

# Raise Wages, Kill Jobs?

## Seven Decades of Historical Data Find No Correlation Between Minimum Wage Increases and Employment Levels

By Paul K. Sonn and Yannet M. Lathrop

### Summary

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Since the passage of the Fair Labor Standards Act in 1938, business interests and conservative politicians have warned that raising the minimum wage would be ruinous. Even modest increases, they've asserted, will cause the U.S. economy to hemorrhage jobs, shutter businesses, reduce labor hours, and disproportionately cast young people, so-called low-skilled workers, and workers of color to the bread lines. As recently as this year, the same claims have been repeated, nearly verbatim.

*Raise wages, lose jobs*, the refrain seems to go.

If the claims of minimum-wage opponents are akin to saying “the sky is falling,” this report is an effort to check whether the sky did indeed fall. In this report, we examine the historical data relating to the 22 increases in the federal minimum wage between 1938 and 2009 to determine whether or not these claims—that if you raise wages, you will lose jobs—can be substantiated. We examine employment trends before and after minimum-wage increases, looking both at the overall labor market and at key indicator sectors that are most affected by minimum-wage increases. Rather than an academic study that seeks to measure causal effects using techniques such as regression analysis, this report assesses opponents' claims about raising the minimum wage on their own terms by examining simple indicators and job trends.

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*“High hourly wages mean nothing to a worker if he has no job.”*

— C.C. Shephard, spokesman for Southern States Industrial Council, 1938

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The results were clear: these basic economic indicators show no correlation between federal minimum-wage increases and lower employment levels, even in the industries that are most impacted by higher minimum wages. To the contrary, in the substantial majority of instances (68 percent) overall employment *increased* after a federal minimum-wage increase. In the most substantially affected industries, the rates were even higher: in the leisure and hospitality sector employment rose 82 percent of the time following a federal wage increase, and in the retail sector it was 73 percent of the time. Moreover, the small minority of instances in which employment—either overall or in the indicator sectors—declined

following a federal minimum-wage increase all occurred during periods of recession or near recession. That pattern strongly suggests that the few instances of such declines in employment are better explained by the overall national business cycle than by the minimum wage.

These employment trends after federal minimum-wage increases are not surprising, as they are in line with the findings of the substantial majority of modern minimum-wage research. As Goldman Sachs analysts recently noted, citing a [state-of-the-art 2010 study by University of California economists](#) that examined job-growth patterns across every border in the U.S. where one county had a higher wage than a neighboring county, “the economic literature has typically found no effect on employment” from recent U.S. minimum-wage increases.<sup>1</sup> This report’s findings mirror decades of more sophisticated academic research, providing simple confirmation that opponents’ perennial predictions of job losses when minimum-wage increases are proposed are rooted in ideology, not evidence.

## Methodology

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This report looks back over the history of all 22 federal minimum-wage increases that occurred between 1938 and 2009, and examines simple economic indicators such as the record of job growth that occurred after each increase. We gathered data on a set of indicators that most closely match those mentioned in the public rhetoric as being potentially harmed by raising the minimum wage. The indicators include typical metrics like total private-sector job growth and employment levels, but also include measures focusing on employment in lower-wage industries such as leisure and hospitality (which includes restaurants) and retail that are most affected by the minimum wage. We sought to go back as far as possible—to 1938 in some cases—to make simple before-and-after comparisons of job-growth trends 12 months after each minimum-wage increase.

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*“The minimum wage has caused more misery and unemployment than anything since the Great Depression.” — Gov. Ronald Reagan, candidate for President of the United States, 1980*

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Our goal was to build as long a time-series as possible for each major minimum-wage indicator. The table below summarizes the key indicators, the data sources used, and any analytical steps used in the calculations. Some of the data are available on a monthly basis, which allows a more accurate analysis of a one-year change after the minimum wage was increased (e.g., if the wage increased in July 2007, we can compare employment levels from July 2008 to July 2007). Other indicators were only available through data sources that provide annual data. In these cases, the one-year change is calculated by comparing a year during which an increase occurred to the following year.

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<sup>1</sup> Daan Struyven & Alec Phillips, Goldman Sachs US Daily: Minimum Wage Hikes and Wage Growth, April 12, 2016.

Table 1. Minimum-Wage Indicators Available on a Monthly Basis		
Variable	Definition	Years Available
Total Private-Sector Employment, SA (000s)	Total Employment in Thousands, All Industries	Jan. 1939 – Jan. 2016
Total Hours Worked, SA (000s)	Total Hours Worked in Thousands, All Industries	Jan. 1964 – Jan. 2016
Leisure and Hospitality Jobs, SA (000s)	Employment in Leisure and Hospitality Industries in Thousands	Jan. 1939 – Jan. 2016
Retail Jobs, SA (000s)	Employment in Retail Industries	Jan. 1939 – Jan. 2016
Restaurant Jobs, SA (000s)	Employment in the Restaurant and Food Services Industry	Jan. 1990 – Dec. 2015
Limited Service Restaurant Jobs, SA (000s)	Employment in the Limited Service (Fast Food) Restaurant Industry	Jan. 1990 – Dec. 2015
Full Service Restaurant Jobs, SA (000s)	Employment in the Full Service Restaurant Industry	Jan. 1990 – Dec. 2015
<small>Source: U.S. Bureau of Labor Statistics, Current Employment Statistics (CES) program. (<a href="http://www.bls.gov/ces/">http://www.bls.gov/ces/</a>) Note: all variables use seasonally adjusted values.</small>		

The data source for the indicators listed in Table 1 is the Current Employment Statistics (CES) program, which is produced and published by the Bureau of Labor Statistics. The CES is the official dataset for measuring payroll jobs on a monthly basis (i.e., the monthly jobs report) and is based on a survey of approximately 146,000 businesses and government agencies, representing approximately 623,000 individual worksites nationwide.

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*“Any temporary advantage to our two-million employees would be more than offset by immediate unemployment within our industry. [A] national minimum wage within our industry is impractical and dangerous.” — George R. LeSavage, National Restaurant Association, Feb. 1949*

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Table 2. Minimum-Wage Indicators Available on an Annual Basis		
Variable	Definition	Years Available
Restaurant Employment	Employment in Restaurants and Food Services (SIC 5800) 1977-97, NAICS (722)	1977-2013
Restaurant Establishments	Number of Establishments in Restaurants and Food Services (SIC 5800) 1977-97, NAICS (722) 1998-2013	1977-2013
Retail Employment	Employment in Retail Industries (SIC 52-- ) 1977-97, NAICS (44----), 1998-2013.	1977-2013
Total Employment	Total Employment, All Industries	1977-2013
Proprietors Income (000s), 2015 \$	Nonfarm Proprietors' Income (Thousands of Dollars)	1969-2014
<p><i>Sources: All indicators were derived from the U.S. Census Bureau's County Business Patterns (CBP) database. <a href="http://www.census.gov/econ/cbp/">http://www.census.gov/econ/cbp/</a>. Proprietor's Income variable is derived from the Bureau of Economic Analysis (BEA), Regional Indicators, Table CA4 Personal Income and Employment by Major Component. Figures adjusted for inflation to 2015 dollars using the Consumer Price Index research series (1982-84=100).</i></p>		

To examine the impact of changes in the minimum wage on various industries and by firm size, we rely on data from the U.S. Census Bureau's County Business Patterns (CBP) database. This dataset has been published by the Census since the late 1940s and is based on aggregations of individual establishments' payroll records from administrative sources (e.g., the Business Register). However, it is only available in a consistent basis in digital format from 1977 through the most recent year available, 2013.

This data series spans an important change in the industry classification system used to categorize companies into distinct industries. Prior to 1998, data are organized by the Standard Industry Classification (SIC) scheme, while subsequent data are organized by the North American Industry Classification System (NAICS). The SIC code for restaurants and food services (58) closely approximates the one used under the NAICS system (722), and therefore allows for a consistent time-series from 1977 to 2013. Given the change in classification system, we cannot analyze retail employment changes across the 1997-1998 period (which did include a change in the minimum wage). Comparison within either the 1977-97 or 1998-2013 periods are appropriate for the retail sector, however.

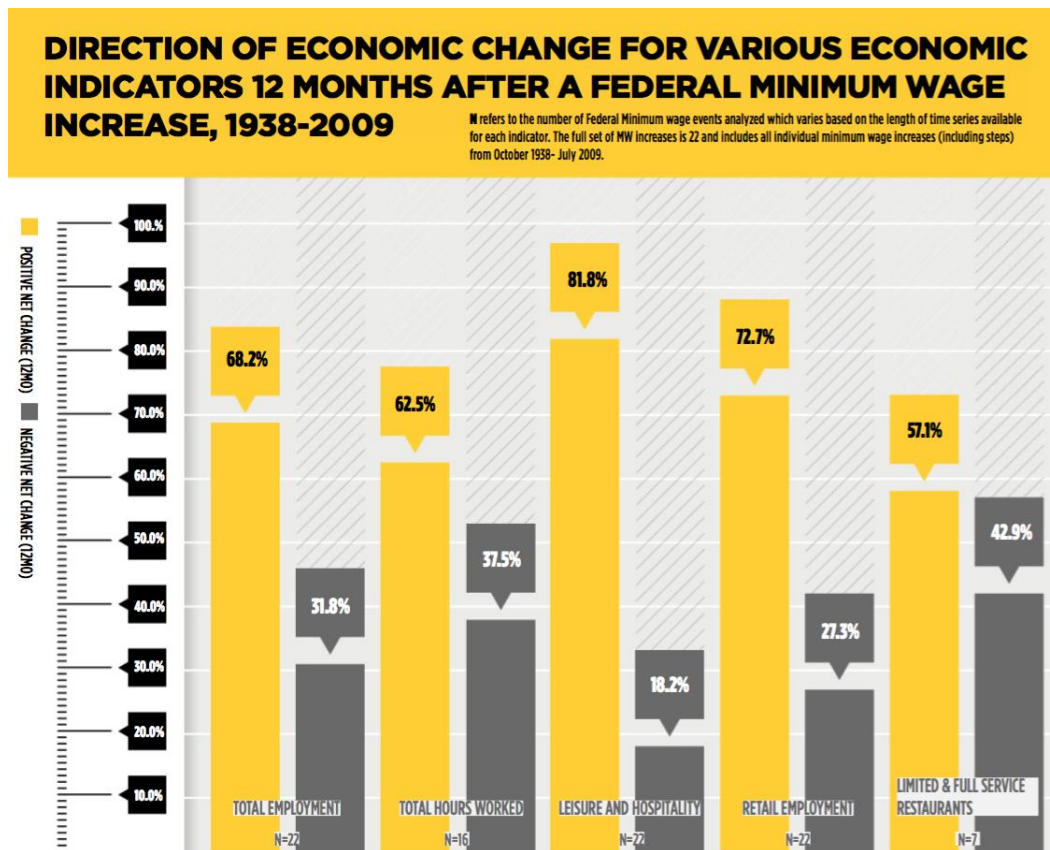
The CBP was chosen over the Quarterly Census of Employment and Wages (QCEW) as it has a longer historical time-series and because it allows a comparison of the number of establishments by establishment size. Therefore, our proxy indicator for small businesses is the number of establishments with less than 50 employees. Thus, if the minimum wage significantly affected small businesses, forcing some to go out of business, one might expect these indicators to fall. (An Excel file containing the underlying data gathered and analyzed for the study can be found [here](#).)

## Key Findings

The federal minimum wage has been raised a total of 22 times since its enactment in 1938. The simplest way to assess the claim that raising the minimum wage costs jobs is to treat each minimum-wage increase as a distinct event and look and see what happened to employment or other indicators one year later.

While opponents often broadly charge that raising the minimum wage “will cause job losses,” such increases disproportionately affect a select few employment sectors. The bulk of workers receiving raises as the result of minimum-wage increases are concentrated in a group of service industries—the two largest being restaurants and retail. For that reason, we examine employment trends, both overall and with a special focus on these indicator industries in which any adverse impact resulting from a higher minimum wage would most likely be evident.

Our findings are quite clear: in the nearly two dozen instances when the federal minimum wage has been increased, employment the following year has increased in the substantial majority of instances.



This pattern of increased job growth following minimum-wage increases holds true both for general labor-market indicators as well as those for industries heavily affected by minimum-wage increases:

- In the 22 instances when the federal minimum wage went up, the change in total private employment after one year was positive 15 out of 22 times (68.2 percent).
- In the 16 instances when the federal minimum wage was increased since 1964 (the earliest year for which this data is available), total hours worked increased 10 out of 16 times (62.5 percent).
- In the leisure and hospitality sector, which includes restaurants, hotels, and amusement parks, employment rose one year after a minimum-wage increase 18 out of 22 times (81.8 percent).
- In retail employment, positive changes occurred 72.7 percent of the time after an increase.

What's more, looking more closely at the relative handful of instances in which employment decreased—whether total employment, or employment in our key indicator sectors—it is also clear that those declines were likely driven by factors other than the higher minimum wage.

Specifically, in five out of eight instances where either total or industry-specific employment took a negative turn during the one-year period following a minimum-wage increase, the employment decreases happened during periods when the U.S. economy was officially in recession.

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*“[The minimum wage] hurts exactly those workers it intends to help—the poor, the unskilled, and the young. Everyone wants to see income growth boost the economic well-being of the working poor, but throwing many of them out of work is not the solution.”*

— Rep. Jim Saxton (R-NJ), 1996

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In the remaining three instances, a recession was just around the corner (the decline shown during the period of March 1956-1957 would be swiftly followed by the Recession of 1958, during which time the U.S. automotive industry saw its worst year since World War II), or the economy was still recovering from a recessionary period (decreases in both the April 1991-1992 and July 2009-2010 periods occurred just months after a recessionary period had technically ended, but the economy was still feeling the effects).

As shown in the table below, in each of the relatively few instances in which employment declined following a federal minimum-wage increase, the economy was either in recession or near a recession. In all other instances, employment grew after the federal minimum wage went up. These patterns show that federal minimum-wage increases have not correlated

# Employment Trends Following Minimum Wage Increases

\* Asterisks indicate periods immediately preceding or following recessions

□ Yellow highlight indicates recession.

Year Period	Change, total employment	Change, hospitality & leisure employment	Change, retail employment
Oct 1939 - Oct 1940			
<b>Oct 1945 - Oct 1946</b>	↑	↑	↑
Jan 1950 - Jan 1951	↑	↑	↑
Mar 1956 - Mar 1957*	↑	↓*	↓*
Sep 1961 - Sep 1962	↑	↑	↑
Sep 1963 - Sep 1964	↑	↑	↑
Feb 1967 - Feb 1968	↑	↑	↑
Feb 1968 - Feb 1969	↑	↑	↑
<b>May 1974 - May 1975</b>	↓	↑	↑
<b>Jan 1975 - Jan 1976</b>	↑	↑	↑
Jan 1976 - Jan 1977	↑	↑	↑
Jan 1978 - Jan 1979	↑	↑	↑
<b>Jan 1979 - Jan 1980</b>	↑	↑	↑
<b>Jan 1980 - Jan 1981</b>	↑	↑	↑
<b>Jan 1981 - Jan 1982</b>	↓	↑	↑
<b>Apr 1990 - Apr 1991</b>	↓	↓	↓
Apr 1991 - Apr 1992	↓*	↑	↓*
Oct 1996 - Oct 1997	↑	↑	↑
Sep 1997 - Sep 1998	↑	↑	↑
<b>July 2007 - July 2008</b>	↓	↓	↓
<b>July 2008 - July 2009</b>	↓	↓	↓
July 2009 - July 2010	↓*	↑	↓*

with reductions in jobs, and in the few instances where they have, the decline was better explained by the business cycle than by the minimum wage.

This is not to say that individual firms may not change their employment decisions in response to higher minimum wages. But it shows that in the aggregate, across firms and across the economy, there is no pattern of reduced employment when the federal minimum wage goes up—and the few instances when employment has gone down after wage increases have been during recessions or near recessions—circumstances that much more plausibly explain the observed employment reductions than the modest minimum-wage increases.

## Consistent with Academic Research Findings

These employment trends after federal wage increases are not surprising, as they are in line with the findings of the substantial majority of modern minimum-wage research.

As Goldman Sachs analysts summarized recently, “the economic literature has typically found no effect on employment [of recent U.S. minimum-wage increases],”<sup>2</sup> citing a [study by University of California economists](#) that examined job-growth patterns across every border in the U.S. where one county had a higher wage than a neighboring county. Lauded by Nobel Laureate Paul Krugman as “one of the most compelling sets of empirical results I’ve ever

<sup>2</sup> Ibid.

seen in economics,”<sup>3</sup> *Bloomberg News* summarized the University of California study’s findings:

[This] 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.<sup>4</sup>

Moreover, it is not just sophisticated individual studies that bear this out; the entire field of modern minimum-wage research indicates little adverse effect on jobs when the minimum wage goes up. This is best illustrated by [meta-studies that survey and pool the results from scores of minimum-wage studies](#) spanning a period of decades.<sup>5</sup> The funnel graph [in this study](#) illustrates the job-loss findings from most minimum-wage research, which are clustered very close to zero. It also shows that the most rigorous studies find zero effect on jobs. Such meta-analysis of the minimum-wage field shows that the overwhelming majority of rigorous studies find little to no impact on employment when the minimum wage goes up.



As the national minimum-wage debate has shifted toward more significant wage increases, with California and New York recently approving plans to gradually phase in \$15 minimum wages, economists have begun analyzing the impacts of these higher wages.



[University of California economists](#) have again conducted the most sophisticated research to date on the new, phased-in \$15 minimum wages—research that more than [75 economists](#) have endorsed. The research shows that in New York, more than one in three workers will see their pay rise by close to \$4,900 per year, a far-reaching increase that will begin to reverse decades of wage inequality.

Significantly, the study finds that, unlike small wage increases, [a \\$15 minimum wage generates billions in new consumer spending that offsets most of the higher costs to businesses](#). As a

<sup>3</sup> Paul Krugman at CUNY Equality Forum, October 1, 2015. For a video tape of Krugman’s remarks, see <http://equalityindicators.org/media/>

<sup>4</sup> “Raise the Minimum Wage,” Bloomberg View, April 18, 2012, <http://www.bloombergview.com/articles/2012-04-16/u-s-minimum-wage-lower-than-in-lbj-era-needs-a-raise>

<sup>5</sup> Summarized in “Employment and Business Effects of Minimum Wage Increases,” National Employment Law Project, September 2015, <http://www.nelp.org/content/uploads/Minimum-Wage-Basics-Business-Effects.pdf>



result, the researchers project that New York's phased-in \$15 wage would likely lead to no reduction in employment levels and, quite possibly, a very small net gain. And because more workers would get a raise in lower-paying rural areas, [the consumer spending increase would be greatest there, providing an extra boost to sales at rural businesses.](#)

This body of research thus indicates that the consumer spending generated by minimum-wage increases is an important factor in promoting growth. As JP Morgan Chase reported last month, [spending by low-income consumers and millennials are the main factors currently driving U.S. job growth.](#) Analysis by *The Atlantic* similarly found that [when consumers move from the lowest 20 percent of earners to the middle 20 percent, their spending at restaurants doubles.](#)



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*“I think the minimum wage systematically hurts the most vulnerable...I think it’s a bad policy.” — Sen. Ted Cruz, 2016*

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## Conclusion

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For decades, minimum-wage opponents have been doom-saying about the likely impact of higher wages on the economy. But review of the best evidence makes clear that their predictions have not been borne out by real-world results. Our analysis of simple job-growth data—both economy-wide and in the industries most affected by higher minimum wages—shows that there is no correlation between minimum-wage increases and reduced employment levels. As those results mirror the findings of decades of more sophisticated academic research, they provide simple confirmation that opponents’ perennial predictions of job losses are rooted in ideology, not evidence.

## Further Reading and Sources

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## About the Authors

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