

The Political Economy of Protective Labor Laws

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Women's Rights in the United States

- Starting in the mid-nineteenth century, major advances in women's economic and political rights.
- But not everything was progress: during first half of twentieth century, many legal restrictions on women's labor market opportunities were implemented.
- These were usually justified as “protective” legislation—**but was this their true purpose?**

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Aim: Understand political economy of protective labor legislation.

Types of Protective Laws

1. Maximum Hours Laws

- Appeared as early as 1847.
- By 1921, all but four states had passed such legislation.

2. Night Work Laws

- Between 1919 and 1925, about 40% of women workers in North Carolina were working night shifts.
- By 1928, one-third of the states had legislation prohibiting night work.

3. Minimum-Wage Laws

- 1912–1919: 14 states & D.C. passed min wage laws for women.
- By 1938, 26 states have passed minimum-wage laws.

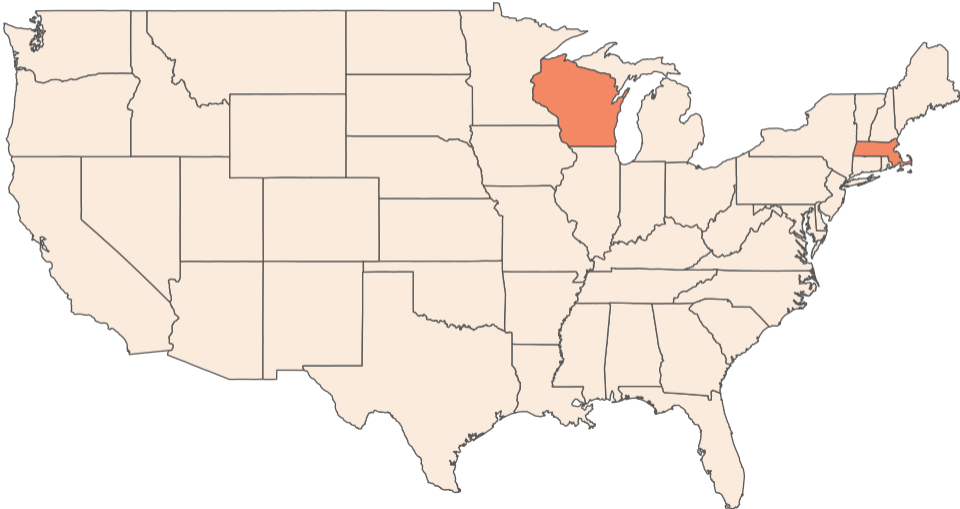
4. Seating Laws

- Requirement that women have to be able to sit down while working.

5. Weight Laws

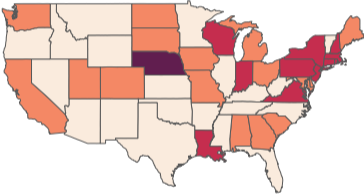
- Limit on how much weight women may lift at work.

Protective Labor Laws, 1880

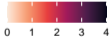
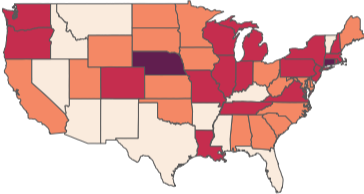


Protective Labor Laws, 1900-1930

(a) 1900

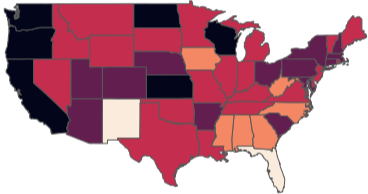


(b) 1910

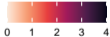
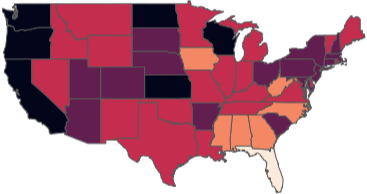


Protective Labor Laws, 1900-1930

(a) 1920



(b) 1930



Potential Drivers of Reform

- Women's health and welfare.
- Children's wellbeing.
- Men's morale at work.
- Bargaining power in marriage.
- Labor market competition: jobs for "breadwinners."

Labor Market Competition as a Driver of Political Change

Main Conclusion of Paper:

Concern about labor market competition from women drives much of the observed change.

How We Arrive at the Conclusion:

1. Use political economy model to spell out the mechanism.
2. Show that when matched to US data, model explains the rise on fall of protective labor legislation remarkably well.
3. Use new and comprehensive cross-state data to provide additional evidence on the mechanism versus potential alternatives.

1. Model

Model Setup: People

- Economy populated by singles and married couples.
- Men heterogeneous by skill: unskilled U or skilled S .
- Women heterogeneous by home productivity: $\psi \in \{\underline{\psi}, \bar{\psi}\}$.
- All single women have low home productivity.
- Numbers of each type:
 - Singles: $N_U, N_S, N_{\underline{\psi}}$
 - Couples: $N_{U\underline{\psi}}, N_{U\bar{\psi}}, N_{S\underline{\psi}}, N_{S\bar{\psi}}$.
 - Households die at mortality rate ρ , new households born at time-varying rates κ_{ht} (matched to data).

Model Setup: Production

Agriculture (rural area):

$$Y_a = X_{Fa}^\alpha X_{Ua}^\beta X_{Sa}^\gamma$$

where $\alpha + \beta + \gamma < 1$ (land is a fixed factor)

Modern sectors (urban area):

$$Y_b = AX_{Sb}^{1-\delta} (\xi\phi X_{Fb} + X_{Ub})^\delta,$$

$$Y_f = AX_{Sf}^{1-\delta} (\xi\phi X_{Ff})^\delta,$$

$$Y_u = AX_{Su}^{1-\delta} X_{Uu}^\delta.$$

$\phi < 1$ is the gender productivity gap in the modern sector.

$\xi \in \{\bar{\xi}, 1\}$ is a political choice of imposing additional constraints on women's productivity in the modern sector ($\bar{\xi} < 1$).

Model Setup: Production

Output of modern sectors combined by competitive industry to produce composite modern good Y_m :

$$Y_m = \left((1 - \theta_f - \theta_u) Y_b^{\frac{\eta-1}{\eta}} + \theta_f Y_f^{\frac{\eta-1}{\eta}} + \theta_u Y_u^{\frac{\eta-1}{\eta}} \right)^{\frac{\eta}{\eta-1}} .$$

Modern good trades at price p_m in terms of agricultural good.

Model Setup: Preferences

- People care about composite consumption good C and home production Q :

$$U(C, Q) = \ln(C) + Q.$$

- C is a composite of agricultural and modern goods:

$$C = \left(c_a^{\frac{\epsilon-1}{\epsilon}} + c_m^{\frac{\epsilon-1}{\epsilon}} \right)^{\frac{\epsilon}{\epsilon-1}}.$$

Model Setup: Timing within Period

1. Households and firms form a (rational expectations) belief, ξ^* , about ξ .
2. Given ξ^* , households choose location (rural or urban) and female labor supply $d \in \{0, 1\}$.
3. Majority vote on women's labor rights $\rightarrow \xi$ is realized.
4. Given ξ : urban households choose sectors and firms choose inputs.
5. Given ξ : output, wages, and consumption are realized.

Dynamic Politico-Economic Equilibrium

Beliefs ξ_t^* , policies ξ_t , wages, labor allocations, and goods market allocations such that:

1. Given prices, firms maximize profits.
2. Given prices and beliefs, households maximize utility.
3. Labor markets clear.
4. Goods markets clear.
5. Policy $\xi \in \{\bar{\xi}, 1\}$ that is preferred by the majority of the voters is implemented.
6. Beliefs are rational: $\xi_t = \xi_t^*$.

Analytical Results

- Wages for each type of labor equalized across regions.
- If both women and men supply labor in the mixed sector, urban sectors aggregate and behave as if there was a single urban production function:

$$Y_m = AX_{Sm}^{1-\delta}(\xi\phi X_{Fm} + X_{Um})^\delta.$$

- Imposing protective legislation reduces relative demand for agricultural goods and hence lowers their price.

Equilibrium: Who Supports Restricting Women's Work?

- For restrictions
- Against restrictions

Women's Type:	Men's Type:				Single Women:
	Unskilled		Skilled		
	Agriculture	Modern	Agriculture	Modern	
Agriculture	Against		Against		Against
Modern		Against		Against	Against
Non-working		For		Against	
Single Men:	Against	For	Against	Against	

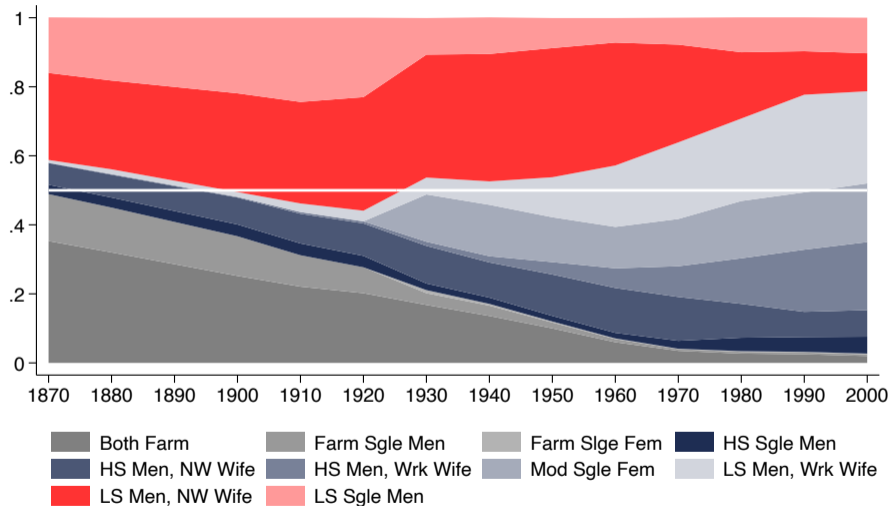
2. Model vs. US Data

Matching the Model to the Data

Match group shares between model and data by:

- Setting modern-sector productivity A to match modern employment share.
- Choose composition of new cohorts (by single/married, skilled/unskilled, working wife/homemaker wife) to match data.
- Track voters for and against restrictions in each period; women are voters after 1920.

Predicted Support Matches Introduction of Restrictions



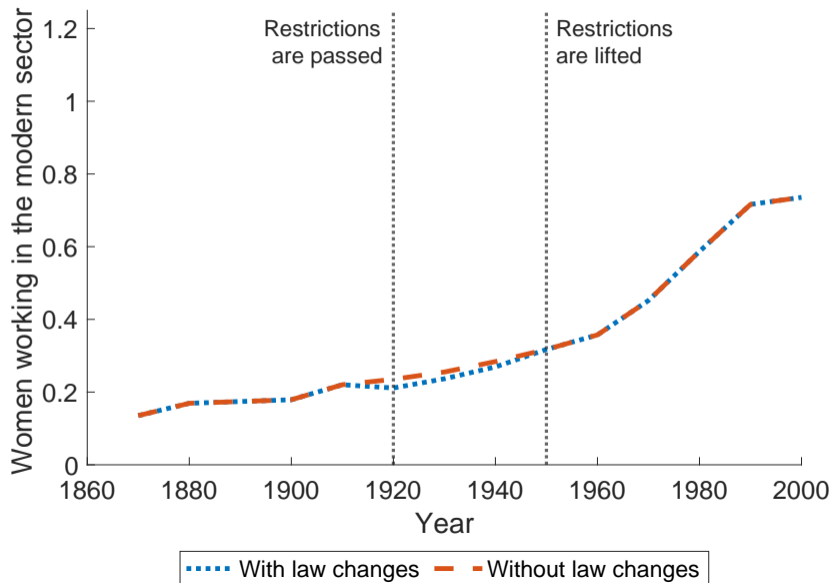
Predicted Support Matches Introduction of Restrictions

Low-skilled modern-sector single men and low-skilled modern-sector married men with stay-at-home wives had the majority of votes when restrictions spread quickly.

Structural change drove the rise of the coalition in favor of restrictions.

Married women's rising LFP and women's suffrage made the support for restrictions fall apart.

Restrictions Temporarily Slow Down Transition to Modern Sector



Counterfactuals

Can use model to assess relative importance of different forces in driving political change.

- If women had the **right to vote** earlier, restrictions would have spread less and be abolished more quickly.
- If **women's LFP** had not risen, restrictions would have persisted much longer.
- **Less skill growth among men** would have also resulted in more durable restrictions; quantitatively, women's rising LFP is more important than changing skills.

State-Level Evidence

Collect comprehensive data on the implementation of protective labor laws across states between 1890–1940.

Include variables that correspond to different potential channels behind the adoption of protective labor laws.

Empirical Evidence: Labor-Market Competition

- Regress indicator of laws' introduction on predicted vote share in favor.
- Larger predicted vote share \Rightarrow protective laws are introduced.

Dependent Variable	(1)	(2)	(3)	(4)
I. First Law	0.25***	0.22***	0.47***	0.24***
II. Max. Hour Laws	0.64***	0.37***	0.85***	0.41***
III. Night Work Laws	0.47***	0.36***	0.51***	0.31***
IV. Weight Laws	0.46***	0.40***	0.48***	0.33***
V. Min. Wage Laws	0.34***	0.14*	0.38***	0.00
VI. Seating Laws	0.22***	-0.07	0.39***	-0.01
Time FE		X		X
State FE			X	X

* $p < .10$, ** $p < .05$, *** $p < .01$.

Regressions use population weights.

Alternative Hypotheses

Who else might gain from restricting women's work?

1. Women want to be protected at work.
→ Protective labor laws not associated with suffrage.
2. Unions want to improve working conditions for everyone, easiest to start with the most vulnerable groups (children, women).
→ Protective labor laws not associated with measures of labor organization.
3. Children need mothers at home. Concerns about fertility.
→ Protective labor laws not associated with fertility and mandatory schooling laws.

Empirical Evidence: Alternative Hypotheses

Dependent Variable: First Law Index						
Vote Share For Laws	0.24***	0.45***	3.41***	3.61***	1.54***	0.24**
I. Women Can Vote						
Suffrage	0.28*					
II. Union Power						
Strikes		0.00				
AFL Delegates			0.00			
AFL Votes				-0.01		
III. Importance of Children						
% Children < 10					-0.14	
Mandatory Schooling Laws						-0.00
State FE	X	X	X	X	X	X
Time FE	X	X	X	X	X	X

* $p < .10$, ** $p < .05$, *** $p < .01$. Regressions use population weights.

Conclusion

Laws restricting female work were introduced in the early twentieth century, and then disappeared in the 1960s.

Politico-economic model focusing on labor-market competition channel captures this pattern remarkably well.