



Policy Note

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Small Business and the Minimum Wage

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Do small businesses change their hiring and employment practices in response to an increase in the minimum wage? The Levy Institute conducts a national survey of small firms in many industries to find out.

It has long been the conventional wisdom that an increase in the minimum wage results in lower employment. This wisdom stems from both theoretical precepts taught in most economic textbooks and statements from employers regarding their anticipated reaction to an increase. It is also suggested that much of the opposition to the minimum wage comes from the small business community. Arguments against raising the minimum wage presume that an increase reduces profits for small businesses and forces them to lay workers off. There is little empirical evidence measuring the actual responses of small businesses to changes in the minimum wage. What is available is anecdotal evidence, the results of a few studies by academics on the effects of the minimum wage on the teen labor market, and the predictions of the minimum wage study commission that a 10 percent increase in the minimum wage might result in a 1 percent reduction in teen employment (Kosters and Welch 1972; Welch 1974, 1978; Meyer and Wise 1983; Neumark and Wascher 1992).

Most of the studies on the teen labor market were conducted during the 1970s and early 1980s. What has been done recently, most notably the work of Card and Krueger (summarized in Card and Krueger 1995), has been controversial, not simply because critics argue that the conclusions are wrong, but because the findings represent an affront to the orthodoxy of the economics profession and a threat to those with a vested interest in resisting minimum wage increases. According to Card and Krueger (1995), when California and New Jersey both increased their minimum wages, there were no adverse effects on employment. These findings were confirmed for New Jersey and Pennsylvania (Card and Krueger 1998).

Implicit in all the theoretical or empirical work regarding the minimum wage is the assumption that the minimum wage is set above the competitive market clearing level; that is, the wage is high enough so that labor demand dictates the number of people hired. Little is known about the relative sensitivity of firms' labor demand to changes in wages, a concept known as "wage elasticity of demand." In the minimum wage commission study mentioned above, a 10 percent increase in the minimum wage resulted in a 1 percent reduction in employment (a wage elasticity of 0.1). In the work that follows, we suggest that in a range of wages around the current minimum wage this estimate of wage elasticity is too high. In other words, small business employers are extremely insensitive to changes in the minimum wage.

Most empirical research on the minimum wage focuses on a specific group of employees (teenage workers) or a specific industry (the fast-food industry). In this policy note, we present some early findings from more comprehensive data obtained through a survey of small businesses conducted at the Levy Institute. The data provide useful information on the hiring and employment practices of small businesses. Our analysis suggests that a large majority of small businesses were not affected by the recent minimum wage hike. Further, there is strong evidence that were the minimum wage to be increased from its current \$5.15 per hour to \$6.00 per hour, the hiring practices of most small businesses still would not be affected. These findings add to the considerable body of empirical research on the minimum wage that contradicts the theoretical presuppositions that have driven minimum wage policy thus far.

The Survey

The purpose of the survey was to obtain information about the hiring practices of small businesses as they relate to questions concerning the recent reform of the welfare system and increases in the minimum wage.¹ Over the course of three weeks during the winter of 1998, a nationally representative, stratified random sample of 568 small businesses (businesses with no more than 1,000 employees) across industry types were contacted by telephone and asked a series of questions. Three basic questions were related to minimum wage issues: (1) Would an increase in the minimum wage alter your decision to hire former welfare recipients? (2) Did the recent increase in the minimum wage affect your hiring or employment decisions? (3) If the minimum wage were raised to \$6.00 per hour, would it affect your overall hiring or employment decisions? Table 1 shows the responses to the three questions.

Table 1 Responses to Basic Survey Questions about the Minimum Wage (Percentages)

Question	Yes	No	Don't Know
1. Would an increase in the minimum wage alter your decision to hire former welfare recipients?	9.9	84.8	5.3
2. Did the recent increase in the minimum wage affect your hiring or employment decisions?	6.2	89.4	4.4
3. If the minimum wage were raised to \$6.00 per hour, would it affect your overall hiring or employment decisions?	20.7	75.6	3.7

Few businesses (9.9 percent) felt that changing the minimum wage would affect their willingness to hire former welfare recipients. This is good news for those looking to the small business sector to absorb former welfare recipients and suggests that small businesses may not align against proponents of a so-called living wage for former welfare recipients.

An even smaller proportion of small businesses (6.2 percent) felt that the recent hike in the minimum wage had affected their overall hiring and employment practices. Although the percentage of businesses that expected that their decisions would be affected by an increase to a \$6.00 minimum is quite a bit larger (20.7 percent), as we will see, few of them thought they would reduce employment. Common economic wisdom suggests that increases in the minimum wage will force employers to lay workers off. However, there is a fundamental difference between laying off current employees and hiring fewer additional workers. If the latter effect dominates, job creation might be hindered, but jobs will not necessarily decrease (see Brown, Hamilton, and Medoff 1990).

We asked employers who said they were affected by the recent hike in the minimum wage to specify the effects. Most of these firms hired fewer additional workers. Of the 6.2 percent of employers who said their decisions were affected by the recent increase, 17.1 percent indicated that they hired fewer workers and 5.7 percent indicated that they laid workers off. The fact that about one-third of 1 percent of small businesses reduced their employment suggests that small businesses' demand for labor is extremely inelastic, at least at a wage around \$5.15 per hour. Similarly, of the 20.7 percent of employers who said that they would be affected by an increase in the minimum wage to \$6.00 per hour, 29.3 percent said they would hire fewer workers and 11.2 percent said they would lay workers off. The remainder thought that they would reduce benefits, show smaller profits, or pay the higher wage. In other words, fewer than 3 percent of small businesses would reduce employment if the minimum rose to \$6.00 per hour, which again suggests that small businesses have an inelastic demand for labor in this wage range.

To illustrate the degree of inelasticity, consider the 0.1 elasticity of labor demand estimated in the commission study cited above. For this wage elasticity to hold, the affected businesses would have to lay off about two-thirds of their minimum-wage employees following an increase in the minimum wage to \$6.00 per hour. There is no evidence in our survey or other studies that small businesses have done so following past minimum wage increases. Such high figures appear so implausible that they call into question the credibility of such elasticity estimates, at least as they apply to small businesses.

The wage elasticity of demand for labor can increase with the wage, so that even if recent minimum wage increases did not have the expected textbook disemployment effects, a larger increase could induce such effects. Is there a point at which the minimum wage begins to "bite" into employment? This is an extremely

important policy question because it allows one to weigh the employment costs of different minimum wage increases against the benefits of raising the wage. We begin to address this question by looking more carefully at the types of small businesses most affected by the recent minimum wage increase and our hypothetical increase.

The industries most affected by minimum wage increases are unsurprising (see Table 2). For example, the retail sales and trade and the food service industries have the highest proportion of firms whose hiring and employment practices were affected by the recent increase (question 2). In response to our hypothetical increase from \$5.15 to \$6.00 per hour (question 3), the retail sales and trade, services, and food service industries dominate the statistics, with the proportion of firms that would be affected more than doubling in these industries. This suggests that in these industries disemployment effects might become evident with another increase in the minimum wage.

Table 2 Businesses Affected by Minimum Wage Increases by Industry (Percentages)

Industry ^a	Question 1	Question 2	Question 3
Blue-collar service ^b	9.3	3.4	17.8
Blue-collar manufacturing ^c	8.0	2.0	16.0
Retail sales and trade	8.3	10.4	33.3
Professional specialty	9.3	2.0	9.9
Services (other than blue-collar service and food service)	20.0	8.9	28.9
Food service	15.7	21.6	47.1
Public sector	5.3	2.6	5.3

^aThe results are tabulated with no overlap of industry categories.

^bBlue-collar service includes such business as automotive repair, craft, repair, and storage.

^cBlue-collar manufacturing includes manufacturing, construction, etc.

The low percentages of affected firms in the blue-collar and public sector industries might be explained by the fact that those firms pay an entry-level wage above the minimum. Respondents were polled on their typical entry wage. As shown in Table 3, 87.1 percent of those firms with an entry-level wage at or near the minimum (between \$5.15 and \$6.00 per hour) were not affected in their hiring or employment practices by the last increase in the minimum wage (question 2). More than half of these small businesses thought they would still not be affected by an increase to \$6.00 per hour (question 3), although the proportion of those that would be affected more than triples from 10.0 percent to 37.6 percent.

Table 3 Businesses Paying Entry-Level Wage at or near Minimum Wage (Percentages)

	Question 1	Question 2	Question 3
Affected	11.4	10.0	37.6
Not Affected	84.3	87.1	59.5

Of the sample, 37.1 percent paid minimum entry wages. Of those that were affected by increasing the minimum wage to \$5.15 per hour (question 2), 60 percent paid a minimum entry wage. A much smaller proportion of businesses that paid entry wages above the minimum, 31.4 percent (or about half the proportion of those that paid the minimum entry wage), were affected by the last increase in the minimum wage. For the hypothetical increase to \$6.00 per hour (question 3), the proportion of affected businesses increases slightly, to 68.1 percent, for those paying a minimum entry wage while it declines slightly for those paying above the minimum.

Although there is some relationship between entry wages and sensitivity to minimum wage changes, the relationship is weak. One in ten businesses paying minimum entry wages was affected by the latest increase. Only about one in three thinks it will be affected by a further increase. Yet the majority of businesses that were affected by minimum wage increases paid minimum entry wages. Identifying those who bear the cost of minimum wage increases is another important concern for policymakers.

Conclusions

A principal problem in the debate about the minimum wage has been the absence of good data and adequate

measures. The findings of this survey serve to put the conventional wisdom of the economic mainstream into context. Doubt is cast on the notion that minimum wage increases lead to significant adverse employment effects. As we have noted, if the predicted 1 percent decrease in employment were to accompany a 10 percent minimum wage increase, affected businesses would have to lay off two-thirds of their minimum-wage employees. To the contrary, the hiring practices of most small businesses would not be affected at all.

The proportion of small businesses that said their decisions would not be affected diminished somewhat when they were asked about a hypothetical further increase to \$6.00 per hour. This suggests that there might be limits to how high the minimum wage could be increased before larger effects on the demand for labor occur. Our findings suggest that the minimum wage can be raised to \$6.00 per hour before significant disemployment effects from small business become evident.

Finally, we looked more carefully at which small businesses would be affected by minimum wage increases. Not surprisingly, the retail sales and trade, service, and food service industries were the most sensitive to wage increases. Perhaps more surprising, a small proportion of businesses that paid minimum entry wages were affected by the recent minimum wage hike. A larger, but still small proportion of those paying minimum entry wages expected to be affected by the hypothetical increase to \$6.00 per hour.

Public Policy

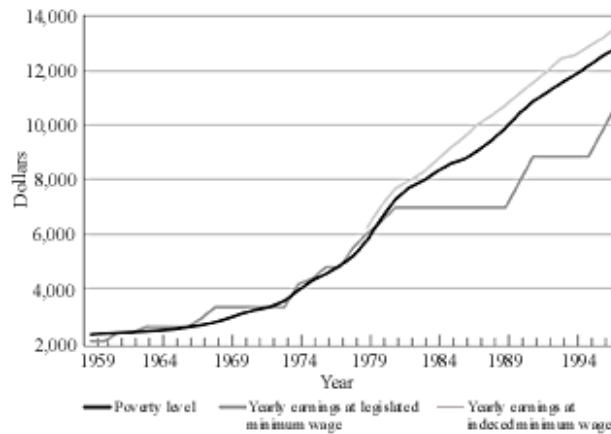
These findings have several implications for public policy regarding the trade-off between the negative employment effects of raising the minimum wage and the benefits of raising the wage. There are also implications regarding the mechanism by which changes in the wage should be made.

The findings of our survey suggest that the minimum wage could be raised somewhat without producing the predicted adverse unemployment effects. We can identify those who would likely bear a disproportionate cost of a hike in the minimum wage (as noted above, the retail sales and trade, services, and food service industries are most sensitive to wage increases); public policy might aim to relieve some of this burden, if possible.

The justification for raising the minimum wage until it "bites" is that the benefits that accrue to society through wage increases--most notably, the benefits of raising the income of the working poor and of making work more viable for those who will be forced by the 1996 welfare reform to go from welfare to work--would likely outweigh the costs. In our opinion, to create jobs that do not enable families to live above the poverty level simply for the sake of creating jobs has no public policy value. If most of the affected businesses are going to respond to a hike by not hiring additional workers rather than by laying off their present workers, then the minimum should be increased because the jobs that might have been created in the absence of the increase are not jobs we as a society would like to see created.

Chart 1 shows the relationship between the poverty level for a family of three with at least one child and the yearly earnings of a full-time worker earning the minimum wage for the years 1959 through 1997. The annual income associated with a full-time job at the legislated minimum wage tracked the poverty level fairly closely from 1959 until the early 1980s. The inflations of the late 1970s and 1980s pushed the poverty level up, but the legislated minimum wage income remained constant until the 1990s. Currently, a minimum-wage worker earns considerably less than the poverty level for a family of three with at least one child (the minimum level for a household to qualify for public assistance benefits). This is the well-documented erosion of the value of minimum wage earnings which, as the chart shows, was barely addressed by legislated increases during the 1990s.

Chart 1 Minimum Wage Earnings and Poverty Level for a Family of Three



Source: U.S. Bureau of the Census.

The ratio of yearly earnings at a minimum wage to the poverty level is shown in Chart 2. The ratio reaches its nadir in 1989, when the yearly income for a full-time minimum-wage worker was 70 percent of the poverty level. In 1997 the income of this worker was around 83 percent of the poverty level. Considering that people leaving the welfare rolls have children and are likely to have few skills, a minimum-wage job is a fairly dim prospect for them. In order to elevate the annual income of a full-time worker earning the minimum wage to the poverty level, the minimum wage would need to be raised to \$6.15 per hour. We showed above that employers' sensitivity to minimum wage increases in the \$6.00 per hour range is low, so we can assume that few disemployment effects (at least among small businesses) will be associated with an increase to \$6.00 per hour.

Chart 2 Ratio of Yearly Minimum Wage Earnings to Poverty Level for a Family of Three



Source: U.S. Bureau of the Census.

Another policy consideration is the mechanism by which changes in the minimum wage should be made. Should the wage continue to be legislated on an ad hoc basis? As one can see from the charts, the minimum wage income tracked the poverty level quite poorly in the 1980s and 1990s. We need to ask ourselves why we have a minimum wage in the first place. If it is designed to provide a minimum living wage, then a way should be found to keep the income it provides at such a level. In order to do this, minimum wage policy must be depoliticized, that is, it must be removed from the political arena of recurring debate, delay, and compromise each time an increase is contemplated. A way to do this is to adopt a policy of indexation.

Although indexation of transfer payments, like Social Security, has been hotly debated recently, the debate has centered on the appropriate index to use, not on the appropriateness of indexation itself. The logic of indexation is sound. People supporting themselves on fixed incomes need protection from market vagaries. As a society, we do not countenance driving the aged or infirm from their homes because of a general price increase. However, at the same time we have allowed the purchasing power of the minimum wage to erode considerably for long periods between revisions. Indexing the minimum wage, as we do transfer payments, is a simple and desirable solution to this problem.

The annual income from an example of an indexed minimum wage is presented in Chart 1. We calculated a minimum wage that increases proportionally with the median hourly wage starting in 1979 (the year in which the legislated minimum wage departed from the poverty level). The median wage was chosen as the appropriate index because it represents market-induced changes in wages reflecting changes in both productivity and prices. As one can see, the indexed wage tracks the poverty level quite closely, slightly exceeding it. If the minimum wage had been indexed in this fashion starting in 1979, the 1997 wage would have been \$6.50 per hour.

When we raise the minimum wage 10 or 20 percent at once in a legislated change, disemployment effects become pronounced because employers have no time to adjust to the sizable wage change. Large jumps in the minimum wage are likely to inflict greater difficulties on small businesses than small, incremental changes. An indexed minimum wage would keep changes relatively small, eliminating large dislocations and minimizing the negative effect of increases on employers. Once the minimum wage is set at an adequate level, indexation would ensure that increases thereafter will be automatic and incremental and that the minimum wage will retain its purchasing power.

Note

1. The relevance of responses to issues of welfare reform will be discussed in detail in a separate policy note.

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