Organized Labor When Things Go South: Unions and the Labor Market Consequences of NAFTA

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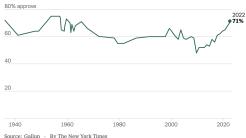
Revival of Labor Unions

Approval of Labor Unions at Highest Point Since 1965

BY MEGAN BRENAN



Americans' approval of labor unions



TECH

Employees everywhere are organizing. Here's why it's happening now

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KEY POINTS

The first half of 2022 saw a spike in worker union petitioning.

Companies from airlines to retail to tech are seeing employees seek unionization.

Research Motivation

- ► Large trade literature estimates the labor market effects of trade shocks.
- ▶ No focus on labor unions or organized labor laws.
 - Do labor unions influence the impact that trade shocks have on local labor markets?
 - Do organized labor laws matter in how local labor markets respond to trade shocks?

This Paper

- Examine the link between organized labor laws and labor market outcomes following trade liberalization
- Empirical design:
 - 1. Use NAFTA as a trade liberalization shock
 - Observe employment changes during 1990-2000 at commuting zone level
 - Use information on local union strength to examine any differential labor market effects

Estimation Challenges

- No geographically disaggregate data on union membership
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- Endogeneity of union membership
 - Union membership responds to local economic outcomes

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 - Union membership responds to local economic outcomes
- Our approach: use variation in right-to-work (RTW) laws
 - RTW laws correlated with unionization rates
 - Most RTW laws passed decades prior to NAFTA

Preview of Our Findings

- ► "Anti-union" (RTW) locations see larger falls in employment
 - No employment losses in "pro-union" (non-RTW) places

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 - unionized occupations most negatively affected in RTW states

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- Differences across workers and occupations:
 - demographic groups covered by unions (e.g., blue collar, men) most negatively affected by NAFTA in RTW states
 - unionized occupations most negatively affected in RTW states
- ► Negative wage effects in "pro-union" (non-RTW) locations:
 - consistent with concession bargaining
 - job stability at the expense of wage gains

Main Contributions

We contribute to three literatures:

- 1. Add to the limited evidence on the local employment effects of NAFTA liberalization [NAFTA literature]
- Shed light on the link between organized labor laws and trade-induced employment outcomes [Unions + labor market outcomes literature]
- Contribute to the literature examining economic effects of right-to-work (RTW) laws [RTW laws literature]

Policy Background: Right-to-Work (RTW) Laws

1935 National Labor Relations Act (Wagner Act):

- ▶ Right of employees to organize without fear of retaliation
- Agreements between employers and employees:
 - → "Union shop": union membership is condition for cont'd employment

Policy Background: Right-to-Work (RTW) Laws

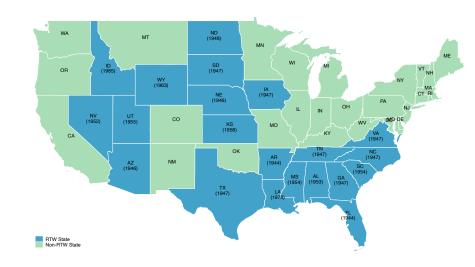
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1947+ State right-to-work (RTW) laws:

- prohibit "union shops"
- free-rider problem: non-union workers covered by collective bargaining
- weaken union power and union representation
- \Rightarrow This paper: RTW \approx low unionization

Right-to-Work (RTW) Laws in 1990



Estimation Methodology

Regression model:

(i = commuting zone)

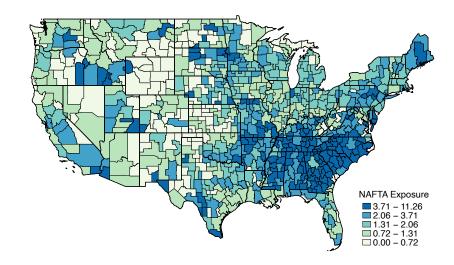
$$\Delta L_i = \beta_1 \tau_i^{1990} + \beta_2 \left(\tau_i^{1990} \times RTW_i \right) + \beta_3 RTW_i + X_i' \beta_4 + \epsilon_{ir}$$

NAFTA exposure:

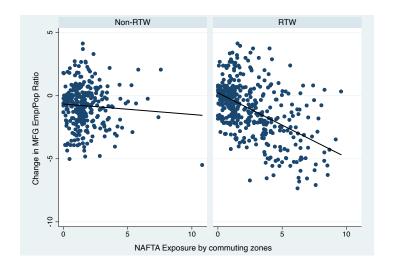
$$\tau_i^{1990} = \frac{\sum_{j \in \mathcal{T}} L_{ij}^{1990} \tau_j^{1990}}{\sum_{j \in \mathcal{T}} L_{ij}^{1990}}$$

- Other variables:
 - Decadal change in empl share: $\Delta L_i = \left(\frac{Emp_i}{WkPop_i}\right)_{2000} \left(\frac{Emp_i}{WkPop_i}\right)_{1990}$
 - $RTW_i = 1$ if CZ i is located in right-to-work state
 - $X_i = \text{labor force and demographic variables for 1990 (ADH controls)}$
 - census devision fixed effects + state clusters

Exposure to NAFTA by Commuting Zone



Raw Data: Mfg Employment Effect of NAFTA by RTW



Changes in manufacturing employment share during 1990-2000

Raw Data: Non-mfg Empl Effect of NAFTA by RTW



Changes in non-manufacturing employment share during 1990-2000

NAFTA and Changes in Employment Shares

	D		/	(0/)	
	Dependent var: Change in emp/working-age pop (% pts) Total employment Manufacturing				
$ au_i^{1990}$ xRTW	0.544 (0.521)	-0.106 (0.109)	-0.459** (0.193)	-0.493*** (0.144)	
$ au_i^{1990}$	-0.697 (0.508)	0.049 (0.079)	-0.103 (0.152)	0.191 (0.149)	
RTW State	-2.596** (1.044)	-0.348 (0.320)	0.939* (0.490)	0.818** (0.335)	
Share MFG		-0.006 (0.011)		-0.062*** (0.014)	
Share Pop College		0.063*** (0.019)		0.002 (0.016)	
Share Foreign Pop		-0.149*** (0.016)		0.005 (0.014)	
Non-White Share		-0.065*** (0.012)		-0.017** (0.007)	
Female LF Share		-0.187*** (0.039)		0.011 (0.030)	
Routineness		0.040 (0.047)		-0.166*** (0.055)	
Outsourcing		-0.464 (0.407)		-0.505 (0.387)	
Obs.	722	722	722	722	
R ²	0.117	0.828	0.160	0.548	
Census division FE	No	Yes	No	Yes	

Magnitude of the Estimated Effects

Manufacturing sector:

- ▶ Interquartile increase in exposure to NAFTA (1.19 pp):
 - \Rightarrow 0.59 pp \downarrow in mfg emp share in RTW rel to non-RTW CZs

- ➤ Observed change in mfg emp share in RTW: -2.25 pp
 - Marginal effect of NAFTA for CZs in RTW = -0.64 pp
 - \Rightarrow explain 28.4% of the observed decline

Threats to Identification

- 1. pre-existing trends
 - CZs in RTW states are systematically different from non-RTW
- 2. omitted variables correlated with exposure to NAFTA

E.g., NAFTA effect heterogeneous for reasons other than unionization

E.g., RTW laws capture "pro-business" policies (Holmes, 1998)

Robustness checks:

⇒ augment baseline model with additional sets of controls

Robustness Exercises I: Model Identification

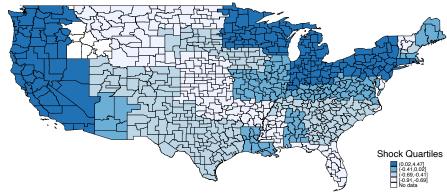
	Dependent var: Change in manufacturing emp/working-age pop (% pts)				
	State FE (1)	CZ×RTW (2)	CZ×NAFTA (3)	1980-2000 (4)	Placebo (5)
$\tau_i^{1990} \times RTW$	-0.424***	-0.298*	-0.522***		-0.079
,	(0.135)	(0.163)	(0.174)		(0.186)
$ au_i^{1990}$	0.224 (0.141)	0.072 (0.133)	-0.819 (0.954)		0.095 (0.226)
	(0.141)	(0.133)	(0.934)		(0.220)
Exposure x RTW x Post				-0.414*** (0.142)	
Exposure x Post				0.096	
				(0.140)	
CZ fixed effects				yes	
Obs.	722	722	722	1,444	722
R ²	0.615	0.574	0.569	0.411	0.504

Robustness Exercises II: Unionization Measures

Consider alternative measures of unionization:

- "Wagner Shock" (Farber et al, 2021)
 - number of new union members registered between 1935-38
 - state-level variable
 - local predisposition of workers to organize

Distribution of Wagner Shock (1935-1938)



Notes: The map displays the Wagner Shock, as constructed in Farber et al (2021)

Robustness Exercises II: Wagner Shock

	Dependent var: Change in mfg emp/working-age pop (% pts)				
•	Baseline	State FE	CZ ×Wagner	CZ×NAFTA	1980-2000
	(1)	(2)	(3)	(4)	(5)
τ_i^{1990} xWagnerShock	0.232***	0.151**	0.262***	0.217*	
, -	(0.069)	(0.069)	(0.080)	(0.123)	
$ au_i^{1990}$	-0.145	-0.050	-0.115	-0.461	
1	(0.101)	(0.112)	(0.080)	(0.834)	
Exposure x Wagner Shock x Post					0.297***
					(0.097)
Exposure x Post					-0.169**
					(0.082)
Obs.	713	713	713	713	1,426
R^2	0.549	0.607	0.568	0.570	0.414

Heterogeneity Analyses

- ► Alternative NAFTA exposure measures
- Employment effects by demographic groups
- Employment effects by occupation groups (high vs low union)
- Robustness to elimination of textile and apparel sectors

Wage Effects

Concession bargaining:

Do labor unions prioritize job stability by giving up wage gains?

$$w_{pi} = \gamma X_p + \alpha_i + \beta_1 \tau_i^{1990} Yr_p^{2000} + \beta_2 (\tau_i^{1990} Yr_p^{2000}) \times RTW_i + \epsilon_{ip}$$

	Dependent var: log worker-level wage			
	Baseline	RTW	RTW & RCA	
τ_{i}^{1990}	-0.158	-1.832***	-1.318**	
,	(0.246)	(0.456)	(0.402)	
$ au_i^{1990} imes RTW$		1.666***	1.320***	
•		(0.401)	(0.346)	
		22.72.15	20.172.15	
Obs.	3347345	3347345	3347345	

Conclusions

- Examine whether organized labor laws influence the response of local labor markets to trade liberalization shocks
- Focus on the impact of NAFTA on manufacturing employment in right-to-work (RTW) states
- Find evidence that mfg workers in RTW locations are harder hit by NAFTA
- Negative wage effects in non-RTW locations consistent with concession bargaining