neumark and Wascher [11] and Card and Krueger [12, 13] continue the debate over the impact of the minimum wage in a venue typically populated by teenage employees, the fast-food industry. Neumark and Wascher find a significant inverse relation, while Card and Krueger ascribe that to frictions in the labor market and reaffirm their earlier conclusion. It should be noted that the Neumark and Wascher study is based on actual payroll data, while Card and Krueger used data from telephone surveys. Recently, Wessels [14] replicated Card's and Krueger's model using the 1996-2007 federal minimum-wage increase and found just the reverse, namely that increases in the federal minimum wage did indeed significantly lower teenage employment rates more in the highly affected states.

The federal minimum wage has remained at $\$ 5.15$ per hour for the last decade. Congress recently voted to boost the hourly wage floor to $\$ 7.25$ in three stagesto $\$ 5.85$ on January 1, 2007, to $\$ 6.55$ on January 1, 2008, and to $\$ 7.25$ on January 1, 2009. In July 2006, the city council of Chicago passed the first "living wage law" in the United States, forcing giant retailers (e.g., Wal-Mart) within the city to pay workers a minimum of $\$ 9.25$ an hour. This law applies only to stores with at least 90,000 square feet of space and $\$ 1$ billion in annual corporate sales; it will affect 42 stores and 7,500 workers in Chicago. These recent actions have rekindled the debate over the impact of imposed wage floors.

While markets are generally considered efficient long-term allocation mechanisms, issues of equity and fairness are typically found, either explicitly or implicitly, at the foundation of the argument for both originating and increasing the minimum wage. This wage is often viewed to be an important determinant of an individual household's economic well-being, particularly for low-income households. Some perceive there to be a power imbalance between employer and employee that needs to be moderated through intervention. In principle, the intent of the legal wage floor is to assist some group(s) deemed deserving at the expense of some other group(s) deemed already well-off, such that the incremental benefit to recipients is greater than the incremental cost to those funding the interdiction. Such interventions seek to create a distribution of real
income that is viewed as more equitable, and their proponents are willing to sacrifice some market efficiency in order to create a "fairer" distribution of income.

This article will examine the implications of such interventions from the perspective of small businesses as employers of the groups of laborers targeted by the minimum-wage legislation.

## UNDERPINNINGS

Marginal productivities constitute the basis for the competitive pricing of factor inputs-each category of land, each set of contractual terms for capital, and each skill level/expertise of labor. Rational employers will have a derived demand for unskilled labor units based upon just what additions to their final output of goods or services successive units of that labor can generate. Moreover, the employer's demand curve for an input, such as unskilled labor, is reflected in the curve of marginal revenue product (MRP) that specific labor type, where MRP is simply the product of marginal physical product (MPP) and marginal revenue (MR). This demand curve will be downward sloping because of both components of MRP, namely: 1) diminishing physical returns and 2) the diminishing marginal revenue inherent in imperfect competition.
Thus the rational employer will seek to employ units of unskilled labor only as long as its marginal revenue exceeds its marginal cost ( MC ); when these incremental issues are equated, further employment opportunities cease. Clearly any legislated/contrived boost to the employer's marginal cost for unskilled labor will cause MC to catch MR at a lower level of labor hours employed. The extension of this logic is that the firm will hire a mix of factor inputs until it has equalized the marginal physical product per last dollar spent on each input. Unfortunately, for the small business operator, the increased minimum wage that needs to be paid for the unskilled labor time may well result in the owner/operator replacing some previously hired hours with the "seemingly-free" hours of his her own time. Thus, the small business operator simply spends more time working "in" the business himself rather than working "on" the business. Moreover, with more owner time directed to mundane tasks and less to strategic planning and oversight, the long-term growth prospects, and even the very viability, of the small firm may suffer.

In order for increased minimum wages for unskilled labor to avoid the resulting surplus and substitution conundrum, it must stimulate a commensurate increase in the marginal productivity of that class of labor (effectively shifting the demand for that labor upward) and enabling the marginal physical product per last dollar spent to remain stable and thus avoid the input substitution. Historically, most worker productivity gains have been attributable to technology change, the educational training of labor, and the know-how of management methods rather than the driver of wage incentives. Unfortunately, to date there is little evidence of
any definitive cause-and-effect relationship running from minimum-wage increments to worker productivity of those immediately affected.

In the case of the employer having some degree of monopoly buying-power over labor (the monopsony model), the imposition of mandated higher wages can lead to both increased wages and increased employment, because the monopsonist will have pursued an employment and wage combination with lesser values for each than would have prevailed in a competitive market. The monopsonist seeks to keep both employment of labor and wage rates artificially low in order to avoid upward pressures on wages paid to workers already hired, which would overshadow the additional revenue resulting from hiring new workers. Thus, the imposition of a minimum-wage rate, and subsequent upward adjustments, may simply counterbalance the monopsonist's power in the local labor market and make that market equilibrium more competitive. This legitimate argument for minimum-wage interdiction would be the case with a very large employer in a community where the workers did not have many employment alternatives and were not willing/able to relocate to find such. Such supply frictions in the labor markets and monopsony influence have been frequently examined in the literature. Manning [15] concludes that labor markets are "thin" in a way that gives employers some market power advantage. Boal and Ransom [16] also found the existence of monopsonistic advantage, but they concluded that the resulting exploitation was small and that minimum wages are ineffective when wage dispersion is primarily due to heterogeneity in marginal products. Van den Berg and Ridder [17] estimated the Burdett-Mortensen equilibrium search model of the labor market and found that search frictions and heterogeneity in productivity levels were the only significant determinants of wages. Extending their results to the effects of changes in the mandatory minimum wage on unemployment, they found such changes to have a large direct impact on the level of unemployment for those in their teens and twenties. Recently, Aaronson and French [18] used output price responses to conclude that restaurant labor markets are generally consistent with competitive conditions rather than the monopsony model.

In contrast, this article will not focus on the implications of the monopsonistic model, but instead will examine the impact of minimum-wage intervention in markets populated by very small businesses ("Mom and Pop" firms) as buyers of labor and the inexperienced and unskilled workers as sellers of labor time.

## SMALL BUSINESS RESPONSES TO ORIGINATING AND INCREASING THE MINIMUM WAGE

Small businesses account for more than half of all non-farm, non-governmental employment in the United States. They also provide most entry-level positions for the inexperienced worker. The internal proportion of low-wage labor costs to the total costs of the frm is critical to understanding the consequences of legislated wage increments. A firm that uses only labor earning \$20 per hour or
more experiences no direct increase in its labor costs when the minimum wage is increased, while another firm, using predominantly minimum-wage labor, confronts a dramatically different order of magnitude in the proportional impact on its costs. Because small firms tend to use a higher proportion of low-wage labor, provide lower benefits, and have lower profit margins than do their larger counterparts, small business are more affected when wage and benefit increases are mandated. For start-up firms, possibly operating initially with negative cash flow, even modest incremental labor costs can be a critical determinant of their Stage-1 survival.
Additional elements that need to be considered in examining the impact of minimum-wage increases on small business owners include the relevant labor market(s), the responsiveness of such markets, and the time horizon over which the impact is being examined.

Clearly not all labor is homogeneous, and, consequently, not all labor markets will be directly impacted by increases in the minimum wage. Aside from the "trickle-up" effect where the most skilled workers seek to maintain existing wage differential between the various labor submarkets, the skilled laborers and experienced laborers are not likely to see their respective labor markets directly influenced by increases in the minimum wage. In contrast, the market for inexperienced, untrained, unskilled labor will be impacted by any wage floor exceeding the equilibrium wage. Classical economic market equilibrium theory tells us that an imposed price floor above the equilibrium price results in excess quantity supplied relative to quantity demanded (i.e., "surplus" labor), which means unemployment in the specific labor market impacted by the wage floor. Both the extent of this unemployment and the gain or loss in collective wages paid to the effected laborers are dependent upon the elasticities of the demand for, and supply of, this specific labor type. Minimal disruptive impact on employment due to legislated minimum-wage increases, presumes both an unresponsive (a.k.a. "inelastic") demand and supply of the specific labor market as depicted in Figure 1.
The price-insensitive demand curve of Figure 1 would suggest that the item is perceived to be a necessity by buyers; certainly this is seldom the case for most employers' perception of unskilled/unexperienced labor. Similarly, the priceinsensitive labor supply curve suggests that the quantity supplied is nearly fixed. While this nearly vertical supply curve may well represent labor offerings of services in the immediate moment, the elasticity of supply tends to increase (i.e., flatter supply curve) as the time horizon is extended. The longer horizon permits the labor suppliers to make adjustments to the prevailing wageadjustments which impact the offering schedule of labor that are simply not available in the immediate-run and gradually emerge through time, such as consciously shifting time allocation from leisure and other commitments to paid work. Thus, we must acknowledge three depictions of the market for unskilled labor, each with a demand curve far less inelastic than reflected in Figure 1, and


Figure 1. Market for unskilled labor.
capturing the impact of the minimum wage in the presence of varying elasticities of unskilled labor due to: 1) the immediate-run, 2) the short-run, and 3) the long-term (see Figure $2 \mathrm{a}, \mathrm{b}, \mathrm{c}$ ). Clearly the discrepancy between quantity supplied and quantity demanded at the wage floor ("surplus") increases with the length of time allowed for adjustment of the market participants. As is the case with many "political" interventions, that which appears relatively "benign" in the immediate moment may become far more significant in the long-run. This surplus may manifest in many forms ranging from attrition to employer dismissals. Setting a wage artificially high means that employers cannot (or will not) employ as many units of labor, particularly in the long-term, as they would otherwise.

Small businesses seldom have the "feared" monopsony power imbalance over their employees that a Fortune 500 corporation might have; consequently, the monopsony counterbalance rationale for minimum-wage floors is weakened in labor markets where they are the primary employers. Small businesses are more often "price-takers" rather than "price-makers" in both the output and input markets in which they participate.

Aside from curtailing the units of labor employed, small businesses have very limited options to respond to increases in the minimum-wage rate. Due to the loyalty bond between many small business owners and their employees, the initial response is likely to be an attempt to pass the additional expense on to the firm's customers. This can be successful only to the extent that the firm's output is perceived as a "necessity" without clear substitutes by its buyers. Having sought


Figure 2. Market for unskilled labor through time.
to create the buyer perception of differentiated and unique products, mega-sized firms such as McDonald's, Subway, Taco Bell, etc., would avoid absorbing the wage increment in the long-run, rather, their customers would absorb the transferred added costs. Other employers, who are unable to pass along the added expense, would have to cut the number of minimum-wage employees they can afford to retain. Thus, the short-run "feel-good" political tactic of raising the minimum wage would eventually result in the displacement of many of the intended beneficiaries and "collateral damage" for the small business owner/operator.

Such a relatively inelastic demand of Figure 1 is seldom the case for most small businesses unless they have been successful in achieving significant product differentiation in the perception of their target customer base. If this "cost-pass-through" option is attempted and deemed not to be sustainable in the output market, then the output's price will likely need to return to its original neighborhood and the firm's costs re-examined.

One cost-driven option for selected tasks is to outsource the activity. The outsource firm may well pay its employees far more than minimum wage, but as skilled professionals, productivity will also far exceed that of the original small firm's employees. Prior to the increase in the minimum wage, the outsource firm could not compete with the internal employees on a MRP per-dollar basis, but with the minimum wage increase, the outsource option starts to look comparatively attractive from a cost-per-unit basis. Large firms typically enjoy greater flexibility for outsourcing low-skilled tasks than do small businesses. While the small employer may be able to contract out for order-taking/order-entry and custodial tasks, many other routine tasks integral to its operation, such as stocking shelves and register operation (retail) actual assembly and packaging (manufacturing), or customer service provision (service), are simply not easily outsourced
by the small firm because such activities constitute the core business of the truly small venture. Similarly, in theory, the automation of selected repetitive tasks, previously performed by the firm's employees, begins to become relatively more attractive as wages are mandated to rise in the absence of productivity gains. But again, the extent of such substitution of capital (automation) for labor is more limited for the small firm. While practical for the mega-retailer, a self-check-out scanner register will simply not be a viable substitute for the one or two cashiers of the small store. Likewise, the use of extensive robotics on the assembly line of a large corporation is far more justifiable than for the small custom job-shop.

In conclusion, as the minimum-wage rate is pushed up, without a commensurate increase in marginal productivity of the impacted workers, each small business will reach a point (perhaps unique to its own situation) where alternatives to employing continuing levels of unskilled or inexperienced workers warrant serious consideration. Unfortunately, these alternatives offer rather limited flexibility to the small employer. Consequently, the bottom line for the "mom and pop" employer may simply be that, if the added labor expense cannot be passed on to the firm's customers, the ultimate result of the minimum-wage increase is a reluctant curtailment of unskilled labor hours hired and, consequently, either the owner/operator spends more time working in the business himself or the scale of the operation contracts.

## ALTERNATIVE SOCIAL/NORMATIVE INTERVENTIONS

Perhaps before one merely accepts the simplistic premise that a wage floor can, or should, provide for a subsistence/living wage for a specific target audience, one should examine possible alternatives to a ratcheting uniform minimum wage.

One concern with a uniform minimum wage is that the nation is too large and diverse for one federal wage floor to have relevance in all geographic markets. There may well exist geographic differences in marginal productivities of any one specific input resulting in multiple markets for that factor. An acre of fertile organic land very likely has a distinct marginal productivity in the Napa Valley than if that same acre were located where the growing season was extremely short. The marginal productivity of $\$ 1,000$ of five-year venture capital is quite different on Wall Street from that for those same funds in a location with very limited opportunities available. Likewise, an hour of the same unskilled labor may have quite distinct marginal revenue products in downtown Chicago and rural Idaho.
Many states have imposed minimum-wage floors above that of the federal minimum for nonexempt wage earners [19]. While many of these states distinguish wage earners who receive tips from those who do not, several states have experimented with a non-uniform minimum-wage structure based on some demographic of the employee or the employer. California and Washington each have a youth sub-minimum wage rate set at 85 percent of their regular minimum-wage rates,
and New Jersey permits individuals with disabilities to be employed at less than the statutory minimum rate with a special permit from the state. In an attempt to recognize the conundrum faced by small businesses, several states have created a tiered minimum-wage structure based upon some firm attribute. Montana maintains a sub-minimum-wage scale for employers with annual sales below a specified threshold. Nevada's two-tiered system is based upon whether or not the employer is providing "qualified health insurance benefits" for the employee and dependents. Ohio and Pennsylvania recognize a sub-minimum wage for teens under age 16 and provide a tier for smaller firms; Ohio's basis is annual sales and Pennsylvania's basis is number of employees.

While a multi-tiered minimum-wage structure, enabling youth to be employed at a lesser rate, sounds attractive for those teens seeking spending money and their first work experience, it would likely result in serious disemployment effects for the unskilled heads of households that society seeks to assist. Employers would seek to substitute the less expensive teens for heads of households whenever the skill levels were comparable. Perhaps a sub-minimum-wage structure, that applies only for some initial period of employment, would encourage training and skill development of entry-level workers. Conceptually, the tiered minimum-wage structure that is based on some attribute of the scale of the employing firm rather than the employee may have fewer adverse incentives. Clearly, such experiments begun in Montana, Nevada, Ohio, and Pennsylvania in 2007 warrant careful monitoring. The issue of minimum-wage intervention may be better matched with regional market forces if addressed at the state rather than federal level.
If the intent of the intervention is really to address the root problem of poverty, there may be more direct forms of assistance than a uniform wage floor. The minimum-wage interdiction was never intended to be a "living wage" designed to support a family. If we accept that the minimum-wage convention has several adverse manifestations, namely, it: 1) catches the small business owner in the "cross-hairs" as an unintended form of "collateral damage", 2) raises the income of some poor workers while reducing the income of others through job loss, and 3 ) does not exclusively target individuals in poor families, then interventions that encourage hiring by small business, provide an incentive for a welfare-to-work migration, and have better targeting capability than the federal minimum wage warrant our examination. Such an instrument is the Earned Income Tax Credit (EITC), which is targeted exclusively for those actually working yet earning less than a specified earned income. Given that tax credits offer substantially more benefit than mere deductions, this directly impacts after-tax disposable income. By periodically raising the maximum amount of income that can be earned and still retain eligibility for the tax credit, the government can maintain the incentive to work and target this tax relief intervention directly at the working poor. The fact that this credit can be received even if one does not owe any federal income tax means that the EITC is a very modest form of negative income
tax. Diverse economists, pioneered by James Tobin and Milton Friedman, have long advocated a negative income tax as an alternative means to achieve a "minimum subsistence" income.

## CONCLUSION

What each worker, given his/her experience, education, and skills, is worth to an employer is an amount reflected in the value of that worker's output. If the wage to be paid is less than this worth, then the firm will elect to employ the worker. If the wage is above this worth, then the firm will seek out other ways to get the same task accomplished. Such alternatives may include some combination of 1) attempting to raise the value of the worker's output via higher prices, 2) using labor of other skill levels, and or 3) using automation, among other alternatives. Either manifestation of higher prices or substitution of inputs will result in some job loss among the workers whose wage cost exceeds their economic worth to the employer.

Minimum-wage interventions invariably compel us to reflect upon the trade-off of "need," as seen from the perspective of the worker, versus "worth," as seen from the perspective of the employer. Small business employers have limited options to deal with increases in the minimum wage, most of which have manifestations that do not appear immediately, but do indeed arise eventually. Minimum-wage legislation has played a significant role in the disemployment of those entry-level workers whom the small business is most likely to seek as employees. This has not only been detrimental to the growth of the small firm itself, but also to the owner/operator and to the very audience of inexperienced minorities, teens, females, and those without developed marketable skills. Many of the targeted beneficiaries are typically the uneducated, the untrained, and/or the unskilled. The imposition of ever higher minimum-wage rates may well harm those they are intended to help. What benefit accrues to the unskilled immigrant or minority youth to know that an employer must, by law, pay him a wage in excess of his marginal revenue product (a.k.a. his contributing worth), if the reality that he must be so compensated is the very fact that precludes him from keeping (or getting) a job? What benefit ensues to either the worker or the small business employer when the added labor expense by fiat manifests in the difficult choice between 1) the reluctant "letting go" of the worker, or 2) the compromise to the small business owner's ability to match his opportunity cost and keep the business afloat.
The very existence of a minimum-wage mandate reflects society's value judgment that the standard of living of workers is important, and that those who sell their labor should be compensated with a minimally decent wage. Adam Smith understood that most economic systems are vulnerable/susceptible to inefficiencies and inequities resulting from interferences by mandate with the internal self-regulating mechanisms of the market. Nevertheless, it is evidently the nature
of man to naively believe that, through his interdiction, he can improve the outcome. Many politicians support minimum-wage increases, often because it is one of those issues, like protectionism, where the short-run benefits are much easier to identify than are the long-term costs. As is often the case in politics and economics, the imposition of normative value judgments on market phenomenon can have serious side effects on unintended participants in such markets. Moreover, there may still be some wisdom in the old adage that "the road to hell is paved with good intentions."

## REFERENCES

1. Y. Brozen and M. Friedman, The Minimum Wage-Who Really Pays? An Interview, The Free Society Association, Washington, D.C., p. 2, 1996.
2. D. Card and A. Krueger, Myth and Measurement: The New Economics of the Minimum Wage, Princeton University Press, Princeton, New Jersey, 1995.
3. G. Stigler, The Economics of Minimum Wage Legislation, The American Economic Review, 36, pp. 358-365, 1946.
4. J. Peterson, Employment Effects of Minimum Wages 1938-50, Journal of Political Economy, LXV, pp. 412-430, 1957.
5. D. Kaun, Economics of Minimum Wage—The Effects of Fair Labor Standards Act 1945-60, Ph.D. thesis, Stanford University, 1963.
6. Y. Brozen, The Effect of Statutory Minimum Wage Increases on Teenage Employment, Journal of Law and Economics, XII, pp. 109-123, 1969.
7. J. Peterson and C. Stewart, Employment Effects of Minimum Wage Rates, American Enterprise Institute for Public Policy Research, Washington, D.C., p. 114, 1969.
8. T. Moore, The Effect of Minimum Wages on Teenage Unemployment Rates, Journal of Political Economy, LXXXX, pp. 897-902, 1971.
9. J. Kau and M. Kau, Social Policy Implications of the Minimum Wage Law, Policy Sciences, 4:1, pp. 21-27, 1973.
10. C. Brown, C. Gilroy, and A. Kohen, The Effect of the Minimum Wage on Employment and Unemployment, Journal of Economic Literature, 20:2, pp. 487-528, 1982.
11. D. Neumark and W. Wascher, Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania: Comment, The American Economic Review, 90:5, pp. 1362-1396, 2000.
12. D. Card and A. Krueger, Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania: Reply, The American Economic Review, 90:5, pp. 1397-1420, 2000.
13. D. Card and A. Krueger, Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania, The American Economic Review,84:4, pp. 772-793, 1994.
14. W. Wessels, A Reexamination of Card and Krueger's State-Level Study of the Minimum Wage, Journal of Labor Research, 28:1, p. 135, 2007.
15. A. Manning, The Real Thin Theory: Monopsony in Modern Labour Markets, Labour Economics, 10:2, pp. 105-131, 2003.
16. W. Boal and M. Ransom, Monopsony in the Labor Market, Journal of Economic Literature, 35:1, pp. 86-112, 1997.
17. G. Van den Berg and G. Ridder, An Empirical Equilibrium Search Model of the Labor Market, Econometrica, 66:5, pp. 1183-1221, 1998.
18. D. Aaronson and E. French, Output Prices and the Minimum Wage, Employment Policies Institute, Washington, D.C., pp. 1-17, June 2006. Available online: www.EPIonline.org
19. Automatic Data Processing, Inc., to access current minimum wages by state; http://complianceconnections.adp.com/toolbox/statetaxes/2008fastwagetaxfacts.gspx

Direct reprint requests to:
James S. Moore
Richard T. Doermer School of Business and Management Sciences
Indiana University - Purdue University Fort Wayne
2101 East Coliseum Blvd.
Fort Wayne, IN 46805
e-mail: moore@ipfw.edu

