

The Economic Effects of a \$21.25 Minimum Wage in New York by 2026

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The Center on Wage and Employment Dynamics was established within UC Berkeley’s Institute for Research on Labor and Employment in 2007. CWED focuses on academic research and policy analysis of wage and employment dynamics in contemporary labor markets.

A proposed increase of New York State’s minimum wage to \$21.25 by 2026 sounds large, but its level would be comparable to the inflation-adjusted \$15 New York City fast-food minimum wage that took effect on December 31, 2018, and to the rate of fast-food minimum wage increases from \$7.25 to \$15 over the period December 31, 2013 to December 31, 2018. My recent research on the effects of \$15 minimum wages in New York combines state-of-the-art statistical methods with administrative data from all fast-food employers in twenty-two New York counties. Minimum wage increases to \$15 substantially raised the pay of low-wage workers without creating disemployment effects, both upstate and downstate. I also discuss why these minimum wage increases did not reduce employment and how high minimum wage increases can go without negative effects.

1. INTRODUCTION

A bill in the New York State Legislature (Raise the Wage Act, A02204/S01978) proposes to increase minimum wages to \$21.25/hour. In New York City and in three suburban counties (Nassau, Suffolk and Westchester), the minimum wage would increase in three annual steps from the current \$15 level—the New York City standard since December 31, 2018—to \$21.25 on January 1, 2026. In the rest of the state, the minimum wage would increase from \$14.20 (\$15 for fast-food workers as of July 1, 2021), also in three steps, to \$20 on January 1, 2026, and to \$21.25 (plus indexing for 2026 inflation, likely to \$22) on January 1, 2027.¹

In this policy brief, I first show that the proposed increases are similar in magnitude to the recent increases of fast-food minimum wages to \$15 in New York. The increases to \$15 therefore provide an informative benchmark for analyzing the legislation. I then present evidence showing that the increases to \$15 raised pay and did not reduce the number of jobs in the fast-food restaurant industry in the state. In the last section I discuss how high minimum wages can go without reducing job numbers.

1.1 Magnitude of the proposed increases

Level after accounting for inflation

Since 2018 fast-food prices have generally increased at the same rate as inflation, but the average wage of fast-food workers has not. Inflation from the end of 2018 through December 2022 decreased from the real level of the 2018 \$15 minimum wage by about 17.2 percent (BLS, CPI monthly releases). Expected inflation by the end of 2026 would reduce the real value another 15 percent, according to the most recent CPI monthly release (November 2022).

¹Subsequent mandated increases would reflect changes in the Consumer Price Index and in worker productivity, as advocated in a report from the New York State Division of the Budget (2022) and as New York State has already implemented. Such adjustments will protect workers from future inflation and begin to reverse the long-run decline in labor’s share of income. Tip credits would continue at their current one-third ratio.

Survey of Professional Forecasters

In other words, if New York City’s \$15 minimum wage had been indexed to inflation since 2018, it would likely reach \$20.22, or 95.2 percent of \$21.25, by the beginning of 2026.

Percentage increases

The New York City and suburban minimum wages would increase by 41.7 percent over three years, or about 13.9 percent per year. The upstate fast food minimum wage would increase by a cumulative 33.3 percent over three years, or about 11.1 percent per year. The upstate overall minimum wage would increase 40.8 percent in four years, or about 10.2 percent per year. These increases fall well within the range of past moderate changes that have had minimal effects on employment (Cengiz et al. 2019).

Relative to median wages

The ability of an economy to absorb a minimum wage is often measured by the ratio of its minimum wage to its median wage. When New York State increased the fast-food minimum wage to \$15 in 2021, the state’s median wage was \$24.45 (BLS Occupational Wage Surveys). The ratio of these two numbers in 2021 was .61. Using CBO’s most recent wage forecast, the comparable ratio for 2023 is likely to be about .57. The projected ratio with a \$22 minimum wage in 2027 would be .72, or 18 percent higher than its 2021 level.²

High-pressure labor market

In the low unemployment rate era of the past five years, the number of job vacancies has exceeded the number of job searchers, especially in low-paying industries. As a result, wages in low-paying industries have increased substantially faster than in high-paying industries and faster than inflation. Starting pay in restaurant occupations in New York reached nearly \$17 in early 2022 (BLS, *Occupational Wages*) and likely will reach \$19 in 2023. Such wage increases have slowed in recent months; their path in the next five years remains uncertain. Nonetheless, these wage increases will reduce the number of workers who would be affected by the proposed legislation. At the same time, minimum wage increases will make it easier for low-wage employers to recruit and retain workers.

1.2 Comparison to recent minimum wage increases in New York

New York State’s minimum wage remained \$7.25 from July 2009 to December 31, 2013, when it increased to \$8. The state then increased the minimum wage in gradual steps, reaching \$15 for workers in fast food restaurants in New York City on December 31, 2018 and in the rest of New York on July 1, 2021. The increases since 2013 amount to an 87.5 percent cumulative increase and average annual increases of 21.9 percent in New York City and 13.5 percent in the rest of the state. *These cumulative and annual increases are twice as large as those in the proposed legislation.* The experience of New York with \$15 minimum wages thus provides informative lessons for how the proposed New York policies would be absorbed.

I therefore review here the effects of policies that raised fast food minimum wages to \$15 on December 31, 2018 for New York City’s fast food workers and on July 1, 2021 throughout New York State. To do so, I

²The 2019 ratio for New York City was about .56, also similar to the projected ratio in 2026 with a \$21.25 minimum wage.

draw from McPherson, Reich and Wiltshire (2023, hereafter MRW), which uses state of the art statistical methods and data from fast-food employers to identify the causal effects of \$15 minimum wage policies on pay and employment of low-wage workers in New York, California and elsewhere.³

2. STUDYING THE EFFECTS OF \$15 MINIMUM WAGES IN NEW YORK

2.1 Data

The minimum wage research literature often focuses on the fast-food restaurant industry because of its high concentration of low-paid workers. Any effects of \$15 minimum wages on jobs would be greater in this industry than in most any other low-paid industry. Conversely, the absence of any employment effect in fast food indicates that the number of jobs in other industries would also not change.⁴

MRW use fast-food pay and employment data on New York's twenty-two most populous counties from the U.S. Bureau of Labor Statistics' *Quarterly Census of Wages and Employment (QCEW)*.⁵ This data come from payroll reports that employers make every quarter to the New York State Department of Labor.⁶ MRW's sample period begins in 2009 and ends in 2022q1 (the most recent available). The twenty-two counties account for over 85 percent of total New York State employment.

2.2 Method

The main challenge in identifying the causal effects of minimum wages involves estimating how pay and employment in New York would have evolved in the absence of minimum wage policies. To estimate this evolution, MRW deploy a widely-used statistical method called the synthetic control approach. This method compares pay and employment trends in fast-food restaurants since 2009 in New York State counties to the same trends in a matched set of counties in other states that have kept minimum wages at \$7.25 since 2009. We first check whether New York's trends in the pre-policy period closely match those in the matched control group counties. We then compare the differences in the trends in the post-policy period.

³A Federal Reserve Bank of New York study (Bram et al. 2019) compared minimum wage effects in New York and Pennsylvania counties that straddle their common border. The fast-food minimum wage was then \$13.75 in New York and \$7.25 in Pennsylvania. Similar studies include Moe et al. (2019) and Lander (2022). Each of these studies finds pay increases but no disemployment effects. MRW study the effects in a much broader set of New York counties and they use a synthetic control method to more credibly identify the causal effects of minimum wages. MRW is also the first to study effects at \$15 and higher.

⁴I focus here on the effects on the number of jobs. Economic Policy Institute (2022) examines the number and demographic composition of workers who would get pay increases and the size of the average increases. NELP (2022) examines the broader implications of the legislation. The proposed increases would also affect New York State's expenditures and tax revenue. I do not examine such effects here. For my analyses of such effects on California's budget and on the federal budget, see Allegretto, Reich and West (2014) and Reich (2021).

⁵We exclude Erie and Jefferson Counties because their proximity to Canada and fluctuations in the Canadian dollar.

⁶QCEW pay data measure average weekly pay over a quarter; they can diverge from hourly pay if average weekly hours vary. In practice, weekly working hours in the fast-food industry change very little over time, even after minimum wage changes.

The pre-policy period consists of the years when minimum wages did not change in New York and in the control group counties—2009q4 through 2013. The post-policy period consists of the period when New York’s minimum wages began their increase—from 2014q1 to 2022q1 (the most recent data available).

MRW construct control groups for each of the 22 New York counties in our sample. To do so, we use the synthetic control method to identify a weighted average of the \$7.25 counties that best match each New York county’s pre-policy fast food pay and employment trends—and other important controls, such as unemployment rates.⁷

The estimated effects comprise a double difference: the difference between changes in fast-food pay and employment between the pre- and post-policy periods in each New York county and the difference in the pre- and post-policy periods in the control group. MRW then calculate a weighted average of the results for each county to estimate an overall effect.

The synthetic control approach works only if two conditions are met:

- 1) The method must successfully construct synthetic control groups with similar fast-food pay and employment trends during the pre-policy period;
- 2) The researchers must control for any confounding shocks during the post-policy period that affect the New York and control group counties differently.⁸

Under these conditions, the method can predict how New York's fast-food industry would have evolved in the absence of any minimum wage increases.⁹

3. RESULTS

More populated counties tend to have higher wage levels and are more urbanized than small counties. For these reasons, I discuss results separately for three sets of counties. I first present the results for seven larger New York counties, then for ten midsize New York counties, and, finally, for New York City.

3.1 Seven larger non-NYC counties

Figures 1A and 1B present the results of our synthetic control estimation for three downstate counties (Nassau, Suffolk and Westchester) and four metro upstate counties (Albany, Monroe, Onondaga and Rochester).¹⁰ The blue line in Figure 1A displays average differences over time between weekly pay trends of fast-food workers in these counties and weekly pay trends of fast-food workers in the synthetic control

⁷In 2009 average pay levels in New York were higher than in the control group. The synthetic control approach compares only subsequent pay trends, not levels.

⁸To eliminate the confounding effects of the Covid pandemic on restaurant employment, which were greater in New York than in the \$7.25 counties, MRW control for Covid-era changes in the control group on spending in restaurants and retail and on time spent at workplaces.

⁹MRW also use a variety of dynamic difference-in-differences statistical methods. These methods produce very similar results to the synthetic control approach.

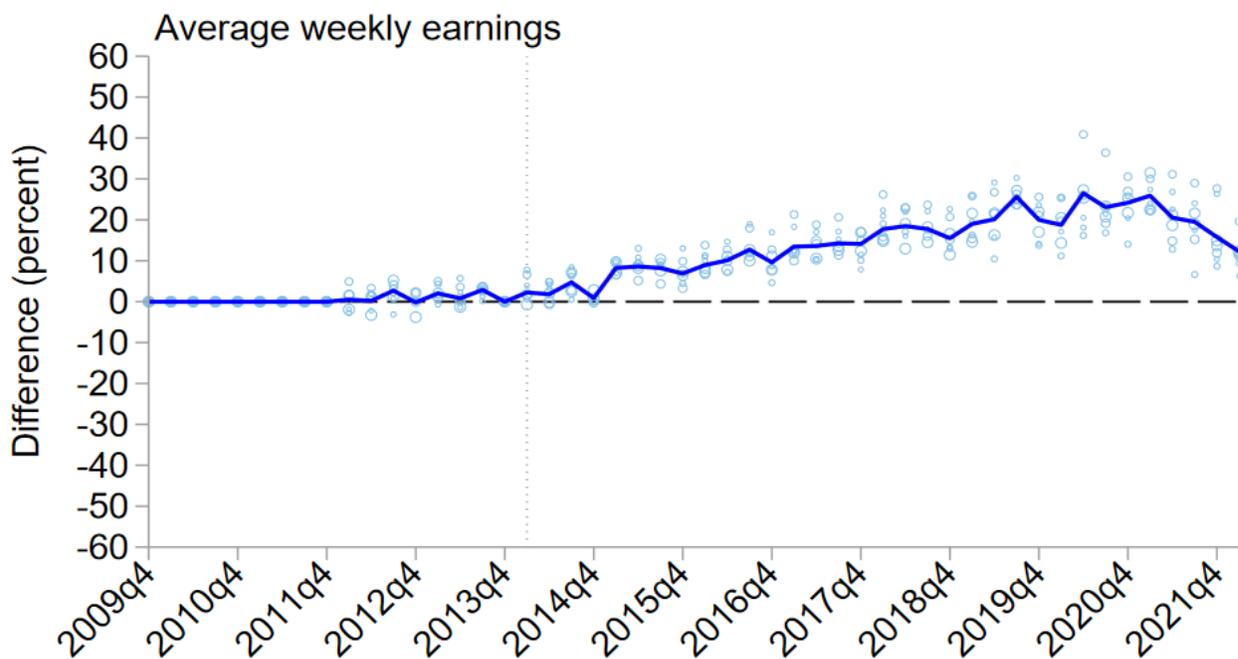
¹⁰ Larger counties are those outside New York City with at least 5,000 restaurant workers.

groups. The lighter blue circles (some of which overlap) show the same estimates for each of the seven counties).

In the pre-policy period from 2009q4 to 2013q4, the blue line stays very close to the x-axis, indicating that pay trends are very similar in both groups of counties. The individual light blue circles are also all close to the x-axis. In other words, the figure shows an extremely close pre-policy fit between these New York counties and the synthetic control group. The synthetic control method successfully constructed a control group with pay trends that closely match those in these New York counties in the pre-policy period.

Figure 1A

Effects on fast food pay, larger non-NYC counties



In the post-policy period, which begins in 2014q1, the same blue line shows that fast-food pay began to grow faster in these New York counties than in the synthetic control group. This pattern holds in each of the individual counties, as the blue circles indicate. The difference between pay trends in these New York counties and in the control group then continues to increase as the fast-food minimum wage increases through 2019q4. This pattern shows that the minimum wage policies raise pay about 20 percent, similar to the results in national studies of more moderate increases (Cengiz et al. 2019).

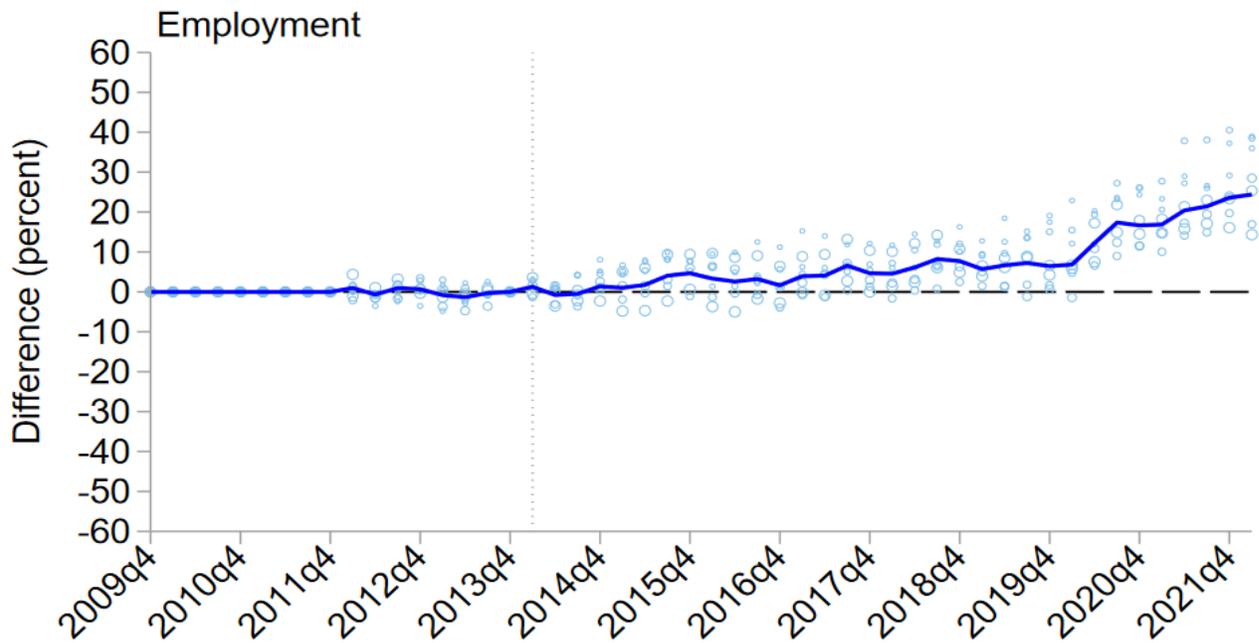
Between 2020 and 2022q1 the wage effect remains positive but decreases in magnitude. This reduction reflects both the end of the minimum wage increases and the unusual labor markets of the Covid pandemic years, when pay increases for low-wage jobs in \$7.25 minimum wage states increased rapidly—and at rates greater than in higher minimum wage states.¹¹

¹¹ Autor, Dube and McGrew (2022) find that wage increases for low-wage jobs were greater in minimum wage states in 2017 to 2019, but not in 2020 to 2022.

Figure 1B shows the effects on fast-food employment. In the pre-policy period of 2009 to 2014, the blue line stays very close to the x-axis, indicating that employment trends in the upstate New York counties were very close to those in the control group counties. This pattern indicates that the synthetic control groups match pre-policy employment trends in these New York counties.

Figure 1B

Effects on fast food employment, larger non-NYC counties



Look next at the post-policy period. On the right side of the figure, the blue line shows a clear positive effect on fast-food employment. The blue circles show that employment increased in every one of these counties relative to the control. This finding suggests that large employers possessed significant monopsony power to hold down wages and employment. The minimum wage policies reduced their power.

3.2 Ten mid-sized non-NYC counties

Figures 2A and 2B present our results for ten mid-sized New York counties.¹² In Figure 2A the match is again very close in the pre-policy period. In the post-policy period, the effects on fast-food pay in these counties are positive and similar in magnitude to those for the larger counties displayed in Figure 1A. The blue line again dips in 2021, when fast-food minimum wages stopped increasing and the hot labor market increased fast-food pay in the control group counties.

¹²The mid-sized counties are those with between 2,000 and 5,000 restaurant workers. The data for counties with smaller numbers of restaurant workers are noisier and not adequate for statistical analysis. The ten mid-sized counties are Broome, Dutchess, Niagara, Oneida, Ontario, Rensselaer, Rockland, Saratoga, Schenectady, and Ulster.

Figure 2A

Effects on fast food pay, mid-sized non-NYC counties

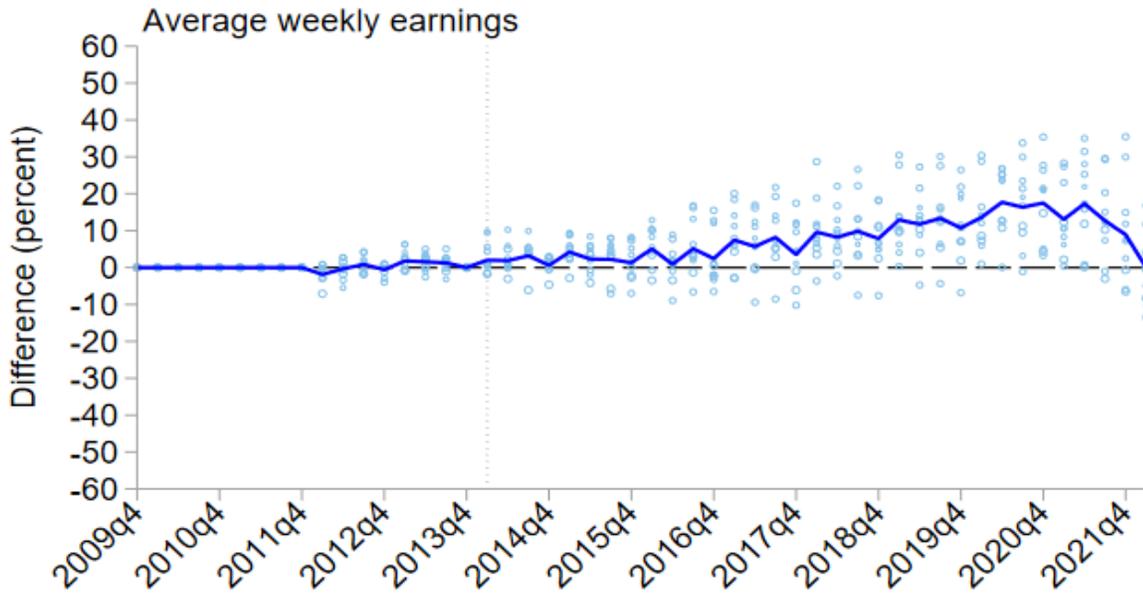
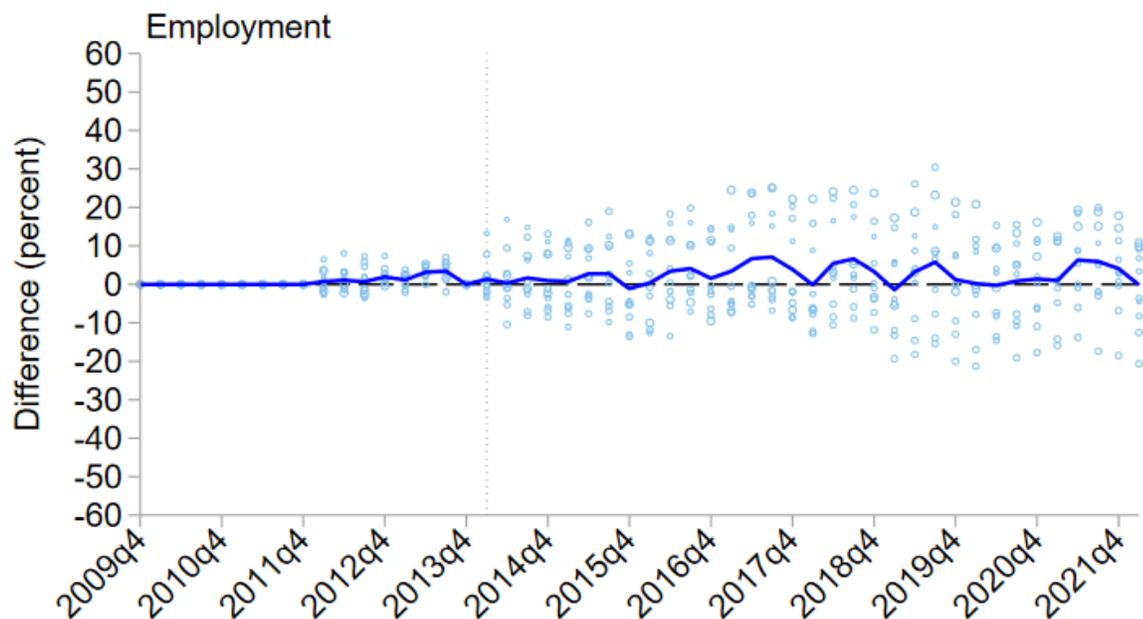


Figure 2B indicates that the \$15 minimum wage on average did not have any effects on fast food employment in these counties.

Figure 2B

Effects on fast food employment, midsized non-NYC counties



3.3 Results for New York City

Figures 3A and 3B show our results for New York City. Here the blue lines again show the differences in pay and employment trends between New York City and its synthetic control group.

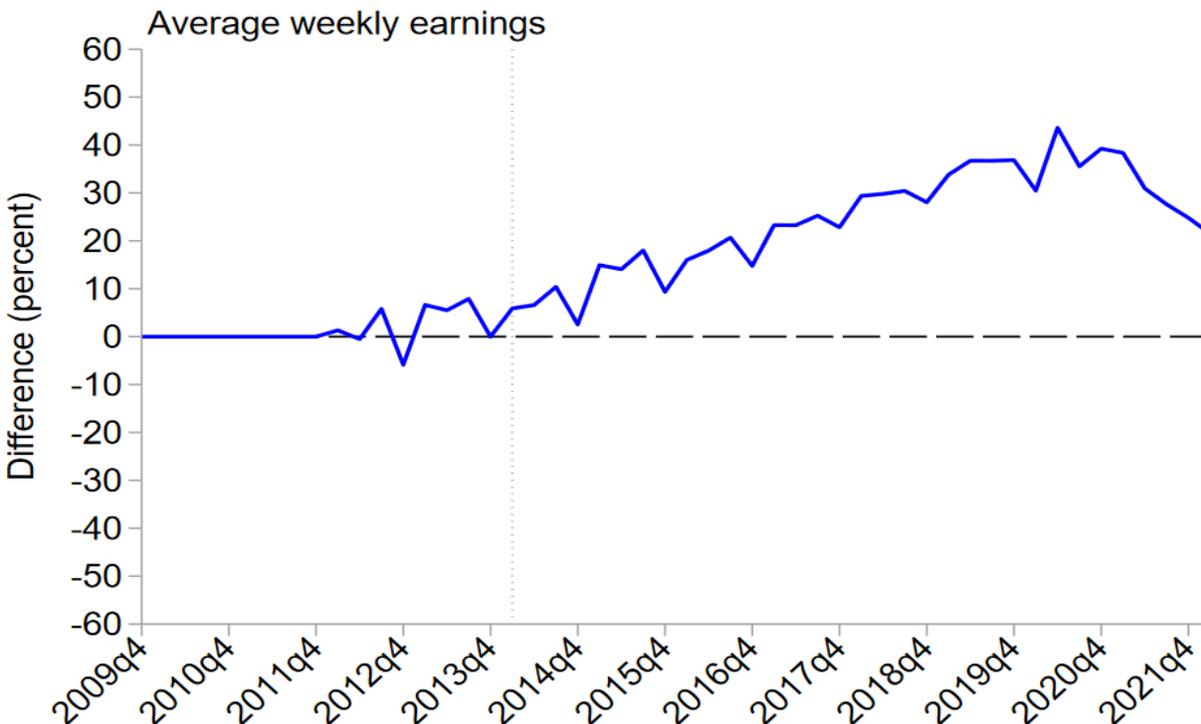
In Figure 3A, the blue line at first lies very close to the x-axis, indicating that the synthetic control provides an excellent match for fast-food pay trends in New York in the pre-policy period. The blue line then begins to increase above the x-axis during the post-policy period, indicating that minimum wage increased fast-food pay about 20 percent by 2016 and close to 40 percent by 2019. The increase between 2016 and 2019 is twice as large as in the non-NYC counties.

The greater pay increase in New York City is notable because pre-policy wage levels in the city were already higher than in the rest of the state. The greater pay increases may have been caused by change in immigration policy in 2016, which especially reduced the supply of low-educated labor in the city.¹³

The blue line then dips in 2020 to 2022, after minimum wages no longer increased in New York City and the hot labor market raised pay in the control group counties.

Figure 3A

Effects on fast food pay, New York City

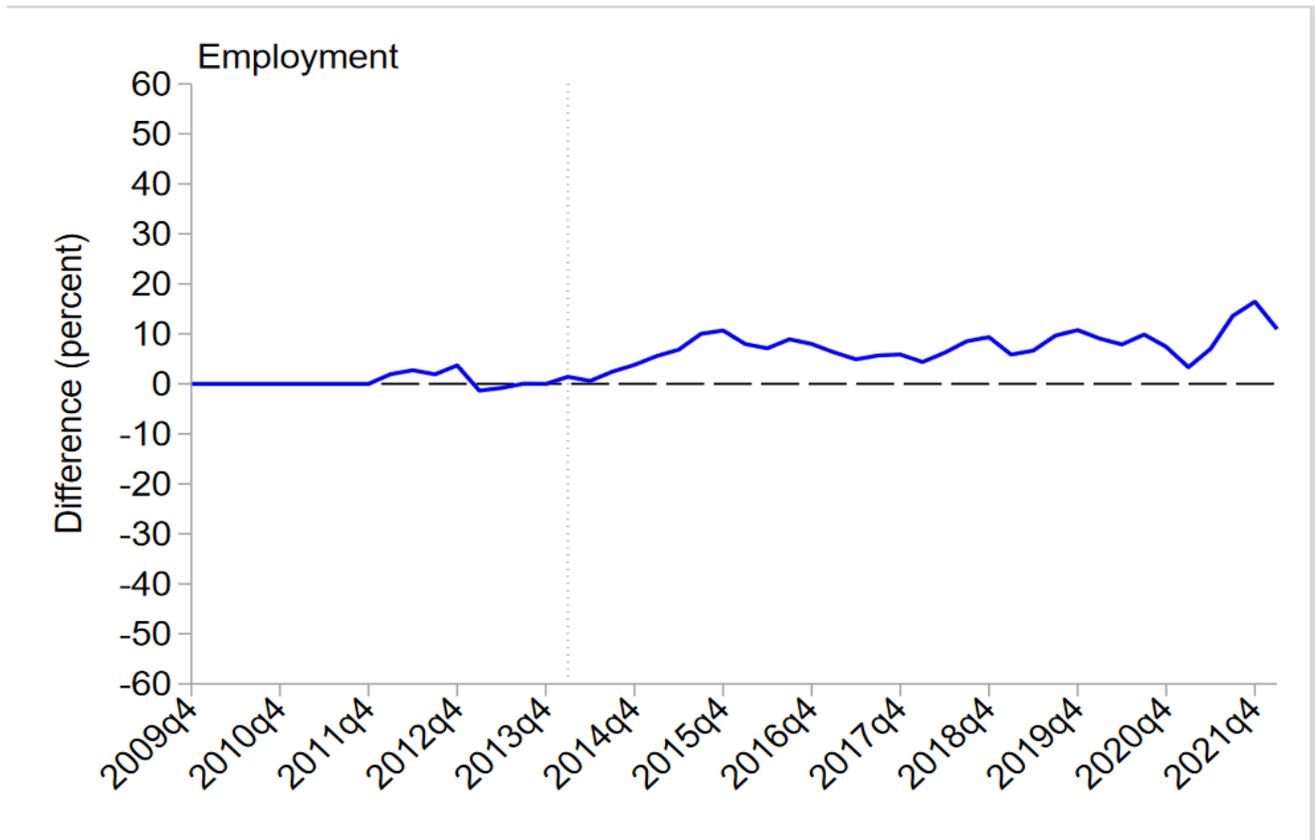


¹³In 2013 immigrants comprised about 47 percent of all New York City workers and about 60 to 80 percent of workers in food-preparation occupations, approximately double the percentage in New York State as a whole. Immigrant percentages began a swift decline with the change in immigration policy that began early in 2017.

In Figure 3B, the blue employment line again lies very close to the x-axis during the pre-policy period. It then rises somewhat above the x-axis during the post-policy period. This pattern indicates a small positive employment effect on fast-food employment in New York City.

Figure 3B

Effects on fast food employment, New York City



In summary, these results show that minimum wages increased fast-food pay without reducing employment in New York. In some areas, fast-food employment increased because the minimum wage reduced the power of employers to hold down wages and headcounts.

4. HOW HIGH CAN MINIMUM WAGES RISE WITHOUT REDUCING THE NUMBER OF JOBS?

Why did the \$15 minimum wage not cause job losses? In the textbook model of a perfectly competitive labor market, employers facing higher labor costs reduce their employee headcounts and hours and substitute technology for labor. Nonetheless, the best minimum wage studies find that moderate minimum wage increases do not reduce employment (Cengiz et al. 2019).

Studies of fast-food restaurants do not observe any relationship between automation and minimum wage levels (Aaronson and Phelan 2019). Ashenfelter and Jurajda (2022) collected data from thousands of McDonald's restaurants in the U.S. They found that McDonald's restaurants in states that increased their

minimum wages were no more likely to implement touchscreen ordering systems than states that did not increase minimum wages.

The minimum wage research literature identifies three main mechanisms that lead businesses to absorb labor cost increases without reducing employee headcount or hours. First, restaurants pass on the cost increases to consumers in small price increases (Allegretto and Reich 2018; Cooper et al. 2020). Since consumer demand for fast food responds very little to modest price increases, businesses are better off increasing prices than by reducing their workforce. The estimated price increases suggest that the proposed minimum wage increases in New York would raise the price of a \$5.15 Big Mac by about 1.9 percent per year over three years (Ashenfelter and Jurajda 2022).

Second, wage increases substantially reduce employee turnover and make it less costly for businesses to fill their vacant positions (Dube, Lester and Reich 2016). The cost savings are especially important in low-wage industries, where turnover exceeds 100 percent per year, and when the number of job openings is greater than the number of workers searching for jobs, as is the case at present.

Third, many low-wage employers possess the power to set their own wage and employment levels (Card 2022). They use that power to set their pay and employee headcounts below those that would pertain in a competitive labor market. In other words, low-wage labor markets are far from perfectly competitive. Higher minimum wages reduce these employers' labor market power, raising pay and employment levels (Wiltshire 2022). These employers can raise wage and employment while remaining profitable.

Could minimum wages higher than \$15 nonetheless cause job losses? McPherson, Reich and Wiltshire do not find job losses in cities that already had minimum wages above \$16 and \$17 in 2022, such as Los Angeles, San Francisco, San Jose and Seattle. Another study (Godoey and Reich 2021) found that minimum wages did not reduce employment even in the lowest-wage quartile of U.S. counties, where the ratio of minimum wages to median wages reaches as high as 82 percent. These studies and the findings in MRW indicate that economists have not yet identified the level at which minimum wages would reduce jobs numbers.

5. CONCLUSION

Reich et al. (2016) analyzed a proposal to increase minimum wages to \$15 in New York State by 2021. The report predicted that a gradual increase to \$15 would not reduce the number of jobs. The results reported here both confirm the accuracy of that forecast. They also suggest that the proposed further increases to \$21.25 will raise pay of low-wage workers and not reduce the number of jobs in New York.

REFERENCES

- Aaronson, Daniel and Brian Phelan 2019. “Wage Shocks and the Technological Substitution of Low-Wage Jobs.” *Economic Journal* 129, 617: 1-34.
- Allegretto, Sylvia and Michael Reich 2018. “Are Local Minimum Wages Absorbed by Price Increases? Evidence from Internet-Based Restaurant Menus.” *ILR Review* 71, 1: 35-63. <https://irl.berkeley.edu/are-local-minimum-wages-absorbed-by-price-increases-estimates-from-internet-based-restaurant-menus/>
- Allegretto, Sylvia, Michael Reich and Rachel West 2014. “Ten Dollars or Thirteen Dollars? Comparing the Effects of State Minimum Wage Increases in California.” CWED Policy Brief. <https://irl.berkeley.edu/files/2014/Ten-Dollars-or-Thirteen-Dollars.pdf>
- Ashenfelter, Orley and Stepan Jurajda 2022. “Minimum Wages, Wages and Price Pass-through.” *Journal of Labor Economics* 40, 51:
- Autor, David, Arindrajit Dube and Annie McGrew 2022. “The Unexpected Compression: Competition at Work in the Low Wage Economy.” Presentation to the Markus Academy. December 8. <https://bcf.princeton.edu/events/david-autur-on-the-unexpected-compression-competition-at-work-in-the-low-wage-economy/>
- Bram, Jason, Fatih Karahan, and Brendan Moore 2022. “Minimum Wage Impacts along the New York-Pennsylvania Border.” Federal Reserve Bank of New York *Liberty Street Economics*. <https://libertystreeteconomics.newyorkfed.org/2019/09/minimum-wage-impacts-along-the-new-york-pennsylvania-border.html>.
- Card, David 2022. “Who Set *Your* Wage?” (Nobel Prize Lecture) *American Economic Review* 112, 4: 1075-90.
- Cengiz, Doruk, Arindrajit Dube, Attila Lindner and Ben Zipperer 2019. “The Effect of Minimum Wages on Low Wage Jobs.” *Quarterly Journal of Economics* 134, 3: 1405-54.
- Cooper, Daniel, Maria Luengo-Prada and Jonathan Parker 2020. “The Local Aggregate Effects of Minimum Wage Increases.” *Journal of Money, Credit and Banking* 52, 1: 5-35.
- Dube, Arindrajit, William Lester and Michael Reich 2016. “Minimum Wage Shocks, Employment Flows, and Labor Market Frictions.” *Journal of Labor Economics* 34, 3:
- Economic Policy Institute 2022. “[Proposed New York state minimum wage legislation would boost wages for nearly 2.9 million workers.](#)” EPI Blog, December 14.
- Lander, Brad 2022. “New York by the Numbers.” No. 69. New York City Comptroller. <https://comptroller.nyc.gov/newsroom/newsletter/new-york-by-the-numbers-monthly-economic-and-fiscal-outlook-no-69-september-12th-2022/>
-

McPherson, Carl, Michael Reich and Justin Wiltshire 2023. “High Minimum Wages in Good Times and Bad?” IRLE Working Paper, UC Berkeley.

Moe, Lina, James Parrott and Yannet Lathrop 2019. “New York City’s \$15 Minimum Wage and Restaurant Employment and Earnings.” <http://www.centernyc.org/new-york-citys-15-minimum-wage>

NELP 2022. “Why New York Needs to Raise Its Minimum Wage.” <https://s27147.pcdn.co/wp-content/uploads/2023-1-12-Fact-Sheet-Why-New-York-Needs-to-Raise-Its-Minimum-Wage.pdf>

New York State, Division of the Budget 2022. “2023 Minimum Wage Report.” New York State Division of the Budget. <https://dol.ny.gov/system/files/documents/2022/10/minimum-wage-2023.pdf>

Reich, Michael, Sylvia Allegretto, Ken Jacobs and Claire Montialoux 2016. “The Effects of a \$15 Minimum Wage in New York State.” CWED Policy Brief. Institute for Research on Labor and Employment, University of California, Berkeley <https://irle.berkeley.edu/files/2016/The-Effects-of-a-15-Minimum-Wage-in-New-York-State.pdf>

Reich, Michael 2021. “Effect of a federal minimum wage increase to \$15 by 2025 on the Federal budget.” CWED Policy Brief, Institute for Research on Labor and Employment. UC Berkeley. <https://irle.berkeley.edu/files/2021/01/Reich-15-MW-Budget-Impacts-January-28-2021.pdf>

Wiltshire, Justin 2022. “Walmart Supercenters and Monopsony Power: How a Low-Wage Employer Impacts Local Labor Markets.” <https://justinwiltshire.com/walmart-supercenters-and-monopsony-power>

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