

Does a One-Size-Fits-All Minimum Wage Cause Financial Stress for Small Businesses?

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he existence of a mandated minimum wage has been the focus of substantial debate by academics and policymakers. We contribute to this debate by analyzing the impact of federal minimum wage increases on the financial health of small businesses. This sheds light on the costs of one-size-fits-all federal minimum wage increases. We focus on the financial health of small businesses, as they account for almost 50 percent of U.S. nonfarm gross domestic product, and the opening and closing of small businesses with fewer than 10 employees account for more than 70 percent of job gains and losses in 2018, according to the Bureau of Labor Statistics.

Wages compose a significant fraction of the costs faced by many small businesses. An increase in labor costs due to an increase in the minimum wage may not cause financial stress to a firm if it can reduce other costs, increase productivity, adjust its capital-to-labor ratio, or pass on the increased costs to its customers. But a firm's inability to offset an increase in labor costs may impact profit margins and financially stress the firm.

Although economic and labor market conditions vary substantially across the United States, 14 states have a minimum wage equal to the federal rate. We study the impact of one-size-fits-all federal minimum wage increases on the financial health of small establishments in states where the effective minimum wage is equal to the federal rate (the bounded states) relative to those in states where minimum wage rates are higher than the federal rate (the unbounded states). Further, we study how various economic conditions regarding the ability of these businesses to pass on the increased labor costs to consumers can moderate or amplify these wage increases.



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We use Dun & Bradstreet Paydex credit score data for approximately 15.2 million establishments from 1989 to 2013. The Paydex score evaluates the likelihood that a business will make payments to suppliers or vendors on time and hence can affect the availability of credit and interest rates for small businesses. We find that a \$1 increase in the federal minimum wage corresponds to an almost one-point greater reduction in the Paydex score of an establishment in a bounded state than that of a similar establishment in an unbounded state. This one-point reduction implies a delay of 1–2 days beyond the typical payment terms of 30 days. In our sample, the median establishment delays its payment by five days on average beyond the payment terms.

Further, we observe large threshold effects: an establishment's one-point decline in credit score from 80 points (payment within terms) to 79 points (payment two days beyond terms) that arises from an increase in the federal minimum wage corresponds to an increase in exit probability by 2.2 percentage points (a 25 percent increase from the 8.5 percent baseline annual exit probability).

One potential concern in identifying the effect of federal minimum wage changes is that two of the three increases were enacted during the recession years. The concern is whether our results can be attributed to the business cycles at the national level or the business cycles in the bounded states rather than the minimum wage increases themselves. However, we find that the bounded and unbounded states followed similar business cycles before and after the federal minimum wage increases. Further, the unbounded states seem to be affected more by the downturns in the overall economy.

Also, if the federal government's decision to adjust minimum wages is connected to differences between the economies of bounded and unbounded states, we may not be able to identify our effect. Therefore, we account for various observable characteristics at the state, county, and ZIP code levels in our estimates and execute additional tests to ensure that different unobservable local economic conditions in bounded and unbounded states are not driving our results. We also account for local economic conditions by analyzing establishments in counties with contiguous state borders, since adjacent counties at state borders likely have similar economic conditions in all aspects other than their respective minimum wages. We find consistent results for establishments in the bordering counties of the bounded states: a \$1 increase in the federal minimum wage decreases the Paydex scores of firms in the bounded state by 0.53 more points than it does for adjacent establishments in the unbounded state.

We also analyze the time-trend impacts of minimum wage increases. Before the federal minimum wage increases, we observe parallel trends in the average Paydex score for establishments in bounded and unbounded states. Within two years of a federal minimum wage increase, there is a sharp decline in the Paydex scores for establishments in bounded states. Finally, we observe that the difference between the Paydex scores for establishments in the bounded and unbounded states converges over the next three to five years. These results suggest that establishments that managed to survive are stronger in some respects or may be able to pass on the extra labor costs to customers over a longer period.

Under the enterprise coverage of the Fair Labor Standards Act, employer businesses with annual sales of \$500,000 or less are exempt from mandated federal minimum wages. We use this threshold to study the effect of a federal minimum wage increase. We find that the average Paydex score declines by almost 2.2 points more in the year of a minimum wage increase for the nonexempt firms located within the bounded states compared with those in unbounded states.

Some small businesses may face certain constraints in passing on their wage costs that may especially impact their financial health. We find that establishments within the same industry, those in the more competitive counties, and those in the low-income ZIP codes find it challenging to pass on their increased labor costs and thus experience a more significant decrease in their credit score. We also find that small and young establishments, which are more likely to have financial constraints, experience a more significant decrease in their credit scores. Establishments with high labor costs and those with an already low Paydex score seem to find it more difficult to absorb minimum wage increases and hence experience a larger credit score decline. Similarly, this negative impact is more pronounced in industries that employ more minimum wage workers (e.g., restaurants and retail) but is not limited to these industries. One explanation may include a spillover effect on other sectors. However, it is challenging to document spillover effects because of limitations on data from the very small firms we analyze.

Finally, we test whether the financial burden on businesses has aggregate real implications using publicly available data from the Bureau of Labor Statistics' Quarterly Census of Employment and Wages. We find that aggregate employment declines significantly more for restaurants (9.5 percent) and retail businesses (8.2 percent) in bounded states. Also, the negative effect is prominent in counties with lower personal income. We find similar results for the aggregate number of establishments.

Overall, our results document the unintended effects of a federally imposed uniform rule that increases the

minimum wage in areas where businesses may not be able to absorb the increased costs and thereby experience financial stress or even default on debt and cut employment.

NOTE

This research brief is based on Sudheer Chava, Alexander Oettl, and Manpreet Singh, "Does a One-Size-Fits-All Minimum Wage Cause Financial Stress for Small Businesses?," NBER Working Paper no. 26523, December 2019.



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