



## **Documented Impacts of Minimum Wage Increases on Job Growth, Business Health, Consumer Prices, and Family Spending**

*An overview of the U.S. experience, with new findings from San Diego County*

June 2016

Peter Brownell, PhD

### **Introduction and summary**

The minimum wage was first put in place by the U.S. federal government in 1938. It is one of our nation's most tried and tested policies for improving the lives of the working poor and supporting economic growth through consumer spending.

As the cost of living varies from place to place and increases over time, many states and cities have set minimum wages above the federal level and raised them repeatedly. In just the 15 years from 2000 through 2014, the federal minimum wage rose three times and 30 states raised their own wage floors an average of five times each to various levels above the federal wage.<sup>1</sup> In addition, at least nine cities and counties enacted higher local minimum wages during the same time period, with many more following suit or considering proposals to do so since 2014.<sup>2</sup>

The direct and indirect results of all those increases have been thoroughly documented. The impact of raising the minimum wage is one of the most researched topics in economics, with hundreds of studies published. Much of the best research has carefully isolated the effects of minimum-wage increases by comparing economic activity in neighboring counties or regions with and without the change.<sup>3</sup>

The documented results of minimum wage increases are overwhelmingly positive for working people and neutral for businesses. There are no significant negative effects on employment, employees' hours, or numbers of businesses, while prices barely budge and low-income

---

<sup>1</sup> U.S. Department of Labor, Wage and Hour Division. "Changes in Basic Minimum Wages in Non-Farm Employment under State Law: Selected Years 1968-2016." <http://www.dol.gov/whd/state/stateminwagehis.htm>

<sup>2</sup> Reich, Michael, Ken Jacobs and Annette Bernhardt. 2014. "Local Minimum Wage Laws: Impacts on Workers, Families and Businesses." ILRE Working Paper No. 104-14. [http://irle.berkeley.edu/working\\_papers/104-14.pdf](http://irle.berkeley.edu/working_papers/104-14.pdf)

<sup>3</sup> Reich, *et al.* 2014. *Ibid.*

families, especially those headed by women and people of color, are better able to meet their living expenses.

Yet in 2016, news reports of proposed minimum wage increases still routinely include speculation from business lobbyists, restaurant owners, and other opponents on a range of ominous consequences. Such guesswork is unnecessary and uninformed, given the wealth of data that has been accumulated and analyzed.

This issue brief summarizes the findings of the most robust studies published over the past two decades, and explores the experience of San Diego County businesses before and after the two statewide increases in the California minimum wage.

### **Impact on Families and Consumer Spending**

In large cities, local minimum wage laws raise the earnings of many thousands of workers and their families, typically affecting 10-20% of the workforce.<sup>4</sup> Clearly, people whose incomes increase have greater spending power, and are better able to pay their bills and avoid eviction and other disruptions. The U.S. Council of Economic Advisors has found that raising minimum wages reduces poverty rates, indicating that the increased earnings are not offset by increased unemployment, as some fear.<sup>5</sup> An analysis of state and federal minimum wage increases over two decades found that a 10% increase in the minimum wage reduces food stamp program enrollment by about 3% on average.<sup>6</sup>

Contrary to a common misperception, workers earning the minimum wage are mostly adults, and many are parents.<sup>7</sup> Nationally, only 12% of those who would benefit from a raise in the minimum wage are younger than 20 years old.<sup>8</sup> In San Diego, a 2014 analysis estimated that between 172,000 and 214,000 workers in the city were paid at or slightly above the minimum wage and would get a raise if it increased to \$11.50. The majority of those affected workers were over age 30 and only 5% were younger than 20. One-third (32.4%) of impacted workers had children.<sup>9</sup>

The researchers also estimated that the proposed City of San Diego minimum wage increase would put an additional \$260 million into those workers' pockets.<sup>10</sup>

---

<sup>4</sup> Belman, Dale, and Paul J. Wolfson. 2014. "The New Minimum Wage Research." *Employment Research*. 21(2): 4-5.

<sup>5</sup> Council of Economic Advisors. 2014. "The Economic Case for Raising the Minimum Wage." February 12, 2014. <http://www.slideshare.net/whitehouse/the-economic-case-for-raising-the-minimum-wage>.

<sup>6</sup> Michael Reich and Rachel West. 2015. "The Effects of Minimum Wages on Food Stamp Enrollment and Expenditures". IRLE Working Paper No. 112-15. <http://irle.berkeley.edu/workingpapers/112-15.pdf>

<sup>7</sup> Reich, Michael, Ken Jacobs, Annette Bernhardt and Ian Perry. 2014. "Fact Sheet: Estimated Impact of San Diego's Proposed Minimum Wage Law." <http://laborcenter.berkeley.edu/fact-sheet-estimated-impact-of-san-diegos-proposed-minimum-wage-law/>

<sup>8</sup> Morath, Eric. 2014. "Who Benefits From a Higher Minimum Wage?" *Wall Street Journal Real Time Economics Blog*. <http://blogs.wsj.com/economics/2014/02/12/who-benefits-from-a-higher-minimum-wage/>

<sup>9</sup> Reich *et al.* 2014. "Fact Sheet: Estimated Impact of San Diego's Proposed Minimum Wage Law."

<sup>10</sup> Reich *et al.* 2014. *Ibid.*

Nationally, the economic stimulus created for communities by increasing the spending power of low-wage workers has not been precisely estimated. But research has documented – as common sense suggests – that families living on low wages are likely to spend, rather than save, any increased earnings.<sup>11</sup> Across the U.S., households with the lowest annual incomes spend nearly every dollar they earn, while the wealthiest are able to save more and spend the smallest percentage of their income.<sup>12</sup> That means any additional dollar of income for the families with lowest wages is almost certain to be spent – on pressing necessities like groceries, gas, and medications – and help stimulate the economy.

The Chicago Federal Reserve has calculated that every \$1 increase in the minimum wage raises consumer spending by about \$2,800 a year for every minimum-wage household.<sup>13</sup>

An analysis of 2014 SEC filings from the 65 largest publicly traded retailers in the U.S., including chain restaurants, found that 90% of them listed low consumer demand or spending among the top risk factors for their businesses. In addition, 70% listed flat or falling incomes as a top risk factor.<sup>14</sup>

Even executives of Walmart, the nation's largest retail chain, have said minimum-wage increases may be a net gain for them because the increased consumer spending could "offset and maybe even exceed whatever impact you pay out to associates (employees)."<sup>15</sup>

### **Impact on Employee Turnover, Productivity, and Business Costs**

Rigorous studies of the real-life consequences following minimum wage increases have documented economic gains for business through reduced employee turnover, reduced absenteeism, higher productivity, greater efficiency, better quality service, and increased sales.

Economists increasingly recognize that the impact of raising the minimum wage is far from a simplistic matter of increased labor costs for business. Although abstract theory might suggest that raising the price of an hour of work would lower demand for labor, the real economy is more complex. The actual results have been shaped by many compensating factors. A wave of

---

<sup>11</sup> Johnson, David, Jonathan Parker and Nicholas Soueles. 2004. "Household Expenditures and the Income Tax Rebates of 2001." Working Paper 10784, National Bureau of Economic Research. .

<sup>12</sup> US Bureau of Labor Statistics Consumer Expenditure Survey, 2011.

<http://www.bls.gov/cex/2011/Standard/income.pdf>

<sup>13</sup> Aaronson, Daniel, Sumit Agarwal, and Eric French. "The Spending and Debt Response to Minimum Wage Hikes." *American Economic Review* 102(7): 3111-3139.

<sup>14</sup> Duke, Brendan V and Ike Lee. 2014. "Retailer Revelations: Why America's Struggling Middle Class Has Businesses Scared." Center for American Progress. [http://cdn.americanprogress.org/wp-content/uploads/2014/10/CorporateMiddleOut\\_report3.pdf](http://cdn.americanprogress.org/wp-content/uploads/2014/10/CorporateMiddleOut_report3.pdf)

<sup>15</sup> Dudley, Renee. "Wal-Mart says 'Looking' at Support of Minimum Wage Raise," Bloomberg News, February 19, 2014. <http://www.bloomberg.com/news/articles/2014-02-19/wal-mart-says-looking-at-support-of-federal-minimum-wage-rise>.

research on the topic since 2000 has identified these positive business impacts from higher wages:<sup>16</sup>

- reductions in workforce turnover
- improvements in organizational efficiency and productivity
- better customer service and work performance, often leading to higher sales

Those impacts raise business revenue and/or reduce costs, often by enough to offset the higher minimum wage. In addition, some businesses have made other adjustments to offset the cost, such as small price increases and reductions in the salaries of higher earners.<sup>17</sup>

Employers at San Francisco International Airport were surveyed following a mandated wage increase there in 2005. They reported substantial improvements in work performance, absenteeism, morale, disciplinary issues, customer service, and equipment maintenance.<sup>18</sup>

Lower employee turnover results in significant savings for many businesses. Studies of counties where the minimum wage increased have found “striking evidence” of substantially less employee turnover than in neighboring counties with no increase.<sup>19</sup> One study calculated that every 1% increase in the minimum wage reduces turnover by an average of 1.45%.<sup>20</sup>

The cost of turnover varies widely by type of business and position. Industry studies have calculated the replacement cost for one non-management worker – including direct costs of recruiting and training and indirect costs of lost productivity – at anywhere from \$1,322 for a hotel room service waiter to \$7,658 for a sales assistant.<sup>21</sup> One national study<sup>22</sup> estimated the median replacement cost for jobs paying \$10 an hour, California’s current minimum wage, at about \$3,350, while a study by the Coca-Cola Research Council<sup>23</sup> estimated the total cost of replacing one \$10/hour nonunion supermarket worker at \$5,085.

---

<sup>16</sup> Schmitt, John. 2015. "Explaining the Small Employment Effects of the Minimum Wage in the United States." *Industrial Relations* 54(4): 547-581.

<sup>17</sup> Schmitt, John. 2015

<sup>18</sup> Reich, Michael, Peter Hall and Ken Jacobs. 2005. "Living Wage Policies at the San Francisco Airport: Impacts on Workers and Business." *Industrial Relations* 44(1): 106-138.

<sup>19</sup> Dube, Arindrajit, T. William Lester, and Michael Reich. 2013. "Minimum Wage Shocks, Employment Flows and Labor Market Frictions." IRLE Working Paper No. 149-13. Berkeley, CA: Institute for Research on Labor and Employment. <http://irle.berkeley.edu/workingpapers/149-13.pdf>.

<sup>20</sup> Jacobs, Ken and Dave Graham-Squire. 2010. "Labor Standards for School Cafeteria Workers, Turnover and Public Program Utilization." *Berkeley Journal of Employment and Labor Law* 21(2): 447-458.

<sup>21</sup> Hinkin, Timothy R. and J. Bruce Tracey. 2000. "The Cost of Turnover: Putting a Price on the Learning Curve." *Cornell Hotel and Restaurant Administration Quarterly* 41(14): 18-19.

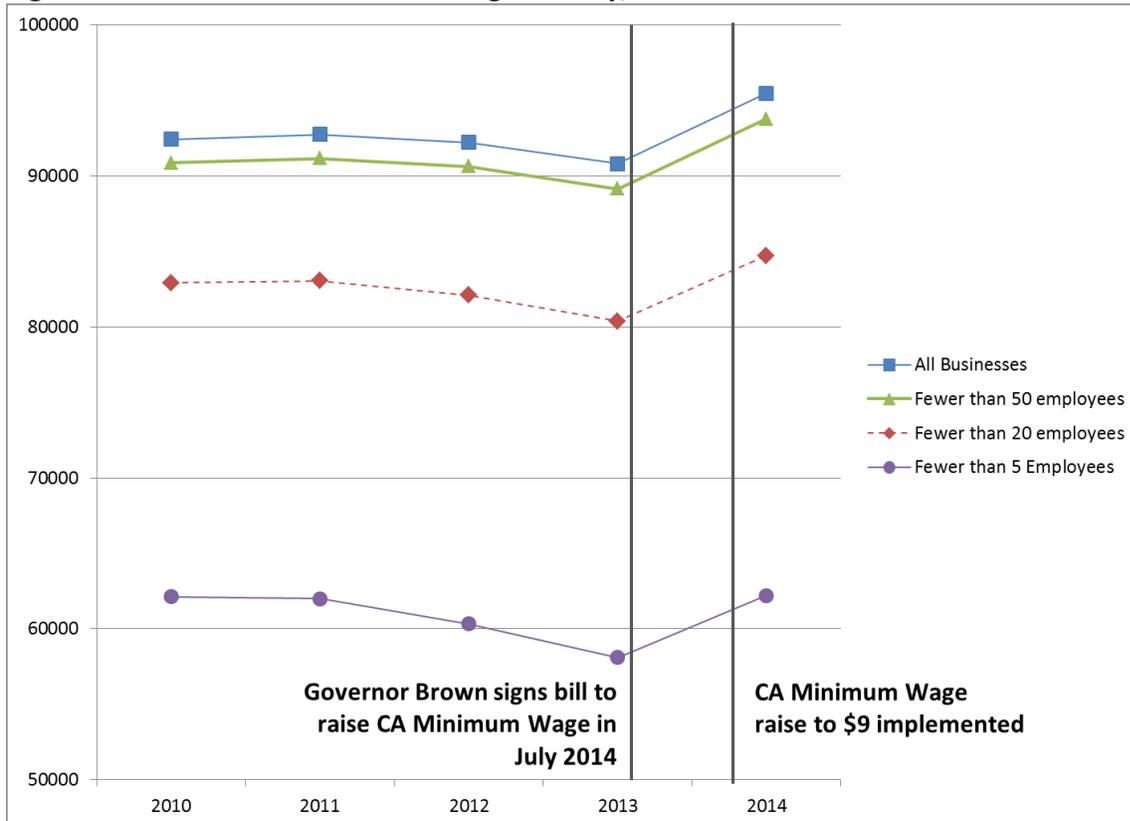
<sup>22</sup> Boushey, Heather and Sarah Jane Glynn. 2012. "There are Significant Business Costs to Replacing Employees." Center for American Progress. <https://www.americanprogress.org/issues/labor/report/2012/11/16/44464/there-are-significant-business-costs-to-replacing-employees/>

<sup>23</sup> Blake, Frank. 2000. "New Ideas from Retaining Store-Level Employees," Coca-Cola Research Council. Atlanta, GA. [http://ccrrc.org/wp-content/uploads/sites/24/2014/02/New\\_Ideas\\_for\\_Retaining\\_Store-Level\\_Employees\\_2000.pdf](http://ccrrc.org/wp-content/uploads/sites/24/2014/02/New_Ideas_for_Retaining_Store-Level_Employees_2000.pdf)

Lower turnover obviously saves on recruitment and training costs, and it also creates indirect benefits of having a more experienced, productive workforce. When the retail chain Gap voluntarily raised its company minimum wage in 2014, CEO Glenn Murphy wrote: “To us, this is not a political issue. Our decision to invest in front-line employees will directly support our business and is one that we expect to deliver a return many times over.”<sup>24</sup>

So, while opponents of raising the minimum wage often predict that it will drive businesses away or force them to close down, these positive factors offsetting increases in hourly wage rates often prevent such dire outcomes. In California, Governor Jerry Brown signed a bill in September 2013 that raised the state’s minimum wage from \$8/hour to \$9 as of July 1, 2014, and then to \$10 on January 1, 2016. As Figure 1 shows, during the 12-month period that started immediately before the bill was signed San Diego County added a net 4,671 new businesses.<sup>25</sup> The growth in business development was unimpeded by the knowledge of an upcoming minimum wage increase or by the implementation of the increase.

**Figure 1: Business Growth in San Diego County, 2010-2014**



Source: California Employment Development Department. “Size of Business Data – 2005-Present.”

<sup>24</sup> Rushe, Dominic. "Obama welcomes Gap decision to raise minimum wage to \$9 an hour," *The Guardian*, February 20, 2014. [www.theguardian.com/business/2014/feb/20/gap-minimum-wage-increase-Obama](http://www.theguardian.com/business/2014/feb/20/gap-minimum-wage-increase-Obama)

<sup>25</sup> California Employment Development Department. “Size of Business Data – 2005-Present.” [http://www.labormarketinfo.edd.ca.gov/LMID/Size\\_of\\_Business\\_Data.html](http://www.labormarketinfo.edd.ca.gov/LMID/Size_of_Business_Data.html). (Note that this data is based on payroll reporting for unemployment insurance, and does not include self-employed individuals with no employees).

## Impact on Jobs and Hours

Because the improvements and adjustments described above offset the moderate payroll cost of paying some workers a higher wage, the feared job losses do not materialize. Businesses continue to need to have work performed to meet customer demand and generate revenue.

Again and again, research tracking the actual impacts of minimum-wage increases has concluded that the employment effects of minimum wage changes in the U.S. are “vanishingly small and not statistically significant in even the most generous test.”<sup>26</sup>

Studies tracking employment trends in regions where the minimum wage has increased, compared to neighboring regions with no such increase, have shown no discernible difference.<sup>27</sup> The overwhelming majority of recent empirical economic research finds no significant impact on number of jobs or hours worked.<sup>28</sup>

While most studies have found effectively zero employment impact, of course some case studies find results either above or below that level. In 2009, a meta-study combining 64 minimum-wage studies concluded there is “an insignificant employment effect (both practically and statistically) from minimum wage raises.”<sup>29</sup> Recent research has identified flaws in most of the studies showing reductions in employment, specifically a failure to adjust for other economic influences.

Another meta-analysis of studies after 2003, which have used improved methods of measuring minimum-wage impacts, also concluded: In the U.S., the change in employment following a 10% increase in the minimum wage is statistically zero.<sup>30</sup>

“It 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.”

In the two years following San Jose’s 2013 minimum wage increase, the city has added 10,300 new jobs, according to data compiled by the U.S. Census Bureau.<sup>31</sup>

Scott Knies, Executive Director of the San Jose Downtown Association, had been among opponents who predicted the increase would kill jobs and force businesses to close. Since then, he has repeatedly acknowledged that the wage increase did **not** hurt businesses. Last December, Knies made a video extolling the large amount of downtown development

---

<sup>26</sup> Belman, Dale and Paul J Wolfson. 2014. *New Minimum Wage Research*. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research, p.168.

<sup>27</sup> Schmitt, John and David Rosnick. 2011. "The Wage and Employment Impact of Minimum Wage Laws in Three Cities." <http://www.cepr.net/documents/publications/min-wage-2011-03.pdf>

<sup>28</sup> Schmitt, John. 2015

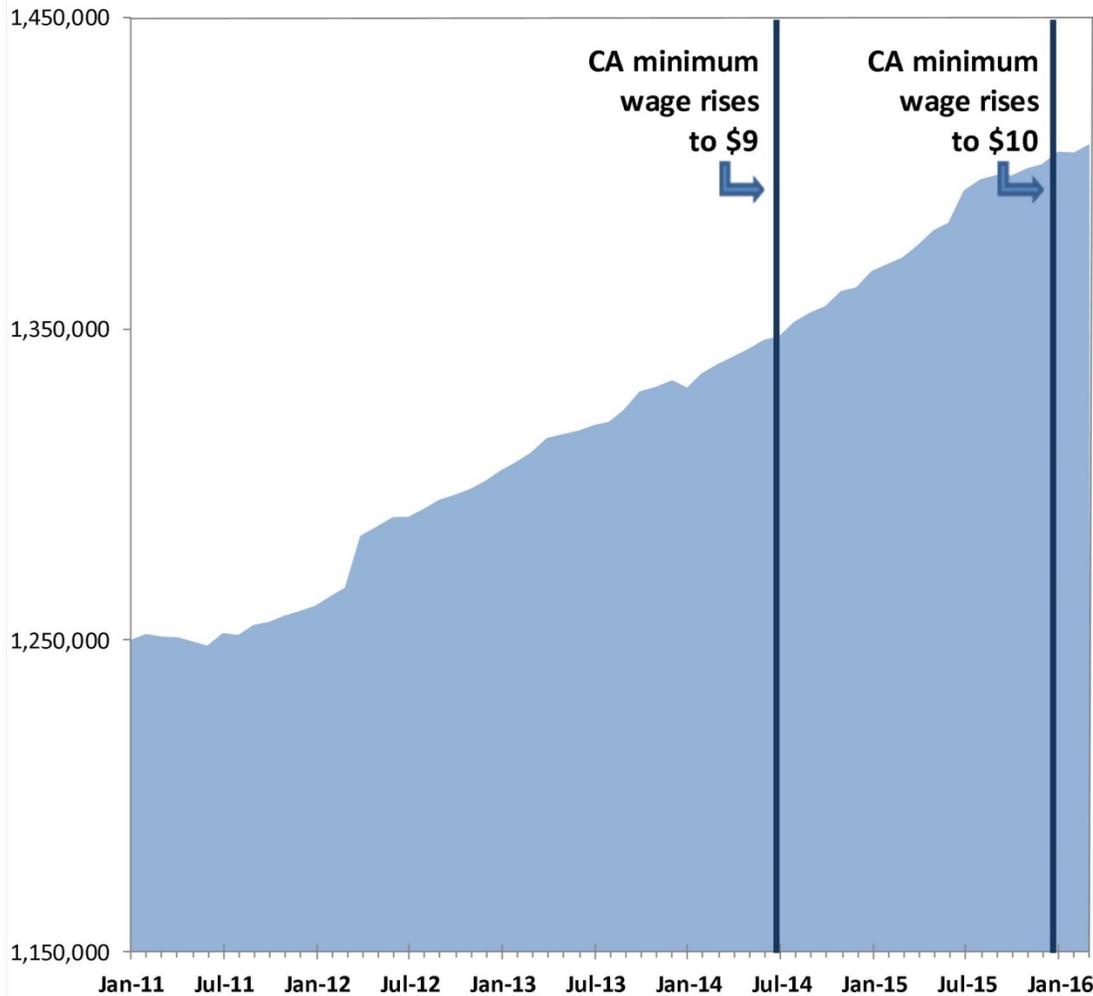
<sup>29</sup> Doucouliagos and Stanley. 2009.

<sup>30</sup> Belman, Dale, and Paul J. Wolfson. 2014. "The New Minimum Wage Research." *Employment Research*. 21(2):4-5.

<sup>31</sup> Author’s analysis using “On The Map,” U.S. Census Bureau. <http://onthemap.ces.census.gov/>

underway and planned, and noting that downtown hotels had a record year in 2015, while more than 120 new technology businesses moved to the city's core, and commercial vacancy rates dropped.<sup>32</sup>

**Figure 2: San Diego County Job Growth, 2010-2016**



Sources: California Employment Development Department, MSA Seasonally Adjusted Total Nonfarm Employment (<http://www.labormarketinfo.edd.ca.gov/msa/sdiego.html>); California Department of Industrial Relations, "History of California Minimum Wage" (<https://www.dir.ca.gov/iwc/MinimumWageHistory.htm>)

In San Diego County, data from the California Employment Development Department shows that the total number of nonfarm jobs has increased steadily between early 2012 and March 2016, without slowing when the state minimum wage rose by 12.5% in July 2014 or when it rose again by 11.1% in January 2016 (see Figure 3). Just as the overwhelming majority of rigorous economic studies nationally have found, there is no evidence that these recent increases in the California minimum wage affected the county's robust job growth, much less caused any net loss of jobs. Rather, San Diego County employers have hired an additional 75,800 workers since immediately before the state wage rose to \$9 in January 2014.

<sup>32</sup> San Jose Downtown Association 2015 in Review. <https://vimeo.com/148977253>

## **Impact on Consumer Prices**

Minimum wage increases have caused only very small, one-time price bumps in the restaurant industry, and no measurable increases in other industries. Yet, opponents often instill the fear that businesses will need hefty price hikes to cover higher payroll costs.

In Seattle, for instance, low-wage employers were surveyed before the minimum wage rose to \$11 in April 2015 and 62% said they would have to raise prices. But looking back on the first nine months with the higher wage, retail prices in Seattle did not increase after all, compared with price changes in neighboring areas.<sup>33</sup>

Minimum wage labor contributes a small proportion of the overall costs of producing and selling products, with much variation by industry. Operating costs also include materials, rent, maintenance, supplies, taxes, utilities, and transportation costs. Perhaps because the math is complicated, the news media generally report without question opponents' claims that consumers will be burdened by substantial jumps in prices.

Data on the actual cost impact of wage increases<sup>34</sup> indicates that a \$1 increase in the minimum wage will add less than 20 cents to a \$30 restaurant tab and boost the price of a \$5 hamburger by only 9 cents.

The price changes are so small, even without considering inflation, because even in the restaurant industry labor costs are only about one-third of operating costs.<sup>35</sup> And those labor costs include many people making more than minimum wage, such as managers and executives. So, if a third of a restaurant's workforce is paid minimum wage and those workers get a 10% raise, that raise would equal about 1% of the operating costs.

## **Conclusion: False Alarm**

Although greatly improved methods of researching the effects of minimum wage increases have provided a well-documented understanding of the economic factors, minimum wage opponents continue to predict different, frightening outcomes.

Opponents of raising minimum wages often cite the research team of Neumark and Wascher, who began publishing studies on the topic in 1992. However, other researchers in the field have determined that Neumark and Wascher used flawed methods "so that effects of other factors are falsely attributed to the minimum wage."<sup>36</sup>

---

<sup>33</sup> Hill, Heather, et al, University of Washington. January 2016. "Early Evidence on the Impact of Seattle's Minimum Wage Ordinance," preliminary draft. <https://evans.uw.edu/sites/default/files/HOvIV%201-27-16.pdf>

<sup>34</sup> Aaronson, Daniel, Eric French, and James MacDonald. 2008. "The Minimum Wage, Restaurant Prices and Labor Market Structure." *Journal of Human Resources* 43(3):688-720.

<sup>35</sup> Reich *et al.* 2014. "Local minimum wage laws: Impacts on workers, families and businesses."

<sup>36</sup> Reich *et al.* 2014. *Ibid.*

In addition, the research is discredited because it is largely funded by the restaurant industry, which has a high proportion of minimum-wage jobs. Specifically, Neumark's minimum wage research is funded by the Employment Policies Institute,<sup>37</sup> run by advertising and PR executive Rick Berman.<sup>38</sup>

Often, individual business leaders and industry representatives specifically threaten that they will be forced to cut payrolls if they have to pay slightly more to their lowest-paid workers. History proves them wrong.

Roger McCracken, managing partner of Seattle airport parking company MasterPark, predicted in November 2013 that a \$15 minimum wage there could force him to automate some jobs because "We're on a razor-thin margin as it is."<sup>39</sup> Three months later, with the new wage in effect, he called layoffs "foolish" and rejected the idea of automation because "service is key."<sup>40</sup>



The National Restaurant Association, a major lobby against wage increases, predicted in 2007: "A minimum wage increase will cost our industry jobs." Just five years later, with the real minimum wage 41% higher, the NRA bragged in its official literature that the restaurant industry had provided strong job growth for a decade and was in good shape to continue to "post steady growth well into the future."<sup>41</sup> (See chart below.)

While opponents of raising the minimum wage continue to predict disaster, careful empirical economic research on the actual impact of increases in the minimum wage refutes these claims. The findings of national level economic studies have been borne out here in San Diego County, where the recent increases in the California minimum wage have been met with uninterrupted growth in both jobs and businesses.

---

<sup>37</sup> David Neumark, "Curriculum Vitae." [http://www.socsci.uci.edu/~dneumark/cv\\_107.pdf](http://www.socsci.uci.edu/~dneumark/cv_107.pdf) (Downloaded 4/28/2016).

<sup>38</sup> Lipton, Eric. "Fight over Minimum Wage Illustrates Web of Industry Ties." *The New York Times*, February 9, 2014. <http://www.nytimes.com/2014/02/10/us/politics/fight-over-minimum-wage-illustrates-web-of-industry-ties.html>

<sup>39</sup> <http://www.bloomberg.com/news/articles/2013-11-04/seattle-burger-flippers-may-get-31-200-to-wage-vote>

<sup>40</sup> <http://www.seattletimes.com/seattle-news/15-wage-floor-slowly-takes-hold-in-seatac/>

<sup>41</sup> National Employment Law Project/Cry Wolf Project. "Consider the Source: 100 Years of Broken-Record Opposition to the Minimum Wage." March 2013

**Figure 3: Restaurant Industry Thrives after Federal Minimum Wage Increase**

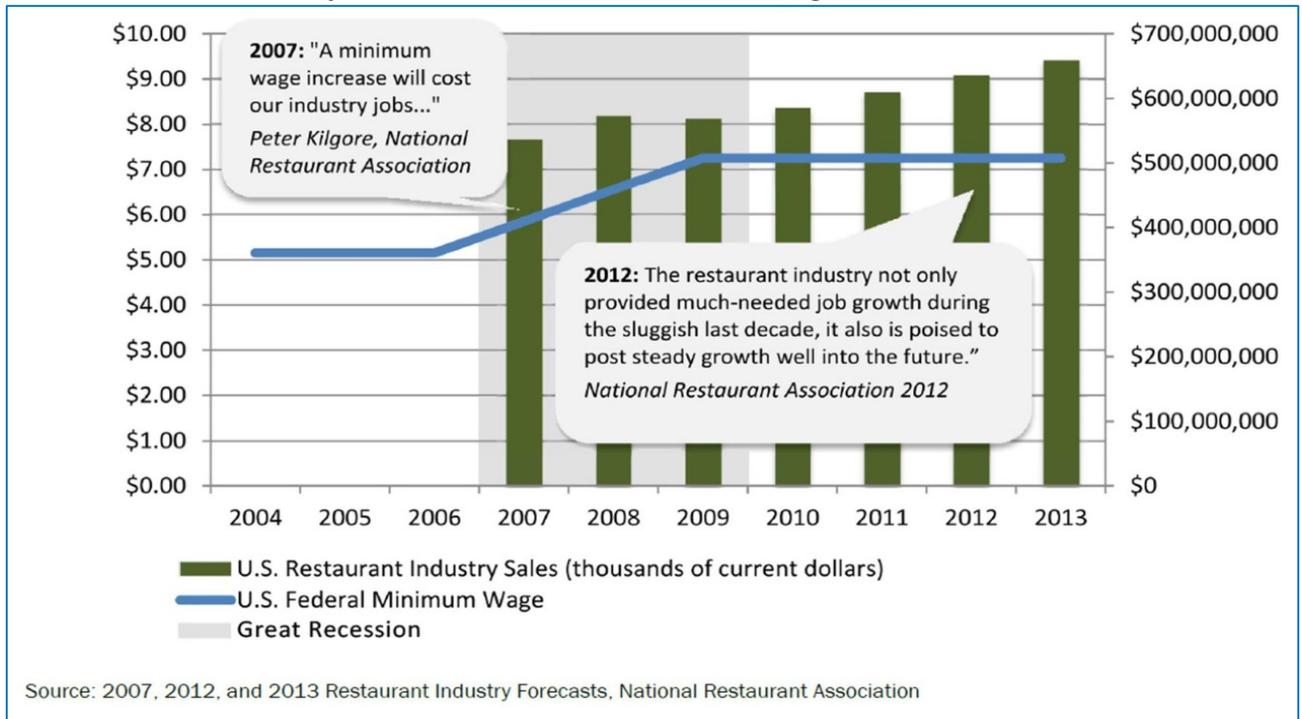


Chart by Cry Wolf Project, <http://www.nelp.org/content/uploads/2015/03/Consider-The-Source-Minimum-Wage.pdf>