Minimum Wages, Morality, and Efficiency: A Choice Experiment

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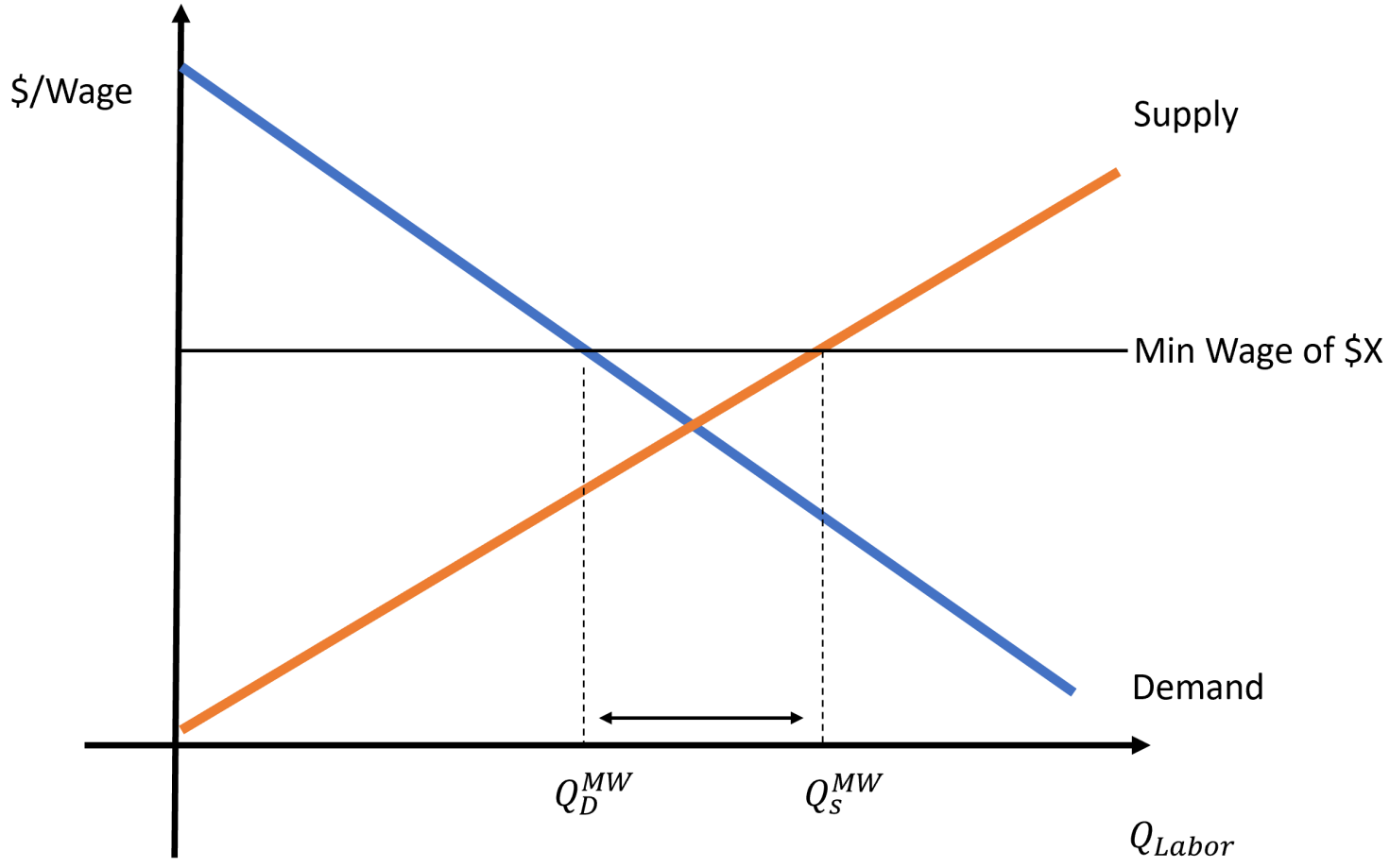
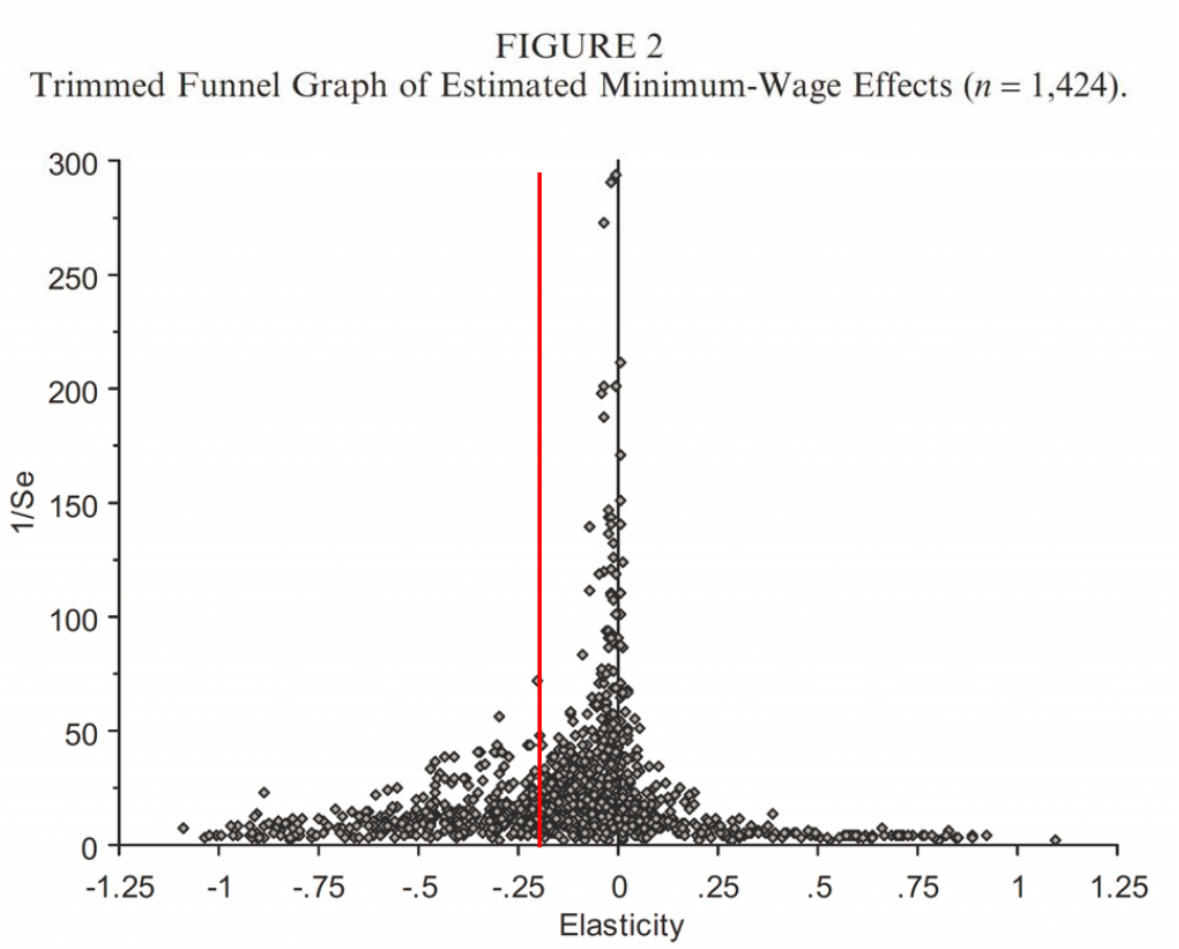
Is "the minimum wage" a moral issue?



- "Good or bad" depends on its effects - Card and Krueger (1994), Neumark & co-authors (2007, 2014, ...), and many more

Minimum Wage Funnel Plot



- Doucouliagos, Hristos, and Tom D. Stanley (British Journal of Industrial Relations, 2009)

Morality as a Constraint on Markets

- Kidney sales, price-gouging, ticket-scalping, prostitution, gambling, surrogacy
- Roth (2008) explains that "laws against buying or selling kidneys reflect a reasonably widespread repugnance, and this repugnance may make it difficult for arguments that focus only on the gains from trade to make headway in changing these laws."
- Elias, Lacetera, and Macis: Morality/Efficiency trade-off Kidney Payments (R&R, AER)

If you have to leave...

- Choice Experiment: MW of $X vs. No MW
  - Elicit moral position - unfair? exploitative? undignified?
  - "Vote" in four scenarios - with varying employment differences
  - LF status and history, political affiliation, moral dilemma

- Amazon mTurk & Qualtrics: 2,219 "reliable" responses
  - Average respondent needs about a five percentage point improvement in efficiency to "switch"
  - 41.5% always chose system with MW
  - 27.1% always chose system without MW
  - Op-eds, attention/reliability checks, policy makers care?

The Experiment

After IRB/Consent and background info...

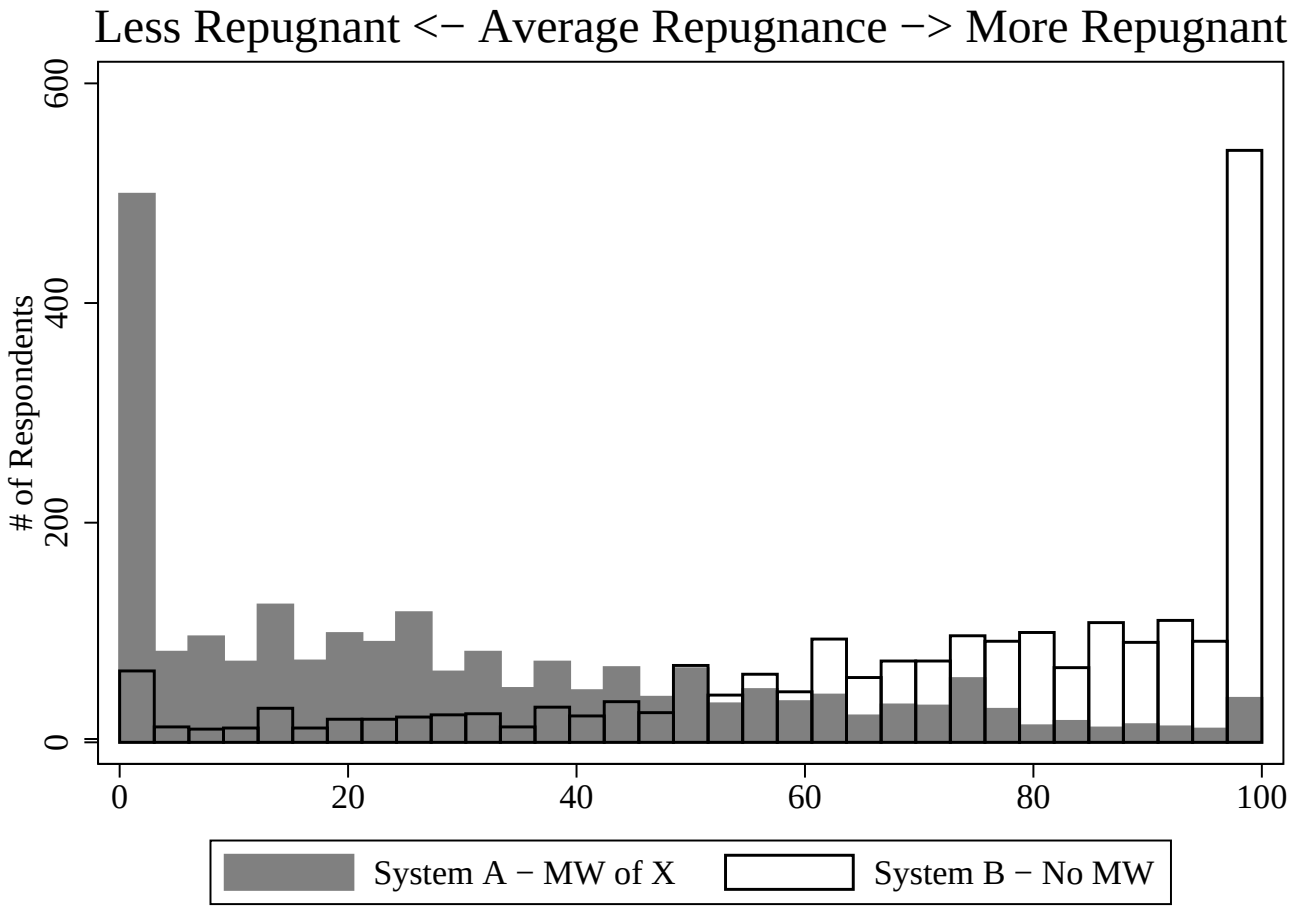
- Stage One: Rate System A (MW of \$X) and System B (no MW) - Exploitation, unfair to worker, unfair to employer, human dignity, personal values
- Stage Two: 4$\times$ System A Unemployment vs System B Unemployment
- Stage Three: Attention and Reliability Recall Checks
- Stage Four: Collect demographics

(Median time: $<$11 minutes, Payment: \$1)

Parameterization

- Min Wage: \$7.25, \$10.10, or \$15
- System A Unemployment: 8,000 (8%) or 10,000 (10%)
- Minorities and Females: No info, equal effects, unequal effects
- 5% of respondents experienced one choice situation with no efficiency numbers

Average "Repugnance"



- = (unfairness to worker + exploitation + dignity + values)/4
- 29.2 for System A and 72.1 for System B

Typical Choice Scenario

For the purposes of the survey consider the potential effect of the alternative systems on a small U.S. city. The city contains 100,000 adults who are willing and able to work. Of these 100,000, 55,000 are male and 45,000 are female. In addition, 60,000 are White, 20,000 are Black, and 20,000 are Hispanic/Latino.

The table below summarizes what happens to employment in the city under each alternative system.

System A		System B
Minimum wage of $7.25 **Number of people unable to find work: 8,000**		Minimum Wage Eliminated **Number of people unable to find work: 8,000**
For System A, among the workers who are unable to find work, 70 percent are members of a minority community (they are Black or Hispanic) and 75 percent are female. **For System B, among the workers who are unable to find work, 40 percent are members of a minority community and 45 percent are female.**		

LPM Model & Interpretation

$$P(\textit{Chose A})_{ic} = \beta_0 + \beta_1 \textit{Repugnance}_i + \beta_2 \textit{Unemployment Rate}_{ic} + \Pi X_{ic} + \epsilon_{ic}$$

- $P(\textit{Chose A})_{ic} = 100$ when System A was chosen, and zero otherwise
- β_1 and β_2 = percentage point differences in the probability of choosing System A for a one unit change in $\textit{Repugnance}_i$ & $\textit{Unemployment}_{ic}$
- Expected sign of β_1 and β_2 ?

Main Estimates

	P(Chose A)	P(Chose A)	P(Chose A)
Δ Unemp. Rate	-4.059***	-4.646***	-3.379***
	(0.195)	(0.252)	(0.438)
Δ Repugnance	-0.440***	-0.439***	-0.438***
	(0.0191)	(0.0267)	(0.0441)
System A = 10,000		0.617	
		(1.937)	
Unemp. Rate × System A = 10,000		0.637*	
		(0.341)	
Min Wage Observed = $10.10			0.448
			(2.940)
Min Wage Observed = $15			-7.848***
			(2.981)
No. of Choices	8,492	8,492	8,492
No. of Respondents	2,123	2,123	2,123
× Repugnance		Y	Y
× Unemp. Rate			Y

Main Estimates Continued

	P(Chose A)	P(Chose A)	P(Chose A)
Δ Unemp. Rate	-4.059***	-4.724***	-4.556***
	(0.195)	(0.266)	(0.493)
ΔRepugnance	-0.440***	-0.464***	-0.469***
	(0.0191)	(0.0254)	(0.0194)
Equal Race and Gender Effects		1.115	1.588
		(2.600)	(2.592)
Unequal Race and Gender Effects		-19.74***	-19.37***
		(2.355)	(2.347)
Unemployment Rate × Equal RG		-0.0483	-0.0819
		(0.551)	(0.547)
Unemployment Rate × Unequal RG		1.936***	1.941***
		(0.431)	(0.431)
No. of Choices	8,492	8,492	8,492
No. of Respondents	2,123	2,123	2,123
× Repugnance		Y	Y
× Unemp. Rate			Y
× System A			Y

Attention Checks

Description	Pass	Fail
Can recall choices	2,035	184
	91.7%	8.3%
Disavows choices	2,033	186
	91.6%	8.4%
Choices Correspond to "Desirability" Rating	1,656	563
	74.6%	25.4%
Contradicts "Slider" Quesiton	2,135	84
	96.2%	3.8%
Monotonic preferences	2,139	80
	96.4%	3.6%

- 83% thought policy makers *should* care about these findings (but few thought they *would*)

Sensitivity (non-parametric)

	(1) P(Chose A)	(2) P(Chose A)	(3) P(Chose A)	(4) P(Chose A)	(5) P(Chose A)
Δ Unemp.= 2%	-20.60***	-12.94***	-10.56***	-11.14***	-12.37***
	(2.304)	(1.745)	(1.605)	(1.538)	(1.090)
Δ Unemp.= 4%	-50.91***	-22.64***	-19.79***	-20.41***	-21.84***
	(2.576)	(1.909)	(1.803)	(1.699)	(1.090)
Δ Unemp.= 6%	-73.84***	-30.24***	-28.16***	-26.85***	-29.00***
	(2.383)	(1.976)	(1.959)	(1.794)	(1.090)
Δ Unemp.= 8%	-83.89***	-35.92***	-34.18***	-30.82***	-35.56***
	(2.277)	(2.668)	(2.745)	(2.555)	(1.369)
Δ Repug.	-0.127***	-0.448***	-0.506***	-0.464***	
	(0.0263)	(0.0265)	(0.0280)	(0.0245)	
No. of Choices	2,652	4,368	3,728	4,660	8,492
No. of Respondents	663	1,092	932	1,165	2,123
Omitted Group	Non-Switchers	Extreme Politics	Religious	No College	-
Fixed Effects	-	-	-	-	Yes

Heterogeneity (Parametric)

	(1) P(Chose A)	(2) P(Chose A)	(3) P(Chose A)	(4) P(Chose A)	(5) P(Chose A)
Δ Unemp.	-4.113***	-4.306***	-4.419***	-3.591***	-4.335***
	(0.277)	(0.244)	(0.418)	(0.304)	(0.277)
Δ Repugnance	-0.449***	-0.441***	-0.440***	-0.441***	-0.403***
	(0.0190)	(0.0191)	(0.0192)	(0.0191)	(0.0203)
X	5.663***	-2.366	3.563	1.714	-8.467***
	(2.059)	(2.161)	(2.488)	(2.090)	(2.608)
$X \times \Delta$Unemp	0.0833	0.751*	0.483	-0.773*	0.484
	(0.391)	(0.405)	(0.472)	(0.396)	(0.498)
Y					-14.56***
					(2.586)
$Y \times \Delta$ Unemp					0.596
					(0.455)
No. of Choices	8,492	8,492	8,492	8,492	8,492
No. of Respondents	2,123	2,123	2,123	2,123	2,123
$X =$	Male	Age	White	Inject Vaccine	No Affiliation
$Y =$					Republican

Discussion

- Estimates of labor demand elasticity matter?
- Given constraints... room for creative solutions (market design?) to *restore* efficiency?
- Future work...