

# **Employment Effects of Minimum Wages: IZA World of Labor Essay**

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**David Neumark**

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

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- “Raising the minimum wage directly helps parents make ends meet and support their families.”
  - [www.whitehouse.gov](http://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?

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- 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

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- 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

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- 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?

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- 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”

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- 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?

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- 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

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- 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

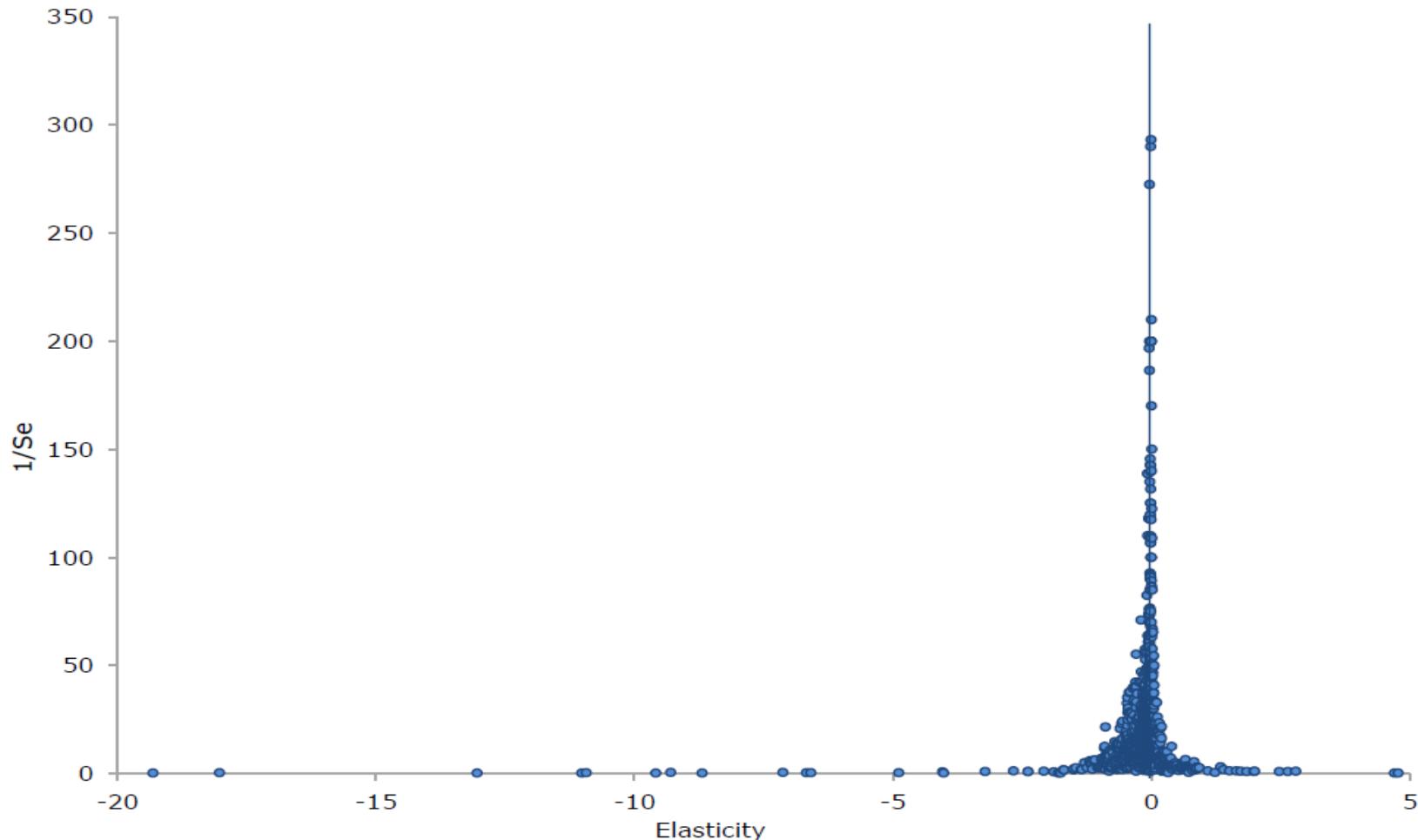
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- Research on other countries more challenging because minimum wage is national
- U.K. has probably attracted the most attention
  - Much of the early research often described as finding no negative effect
  - Our review draws different conclusions, 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.

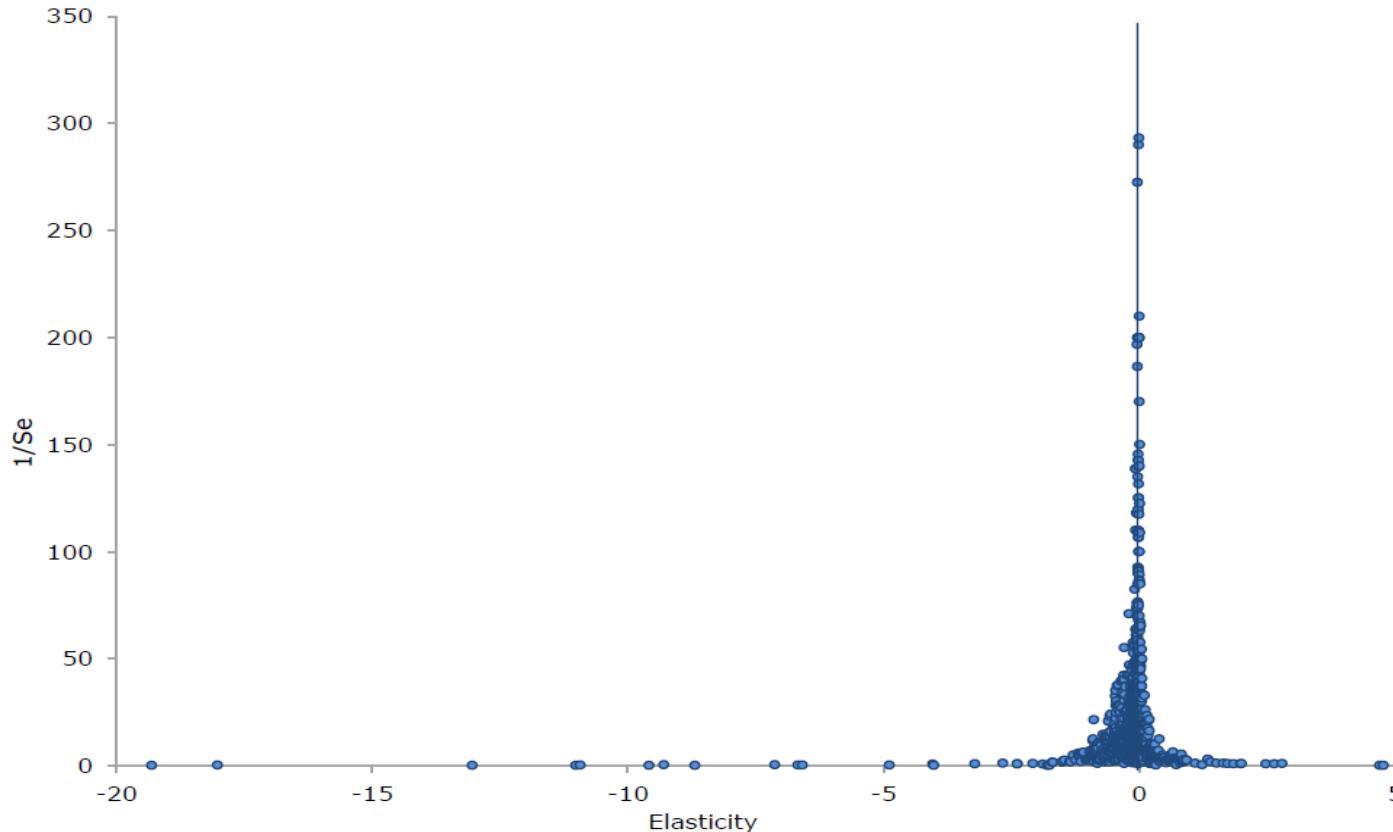
**FIGURE 1**  
Trimmed Funnel Graph of Estimated Minimum-Wage Effects (n = 1,492)



Source: Doucouliagos and Stanley (2009).

# New evidence since our review does not overturn this conclusion

**FIGURE 1**  
Trimmed Funnel Graph of Estimated Minimum-Wage Effects (n = 1,492)



Source: Doucouliagos and Stanley (2009).

- 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.

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- **“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

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- 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

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- **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

	2008	
Income-to-needs	% of all workers	% low-wage workers < \$7.25 per hour
Less than 1 (poor)	4.4	12.7
1-1.24	2.6	5.0
1.25-1.49	2.5	6.5
1.5-2.00	6.4	10.3
2-2.99	16.3	20.9
3 or above	67.8	44.6

Source: Sabia and Burkauer (2010)

Over ½ of working age families have no workers.

# Direct evidence also suggests weak distributional benefits

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- 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

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- 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)

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- **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

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- 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

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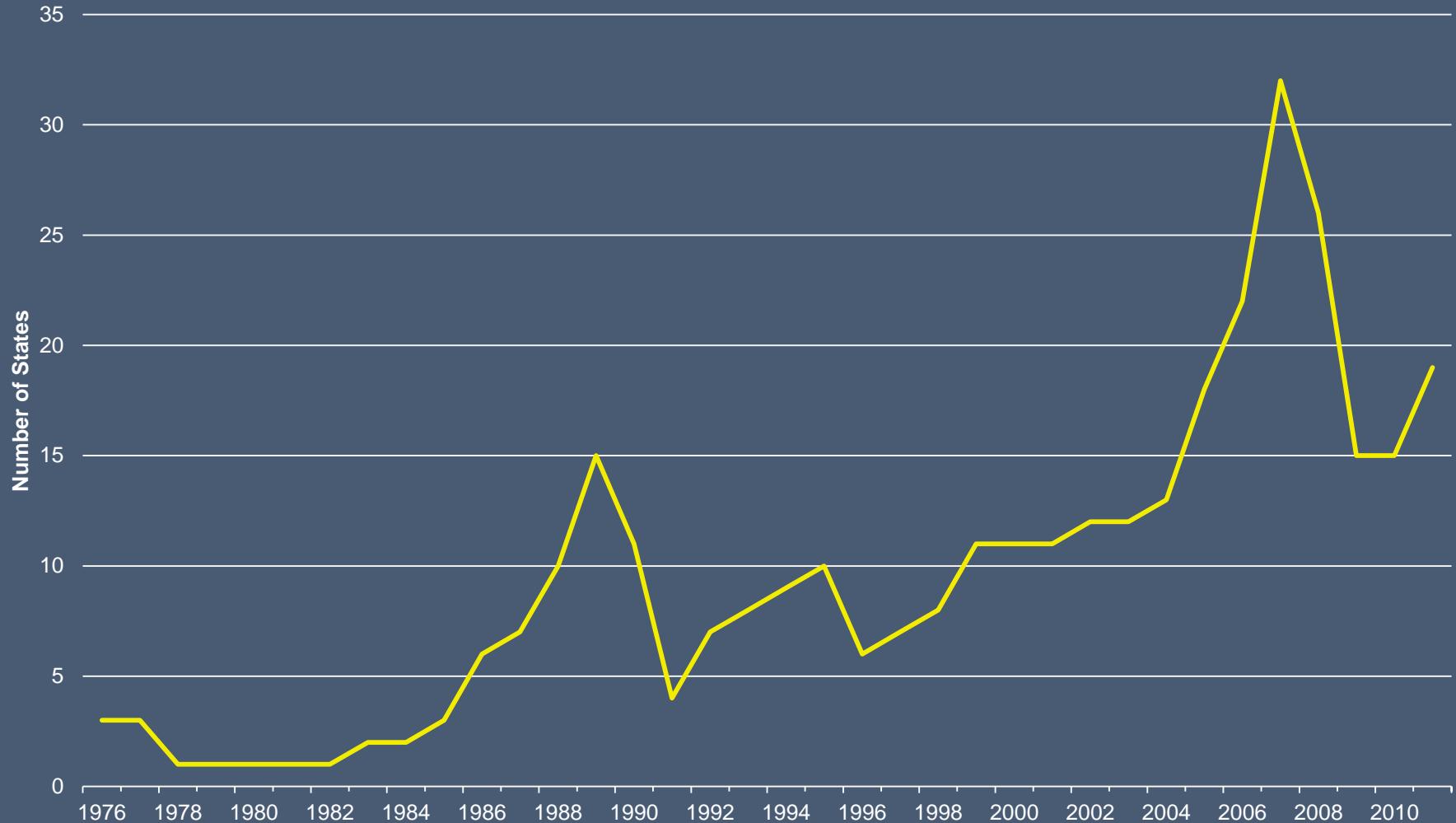
- In some cases/contexts the benefits of a higher minimum wage may be viewed as outweighing the costs of job loss
- That should be the policy debate
- Policymakers need to take the job destruction effects of minimum wages into account
- Claims that there won't be job loss for any workers are contradicted by a large body of evidence

# Additional slides

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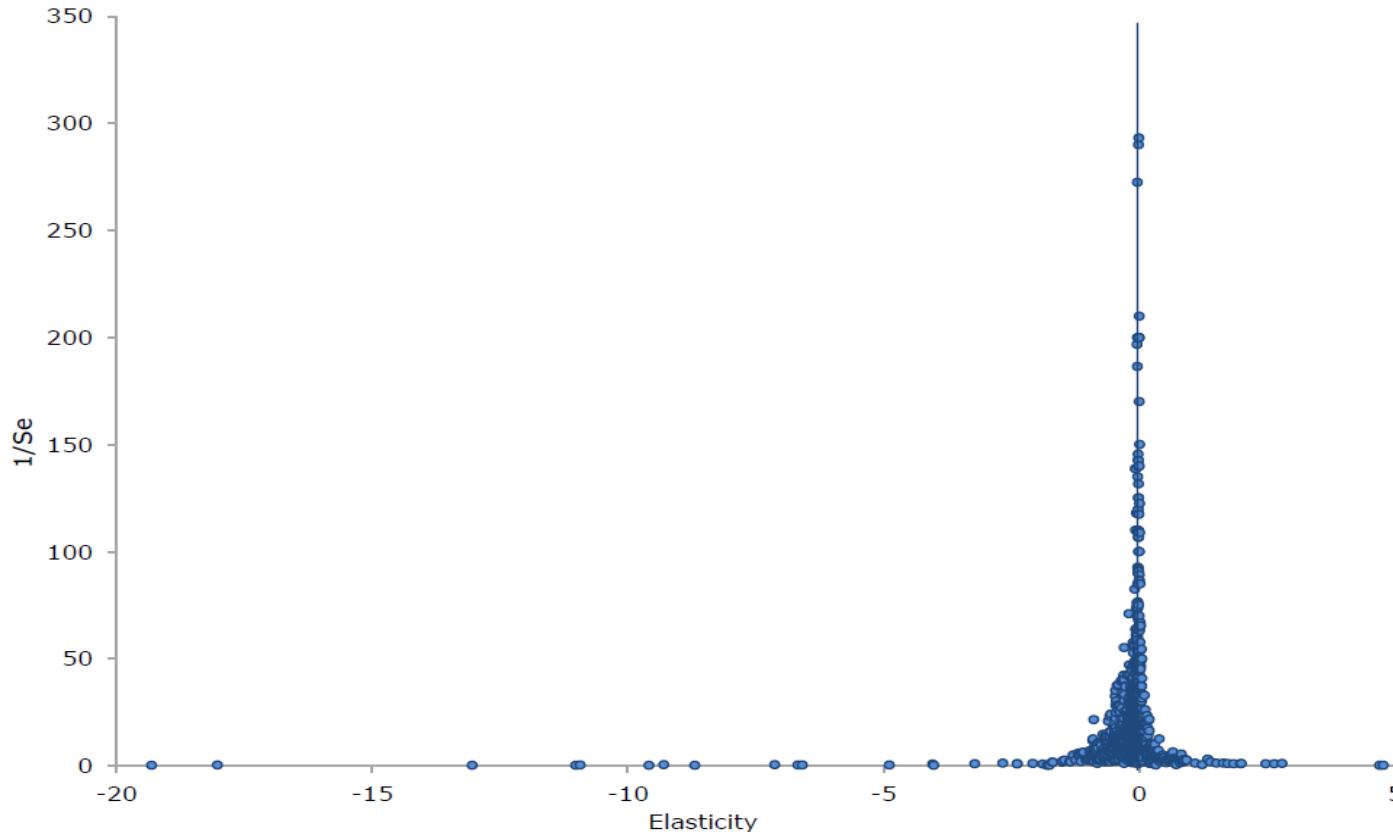
# Why is the U.S. so useful for minimum wage research?

Number of States with Minimum Wage higher than the Federal



# New evidence since our review does not overturn this conclusion

**FIGURE 1**  
Trimmed Funnel Graph of Estimated Minimum-Wage Effects (n = 1,492)



Source: Doucouliagos and Stanley (2009).

- 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

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- 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?

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- Prevailing view: with elasticity of  $-0.2$ , 10% increase in minimum implies:
  - 2% lose their job
  - 98% get 10% raise
  - Average income of low-wage workers up by  $(.98 \times 10) - (.02 \times 100) = 7.8\%$
- By extension, low-income families almost certain to be helped

# But these elasticities don't compare wage gains and job loss for affected workers

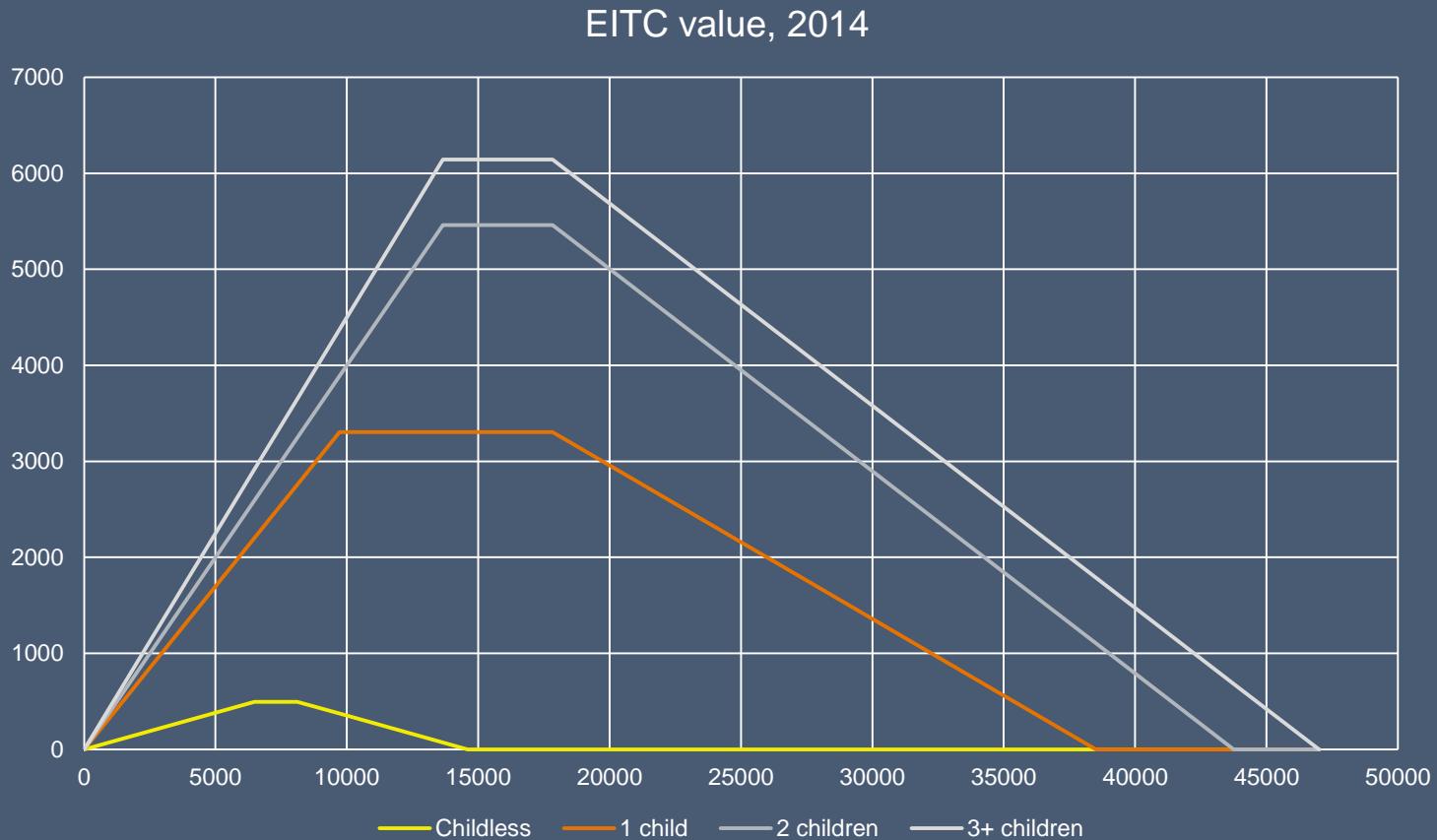
Correct calculation: Impact on affected workers

	80% above minimum	20% at minimum	Average
Wages	No change	Up 10%	Up 2%
Employment	No change	Down 10%	Down 2%
Earnings	No change	No change	No change

Incorrect calculation, based on elasticity

Elasticity of  $-0.2$  comes from:  $\frac{2\% \text{ employment decline}}{10\% \text{ wage increase}}$

# Earned Income Tax Credit by income and number of children



# Estimated effects of state EITC's on probability family earnings below poverty/near-poverty line

