November 3, 2021

Comments on

“Economic Impact Evaluation of the City of Minneapolis’s Minimum Wage Ordinance”
by Loukas Karabarbounis, Jeremy Lise and Anusha Nath
https://www.minneapolisfed.org/topic/minimum-wage

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[Disclosure: The Minneapolis Federal Reserve Bank commissioned me to review a draft of the studies cited above, which I provided on October 15, 2021. The studies, released on November 1, 2021, were revised considerably from the draft that I previously reviewed. My comments here refer only to the final versions. I refer to these--using the authors’ initials--as KLN.]

Policies

The City of Minneapolis instituted a city-wide minimum wage that reached $10. on January 1, 2018, and $11.25 on July 1, 2018. It was then raised to $12.25 on July 1, 2019, and to $13.25 on July 1, 2020. These minimum wage levels apply to firms with 100 or more employees; a longer phase-in applies to smaller firms. The nearby City of St. Paul also instituted a citywide minimum wage, which first went into effect in 2020. Most of my comments focus on KLN’s Minneapolis report.

1 Professor, Graduate School, University of California, Berkeley and Co-Chair, Center on Wage and Employment Dynamics, Institute for Research on Labor and Employment. Professor Reich has authored numerous studies of minimum wage effects that have influenced both the economics profession and policy makers. These are available at www.cwed.berkeley.edu/minimumwage
Methods

The central issue in identifying the causal effects of these policies concerns separating their effects from the effects of other simultaneous changes that affect wages, employment and hours, especially among low-wage businesses and workers. Economists generally use various methods to create a control group to identify the causal differences.

But two major events affected the Twin Cities in 2020: The rapid and severe economic shutdown response to the pandemic; and the widespread protests, marches and curfews after the murder of George Floyd and lasting through the subsequent trial of former Minneapolis police officer Derek Chauvin. These events each affected the Twin Cities economy to a much greater extent than any other city in Minnesota. These events therefore make it extremely difficult to identify the separate effects of the minimum wage.

KLN’s causal identification strategy first constructs synthetic control groups that we can call Synthetic Minneapolis and Synthetic St. Paul. These control groups are set up to mimic the wage and employment trends in each industry in each of the Twin Cities well before the policies went into effect. This approach sometimes results in excellent pre-treatment fits, but not always.

The authors claim their pre-treatment fits are excellent, but that is not at all the case (KLN Table 5). They are particularly poor for wages in the industries most affected by the pandemic, which include Arts, Entertainment and Recreation, and Restaurants. The pre-treatment fit of the control group for jobs is also poor for limited-service restaurants.

2013 simulation

KLN attempt to demonstrate the validity of their control groups by estimating the effects of a simulated 2013 minimum wage increase, when none occurred. This validity test expects zero effects on jobs in 2013. But the results (Table 7) include a 10 percent increase in retail trade jobs and 51 percent increase in the number of limited-service restaurant jobs. These results invalidate their control groups and suggest that we cannot place much confidence in any of their results.

“Pre-pandemic” results

KLN present two sets of results. One is for the period through the first quarter of 2020, which they label as their “pre-pandemic sample.” The other consists of the period through the end of 2020.

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2 KLN (p. 13) state that their pre-pandemic sample “covers the period up to 2020(1).” They then state: “We then provide preliminary results for the 2020 minimum wage increases, which adds the period 2020(2) to 2020(4) to the analysis.” The wording in the second sentence suggests that their pre-pandemic period includes 2020(1). I assume that is the case in my comments here.
In the “pre-pandemic” results (Table 6), the standard errors of the estimates are extremely large and employment effects are not significant, except in restaurants. Their “pre-pandemic” results for restaurants show employment effects that are well outside the range in the minimum wage literature. These may arise not only because of the poor quality of their control groups, but also because the economic effects of the pandemic were already well underway in 2020q1.

The first Covid case in Minnesota was reported on March 6, 2020; the Governor declared a state of emergency on March 13, 2020. Given the unprecedented speed at which the economy shut down, results through the end of March 2020 likely were still affected by the pandemic. (See my further discussion below.)

High-wage industries

KLN report estimates of minimum wage effects in two high-wage industries in their “pre-pandemic” sample. If their statistical methods are sound, they should not find significant wage or employment effects in these industries, as few of the workers in these industries earn low wages. However, KLN report (Table 8) a 15.6 percent increase in jobs in finance and insurance, and 5.1 percent increase in wages in professional services. These results cast further doubt on the validity of their study.

Pandemic era results (through 2020q4)

The report finds modest wage increases in Minneapolis retail and restaurants and none for these industries in St. Paul. The Minneapolis estimates (in Table 9) for employment are virtually identical with those for hours, which is unusual. To save time and space, I will discuss only the estimated employment effects.

Some of the employment estimates are eye-popping: KLN estimate that average wages increased 4 percent in full-service restaurants and yet generated a 39 percent decline in jobs; and that a 10 percent increase in average wages in limited-service restaurants generated a 37 percent employment decline! Based upon KLN’s estimates of the proportions of low-wage workers in these industries, these results imply that virtually every worker paid under the new minimum wage lost their job. This seems highly implausible, as the mandated wage increases were quite modest, and large proportions of the restaurant workers were already paid very close to the new minimum wage.

The St. Paul estimates for restaurants (Table 9) are equally eye-popping: With an average wage increase of about 2.5 percent among full-service restaurants, employment falls by 26 percent.

If these estimates are correct, surely many restaurant owners and workers would have been protesting in the streets!
I did not see results separately for 2018 and 2019 in any of the tables. They should be reported as well, along with confidence intervals, as they would not be affected by the big 2020 shocks.

**The pandemic recession: depth and timing**

In a few short months in the spring and summer of 2020, the U.S. unemployment rate rose to levels previously recorded only during the depths of the Great Depression. As multiple studies of the Covid shock have shown, the business shutdowns, which were probably coded as exits in the administrative data used in this report, and the subsequent deep recession especially affected low-wage workers. Many of these workers were employed in service industries that were customer-facing and could not conduct business remotely. The economic recovery since April of 2020 has left many of the same workers behind. Consider for example, this figure:

![Graph showing employment changes](image)

The figure shows much greater pandemic-related declines in employment among workers without college and in the largest metros (population 2.5 million or more). Larger metro areas tend to have more restaurant and other low-wage service jobs per capita than small ones, which explains the greater recessionary effects in larger metros. The Twin Cities metro area, with over 3.5 million people, is much bigger than any other populated area in Minnesota. A deeper pandemic recession in the Twin Cities might therefore generate the effects that KLN report, indicating a spurious attribution to the minimum wage increases.

Note that the reference week for monthly ES-202 reports always includes the 12th day of the month; the state of emergency began on March 13. The March 2020 employment reports in their data were therefore heavily affected by the pandemic shutdowns.

This report is especially informative because it presents monthly QCEW data. Here are three excerpts:

1. “The second most heavily impacted industry by the pandemic recession is Accommodation and Food Services, which lost over half (or 53%) of its employment between February and April [2020].”

2. “In terms of count of jobs, the Accommodation and Food Services industry endured the largest COVID-19 impact to all four establishment types (See Table 2). In March-April 2020, COVID-19 inflicted a loss of 10,754 jobs in possible new jobs added by expanding establishments, a loss of 2,617 jobs in possible new jobs added by opening establishments, a removal of 80,572 jobs from contracting establishments, and removal of 29,607 jobs from closing establishments. All this adds up to a whopping loss of 123,550 jobs as captured in the net employment change.”

3. “The COVID-19 impact of 123,550 jobs lost in the Accommodation and Food Services industry amounts to 30% of the overall COVID-19 impact on jobs. No other industry is even close to this level of impact across all four types of establishments. Moreover, no other industry ranks as high in terms of COVID-19 impact in all five measures of business employment dynamics.”

Cities like Minneapolis have more restaurants and hotels relative to its size, and more employment per capita in sports stadiums, museums, convention centers and concert halls than do smaller cities. The statewide losses summarized above were therefore likely even greater in Minneapolis than in KLN’s control cities.

Bottom line: It is misleading to refer to the period that includes 2020q1 as “pre-pandemic.” KLN need to show the monthly employment counts by industry for the entire period of their study. The minimum wage literature finds that wage and employment effects occur almost entirely within the first six months of a policy event. KLN therefore need to show how the monthly counts line up with their results. And their data analysis should end with 2019q4, not 2020q1.

Summary

The small wage effects and large disemployment effects found in this report constitute major outliers in the minimum wage literature. The report is riddled with contrasts between what they say are their findings and the findings themselves.

There are good reasons to suspect that the report’s outlier findings for what they call the “pre-pandemic” period ending 2020q1 result from the poor quality of their control groups and from their confounding the effects of the minimum wage with the effects of the pandemic-
generated deep recession. And that their results for the period ending 2020q4 also reflect the racial justice protests in the Twin Cities.