## Research Brief

## The Effect of Minimum Wages on Low-Wage Jobs: Evidence from the United States Using a Bunching Estimator

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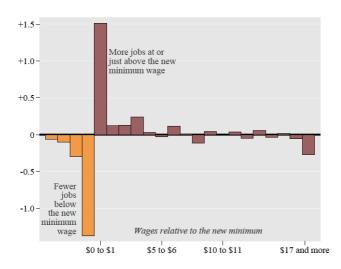
Minimum wage policies have featured prominently in recent policy debates in the United States and in Europe. Over the past three years, California, Massachusetts and New York passed legislation to increase minimum wages to \$15/hour by 2022 or sooner, and over a dozen cities instituted city-wide minimum wages—typically by substantial amounts above state and federal standards. In Europe, Germany introduced its first ever nation-wide minimum wage in 2015, while in the United Kingdom, the conservative government announced plans to raise the minimum to £9 an hour by 2020. Underlying much of the policy debate is the central question: what is the overall effect of minimum wages on low-wage jobs?

Even though nearly three decades have passed since the advent of "new minimum wage research," the effect of the minimum wage on employment remains a controversial topic. Moreover, the debate has often been concentrated on the impact on teen employment or on workers in specific sectors, while the evidence on the impact on total employment remains limited. This shortcoming is particularly acute given the importance policymakers place on understanding the overall employment effect on low-wage workers.

In our paper we propose a new method to assess the overall employment effect of the minimum wage by tracking the changes in the number of jobs throughout the wage distribution following a minimum wage increase. We exploit 138 prominent minimum wage changes instituted between 1979 and 2014 in U.S. states to infer the job loss (or gain) caused by the minimum wage. The following figure summarizes our key findings.

## Figure: Effect of the Minimum Wage on Jobs Throughout the Wage Distribution

Estimates of the change in jobs five years after a change in the minimum wage, as a share of total employment before the increase



The figure shows the effect of an average minimum wage increase on the wage distribution at each wage level relative to the minimum wage. Minimum wage increases led to a clear reduction in jobs below the new confirming minimum wage, that minimum wages we study are binding. However, the reduction in jobs paying below the minimum was balanced by a sharp increase in the number of jobs paying at the minimum, along with additional increases in jobs paying up to \$5 above the new minimum. As the figure also shows, virtually no change found employment higher up in the wage distribution even up to the highest wage level. This is reassuring, as it is unlikely that a minimum wage increase would lead to large changes in jobs paying much more to begin with. Overall, then, low-wage workers saw a wage gain of 7 percent after a minimum wage increase, but little change in employment.

In addition, we studied the effects for specific subgroups like those without a college degree, under-represented minorities and young workers. We did not find evidence of substantial job loss for any of these (and other) groups we studied. We did find an indication of more substantial job losses in tradable sectors like manufacturing; however, since very few of the minimum wage workers are in such sectors, the overall effect on employment is close to zero.

What is the relevance of our findings for recent minimum wage increases? Many recent minimum wage changes and proposals are larger than those seen in the last three decades. For instance, if the United Kingdom raised its minimum wage to £9 an hour by 2020, it would reach 62% of the median wage by 2020. While minimum wages may have positive impact on low wage labor markets, most scholars would agree that above a certain point job losses become more substantial.

In our paper, we produce individual estimates for each of the 138 minimum wage changes to better understand when we reach that turning point. As we consider events with a more binding minimum wage increase, we find a larger reduction in the number of jobs paying below the new minimum wage. However, at the same time, we find that the number of jobs paying at or just above the minimum rises by a nearly identical extent.

Overall, these findings suggest that the level of minimum wages that we study—which range between 37% and 59% of the median wage—have yet to reach a point where the job losses become sizable. However, the employment consequences of a minimum wage surpassing the ones studied here remain an open question.

The NBER Working Paper is available at: <a href="https://www.nber.org/papers/w25434.pdf">https://www.nber.org/papers/w25434.pdf</a>

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