

# Exhibit A

Excerpt From:

## A PROPOSED MINIMUM WAGE FOR PRIVATE HEALTHCARE FACILITIES

*In the City of Long Beach*

An Economic Study



INSTITUTE FOR APPLIED ECONOMICS

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### 3. THE MINIMUM WAGE: THEORY AND EVIDENCE

Proponents of the minimum wage have justified increases on moral, social, and economic grounds.<sup>8</sup> Overall, the main objective of such increases is to raise incomes and improve living standards of low-wage workers while reducing inequality. Minimum wage opponents claim that minimum wages can be counterproductive and decrease rather than improve the welfare of many low-income workers, while also leading to economic and social inefficiencies. In this section economic theory and empirical evidence both supporting and opposing minimum wage implementation and increases will be reviewed.

#### Economic Theory Supporting Minimum Wage Increases

**Point of View:** Minimum wage increases have theoretically been shown to result in little to no economic disruption while also leading to a number of potential economic benefits.

This section will provide a brief overview which is split in two sections, theory pertaining to businesses and theory pertaining to workers.

#### Businesses

Employment reductions due to increased labor costs are frequently cited by critics of minimum wage increases, however, proponents state that labor markets do not operate in the same way as markets for products and other services.<sup>9</sup> Instead, they argue that, unlike other markets where price increases do not usually change the quality of the product, increased wages above the market equilibrium may lead to better quality labor due to factors such as improved morale and decreased turnover in labor markets. This increase in labor quality can serve to offset the possible negative effect that an increase in wages may have on employment as employers would not feel as strong a need to reduce the number of workers or hours worked.<sup>10</sup> Furthermore, employment decreases can be avoided if businesses pass on higher labor costs to their customers by increasing prices for goods and services, decrease wages for higher income workers to keep labor costs constant, or reduce profits to maintain the current price level.<sup>11</sup>

In models analyzing the minimum wage in terms of efficient worker search and job matching, the minimum wage has multiple, opposing effects on job creation and can lead to more jobs.<sup>12</sup> Although in these models the minimum wage serves to decrease demand for labor by raising the cost of hiring a new worker, the higher minimum wage also makes employment attractive relative to unemployment for prospective workers, thus leading to increased job search effort by unemployed workers. By augmenting the pool of workers looking for a job as well as the intensity of their job search, the minimum wage increases the quality of matches between employers and employees. If prospective employees' additional search effort significantly improves the employee-employer match quality, employment may not be

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<sup>8</sup> Sodsriwiboon, P., and Srour, G. March 2019. "Does a Minimum Wage Help Workers?" International Monetary Fund. <https://www.imf.org/Publications/fandd/issues/2019/03/does-a-minimum-wage-help-workers-basics>

<sup>9</sup> Card, D., & Krueger, A. B. 1993. "Minimum Wages and Employment: A Case Study of The Fast Food Industry in New Jersey and Pennsylvania." NBER. <https://www.nber.org/papers/w4509>

<sup>10</sup> Leigh, J.P. and Du, J. October 4, 2018. "Effects Of Minimum Wages on Population Health." Health Affairs. <https://www.healthaffairs.org/doi/10.1377/hpb20180622.107025/full/>

<sup>11</sup> Leigh, J. P. 2019. "Arguments For and Against The \$15 Minimum Wage For Health Care Workers." American journal of public health, 109(2), 206-207.

<sup>12</sup> Cahuc, P. and Zylberberg, A. 2004. *Labor Economics*. Cambridge: The MIT Press.

negatively affected and may even increase due to a minimum wage increase. This increased match quality due to the higher minimum wage could lead to less job turnover among healthcare workers, especially among the lesser paid Patient Care Technicians and Certified Nursing Assistants who leave their positions at higher rates than any other occupations in hospital settings. This turnover is costly for businesses and likely impacts the quality of care being provided. As a result, covered healthcare facilities and patients stand to benefit from reduced turnover.

### Workers

Supporters of minimum wage increases often argue that they increase the wages of employees with the least bargaining power, those who would be getting paid more if markets were fully competitive.<sup>13</sup> In a market characterized by significant employer market power, a minimum wage increase above the equilibrium could theoretically increase employment and raise wages.

Importantly, the current proposed minimum wage increase was in part brought about because proponents argue that the healthcare industry is not experiencing full employment. Proponents argue that this is due to the fact that there is not a sufficient supply in the labor market of the positions that are short-staffed. These positions are likely those receiving the lowest wages, which affects the quantity supplied of workers to fill them. Increasing wages is a straightforward way to stimulate supply among workers for these positions, thereby addressing the understaffing crisis.

Finally, the minimum wage may serve as a tool to decrease inequality by closing wage gaps in the healthcare industry. With lower wage jobs being highly represented by minority workers, this could potentially reduce racial wage gaps in the private healthcare sector.

### Economic Theory Opposing Minimum Wage Increases

**Point of View:** A minimum wage increase has also theoretically been found to result in a number of negative economic consequences.

This section will provide a brief overview of those consequences, organized in two subsections.

### Businesses

Adjustments in response to the increase in the minimum wage may include price increases for consumers or cost saving adjustments by businesses, such as substituting lower-skilled workers with higher-skilled employees, eliminating jobs or reducing hours, and increasing automation over the long-run. Potential reductions in employment resulting from the increase in the minimum wage may not take place automatically and may take months or even years to materialize, as employers substitute labor-saving equipment and make other adjustments in response to the increased minimum wage. Some businesses may adjust to the new minimum wage by leaving a jurisdiction altogether.

Full worker compensation contains monetary and nonmonetary forms of compensation. Some employers may adjust non-monetary forms of compensation to help offset the increase in the minimum wage. These offsetting actions may include a reduction in health care benefits, reduced childcare benefits, reduced vacation time, and elimination of workplace features attractive to employees. An increase in the minimum wage may do little to decrease employment but could instead reduce fringe benefits that workers value

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<sup>13</sup> Bernstein, J., and Schmitt, J. June 2000. "The Impact of the Minimum Wage." Economic Policy Institute. [https://www.epi.org/publication/briefingpapers\\_min\\_wage\\_bp/](https://www.epi.org/publication/briefingpapers_min_wage_bp/)

more highly than the increase in wages.<sup>14</sup> As a result, a minimum wage increase may make workers who receive higher wages worse off. Adjustments in terms of nonmonetary forms of compensation are prohibited by the ordinance after the minimum wage increase goes into effect. While this prohibition will serve to mitigate long-term employer reactions made in terms of nonmonetary compensation, short run adjustments may take place before the minimum wage goes into effect. In addition, some types of nonmonetary compensation valued by employees are not easily measured and may be reduced as a result of imperfect measurement and enforcement.

An increase in the minimum wage may exert negative effects on businesses as increased labor costs decrease profits, with this phenomenon particularly impacting small businesses and businesses that are just staying afloat. In response to minimum wage increases, some businesses may react by eliminating jobs, replacing employees with labor-saving technology, or leaving the city altogether. Minimum wage increases are particularly impactful for businesses in industries that rely on low-skilled workers with little education, such as restaurants, bars, retail stores, fitness centers, sports stadiums, and concert venues. As an essential part of the economy, anything that negatively impacts small businesses has the potential to reduce a jurisdiction's economic performance.

### Workers

Economists have long discussed the potential negative employment effects of minimum wages on low-skilled workers – the very group that minimum wage laws intend to help. All else equal, just as with any other good or service, when wages are raised less labor will be demanded by employers. While some employees may benefit from the higher minimum wage others may see a reduction in work hours or may lose their jobs altogether. Those workers whose production is valued most below the minimum wage may be most negatively affected by minimum wage laws, with many of these individuals not having graduated high school and coming from low-income backgrounds.

Minimum wage laws prohibit affected businesses from paying less than a given wage. If that given wage is higher than the market wage, it stimulates the supply of labor, attracting workers. Meanwhile, all else equal, the increased wage would cause employers to demand less labor. When the labor market finds its new equilibrium with the minimum wage, some low-skilled workers may be priced out by the entry of new higher skill workers, reduction in demand from employers, or introduction of labor-saving capital machinery.

Another potential negative consequence of a higher minimum wage is reduced on-the-job training and experience for some low-skilled workers. Low-skilled workers who are priced out of the labor market may be prevented from acquiring on-the-job training and experience that will allow them to become more productive and earn higher wages. All else equal, this will reduce the number of workers with the level of training and job skills that would have been available otherwise, making it more difficult for businesses to fill certain higher-skilled positions.

### Concluding Thoughts: Economic Theory and Minimum Wage Increases

Economic theory generally supports the conclusion that minimum wage increases are associated with a variety of negative economic impacts. These negative results are more likely to take place under certain

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<sup>14</sup> Lee, D. R. 2004. "The Minimum Wage Can Harm Workers by Reducing Unemployment." *Journal of Labor Research*, 25(4), 657-666.

conditions: holding other factors constant, the larger the increase in the minimum wage over the competitive market wage, the greater the potential negative economic impact. Furthermore, all else equal, the longer the minimum wage is in place, the more firms and employees will make adjustments in response. As a result, the theoretical long run negative impacts of a significant real inflation-adjusted minimum wage increase would be greater than short run impacts.

Competitive markets with little to no employer market power will be more likely to exhibit negative effects as a result of a significant increase in a minimum wage. In a theoretical labor market where an employer holds significant labor market power, worker mobility is limited, meaning that individual employers have significant discretion when it comes to setting wages. In this theoretical case, the effect of increasing the minimum wage is unclear. In most markets, employers must compete for labor which strips them of market power. Furthermore, the market power case is generally not applicable to labor markets for unskilled labor that are subject to a minimum wage.<sup>15</sup>

There are other scenarios where the minimum wage will result in little to no negative economic effects. Short run impacts will likely be muted as economic actors figure out how to best adjust to the changing economic environment. Furthermore, small increases in the minimum wage will be limited in their ability to negatively impact labor and product markets as well as business profitability and survival prospects. Moreover, if employers in an industry want to hire approximately the same number of workers despite an increase in wages, meaning that their demand for labor is not very responsive to changes in the price of labor, a minimum wage increase may not significantly reduce employment. This situation is more likely to hold in the short term than in the long term and more likely to characterize certain industries, including healthcare. Another long-term effect is dependent upon whether the minimum wage has an inflation-adjustment mechanism. The presence of such an effect makes it so that the minimum wage is not eroded by inflation over time, resulting in a permanent increase in real wages that is more significant.

Industries heavily reliant on labor subject to the minimum wage may experience a loss in establishments and employment with potential negative impacts on state and local tax revenues. This is particularly true for small businesses and those on the margin of survival, who may relocate to avoid the minimum wage or close down altogether. **Overall, the degree of a minimum wage increase matters more than the mere fact that a minimum wage increase will take place.** This conclusion is supported by a number of professional economists. A 2021 Chicago Booth Initiative on Global Markets Poll asked a panel of expert economists whether they agreed with the statement that “an increase in the federal minimum wage of \$15 per hour would lower employment for low-wage workers in many states.” The current federal minimum wage is \$7.25 per hour. Only 14 percent of respondents disagreed with the statement with 45 percent agreeing.<sup>16</sup> A quote provided by an economic expert that responded to the poll indicates that the degree of increase is an important determinant of the minimum wage increase’s potential effect:

“Research has shown modest min. wage increases do not increase unemployment. But going from \$6 to \$15 in the current situation is not modest.”

-Pinelopi Goldberg, Yale University

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<sup>15</sup> Staiger, D., Spetz, J.E. and Phibbs, C.S. July 1999. “Is There Monopsony in the Labor Market? Evidence from a Natural Experiment.” NBER Working Paper No. w7258. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=202434](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=202434)

<sup>16</sup> IGM Economic Experts Panel. February 2, 2021. “The U.S. Minimum Wage.” <https://www.igmchicago.org/surveys/the-us-minimum-wage/>



A small minimum wage increase will likely result in only slight or even zero negative employment outcomes. A theoretical explanation for the slight negative employment effects resulting from moderate minimum wage increases is that at modest levels, minimum wage increases make up only a small share of an employer's total costs.<sup>17</sup> As a result, businesses can absorb the increase in a variety of ways that do not significantly distort employment outcomes.

However, minimum wage increases that are too high may result in significant employment losses, increasing income inequality as low-income workers lose jobs.<sup>18</sup> Low-skilled workers subject to the minimum wage may suffer job losses, benefit reductions, and cuts in hours worked. Additionally, one invisible potential impact of a minimum wage increase is reduced hiring of low-skilled workers compared to what otherwise would have happened without the minimum wage increase.<sup>19</sup> **These jobs that were never created should be considered a cost of a minimum wage increase although they are never seen.**

**Workers who keep their jobs, do not see their hours worked significantly impacted, do not experience an offsetting decrease in other nonmonetary forms of compensation, and whose employer does not relocate or close will benefit from the minimum wage increase.** Additionally, new workers attracted to the field would reap these benefits, so long as they are able to get a job. With this increase in income, there may be additional benefits such as improved worker health outcomes and increased spending within the economy.<sup>20</sup> Some argue that a growing and prosperous healthcare sector and economy can absorb a minimum wage increase with few disruptions.<sup>21</sup> Disemployment effects would likely be less for industries like healthcare where consumers do not alter demand significantly as a result of changes in prices.<sup>22</sup>

Discussions surrounding the minimum wage often center on the impact on workers, in particular jobs and income figures. **The overall effect of the minimum wage on workers depends on a combination of the policy's effect on employment numbers, hours worked, and labor income.**<sup>23</sup>

Theoretically, when it comes to employment numbers and labor income, a minimum wage could result in three outcomes.

1. Total employment and total labor income decrease. In this situation, a minimum wage increase results in large enough disemployment of affected workers that the higher wages to workers that kept their jobs is less than the employment losses resulting from layoffs, business relocation, and reduced hours.
2. Total employment and total labor income increase. In this case, other changes beyond a mandated increase to the minimum wage may have taken place in the economy. A thorough

<sup>17</sup> Sodsriwiboon, P., and Srour, G. March 2019. "Does a Minimum Wage Help Workers?" International Monetary Fund. <https://www.imf.org/Publications/fandd/issues/2019/03/does-a-minimum-wage-help-workers-basics>

<sup>18</sup> Sodsriwiboon, P., and Srour, G. March 2019. "Does a Minimum Wage Help Workers?" International Monetary Fund. <https://www.imf.org/Publications/fandd/issues/2019/03/does-a-minimum-wage-help-workers-basics>

<sup>19</sup> Boudreaux, D. December 9, 2014. "The Detectable and the Undetectable." Café Hayek. <https://cafehayeck.com/2014/12/the-detectable-and-the-undetectable.html>

<sup>20</sup> Leigh JP, Du J. October 4, 2018. "Health Policy Brief: Effects of Minimum Wages On Population Health." Health Affairs. Available at: <https://www.healthaffairs.org/doi/10.1377/hpb20180622.107025/full>.

<sup>21</sup> Himmelstein, K. E., & Venkataramani, A. S. 2019. "Economic Vulnerability Among US Female Health Care Workers: Potential Impact of A \$15-Per-Hour Minimum Wage." American Journal of Public Health, 109(2), 198-205.

<sup>22</sup> Leigh, J. P. 2019. "Arguments For and Against The \$15 Minimum Wage for Health Care Workers." American Journal of Public Health, 109(2), 206-207.

<sup>23</sup> Leigh, J.P. and Du, J. October 4, 2018. "Effects Of Minimum Wages on Population Health." Health Affairs. <https://www.healthaffairs.org/doi/10.1377/hpb20180622.107025/full/>

empirical study would control for other factors in order to isolate the effect of the minimum wage on employment. Total employment and total labor income may both increase due to a rise in the minimum wage in a labor market situation where an employer has significant market power.

3. Total employment decreases and total labor income increases. This is a scenario with a clear tradeoff. Workers subject to the minimum wage who have kept their jobs and have not had hours cut will experience an increase in income and standards of living. On the other hand, some workers have lost jobs or have had hours cut as a result of the minimum wage. In this scenario, there are both winners and losers in the labor market from the minimum wage increase.

**Which of these three scenarios will hold depends on a variety of factors which include market conditions, responses to the minimum wage increase by economic actors, and the specific details of the minimum wage and relevant sector.** A review of the empirical evidence looking at real-world implications of minimum wage increases will be conducted in the next section.

It is also essential to understand how minimum wage increases impact consumers, especially in a field like healthcare. Consumers may end up paying higher prices or receiving lower quality for a number of goods and services. Healthcare prices for patients, governments, and insurance companies may rise as a result of the minimum wage increase in the private healthcare sector, though the response would not be immediate due to the market mechanisms within healthcare. Also, if covered healthcare facilities demand less labor, so that the minimum wage increase does not in turn increase their labor costs, it would exacerbate staffing issues and may result in a decrease in the quality of care. These impacts could also potentially reduce access to healthcare for patients, specifically lower-income patients.

However, the wage increase could theoretically be financed with decreases in wages for higher income workers or profits of healthcare businesses so that prices would not increase.<sup>24</sup> Additionally, if staffing levels stay the same, then the quality of care for patients may improve, as the additional worker income bolsters the quality of labor. Furthermore, acknowledging the reported understaffing in some covered healthcare facilities, if the minimum wage was able to attract workers and the covered healthcare facility could weather the increased labor costs, then the increased number of workers should have a positive effect on quality of care.

## Empirical Evidence Supporting Minimum Wage Increases

Empirical evidence is mixed regarding the effect of minimum wage increases. However, this does not appear to impact the opinion of the general public, with polls showing that a majority of Americans support increases in minimum wages. In 2014, the Pew Research Center reported that 73 percent of polled Americans support increasing the federal minimum wage from \$7.25 to \$10.10.<sup>25</sup>

### Businesses

Proponents of increasing the minimum wage state that it would serve to increase worker productivity and decrease worker turnover.<sup>26</sup> Studies have found a potential positive impact on increasing the minimum

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<sup>24</sup> Leigh, J. P. 2019. "Arguments for and Against the \$15 Minimum Wage for Health Care Workers." *American Journal of Public Health*, 109(2), 206-207.

<sup>25</sup> Drake, B. March 4, 2014. "Polls Show Strong Support for Minimum Wage Hike." Pew Research Center. <https://www.pewresearch.org/fact-tank/2014/03/04/polls-show-strong-support-for-minimum-wage-hike/>

<sup>26</sup> Janet L. Yellen, "Efficiency Wage Models of Unemployment," *Information and Macroeconomics*, May 1984

wage on worker productivity due to improved morale and work ethic. In addition, increasing the minimum wage may reduce employee turnover, leading to reduced recruiting and training costs. Employee turnover can have a significant negative impact on the bottom line of a business. **One study estimates that the cost to employers of replacing a low-wage employee equals approximately 16 percent of the worker's yearly salary.** Research has found that higher minimum wages are associated with lower absenteeism rates thus increasing productivity. One study found “evidence that... turnover rates for teens and restaurant workers fall substantially following a minimum wage increase,” declining by approximately 2 percent for a 10 percent rise in the minimum wage.<sup>27</sup>

### Workers

Multiple academic studies find that modest minimum wage increases do not result in significant employment losses.<sup>28</sup> Studies suggest that in these cases, wages can grow and racial earnings gaps may close as a result of the minimum wage without significantly reducing opportunities for low-income workers.<sup>29</sup> One study finds that the overall number of low-wage jobs was relatively unchanged five years following a minimum wage increase.<sup>30</sup> This result held for the restaurant and retail sectors which employ high numbers of minimum wage workers. Furthermore, the study finds that the absence of employment loss was not explained by the substitution of higher skilled labor. However, the study did find evidence of job loss in sectors of the economy where goods and services are traded internationally, including manufacturing. This is largely due to the fact that consumers have more options to purchase competing internationally traded goods and services, however this is not the case in healthcare.<sup>31</sup>

A famous empirical study by David Card and Alan Krueger found that a 1992 increase in New Jersey's minimum wage may have been associated with an increase in fast-food industry employment.<sup>32</sup> The study surveyed 410 fast food restaurants just before New Jersey increased its minimum wage as well as 10 months after the increase while neighboring Pennsylvania did not increase its minimum wage. No statistically significant change in employment was found for New Jersey franchises. However, Pennsylvania franchise employment fell during this period. Thus, employment in the New Jersey franchises increased relative to employment in Pennsylvania fast food franchises. These results were interpreted by many as showing that an increase in the minimum wage does not necessarily negatively impact employment, which may actually increase.

Minimum wages are designed to target poverty. **One study found that assuming a 9.4 percent decrease in total workhours as a result of a \$15 national healthcare minimum wage, poverty rates for healthcare workers would be reduced by 27 percent.**<sup>33</sup> A higher minimum wage may also serve to reduce government welfare spending: a study by the Center for American Progress found that raising the federal

<sup>27</sup> Arindrajit Dube, T. William Lester, and Michael Reich. Oct. 2014. "Minimum Wage Shocks, Employment Flows and Labor Market Frictions," [irle.berkeley.edu](http://irle.berkeley.edu).

<sup>28</sup> Paul J. Wolfson and Dale Belman. 2016. "15 Years of Research on U.S. Employment and the Minimum Wage," Tuck School of Business Working Paper no. 2705499.

<sup>29</sup> Ellora Deroncourt and Claire Montialoux. February 2021. "Minimum Wages and Racial Inequality," *Quarterly Journal of Economics* 136, no. 1.

<sup>30</sup> Cengiz, D., Dube, A., Lindner, A., & Zipperer, B. 2019. "The Effect of Minimum Wages On Low-Wage Jobs." *The Quarterly Journal of Economics*, 134(3), 1405-1454.

<sup>31</sup> Harasztosi, P., & Lindner, A. 2019. "Who Pays for the Minimum Wage?" *American Economic Review*, 109(8), 2693-2727.

<sup>32</sup> Card, D., & Krueger, A. B. 1993. "Minimum Wages and Employment: A Case Study of The Fast Food Industry in New Jersey and Pennsylvania." NBER. <https://www.nber.org/papers/w4509>

<sup>33</sup> Himmelstein, K. E., & Venkataramani, A. S. 2019. "Economic Vulnerability Among US Female Health Care Workers: Potential Impact of A \$15-Per-Hour Minimum Wage." *American Journal of Public Health*, 109(2), 198-205.



minimum wage by 6 percent would decrease spending on the Supplemental Nutrition Assistance Program (SNAP, formerly food stamps) by 6 percent, which translated to \$4.6 billion.<sup>34</sup> In addition, the Economic Policy Institute found that increasing the minimum wage could result in millions of Americans no longer being dependent on government assistance programs and could save billions in government spending on income-support programs.<sup>35</sup>

Research has found that increasing the minimum wage could reduce crime. One study finds that “higher wages for low-income individuals reduce crime by providing viable and sustainable employment... raising the minimum wage to \$12 by 2020 would result in a 3 to 5 percent crime decrease (250,000 to 540,000 crimes) and a societal benefit of \$8 to \$17 billion dollars.”<sup>36</sup>

Supporters of a higher minimum wage often cite health benefits to low-income workers that would result. One study found that increasing California’s minimum wage could lead workers earning a higher wage to eat better, exercise more, be less likely to smoke, and experience fewer emotional and psychological problems.<sup>37</sup> Higher incomes from minimum wage increases may also serve to improve infant health, decrease child abuse, and reduce teenage pregnancy.<sup>38</sup>

Additionally, increasing the minimum wage could serve to increase the incomes of workers who make slightly above the minimum wage, also improving their morale and livelihood. A Brookings Institution study found that an increase in the federal minimum wage could result in higher wages not only for workers earning the minimum wage, but also for millions of workers making up to 150 percent of the federal minimum wage.<sup>39</sup>

## Empirical Evidence Opposing Minimum Wage Increases

While most of the general public believes that minimum wage laws serve to benefit low wage workers, many economists believe that minimum wage mandates may actually harm the very people they are supposed to help, in addition to harming businesses. **When surveyed on the minimum wage, professional economists differ significantly from the general public.** A survey of members of the American Economic Association (AEA) in 1992 found that 79 percent of respondents believed that a minimum wage serves to increase unemployment among young and low-skilled workers – the very population that the minimum wage seeks to help; however, a follow-up survey of AEA economists in 2000 showed that only 46 percent did at that point.<sup>40</sup> A 2019 poll of professional economists found that 74 percent opposed raising the federal minimum wage to \$15 per hour, with 84 percent of respondents stating that it would have a negative impact on low skilled youth employment levels. In addition, only six percent of the surveyed

<sup>34</sup> Rachel West and Michael Reich. March 2014. "The Effects of Minimum Wages on SNAP Enrollments and Expenditures," Center for American Progress.

<sup>35</sup> David Cooper. October 16, 2014. "Raising the Federal Minimum Wage to \$10.10 Would Save Safety Net Programs Billions and Help Ensure Businesses Are Doing Their Fair Share," Economic Policy Institute.

<sup>36</sup> Jose Fernandez, Thomas Holman, and John V. Pepper. July 5, 2013. "The Impact of Living Wage Ordinances on Urban Crime," [people.virginia.edu](http://people.virginia.edu).

<sup>37</sup> Rajiv Bhatia. May 2014. "Health Impacts of Raising California's Minimum Wage," Human Impact Partners.

<sup>38</sup> George L. Wehby, Dhaval M. Dave, and Robert Kaestner. 2020. "Effects of the Minimum Wage on Infant Health," *Journal of Policy Analysis and Management* 39, no. 2 (Spring 2020); Kerri M. Raissian and Lindsey Rose Bullinger, "Money Matters: Does the Minimum Wage Affect Child Maltreatment Rates?"

<sup>39</sup> Melissa S. Kearney and Benjamin H. Harris. Jan. 10, 2014 "The 'Ripple Effect' of a Minimum Wage Increase on American Workers," *The Hamilton Project*.

<sup>40</sup> *The Economist*. February 8, 2021. "What Harm Do Minimum Wages Do?" <https://www.economist.com/schools-brief/2020/08/15/what-harm-do-minimum-wages-do>

economists believe that the minimum wage increase is an efficient way to help individuals out of poverty.<sup>41</sup>

### Businesses

All else equal, when the price of labor changes, employers change the quantity of labor that they demand. When analyzing the employment impact of an increase in the minimum wage the question is by how much will employers alter their demand for labor. A major meta-analysis on labor demand responses as a result of wage changes provides a number of findings:

1. The change in quantity of labor demanded by employers as a result of a wage change is greater in the long run than in the short run. This is due to the increased time economic actors have to adjust to the new labor market situation.
2. The change in quantity demand for low-skilled labor is more responsive to wage changes than for higher skilled labor.
3. A conservative long run estimate of labor demand response resulting from a change in a market wage finds that raising wages by 4 percent permanently will decrease employment by 1 percent. This response underestimates the employment loss response specific to low skilled labor lending a conservative bias to the estimate. On the other hand, this response would be lower for an industry where consumer demand does not significantly response to the price of goods or services offered such as the healthcare industry.

**Minimum wage increases have been found to encourage business exit from a jurisdiction, especially the exit of financially weaker businesses.** A study of the impact of an increase in the minimum wage on firm exit in the restaurant industry finds that the impact depends on whether a restaurant was already close to the margin of exit.<sup>42</sup> In general, restaurants closer to the margin of exit were at significant risk of being driven out of business by increases in the minimum wage. In addition, these restaurants generally increased prices in response to increases in the minimum wage.

**Research has found that minimum wage increases may serve to deter new businesses from locating to an area,** particularly deterring businesses in industries that rely on workers with low levels of education.<sup>43</sup> This may occur because an increase in the minimum wage serves to reduce business profitability, therefore reducing the incentive to enter the industry.

### Workers

**An extensive review of over 100 studies analyzing the employment effects of minimum wages found that almost two-thirds of the studies estimated that the minimum wage had negative effects on employment, with only eight finding positive employment effects.**<sup>44</sup> Of the 33 empirical studies judged

<sup>41</sup> Corder, L. March 2019. "Survey of US Economists on a \$15 Federal Minimum Wage." Employment Policies Institute. <https://epionline.org/studies/survey-of-us-economists-on-a-15-federal-minimum-wage-2/>

<sup>42</sup> Luca, D. L., & Luca, M. 2019. "Survival of the Fittest: The Impact of the Minimum Wage on Firm Exit." (No. w25806). National Bureau of Economic Research.

<sup>43</sup> Rohlin, S. M. 2011. "State Minimum Wages and Business Location: Evidence From a Refined Border Approach." *Journal of Urban Economics*, 69(1), 103-117.

<sup>44</sup> Neumark, D., Wascher, W. 2007. "Minimum wages and employment" *Foundations and Trends in Microeconomics* 3:1-2 (2007): 1-186.

most credible, 28 (85 percent), found negative employment effects. **Of the reviewed studies, those focusing on low-skilled workers found the strongest evidence of negative employment effects.**

Research has found that, across the 21 states and Washington, D.C. that increased their minimum wages in 2019, 64 percent of restaurants reduced employee hours and 43 percent eliminated jobs.<sup>45</sup> Research has also found that job losses for black teenagers and the handicapped as a result of a minimum wage are even larger than for most workers.<sup>46</sup>

Opponents of the minimum wage cite the policy's potential negative impact on job training and experience. One study found that a 10 percent increase in minimum wages decreased on-the-job training for young workers by 1.5 to 1.8 percent.<sup>47</sup> Since on-the-job training allows low-skilled workers improve their skills and become more productive, this finding suggests that minimum wage laws also serve to reduce future opportunities for unskilled workers.

In 2019, the Congressional Budget Office (CBO) analyzed how increasing the federal minimum wage from \$7.25 per hour to \$10, \$12, or \$15 per hour by 2025 would affect economy-wide employment.<sup>48</sup> As would be expected, the CBO found that employment responses due to increases in the minimum wage varied by the amount of the increase. For the \$15 option the estimated response indicated that the 107 percent increase would result in a decrease in employment of around 28 percent. For the \$12 option, the 65 percent increase in the minimum wage would result in an employment decrease of 15 percent. This \$12 option is similar to the proposed healthcare minimum wage increase in terms of percentage increase in the minimum wage (67 percent). Finally, for the \$10 option, the 38 percent increase in the minimum wage would result in an employment decrease of around 8 percent.

**Some researchers argue that the effect of the minimum wage is more pronounced in terms of new employment growth compared to employment levels.**<sup>49</sup> The minimum wage has been found to decrease net job growth, mostly through the effect on job creation by expanding businesses. In addition, these negative effects are greater in industries with a higher proportion of low-wage workers. The negative effects of the minimum wage may therefore be delayed instead of immediate.

Another study, confirms the longer-term effects of the minimum wage, finding that during the late 2000s, the average minimum wage increased by 30 percent and reduced the national employment-population ratio by 0.7 percentage points.<sup>50</sup> This effect was significantly pronounced for low-income workers. In addition, artificial wage increases have been found to reduce the incomes of many low-skilled workers under what they would have been over time since reduced job creation results in fewer opportunities to gain experience and increase productivity and income.

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<sup>45</sup> Shenker, N. 2020. "How Restaurants are Dealing with Minimum Wage Increases," On the Line. <https://pos.toasttab.com/blog/on-the-line/how-restaurants-deal-with-minimum-wage-increases>

<sup>46</sup> Gorman, L. "Minimum Wages." The Library of Economics and Liberty. <https://www.econlib.org/library/Enc/MinimumWages.html>

<sup>47</sup> David Neumark and William Wascher. 1998. "Minimum Wages and Training Revisited," NBER Working Paper no. 6651, National Bureau of Economic Research, Cambridge, Mass.

<sup>48</sup> Congressional Budget Office. 2019. *The Effects on Employment and Family Income of Increasing the Federal Minimum Wage*. <https://www.cbo.gov/system/files?file=2019-07/CBO-55410-MinimumWage2019.pdf>

<sup>49</sup> Meer, J., & West, J. 2016. "Effects of the Minimum Wage on Employment Dynamics." *Journal of Human Resources*, 51(2), 500-522.

<sup>50</sup> Clemens, J., & Wither, M. 2014. "The Minimum Wage and the Great Recession: Evidence of Effects on the Employment and Income Trajectories of Low-Skilled Workers." NBER Working Paper 19262.

While much of the theoretical and empirical minimum wage research focuses on employment effects, there is also evidence that minimum wage increases may lead to increases in prices to consumers.<sup>51</sup>

## Concluding Thoughts: Empirical Evidence and Minimum Wage Increases

Overall, most economists believe that higher minimum wages have the potential to increase unemployment among low-skilled workers.<sup>52</sup> While some studies find no significant negative effects on employment,<sup>53</sup> others find that minimum wage increases reduce employment,<sup>54</sup> particularly the employment of low-skilled workers.

There are many empirical studies that find that increases in the minimum wage may have significant negative effects on employment. For example, a study of restaurant industry employment by Chicago Federal Reserve Bank economists Daniel Aaronson and Eric French found that a 10 percent increase in the minimum wage would reduce unskilled restaurant workers employment by 2 to 4 percent.<sup>55</sup>

However, a number of empirical studies suggests that there are only small negative employment effects due to minimum wage increases. **The empirical minimum wage literature that finds little to no negative employment effects has often focused on estimating short-run employment responses to minimum wage increases.**<sup>56</sup> The most famous of these studies, the Card and Krueger study, studied a 9-month window while other studies focus on responses during a quarter. These short-run employment responses only capture employment response that result in a change in output with little or no capture of the substitution of labor for capital or skilled labor for low skill labor. This substitution effect has been found to be significant in the longer run.<sup>57</sup> **The long-run, which may differ significantly from short-run, is the time period that is policy relevant.**

Critics of minimum wage studies finding little to no effect of minimum wages on employment also claim that the bulk of these studies look at situations where economic actors have already adjusted to the minimum wage policy and to the strong likelihood that minimum wages will be raised in the future.<sup>58</sup> As a result, these empirical studies really show how economic actors adjust to unexpected increase in the minimum wage above and beyond what is anticipated. The critics claim that studies finding little to no

<sup>51</sup> Aaronson D. 2016. "Price Pass-Through and The Minimum Wage." *Review of Economics and Statistics*. 2001;83:158–169.

<sup>52</sup> University of Minnesota. 2016. *Principles of Economics*. <https://open.lib.umn.edu/principleseconomics/>

<sup>53</sup> Card, D. and Krueger, A. B. 1994. "Minimum Wages and Employment: A Case Study of The Fast Food Industry in New Jersey and Pennsylvania." *American Economic Review*, 84(4), 772-793.

Dube, A. T., Lester, W., and Reich, M. 2010. "Minimum wage Effects Across State Borders: Estimates Using Contiguous Counties." *The Review of Economics and Statistics*, 92(4), 945- 964

<sup>54</sup> For a review see: Neumark, D. and Wascher, W. 2007. "Minimum Wage and Employment." In W.K. Viscusi (Ed.), *Foundations and Trends in Microeconomics* Vol 3 No. 1-2 (pp 1-182). Boston, MA: Now Publishers.

<sup>55</sup> Aaronson, D., & French, E. 2007. "Product Market Evidence on The Employment Effects of the Minimum Wage." *Journal of Labor economics*, 25(1), 167-200. <https://www.jstor.org/stable/10.1086/508734>

<sup>56</sup> See Neumark, D., & Wascher, W. 1992. "Employment Effects of Minimum and Subminimum Wages: Panel Data on State Minimum Wage Laws." *ILR Review*, 46(1), 55-81.

Dube, A., Lester, T. W., & Reich, M. 2010. "Minimum Wage Effects Across State Borders: Estimates Using Contiguous Counties." *The Review of Economics and Statistics*, 92(4), 945-964.

<sup>57</sup>

Sorkin, I. 2015. "Are There Long-Run Effects of the Minimum Wage?" *Review of Economic Dynamics*, 18(2), 306-333.

<sup>58</sup> Boudreaux, D. April 25, 2016. "A Proposed Minimum-Wage Experiment." *Café Hayek*. <https://cafehaye.com/2016/04/40727.html>

negative effect on employment after minimum wage increases are not answering the question of what would happen to employment if no minimum wage increases were expected.

Employers adjusting to a minimum wage increase can respond in a variety of ways. A large percentage of workers at nursing homes are low-income workers subject to the minimum wage. **Research has found that an increase of the federal minimum wage would result in a high number of nursing assistants experiencing a wage increase, increasing labor costs to nursing homes, and potentially reducing nursing home profits; to not impact their profit level, nursing homes could respond by passing on prices to the consumer, reducing nonlabor costs such as spending on food and amenities, or reducing labor costs by decreasing employee hours, decreasing spending on employee benefits, or decreasing higher income employee wages, hours, or benefits.**<sup>59</sup>

A principal argument made in favor of minimum wage increases is that they help poor and low-income families increase their living standards. However, **the existence of some disemployment effects mean that minimum wage increases create both winners and losers as a result.** The winners get a higher wage with no loss in employment or hours worked while the losers experience job losses, reduced work hours, or increased difficulty finding jobs. **If the gains to the winners are large, and if the winners come disproportionately from low-income families with losses concentrated among higher-income workers, customers, business owners, or any other groups that policymakers are willing to redistribute income from, then the losses experienced by the losing groups may be considered acceptable.** However, multiple research studies fail to find evidence that minimum wages help the poor, instead finding that they may increase the number of low-income households.<sup>60</sup>

**The empirical evidence on the distributional effect of minimum wages provides mixed results.** Increasing the minimum wage has been found to both increase the probability that a low-income family will escape poverty due to higher wages as well as the probability that another nonpoor family will become low-income as the minimum wage increase prices family members out of the labor market.<sup>61</sup> Unemployment resulting from a minimum wage increase is found to be highly concentrated among low-income families. This indicates that **minimum wage increases usually redistribute income among low-income households rather than redirecting income from families with high incomes to those with low incomes.** Although some families do benefit from the minimum wage increase, generally the raise increases the proportion of families that are low-income and near-poor.

**The main issue with using the minimum wages as a tool to increase the incomes of low-income families is that it targets low-wage workers, not low-income families, which may not be the same.** In the United States, the link between low wages and low family income has been found to be relatively weak. According to Current Population Survey (CPS) data, over half of poor families with heads of household aged 18–64 have no workers. Furthermore, some workers are poor due to low hours worked rather than low wages. Finally, teenagers are highly overrepresented in the minimum wage workforce meaning that many low-wage workers do not belong to low-income families. As a result, one estimate suggests that when the

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<sup>59</sup> Lepose, M., Livingstone, I., Naden, D., Hatem, M., Feng, Z. June 2020. “Impacts of Minimum Wage Increases on Nursing Homes: Final Report.” Office of Disability, Aging and Long-Term Care Policy Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services.

<sup>60</sup> Neumark, D. 2018. “Employment Effects of Minimum Wages.” IZA Institute of Labor Economics. <https://wol.iza.org/articles/employment-effects-of-minimum-wages/long>

<sup>61</sup> Neumark, D., Schweitzer, M., and William Wascher. February 1, 1999. “Will Increasing the Minimum Wage Help the Poor?” Federal Reserve Bank of Cleveland Economic Commentary.



minimum wage is increased, even assuming no employment loss, far more of the increase in income goes to households in the top half of the income distribution rather than to families below the poverty line.<sup>62</sup>

Despite the lack of evidence supporting the conclusion that minimum wages reduce poverty, some studies have shown that a higher minimum wage reduces the dependency on government assistance. However, a recent study of spending on Medicaid, welfare, and other assistance programs did not find that higher minimum wages lower participation in public assistance programs, except for SNAP.<sup>63</sup>

While low wages themselves clearly make life difficult for many poor and low-income households, the argument that a higher minimum wage is an effective tool to improve their economic well-being is not generally supported by the empirical evidence.<sup>64</sup>

Since minimum wage laws mandate higher wages for low-wage workers rather than higher earnings for low-income families this tool is imprecise at best. Generally, empirical evidence from studies focused on the United States do not find evidence that minimum wages help the poor. However, some subgroups may benefit when minimum wages are combined with other targeted programs such a targeted tax credit.<sup>65</sup>

## Combining Theory and Evidence on Minimum Wage Increases

While economic theory generally supports the idea that a minimum wage increase will result in a variety of unintended negative economic effects, the empirical evidence is more mixed. While empirical findings are not unanimous, particularly for the US, evidence suggests that minimum wages lead to a number of negative economic consequences in the long run for significant real inflation-adjusted minimum wage increases including a potential reduction in the number of jobs available to low-skill workers.

**Next, the economic theory and existing empirical evidence discussed above will briefly be considered in terms of the proposed Long Beach healthcare minimum wage increase in the covered private healthcare facilities.**

## Applying Theory and Evidence on Minimum Wage Increases to the Long Beach Proposal

### The Minimum Wage in the Context of the Healthcare Industry and Healthcare Labor

**The 67 percent increase in the proposed minimum wage for covered healthcare workers is significant.** This suggests that the economic effects of the proposed minimum wage will also be significant.

Demand response conditions in the healthcare industry relative to other sectors in the economy are such that **significant changes in employee numbers as a response to a minimum wage increase may not be as pronounced as employment changes would be in other industries.** In addition, long-run prohibition

<sup>62</sup> Lundstrom, S. M. 2014. “When is a Good Time to Raise the Minimum Wage?” *Contemporary Economic Policy* 35:1 (2017): 29–52. Sabia, J. 2014. “Minimum Wages: An Antiquated and Ineffective Antipoverty Tool.” *Journal of Policy Analysis and Management* 33:4 (2014): 1028–1036.

<sup>63</sup> Sabia, J., and T. T. Nguyen. 2017. “Do Minimum Wages Really Reduce Public Assistance Receipt?” Working Paper.

<sup>64</sup> Neumark, D. 2018. “Employment Effects of Minimum Wages.” IZA Institute of Labor Economics. <https://wol.iza.org/articles/employment-effects-of-minimum-wages/long>

<sup>65</sup> Neumark, D. 2018. “Employment Effects of Minimum Wages.” IZA Institute of Labor Economics. <https://wol.iza.org/articles/employment-effects-of-minimum-wages/long>

on certain labor market adjustments as outlined in the Long Beach minimum wage ordinance will likely dampen the negative effect of the proposed minimum wage on employment numbers.

**However, some short run employment losses may still take place as will some longer-run employment losses as the result of the minimum wage.** For example, in the long run, even with perfectly enforced labor market adjustment prohibitions in place, job losses may result due to employee quits and retirements that are not rehired as well as business closures and relocations due to the higher labor cost environment. Furthermore, in the long run, employee growth in the healthcare industry may be negatively affected.

The minimum wage increase may serve to attract more labor into affected healthcare occupations in the long run. In addition, the minimum wage increase may result in increased morale and productivity thus increasing labor demand by employers. This may serve to reduce possible negative impacts on future employment. However, all else equal, the increased cost of labor would likely reduce the quantity of labor demanded by employers resulting in an ambiguous net employment effect. In addition, **it is possible that the positive effects of the minimum wage on morale and productivity are relatively short term and may erode over time as employees factor the new baseline wage into expectations.**

**Proponents of the minimum wage increase have claimed that the healthcare labor market is not competitive, resulting in significant market power to employers and wages below the competitive level for certain occupations.** While employer market power for certain segments of the healthcare industry may be higher than for other sectors of the economy, such as for retail and for food services, employers in the covered healthcare sector still face considerable competition for labor from other Long Beach private healthcare businesses, public healthcare facilities, and healthcare employers in nearby cities. In addition, employers must compete for a labor pool that is also being attracted by employers in industries outside of healthcare. As a result, it is possible that the wages currently being paid to employees in occupations targeted by the Long Beach private healthcare minimum wage proposal are currently near competitive market wages.

If labor shortages were only the result of monetary wages sitting below their true competitive level, competition would drive employers to raise wages to attract workers away from competitors and eliminate the shortage of healthcare workers in certain occupations. In this way, profit-seeking employers could overcome labor shortages and provide more services to patients therefore increasing profits. **The fact that this has not happened may indicate that there are other non-wage issues depressing labor supply for certain healthcare occupations that should also be considered, such as healthcare occupations' toll on mental health or insufficient nonmonetary benefits.**

**If enacted, low-wage employees in covered healthcare facilities that remain employed will enjoy an increase in their incomes.** This will likely lead to higher living standards for these workers and their families. Additionally, both theory and empirical evidence state that low-income households spend a larger percent of their income than other groups, so a larger percentage of the increased income would be spent in the economy, as opposed to if higher wage workers were given additional labor income. However, these benefits may come at the cost of job losses for some employees.

### The Minimum Wage and Non-Labor Adjustments

The above analysis of the proposed minimum wage's effect on the covered Long Beach private healthcare sector focused on labor markets. However, **there will likely be other non-labor market adjustments made in the healthcare industry as a result of the proposed minimum wage increase.**

**A number of non-labor market adjustment mechanisms can be used to pay for the increased labor costs resulting from the minimum wage.** For example, businesses may reduce service quality, increase prices, reduce access to patients, close or relocate, or may experience a reduction in business profits to offset the increase in labor costs and resulting increase in labor income to remaining covered employees. Each of these possible adjustments represent potential costs of the minimum wage policy. For example, a reduction in business profits may lead to business closures and relocations, reduced spending for consumption goods by business owners who would have spent the profits, and reduced investment that could have improved healthcare service provision. **Even if business profit reductions were the primary mechanism by which increased labor costs were paid for, decreased profits could have a negative impact on patients since businesses generally finance investment and expansion directly through profits and loans that will eventually need to be paid back out of profits.**

**Affected facilities will not all react to the proposed minimum wage increase in the same way.** It is highly likely that different facilities would make different adjustments to a minimum wage increase based on unique characteristics such as profitability, customer base, and type of healthcare service provided. For example, facilities with a significant portion of their patients on government provided plans will face a market situation where prices are relatively fixed. As a result, price adjustments to cover increased labor costs as a result of the minimum wage will be limited. These types of facilities will need to find other ways to effectively manage costs or risk relocation out of the city or even closure.

**If fewer labor adjustments are made as a result of the minimum wage due to the measure's employment-adjustment prohibitions, adjustments will likely be concentrated in non-labor market reactions.**

### The Minimum Wage and Tradeoffs

**The minimum wage proposal will likely involve a number of short and long term tradeoffs in terms of employment and non-employment variables.** Economic theory and empirical evidence can provide us with some insight regarding potential tradeoffs in the Long Beach healthcare industry associated with the proposed minimum wage increase.

#### **Benefits:**

- Increased labor income to remaining low wage workers in covered healthcare facilities.
- Potential increase in labor supply and retention in certain covered healthcare occupations.
- Potential short run increase in morale and productivity for covered healthcare workers.

#### **Risks:**

- Short run employment losses, particularly for low wage workers.
- Potential long run business exits, employment losses and reduced future employment growth and business entry for covered occupations.
- Potential non-labor adjustments such as decreased business profits and quality/access reductions to pay for increased labor costs.



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