

Comments on:  
**Modeling the Effects of State and  
Federal Minimum Wages**

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## Minimum Wage Policy

Minimum wage is a key policy to help increase low wages

Many states and cities have passed large increases in min wages in recent years

Democrats would like to sharply increase Fed min wage

Critical to understand effects of local or federal min wage

Large empirical literature but challenging to put all the effects together

CWED model is the most sophisticated attempt to date to predict min wage effects

## **CWED Minimum wage model**

Pragmatic non-structural model that incorporates most salient empirical findings

Well grounded in recent empirical findings along a number of dimensions:

- 1) Direct effect given current distribution of wages
- 2) Substitution away from low wage workers
- 3) Passthrough to prices and reduction in consumption

Net effect on employment of moving to \$15 is close to zero

## **Issues with CWED model**

- 1) Core “Marshallian” competitive model
- 2) Labor costs in output
- 3) Local vs. Federal min wage
- 4) Link with CBO analysis

## Issue 1: Core “Marshallian” competitive model

In competitive Marshallian model, min wage is distortionary

⇒ Scope for using minimum wage (over and above taxes/transfers) is limited

In reality, wages not set solely by marginal product due to matching costs and bargaining of surplus between business, workers, and consumers

⇒ Minimum wage is a way to shift surplus toward workers

Challenge: how to incorporate this “Industrial Relation” view into the model

Recent work shows that min wage is passed through to prices

Dear Valued Customers,

Every city in the Bay Area is moving toward the establishment of a living minimum wage, including Oakland and Berkeley.

This is something at Gregoire we fully embrace. We believe that all employees, including Gregoire staff in both Berkeley and Oakland, deserve to make a fair living wage.

The minimum wage will be increasing by 35% starting March 1st in Oakland and will continue to go up yearly.

At Gregoire the quality of food we produce is our highest priority so in order for us to maintain our high level of standards our prices will reflect these new wage increases.

Thank you for supporting Gregoire Restaurant and its employees,

Gregoire Jacquet

## Issue 2: Labor costs in output and price effects

1) Labor costs to operating costs only **22%**

⇒ In CWED model, min wage payroll increase of 3.35% translates into a  $3.35\% \times 22.1\% = 0.74\%$  price increase

2) But labor income in value added is **75%**

Difference is due to intermediate goods production

⇒ Min wage affects intermediate goods prices as well and cascades to final retail price

With full pass through, final effect on prices should be  $3.35\% \times 75\% = 2.5\%$  instead of 0.74%

Employment effects -1% instead of 0%

## Costs for firms: the minimum wage increase would raise prices by 0.6 percent by 2021 in New York State

	% Change in Payroll Costs	Labor Costs as % of Operating Costs	Price increase
Cumulative changes by 2021, private, for profit sector			
All Industries	3.35%	22.10%	0.74%
Restaurants	23.13%	30.70%	7.10%
Retail trade	8.12%	10.80%	0.88%
Food manufacturing	7.61%	10.70%	0.81%

Source: Reich, Allegretto, Jacob, Montialoux (2016) [\[here\]](#).

Note: The price increases are presented in the case of a competitive model, and are calculated as follows: % Change in Payroll Costs \* Labor Costs as a % of Operating Costs \* Percentage Minimum Wage Increase. A full-pass-through of minimum wage costs into prices is assumed. The percentage minimum wage increase is an average between the percentage minimum wage increase in New York City and outside New York City weighted by the affected workforce in the two areas. Percent change in payroll costs includes payroll taxes and workers' compensation as well as turnover offsets. In this table, the percent change in payroll costs does not take into account the reduction in total wage bill due to substitution and productivity gains job losses. Those effects are, however, taken into account in our GE model.



The increase in prices will **reduce consumer demand**



### **Issue 3: Local vs. Federal min wage**

Analysis at State vs. Federal is almost identical

Key distinction: tradable vs. non-tradable goods.

For tradable goods, harder to shift min wages on prices

Fraction tradable goods increases when minimum wage increase is local

⇒ Would be good to incorporate this feature in the model

## Issue 4: Link with CBO analysis

CBO (2014) examined a \$9 and \$10.1 Fed min wage

CBO predictions: \$9 min wage has zero effect on employment but \$10.1 min wage has -0.3% employment effect

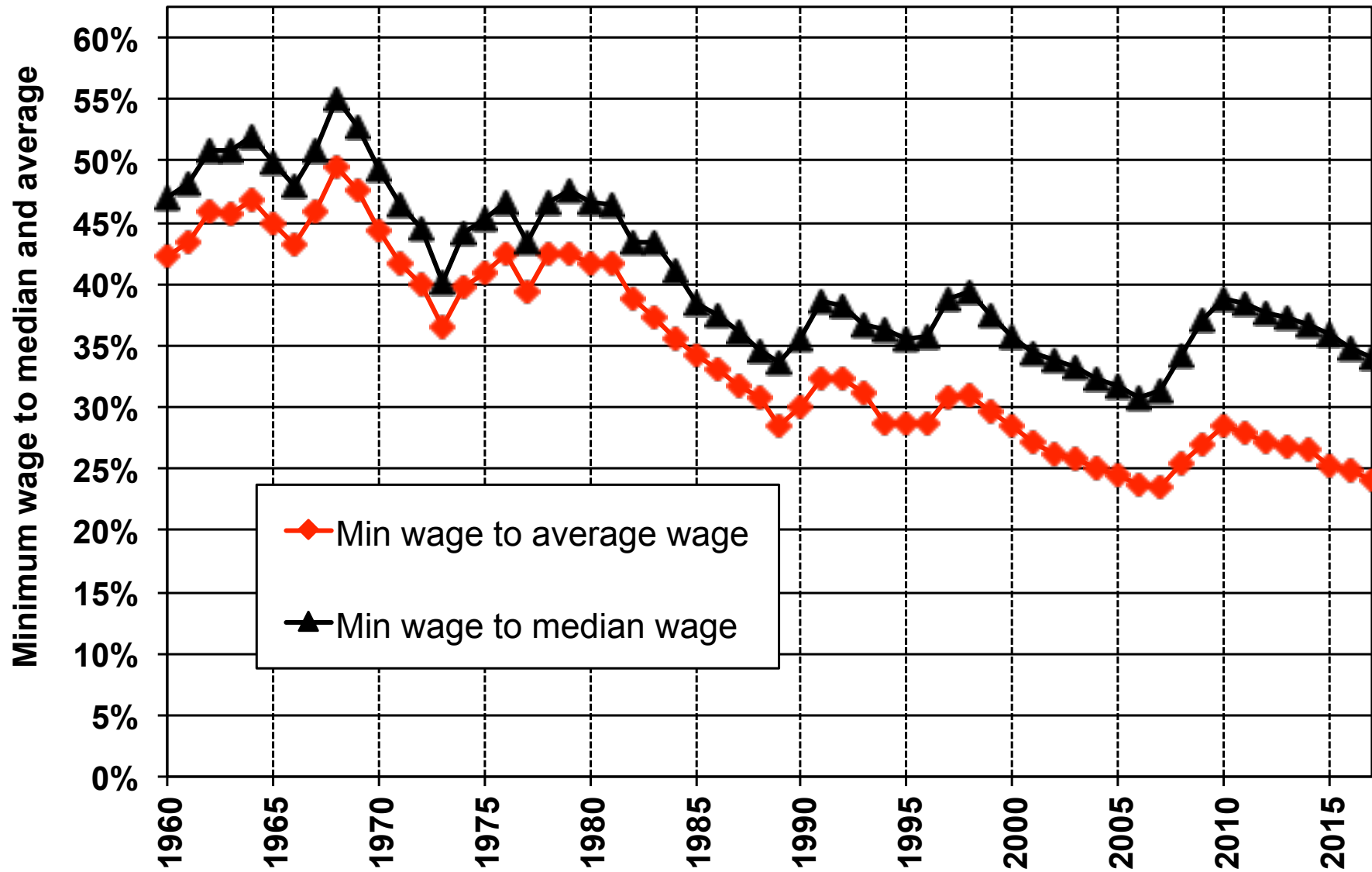
⇒ A \$15 min wage would have larger disemployment effects of at least -1%

CBO analysis important in policy making decision

CBO analysis is responsive to outside academic research

⇒ Important to discuss link with CBO analysis and start a dialog with CBO

# The Ratio of Fed Min Wage to Average or Median Wage



## **Is the minimum wage enough?**

Inequality in the US is very high

Minimum wage only help wages at the very bottom

Traditionally unions help push wages up for middle workers

E.g., Swedish wage floors by industry and occupation in lieu of uniform min wage

Unions useful in bilateral monopoly model of the labor market

Striking that min wage policy is so much more widely discussed than union policy