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## Minimum Wages: A Poor Way to Reduce Poverty

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In his 2014 State of the Union address, President Barack Obama endorsed a plan to raise the federal minimum wage from \$7.25 to \$10.10 per hour. Supporters of the increase argue that a \$10.10 minimum wage is necessary to ensure that those who work hard and play by the rules do not live in poverty. While alleviating poverty is a widely shared goal, raising the minimum wage is a very inefficient means of achieving this objective and is likely to hurt many low-skilled workers.

Nobel Prize-winning economist Milton Friedman said, “one of the great mistakes is to judge policies and programs by their intentions rather than their results.”<sup>1</sup> With regard to the minimum wage, the intentions and the results are usually different. This bulletin discusses the latest empirical evidence on the effects of minimum wage increases on poverty and employment. It also presents evidence on the likely effects of future minimum wage increases.

The bulletin concludes that minimum wage increases almost always fail to meet proponents’ policy objectives and often hurt precisely the vulnerable populations that advocates wish to help. The weight of the science suggests that policymakers should abandon higher minimum wages as an antiquated anti-poverty tool. Minimum wages deter employment and are poorly targeted to those in need.

### Minimum Wages and Poverty

Numerous empirical studies have examined the effect of past minimum wage increases on poverty. In a 2007 peer-reviewed study, Richard Burkhauser of Cornell University and I examined Census data from 1979 to 2003 to estimate the effects of minimum wage increases on state poverty rates.<sup>2</sup> We found no evidence that minimum wage increases were effective at reducing overall poverty rates or poverty rates among workers.

In two subsequent studies, we extended the analysis to include more recent Census data.<sup>3</sup> The results showed no evidence that minimum wage increases reduce poverty. Even among a population that has been targeted by policymakers for minimum wage protection—less-

educated single mothers—my research has found no evidence that minimum wage increases reduce poverty.<sup>4</sup>

David Neumark of the University of California-Irvine and William Wascher of the Federal Reserve Board examined family-specific flows into and out of poverty as a result of minimum wage increases, using matched Current Population Survey data.<sup>5</sup> They found that while some poor workers who kept their jobs after minimum wage increases were lifted out of poverty, others lost their jobs and fell into poverty. Their findings suggest that minimum wage increases redistribute income among poor and near-poor households. Only for younger junior high school dropouts is there some peer-reviewed evidence of net poverty-alleviating effects of the minimum wage.<sup>6</sup>

One concern raised by skeptics of the poor poverty-alleviation record of minimum wages is that the official poverty threshold may be an imperfect “measuring stick” for the economic well-being of low-income households. Therefore, Robert Nielsen of the University of Georgia and I used data from the Survey of Income and Program Participation to examine whether minimum wages were effective in reducing alternate measures of economic well-being, namely material hardship.<sup>7</sup> We found no evidence that higher minimum wages helped people make ends meet, pay their rent, pay their utility bills on time, or avoid financial or health insecurity.

In sum, much of the empirical evidence published in peer-reviewed journals suggests that minimum wage increases fail to alleviate net poverty even among vulnerable populations that minimum wage advocates wish to help. Why is this? The research has identified two key reasons: (1) adverse employment and hours effects, and (2) the fact that few beneficiaries of minimum wage increases live in poor households (poor “target efficiency”).

### Adverse Employment Effects

Advocates argue that a rise in the minimum wage will increase the wages and incomes of workers, lifting many people out of poverty. Such a static analysis ignores the behavioral effects of minimum wage increases. In the

presence of competitive low-skilled labor markets, a government-mandated minimum wage set above the market wage will raise the cost of low-skilled labor to firms, creating an incentive for firms to cut jobs or reduce employees' hours of work. Many firms respond to minimum wage increases by substituting away from low-skilled labor and toward other inputs. For example, grocery stores may substitute away from cashiers and toward self-checkout systems or toward higher-skilled labor. If some near-poor, low-skilled workers lose their jobs or have their hours cut as a result of minimum wage increases, then their incomes may fall, resulting in a rise in poverty among these households.

The vast majority of credible empirical evidence produced by labor economists—reviewed in a 2008 book by David Neumark and William Wascher and confirmed by many researchers since in studies discussed below—suggests that minimum wage increases reduce low-skilled employment.<sup>8</sup> Estimates of the employment elasticity with respect to the minimum wage for low-skilled individuals generally range from -0.1 to as large as -0.3, suggesting that a 10 percent increase in the minimum wage reduces low-skilled employment by 1 to 3 percent. A lower-bound estimate in this range was used in the recent Congressional Budget Office report on the likely effects of a \$10.10 minimum wage. These estimates suggest that the 39 percent increase in the federal minimum wage proposed by President Obama could reduce low-skilled employment by 4 percent to as much as 12 percent.

Recent research indicates that under certain economic conditions, the employment effects of minimum wages may be even larger than this “consensus range” of estimates. A study by Jeffrey Thompson of Syracuse University finds that in counties for which the minimum wage binds most strongly, the low-skilled employment effects are larger.<sup>9</sup> And in a case study of New York State, Burkhauser, Benjamin Hansen of the University of Oregon, and I use a novel “synthetic control design” and find that a large state minimum wage increase may produce large adverse employment effects for less-educated, less experienced individuals.<sup>10</sup> Policymakers thus should be careful not to assume that the effects of minimum wage increases will be homogeneous across all low-skilled labor markets.

There is also some evidence that the adverse low-skilled employment effects of minimum wages may be larger during economic downturns. If recessions result in negative shocks to the demand for goods and services produced by low-skilled workers (and hence to the demand for low-skilled workers), then a minimum wage increase is likely to be binding for more of these workers than during

expansions. This would suggest larger (in absolute magnitude) adverse employment effects. Put another way, low-skilled workers may be the first to be laid off during times of recession. Conversely, during expansions, increases in the demand for goods and services produced by low-skilled workers may ameliorate the negative effect of minimum wages on low-skilled employment, resulting in smaller adverse consequences.

In a 2014 study, I examined Census data from 1990 to 2010 to explore whether the low-skilled employment effects of minimum wage increases differ in peaks and troughs of state business cycles.<sup>11</sup> The results showed that during economic downturns—periods of high unemployment or low nominal GDP growth—the adverse employment effect of minimum wage increases for younger high school dropouts is larger than in times of expansion. Specifically, I found that during state expansions, a 10 percent increase in the minimum wage reduces employment of younger high school dropouts by about 2 percent. However, during recessions, the effect is twice as large—a 10 percent increase in the minimum wage reduces low-skilled employment by 4 percent. This study suggests that if the proposed 39 percent federal minimum wage increase were implemented, and a state were in a period of high unemployment or sluggish growth, there could be a nearly 16 percent decline in employment for vulnerable low-skilled workers.

While the evidence suggests that there is never a good time to raise the minimum wage, times of economic uncertainty and recession appear to be the worst times to do so. Moreover, the implications of my work—and that of others finding adverse low-skilled employment effects of minimum wages in states hardest hit by the Great Recession<sup>12</sup>—could suggest an important warning about proposals to index future minimum wage increases to inflation. If the United States were to enter a recession with both high unemployment and substantial inflation, indexed minimum wages could put low-skilled workers on “autopilot” to poorer and poorer job prospects.

There is also emerging evidence that minimum wage increases may inhibit job growth. Jonathan Meer and Jeremy West at Texas A&M University find that minimum wage increases tend to reduce job creation among expanding businesses.<sup>13</sup> That particularly would affect younger and less-experienced workers and those industries with larger shares of low-wage workers.

### **Controversies in the Employment Literature**

While a substantial body of credible science suggests that there are adverse employment effects for low-skilled individuals for whom the minimum wage is most likely to

bind, there are a few important but iconoclastic studies that are worthy of note. A 2010 peer-reviewed study by Arindrajit Dube, William Lester, and Michael Reich (“DLR”) used a novel research design to compare employment trends in contiguous counties across borders of states that had differing minimum wages.<sup>14</sup> They found no evidence that minimum wage increases caused adverse employment effects in lower-skilled industries.

However, a new study forthcoming in *Industrial and Labor Relations Review* by David Neumark, Ian Salas, and William Wascher note a number of shortcomings of DLR’s approach.<sup>15</sup> They find that: (1) the data often fail to justify DLR’s exclusion of alternate non-border counties (or regions) as controls, as many non-border counties look more similar on observables to treatment counties, (2) DLR’s findings are quite sensitive to the number of leads and lags of the minimum wage included in their empirical model, and (3) DLR’s selection of matching counties often produces matched pairs that are quite dissimilar across an important set of observables. When Neumark, Salas, and Wascher use matched pairs of nearby counties and states that are arguably better controls, negative employment effects reemerge.

A second study often cited by proponents of minimum wage increases was by Sylvia Allegretto, Arindrajit Dube, and Michael Reich (“ADR”) in 2008.<sup>16</sup> It found that by comparing states within Census divisions and controlling for state-specific linear time trends (“spatial heterogeneity”), there was no evidence that minimum wage increases reduced teen employment. Dube uses this same empirical strategy to argue that without negative employment effects, higher minimum wages may actually reduce poverty, particularly during economic expansions.<sup>17</sup>

However, the recent study by Neumark, Salas, and Wascher suggests another interpretation of ADR’s findings. Their work suggests that ADR’s null employment effects can be explained, at least in part, by their “throwing the baby out with the bathwater” and eliminating potentially valid sources of identifying variation by including controls for state-specific linear time trends. They show that controlling for higher-order polynomials in state time trends rather than linear time trends results in negative teen employment elasticities in line with consensus estimates.

In addition, Neumark, Salas, and Wascher critique ADR’s assertion that within-Census division state comparisons are more credible than cross-census division state comparisons by showing: (1) states outside a Census division can be a better match for “treatment” states when one examines low-skilled economic conditions prior to a minimum wage hike, and (2) even within Census

divisions, minimum wage increases still adversely affect teen employment within four of nine divisions; in the remaining five divisions, minimum wage hikes produce employment elasticities that are too imprecisely estimated to reject a finding of negative employment effects.

In summary, the studies by DLR and ADR make important contributions to the minimum wage literature in that they challenge researchers to think harder about the assumptions underlying the standard “difference-in-difference” techniques for policy analysis pioneered by Card and Krueger.<sup>18</sup> However, it is far too soon to conclude that these studies have overturned the wide body of minimum wage literature in labor economics. Minimum wage advocates’ claims that these few studies’ findings represent economists’ “widely accepted” or “comprehensive” view of the effects of minimum wages—as the *New York Times* recently claimed in an editorial calling for a \$10.10 minimum wage—are not supported by any reasonable review of the literature.<sup>19</sup>

But even if employment effects were small or even zero as the rose-colored results of DLR and ADR suggest, there is a second reason why minimum wage increases will be ineffective at reducing poverty: few minimum wage beneficiaries live in poor households.

### **Poor “Target Efficiency”**

Advocates of minimum wage increases paint a vivid portrait of what they see as the typical minimum wage worker: a working single mother struggling to keep her family above the poverty line. But is this portrait accurate? Are most minimum wage workers poor or near poor? Are they usually single, female heads of household?

In fact, relatively few minimum wage workers live in poor households. In a new study, Burkhauser and I examine Census data, and find that workers earning between \$7.25 and \$10.10 per hour—workers who would be directly affected by the proposed federal minimum wage increase—overwhelmingly live in non-poor households.<sup>20</sup> We find that only 13 percent of workers who would be affected live in poor households, while nearly two-thirds live in households with incomes over twice the poverty line, and over 40 percent live in households with incomes over three times the poverty line. Other research suggests that poor single-female headed households make up less than 5 percent of all affected workers.<sup>21</sup>

In addition, data from the Census Survey of Income and Program Participation also suggest that minimum wage workers are not living in hardship.<sup>22</sup> Just 19.0 percent reported difficulty making ends meet, just 10.5 percent reported difficulty paying utility bills on time, just

7.6 percent reported difficulty paying rent, and just 9.6 percent reported difficulty seeing a doctor when needed.

The Census data brings reality to the minimum wage debate. It shows that minimum wage increases are very poorly targeted to those most in need, and that even under the highly unlikely assumption that minimum wages cause no adverse labor demand effects, raising the minimum wage is still a very poor anti-poverty strategy.

## Conclusions

While alleviating poverty is a widely shared goal, raising the minimum wage is unlikely to achieve that end. In reality, it is more likely to result in making many low-skilled workers worse off. The minimum wage fails to reduce net poverty because of its adverse effects on employment and poor ability to target workers living in households below the poverty threshold.

Worse, focusing on minimum wage increases to alleviate poverty diverts attention from public policies that promote employment and incentivize human capital investment that are far more effective ways to raise incomes and alleviate poverty. Tax reforms, for example, could increase incentives for working and human capital acquisition, while encouraging greater business capital investment that raises productivity and wages over time. In addition, a pro-work negative income tax that replaces a tangled web of in-kind public transfer programs—many of which have perverse disincentives for work—is much more likely to benefit the poor than a minimum wage increase.

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<sup>1</sup> Richard Heffner's *Open Mind*, WPIX-TV, New York City, December 7, 1975.

<sup>2</sup> Richard V. Burkhauser and Joseph J. Sabia, "The Effectiveness of Minimum Wage Increases in Reducing Poverty: Past, Present, and Future," *Contemporary Economic Policy* 25, no. 2 (2007): pp. 262–81.

<sup>3</sup> Joseph J. Sabia and Richard V. Burkhauser, "Minimum Wages and Poverty: Will a \$9.50 Federal Minimum Wage Really Help the Working Poor?" *Southern Economic Journal* 76, no. 3 (2010): pp. 592–623. And see Joseph J. Sabia and Richard V. Burkhauser, "Minimum Wages, Cash Wages, and Poverty: New Evidence from the Great Recession Years," forthcoming, Employment Policies Institute.

<sup>4</sup> Joseph J. Sabia, "Minimum Wages and the Economic Well-Being of Single Mothers," *Journal of Policy Analysis and Management* 27, no. 4 (2008): pp. 848–66.

<sup>5</sup> David Neumark and William Wascher, "Do Minimum Wages Fight Poverty?" *Economic Inquiry* 40, no. 3 (2002): pp. 315–33.

<sup>6</sup> John T. Addison and McKinley L. Blackburn, "Minimum Wages and Poverty," *Industrial and Labor Relations Review* 52, no. 3 (1999): pp. 393–409.

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<sup>7</sup> Joseph J. Sabia and Robert B. Nielsen, "Minimum Wages, Poverty, and Material Hardship: New Evidence from the SIPP," *Review of Economics of the Household*, January 2013.

<sup>8</sup> David Neumark and William L. Wascher, *Minimum Wages* (Cambridge, MA: MIT Press, 2008).

<sup>9</sup> Jeffrey P. Thompson, "Using Local Labor Market Data to Re-Examine the Employment Effects of the Minimum Wage," *Industrial and Labor Relations Review* 62, no. 3 (2009): pp. 343–66.

<sup>10</sup> Joseph J. Sabia, Richard V. Burkhauser, and Benjamin Hansen, "Are the Effects of Minimum Wage Increases Always Small? New Evidence from a Case Study of New York State," *Industrial and Labor Relations Review* 65, no. 2 (2012): pp. 350–76.

<sup>11</sup> Joseph J. Sabia, "Minimum Wages, the State Business Cycle, and Indexing," Working Paper, San Diego State University, 2014. (Also published as Joseph J. Sabia, "Minimum Wages and the Business Cycle: Does a Wage Hike Hurt More in a Weak Economy?" Employment Policies Institute, January 2014).

<sup>12</sup> John T. Addison, McKinley L. Blackburn, and Chad D. Cotti, "Minimum Wage Increases in a Recessionary Environment," *Labor Economics* 23, no. 4 (2013): pp. 30–39.

<sup>13</sup> Jonathan Meer and Jeremy West, "Effects of the Minimum Wage on Employment Dynamics," Working Paper, Texas A&M University, December 2013.

<sup>14</sup> Arindrajit Dube, William T. Lester, and Michael Reich, "Minimum Wage Effects Across State Borders: Estimates Using Contiguous Counties," *Review of Economics and Statistics* 92, no. 4 (2010): pp. 945–64.

<sup>15</sup> David Neumark, J. M. Ian Salas, and William Wascher, "Revisiting the Minimum Wage-Employment Debate: Throwing Out the Baby with the Bathwater?" Working Paper, National Bureau of Economic Research, January 2013. Forthcoming in *Industrial and Labor Relations Review*.

<sup>16</sup> Sylvia Allegretto, Arindrajit Dube, and Michael Reich, "Do Minimum Wages Really Reduce Teen Employment? Accounting for Heterogeneity and Selectivity in State Panel Data," *Industrial Relations* 50, no. 2 (2008): pp. 945–64.

<sup>17</sup> Arindrajit Dube, "Minimum Wages and the Distribution of Family Incomes," Working Paper, December 30, 2013.

<sup>18</sup> David Card and Alan B. Krueger, *Myth and Measurement: The New Economics of the Minimum Wage* (Princeton, N.J.: Princeton University Press, 1995).

<sup>19</sup> *New York Times*, "The Case for a Higher Minimum Wage," editorial, February 8, 2014.

<sup>20</sup> Sabia and Burkhauser (forthcoming).

<sup>21</sup> Sabia (2008).

<sup>22</sup> Sabia and Nielsen (2013).