Minimum Wages' Minimal Effect on Employment

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Abstract

Recently, more and more states have taken measures to increase their minimum wage slowly over time. New Jersey increased its minimum wage from $4.25 to $5.05 in 1992. Pennsylvania also considered taking similar action but ultimately did not follow through. Price discrimination data compares fast food employment market trends between New Jersey and Pennsylvania.We ran a regression that accounted for several different kinds of defining characteristics of both states and all four fast food chains. This led us to the conclusion that increasing the minimum wage, only slightly increases fast food employment levels.

Data

On average we found that the higher a state's minimum wage was associated with a slight increase in the states employment levels. On average we found that the higher a state's minimum wage, the lower the states overall employment levels will be. We used data collected from fast-food restaurants (Burger King, Kentucky Fried Chicken, Roy Rogers and Wendy's) in New Jersey and Eastern Pennsylvania with on starting wages, employment, hours open, prices, collected in March 1992 and then again in December 1992.

Analysis

We formulated our regressions based on the data in our star gazer table. The similarity of the means of the starting wage and the number of employees between New Jersey and Pennsylvania suggested that they are correlated. From this we began to choose variables that we thought would help to explain the relationship between starting wage and the number of employees. In order to fully explain this relationship we decided to include identifying characteristics between our two sets of data on more than one level. On a state level we controlled for location (state),median family income, and population density. In terms of identifying characteristics of fast food employment we controlled for the number of hours that the store is open as well as the chain.

Results

Our results were conclusive but erratic for the most part. Almost all of the coefficients in our regression fluctuate continuously as we added more and more controlling factors On the surface level the coefficient on our variable of interest conveyed to us that there is an increase in employment as a result of increased minimum wage but this effect is very small (~0.12%). Our

linear hypothesis test on the statistical significance of our dependent variable of starting wages

affirm that our controlled variables account for the most relevant factors in this relationship. This

makes sense because when a company hires a worker, it is not necessarily seen as taking on an

expense, but rather, investing in their company. Odds are that the amount of money that the

employee will bring to the company through their employment will offset the fixed cost that the

company takes on in paying the worker. We conducted similar linear hypothesis tests on our

controlling variables to better understand the significance of their impact on our variable of

interest. We found that in terms of our baseline specification, both state and starting wages are

statistically significant at a level of five percent. Hours that the restaurant is open proved to be

insignificant on all levels above one percent when its significance to explaining the relationship

of our alternative specification against our baseline.When we controlled for hours open and

added the interaction between starting wages and hours open our coefficient of interest

drastically changed. Not only did the sign change, but the standard error increased immensely as

well, making it statistically insignificant. An 8% increase in the starting wages at a fast food

company is associated with a mean increase of 1 in the number of employees hired at a 10%

significance level. When viewing the results with a macroeconomic lense, an explanation could

be that higher starting wages brought people back into the labor force who otherwise had no

interest in employment at a lower pay rate.

Conclusion

One thing we could look further into to understand why the regression gave us this result

is finding out if the restaurants had the max amount of employees hired at the time the data was

collected. If restaurants with lower wages had open positions they were hiring for (since most

people don't want to work for the lowest possible wage) while higher starting wage locations were fully employed since they are able to attract a larger percentage of the workforce, then the data would show a trend of higher wages being associated with more employees. This would be supported by modern analysis of the unconventionally high turnover rates in the fast food industry. Within the last few decades, fast-food restaurants have become notorious for being understaffed, as there is less participation from the labor market when minimum wage fails to keep up with the rate of inflation.

Our study is internally valid. Omitted variable bias has been taken into account, the baseline specification is solid, there are no variable errors, the data collection is strong, and there is no simultaneous causality bias. When looking into the same scope and timeframe, it is clearly internally valid. Our study is also externally valid, to a degree. External validity is a generalization of relationships within the study in different locations, settings, and timeframes. Keeping the study within the same timeframe and the United States, the study is externally valid. Another factor for consideration of external validity is that New Jersey's minimum wage was raised to the highest in the country. More rural regions where there are likely slower rates of inflation may see a different effect from increasing starting wages to the extent that New Jersey did.