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 often motivated as protection for women.

- But why was there a majority for these laws? Why not earlier? And why did these laws eventually disappear again?

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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.
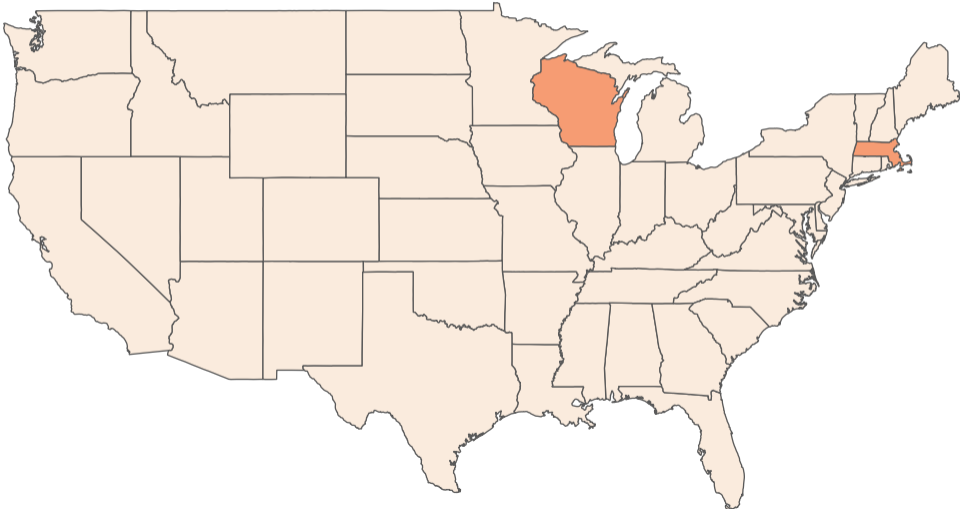   - By 1938, 26 states have passed minimum-wage laws.

4. **Seating Laws**
   - Requirement that employers provide the possibility to sit down for women.
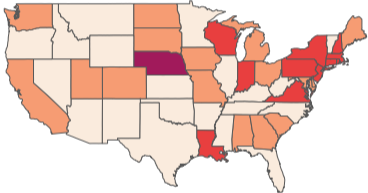
5. **Weight Laws**
   - Limit on how much weight women may lift at work.
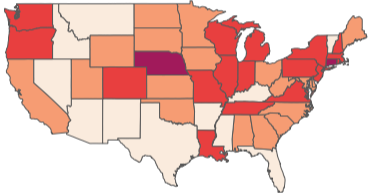
Protective Labor Laws, 1880

Protective Labor Laws, 1900–1930
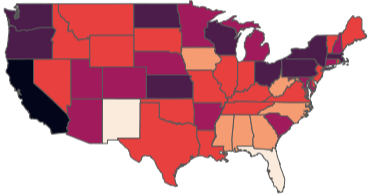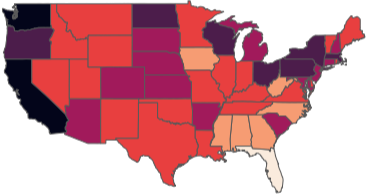

(a) 1900

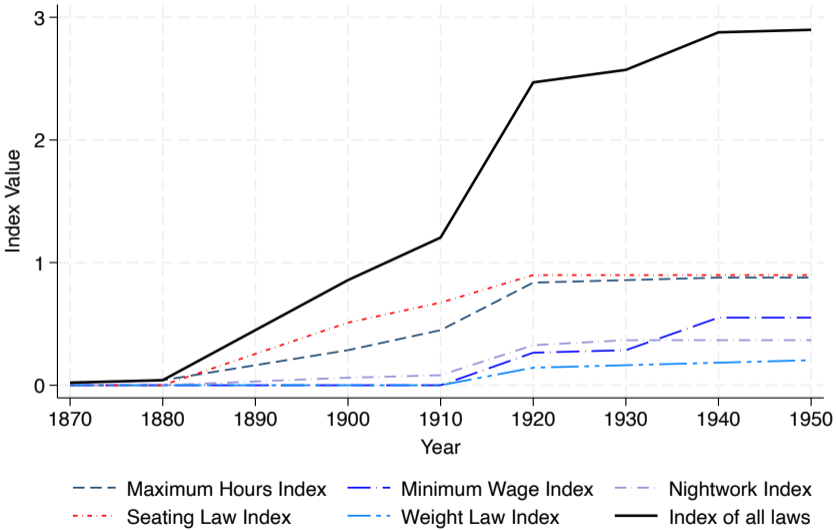(b) 1910

Protective Labor Laws, 1900–1930

(a) 1920

(b) 1930

Spread of Protective Labor Laws

How Did Protective Labor Laws Disappear?

Era of protective legislation ended in the 1960s with a series of court decisions declaring the state laws to be unconstitutional.

- Title VII of the 1964 Civil Rights Act.

- Creation of the Equal Employment Opportunity Commission.

- 1968: Rosenfeld v. Southern Pacific Company: 9th Circuit Court; interpreted Title VII as ending state protective legislation.

- 1969: Weeks v. Southern Bell Telephone & Telegraph Company: Protective legislation case; Weeks lost case in 1967 but won in Appeals Court.

Potential Drivers of Reform

Structural change moving women from family farms to paid employment.

Potential reasons for opposition to this change:

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

Which of these reasons can explain shifting majorities first for, later against, restrictions?

Arguments pro protective legislation

"Representative Keefe of Fall River, the petitioner, said that a telephone office is harder upon the nervous system than a cotton mill and that aside from the moral aspect, the telephone office is an improper place for a young woman at night."

(Boston Globe, 1911).

"Shall it be said that these women with their motherhood possibilities are none the less precious to the welfare of democracy in times of peace? The shorter workday has been proven […] to be good for human as well as the material product."

(Boston Globe, 1920)

Arguments against protective legislation

"In thousands of instances it will mean that they will lose their places altogether and be replaced by men upon whom the restriction is not laid."

(Working Girls Suffer from Eight-Hour Law, Los Angeles Times, 1911)

"We are not opposed to 8-hour laws and minimum-wage laws, or to the prohibition of night work [...]. We simply demand that these laws be applied to men and women alike [...] We challenge the process which under guise of safeguarding women, does in fact rob them of equal chance with men to be self-supporting and self-respecting. [...] We believe that these discriminatory laws make women undesirable employees ..."

(Do Women Really Want Equality? Boston Globe, 1922)

Taking Stock

- Clearly there were arguments pro and against the legislation.

- The benefit to women was often mentioned,

- but also that it would hurt their job prospects.

- The question we want to address is why and how the majorities pro and contra these laws shifted twice over the course of the 20th century.

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.

Literature

- Empirical papers analyzing the effect of protective legislation on employment (Landes 1980, Goldin 1988, Haddad and Kattan 2023) and effect of removal on gender pay gap (Bailey, Helgerman, Stuart 2023).

- Evolution of other types of women's rights (Geddes and Lueck 2002, Doepke and Tertilt 2009, Fernandez 2014).

- Political economy of child labor laws (Doepke and Zilibotti 2005).

Outline

- Model

- Application to United States

- Empirical evidence

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: $\psi \in \{\underline{\psi}, \overline{\psi}\}$.
  (only relevant in modern sector)

- All single women have low home productivity.

- Numbers of each type:

    - Singles: $N_U, N_S, N_{\underline{\psi}}$

    - Couples: $N_{U\underline{\psi}}, N_{U\overline{\psi}}, N_{S\underline{\psi}}, N_{S\overline{\psi}}$

    - 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):

$$Y_b = A X_{Sb}^{1-\delta} (\xi \phi X_{Fb} + X_{Ub})^{\delta},$$
$$Y_f = A X_{Sf}^{1-\delta} (\xi \phi X_{Ff})^{\delta},$$
$$Y_u = A X_{Su}^{1-\delta} X_{Uu}^{\delta}.$$

$\phi < 1$ 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:

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

- C, Q public goods in marriage (hence spouses always agree on location, sector, and female work decision $\rightarrow$ no bargaining needed).

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 (in urban area) female labor supply $d \in \{0, 1\}$. Couples choose location together.

3. Majority vote (before 1920 only men 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.

- High home productivity women (and their husbands) live in urban areas.

- 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 productivity in modern sector and hence increases price of modern goods.

Equilibrium: Who Supports Restricting Women's Work?

- Unskilled men in modern sector support restrictions if they are single or if their own wife does not work.

- These men compete with women in the labor market.

- Even unskilled men in entirely male sectors benefit from restrictions, because labor is mobile across sectors.

- Wives vote with their husbands.

- Even though restrictions do not affect agriculture directly, workers in agriculture oppose restrictions because they lower the relative price of agricultural output.
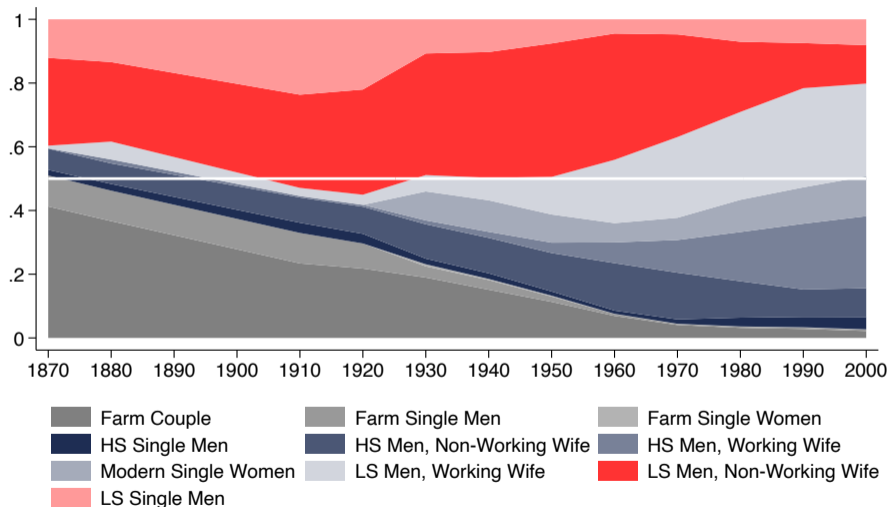
Equilibrium: Who Supports Restricting Women's Work?

- For restrictions

- Against restrictions

	Men				
	Unskilled		Skilled		
Women	Agriculture	Modern	Agriculture	Modern	
Agriculture	Against		Against		Against
Modern		Against		Against	Against
Non-working		For		Against	
	Against	For	Against	Against	–

2. Application to the United States

Predicted Support Matches Introduction of Restrictions

- Track voters for and against restrictions in each period; women are voters after 1920.

Legend: Farm Couple, Farm Single Men, Farm Single Women, HS Single Men, HS Men, Non-Working Wife, HS Men, Working Wife, Modern Single Women, LS Men, Working Wife, LS Men, Non-Working Wife, LS Single Men

Hypotheses

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

Married women's rising LFP, the rise of high skilled men and women's suffrage made the support for restrictions fall apart.

Matching the Model to the Data

To what extent did the different forces shape the timing?

Structural change, rise in female lfp, skill gap, female suffrage...

Calibrate model:

- Choose ϕ_t to fit the gender wage gap

- Choose $\alpha, \beta, \gamma, \delta$ to fit sector shares in 1870

- Choose A_t to minimize distance to empirical sector shares in $t > 1870$

- Choose composition of new cohorts (by single/married, skilled/unskilled, working wife/homemaker wife) to match data.

Model Prediction: Voting Shares
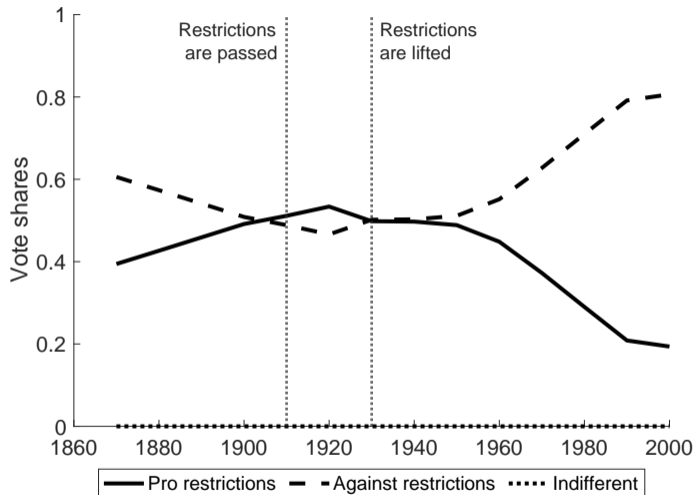
Counterfactuals: Women's Suffrage
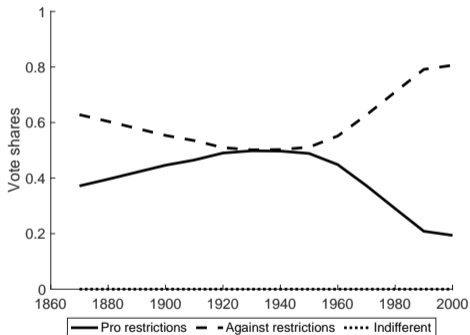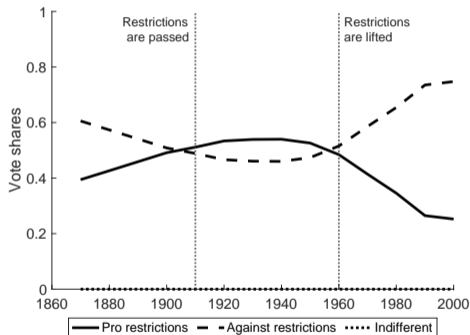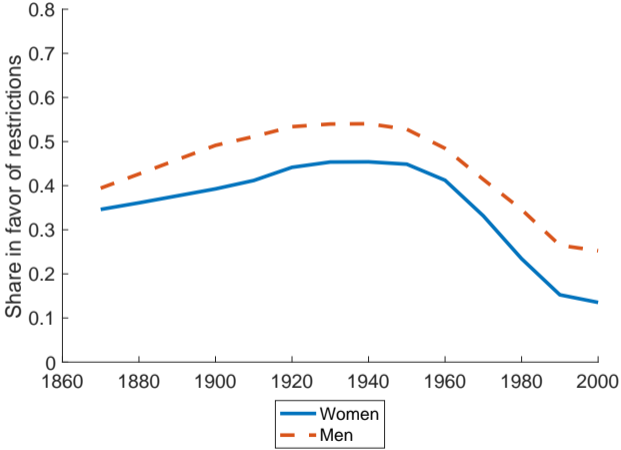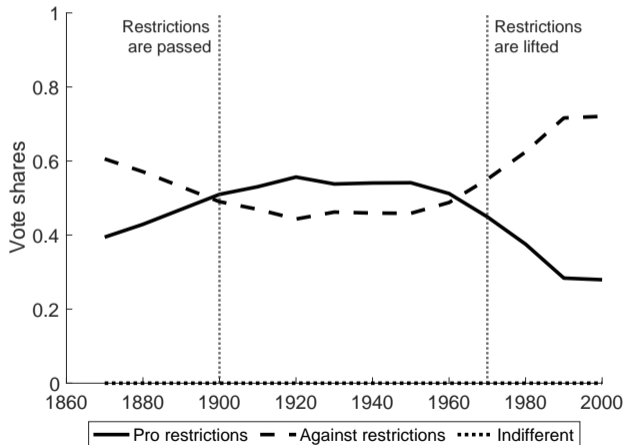

Figure: Suffrage in 1870

Figure: No suffrage

Counterfactuals: Women's Suffrage
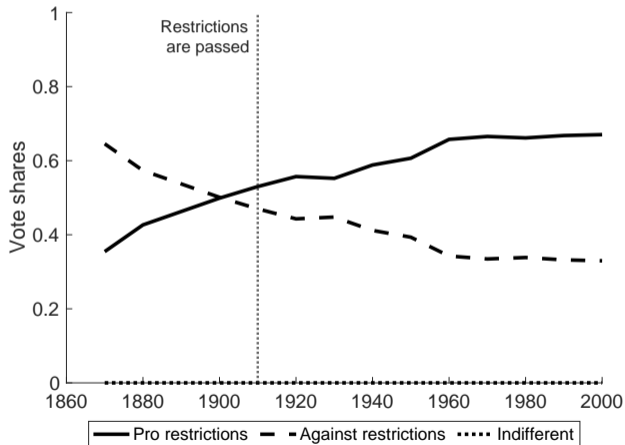

Figure: Women's/Men's Votes

Counterfactual: No Skill Growth

- Counterfactual: Keep skill gap fixed at 1870 level.

Counterfactual: No Increase in modern sector FLFP

- Counterfactual: Keep modern sector FLFP fixed at 1870 level.

Counterfactuals

Scenario	Restrictions passed	Restrictions lifted
Baseline	1910	1930
Suffrage in 1870	-	-
No suffrage	1910	1960
No skill growth	1900	1970
No modern sector FLFP growth	1910	-

Counterfactuals: Which Forces Matter Most?

Relative importance of different forces in driving political change:

- If women had gotten the right to vote earlier, restrictions would have spread less and be abolished more quickly (or would not have spread at all).

- If women's LFP had not risen, restrictions would have persisted much longer (potentially until today).

- Less skill growth among men would have also resulted in restrictions being lifted later.

- Quantitatively, women's rising LFP is more important than changing skills.

3. Empirical Evidence

Empirical Analysis

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

Use US Census data (together with our model) to calculate the predicted vote shares for protective laws for each state each decade.

Run a regression to see whether the vote shares can explain the introduction of the laws.

End of protective legislation: Use state equal rights amendments (ERAs) as proxy for the end of protective legislation. Redo exercise above to see whether predicted vote shares can explain the opposition to ERAs.

Collect further data to asses alternative hypothesis for the introduction of the laws.

Empirical Evidence: Introduction of Laws

- 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	0.26***	0.22***	0.48***	0.25***
II. Max. Hour Laws	0.66***	0.38***	0.86***	0.43***
III. Night Work Laws	0.47***	0.37***	0.51***	0.31***
IV. Weight Laws	0.46***	0.40***	0.48***	0.34***
V. Min. Wage Laws	0.35***	0.14*	0.39***	0.01
VI. Seating Laws	0.23***	−0.07	0.40***	−0.01
Time FE		X		X
State FE			X	X

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

Empirical Evidence: End of Protective Laws

- Use equal right amendments (ERAs) as proxy for the end of protective legislation.

- 3 proxies: state ERAs, ratification of national ERA, state ratification not rescinded.

- Smaller vote share $\Rightarrow$ predicts support for ERAs.

	State ERAs		National ERA		National ERA w/o rescind	
	(1)	(2)	(3)	(4)	(5)	(6)
Vote Share	-0.21^{***}	-0.33^{***}	-0.43^{***}	-0.36^{***}	-0.39^{***}	-0.47^{***}
Time FE		X		X		X
State FE		X		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 are not associated with suffrage.

2. Unions want to improve working conditions for everyone, easiest to start with the most vulnerable groups (children, women).
   → No evidence in the data.

3. Children need mothers at home. Concerns about fertility.
   → No evidence in the data.

Empirical Evidence: Alternative Hypotheses

	Dependent Variable: First Law Index					
Vote Share For Laws	0.25**	0.46***	3.55***	3.77***	1.57***	0.25**
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.

- Main driver of introduction: unskilled men (and their non-working wives) moving from agriculture to the modern sector fearing competition from women.
- Main driver of removal: increase in the share of working women (together with female suffrage). Increase in share of skilled men also played a role in the timing.