MEMO *Published March 12, 2014 Updated March 12, 2014*

Does Raising the Minimum Wage Really Kill Jobs?

By: **Alicia Mazzara**

Democrats and Republicans in Congress are fiercely debating whether to raise the federal minimum wage. The Congressional Budget Office recently entered the fray, projecting that raising the minimum wage to $10.10 an hour and indexing it to inflation will raise incomes for 16.5 million workers but may cause the economy to employ 500,000 fewer workers.[1]

The CBO's projections are derived from a review of academic studies on past minimum wage increases.[2] But many of these studies focused on teenage employment, as teenagers used to comprise a majority of minimum wage workers.[3] By 2016, nearly 90% of low-wage workers will be age 20 or older, and a majority will work full-time.[4] The fact is, we don't live in a textbook. So what happens in the real world when the minimum wage rises?

States have been setting their own minimum wages for years. In fact, half of all workers already live in a state with a minimum wage above the federally mandated $7.25 an hour.[5] This memo puts a spotlight on an original study—the most comprehensive of its kind—that assessed state minimum wage increases between 1990 and 2006.* Economists Andrajit Dube, William T. Lester, and Michael Reich looked at hundreds of adjacent counties with different minimum wage laws over the course of more than a decade to see whether counties with higher mandated wages lost or gained jobs. The

authors found that **modest minimum wage increases did not result in job losses—not in retail, not in accommodation, not in food services**.[6]

* The study, "Minimum Wage Effects Across State Borders: Estimates Using Contiguous Counties," was published in 2010 in *The Review of Economics and Statistics.*

While policymakers have the obligation to be skeptical of studies, this one is especially compelling because it:

- Used a superior research design known as a "natural experiment";
- Tested employment effects in 337 counties bordering states with different minimum wage laws;
- Covered a 16-year period spanning 1990 to 2006; and
- Included employment in retail, accommodation, and food services.

A "Natural Experiment"

What this study did differently: Prior case studies have compared employment in a state that raised its minimum wage to a neighboring state that did not. Dube, Lester, and Reich focus on counties located along the borders of these states. They compare employment for border counties in states that raised the minimum wage against border counties in states that did not raise wages.

Why it matters: In the same way that randomized drug trials use a treatment and control group, economists try to exploit situations that form "natural experiments." In a drug trial, scientists take two randomly selected groups of people and give one the drug treatment while the other receives a placebo. In the Dube, Lester, and Reich study, the researchers compare employment in a county that experienced an increase in the minimum wage (the treatment) to a neighboring county that was not subject to a minimum wage increase (the placebo). If raising the minimum wage lowers employment, we would expect employers to eliminate jobs in the county that raised wages relative to the neighboring county. However, if both counties had similar employment trends, we would conclude that raising the minimum wage did not have an effect.

While Dube, Lester, and Reich are not the first to use this technique, their comparison of neighboring counties is innovative. The *New York Times* recently profiled workers in Payette County, Idaho who regularly commute to neighboring Malheur County, Oregon, where the minimum wage is $9.10 an hour.[7] Payette and Malheur are examples of two counties that form a larger regional economy, and they were one of the many county pairs included in this study. Counties located along state borders often comprise the same commuting zone, and it is not uncommon for workers to drive across state lines for work. It is also reasonable to expect that neighboring counties will be shaped by many of the same local economic forces and have similar labor markets. Consequently, Dube, Lester, and Reich's use of neighboring counties provides a more accurate comparison of how minimum wage increases affect employment in the real world. The authors looked at 337 different counties and did not find job losses in the counties with higher minimum wages.

Geographic Diversity

What this study did differently: Dube, Lester, and Reich look at counties across the entire country that bordered states with different minimum wages. These 337 counties were not clustered in any one geographic region but instead spread across the United States.

Why it matters: The United States is composed of many different local economies. State case studies can be very useful, but there is always the possibility that the findings may not apply to another state or region. Even if raising the minimum wage in New Jersey did not affect employment,[8] for example, how can we know this will be the case in Texas? The Dube, Lester, and Reich study showed that modest wage increases have not demonstrably affected employment in a variety of locations across the country.

A Longer Time Period

What this study did differently: The Dube, Lester, and Reich paper examines quarterly employment from 1990 to 2006, covering a total of 16 years.

Why it matters: Raising the minimum wage could affect employment differently in the long term. For instance, employers might not immediately eliminate jobs in response to

a wage raise, but they could choose to eliminate jobs further down the road. If raising the minimum wage affects employment in the long run, studies that only cover a few months might not capture these changes. Using a 16-year study period allowed Dube, Lester, and Reich to check for employment changes that may lag behind the legislated minimum wage increase. The authors tracked employment trends for four years following each minimum wage increase but still did not find evidence of job losses.[9]

Multiple Industries

What this study did differently: Dube, Lester, and Reich analyzed minimum-wage jobs in the retail and accommodation and food services industries.*

* The accommodation and food services category includes hotels and other lodging establishments, restaurants, bars, cafeterias, catering services, and mobile food stands.

Why it matters: Many previous studies have focused solely on the restaurant industry. There is good reason for this: restaurants, especially fast food establishments, employ the majority of all minimum wage workers.[10] However, it is still useful to know how changes in the minimum wage affect other low-wage industries. Dube, Lester, and Reich analyzed the restaurant industry alone and in combination with the retail industry and the accommodation and food services industry (a broader category that includes restaurants). Together, these industries account for nearly half of all employees earning within 10% of the federal or state minimum wage.[11] The authors found that raising the minimum wage did not decrease jobs in the restaurant, retail, or accommodation and food services industries.

Conclusion

The Congressional Budget Office is deservedly the official umpire of Washington. The work of the CBO is consistently non-partial, objective, and of the highest quality. But even the best umpires can miss a call.

The most comprehensive case study—in terms of time, geography, and industry—asserts that a modest increase in the minimum wage has no impact on job creation or destruction. It's time to raise the minimum wage.

ENDNOTES

1. United States, Congressional Budget Office, "The Effects of a Minimum-Wage Increase on Employment and Family Income," report, February 2014. Accessed February 20, 2014. Available at: http://www.cbo.gov/publication/44995.

2. United States, Congressional Budget Office, "The Effects of a Minimum-Wage Increase on Employment and Family Income," report, February 2014, p. 21. Accessed February 20, 2014. Available at: http://www.cbo.gov/publication/44995.

3. United States, Congressional Budget Office, "The Effects of a Minimum-Wage Increase on Employment and Family Income," report, February 2014, p. 25. Accessed February 20, 2014. Available at: http://www.cbo.gov/publication/44995.

4. United States, Congressional Budget Office, "The Effects of a Minimum-Wage Increase on Employment and Family Income," report, February 2014, p. 10. Accessed February 20, 2014. Available at: http://www.cbo.gov/publication/44995.

5. United States, Congressional Budget Office, "The Effects of a Minimum-Wage Increase on Employment and Family Income," report, February 2014, p. 6. Accessed February 20, 2014. Available at: http://www.cbo.gov/publication/44995.

6. Andrajit Dube, William T. Lester, and Michael Reich, "Minimum Wage Effects Across State Borders: Estimates Using Continguous Counties," *The Review of Economics and Statistics*, November 2010, 92(4), pp. 945-964. Accessed February 20, 2014. Available at: http://escholarship.org/uc/item/86w5m90m.

7. Kirk Johnson, "Crossing Borders and Changing Lives, Lured by Higher State Minimum Wages," *The New York Times*, February 15, 2014. Accessed February 20, 2014. Available at: http://www.nytimes.com/2014/02/16/us/crossing-borders-and-changing-lives-lured-by-higher-state-minimum-wages.html.

8. David Card and Alan Krueger, "Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania," *The American Economic Review*, September 1994, 84(4), pp. 772-793. Accessed February 20, 2014. Available at: http://davidcard.berkeley.edu/papers/njmin-aer.pdf.

9. Andrajit Dube, William T. Lester, and Michael Reich, "Minimum Wage Effects Across State Borders: Estimates Using Continguous Counties," *The Review of Economics and Statistics*, November 2010, 92(4), p. 956. Accessed February 20, 2014. Available at: http://escholarship.org/uc/item/86w5m90m.

10. Andrajit Dube, William T. Lester, and Michael Reich, "Minimum Wage Effects Across State Borders: Estimates Using Continguous Counties," *The Review of Economics and Statistics*, November 2010, 92(4), p. 948. Accessed February 20, 2014. Available at: http://escholarship.org/uc/item/86w5m90m.

11. Andrajit Dube, William T. Lester, and Michael Reich, "Minimum Wage Effects Across State Borders: Estimates Using Continguous Counties," *The Review of Economics and Statistics*, November 2010, 92(4), p. 961. Accessed February 20, 2014. Available at: http://escholarship.org/uc/item/86w5m90m.



Alicia Mazzara
Policy Advisor, Economic Program