THE EFFECT OF MINIMUM WAGES ON LOW-WAGE JOBS: EVIDENCE FROM THE UNITED STATES USING A BUNCHING ESTIMATOR

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Abstract

This report attempts to estimate the effect that minimum wage increases have on the number of low-wage jobs. This is done by comparing the changes in low-wage jobs with their corresponding changes in minimum wages changes using 138 state-level minimum wage changes between 1979 and 2016.

Introduction

The purpose of this study was to evaluate new and potentially more accurate method of analyzing the impact that the minimum wage has on the amount of low-wage jobs exist in the economy, thus providing lawmakers and politicians better and more firm degree of control over the economy and economic policy.

Data

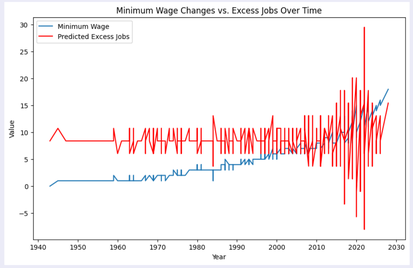
The data comes from NBER (National Bureau of Economic Research) as well as more general federal minimum wage data.

Methodology

This study uses data on state-level annual wage changes and juxtaposes it with data on the amount of excess jobs at or above the minimum wage in the economy. It is purely observational and simply draws from previously recorded records of minimum wage fluctuations and their corresponding changes in excess jobs. The study uses a bunching estimator to estimate the effect of minimum wage increase on the frequency distribution of hourly wages for 138 state-level minimum wage changes.

Findings

My findings showed that as the minimum wage increased over time, fluctuations in excess jobs increased dramatically. The range between possible values is positively correlated with the minimum wage.



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Discussion

My findings indicate that increases in the minimum wage, rather than causing direct and consistent increases in the number of excess jobs at or above the minimum wage, instead caused the number of excess jobs to become much more volatile and therefore caused the job market as a whole to become much more volatile.

Conclusions

This information can prove extremely useful to lawmakers and institutions like the Federal Reserve because it allows them to have a better understanding of the impact that minimum wage changes can have on the economy. This would, in turn, allow them to better control for negative outcomes and improve their macroeconomic policies for the future.

	State FIPS Code	month	day	mw	\
count	1185.000000	1185.000000	1185.000000	1185.000000	
mean	22.719831	2.935865	3.095359	11.146835	
std	14.120709	3.401501	7.197751	6.104831	
min	1.000000	1.000000	1.000000	0.000000	
25%	15.000000	1.000000	1.000000	6.000000	
50%	15.000000	1.000000	1.000000	10.000000	
75%	33.000000	4.000000	1.000000	18.000000	
max	56.000000	12.000000	31.000000	18.000000	

	mw_healthinsurance	mw_smallbusiness	mw_youth	mw_change	\
count	1185.000000	929.000000	686.000000	1184.000000	
mean	11.129502	11.678149	8.043732	1.165541	
std	6.109969	3.868357	0.204647	1.843302	
min	0.400000	5.000000	8.000000	-7.000000	
25%	6.150000	7.000000	8.000000	0.000000	
50%	10.000000	14.000000	8.000000	1.000000	
75%	18.000000	15.000000	8.000000	3.000000	
max	18.000000	15.000000	9.000000	9.000000	

	predicted_excess_jobs
count	1185.000000
mean	11.129502
std	4.322240
min	-8.019897
25%	8.398115
50%	10.743545
75%	15.434406
max	29.506987

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