

# The Effects of Statutory Minimum Wages

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Great Britain is one of the few advanced industrialized countries without a national minimum wage. There is much debate regarding the effects of statutory national minimum wages: are they beneficial, detrimental, or neither in the long-run? More specifically, do minimum wages increase or decrease employment? The traditional view based on a perfectly competitive labor market opposes the notion of a national minimum wage. Such neoclassical economists maintain that minimum wages hurt employment. However, as more and more people come to admit that the world is not as perfect as the classical theory would lead us to believe, alternative models to explain market behavior arise. Supporters of a national minimum wage suggest that it combats exploitation, helps the poor, and can even *raise* the employment rate. Finally, both sides of the theoretical debate are cogent. Consequently, the empirical evidence is of paramount importance. This discussion will explore the various theories regarding the effects of minimum wages on employment and relative earnings for the low-paid in an economy. Then, we will examine the research to consider which side the data supports—that is, if it does indeed conclusively decide the case one way or the other.

First of all, who are the low-paid? The definition of low-pay depends on the conditions specific to a particular society and time period. One can define low-pay in terms of earnings or in terms of standards of living. In the case of the latter, though, one would have to consider entire families and other sources of income. For the purpose of this discussion, we will define low-pay in terms independent of living standards. In terms of earnings, then, who are the low-paid? The lowest decile of earnings in most of Europe is made up of the young, women, part-timers, and temporary workers. In much of the literature, one finds the assumption that the vast majority of the low-paid are teenagers. Yet, this is not true. In Great Britain, the percentage of young workers has fallen as more go on to higher education and also as more women enter the workforce. In fact, the proportion of work-

ers in the bottom decile of hourly wage distribution who are teenagers fell from 40 percent in the mid-1970's to 18 percent in the early 1990's (Dolado, 335). Female part-timers now make up almost 47 percent of those who earn less than 3 pounds an hour (Edwards, 548).

Most of us learned in Introductory Economics that any type of wage floor reduces employment. More than 90 percent of all professional economists agree with this conclusion, which is based on the Classical view of the world. This model assumes that the firm is a price-taker and that the elasticity of supply of labor is infinite. Both of these assumptions are implausible in the real world. Nevertheless, in a classical utopian competitive market, pay will move to equate supply and demand. Thus, low pay either results from low productivity during training or low labor quality. Accordingly, then, Classical economists prescribe better training as the key to combating low pay.

The second implication of the traditional theory is that minimum wages lead to no improvement in relative pay. As the wages of the low-paid rise, those workers just above them on the pay scale will demand higher wages in order to maintain the differentials and their relative place in society. Every time the minimum wage increases, not only will there be further losses of marginal jobs, but there are also further ripples in the entire pay structure. If any attempts are made to set the minimum wage above the average earnings, every increase in that wage increases the average by the same proportion. Ultimately, the only effect is price inflation.

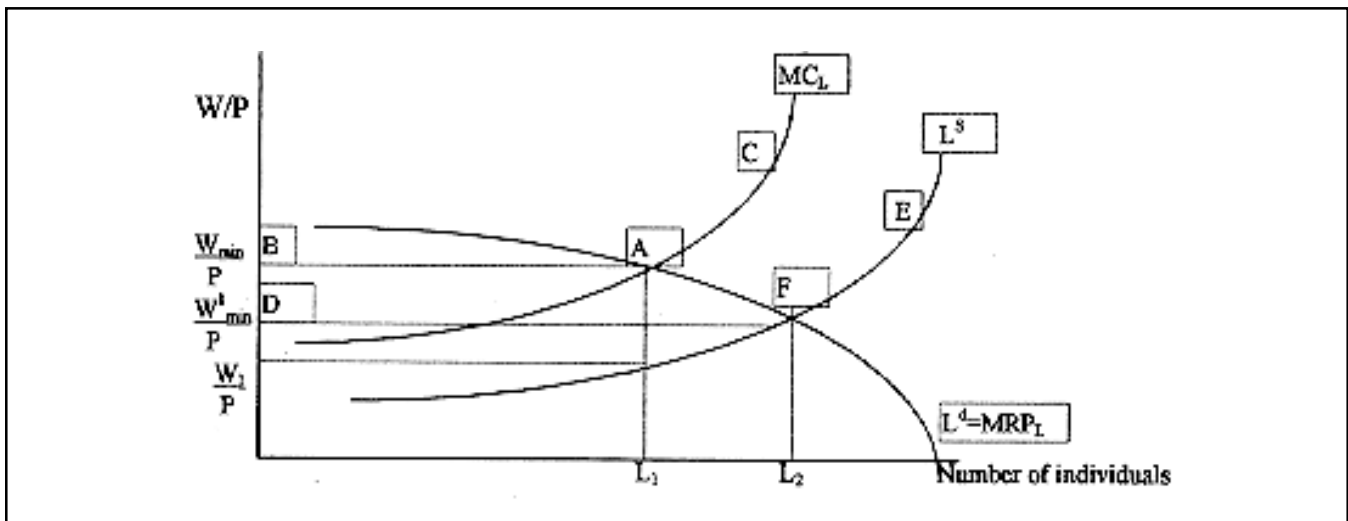
As we will see, the evidence disproves this traditional view towards employment. But, how could this be true? First of all, most firms are not fully price-takers. Secondly, the elasticity of labor supply is very high. As previously mentioned, women and youth comprise the majority of the low-paid workers. Both groups as an aggregate have a higher elasticity of supply than most adult men. The reason is that men are still, in most cases, the primary wage-earners in the

family. Their choice to work or not to work does not change with wage fluctuations. Their particular occupational choice may vary, but that is not the issue. Because women and teenagers generally provide secondary sources of income in a family, their elasticities are much higher. In addition, other incentives besides wages become important, such as the cost of childcare, tax rates, and flexible hours. Moreover, recent studies have uncovered a real problem in Great Britain, which affects all other areas of the economy: a low skill/low quality production strategy on the part of most firms. Low-spec production strategies only exacerbate the problem of low earnings.

Let us pretend for a moment that the labor market was perfectly competitive. What implications should we deduce? Obviously, to begin with, a minimum wage should not ever raise employment and it will generally lower it. Theoretically, the slightest increase in the minimum wage should mean higher unemployment for marginal workers, such as the young, unskilled, and those approaching retirement. Secondly, there should be no improvement in relative

are conscious that any attempt on their part to buy more labor will result in a general increase in the level of wages in the labor market they dominate. Hence, monopsonists are aware that they face an upward sloping marginal cost of labor curve,  $MC_L$ , which lies to the left of the labor supply curve for that market. Such a situation is depicted below.

Profit maximizing monopsonists take employment to the point at which the marginal cost of labor equals the marginal revenue product of labor, as indicated by point *A*, but pays a wage equal to  $W_1/P$ . Under these circumstances, a skillfully set minimum wage can increase the total earnings of labor. The introduction of a minimum wage in excess of  $W_1/P$  changes the marginal cost of labor to the firm and therefore effectively flattens the  $MC$  schedule. Thus, a minimum wage of  $W_{min}^1/P$  produces the marginal cost schedule of  $DFE$ . In the former case, wages are increased by  $(W_{min} - W_1)/P$  without loss of employment. In the latter case, wages rise from  $W_1/P$  to  $W_{min}^1/P$  and employment increases from  $L_1$  to  $L_2$ . In both cases, the total earnings of labor have increased without adverse



pay, as those with higher pay work to maintain wage differentials and thus their relative position in society. Yet, especially regarding the former, there is some compelling evidence to the contrary—some of which shows a positive effect; though, most of the new evidence shows no significant effect at all.

The most consistent alternative theory regarding minimum wage effects centers around the monopsony model. As the single buyer of labor, monopsonists

employment consequences. Such an outcome could only be sustained if the firm in question were previously making supernormal profits and the rise in its labor costs were accommodated by these.

There is one major problem with this model though—the ad hoc nature of the hiring and quit-rate functions. Though this essay will cite evidence in the US indicating positive effects on employment, one should note that the theory itself does not offer a

straightforward explanation of the effect on unemployment. In fact, many monopsony models reveal a shift to the right in the entire distribution of wage offers. A second problem with the model is actually similar to a problem with the traditional model in that it may still assume labor elasticities for marginal, minimum-wage workers to be higher than what they are. Financial incentives can affect the supply of labor and induce some people to work who were not working before. However, this may work with some groups more than others. Case in point, once again, is married women. Also remember that, in some cases, giving people a higher income without making the trade-off between work and leisure more favorable to work will encourage people to actually work fewer hours—that is, unless they are already working fewer hours than they would like.

Now that we have probed the pros and cons to both sides of the issue, which position does the empirical evidence support? The first major splash to hit the minimum wage debate this decade was the studies of Card and Krueger in the United States. Card and Krueger researched fast food chains across America during times of change in the minimum wage. This seems like a reasonable choice since fast food chains employ a good percentage of minimum wage earners among their workers. Card and Krueger found some interesting results. When New Jersey raised its minimum wage in 1992, employment did not fall in the fast food industry. In fact, it expanded. They found similar results after the 1991 increase in Texas and the 1988 increase in California. But, of course, these are regional minimum wages, and we are concerned with the effects of a national minimum wage. Interestingly, though, in their cross-state analysis, they found that between 1990 and 1991 the federal minimum wage did not adversely affect teenage unemployment.

Perhaps the most surprising finding was decreased wage dispersion. Most of the other literature, no matter what they say about effects on employment, maintains that minimum wages do not help wage dispersion. But, Card and Krueger discovered that mini-

imum wage increases accrue disproportionately to individuals in low-income families. Moreover, they did not seem to diminish fringe benefits. However, they did detect a sort of “ripple effect” throughout firms—workers making above minimum wage demanded raises in order to maintain the differentials. And, the observed decrease in wage dispersion did not reduce overall poverty. The 90 cent increase in the minimum wage between 1989 and 1991 transferred only about \$5.5 billion to low-wage workers, which is a mere .2 percent of economy-wide earnings (C&K, 3). This is quite obviously a limited impact on the low-paid. Nonetheless, there is still enough evidence in Card and Krueger’s findings to put a severe damper on the Classical theory. The biggest discrepancy is obviously the employment effect. Card and Krueger found positive effects on employment for moderate increases in the minimum

wage, but negative effects if the floor was pushed too high. Thus, it appears that the evidence supports the model of monopsony.

Thus far, we have examined data from the United States. However, one cannot simply transfer conclusions from America to Europe, for the government systems and social priorities vary greatly from country to country. As a result, this discussion now turns to research in Europe in order to give a better overall picture. There are five distinguishable systems in Europe regarding minimum wages (Dolado, 321). Some countries, like France, Spain, and the Netherlands, have a statutory minimum wage set by the government. Other countries, such as Belgium and Denmark, have a national minimum wage which is set in a national collective bargaining process. A third type is that used by Germany, Italy, and Austria. In this system, minimum wages are set according to sectors, in sectoral collective agreements. Fourthly, Sweden, Norway, and Finland have collective agreements that cover everyone; however, there are no formal provisions for the extension of these agreements to non-signatory employers. Finally, the United Kingdom and Ireland only set minimum wages in selected low-paying industries. In fact, in Great Britain, the

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only sector still protected by minimum wages is agriculture.

It is useful to distinguish these various systems in order to examine their different outcomes on employment and relative pay. Regarding the latter, Dolado and his co-authors used the Kaitz index in their study. The Kaitz index measures the minimum wage as a fraction of average earnings. It is more of a general indication than a precise measurement. Interestingly, the estimated Kaitz indices for the U.K. and the U.S. are very similar: in 1993, the U.K. had an estimated index of .4; the U.S., of .39 (Dolado, 323). Of course, as with any measuring tool, there are a whole host of concerns with using the Kaitz index (*ibid*, 324-325). Nonetheless, it is a useful indicator, especially when looking at relative earnings. Keeping in line with the studies we have been discussing, Dolado and his crew found that there have been few dramatic changes in the Kaitz index across Europe. When minimum wages rise, average earnings rise.

To ascertain the effects on employment, it is useful to look at a few specific countries. In France, the evidence suggest that the substantial rise in the minimum wage up until the mid-1980's had no adverse effect on employment. Some argue that at that point, it did cause employment losses. However, there are other factors which must be considered. For instance, it is wholly reasonable that the economy was simply responding to the recession which was going on at the same time. These are basically just summaries of the observed effects in these countries, but let us turn to the Netherlands. In the Dutch economy as a whole, the share of youth employment fell from 19.4 percent in 1979 to 16.4 percent in 1985 (*ibid*, 345). But, once again, there were other factors similar to those in France. The inclusion of these examples may seem extraneous. However, the significance lies in the lack of compelling evidence in either case that there were adverse effects directly resulting from a minimum wage.

Spain has a statutory minimum wage set by the government in consultation with trade unions and employer organizations. The purpose is to protect wage earners and "ensure a guarantee of their purchasing power and participation in the economic development of the nation" (*ibid*, 350). Yet, as mentioned before, the Kaitz index has changed very little. As far as the effects on employment, the evidence

shows that there was some decline in youth employment with the introduction of a national minimum wage, but total employment rose.

Finally, we arrive at the situation in Britain. As mentioned at the beginning, Britain has no national minimum wage. For that matter, it has no sectoral minimum wages. For while, though, it did. In 1909, Winston Churchill wanted to protect the pay of workers in the so-called "sweated" trades. His solution was to set up the Wages Councils. However, the number of industries they covered dwindled over the years, so that by 1993, the Trade Union Reform and Employment Rights Act only had 26 remaining councils to abolish. We can, of course, look at data during the time period before the 1993 Act. Measuring changes in employment against changes in the Kaitz index for 1975 to 1992, we find a positive relationship between the two variables. This suggests that industries and years in which minimum wages rose quickly in relation to average wages can be associated with faster than average growth in employment.

Of course, the Conservative legislation in Great Britain has considerably narrowed the scope for any sort of wage protection mechanisms in Britain. The pay determination system is much more fragmented now without the intermeshing of industry-level minimum rates and Wages Councils setting wage floors in the labor market. Moreover, the move away from manufacturing employment to more service-oriented sectors has reduced the share of the workforce covered by collective bargaining. It is in this very type of situation that those who advance yet another model, based on the segmentation of the labor market, believe that a national minimum wage is needed. Segmentationists believe that low pay is generated more by jobs than by workers, for workers could be very well-trained but stuck in a bad job. This theory is actually very similar to the monopsony theory and may simply highlight a different aspect of the imperfection of labor markets. In a segmented labor market, minimum wages would raise efficiency, as it would force employers to pay workers according to their skill. This particular approach may be most appropriate for many unmarried females and unskilled adult males, and the vast majority of married females. These groups have little choice in pay since they are typically working part-time.

In summary, the only sure conclusion we can

draw is that the importance of minimum wages appears to be exaggerated on both sides of the debate. The bottom line is that the theory can go either way. The evidence does not seem to waiver much in that, in most European countries, there has been little change in minimum wages relative to average earnings over the past thirty years. Likewise, then, it is hard to argue that they have played a significant role in impacting employment. Moreover, much of the policy discussion concentrates on the effects of the young. But, they really make up a rather small proportion of minimum wage workers. There does seem to be some decline in employment rates for the young with the institution of a minimum wage. At the same time, though, the evidence reveals improvements in overall employment rates, such as in France. This might attest to the wisdom of a lower minimum wage for the young, but that is an issue for another paper.

## REFERENCES

- Dell, D.N.F. & R.E. Wright.** "The Impact of Minimum Wages on the Wages of the Low Paid: Evidence from the Wage Boards and Councils." Economic Journal, 1996. Vol. 106, pp. 650-656.
- Bowen, Alex & Ken Mayhew.** Improving Incentives for the Low Paid. Macmillan: London, 1990.
- Card, David E. & Alan B. Krueger.** Myth and Measurement: the new economics of the minimum wage. Princeton University Press, 1995.
- Dolado, Juan, Francis Kramarz, Stephen Machine, Alan Manning, David Margolis, & Coen Tuelings.** "The economic impact of minimum wages in Europe." Economic Policy, October 1996. Vol. 23, pp. 317-372.
- Edwards, Paul K.** Industrial Relations in Britain. Blackwell: London, 1995.
- Freeman, R.E.** "The Minimum Wage as a Redistributive Tool." Economic Policy, 1996. Vol. 106, pp. 639-649.
- Machin, S. & A. Manning.** "Employment and the Introduction of a National Minimum Wage." Economic Journal, 1996. Vol. 106, pp. 667-676.