# Labor Unions and the Electoral Consequences of Trade Liberalization

Pedro Molina Ogeda Emanuel Ornelas Rodrigo R. Soares

NBER PE SI – July 2021

#### Motivation

- Trade policies have always been a politically sensitive topic.
  - But particularly so lately.
- Recent economics and political science literature has indeed shown that trade shocks can have important political consequences.
  - Punishment of incumbents.
  - Gains for parties identified with protectionist policies.
  - Political radicalization.
- These responses have been interpreted as individual-led reactions to losses in socioeconomic status.
  - Motivated by economic or identity concerns.
- This paper: Trade shocks have large political impacts, in both the short and long runs, that seem to be mediated by institutional change.

## This Paper

- Evaluate how Brazil's trade liberalization from the early 1990s affected presidential elections afterwards.
  - Analysis at the microregion level, using nationwide tariff reductions interacted with pre-shock local industry composition.
  - Based on the results for elections, we assess a possible unexplored institutional channel: unions' strength.
- The Brazilian trade liberalization provides a useful environment for such an analysis.
  - Its labor market implications have been scrutinized by many...
  - ...but not its political impacts.

## Results Summary

- Relative vote share for the left fell in microregions that faced larger tariff reductions.
  - Despite the shock being implemented by a right-wing party.
  - Despite the left's historical protectionist stance in Brazil.
  - Despite the subsequent rise of the left in the country as a whole.
- We propose that the weakening of labor unions may be the institutional channel behind this puzzle.
  - Relative union strength declined in microregions that faced relatively larger tariff reductions.
  - Vote share decline was driven by political parties with historical links to unions and by regions where unions had been present before 1989.
- Results are remarkably persistent and stable over the last 25 years.

#### Literature

- Trade exposure/tariff changes and political outcomes:
  - Autor et al. (2020); Blanchard et al. (2019); Che et al. (2020); Choi et al. (2021); Dippel et al. (2020); Jensen et al. (2017).
- Protection levels and union's strength:
  - Matschke and Sherlund (2006); Baldwin and Magee (2000); Conconi et al. (2014); Lake (2015).
- Labor unions and electoral outcomes:
  - Burns et al (2000); Kim and Margalit (2017); Leighley and Nagler (2007); Radcliff and Davis (2000).
- Labor market consequences of Brazil's 1990s trade liberalization:
  - Dix-Carneiro and Kovak (2017, 2019); Dix-Carneiro et al. (2018);
     Hirata and Soares (2020); Kovak (2013); Ponczek and Ulyssea (2021).

#### Brazil's Trade Liberalization

- Import-substitution industrialization policies (1890 1990):
  - Very high tariffs.
  - Very restrictive NTBs.
- The trade liberalization process:
  - 1990: quotas and administrative controls replaced by import tariffs adjusted to reflect the same level of protection.
  - 1991 1995: phased tariff reductions.
    - Average tariff: 30.5% (1990) -> 12.8% (1995)
  - "Once-and-for-all" permanent shock.
    - No meaningful tariff changes afterwards.
  - Tariff cuts strongly negatively correlated with pre-shock tariff levels.



## Unions in Brazil

- Labor unions were institutionalized in 1931 and have since played an important role in domestic politics.
- Historically, they have been associated with left-wing parties, particularly after the end of the military regime in the 1980s.
  - Many union leaders started political careers in left-wing parties during this period (Coradini 2007).
- Labor unions in Brazil represent all workers in their occupational category and geographic jurisdiction.
  - Until 2017, all formal workers in that category had to pay an annual union tax equivalent to one working day.
  - Affiliation was nevertheless still fundamental for mobilization and political action (Campos 2016).

#### Classification of Parties

- Party is "left-wing" if defined as communist, socialist or left-wing in its official manifesto.
  - A few cases rely also on media characterizations when official information is not enough.
- Right-wing and center parties defined as all parties that are not left-wing.
- Final classification consistent with papers from the political science literature on parties in Brazil.
  - Rodrigues (2002), Sakurai and Menezes-Filho (2008), Power and Zucco Jr (2009), Figueiredo and Limongi (1999).

#### Data

- Elections:
  - 8 presidential elections 1989-2018, official electoral data at the municipality level.
  - Focus on first round of voting.
    - Also results for runoffs after 2002.
- 2-digit SIC nominal tariffs, 1987-1998, as in previous analyses of the Brazilian trade liberalization shock.
  - Microregion-specific tariff cuts constructed following Kovak (2013), Dix-Carneiro and Kovak (2017), and others.
- Several socioeconomic and demographic variables at the microregion level from the Brazilian census and Datasus.

elections data table

## Regional Tariff Reduction

$$RTR_r = -\sum_{i \in I} eta_{ri} \, \Delta ln (1 + ariff_i), \; where$$
  $eta_{ri} \equiv rac{\lambda_{ri} \, rac{1}{\phi_i}}{\sum_{j \in I} \lambda_{rj} rac{1}{\phi_i}}$ 

- **1**  $\lambda_{ri}$ : fraction of regional labor allocated to industry *i* in 1991.
- ②  $\phi_i$ : cost share of nonlabor factors, calculated as one minus the wage bill share of industry i using 1990 national accounts data.
- **3**  $\Delta$ : long difference from 1990 to 1995.

maps: RTR and votes

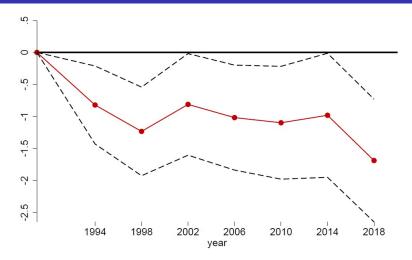
## **Empirical Strategy**

• Estimate, for each election year t after 1989:

$$y_{rt} - y_{r,1989} = \theta_t RTR_r + \alpha_{st} + \psi_t X_r + \epsilon_{rt};$$

- $y_{rt}$ : electoral outcome or union strength proxy in region r, year t;
- $\alpha_{st}$ : state fixed effects;
- $X_r$ : vector of pre-liberalization socio-demographic controls;
  - % white, % female, % high-school, % over 60, % in manufacturing, employment and urbanization rates, and Gini;
- standard errors clustered at the mesoregion level.

## Results: Tariff Cuts and Vote Share for the Left



• Average effect (pooled): 1 standard-deviation increase in  $RTR_r = > 4$  p.p. reduction in relative vote share for the left, compared to 1989.

## Results: Robustness of Vote Share Responses

- Effective rates of protection.
- Runoff elections.
- Political radicalization.
- Changes in tariffs after 1995 and Mercosur.
- Excluding microregions with > 50% the workforce in agriculture.
- Privatization.
- Changes in exchange rates (variable analogous to  $RTR_r$ ).
- Alternative classifications of political parties as left/center-right.

Effective Protection Radicalization Policies and Sample Exchange rate controls

#### Labor Unions as a Potential Channel

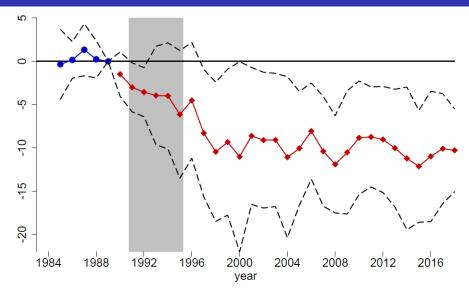
- Labor unions are generally stronger in manufacturing (Visser 2019), which tends to be more affected by trade shocks.
- This relationship is particularly relevant in the context of the Brazilian trade liberalization.
  - Trade shock had a major negative impact on formal jobs (Dix-Carneiro and Kovak 2017; Ponczek and Ulyssea 2021).
  - Labor unions relied on formal employment as an important source of revenue.
- Labor unions can affect electoral outcomes (Leighley and Nagler 2007, Kim and Margalit 2017; Burns et al. 2000; Radcliff and Davis 2000).
  - In Brazil, labor unions historically connected to the left (Colistete 2007).

## Proxies for Union Strength

- Number of union employees per pop. between 15 and 64 y/o.
  - RAIS data on # people who work for labor unions.
- 2 Number of union establishments per pop. btw. 15 and 64 y/o.
  - RAIS data on # of establishments classified as labor unions.
- ullet Unionized workers per population between 15 and 64 y/o.

$$UW_{rt}^{15-64} = \sum_{i=1}^{I} \frac{\text{Formal Workers}_{irt}}{\text{Formal Workers}_{ist}} \frac{\text{Unionized Workers}_{ist}}{Population_{rt}^{15-64}}.$$

# Results: Tariff Cuts and Union Employees



Figs.: Other Measures

Tab.: Other Measures

Tab.: OLS-Results

#### Parties with Ties to Unions and Union Presence

- If results are partly driven by the weakening of unions, then they should be stronger for votes for parties with close links to unions.
- Re-estimate baseline results using the change in the vote share of parties with links to labor unions as the dependent variable.
  - "Union parties" (Queiroz 2017): PT, PDT, PMDB, PCB, PSB, PSD.
- Similarly, the effect of tariff cuts should be stronger in areas where unions were present prior to the shock.

## Results: Tariff Cuts and the Vote Share for "Union Parties"

Dep var: $\Delta$ Left Vote %	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	t = 1994	t = 1998	t = 2002	t = 2006	t = 2010	t = 2014	t = 2018	Pooled
A: Union Parties								
$RTR_r$	-0.901***	-0.797**	-0.355	-1.090**	-1.749***	-0.802	-1.453***	-1.021***
	(0.308)	(0.344)	(0.408)	(0.449)	(0.545)	(0.516)	(0.525)	(0.384)
B: Left Without Union Pa	arties							
$RTR_r$	N/A	-0.164	-0.174	0.340***	0.928***	0.099***	0.024**	0.149***
		(0.191)	(0.208)	(0.054)	(0.173)	(0.0174)	(0.010)	(0.050)
C: Left Without Union Pa	arties - Exclu	ding Union	Parties					
$RTR_r$	N/A	-0.033	0.288	0.577***	0.931**	0.273***	0.009	0.290**
		(0.291)	(0.314)	(0.127)	(0.390)	(0.082)	(0.020)	(0.127)
Observations	484	484	484	484	484	484	484	3388

# Results: Tariff Cuts and Votes by Union Presence in 1989

Pooled, Dep. var.:	(1) % Left	(2) % Left (Runoff)	(3) % Union Parties
$RTR_r$ in regions with unions and above 1st deciles	-1.175**	-1.700***	-1.113**
$RTR_r$ in regions without unions in 1989	(0.372)	(0.424) -0.497	(0.389) -0.023
$RTR_r$ in 10% less populated regions in 1989	(0.557) -1.217	(0.755) -1.933***	(0.569) -1.221**
$RTR_r$ in 10% less urbanized regions in 1991	(0.485) -1.312	(0.551) -1.657**	(0.554) -0.955
	(0.877)	(0.803)	(0.776)
$RTR_r$ in bottom 10% in manufacturing 1991	0.134 (0.829)	-1.567* (0.856)	-0.857 (0.680)
Observations	3,381	2,415	3,381

#### Conclusion

• We investigate the electoral consequences of a large unilateral trade liberalization in Brazil and the role of labor unions in this response.

#### We find that:

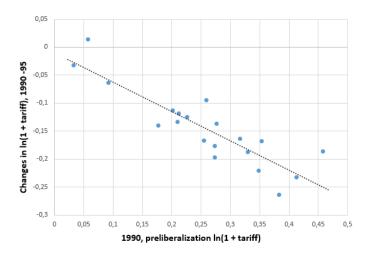
- Tariff cuts permanently reduced the share of votes for left-wing candidates in the more affected regions, relative to less affected ones.
- ② Tariff cuts also weakened labor unions' presence in the more affected regions, relative to less affected ones.
- The reduction in votes for the left was driven primarily by parties with ties to labor unions and by regions with previous union presence.

## Results: Tariff Cuts and Vote Share for the Left

Dep var: Δ Left Vote %	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	t = 1994	t = 1998	t = 2002	t = 2006	t = 2010	t = 2014	t = 2018	Pooled
A. Main Specification								
$RTR_r$	-0.829***	-1.243***	-0.811**	-1.032**	-1.103**	-0.986**	-1.733***	-1.105***
	(0.307)	(0.347)	(0.398)	(0.411)	(0.441)	(0.487)	(0.485)	(0.359)
B. Effective Protection								
$RETR_r$	-0.480***	-0.662***	-0.494**	-0.675***	-0.756***	-0.686**	-1.072***	-0.689***
	(0.181)	(0.205)	(0.248)	(0.253)	(0.265)	(0.270)	(0.276)	(0.217)
C. Runoff Elections								
$RTR_r$	N/A	N/A	-1.227***	-1.280***	-1.815***	-1.785***	-1.949***	-1.611***
			(0.390)	(0.406)	(0.490)	(0.491)	(0.495)	(0.412)
Observations	484	484	484	484	484	484	484	3,388 or 2,420



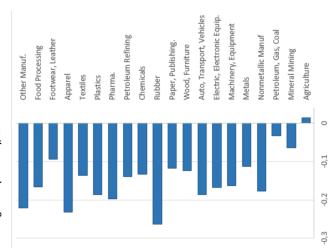
### Tariff Reductions and Initial Tariff Levels





# Tariff Changes across Industries

Changes in In( 1 + tariff), 1990—95



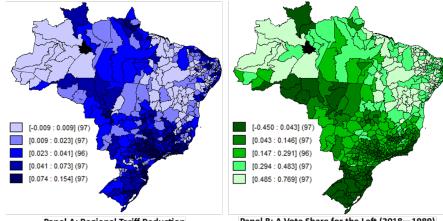


## Election Data

Variables	1989	1994	1998	2002	2006	2010	2014	2018
Eligible Voters (Thousand)	81,468.64	94,034.36	105,210.51	114,233.28	124,708.91	134,333.57	141,080.13	145,311.32
V.Sh Left-Wing Parties (First Round)	35.25%	30.27%	43.64%	76.70%	57.80%	66.98%	65.14%	42.50%
V.Sh Left-Wing Parties (Runoff Elections)	47.03%	N/A	N/A	61.15%	60.58%	55.84%	51.61%	44.98%
Turnout (First Round)	88.12%	82.29%	78.53%	82.26%	83.24%	81.86%	80.66%	79.74%
Turnout (Runoff Elections)	85.66%	N/A	N/A	79.56%	81.01%	78.51%	78.96%	78.77%

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# RTR and the Change in the Vote Share for the Left



Panel A: Regional Tariff Reduction

Mean	SD	P10	P90
0.043	0.039	0.002	0.106

Panel B: Δ Vote Share for the Left (2018—1989)

Mean	SD	P10	P90
0.230	0.252	-0.101	0.558

## Regional Exchange Rates

 Controls for real exchange rate shocks as in Dix-Carneiro and Kovak (2017):

$$IER_{i,t}^K = \sum_{j=1}^{P} S_{(ip,1989)}^K er_{pt}$$
  $RER_{rt}^K = \sum_{j=1}^{I} \lambda_{ri} \Delta_{(t-90)} ln(IRE_{i,t}^K)$ 

- $S_{ip,1989}^{K}$ : country p share of K = imports or exports of Brazil
  - 1989 import and export shares from Comtrade
- ullet  $er_{pt}$ : real exchange rate between Brazil and country p in year t
  - Real exchange rates from Penn World Table 10.0



## Results: Polarization

Dep var: $\Delta_{1989-t}$ Vote share:	t = 1994	t = 1998	t = 2002	t = 2006	t = 2010	t = 2014	t = 2018	Pooled
Panel A. Far-Right Parties								
Regional Tariff Reduction (RTR <sub>r</sub> )	0.266***	-0.035 (0.021)	N/A	-0.021** (0.008)	-0.023*** (0.008)	0.065***	0.304 (0.315)	0.093*
Panel B. Other Center and Right Parties	()	( /		()	()	( /	()	()
Regional Tariff Reduction $(RTR_r)$	0.562* (0.336)	1.278*** (0.354)	0.842** (0.398)	1.053** (0.411)	1.127** (0.441)	0.921* (0.491)	1.428*** (0.434)	1.030*** (0.352)
Observations	484	484	484	484	484	484	484	3,388 or 2,904



# Results: Robustness of the Vote Share Response II

Dep.Var: Δ Vote share for left-wing parties	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	t = 1994	t = 1998	t = 2002	t = 2006	t = 2010	t = 2014	t = 2018	Pooled
A. Main Specification								
Regional Tariff Reduction (RTR <sub>r</sub> )	-0.829***	-1.243***	-0.811**	-1.032**	-1.103**	-0.986**	-1.733***	-1.105***
	(0.307)	(0.347)	(0.398)	(0.411)	(0.441)	(0.487)	(0.485)	(0.359)
B. Post-Liberalization Tariff Reduction								
Regional Tariff Reduction (RTR <sub>r</sub> )	N/A	-1.244***	-0.726*	-0.912**	-1.176**	-1.169**	-1.730***	-1.141***
		(0.347)	(0.404)	(0.414)	(0.485)	(0.546)	(0.486)	(0.375)
C. Less than 50% of the work force working in Agriculture								
Regional Tariff Reduction (RTR <sub>r</sub> )	-0.880***	-1.254***	-0.681*	-0.804*	-1.030**	-0.932*	-1.655***	-1.034***
	(0.333)	(0.383)	(0.403)	(0.420)	(0.458)	(0.522)	(0.500)	(0.380)
Observations:	338	338	338	338	338	338	338	2,366
D. Privatization - Initial state-owned employment share								
Regional Tariff Reduction (RTR <sub>r</sub> )	N/A	-1.232***	-0.804**	-0.993**	-1.063**	-0.936*	-1.690***	-1.120***
		(0.349)	(0.397)	(0.426)	(0.446)	(0.499)	(0.494)	(0.384)
E. Privatization - Change in state-owned employment share								
Regional Tariff Reduction (RTR <sub>r</sub> )	N/A	-1.243***	-0.808**	-1.028**	-1.099**	-0.973**	-1.714***	-1.147***
		(0.347)	(0.399)	(0.413)	(0.442)	(0.490)	(0.487)	(0.378)
F. Real Exchange Rates								
Regional Tariff Reduction (RTR <sub>r</sub> )	-1.008***	-1.369***	-0.882**	-1.085***	-1.119**	-1.115**	-1.804***	-1.197***
	(0.306)	(0.354)	(0.405)	(0.407)	(0.442)	(0.511)	(0.469)	(0.356)
Observations	484	484	484	484	484	484	484	3388 or 2904

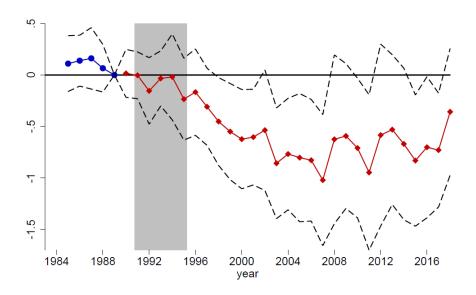


# Results: Robustness to Alternative Party Classifications

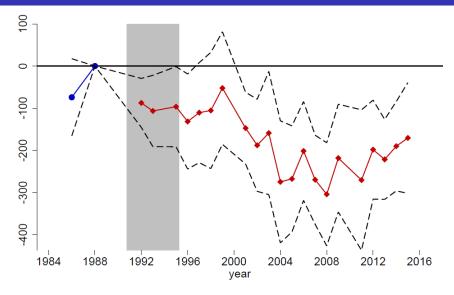
Dep.Var: $\Delta$ Vote share for left-wing parties	t = 1994	(2) $t = 1998$	(3) $t = 2002$	t = 2006	(5) $t = 2010$	(6) $t = 2014$	(7) $t = 2018$	(8) Pooled
A. Main Specification								
Regional Tariff Reduction $(RTR_r)$	-0.829*** (0.307)	-1.243*** (0.347)	-0.811** (0.398)	-1.032** (0.411)	-1.103** (0.441)	-0.986** (0.487)	-1.733*** (0.485)	-1.105*** (0.359)
B. All Less Relevant Parties Right-Wing								
Regional Tariff Reduction (RTR <sub>r</sub> )	-0.728**	-1.122***	-0.739*	-0.931**	-1.009**	-0.893*	-1.637***	-1.008***
	(0.300)	(0.344)	(0.393)	(0.408)	(0.439)	(0.484)	(0.482)	(0.354)
C. All Less Relevant Parties Left-Wing								
Regional Tariff Reduction (RTR <sub>r</sub> )	-0.849***	-0.981**	-0.529	-0.742	-0.814*	-0.608	-1.334**	-0.837**
	(0.317)	(0.400)	(0.420)	(0.455)	(0.485)	(0.525)	(0.522)	(0.392)
D. PSDB left-wing party in 1989								
Regional Tariff Reduction (RTR <sub>r</sub> )	-1.361***	-1.776***	-1.344***	-1.564***	-1.636***	-1.519***	-2.265***	-1.638***
- , , , ,	(0.316)	(0.344)	(0.364)	(0.401)	(0.434)	(0.490)	(0.470)	(0.349)
Observations	484	484	484	484	484	484	484	3.388



## Results: Tariff Cuts and Number of Union Establishments



# Results: Tariff Cuts and Union Density





# Results: Tariff Cuts and Unions Strength

	(1) 1994	(2) 1998	(3) 2002	(4) 2006	(5) 2010	(6) 2014	(7) 2018	(8) Pooled
A.1 - Union Employees Per Thousand Pe	ople (Between :	15 and 64 Ye	ars)					
Regional Tariff Reduction (RTR <sub>r</sub> )	-3.993	-10.46**	-9.108**	-8.062***	-8.830***	-11.21***	-10.28***	-8.320***
	(3.121)	(4.093)	(3.992)	(2.824)	(3.335)	(4.190)	(2.427)	(2.693)
A.2 - Union Employees Per Capita (Thou	isand People)							
Regional Tariff Reduction (RTR <sub>r</sub> )	-2.450	-6.236**	-6.026***	-5.022***	-5.837**	-7.081***	-6.258***	-5.198***
	(1.913)	(2.989)	(1.675)	(1.355)	(2.820)	(2.176)	(1.612)	(1.639)
B.1 - Unions per Thousand People (Betv	veen 15 and 64	Years)						
Regional Tariff Reduction (RTR <sub>r</sub> )	-0.0190	-0.451**	-0.536*	-0.827***	-0.709**	-0.669*	-0.357	-0.476*
	(0.212)	(0.217)	(0.298)	(0.300)	(0.344)	(0.374)	(0.313)	(0.244)
B.2 - Unions per Capita (Thousand Peop	ole)	, ,			, ,	. ,	, ,	, ,
Regional Tariff Reduction (RTR <sub>r</sub> )	0.00444	-0.305***	-0.325	-0.536**	-0.484**	-0.607***	-0.368*	-0.310*
	(0.125)	(0.109)	(0.198)	(0.224)	(0.235)	(0.223)	(0.189)	(0.161)
C.1 - Unionized Workers per Thousand F	People (Between	15 and 64 \	(ears)					
Regional Tariff Reduction (RTR <sub>r</sub> )	N/A	-105.4	-188.0***	-201.5***	N/A	-190.1***	N/A	-170.8***
		(70.14)	(55.57)	(59.66)		(53.99)		(36.75)
C.2 - Unionized Workers per Capita (The	ousand People)							
Regional Tariff Reduction (RTR <sub>r</sub> )	N/A	-46.16	-137.8***	-127.5***	N/A	-133.1***	N/A	-104.1***
- , ,	,	(36.07)	(35.09)	(41.68)	·	(40.46)		(23.95)
Number of Microregions	474	474	474	474	474	474	474	474
Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

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# Results: Unions Strength and RTR - OLS

	(1) 1994	(2) 1998	(3) 2002	(4) 2006	(5) 2010	(6) 2014	(7) 2018	(8) Pooled
A.1 - Union Employees Per Thousand Pe								
Regional Tariff Reduction (RTR <sub>r</sub> )	2.971	-20.55***	-22.09***	-17.06**	-23.22***	-24.65***	-25.19***	-17.53***
, ,,	(12.93)	(6.538)	(6.443)	(7.878)	(5.417)	(4.946)	(5.593)	(4.778)
A.2 - Union Employees Per Capita (Thou	usand People)	, ,	, ,	` ,	` ,	, ,	` ′	` ′
Regional Tariff Reduction (RTR <sub>r</sub> )	1.507	-12.53***	-13.74***	-11.13**	-14.35***	-15.18***	-15.53***	-10.84***
, ,,	(7.838)	(3.965)	(4.041)	(4.450)	(3.405)	(3.084)	(3.357)	(2.889)
B.1 - Unions per Thousand People (Betv	ween 15 and 64	Years)	, ,	, ,	, ,	, ,	, ,	, ,
Regional Tariff Reduction (RTR <sub>r</sub> )	-0.580	-1.212**	-1.087*	-1.181**	-1.134**	-1.108**	-0.935	-1.013*
	(0.559)	(0.559)	(0.563)	(0.560)	(0.530)	(0.527)	(0.578)	(0.513)
B.2 - Unions per Capita (Thousand Peop	ole) `	, ,	, ,	, ,	, ,	, ,	, ,	, ,
Regional Tariff Reduction (RTR <sub>r</sub> )	-0.360	-0.752**	-0.701**	-0.762**	-0.745**	-0.723**	-0.606*	-0.651**
	(0.339)	(0.340)	(0.343)	(0.342)	(0.322)	(0.317)	(0.351)	(0.311)
C.1 - Unionized Workers per Thousand F	People (Between	15 and 64 Y	ears)					
Regional Tariff Reduction (RTR <sub>r</sub> )	N/A	-142.8	-296.2***	-345.3***	N/A	-225.6**	N/A	-245.0***
		(92.45)	(92.21)	(100.5)		(91.56)		(80.42)
C.2 - Unionized Workers per Capita (The	ousand People)							
Regional Tariff Reduction (RTR <sub>r</sub> )	N/A	-85.52	-187.4***	-221.9***	N/A	-141.5**	N/A	-155.0***
		(54.38)	(53.75)	(60.72)		(55.48)		(46.40)
Number of Microregions	474	474	474	474	474	474	474	474
Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes



# Descriptive Statistics on Trade Unions

Variable:	Mean	SD	Min	Max	P10	P25	P50	P75	P90
Number of Union Employees	436.63	2013.84	0.00	27,855	0	6	36	174	688
Number of Union Employees per Thousand People (Between 15 and 64 Years Old)	1.11	1.72	0.00	13.73	0.00	0.11	0.48	1.41	2.92
Number of Union Employees Per Capita (Thousand People)	0.68	1.08	0.00	8.89	0.00	0.06	0.28	0.81	1.83
Number of Unions	25.98	85.54	0.00	1,283	0	2	7	21	51
Number of Unions Per Thousand People (Between 15 and 64 Years Old)	0.11	0.10	0.00	0.53	0.00	0.03	0.09	0.18	0.24
Number of Unions Per Capita (Thousand People)	0.07	0.06	0.00	0.32	0.00	0.02	0.05	0.11	0.15
Number of Unionized Workers	10088.72	45383.58	1.39	675,000	118	407	1,574	5,121	15,601
Number of Unionized Workers Per Thousand People (Between 15 and 64 Years Old)	31.06	34.50	0.11	351.23	2.86	6.96	18.87	42.82	75.35
Number of Unionized Workers Per Capita (Thousand People)	18.64	21.09	0.06	199.02	1.41	3.60	10.77	26.06	46.26