
Federal Minimum Wage and Poverty Alleviation

Maryam Arab

ABSTRACT

In 2022, 37.9 million people in the United States lived in poverty, creating a poverty rate of 11.5 percent (US Census Bureau 2024). There are many efforts across the country to decrease poverty, one of them being increasing the minimum wage to \$15 an hour. This paper examines the history of the minimum wage in the United States, its erosion over the years, and its impact on poverty alleviation. Ultimately, increasing the minimum wage to \$15 an hour will not decrease poverty in the United States due to average wage rates and insufficient targeting efforts.

Reference:

US Census Bureau. 2024. "National Poverty in America Awareness Month: January 2024." Census.gov, January 4, 2024. <https://www.census.gov/newsroom/stories/poverty-awareness-month.html>.

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MARYAM ARAB is a second-year MPP student at the Trachtenberg School of Public Policy and Administration. During her first year at the Trachtenberg School, Maryam was a legislative intern at the United States Senate and House of Representatives and a Student Administrative Assistant for the Trachtenberg School. She is from St. Paul, Minnesota, and received a bachelor's degree in Sociology. At the Trachtenberg school, she is concentrating in Social Policy with a focus on wealth and income inequality.

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INTRODUCTION

In the United States, the federal government provides guidelines for measuring and determining poverty rates. International organizations, including the United Nations, track poverty rates around the world with models such as the Human Poverty Index. Guidelines for these organizations require poverty to often be measured by family income and wage rates. Many countries, such as the United States, are making efforts to reduce poverty rates, and to facilitate this, several pieces of legislation have been enacted over the last 100 years. The Fair Labor Act (FLA) of 1938 was passed after the Great Depression to safeguard workers and stabilize the post-depression economy through the provision of a minimum wage for all laborers. The purpose of the minimum wage was to provide workers with a rudimentary level of income with the ability to achieve a basic standard of living and to protect their health and well-being.

The minimum wage has been raised at a constant rate in subsequent years in an attempt to meet the increasing demands of the economy. Despite this habitual increase in wages, millions of Americans are still living at or below the poverty line, raising into question the efficacy of a federal minimum wage in alleviating poverty. This paper addresses this question by interpreting the different existing analyses on minimum wage and poverty alleviation, ultimately demonstrating that a federal minimum wage increase will not alleviate poverty and has little impact on poverty reduction due to its inability to meet market-wage expectations and target low-income households.

UNDERSTANDING THE MINIMUM WAGE

Prior to the implementation of a minimum wage, Americans discussed the need for improving living conditions for low-income laborers. Outside of the United States, other countries, including New Zealand, Australia, and the United Kingdom, had long implemented forms of minimum wages among their workforces. New Zealand established a national minimum wage in 1899 to decrease child labor. Australia and the United Kingdom created “wage boards” to determine a minimum wage using an employee and employer representative and an impartial chair. In the United States, concerns about the working conditions for women and children began increasing interest in introducing a minimum wage as part of the Progressive movement. Many progressives argued “individuals were entitled to a ‘living wage’ that ensured a decent standard of living” (Neumark and Wascher 2008, 12). Politicians, however, were not interested in a minimum wage due to concerns that it would “violate the freedom of contract provisions of the Fourteenth Amendment” (Neumark and Wascher 2008, 12).

Progressives continued to argue that concerns about the minimum wage were outweighed by the need to preserve the health and well-being of laborers. Policymakers’ execution of a federal minimum wage required multiple attempts due to opposition from employers concerned for the free market and rights to private property. Surpassing objections, legislators in many states began implementing various forms of a minimum wage before the passage of the FLA. Arguments for the minimum wage in various states were focused on the

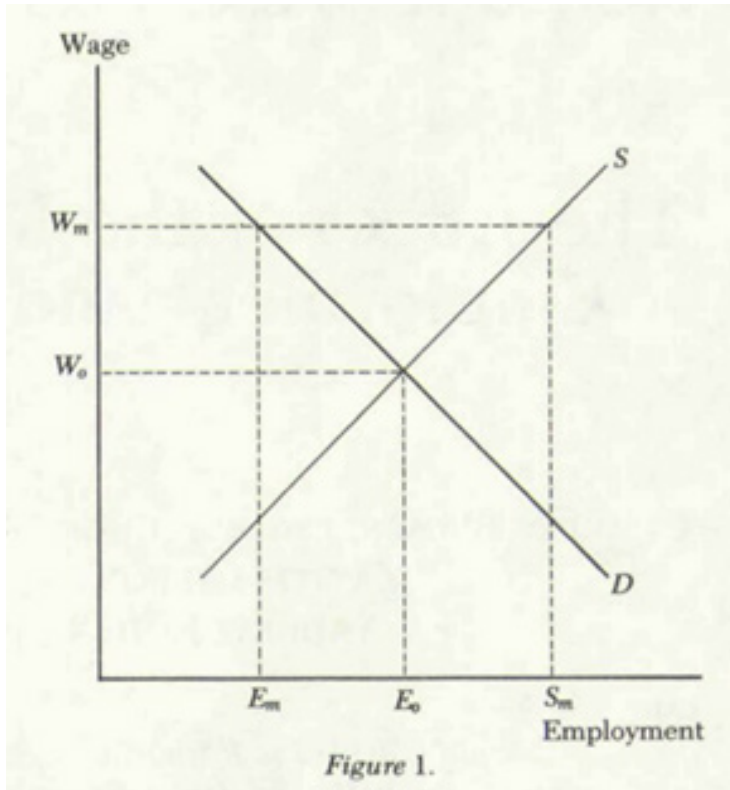
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standard of living for laborers and the fair wages needed to be reflected in the livelihoods of the employees.

During the initial stages of creating a minimum wage, economists evaluated how the market would be impacted. Many looked at minimum wage legislation through the lens of supply and demand, with employers as the producers (supply) and the workers as the consumers (demand). According to Neumark and Wascher (2008), economist John Bates Clark argued, “We can be sure ... that raising the rate of wages will, or itself and in the absence of any new demand for labor less the number of workers employed” (15). Economists like Clark were concerned with the minimum wage and its effect on the availability of labor, the result of supply and demand suggesting that introducing a minimum wage would decrease employment opportunities for lower-skilled workers. Other economists were more concerned with the exploitation of low-skilled labor. Neumark and Wascher (2008) believed that a “minimum wage would encourage those workers who could do so to increase their efforts and abilities and would prompt employers to reduce other inefficiencies in their business practices” (16). Neumark and Wascher (2008) felt the minimum wage could influence labor productivity and provide a better standard of living. Despite their differing predictions, economists anticipated the federal minimum wage to have a large effect on the market in terms of supply and demand.

To understand minimum wage and predict its effects on the market, economists considered supply and demand. A minimum wage is a price floor or a minimum legal price below which sellers cannot price their goods. Specifically, employers sell wages to workers to buy labor. Using a basic supply and demand model in a single competitive market with wage on the Y-axis and employment on the X-axis, implementing a minimum wage applies a price floor. Traditionally, with a price floor, there is a drop in the quantity demanded, which leads to a disequilibrium where producers are stuck with output they cannot sell. In economic theory, the excess output left with employers is labor, leaving the amount of employment that employers can provide at the new wage to be significantly less than the market equilibrium. In Figure 1, “initial employment E_0 is determined by supply and demand; once the minimum wage is introduced, employment falls to E_m , the level demanded at wage W_m ” (Brown, Gilroy, and Kohen 1982, 488). In a simple supply-demand model, minimum wage decreases employment. However, creating a minimum wage does not indicate a reduction in employment. Instead of reducing employment, the fall of E_m may be a result of lower employment growth rather than a decrease in the number of employees (Brown, Gilroy, and Kohen 1982, 488). Therefore, a minimum wage increase may not correspond with a decrease in employment.

Shortly after the minimum wage was passed, evidence that it did not significantly reduce employment emerged. In the 1950s, the Department of Labor (DOL) conducted surveys in low-wage industries to understand the effect of minimum wage on employment. The DOL found that “there were no significant employment losses in low-wage industries following [the] minimum wage increase” (Neumark and Wascher 2008, 27). Ultimately, implementing the minimum wage did not decrease employment for low-wage laborers.



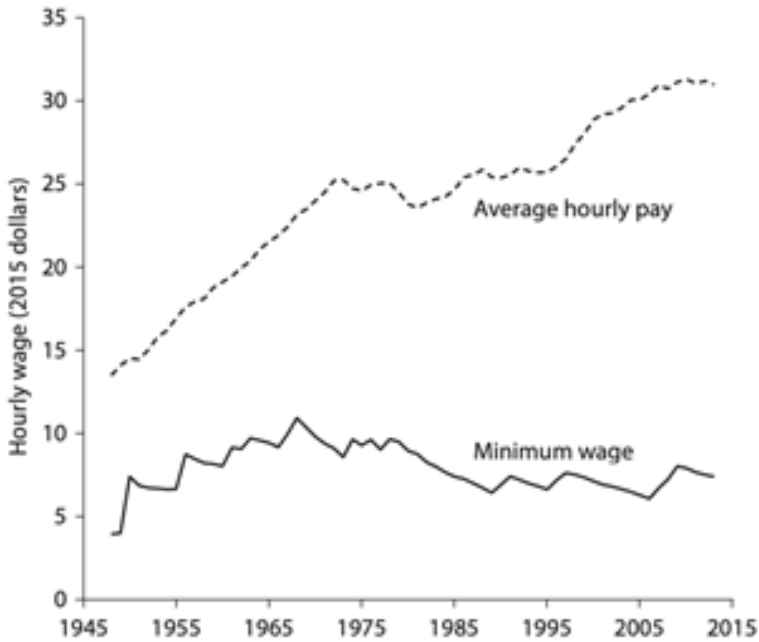
THE DECLINE OF MINIMUM WAGE

Despite the positive effect that the implementation of a minimum wage had on employment, its value in the labor market has changed. The latest minimum wage legislation was the Fair Minimum Wage Act of 2007, which increased the federal minimum wage from \$5.15 per hour to \$7.25 per hour in three annual 70-cent increments. The act serves as a federal price floor for the United States, leaving states the ability to price minimum wage above \$7.25. Currently, 30 states and the District of Columbia have a minimum wage higher than \$7.25, ranging from \$10 to \$17. The Fair Minimum Wage Act of 2007 was celebrated by legislators and laborers alike with positive estimated effects, but “even after the full increase took effect in 2009, the real value of the minimum wage was 26 % less than it had been 40 years earlier” (Bartels 2016, 199).

Between 1970 and 2009, the average real hourly wage for all American workers rose by more than one-third (Bartels 2016, 199). Following the establishment of a federal minimum wage, the minimum wage has gradually eroded due to inflation (Bartels 2016, 209). Figure 2 illustrates the value of minimum wage and how it has changed over the past 65 years, accounting for inflation in addition to changes in average hourly wage rates. Bartels (2016) claimed, “The history of minimum wage rates summarized in [Figure 2] can be divided into two distinct periods. During the first two decades of the postwar era, periodic upward adjustments in the nominal minimum wage rate produced substantial increases in its real value, generally keeping pace with real wage gains in the

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economy as a whole" (200). Minimum wage rates during the postwar era increased with any wage gain in the economy, and as overall wages rose, so did the minimum wage.



The drive to increase the minimum wage started to decline once real wage growth began stalling in the economy (Bartels 2016). As shown in Figure 2, wage growth began to stall in the 1970s, resulting in the real value of minimum wage declining. To simplify, “whereas minimum wage workers in the 1950s and 1960s earned 45% of the average wage in the economy as a whole, by 2006 the minimum wage was only 20% of the average wage. The 2007 minimum wage hike increased that ratio to 26% in 2009, but by 2013 it had slipped back down to 24%” (Bartels 2016, 201). Bartels’ (2008) analysis of the real value of minimum wage demonstrates that since the 1970s, minimum wage increases have not been meeting average wage rate expectations as they no longer align with market wages. Unless there is a large minimum wage increase, wage rates for low-skilled workers are significantly less than those in high-skilled jobs.

Bartels (2016) argued that recent economic research shows that any negative effects of minimum wage on employment are not as substantial as initial economic theories claimed. He stated that instead, “declines in the real value of the minimum wage have contributed substantially to increasing inequality in the bottom half of the income distribution” (Bartels 2016, 201). Rather than decreasing employment, the minimum wage had a negative effect on the income distribution due to its decline in real value. This implies that the erosion of the minimum wage has impacted its effectiveness.

POVERTY REDUCTION AND WAGE STAGNATION

The level of poverty in the United States is correlated to the effectiveness of the minimum wage. For most individuals, “direct paid work is a source of income which can reduce risks of poverty and raise living standards, both in the short and longer term, including retirement” (Bailey 2017, 159). Paid work can increase the livelihood of laborers and should be considered when strategizing poverty curtailment solutions (Bailey 2017). Poverty reduction efforts in the United States and worldwide are driven by the belief that income maintenance allows for a sustainable life and reduces the risk of poverty, using wages to determine specific poverty rates. In a progress report conducted by the Council of Economic Advisors (CEA), the CEA found “far too many Americans still experience poverty, in part because of ‘unemployment ... inequality, wage stagnation, and a declining minimum wage’” (Paul et al. 2018, 45). This directly correlates to Bartels’ (2008) analysis of average wage rates and the real value of a minimum wage. Due to the minimum wage’s real value being significantly lower than the average hourly pay, paid minimum wages are at the bottom of the pay scale, creating a large wage gap. When wage stagnation occurs and the value of minimum wage decreases, there is an increased risk of poverty.

Current minimum wage debates are focused on whether the minimum wage should be increased to \$15 to combat wage stagnation. The Raise the Minimum Wage Act of 2021 proposes increasing the federal minimum wage gradually over five years, beginning at \$9.50 and ending at \$15 (Raise the Wage Act of 2021). Paul Decker (2021) discusses the Raise the Minimum Wage Act by illustrating how it is closely tied to minimum wage and employment opportunities. Because increasing the minimum wage from \$7.25 to \$15 is a significant change, Michael Strain argued that the Raise the Minimum Wage Act may have a negative effect on long-term labor conditions (Decker 2021, 1293). Employers will feel the minimum wage and “increase labor costs substantially” (Decker 2021, 1294). In addition, employers might recruit laborers with supplemental skills to change the kind of employees they hire (Decker 2021, 1294). Instead of a large minimum wage increase, Strain argued that there are additional policies – like the Earned Income Tax Credit – to increase the earnings of low-income families. Conversely, Michael Reich argued that increasing the minimum wage to \$15 has a minimal effect on labor conditions (Decker 2021, 1299). Reich claimed that the \$15 increase would only have a small negative effect on restaurant workers and teens (Decker 2021, 1304). Each perspective on the Raise the Minimum Wage Act reflects the fraught economic debate about minimum wage and its heavy impact on employment. Despite this, if the minimum wage were to meet market expectations and the real value increased, there is no guarantee that inequality in the bottom half of the income distribution would decrease.

There is a wide spectrum of opinions on a minimum wage possessing the capability to alleviate poverty, with one argument using evidence to claim a minimum wage increase will lead to some form of poverty reduction. A study done in Arizona analyzed the relationship between minimum wage, per capita income, and its overall effect on poverty. In 2006, before the Fair Minimum Wage Act of 2007, Arizona passed the Raise the Minimum Wage

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for Working Arizonans Act, which increased the minimum wage to \$6 and included annual cost-of-living updates (Overstreet 2019, 157). According to Overstreet (2019), “Since the adoption of the act in 2006, Arizona’s minimum wage has seen annual increases in small increments” (157). Arizona residents passed the Fair Wages and Healthy Family Act via ballot question, increasing the state’s minimum wage in four stages: “\$10.00 on and after January 1, 2017; \$10.50 on and after January 1, 2018; \$11.00 on and after January 1, 2019; and \$12.00 on and after January 1, 2022” (Overstreet 2019, 157).

Using data from the Bureau of Labor Statistics and the St. Louis Federal Reserve, Overstreet (2019) did a multiple regression analysis. Overstreet (2019) set per capita incomes as his dependent variable and minimum wage, population, unemployment rate, and inflation as his independent variables. In his model, Overstreet (2019) sets per capita income, minimum wage, and population using a logarithmic form to “capture the actual effect occurring more accurately” (161). In the results, Overstreet (2019) found the effects of minimum wage on per capita are small, positive, and statistically insignificant. However, he found this was due to a high level of multicollinearity between two of the independent variables: minimum wage and population. To correct this error, Overstreet (2019) ran another regression, removing population as a variable. After removing population, the regression results begin to show that minimum wage has a larger positive effect that is statistically significant, while the unemployment rate and inflation have negative effects on income per capita. Overstreet (2019) stated, “Interpreting our coefficient of interest, β_1 , tells us that a 1 percent increase in the minimum wage will on average produce a 1.13 percent increase in per capita income in Arizona, holding the unemployment rate and inflation rate constant” (163). Overstreet’s (2019) results indicate that with a minimum wage increase, there was also an increase in the per capita income among residents in Arizona.

Using Arizona as an example, Overstreet (2019) concluded minimum wage increases are an effective tool for increasing per capita income among low-wage workers. Specifically, “the benefit received by low-wage earners outweighs the costs borne by high-wage earners and businesses due to minimum wage increases. Thus, minimum wage could create economic growth” (Overstreet 2019, 165-166). Overstreet’s (2019) analysis of the relationship between minimum wage and per capita income directly supports the theory that increasing the minimum wage reduces poverty. In his regression, there are clear positive effects on income and employment, aiding in poverty reduction.

Conversely, there is evidence that a minimum wage has no effect on poverty reduction. A study done in Ontario by Mascella et al. (2009) directly contradicted the sentiments made by Overstreet (2019). In fact, Mascella et al. (2009) argued that while minimum wage did have a positive effect on income for certain laborers, most did not belong to low-income households. Mascella et al. (2009) had evidence that suggested “that only a small portion of poor households will see any increase in income as a result of these increases in the minimum wage” (373). To determine this, Mascella et al. (2009) constructed a profile of low-income households and low-wage earners in Canada, classifying low-wage earners, poor households, and low-wage earners in poor households. The researchers considered

gender, age, and occupation (including students), and they analyzed the proportion of each classification in each profile. In this profile, they found that, on average, the proportion of low-wage earners was mostly students between the ages of 16 and 19. Mascella et al. (2009) also found that “10.3% of all individuals belong to poor households while 13.6 percent of all households are poor” (375). Mascella et al. (2009) argued that the pool of low-wage earners did not consistently match poor households. Therefore, a minimum wage increase was not an effective tool to reduce poverty (Mascella et al. 2009).

There are additional opinions against minimum wage increases in the United States. Similar to Mascella et al. (2009), Sabia and Burkhauser (2010) argued that “the relationship between earning a low hourly wage rate and living in poverty is weak and has become weaker over time” (593). They emphasized overall national minimum wage increases in the United States provide very little support to the working class. Sabia and Burkhauser (2010) used the Fair Minimum Wage Act of 2007’s increases in minimum wage to examine poverty rates in the United States. Using the March Current Population Survey data, they found no evidence that decreased poverty rates in any state, nor that the new minimum wage of \$7.25 affected the working poor. Sabia and Burkhauser (2010) found that 11.3 percent of laborers who receive a minimum wage increase are from low-income families, which is “an even smaller share than was the case with the last federal minimum wage increase (15.8%)” (593). In accordance with Mascella et al. (2009), they argued that these rates are due to low-wage workers coming from families with other earners. In their analysis, Sabia and Burkhauser (2010) used a fixed effects model to estimate the recent minimum wage increase on state poverty rates among 16 – 64-year-olds.

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In their results, Sabia and Burkhauser (2010) further reiterated that there is no relationship between increases in the minimum wage and poverty rates. While a variable of interest, the minimum wage is negatively correlated with the overall poverty rate, and it is statistically insignificant. Therefore, Sabia and Burkhauser (2010) argued that minimum wage increases between 2003 and 2007 have had virtually no effect on poverty rates in the United States. In contrast to Mascella et al. (2009), Sabia and Burkhauser (2010) posited that in the United States, a minimum wage increase has no effect due to all laborers making more than the minimum wage. In their research, Sabia and Burkhauser (2010) discovered that “Approximately 17.7% of all workers in the United States earn hourly wages between \$5.70 and \$9.49 per hour and stand to be directly affected by the increase, while 80.3% of all workers earn hourly wages of \$9.50 per hour or more” (602). This finding demonstrates that the minimum wage increase is largely ineffective due to the differing minimum wage rates across the country. Ultimately, for minimum wage to be an effective poverty reduction tool, the focus should center on increasing wages among poor households and matching average wage rates for those living in poverty.

CONCLUSION

Overarching evidence suggests that a federal minimum wage increase does not reduce poverty. Romich and Hill (2018) summarize factors responsible for reducing the effectiveness of a minimum wage increase: “imperfect targeting [and] heterogeneous labor market effects” (22). As Mascella et al. (2009) and Sabia and Burkhauser (2010) noted, imperfect targeting impacts the low-wage workers who receive the minimum wage increases. The heterogeneous labor market effect corresponds with Bartels’ (2008) analysis of the real value of minimum wage and the labor market. As Bartels (2016) analyzed, the real value of minimum wage is significantly lower than average hourly wage rates, which usually results in an insignificant impact on poverty. The study conducted in Arizona by Overstreet (2019) illustrates how minimum wage increases should be implemented. In Arizona, minimum wage legislation increased before the Fair Minimum Wage Act and continued to increase incrementally afterward. Overstreet (2019) demonstrated that these minimum wage increases were directly correlated to increases in the cost of living, resulting in a positive economic impact. The federal minimum wage cannot have this impact nationally due to its imperfect targeting and heterogeneous labor market. Due to the lack of an annual federal minimum wage increase, it continues to fall behind market expectations, creating an even larger gap between average wages and the value of the minimum wage.

Current legislative proposals on minimum wage, including the Raise the Minimum Wage Act of 2021, are focused on increasing the rate to \$15 per hour; however, this act is not the only policy solution in labor policy that can positively or negatively affect wages. Romich and Hill (2008) and Bartels (2016) imply that there should be a minimum wage policy that is regularly adjusted. Strain mentioned the Earned Income Tax Credit as a more effective solution to address poverty in low-income households (Decker 2021, 1294). Other policy suggestions, including the Domestic Workers Bill of Rights and Schedules That Work Act,

focus on labor conditions to improve poverty outcomes. Ultimately, each of these policy options illustrates common goals: better working conditions and poverty alleviation. While the federal minimum wage is a step toward reaching these goals, it does not have a significant impact on the rates of poverty. For the federal minimum wage to alleviate poverty, the value of the minimum wage needs to be at least half of the average wage rate. A steady increase in minimum wage value, combined with the average wage rate, must directly target low-income households, not just low-wage workers.

REFERENCES

- Bailey, Nick. 2017. "Employment, poverty and social exclusion." In *Poverty and social exclusion in the UK*, pp. 159–178. Policy Press. <https://doi.org/10.2307/j.ctt1zqrn6q.13>
- Bartels, Larry M. 2016. "The Eroding Minimum Wage." In *Unequal Democracy: The Political Economy of the New Gilded Age* (2nd ed.), 198–232. Princeton University Press. <https://doi.org/10.2307/j.ctvc77jxs.11>
- Burkhauser, Richard V., Kenneth A. Couch, and Andrew J. Glenn. 1996. "Public policies for the working poor: The earned income tax credit versus minimum wage legislation." *Research in Labor Economics*, 15: 65–109.
- Burkhauser, Richard V., and Joseph J. Sabia. 2007. "The effectiveness of minimum-wage increases in reducing poverty: Past, present, and future." *Contemporary Economic Policy* 25(2): 262-281. <https://doi.org/10.1111/j.1465-7287.2006.00045.x>
- Brown, Charles, Curtis Gilroy, and Andrew Kohen. 1982. "The Effect of The Minimum Wage on Employment and Unemployment." *Journal of Economic Literature* 20(2): 487–528. <http://www.jstor.org/stable/2724487>. <https://www.jstor.org/stable/2724487>
- Decker, Paul, ed. 2021. "Should the Federal Minimum Wage Be Increased to \$15 Per Hour?" *Journal of Policy Analysis and Management* 40(4): 1288–1288. <https://doi.org/10.1002/pam.22364>
- Horton, John J. 2017. "Price floors and employer preferences: Evidence from a minimum wage experiment." Available at SSRN 2898827. <http://proxygw.wrlc.org/login?url=https://www-proquest-com.proxygw.wrlc.org/reports/price-floors-employer-preferences-evidence/docview/2033749889/se-2?accountid=11243>
- Raise the Wage Act of 2021. 2021. H.R. 1225, 117th Congress (2021). <https://www.congress.gov/bill/117th-congress/house-bill/603>.

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- Mascella, Allison, Shahzia Teja, and Brennan S. Thompson. 2009. "Minimum Wage Increases as an Anti-Poverty Policy in Ontario." *Canadian Public Policy / Analyse de Politiques* 35(3): 373–379. <https://www.jstor.org/stable/40345329>
- Neumark, David, and William L. Wascher. 2008. "The History of the Minimum Wage in the United States." In *Minimum Wages*, 9–36. The MIT Press. <https://www.jstor.org/stable/j.ctt5hhh46.5>
- Overstreet, Dallin. 2019. "The effect of minimum wage on per capita income in Arizona: Empirical analysis." *Poverty & Public Policy* 11(1-2): 156–168. https://doi-org.proxygw.wrlc.org/10.1002/pop4.249open_in_new
- Paul, Mark, William Darity, Darrick Hamilton, and Khaing Zaw. 2018. "A Path to Ending Poverty by Way of Ending Unemployment: A Federal Job Guarantee." *RSF: The Russell Sage Foundation Journal of the Social Sciences* 4(3): 44–63. <https://doi.org/10.7758/rsf.2018.4.3.03>
- Romich, Jennifer, and Heather D. Hill. 2018. "Coupling a Federal Minimum Wage Hike with Public Investments to Make Work Pay and Reduce Poverty." *RSF: The Russell Sage Foundation Journal of the Social Sciences* 4(3): 22–43. <https://doi.org/10.7758/rsf.2018.4.3.02>
- Sabia, Joseph J., and Richard V. Burkhauser. 2010. "Minimum Wages and Poverty: Will a \$9.50 Federal Minimum Wage Really Help the Working Poor?" *Southern Economic Journal* 76(3): 592–623. <http://www.jstor.org/stable/27751487>
- Stigler, George J. 1946. "The Economics of Minimum Wage Legislation." *The American Economic Review* 36(3): 358–65. <https://www.jstor.org/stable/1801842>