



The Nelson A. Rockefeller Center at Dartmouth College

The Center for Public Policy and the Social Sciences

## Policy Research Shop

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### RAISING THE MINIMUM WAGE

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#### *An Analysis of the Minimum Wage in New Hampshire*

Presented to the New Hampshire Senate Finance Committee

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## **EXECUTIVE SUMMARY**

The minimum wage is one of the most debated topics in economics and the political arena. In this report, we analyze the economic impacts, stakeholder perspectives, and public opinion regarding an increase in the New Hampshire minimum wage. The report first reviews the large body of research on effects of the minimum wage on overall employment and income of workers, with an overview of relevant economic theory. We identify both areas of consensus and disagreement in the existing literature. The report further addresses wage adjustment channels that employers might change including hours, prices, or fringe benefits, as well as the social impact of minimum wage increases on education, poverty and demographic groups. We then conduct a new analysis of minimum wage effects utilizing data on contiguous counties in the New Hampshire area. Consistent with research for all contiguous counties, the results suggest that minimum wage increases in the state would not likely have significant negative effects on employment. Additionally, we present findings from interviews we conducted with stakeholders and industry representatives in New Hampshire and public opinion on minimum wage increases.

## **1. INTRODUCTION**

This report addresses the debate facing New Hampshire as it considers whether implementing a statewide minimum wage would be economically beneficial and practical. Our research question is straightforward: what is the economic effect of a minimum wage increase on New Hampshire workers, businesses, and the overall economy?

Our focus begins with a review of the research literature. We first discuss the influence of the minimum wage in meta-analyses, which summarize results from prior studies and determine the extent of consensus in the literature. Furthermore, we carry out a contiguous county analysis to understand the impact of a single-state increase in the minimum wage. Since this technique analyzes counties along state borders, it provides a direct comparison between states that have raised the minimum wage and those that have not. The analysis utilizes data and the methodological strategy developed by Dube, Lester, and Reich (2010) and accounts for regional variation in population, employment, and earnings trends in the New England area. To get a broader sense of the effects of minimum wage increases, we also consider economic outcomes besides overall employment and earnings. We assess the impact on teen unemployment, income, average hours worked, prices, and poverty rates, among other outcomes.

We interviewed leaders of New Hampshire's business organizations. In particular, we gained perspective on how an increase in the minimum wage would impact New Hampshire's businesses and how they would adapt. We also evaluated anecdotal and concrete data to examine how an increase would substantially affect their business or organization. We have highlighted the opinions of major stakeholders in the minimum wage debate in New Hampshire.



We further examined a number of public opinion polls to determine where the public stands on this issue. While New Hampshire polling data on the minimum wage is limited, we have observed that a majority of public polling in New Hampshire and in the nation suggest that most Granite Staters and Americans support a minimum wage increase.

## **2. MINIMUM WAGE HISTORY AND WORKFORCE DEMOGRAPHICS**

In 2007, Governor John Lynch signed House Bill 514 to increase the minimum wage above the federal level.<sup>1</sup> At the time, the minimum wage increased from the federal level of \$5.15 per hour to \$6.50, with a final increase to \$7.25 the following year, in 2008. The federal government enacted similar legislation, so that by 2009, New Hampshire's minimum wage was the same as the federal level.<sup>2</sup> In 2011, the New Hampshire General Court amended the minimum wage law by explicitly tying it to the federal level,<sup>3</sup> which is \$7.25 per hour for full-time employees.<sup>4</sup>

The minimum wage is the most researched and debated policy issue in American labor economics.<sup>5</sup> In 1977, Congress established the Minimum Wage Study commission to investigate the consequences of minimum wage proposals. Five years later with over \$17 billion in funding,<sup>6</sup> the committee published a report outlining how the impact of increases in minimum wage is uncertain in "the empirical work, as it is in theory."<sup>7</sup> Over the past forty years, economic research on the minimum wage has remained divided. However, in the past decade, new models that account for spatial heterogeneity through analyzing contiguous county borders often demonstrate no negative employment impacts from state increases in the minimum wage. This "new-wave" of research has caused the minimum wage debate to resurface among political communities.

Furthermore, the value of the minimum wage is constantly depreciating. Since the 1960s, the real value of minimum wage has fallen more than a third, while real per capita GDP has grown over 120 percent and labor productivity has risen 142 percent.<sup>8</sup> After accounting for inflation, in 1979, the real value of the minimum wage was \$9.47 in today's dollars, or 23 percent higher than the current minimum wage.<sup>9</sup> This decline in the real value of the minimum wage imposes a larger impact on inequality, whereby the earnings of minimum wage households continue to decline relative to high-income households.<sup>10</sup> Given New Hampshire's high percentage of female minimum wage workers, this problem persists in the Granite State.

New Hampshire's minimum wage is the lowest in New England, yet only three percent of workers are paid the minimum wage, versus 3.4 percent in Massachusetts, 3.8 percent in Vermont, and 4.3 percent nationally.<sup>11</sup> In 2013, of the 369,000 workers paid hourly rates in New Hampshire, 6,000 workers earned exactly the federal minimum wage of \$7.25 per hour, while another 5,000 earned less than the minimum wage.<sup>12</sup> By contrast, in 2003, 7,000 hourly-paid workers earned the prevailing federal minimum wage or less. New Hampshire's proportion of hourly-paid workers earning at or below the federal minimum wage was the seventh smallest among the 50 states.<sup>13</sup> This finding is comparable for all wages, where



median hourly earnings in the state for employed wage and salary workers totaled \$14.56 in 2013, compared to the national median of \$12.93.

It is important to consider the demographics of who earns the minimum wage. In New Hampshire, 72 percent of workers who would be affected by an increase in the minimum wage to \$9 an hour are over 20 years old, and 36 percent are at least 30.<sup>14</sup> Additionally, minimum wage workers are often largely responsible for supporting a family, as 14 percent of New Hampshire workers who would be impacted by an increase to \$9 have children.<sup>15</sup> Additionally, workers who would be impacted by an increase in the minimum wage to \$10.10 are more educated than commonly believed. Nationally, 43.8 percent of workers who fall into this category have at least some college education.<sup>16</sup> Furthermore, female workers are overrepresented amongst minimum wage workers compared to their male counterparts in the Granite State, as 72.7 percent of minimum wage workers are women.<sup>17</sup>

An individual minimum wage employee working full-time in New Hampshire earns the equivalent of \$15,080 per year, or less than \$300 per week.<sup>18</sup> However, 56 percent of minimum wage workers work less than 35 hours per week, which only amounts to \$13,195 annually.<sup>19</sup> If New Hampshire had a \$9.00 per hour minimum wage, 47,500 workers would see a direct increase in their wages, and if New Hampshire increased the minimum wage to \$10.10, 80,000 workers would see a direct increase.<sup>20</sup> With these statistics, it is important to consider the context of a minimum wage increase through its overall economic impact.

### **3. LITERATURE REVIEW**

#### *3.1 Unemployment Effects*

##### *3.1.1 Total Unemployment Meta-Analysis*

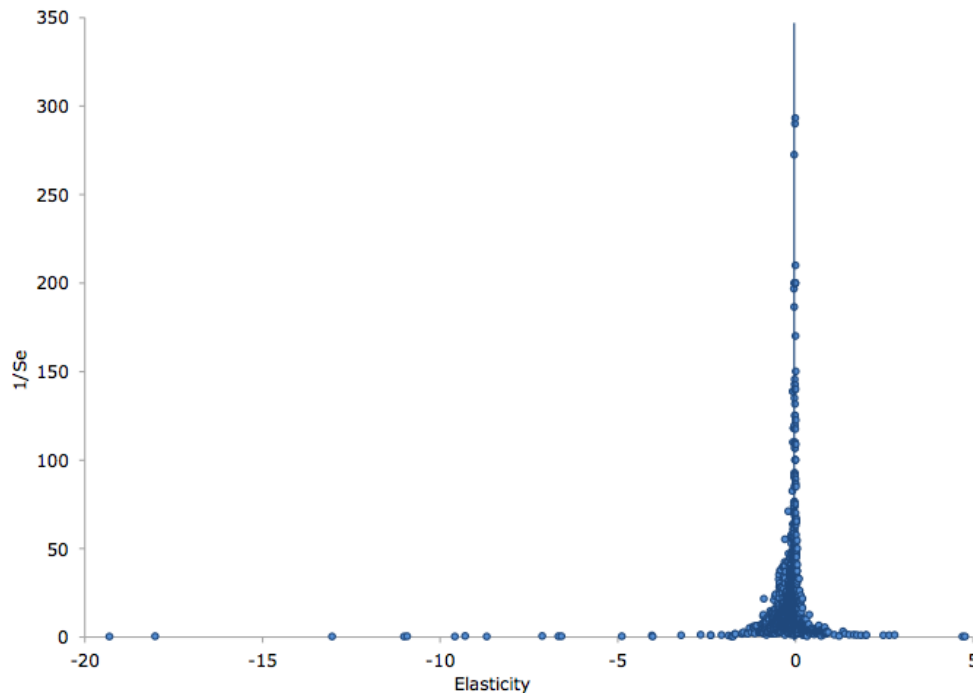
In order to first synthesize the thousands of journal articles and papers on the minimum wage, we analyze meta-analysis studies, which are “studies of studies” that aggregate a large number of separate analyses among studies that share a set of well-defined statistical techniques. After observing meta-studies on the minimum wage, the amount of evidence is on the minimum wage’s impact on total unemployment is often statistically insignificant and suggestive of only very small effects on unemployment.<sup>21</sup>

Multiple meta-analyses have corroborated these findings.<sup>22</sup> Doucouliagos and Stanley (2009) concluded that adverse employment effects are not supported through meta-analysis. Using 64 comparable studies of US data, they found no evidence that minimum wage increases reduce employment.<sup>23</sup> Further meta-analysis research by Belman and Wolfson examining 70 research articles demonstrated miniscule employment declines following a 10 percent increase in the minimum wage.<sup>24</sup> The impact of minimum wage is measured in terms of elasticity. Elasticity is a measure of responsiveness, whereby an elasticity of  $-0.1$  would indicate that a 10 percent increase in wages would lead to a one percent reduction in employment (see Appendix A for formula). Meta-analysis minimum wage research has often found aggregate elasticity to be below 0.05,<sup>25</sup> indicating that previous minimum wage price increases would be too modest to



have meaningful consequences in the dynamically changing labor markets of the United States.<sup>26</sup> Furthermore, by weighing each estimate by its statistical precision, research has determined that the most precise estimates of minimum wage increases are heavily clustered at or near zero employment effects.<sup>27</sup> (See Figure 1)

Figure 1: Meta-analysis of minimum wage effects on employment



Source: Doucouliagos and Stanley (2009, Figure 3),  $n=1,424$  estimates in 64 studies

### 3.1.2 Total Unemployment Effects – Contiguous County Comparative Analysis

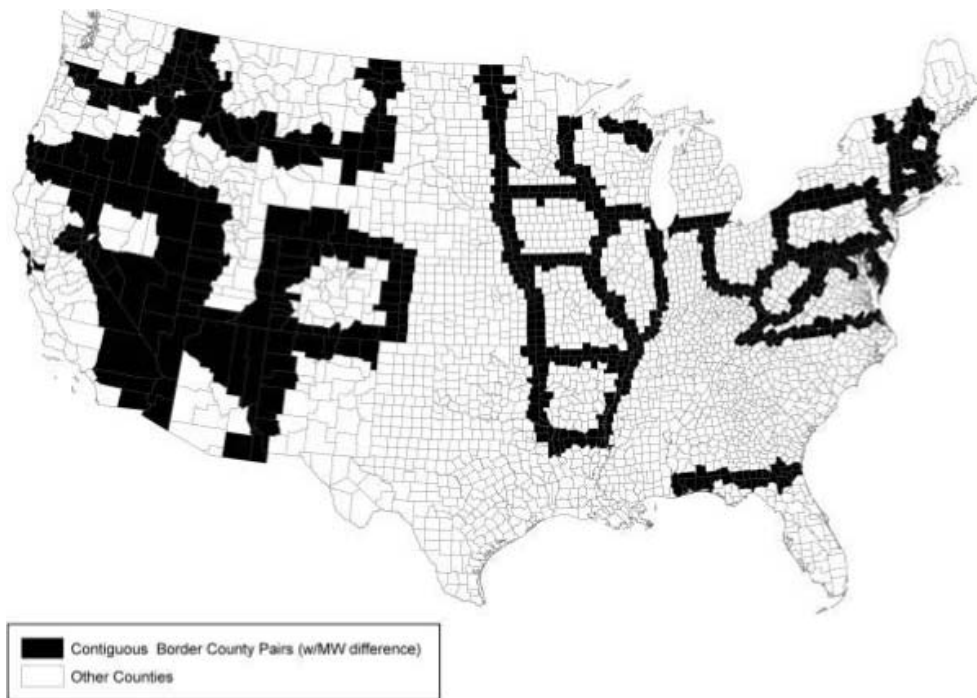
Studying minimum wage at the federal level can often lead to bias in national-level estimates due to differences between regions. This problem occurs due to exogenous geographic or economic factors that impact unemployment. In order to counteract this problem, Card and Krueger (1995) examined the contiguous county approach.<sup>28</sup> They analyzed the experiences of 410 fast-food restaurants in New Jersey and Pennsylvania following an increase in New Jersey's minimum wage from \$4.25 to \$5.05 per hour in 1992. After observing the changes in employment from before and after New Jersey's minimum wage increase, the research pointed toward a relative gain of 13 percent in New Jersey's employment.<sup>29</sup> Furthermore, when observing teenage employment, relative to teenagers in Pennsylvania, the teenage employment rate in New Jersey rose by 2.0 percentage points.<sup>30</sup> The research concluded by asserting that there is no evidence that the rise in New Jersey's minimum wage reduced employment at fast-food restaurants in the state.<sup>31</sup>

Card and Krueger have been criticized because their research only encompassed a few counties along the New Jersey-Pennsylvania border; however, further research on contiguous

counties has reported similar results. Addison, Blackburn, and Cotti (2012) examined how the decreases in employment for states that increase the minimum wage is independent of the wage increase and largely due to regional factors.<sup>32</sup> Furthermore, on a city-basis, Dube et al., (2007) analyzed San Francisco’s minimum-wage increase in 2004. Looking at restaurants, they found no significant effects of the minimum wage increase on employment or hours.<sup>33</sup>

The strongest support for Card and Krueger comes from a 2010 paper published by Dube, Lester, and Reich, considered the most important paper written on the minimum wage in the past decade.<sup>34</sup> Dube, Lester, and Reich (2010) looked at all adjacent counties on state borders from 1990 to 2006 and found no evidence of job losses resulting from minimum wage increases for high-impact sectors such as restaurants and retail (see Figure 2).<sup>35</sup> This research replicated Card and Krueger’s analysis thousands of times by comparing employment differences across contiguous U.S. counties with differing minimum wage levels. With over 16 years of quarterly data, the research was able to test for the possibility of longer-term effects of a minimum wage increase, ruling out the possibility of employers adjusting to higher prices within a few years. Furthermore, by recognizing regional bias in national level estimates, local estimates were able to reject previous national aggregate research, finding a very small and even a positive employment effect amongst 288 county pairs with a minimum wage differential.

**Figure 2: Contiguous county pairs with a minimum wage differential, 1990 – 2006**



*Source: Dube, Lester, and Reich (2010, Figure 2)*



### *3.1.3 Teen Unemployment*

Teenagers are often the focus of minimum wage research, since they represent low-skilled workers who are generally paid minimum wage. Federal increases in the minimum wage tend to reduce teen employment, while state-level increases have seen much less impact on employment. In New Hampshire, approximately 13,300 teenagers make below \$9.00 an hour.<sup>36</sup> Brown, Gilroy, and Kohen (1982) concluded that a 10 percent increase in the minimum wage would reduce teen employment between 0 and 1.5 percent.<sup>37</sup> Since the 1980s, further research on teen employment in the past few decades has produced mixed results. Using data from the 1990s, increases in the minimum wage were seen to reduce employment, especially among youths.<sup>38</sup> These results were first seen by Neumark and Wascher (1992), and repeated in 2006, whereby the employment elasticity with respect to the minimum wage ranged from about -0.1 to -0.2 for teenagers within both studies.<sup>39</sup> More recent research by Allegratto, Dube, and Reich has examined how a 10 percent increase in the minimum wage reduces teen employment slightly more than one percent.<sup>40</sup> However, at the state level, Dube, Lester, and Reich (2013) used the same cross-border methodology to study the effect on teens and found no discernible impact on their employment.<sup>41</sup> Lastly, Hoffman (2014) finds no evidence of teen job losses using state-level case studies during the 2000s.<sup>42</sup> Looking at aggregate federal time-series data research, Neumark and Wascher (1992), Williams (1993), Burkhauser et al. (2000), Zavodny (2000), Couch and Wittenburg (2001), Keil et al. (2001), and Sabia (2006) all demonstrated significant negative teen employment effects from increases in the federal minimum wage.<sup>43</sup> However, when observing state increases in the minimum wage, there is much less evidence supporting teen unemployment affects. Chapman (2004), Reich and Hall (2001), Hoffman (2014), and Dube, Lester, and Reich (2013) saw no significant impact at the state level. It is also important to consider the effect on education attainment. Connolly (2005) demonstrated how the probability a minimum wage worker has less than a high school degree increases in states where the minimum wage increases.<sup>44</sup> This could lead to less educational attainment and more teen unemployment following a minimum wage increase.

### *3.2 Income Effects*

There is evidence that raising the minimum wage would provide a modest stimulus to the entire economy, as increased wages lead to increased consumer spending.<sup>45</sup> This income boost would likely exceed the potential income impact of a net decline in employment, leading to a net increase in the total income of low wage workers. Research on the income effects of the minimum wage suggests a statistically significant increase in the average weekly earnings of low wage workers. The Congressional Budget Office (CBO) estimates that a minimum wage increase to \$10.10 per hour would raise the net aggregate income of families below the poverty line by \$5 billion per year.<sup>46</sup> Furthermore, the CBO predicts increases in income for families with incomes up to six times the poverty level,<sup>47</sup> or \$144,600 in annual income.<sup>48</sup> Since nearly half the American population lives within these income brackets,<sup>49</sup> the CBO's analysis suggests that the impact of increasing the minimum wage would reach significantly more workers than just the 4.3 percent of laborers earning the





minimum wage or less.<sup>50</sup> Raising the minimum wage to \$9.00 per hour, the other option the CBO considers, would have smaller, positive impacts on the net incomes of families earning up to six times the poverty line.<sup>51</sup>

A study by the Fiscal Policy Institute (FPI) augments the CBO's findings on the impact of the minimum wage while focusing on small businesses (the employers of 40 percent of the American workforce).<sup>52</sup> The report compares states with minimum wages above the federal level to states that had no minimum wage or one tied to the federal minimum between 1998 and 2003. The institute finds that states with higher minimum wages witnessed a greater increase in both average annual payroll and average payroll per worker than states with lower minimum wages, indicating that an increase in the minimum wage spurs wage growth.<sup>53</sup> This trend holds especially true when considering the restaurant and bar industry, a sector of the economy that relies heavily on minimum and sub-minimum wage workers.<sup>54</sup> A 2012 study by Addison, Blackburn, and Cotti suggests an association between higher minimum wages and higher weekly earnings for workers in the restaurant and bar industry.<sup>55</sup>

The increase in income for low wage workers is likely to largely be reincorporated into the consumer economy. Low wage workers are the most likely income bracket to immediately spend additional earnings on previously unaffordable basic needs and services.<sup>56</sup> Additionally, according to research by Allegretto, Dube, and Reich (2011), a higher minimum wage could help low wage workers cover the costs of finding and keeping a job.<sup>57</sup> These costs include transportation, childcare, and uniforms—expenditures that quickly reintroduce additional income into the economy.<sup>58</sup> These two studies suggest that increasing the minimum wage stimulates demand for goods and services, benefiting the broader economy.

Owens (2008) analyzed the potential impacts of the 2007 minimum wage increase in New Hampshire, predicting similar effects for the Granite State. Although she estimated that reductions in employment would cost workers 4.6 million dollars annually, Owens predicted the minimum wage increase would still raise workers' net yearly income by 17.4 million dollars.<sup>59</sup> Owens's report suggests that New Hampshire aligns with national trends regarding the impact of increasing the minimum wage on income, bolstering projections that low wage workers of the Granite State would see an increase in their net income if the minimum wage were increased.

### *3.3 Average Hours Impact*

Recent literature on the minimum wage often focuses on the overall employment and earnings effects. However, it is important to further consider alternative measures where profit-maximizing firms can reduce their utilization of labor. Employers may change average hours to adjust to an increase in the minimum wage.

Studies with national data suggest job losses due to a minimum wage increase would not negate the net increase in the incomes of minimum-wage workers.<sup>60</sup> Furthermore, workers with reduced hours would still earn more per-week than before the minimum wage increase, as higher wages would overpower reductions in hours.<sup>61</sup>



Unfortunately, the economic literature for state-based data remains sparse and the consensus is still unclear. Zavodny (2000) found that minimum wage increases have an insignificant effect on average hours of work.<sup>62</sup> Using state level data, Zavodny examined how higher minimum wages did not impact average hours among all teens. Unlike many studies, the analysis included teens who were laid off, and even though their hours likely decreased to zero, the overall impact for all teens was non-negative.<sup>63</sup> However, Couch & Wittenburg (2001) used Current Population Survey data to examine monthly state observations of average hours worked. Also examining teenagers, they found a significant elasticity of -0.48 for minimum wage increases in regards to a decrease in hours.<sup>64</sup> This can be interpreted as a 10 percent increase in the minimum wage would be associated with a 4.8 percent decline in hours. Both studies used the same data; however, they had different timeframes and wage equations. In the United States, including New Hampshire, the impact of minimum wage increases on average hours worked is still up for further interpretation.

### *3.4 Poverty Effects*

The national literature suggests that an increase in the minimum wage would raise a significant number of families out of poverty. The White House estimates that a \$10.10 minimum wage would bring two million people above the poverty line,<sup>65</sup> and the CBO predicts such an increase would move 900,000 workers above the poverty threshold.<sup>66</sup> Dube's 2014 analysis corroborates the CBO and White House's estimates of the minimum wage's positive impact on decreasing poverty. Dube (2014) suggests that increasing the minimum wage by 10 percent would prompt a 1.2 to 3.7 percent decrease in national poverty, with a best estimate of a 2.4 percent decrease.<sup>67</sup> According to this projection, the national nonelderly poverty rate would drop from 15.8 percent to 15.0 percent, raising 2.2 million Americans out of poverty.<sup>68</sup> New Hampshire has a relatively low poverty rate compared to the nation as a whole (10 percent in the Granite State versus 15.9 percent nationally).<sup>69</sup>

### *3.5 Redistributive Effects*

Net income changes become more pronounced when the impact of a minimum wage increase is broken down by income brackets. The CBO's analysis of raising the minimum wage to \$10.10 predicts an overall net income increase of \$2 billion.<sup>70</sup> This change comes in the form of a \$19 billion increase in the net incomes of workers earning up to six times the poverty line (\$144,600)<sup>71</sup> and a \$17 billion decrease in income for families making six times the poverty line or more.<sup>72</sup> The impact of raising the minimum wage to \$9.00 (the other option the CBO report considers) has similar, albeit smaller effects. In both of the CBO's models, the amount of income redistributed constitutes a significantly larger percentage of low wage workers' income than high earners' income. According to Sherman's 2014 analysis of CBO data, raising the minimum wage to \$10.10 would increase the net income of families at or below the poverty line by 2.8 percent while decreasing the net income of families six or more times above the poverty line by 0.4 percent.<sup>73</sup>



### *3.6 Inflation Effects*

There is also a debate on the inflationary pressures of a minimum wage increase. With an increase in wages and incomes, employees' marginal spending would increase. Furthermore, employers may see prices as an adjustment channel for an increase in wages. In Card and Krueger's analysis, after-tax meal prices rose 3.2 percent faster in New Jersey than in Pennsylvania after New Jersey increased its minimum wage.<sup>74</sup> Aaronson, French, and MacDonald (2008) modeled a 10 percent minimum wage increase that demonstrated fast food prices rising by around 0.7 percent.<sup>75</sup> Lemos (2008) exhibited a more significant effect on prices—a 10 percent increase in the U.S. minimum wage raises food prices just under four percent and overall prices by no more than 0.4 percent.<sup>76</sup> This is problematic since many economists consider tying state minimum wage increases to regional price indices.<sup>77</sup> However, an endogenous model might be needed in order to exclude minimum wage inflationary pressures from regional price indices.

## **4. NEW HAMPSHIRE AREA ANALYSIS**

Our statistical analysis utilizes data and methods from Dube et al. (2010) to draw specific inferences about minimum wage increases in the New Hampshire area. After replicating the Dube et al. results for all geographic areas, we show that minimum wage increases in the New Hampshire area had no significant influence on job loss from 1990 to 2006.

In 2010, Dube, Lester, and Reich examined effects of state minimum wage policies, focusing on adjacent counties on state borders from 1990 to 2006. Unlike economic research using all U.S. counties, the authors compared contiguous counties on different sides of a state border. The counties have different minimum wage policies but experience similar economic and labor market trends. Dube et al. primarily analyzed employment and earnings in the restaurant industry, since it employs a large share of minimum wage workers and can be effectively compared across borders. The analysis revealed no evidence of job losses resulting from minimum wage increases for the sector. Specifically, a minimum wage increase had a positive employment elasticity of 0.016—not only very small in magnitude but also in the opposite direction suggested by historical minimum wage studies. This result was similar to Card and Krueger's 1995 conclusion.

We acquired the contiguous county data by reaching out to Arindrajit Dube, Associate Professor of Economics at the University of Massachusetts Amherst. Professor Dube provided us with the complete data set and STATA code used for the 2010 paper. Specifically, the data is from the Quarterly Census of Employment and Wages (QCEW), covering 98 percent of all wage-earning workers. They describe restaurant industry workers in the 288 contiguous county pairs with minimum wage changes between 1990 and 2006. With over 16 years of quarterly data, the analysis accounts for longer-term effects of statewide minimum wage increases. This rules out the possibility of lagged effects of minimum wage increases, which would take place over multiple years as employers adjusted to higher wages.



We first sought to replicate the Dube et al. findings for all contiguous counties across the U.S. We were successful in replicating the findings by regressing a variable for minimum wage values on earnings and employment. Minimum wage, earnings, and employment values are all logged. Similar to the Dube et al. approach, we control for the population of counties and include county and period fixed effects to account for any differences in specific cases not observed in the data. Consistent with Dube et al, we find that an increase in the minimum wage had a significant effect on earnings (elasticity of -0.232) but no statistically significant effect on employment.

Having replicated prior findings, we analyze contiguous county pairs that straddle the state boundaries of New Hampshire, Maine, Vermont, and Massachusetts. Although we originally planned to only study New Hampshire counties, the limited number of observations made us consider using New England states. The data include 2,772 observations of county-pairs over the 16-year period. Using the same controls and specification as above, the results indicate that previous minimum wage rises in New England have not had a significant impact on either employment or earnings. We found an elasticity of 0.018 for minimum wage increases on earnings, which was not significant ( $p = 0.830$ ). We also saw no significant effect of increases in minimum wage on employment, which had an insignificant elasticity of 0.070 ( $p = 0.613$ ). The results are summarized in Table 1. Unlike Dube et al (2010), our results do not indicate a significant positive effect on earnings. Instead, we find a statistically insignificant effect. This may be the result of a smaller sample size or rigidity in the New England labor market following minimum wage increases.

Our findings of no statistically significant effect of minimum wage increases could indicate either that there is no causal effect or that the sample size is insufficient to detect the effect. However, the employment results are consistent with prior studies. Previous contiguous county studies (e.g., Card and Krueger 1995) utilized an even smaller sample size. Overall, the analysis suggests that large earnings and employment elasticities for minimum wage increases in New Hampshire are unlikely. The analysis of New England contiguous counties corroborates Dube et al. (2010) finding that increases in the minimum wage at the state level are not associated with either significant increases or decreases in private sector employment.

**Table 1. Effect of Minimum Wage on logged Earnings and Employment: New England States (NH, VT, ME, MA)**

<b>Effect of Minimum Wage Increase On</b>	<b>Elasticity</b>	<b>Standard Error</b>	<b>P Value</b>
<b>Earnings</b>	0.018	(0.081)	0.830
<b>Employment</b>	0.070	(0.135)	0.613

Note: Authors' analysis of Dube et. al. 2010 data. Estimates are not statistically significant at conventional levels.



## **5. STAKEHOLDER PERSPECTIVES**

To gain perspective on the views of employers of minimum wage workers, we interviewed representatives from New Hampshire association groups and New Hampshire union organizations. We began by reaching out to various New Hampshire trade associations that were likely to employ minimum wage workers in New Hampshire. The business and trade associations that we spoke to were unanimously opposed to a minimum wage increase. Nancy Kyle, the President and CEO of the New Hampshire Retail Association, expressed concerns over the small profit margins in the retail industry and the fear that an increase in the minimum wage could jeopardize the health of New Hampshire retailers. Furthermore, she estimated that over 90 percent of the 900 businesses represented by the association would oppose any minimum wage rise. Mike Somers, the President and CEO of the NH Lodging and Restaurant Association (NHLRA), also outlined his organization's opposition to a minimum wage increase, whereby businesses would be forced to cut their profit expectations and redistribute costs.

David Juvet, the Senior Vice President of the Business and Industry Association (BIA) of New Hampshire, also outlined the BIA's stance on minimum wage increases. He outlined the practical and philosophical opposition to a minimum wage increase. Philosophically, he questioned how a government could place a prudent value on a job over employers who have the data and market research to focus on the marginal value of each laborer. Practically, he opposes a minimum wage increase, since it would put New Hampshire employers in an uncompetitive position compared to the rest of the nation. The BIA's 400-member New Hampshire businesses rely on consumers from out-of-state and across the globe to purchase their product. An increase in the New Hampshire minimum wage could therefore make New Hampshire businesses uncompetitive and incentivize businesses to move out of the state. However, Mr. Juvet explained that the BIA would not explicitly oppose an increase in the federal minimum wage that would apply to all states in the nation.

According to all three New Hampshire trade associations, minimum wage workers were generally limited to trainees and employees with disabilities. The BIA, NHLRA, and the NH Retail Association represent over one thousand New Hampshire businesses, and all three associations believe that the tightness in the labor market has led to very few minimum wage jobs. Mr. Somers pointed out that tipped minimum wage workers often make around \$15 per hour. Therefore, a rise in the minimum wage would give a raise to the tipped employees, which could come at the expense of the laborers working behind the scenes with fewer hours, fewer benefits, or fewer job opportunities. Even though all three organizations were opposed to a wage increase, they recognized that very few employees were currently paid at the minimum wage. Nevertheless, Mr. Juvet mentioned how an increase in the minimum wage would produce a ripple effect for all wage earners. He reasoned that even if minimum wage workers (and those workers in between the current and new minimum wage) received a raise, all employees, especially those who have more experience, education, or tenure would demand a comparable pay increase.



We also sought the opinion of labor groups on a potential increase in the minimum wage. Accordingly, we spoke to Judy Stadtman, the Campaign Coordinator and Field Director of the New Hampshire AFL-CIO, a group that represents unionized workers in the Granite State. Although most of the organization's members earn above the minimum wage, Ms. Stadtman noted that the AFL-CIO supports all workers, not just those in the unions the organization represents. Accordingly, Ms. Stadtman commented that the NH AFL-CIO supports raising the minimum wage because an increase would align with the organization's mission of advocating for workers. She said that \$7.25 is too low for people to live on in New Hampshire and that the AFL-CIO would like to see the minimum wage raised above \$10 in the Granite State. She explained that the organization believes raising the minimum wage would help keep New Hampshire families out of poverty.

In addition to groups that represent businesses and the workers they employ, we sought the opinion of an expert on New Hampshire economic policy. We spoke with Jeff McLynch, the Executive Director of the New Hampshire Fiscal Policy Institute, an independent nonprofit organization that seeks to identify and advance policies that improves the economic standing of individuals in the Granite State.<sup>78</sup> Mr. McLynch echoed Ms. Stadman's comment that people earning the minimum wage in the Granite State cannot make ends meet. He referenced the Massachusetts Institute of Technology living wage calculator, noting that it estimates people living in Concord needs about \$19,000 per year to sustain themselves, over \$3,000 more than those making the minimum wage earn annually in New Hampshire. Additionally, Mr. McLynch commented that the New Hampshire minimum wage is below that of the other New England states. In particular, he noted that Vermont, Massachusetts and Connecticut have all passed minimum wage laws that raise the rate well above the federal level. Accordingly, he said that increasing the New Hampshire minimum wage to \$9 or \$10 would not make the state an outlier and would not dampen businesses' competitiveness. Mr. McLynch further suggested that a minimum wage increase should be part of a broader strategy to strengthen the fiscal situation of residents of the Granite State. He said such a plan should includes taking further advantage of federal funding to expand Medicaid, making childcare more affordable and creating a New Hampshire version of the Earned Income Tax Credit to supplement the wages of working families and individuals.

With a variety of business, employee, and policy analyst perspectives, the minimum wage is highly contested debate in New Hampshire. While business groups and trade associations unanimously oppose minimum wage increases due to cuts in profit margins and negative effects on the state of business and employment, unions and social interest groups often support a rise in the minimum wage, citing the need to be able to achieve a "livable" minimum wage. Given this disparity, we find that until further research can corroborate our findings, an easy compromise amongst these interest groups might be difficult.



## **6. PUBLIC OPINION**

This section summarizes available information on public opinion on the minimum wage. It addresses both New Hampshire and national opinions. The survey information suggests broad public support for a minimum wage increase.

### *6.1 New Hampshire Polling*

A January 2014 poll conducted by Public Policy Polling found that 60 percent of New Hampshire residents would support an increase in the minimum wage to \$10 an hour. Specifically, the poll found that younger New Hampshire residents were more supportive than the general population, with 64 percent of respondents between the ages of 18-29 supporting the increase.<sup>79</sup>

According to a February 2014 WMUR/University of New Hampshire Granite State poll, 76 percent of New Hampshire residents support (59 percent “strongly” and 17 percent “somewhat”) a minimum wage increase from \$7.25 to \$8.25 in 2015 and then to \$9.00 in 2016. Thirteen percent oppose it (8 percent “strongly” and 5 percent “somewhat”) and 11 percent are either neutral or don’t know enough to say. Although 91 percent of Democrats supported the vote, 70 percent of Independents and 64 percent of Republicans supported it as well, suggesting bipartisan citizen consensus in favor of raising the minimum wage.<sup>80</sup>

### *6.2 National Polling*

Since there is limited polling on New Hampshire about the minimum wage, we also report national trends. The national trends are very similar to New Hampshire, depicting widespread citizen support. According to a 2014 National Pew Research Center poll, 73 percent of Americans favor raising the federal minimum wage from \$7.25 an hour to \$10.10 an hour.<sup>81</sup> A 2013 nationwide Gallup poll found that 76 percent of Americans say they would vote to raise the minimum wage to \$9 an hour in a hypothetical national referendum. In addition, the same poll found that 69 percent of respondents would support an increase of the minimum wage to \$9 an hour, with the additional stipulation that automatic increases are connected to the rate of national inflation.<sup>82</sup> At the start of 2015, 21 states raised the state-level minimum wage above the federal level.<sup>83</sup> Currently, 29 states in the union have a state wide minimum wage above the federal level.<sup>84</sup> Widespread citizen support across the nation supported statewide legislation and ballot initiatives to raise the minimum wage, including the New England states of Massachusetts, Vermont, Connecticut, and Rhode Island.<sup>85</sup>

## **7. CONCLUSION**

Beginning with a comprehensive literature review, meta-analysis studies and contiguous county strategies for measuring the impact of the minimum wage demonstrate the limited



effects of raising the minimum wage on levels of employment. Although some evidence points to an increase in prices and higher teen unemployment, positive effects include higher net income, decrease in poverty, and an increase in consumption among low wage workers in the economy. With a lack of New England or New Hampshire specific studies, we completed our own contiguous county analysis of the New Hampshire region to test the effect of minimum wages on income and employment. Our results indicate that increases in the minimum wage at the state level in New England are not associated with either significant increases or decreases in private sector employment. The economic impact of a minimum wage increase in New Hampshire is likely small and insignificant. We further assessed New Hampshire stakeholder perspectives on minimum wage increases through interviews with representatives of business and trade organizations as well as unions and policy institutes. The report detailed specifics regarding why trade organizations opposed minimum wage increases and the reasoning behind labor groups' support. Furthermore, a meta-analysis of public opinion in the nation and Granite State favor a minimum wage increase. In considering an increase in the minimum wage, it is important to assess the opinions of the workers and employers in the context of economic literature and analysis in order to understand the current debate.



## APPENDIX A. ECONOMIC THEORETICAL MODELS

The minimum wage functions as a price floor in the labor market. It sets a minimum hourly rate for full-time workers above the equilibrium price for labor. While basic economic models suggest the imposition of a minimum wage will lead to a surplus of labor, secondary effects of an increase may offset some if not all of the job losses. For low-income workers, a minimum wage increase would boost salaries, leading to increased consumer spending, economic output, and further jobs as a result. However, could this also create inflationary pressures and outweigh the economic stimulus of a minimum wage.

The impacts of minimum wage is measured in terms of elasticity. Elasticity is a measure of responsiveness, whereby an elasticity of  $-0.1$  would indicate that a 10 percent increase in wages would lead to a 1 percent reduction in employment.

**Figure 3: Elasticity of Labor Demand Equation<sup>86</sup>**

$$\text{elasticity of labor demand} = \frac{\% \text{ change in employment}}{\% \text{ change in wage}}$$

Conventional economic theory for the minimum wage seems unambiguous. In a competitive labor market, a rise in the minimum wage causes perfectly competitive employers to cut employment.<sup>87</sup> This competitive model would see employers adjust to rising labor costs through a decrease in hiring, hours, or fringe benefits.

**Figure 4: Graph of a Perfectly Competitive Labor Market<sup>88</sup>**

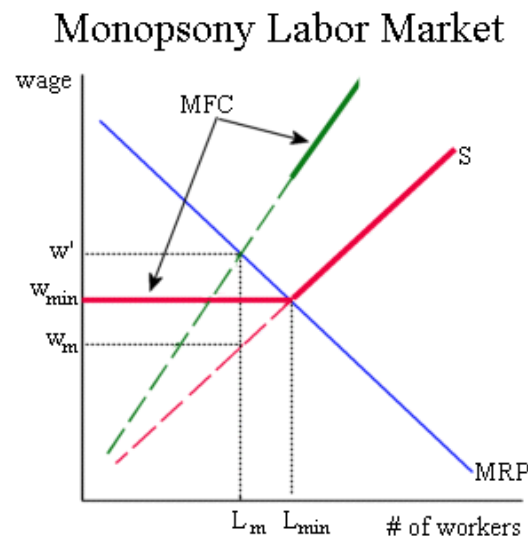


However, other economists have suggested an institutional or efficiency wage model, where workers may view higher wages as an incentive to work harder.<sup>89</sup> In this institutional model, a higher minimum wage would lead employees to see their work as more valuable, and therefore become more productive. Furthermore, it could incentivize employers to focus on



productivity gains, which would outweigh the increase in labor costs.<sup>90</sup> The institutional model would predict an increase in economic output without significant job loss due to productivity gains and incentives for employees to work harder. Lastly, the dynamic monopsony model of the labor market recognizes that employers face real costs associated with hiring and training new workers. Therefore, employers habitually operate with unfilled vacancies, since the going wage faces significant recruitment costs. However, if the minimum wage increases, employers could become incentivized to fill these vacancies without having to raise the wage for their entire workforce.

Figure 5: Graph of Monopsonistic Labor Market Demand<sup>91</sup>





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