

PA 819
Spring 2014
Final Project
Minimum Wage Impact
Due: Wednesday April 30, 11:30 am

The impact of the minimum wage on employment, earnings and poverty is a topic of current debate.

Your Assignment

You are the labor staff economist for the President's Council of Economic Advisers, and your task is to assess econometrically the impact of an increase in the minimum wage on employment and poverty rates. In particular,

1. Does an increase in the minimum wage have a measurable impact on employment?
2. Does an increase in the minimum wage have a measurable impact on the poverty rate?

You are provided a data set compiled by Jonathan Meer and Jeremy West at University of Texas at Austin (provide proper acknowledgment in your memo), augmented by Census data on poverty. You should note where your ability to answer these two questions is limited by shortcomings of the data.

Ground Rules

The memorandum may not exceed 3 double-spaced typed pages, plus table(s). The memo should start with a clear, one-paragraph summary of your findings. Present empirical results in tables. Assume that your reader is familiar the statistical techniques and terminology. Attach Stata output for grading purposes. But since a real-world memo would *not* include this output, your memo ought not rely on or refer to the Stata output.

Be sure to use the concepts from class, where relevant, including concerns about omitted variable bias, accounting for nonlinearities, endogeneity issues, and panel techniques (fixed effects, differences, time trends). While there is a plethora of studies on the issue of minimum wage effects, your memo should focus on the empirical results you obtain.

You will be assigned to groups of three or four people (no changing groups!). Each group will hand in a single memo that lists the names of all group members. *Groups may not consult with each other.*

Background: Minimum Wage Legislation

The Fair Minimum Wage Act of 2013 (link: <http://democrats.edworkforce.house.gov/sites/democrats.edworkforce.house.gov/files/documents/FairMinimumWageAct-BillText.pdf>) proposes increases in the minimum wage in increments of \$0.95, at yearly intervals, starting one year after passage. After the third increment, the minimum wage would have risen from \$7.25 to \$10.10. The minimum wage would be indexed to the Consumer Price Index thereafter.

Data Description

The data set is a compilation of data from Business Dynamics Statistics (BDS) from the Bureau of the Census, the Quarterly Census of Employment and Wages (QCEW) from the Bureau of Labor Statistics (BLS), and the Quarterly Workforce Indicators (QWI), also from the Bureau of the Census. The QCEW and QWI report quarterly employment data for each state, while the BDS is annual as of March 12th. Each of the data sets accounts for virtually the entire population of non-farm employment. Population-level data provide for a cleaner assessment of the overall policy impact of minimum wages by avoiding sampling error and enabling us to obtain more precise estimates. However, as a consequence, there is less demographic detail. The data set is augmented by poverty rates by state, drawn from Census:

<http://www.census.gov/hhes/www/poverty/data/historical/hstpov19.xls>

Variable	Description
statefips	State (FIPS code)
censusreg	Census Region (1-4)
censusdiv	Census Division (1-9)
year	Year
emp	Employment (levels)
lemp	Log of employment
jgr	Job growth rate
jc	Jobs created (levels)
ljc	Log of jobs created
jd	Jobs destroyed (levels)
ljd	Log of jobs destroyed
lnmin	Log of state real minimum wage as of prev. March 12 (2011\$)
realmw	State real minimum wage as of prev. March 12 (2011\$)
mw	State minimum wage as of prev. March 12
realfedmw	Federal real minimum wage as of prev. March 12 (2011\$)
fedmw	Federal minimum wage as of prev. March 12
indexedwage	State minimum wage is inflation-indexed
eversuperfed	Equals one if state ever had superfederal min. wage (0 o/w)
popall	Total population count in state in year
lpopall	Log of total population in state in year

share1559	Fraction of state population aged 15-59
gsp	Gross state Product (millions \$)
rgsp	Real Gross State Product (millions)
rgspcap	Real Gross State Product per capita
lrgspcap	Log of real GSP per capita
unemprt	Unemployment rate In state in year
unem	Unemployment in state In year
laborforce	Labor force participation count in state in year
povrate	Poverty rate in state In year