Employment Effects of Minimum Wages: IZA World of Labor Essay

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In U.S. debate, policy goal is to reduce poverty, help low-income families.

- “Raising the minimum wage directly helps parents make ends meet and support their families.”
  - www.whitehouse.gov (2/13/2013)

- “The minimum wage was one of the first – and is still one of the best – anti-poverty programs we have”
  - Senator Edward Kennedy (quoted in Clymer, 1999, p. 449)
Will minimum wages achieve this goal?

- Gains come from higher wages for affected workers
- Potential downside is lower employment among low-wage, low-skill workers
- If minimum wages destroy jobs, there are winners and losers
- Whether or not minimum wage helps poor or low-income families depends on where in distribution of family income winners on losers or located
- Clearly effect on jobs is key: if minimum wage doesn’t destroy jobs, it is a “free lunch” that has to help reduce poverty
Bottom line: there are both winners and losers from minimum wages

- Many low-wage, low-skill workers retain their jobs and earn more from a higher minimum wage.
- Evidence on job loss is not unanimous, and is contested, but evidence from many countries indicates that minimum wages reduce jobs available to low-skill workers—especially for least-skilled workers.
- Minimum wages are fairly ineffective at helping poor or low-income families: less research and more ambiguity on this conclusion.
Competitive model predicts job destruction

- Low-skill labor becomes more expensive and relatively more expensive, raising cost of production
- Firms reduce use of low-skilled labor, and increase use of other inputs
- Results in higher production costs (since they were initially producing at minimum cost)
- Higher costs raise prices, which reduces demand by consumers
- Both effects imply less employment of low-skilled workers
- In monopsony-type models effects of minimum wages can be positive, zero, or negative
What does the evidence say?

- Minimum wage “elasticity”

\[
\frac{\% \text{ change in employment}}{\% \text{ change in MW}}
\]

- Earlier consensus from U.S. national studies:
elasticity for young workers: $-0.1$ to $-0.2$
  - 10% increase in MW reduces employment for this group by 1-2%
  - Likely carries over to other low-skill groups, but less evidence
More compelling research from U.S. “state laboratory”

- Problem of “counterfactual” or “comparison group” in research on national minimum wages
- Research begun in 1990s exploits variation introduced by state minimum wages
  - Comparing experiences in similar states with and without minimum wage increases provides better comparison groups
What do the state experiments and other more recent research tell us?

- N&W extensive review of work done through 2007 – in U.S. and elsewhere

- Review concludes that minimum wages reduce employment
  - > 100 studies, 2/3 find negative effects (not all statistically significant)
  - 85% of more credible studies find negative effects
  - Many elasticities in −0.1 to −0.2 range

- Evidence is more one-sided than often described in media and some literature reviews
Studies focusing on the least-skilled find consistently stronger negative effects

- Currie and Fallick (1996) and Neumark et al. (2004) for the United States
- Campolieti et al. for Canada (larger, −1)
- Abowd et al. (2000) for France (but not the very young for whom other institutions imply effective lower youth minimum wage)
- Few if any convincing studies with positive effects, especially for least-skilled
  - Card and Krueger (1994) is notable exception, with large positive effects, but even they backed off this conclusion
U.K. evidence mixed, but some of it supports same conclusion

- Research on other countries more challenging because minimum wage is national
- U.K. has probably attracted the most attention
  - Much of the early research often described as finding no negative effect
  - Our review draws different conclusions, again in part based on what evidence is regarded as most convincing
  - Some recent studies (Dickens et al., 2012; Fidrmuc and Tena, 2013) find negative effects on strongly-affected groups
New evidence since our review does not overturn this conclusion

Schmitt (2013), teen employment for U.S.

Source: Doucouliagos and Stanley (2009).
New evidence since our review does not overturn this conclusion

- Scale hard to perceive because of huge range of elasticities, and vertical line at zero
- Mean of estimates is actually −0.19
Recent critiques by Allegretto et al. and Dube et al.

- “Spatial heterogeneity” leads to negative bias in panel data studies
  - Minimum wages raised when job market for low-skill workers turning down
- Leads them to look at variation within narrower geographic areas
- Dube et al.: “no detectable employment losses from the kind of minimum wage increases we have seen in the United States” (2010, p. 962)
Critiques are unfounded

- Neumark et al. (2014) shows that they don’t focus on better counterfactuals, and when we do, we get negative effects, especially for teens
- Neumark et al. (forthcoming) shows that with longer-term look, both approaches point to disemployment effects
- Recent work by Baskaya and Rubinstein presents more compelling way of dealing with endogeneity of state minimum wages, and finds stronger disemployment effects
Evidence of job loss does not settle the policy question

- Government regulations cost somebody a job somewhere (and impose other costs as well)
- Question: Do the costs outweigh the benefits?
- Sensible gauge: Do minimum wages help poor or low-income families?
Low-wage workers not synonymous with low-income families

<table>
<thead>
<tr>
<th>Income-to-needs</th>
<th>% of all workers</th>
<th>% low-wage workers &lt; $7.25 per hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 (poor)</td>
<td>4.4</td>
<td>12.7</td>
</tr>
<tr>
<td>1-1.24</td>
<td>2.6</td>
<td>5.0</td>
</tr>
<tr>
<td>1.25-1.49</td>
<td>2.5</td>
<td>6.5</td>
</tr>
<tr>
<td>1.5-2.00</td>
<td>6.4</td>
<td>10.3</td>
</tr>
<tr>
<td>2-2.99</td>
<td>16.3</td>
<td>20.9</td>
</tr>
<tr>
<td>3 or above</td>
<td>67.8</td>
<td>44.6</td>
</tr>
</tbody>
</table>

Source: Sabia and Burkauser (2010)

Over ½ of working age families have no workers.
Direct evidence also suggests weak distributional benefits

- Most evidence provides no statistical evidence of poverty reductions

- Dube (2014) claims sharp poverty reductions, but uses same methods that obscure disemployment effects

- Conclusions likely less general than for employment effects, because many factors influence where affected workers are in income distribution
  - U.S. living wages
  - Other countries?
The Earned Income Tax Credit solution

- Challenge is to increase incomes of low-income families, *without discouraging work* (either hiring by firms, or labor supply by workers)
- EITC does exactly this
  - Pays nothing to people who don’t work
  - Subsidizes, or adds to, what people earn in the labor market, making work more attractive
  - Targets low-income *families*, mainly families with children
The EITC works (and works better than the minimum wage)

- Targets low-income families well
  - Increases employment of those who gain the most
    - Low-skill single-female mothers
  - Reduces poverty
  - Helps families *earn* their way out of poverty
- Not a panacea for all sources of low family income
Policy interactions may make minimum wage more effective

- Coupled with a generous EITC, minimum wage can have better distributional effects (Neumark and Wascher, 2011)
  - Strengthens work incentives
  - But still no free lunch: gains for some groups (single mothers) offset by costs for others (teens, with possible long-run adverse effects)
Policymakers can’t ignore job loss from minimum wages

- In some cases/contexts the benefits of a higher minimum wage may be viewed as outweighing the costs of job loss
- **That** should be the policy debate
- Policymakers need to take the job destruction effects of minimum wages into account
- Claims that there won’t be job loss for any workers are contradicted by a large body of evidence
Additional slides
Why is the U.S. so useful for minimum wage research?

Number of States with Minimum Wage higher than the Federal

![Graph showing the number of states with minimum wage higher than the federal over time.](image-url)
New evidence since our review does not overturn this conclusion

- Larger SE’s for negative estimates interpreted as publication bias, but better studies could have (a) more negative estimates, (b) larger standard errors
Meta-analysis is not the way to go

- More suitable for repeated studies estimating the same parameter in the same way, like randomized drug trial
- Poorly suited to minimum wages, with better and worse research designs, different populations and sources of identifying information that can identify different parameters, etc.
- Wascher and I explicitly rejected this approach in favor of critical review, although obviously others can take issue with our assessment of studies
Are $-0.1$ to $-0.2$ elasticities small?

- **Prevailing view:** with elasticity of $-0.2$, a 10% increase in minimum implies:
  - 2% lose their job
  - 98% get 10% raise
  - Average income of low-wage workers up by \((0.98 \times 10) - (0.02 \times 100) = 7.8\%\)

- **By extension**, low-income families almost certain to be helped
But these elasticities don’t compare wage gains and job loss for affected workers

Correct calculation: Impact on affected workers

<table>
<thead>
<tr>
<th></th>
<th>80% above minimum</th>
<th>20% at minimum</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wages</td>
<td>No change</td>
<td>Up 10%</td>
<td>Up 2%</td>
</tr>
<tr>
<td>Employment</td>
<td>No change</td>
<td>Down 10%</td>
<td>Down 2%</td>
</tr>
<tr>
<td>Earnings</td>
<td>No change</td>
<td>No change</td>
<td>No change</td>
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</tbody>
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Incorrect calculation, based on elasticity

Elasticity of – 0.2 comes from:

2% employment decline
10% wage increase
Earned Income Tax Credit by income and number of children

EITC value, 2014
Estimated effects of state EITC’s on probability family earnings below poverty/near-poverty line

Effects of state EITCs

P(earnings > poverty)  P(earnings > .5 x poverty)

Family head or individual
Single female family head or individual
Single female family head or individual, high school degree at most