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Minimum Wage Basics

Employment and Business Effects of Minimum Wage Increases

NELP's Minimum Wage Basics series sheds light on key issues related to the minimum wage, drawing on the latest research and campaign developments.

Introduction

While the U.S. economy continues to see steady growth, wages have been flat or falling for much of the labor force. This dynamic has spurred the most significant wave of action to raise the minimum wage in fifty years, with momentum for significant increases at the federal, state and local levels. The growing momentum for raising the minimum wage has focused attention on the impact of higher minimum wages on employment levels. Supporters argue that higher minimum wages help workers and the economy, and that research shows any adverse effect on jobs is minimal. Opponents, by contrast, generally contend that higher wages will reduce employment or slow job growth.

The fact that many states and cities in the U.S. have raised their minimum wages in recent years while others have not has created a rich store of data for research and analysis and has made the minimum wage one of the most studied questions in economics.

This brief reviews the extensive body of research on the impact of higher minimum wages in the U.S. over the past twenty years and draws these key findings:

- The bulk of rigorous research examining hundreds of case studies of minimum wage increases at the state and local levels finds that ***raising the minimum wage boosts incomes for low-paid workers without reducing overall employment or job growth*** to any significant degree**.**
- The minority of ***researchers reaching different conclusions rely on less precise or flawed methodologies*** that fail to take advantage of the most recent advancements in economic research.
- Businesses are able to absorb the cost of paying higher wages without reducing employment through a range of channels, including **savings from increased employee productivity and reductions in employee turnover** that consistently result from minimum wage increases.

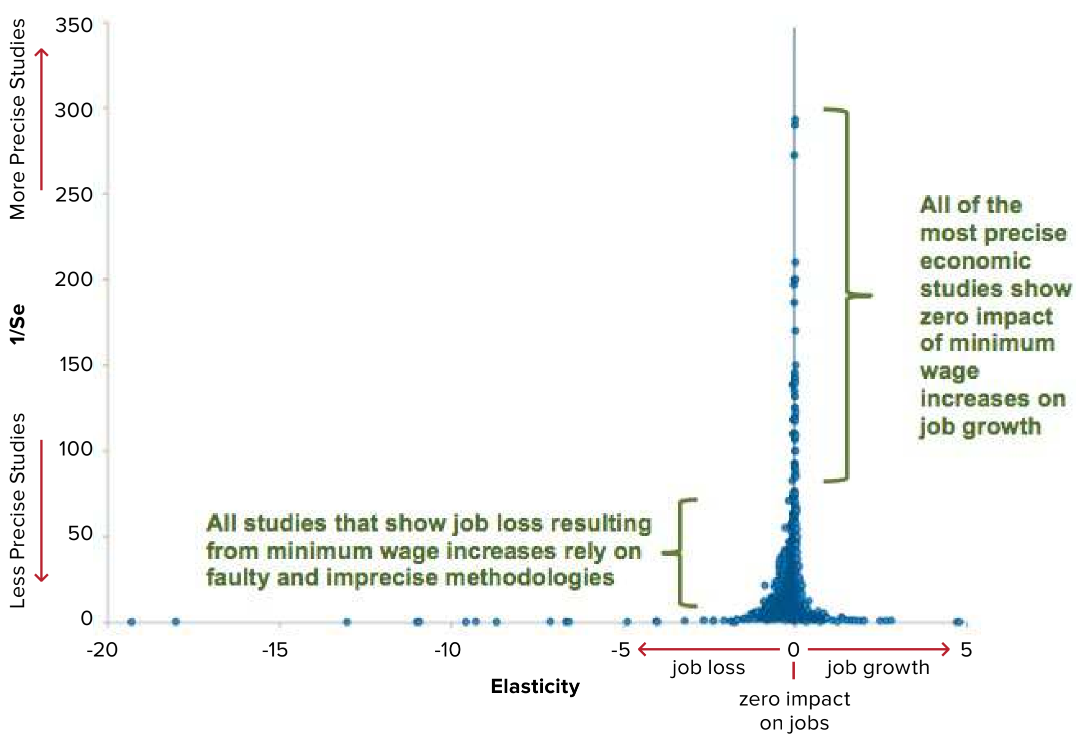
Leading mainstream economists and a majority of recent studies agree that raising the minimum wage boosts incomes for low-paid workers without reducing overall employment

The minimum wage is one of the most studied subjects in the field of economics. Since the early 1990s, economists – armed with richer data than previously available and the computational power to analyze it – have conducted scores of studies in an effort to better understand the employment effects of raising the minimum wage. Many of these studies, often referred to as the "new minimum wage research," have used sophisticated methodologies that control for variables unrelated to the minimum wage – such as regional employment trends not driven by minimum wage changes – that otherwise may bias a study's findings. The results overwhelmingly suggest that raising the minimum wage has very little effect on employment.

Most prominently, two leading "meta-studies" survey and pool the data from over four decades of research.[1] The meta-studies represent the most reliable and sophisticated approaches to studying the employment impact of raising the minimum wage, as they aggregate data from dozens of studies containing thousands of different estimates of the employment impacts of minimum wage increases.

The first meta-study, by **Hristos Doucouliagos and T.D. Stanley (2009)**, shows that there is **"little or no significant impact of minimum wage increases on employment**,"[2] as noted by the Center for Economic and Policy Research in its review of the minimum wage literature. This is illustrated in Figure 1, which arrays 1,492 different findings from 64 different studies, mapping their conclusions on employment impacts against the statistical precision of the findings. As economist Jared Bernstein summarizes, "the strong clumping around zero [impact on jobs] provides a useful summary of decades of research on this question [of whether minimum wage increases cost jobs]."[3]

Figure 1. Trimmed Funnel Graph of Estimated Minimum-Wage Effects



Source: Doucouliagos and Stanley (2009)

Drawing on the methodological insights of Doucouliagos and Stanley, the second meta-study by **Dale Belman and Paul Wolfson (2014)** reviews more than 70 studies and 439 distinct estimates to come to a very similar conclusion: **"[I]t appears that if negative effects on employment are present, they are too small to be statistically detectable. Such effects would be too modest to have meaningful consequences in the dynamically changing labor markets of the United States,"**[4] and too small to merit policy or political controversy.[5]

In addition to these meta-studies, state-of-the-art individual studies have developed new research methods to enable economists to better isolate and analyze the actual impact of minimum wage increases – and have confirmed that raising the minimum wage does not reduce employment. Two of these leading individual studies are:

- "Minimum Wage Effects Across State Borders," in which economists **Arindrajit Dube, T. William Lester and Michael Reich (2010)** apply innovative new research methods to examine the real-world impact of state minimum wage increases on employment. In order to completely isolate other factors influencing state job growth trends, the study compares employment trends in neighboring counties that are economically similar except for having different minimum wages (by virtue of being on different sides of a state border). The study looks at employment levels among every pair of neighboring U.S. counties that had differing minimum wage levels at any time between 1990 and 2006 – and finds that higher minimum wages did not lead business in those states to reduce their hiring or shift their hiring to neighboring counties with lower minimum wage rates.[6]
- "Do Minimum Wages Really Reduce Teen Employment?," in which economists **Sylvia Allegretto, Arindrajit Dube and Michael Reich (2011)** demonstrate that neglecting to control for regional employment trends leads observers to erroneously attribute reductions in employment in certain states to an increase in the minimum wage.[7] They find that, after controlling for regional trends, the negative effects on teen employment in regions with higher minimum wages not only disappeared, but turned slightly positive, and that these observations hold true whether the economy is growing or in a downturn. The fact that there is no evidence that past U.S. minimum wage increases have reduced teen employment is significant since, if there were any adverse effects associated with minimum wage increases, one might expect to see them among teens who are new entrants to the labor market.

The innovative approach used by Dube, Lester and Reich in the 2010 study has won praise from leading labor economists at top universities, such as Harvard economist Lawrence Katz and Massachusetts Institute of Technology economists David Autor and Michael Greenstone. As Autor explained, "The paper presents **a fairly irrefutable case that state minimum wage laws do raise earnings in low wage jobs but do not reduce employment to any meaningful degree**. Beyond this substantive contribution, the paper presents careful and compelling reanalysis of earlier work in this literature, showing that it appears biased by spatial correlation in employment trends."[8]

The new body of research has led to a shift in the views of mainstream economists on the employment impact of minimum wage increases. Indicative is a February 2013 poll of leading economists by the University of Chicago's Booth School of Business, in which economists by a more than 3 to 1 margin believe that the benefits of raising the minimum wage and indexing it for inflation outweigh any costs.[9] Similarly, **centrist economists, including Larry Summers and Robert Rubin**, have called for raising the minimum wage and empowering workers as part of a strategy to help grow the middle class and move the economy forward;[10] and **Goldman Sachs** released an analysis of minimum wage increases, which did not mention disemployment at all – neither as an immediate effect, nor as a forecast.[11]

Opponents of raising the minimum wage rely on outdated and highly subjective studies that use imprecise methodologies and fail to take advantage of recent advancements in economic research.

The shrinking body of economic research that continues to argue that increases in the minimum wage cost jobs emanates in large part from a single source: University of California-Irvine economist **David Neumark**. Neumark is the author of both a survey that claims that the weight of minimum wage research points towards evidence of job losses, and of several studies that claim to show the same. However, both Neumark's survey and the methodology he uses in his individual studies have been shown to be skewed and inaccurate.

Neumark's 2006 survey (coauthored with William Wascher), "Minimum Wages and Employment: A Review of Evidence from the New Minimum Wage Research,"[12] maintains that 85 percent of the "most credible" research on the impact of raising the minimum wage finds job losses as a result. However, other economists have pointed out that this survey – which is not a true meta-study – was conducted in a highly subjective manner, generating its unrepresentative conclusions. Specifically, Neumark's survey:

1. Fails to comprehensively review the economic research on the impact of raising the minimum wage, and instead selects just 33 studies that the author subjectively designates as the "most credible;"
2. Omits several of the most important recent studies on the impact of minimum wage increases in the United States, with the result that half of the studies analyzed by Neumark focus on foreign labor markets, rendering their conclusions less relevant to the U.S.; and
3. Is skewed towards Neumark's own research, which makes up a full 26 percent of the U.S.-based studies that he elects to include.

Neumark's research, as well as the few other studies which continue to maintain that minimum wage increases cost jobs, have used variants on a single approach: comparing job growth in states with higher minimum wages against job growth in states with lower minimum wages.

However, as demonstrated by **Dube, Lester and Reich** (2010) and **Allegretto, Dube and Reich** (2011), **Neumark's simplistic approach cannot accurately assess the impact of a higher minimum wage since it does not adequately control for the wide range of varying local economic conditions – such as regional trends in manufacturing jobs losses, population shifts to the sun belt, and the local severity of economic shocks such as the housing bubble collapse – that affect job growth in state labor markets**. As a result of these inadequate controls, Neumark and other conservative economists erroneously attribute differences in regional job growth levels to minimum wage differences.

More recent and sophisticated research does a better job of controlling for those regional economic differences. The 2010 study by Dube, Lester and Reich, for example, uses a methodology similar to Neumark's. But rather than comparing job growth rates among all states nationwide, it focuses on comparisons among states in the same region of the country that have differing minimum wages. Dube, Lester and Reich show that when one uses a regional focus to control for extraneous economic trends, any evidence of job losses disappear.

The strength of the new research has led major business publications to endorse its findings and methodologies – and to reject opposition research as faulty and inaccurate. In 2012, **Bloomberg News**, for example, called for increasing the minimum wage and indexing it for inflation, writing that, **"[a] wave of new economic research is disproving those arguments about job losses and youth employment. Previous studies tended not to control for regional economic trends that were already affecting employment levels, such as a manufacturing-dependent state that was shedding jobs. The new research looks at micro-level employment patterns for a more accurate employment picture.** The studies find minimum-wage increases even provide an economic boost, albeit a small one, as strapped workers immediately spend their raises."[13]

Despite the advances made in new research on the minimum wage, in 2014 the **Congressional Budget Office** (CBO) published a report, based partially on older research, suggesting that an increase in the minimum wage would reduce total U.S. employment by about 500,000 workers – though it acknowledged the possibility of an impact ranging from near-zero to one million jobs lost.[14] Economists who have studied the minimum wage, however, have criticized the report for a major flaw in its analysis: Despite acknowledging the greater accuracy of newer methodologies, in its synthesis of minimum wage studies the **CBO gave equal weight to older methodologies as to new, without explaining its reason for doing so**.

Michael Reich – one of the critics of the report and coauthor of two of the studies discussed above – notes the CBO erred when it took the findings of research by Neumark/Wascher and Reich/Dube and averaged them, as if those studies were similar enough in methodology, time and data sets used to justify doing so. He writes, *"We conclude, and many other labor economists agree, that our studies invalidate the previous approach used in many studies by Neumark and Wascher and others.* ***It makes no sense to take an average between a rigorous study and one that has been shown to be flawed***."[15] Giving equal weight to these studies likely biased the CBO's conclusions.[16]

Goldman Sachs analysts also reviewed the CBO report and **concluded that its job loss estimates are overstated**. The analysts cite the findings of the new minimum wage research, which find little to no effects on employment (see the first section of this brief); a boost in demand from higher earnings; a concentration of employment impacts on only two industries (retail and leisure & hospitality); and the fact that states and localities have taken the lead in increasing the minimum wage in the face of congressional inaction, as reasons the CBO estimates are likely too high.[17]

Even with its flawed analysis, taken as a whole the CBO report nonetheless demonstrates that the benefits of raising the minimum wage far outweigh any drawbacks. Among its positive findings, the report concluded that 24.5 million workers would benefit from a wage increase to $10.10, and nearly one million would be lifted out of poverty.

Businesses are able to pay higher wages without reducing employment due to a range of factors, including higher productivity and lower employee turnover, that consistently result from minimum wage increases.

In January 2014, House of Representatives Speaker John Boehner made the following claim in explaining his opposition to raising the minimum wage: "When you raise the cost of something, you get less of it."[18] This idea seems intuitive to many who learned about supply and demand in an introductory economics class. But in fact, both research and real life experiences show that, rather than automatically raising costs and forcing layoffs, higher wages can lead to significant *savings* for businesses, offsetting a large portion of the higher payroll costs. Among the leading factors explaining this seemingly counter-intuitive observation are two related concepts: employee turnover and productivity.

Low wages are associated with high levels of employee turnover. Workers earning low wages tend to be less committed to their jobs than better paid workers and are less likely to stay at their jobs for long.[19] Unsurprisingly, the accommodations and food services sector – one of the lowest-paying sectors – has an annual turnover rate of nearly 63 percent, while "limited service restaurants" – a subsector which includes **fast food restaurants like McDonald's and Burger King – have a turnover rate of well over 100 percent each year**. The retail trade, which employs cashiers, customer service representatives, stock clerks and other low-wage workers, has a turnover rate of nearly 50 percent.[20]

Employee turnover forces businesses to constantly find and train new workers, costing firms significant amounts of money and time. **In the fast food industry, the cost of turnover is approximately $4,700 each time a worker leaves his or her job**.[21] Studies show that higher wages can substantially reduce turnover and the costs associated with replacing lost workers. In the fast food industry, increasing the minimum wage could lead to as much as $5.2 billion in cost savings to businesses and as many as 1.1 million fewer separations. Overall, savings from reduced turnover alone can offset as much as 30 percent of the cost of a minimum wage increase - even to $15 per hour.[22]

Low pay also impacts productivity. While experienced workers tend to be more productive, new workers may not be as optimally efficient during their training period, and this can incur indirect costs to businesses from lost sales and imperfect customer service as new workers learn on the job.[23] While the savings from greater productivity and lower turnover may not fully pay for a minimum wage increase,[24] these savings can nonetheless substantially offset the higher labor costs associated with an increase.

The benefits from higher productivity and lower turnover helps explain why large companies as well as many small businesses have chosen to invest in higher wages as part of a highly competitive business strategy. As MIT business school professor **Zeynep Ton** explains, "**Highly successful retail chains**—such as QuikTrip convenience stores, Mercadona and Trader Joe's supermarkets, and Costco wholesale clubs—**not only invest heavily in store employees but also have the lowest prices in their industries, solid financial performance, and better customer service than their competitors**. They have demonstrated that, even in the lowest-price segment of retail, bad jobs are not a cost-driven necessity but a choice. And they have proven that the key to breaking the trade-off is a combination of investment in the workforce and operational practices that benefit employees, customers, and the company."[25]

Many employers can afford to pay better wages. The vast majority of small businesses (89 percent) already pay their employees more than the federal minimum wage, a strong majority (60 percent) support raising the minimum wage to $12 and adjusting it for inflation each year, and a growing number of employers see $15 as a fair minimum wage.[26] Many also believe that higher wages level the playing field by preventing larger or less scrupulous firms from gaining a competitive advantage through very low labor costs.[27] Large businesses, in particular, are in the position to improve their wages. Corporations like Walmart, T.J. Maxx, Gap and Ikea, which employ the majority of low-wage workers, have been enjoying record profits for years. According to the St. Louis Federal Reserve Bank, in the second quarter of 2015, corporate profits amounted to $1.8 trillion – the highest since the late 1940s.[28]

Conclusion

> "When employers stop thinking about employees as costs to cut, but instead as customers, they see it is in their self-interest to raise the minimum wage. We need to change their concept of self-interest."
>
> ***Nick Hanauer, entrepreneur and venture capitalist*.**

The most recent and sophisticated research – as well as the experiences of leading employers like Trader Joe's, Costco and thousands of small businesses – strongly suggest that higher wages increase incomes for low-wage workers without reducing overall employment or hurting businesses. Not only do employers benefit from the savings they accrue from lower turnover and higher productivity; they also benefit from an increase in demand for the goods and services they offer. As observers from Nick Hanauer to Larry Summers point out, workers are customers – and the better a worker's ability to participate in the economy as a consumer, the better off will be both individual businesses and the economy as a whole.

Notes

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