

*LOCAL IMPACTS OF GLOBAL MARKETS*

# The World Trade Organization and U.S. Domestic Politics

Renee T. Bowen  
*UC San Diego*

J. Lawrence Broz  
*UC San Diego*

Marc-Andreas Muendler  
*UC San Diego*

*NBER: April 8, 2022*

## WTO and Domestic Politics

- Erosion of support for multilateral organizations, including the WTO
- Substantive political science and economics literatures on domestic political support for formation of multilateral organizations and ratification of trade agreements, and consequences
- Support for trade agreements in operation less well understood
- Impact of international organization on U.S. domestic politics (USTR '20)

## WTO Appellate Body Rulings and U.S. Elections

- Change in vote shares towards Republican anti-WTO candidate 2016 (compared to Republican presidential candidate in 2012)
- Exposure of U.S. counties' industries to Appellate Body (AB) losses
- **Causal impact of WTO decisions on domestic electoral outcomes.** Three randomly assigned AB Members (“judges”) to given dispute
- Mechanism to be elicited: Employment at risk, or mere information

## Related Literature

- **Domestic determinants of trade agreements.** *Economic*: Johnson '54, Bagwell/Staiger '99, Ludema/Mayda '13, Amador/Bagwell '13
- **Domestic determinants of trade agreements.** *Political*: Grossman/Helpman '95, Mansfield/al. '02, Maggi/Rodriguez-Clare '07
- **Local impacts of trade.** *Economic*: Autor/al. '13, Jensen/al. '17
- **Local impacts of trade.** *Political*: Margalit '11, Feler/Senses '17, Rushford '18, Autor/al. '20, Choi/al. '21, Kim/Margalit '21
- **Random assignment of court cases to judges.** Kling '06

## Agenda

- Institutional Context
- Data
- Identification
- Electoral Outcomes

## Agenda

- Institutional Context
- Data
- Identification
- Electoral Outcomes

## WTO Dispute Settlement

### 1. **Consultations**

- Complainant(s) allege violation of WTO agreement by respondent
- Possible conclusion: Mutually agreed settlement

## WTO Dispute Settlement

### 1. Consultations

- Complainant(s) allege violation of WTO agreement by respondent
- Possible conclusion: Mutually agreed settlement

### 2. **Panel**

- Either party can request Panel of three non-WTO experts to arbitrate
- Possible conclusion: Panel report (approved by Dispute Settlement Body)



## WTO Dispute Settlement

### 1. Consultations

- Complainant(s) allege violation of WTO agreement by respondent
- Possible conclusion: Mutually agreed settlement

### 2. Panel

- Either party can request Panel of three non-WTO experts to arbitrate
- Possible conclusion: Panel report (approved by Dispute Settlement Body)

### 3. **Appellate Body (AB)**

- Both parties can appeal. Three randomly selected AB members (“judges”)
- Conclusion: AB report (approved by Dispute Settlement Body)

## WTO Dispute Settlement

### 1. Consultations

- Complainant(s) allege violation of WTO agreement by respondent
- Possible conclusion: Mutually agreed settlement

### 2. Panel

- Either party can request Panel of three non-WTO experts to arbitrate
- Possible conclusion: Panel report (approved by Dispute Settlement Body)

### 3. Appellate Body (AB)

- Both parties can appeal. Three randomly selected AB members (“judges”)
- Conclusion: AB report (approved by Dispute Settlement Body)

### 4. Notification of implementation or Suspension of concessions

## WTO Appellate Body

- AB members
  - Seven judges, appointed by Dispute Settlement Body (unanimity)
  - Staggered four-year terms (reappointment possible)
  - Inoperable since 2019 (U.S. blocks AB appointments since 2016)
- Rulings
  - Three randomly selected judges hear appeal (dissent unknown)
  - Complainant *Win*: Respondent has to bring policy into conformity

## Agenda

- Institutional Context
- **Data**
- Identification
- Electoral Outcomes

## Data

- WTO Dispute Data through DS 507 (April 2016)  
(Hoekman, Horn, Johannesson and Mavroidis 2016)  
USTR (2015) on complainant wins against United States
- MIT Election Data & Science Lab for election outcomes  
County Business Patterns (CBP)
- HS codes to NAICS (Pierce and Schott '12, strict and lenient)
- *In preparation*: WTO Dispute Data through DS 608 (September 2021),  
American Presidency Project, VoxGov, Google

## Resolution of WTO Disputes

Disputes	U.S. Respondent			U.S. Complainant			Universe		
	no AB	AB	<i>Total</i>	no AB	AB	<i>Total</i>	no AB	AB	<i>Total</i>
no Panel	52	0	52	63	0	63	292	0	292
Panel	19	<b>55</b>	74	14	32	46	72	143	215
<i>Total</i>	71	55	126	77	32	109	364	143	507

*Source:* WTO DS Database by Hoekman, Horn, Johannesson and Mavroidis (2016), DS 1 (January 10, 1995) through DS 507 (April 4, 2016).

*Notes:* Panel and AB refer to the WTO record of a decision at the respective stage of the dispute: a Panel decision is recorded if there is a circulated Final Panel Report, an Appellate Body decision on a dispute if there is a circulated final AB report. Disputes with no Panel and no AB were resolved in consultations or are still at the consultations stage at the time of our data (April 2016).

## Complainant Losses and Wins at the Appellate Body

WTO DS:	U.S. Respondent			U.S. Zeroing*			Any Respondent		
	Loss	Win	Total	Loss	Win	Total	Loss	Win	Total
USTR: C. Loss	2	6	8	0	0	0			
USTR: C. Win	4	43	47	0	4	4			
<i>Total</i>	6	49	55	0	4	4	13	128	141

\*The practice of *zeroing* in anti-dumping procedures is only used by the United States.

*Sources:* WTO DS Data ('16) to DS507 (Apr 2016); MIT Election Data & Science Lab; CBP; USTR information on U.S. zeroing and wins.

*Notes:* A “win” of a dispute is defined as the (Panel-stage) complainants’ success at the AB stage if the AB report recommends that the respondent bring a measure or trade policy into conformity with WTO agreements. The columns report a data-driven measure of wins, by which a win occurs if the AB rules for *at least one* cited agreement article (“claim”) that the respondent bring a measure or policy into WTO conformity. The rows report wins as defined by the USTR.

## Measurement

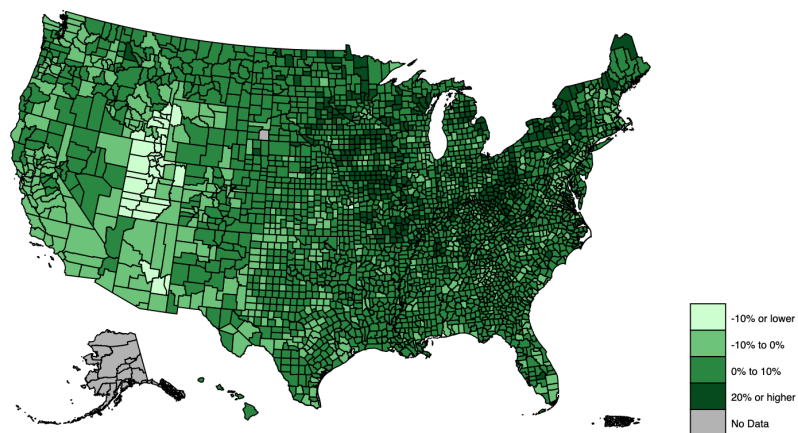
- Trump-Romney vote share change in county  $\ell$ :  $(x_{\ell}^{2016} - x_{\ell}^{2012})$
- Complainant Win (against U.S. as respondent) in industry  $i$  at  $t$ :  $\mathbb{1}_{it}^{adv}$
- Employment share of industry  $i$  in county  $\ell$  and year  $t$ :  $\alpha_{ilt} \equiv L_{ilt} / \bar{L}_{\ell t}$
- Cumulate exposure to adverse AB decisions in county  $\ell$  up to year  $T$ :

$$\mathcal{E}_{\ell}^T = \sum_{t=1995}^T \sum_i \alpha_{ilt} \mathbb{1}_{it}^{adv}$$

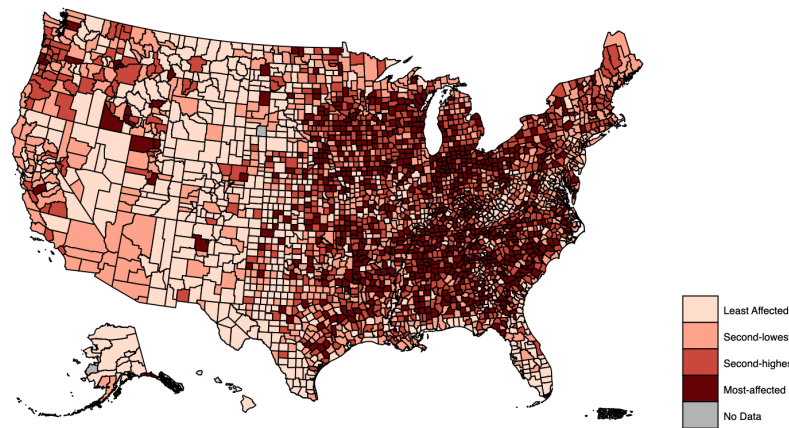


## Cumulative WTO-AB Exposure and the 2016 Presidential Election

Trump-Romney Vote Share changes from 2012 to 2016



WTO-AB Exposure (5-digit NAICS)



Sources: WTO DS Data ('16) to DS507 (Apr 2016); MIT Election Data & Science Lab; CBP.

Notes: The map on the left shows the change in the Trump-Romney vote share from 2012 to 2016; counties in dark green exhibit the largest increases in the Trump-Romney vote share. The map on the right shows cumulative county-level employment exposure to adverse WTO-AB rulings; counties in dark red experience the most local employment exposure to adverse WTO-AB rulings from 1995 to 2016.

## Agenda

- Institutional Context
- Data
- Identification
- Electoral Outcomes

## Potential Simultaneity Bias

- Simultaneity bias from exposure to potential adverse WTO rulings. Propensity to vote for protectionism and exposure correlated
  - Suppose *Laissez-faire counties* dominate sample. Few counties influence trade policy. Laissez-faire counties: low propensity to vote protectionist associated with high frequency of import-competing employment and high exposure to adverse WTO rulings. Downward bias in OLS.
  - Suppose *Concerned counties* dominate sample. High propensity to vote protectionist in presence of high frequency of import-competing employment, so higher exposure to adverse WTO rulings. Upward bias in OLS.

## Random Assignment and Judge Characteristics

- WTO working procedures for appellate review, Rule 6:

*The Members constituting a division shall be selected on the basis of rotation, while taking into account the principles of random selection, unpredictability and opportunity for all Members to serve regardless of their national origin.*

- Observed AB judge identities and demographics
- Inference of individual judge stringency not possible.  
Three-judge “divisions” with no attributable opinion

## Appellate Body Judges' Nationality and Studies Abroad

AB Members WTO member country	Nationality		Study Abroad	
	Count	Frequency	Count	Frequency
United States	4	<b>16%</b>	11	<b>44%</b>
United Kingdom			7	28%
Japan	3	12%		
France			3	12%
Egypt	2	8%		
India	2	8%		
Philippines	2	8%		
...				

*Sources:* Biographic data on Appellate Body judges are from public records; WTO DS Data ('16) to DS507 (Apr 2016).

*Notes:* Twenty-five judges served on Appellate Body up to dispute DS 507. "Study Abroad" excludes studies in the country of the judge's own nationality.

## Appellate Body Judge Characteristics and Dispute Assignment

AB Members on dispute	U.S. Respondent			Universe		
	Mean	p50	Obs.	Mean	p50	Obs.
Complainant wins $\geq$ 1 claims	.889 (.025)	1	162	.906 (.014)	1	417
USTR: Complainant wins	.852 (.028)	1	162			
Female	.080 (.021)	0	162	.111 (.015)	0	423
Tenure at AB report (mos.)	42.9 (2.049)	41	162	40.9 (1.128)	39	423
Nationality of respondent	<b>.154</b> (.028)	0	162	.104 (.015)	0	423
Past study at respondent	<b>.500</b> (.039)	.5	162	.243 (.021)	0	423

*Sources:* Biographic data on Appellate Body judges are from public records; WTO DS Data ('16) to DS507 (Apr 2016).

*Notes:* Twenty-five judges served on Appellate Body up to dispute DS 507. "Study Abroad" excludes studies in the country of the judge's own nationality.

## Agenda

- Institutional Context
- Data
- Identification
- Electoral Outcomes

## Specification

- Trump-Romney vote share change  $\ell$ :  $(x_{\ell}^{2016} - x_{\ell}^{2012})$
- Cumulative exposure to adverse AB decisions:  $\varepsilon_{\ell}^{2016} = \sum_t \sum_i \alpha_{ilt} \mathbb{1}_{it}^{adv}$
- County mapped judge indicators:  $\mathbb{1}_{j\ell}^{judge} = \sum_{t=1995}^{2016} \sum_i \alpha_{ilt} \mathbb{1}_{it}^{judge}$
- China shock:  $\Delta_{2000}^{2014} CH_{\ell}^{US}$ , instrument:  $\Delta_{2000}^{2014} CH_{\ell}^*$



## Specification

$$\begin{aligned} (x_\ell^{2016} - x_\ell^{2012}) = & \alpha + \beta_\varepsilon \varepsilon_\ell^{2016} + \beta_{Edu} \varepsilon_\ell^{2016} \times Edu_\ell \\ & + \beta_C \Delta_{2000}^{2014} CH_\ell^{US} + X'_\ell \beta_X + \eta_\ell \end{aligned}$$

$$\varepsilon_\ell^{2016} = \gamma_0^1 + \sum_j \gamma_j^1 \mathbb{1}_{jl}^{judge} + \gamma_C^1 \Delta_{2000}^{2014} CH_\ell^* + X'_\ell \gamma_X^1 + v_\ell^1$$

$$\varepsilon_\ell^{2016} \times Edu_\ell = \gamma_0^2 + \sum_j \gamma_j^2 \mathbb{1}_{jl}^{judge} + \gamma_C^2 \Delta_{2000}^{2014} CH_\ell^* + X'_\ell \gamma_X^2 + v_\ell^2$$

$$\Delta_{2000}^{2014} CH_\ell^{US} = \gamma_0^3 + \sum_j \gamma_j^3 \mathbb{1}_{jl}^{judge} + \gamma_C^3 \Delta_{2000}^{2014} CH_\ell^* + X'_\ell \gamma_X^3 + v_\ell^3$$

## Change in Trump-Romney Vote Share: OLS

	OLS	OLS	OLS	OLS	OLS
WTO-AB Exposure '95-'16	.054 (.009) <sup>***</sup>	.023 (.004) <sup>***</sup>	.019 (.003) <sup>***</sup>	.008 (.003) <sup>***</sup>	-.061 (.035) <sup>*</sup>
Δ China imports '00-'14			.005 (.002) <sup>**</sup>	.006 (.002) <sup>***</sup>	.006 (.002) <sup>***</sup>
Share No BA '90				.414 (.031) <sup>***</sup>	.394 (.029) <sup>***</sup>
WTO-AB Exp. × Sh. No BA					.124 (.060) <sup>**</sup>
Observations	3,111	3,104	3,091	3,091	3,091
Mean WTO-AB Exposure	.314	.314	.315	.315	
Standard controls		✓	✓	✓	✓
Occupation controls			✓	✓	✓

*Sources:* WTO DS Data ('16) to DS507 (Apr 2016); MIT Election Data & Science Lab; CBP; ADHM ('20).  
*Notes:* State FE; weighting by citizen voting-age population. WTO-AB exposure under lenient HS-NAICS mapping. Standard controls (1990 unless noted): Vote % Republican (1992, 1996), % age 65+, % female, % non-hispanic white, % non-hispanic black, % hispanic, % rural, % foreign-born, employment (1995), % unemployed, median household income. Occupation controls (ADHM '20): offshorability, routine task intensity. Standard errors in parentheses clustered at state level; \*  $p$  0.1, \*\* 0.05, \*\*\* 0.01.

## Change in Trump-Romney Vote Share: OLS

	OLS	OLS	OLS	OLS	OLS
WTO-AB Exposure '95-'16	.054 (.009) <sup>***</sup>	.023 (.004) <sup>***</sup>	<b>.019</b> (.003) <sup>***</sup>	<b>.008</b> (.003) <sup>***</sup>	<b>-.061</b> (.035) <sup>*</sup>
Δ China imports '00-'14			.005 (.002) <sup>**</sup>	.006 (.002) <sup>***</sup>	.006 (.002) <sup>***</sup>
Share No BA '90				.414 (.031) <sup>***</sup>	.394 (.029) <sup>***</sup>
WTO-AB Exp. × Sh. No BA					<b>.124</b> (.060) <sup>**</sup>
Observations	3,111	3,104	3,091	3,091	3,091
Mean WTO-AB Exposure	.314	.314	.315	.315	
Standard controls		✓	✓	✓	✓
Occupation controls			✓	✓	✓

*Sources:* WTO DS Data ('16) to DS507 (Apr 2016); MIT Election Data & Science Lab; CBP; ADHM ('20).  
*Notes:* State FE; weighting by citizen voting-age population. WTO-AB exposure under lenient HS-NAICS mapping. Standard controls (1990 unless noted): Vote % Republican (1992, 1996), % age 65+, % female, % non-hispanic white, % non-hispanic black, % hispanic, % rural, % foreign-born, employment (1995), % unemployed, median household income. Occupation controls (ADHM '20): offshorability, routine task intensity. Standard errors in parentheses clustered at state level; \*  $p$  0.1, \*\* 0.05, \*\*\* 0.01.

## Change in Trump-Romney Vote Share: IV

	OLS	IV-24	OLS	IV-24	OLS	IV-24
WTO-AB Exposure '95-'16	.019 (.003)***	.057 (.020)***	.008 (.003)***	.021 (.016)	-.061 (.035)*	-.876 (.252)***
$\Delta$ China imports '00-'14	.005 (.002)**	.002 (.003)	.006 (.002)***	.004 (.002)*	.006 (.002)***	.003 (.003)
Share No BA '90			.414 (.031)***	.394 (.037)***	.394 (.029)***	.069 (.089)
WTO-AB Exp. $\times$ Sh. No BA					.124 (.060)**	1.674 (.465)***
Observations	3,091	3,091	3,091	3,091	3,091	3,091
KP $F$ stat.		7.58		7.08		7.97
Cragg-Donald $F$ stat.		9.48		7.54		2.00
Stock-Yogo CV 10% bias		11.06		11.06		10.71

*Sources:* WTO DS Data ('16) to DS507 (Apr 2016); MIT Election Data & Science Lab; CBP; ADHM ('20).  
*Notes:* State FE; weighting by citizen voting-age population. WTO-AB exposure under lenient HS-NAICS mapping. IVs: 24 WTO-AB judges,  $\Delta$  China imports '00-'14 abroad. Standard controls (1990 unless noted): Vote % Republican (1992, 1996), % age 65+, % female, % non-hispanic white, % non-hispanic black, % hispanic, % rural, % foreign-born, employment (1995), % unemployed, median household income. Occupation controls (ADHM '20): offshorability, routine task intensity. Standard errors in parentheses clustered at state level: \*  $p$  0.1, \*\* 0.05, \*\*\* 0.01. Critical value (CV) for Cragg-Donald  $F$  stat.

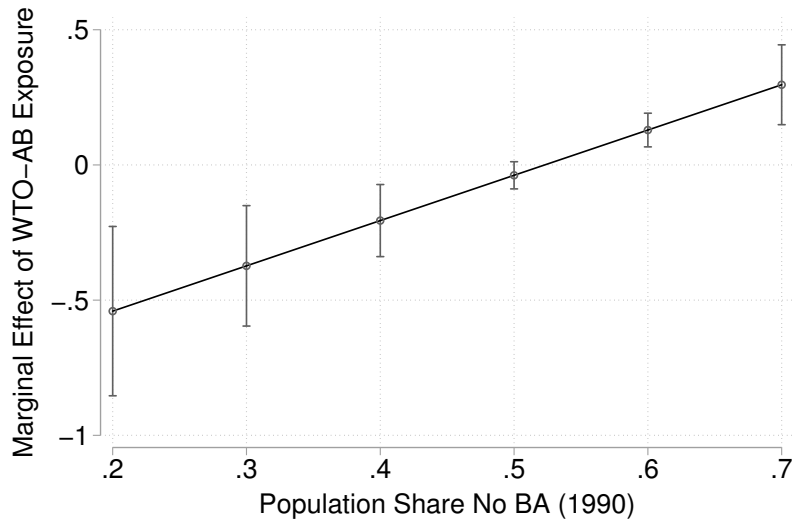
## Change in Trump-Romney Vote Share: IV

	OLS	IV-24	OLS	IV-24	OLS	IV-24
WTO-AB Exposure '95-'16	.019 (.003) <sup>***</sup>	<b>.057</b> (.020) <sup>***</sup>	.008 (.003) <sup>***</sup>	<b>.021</b> (.016)	-.061 (.035) <sup>*</sup>	<b>-.876</b> (.252) <sup>***</sup>
Δ China imports '00-'14	.005 (.002) <sup>**</sup>	.002 (.003)	.006 (.002) <sup>***</sup>	.004 (.002) <sup>*</sup>	.006 (.002) <sup>***</sup>	.003 (.003)
Share No BA '90			.414 (.031) <sup>***</sup>	.394 (.037) <sup>***</sup>	.394 (.029) <sup>***</sup>	.069 (.089)
WTO-AB Exp. × Sh. No BA					.124 (.060) <sup>**</sup>	<b>1.674</b> (.465) <sup>***</sup>
Observations	3,091	3,091	3,091	3,091	3,091	3,091
KP <i>F</i> stat.		7.58		7.08		7.97
Cragg-Donald <i>F</i> stat.		9.48		7.54		2.00
Stock-Yogo CV 10% bias		11.06		11.06		10.71

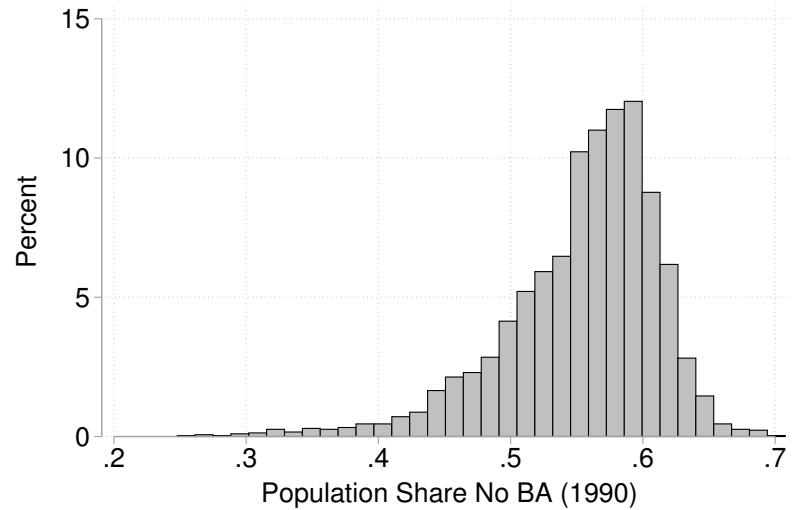
*Sources:* WTO DS Data ('16) to DS507 (Apr 2016); MIT Election Data & Science Lab; CBP; ADHM ('20).  
*Notes:* State FE; weighting by citizen voting-age population. WTO-AB exposure under lenient HS-NAICS mapping. IVs: 24 WTO-AB judges, Δ China imports '00-'14 abroad. Standard controls (1990 unless noted): Vote % Republican (1992, 1996), % age 65+, % female, % non-hispanic white, % non-hispanic black, % hispanic, % rural, % foreign-born, employment (1995), % unemployed, median household income. Occupation controls (ADHM '20): offshorability, routine task intensity. Standard errors in parentheses clustered at state level: \* *p* 0.1, \*\* 0.05, \*\*\* 0.01. Critical value (CV) for Cragg-Donald *F* stat.

### *Polarizing Effect of Education on WTO-AB Exposure (IV-24)*

Change in Trump-Romney Vote Share



Distribution of Share No BA (1990)



Sources: WTO DS Data ('16) to DS507 (Apr 2016); MIT Election Data & Science Lab; CBP; ADHM ('20).  
 Note: Estimates based on final column of preceding table.

## Change in Trump-Romney Vote Share: Aggregate IV

	OLS	IV-agg	OLS	IV-agg	OLS	IV-agg
WTO-AB Exposure '95-'16	.023 (.004)***	.070 (.022)***	.008 (.003)***	-.008 (.024)	-.061 (.035)*	-2.840 (.775)***
Δ China imports '00-'14			.006 (.002)***	.004 (.002)**	.006 (.002)***	-.0003 (.005)
Share No BA '90			.414 (.031)***	.437 (.052)***	.394 (.029)***	-.602 (.319)*
WTO-AB Exp. × Sh. No BA					.124 (.060)**	5.301 (1.479)***
Observations	3,104	3,104	3,091	3,091	3,091	3,091
KP <i>F</i> stat.		13.07		5.60		3.11
Cragg-Donald <i>F</i> stat.		53.07		28.32		4.37
Stock-Yogo CV 10% size		19.93		13.43		n/a

*Sources:* WTO DS Data ('16) to DS507 (Apr 2016); MIT Election Data & Science Lab; CBP; ADHM ('20).  
*Notes:* State FE; weighting by citizen voting-age population. WTO-AB exposure under lenient HS-NAICS mapping. IVs: positive and negative WTO-AB judges, Δ China imports '00-'14 abroad. Standard controls (1990 unless noted): Vote % Republican (1992, 1996), % age 65+, % female, % non-hispanic white, % non-hispanic black, % hispanic, % rural, % foreign-born, employment (1995), % unemployed, median household income. Occupation controls (ADHM '20), except specifications 1 and 2: offshorability, routine task intensity. Standard errors in parentheses clustered at state level: \* *p* 0.1, \*\* 0.05, \*\*\* 0.01.

## Change in Trump-Romney Vote Share: Aggregate IV

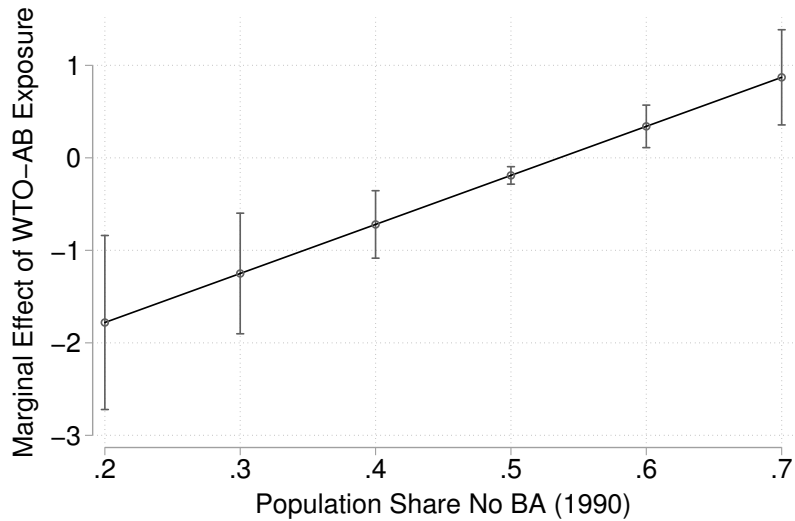
	OLS	IV-agg	OLS	IV-agg	OLS	IV-agg
WTO-AB Exposure '95-'16	.023 (.004)***	<b>.070</b> (.022)***	.008 (.003)***	-.008 (.024)	-.061 (.035)*	<b>-2.840</b> (.775)***
Δ China imports '00-'14			.006 (.002)***	.004 (.002)**	.006 (.002)***	-.0003 (.005)
Share No BA '90			.414 (.031)***	.437 (.052)***	.394 (.029)***	-.602 (.319)*
WTO-AB Exp. × Sh. No BA					.124 (.060)**	<b>5.301</b> (1.479)***
Observations	3,104	3,104	3,091	3,091	3,091	3,091
KP $F$ stat.		13.07		5.60		3.11
Cragg-Donald $F$ stat.		53.07		28.32		4.37
Stock-Yogo CV 10% size		19.93		13.43		n/a

*Sources:* WTO DS Data ('16) to DS507 (Apr 2016); MIT Election Data & Science Lab; CBP; ADHM ('20).  
*Notes:* State FE; weighting by citizen voting-age population. WTO-AB exposure under lenient HS-NAICS mapping. IVs: positive and negative WTO-AB judges, Δ China imports '00-'14 abroad. Standard controls (1990 unless noted): Vote % Republican (1992, 1996), % age 65+, % female, % non-hispanic white, % non-hispanic black, % hispanic, % rural, % foreign-born, employment (1995), % unemployed, median household income. Occupation controls (ADHM '20), except specifications 1 and 2: offshorability, routine task intensity. Standard errors in parentheses clustered at state level: \*  $p$  0.1, \*\* 0.05, \*\*\* 0.01.

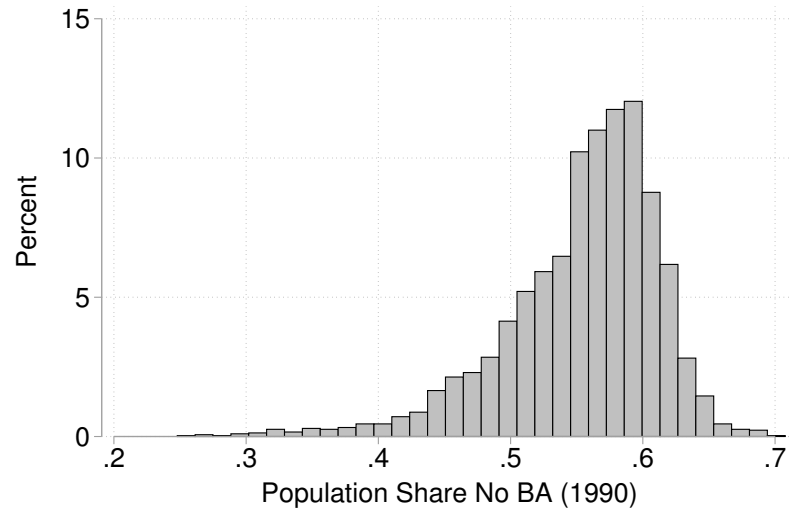


## *Polarizing Effect of Education on WTO-AB Exposure (IV-agg)*

Change in Trump-Romney Vote Share



Distribution of Share No BA (1990)



Sources: WTO DS Data ('16) to DS507 (Apr 2016); MIT Election Data & Science Lab; CBP; ADHM ('20).

Note: Estimates based on final column of preceding table.

## First Stages (basic and interaction specifications)

	Only		Full Specification		
	$\varepsilon_l^{16}$	$\varepsilon_l^{16}$	$\varepsilon_l^{16}$	$\varepsilon_l^{16} \times Edu_l$	$\Delta_{00}^{14} CH_l^{US}$
$\Delta$ China imports abroad '00-'14			.010 (.012)	.006 (.006)	.927 (.075)***
Judges positive prediction		.011 (.003)***	.010 (.002)***	.005 (.001)***	-.0006 (.002)
Judges negative prediction		-.009 (.003)***	-.008 (.002)***	-.004 (.001)***	.0006 (.001)
Georges-Michel Abi-Saab	.002 (.004)				
James Bacchus	-.020 (.007)***				
Luiz Olavo Baptista	-.024 (.008)***				
Lilia R. Bautista	-.035 (.013)**				
...					

## First Stages (basic and interaction specifications)

	Only		Full Specification		
	$\varepsilon_l^{16}$	$\varepsilon_l^{16}$	$\varepsilon_l^{16}$	$\varepsilon_l^{16} \times Edu_l$	$\Delta_{00}^{14} CH_l^{US}$
$\Delta$ China imports abroad '00-'14			.010 (.012)	.006 (.006)	<b>.927</b> (.075) <sup>***</sup>
Judges positive prediction		.011 (.003) <sup>***</sup>	<b>.010</b> (.002) <sup>***</sup>	<b>.005</b> (.001) <sup>***</sup>	-.0006 (.002)
Judges negative prediction		-.009 (.003) <sup>***</sup>	<b>-.008</b> (.002) <sup>***</sup>	<b>-.004</b> (.001) <sup>***</sup>	.0006 (.001)
Georges-Michel Abi-Saab	.002 (.004)				
James Bacchus	-.020 (.007) <sup>***</sup>				
Luiz Olavo Baptista	-.024 (.008) <sup>***</sup>				
Lilia R. Bautista	-.035 (.013) <sup>**</sup>				
...					

## First Stages (basic and interaction specifications), continued

	Only		Full Specification		
	$\varepsilon_l^{16}$	$\varepsilon_l^{16}$	$\varepsilon_l^{16}$	$\varepsilon_l^{16} \times Edu_l$	$\Delta_{00}^{14} CH_l^{US}$
...					
Christopher Beeby	.006				
	(.024)				
Ujal Singh Bhatia	-.032				
	(.018)*				
Peter Van den Bossche	.003				
	(.014)				
Seung Wha Chang	.032				
	(.023)				
Claus-Dieter Ehlermann	.024				
	(.011)**				
Said El-Naggar	.016				
	(.023)				
Florentino P. Feliciano	-.014				
	(.008)*				
...					

## First Stages (basic and interaction specifications), continued

	Only		Full Specification		
	$\varepsilon_l^{16}$	$\varepsilon_l^{16}$	$\varepsilon_l^{16}$	$\varepsilon_l^{16} \times Edu_l$	$\Delta_{00}^{14} CH_l^{US}$
...					
A.V. Ganesan	.012				
	(.005)**				
Thomas R. Graham	.044				
	(.023)*				
Jennifer Hillman	.073				
	(.018)***				
Merit E. Janow	.001				
	(.004)				
Julio Lacarte-Muró	.024				
	(.011)**				
John Lockhart	.021				
	(.007)***				
Mitsuo Matsushita	.006				
	(.021)				
...					

## First Stages (basic and interaction specifications), continued

	Only		Full Specification		
	$\varepsilon_l^{16}$	$\varepsilon_l^{16}$	$\varepsilon_l^{16}$	$\varepsilon_l^{16} \times Edu_l$	$\Delta_{00}^{14} CH_l^{US}$
...					
Shotaro Oshima					
Ricardo Ramírez-Hernández					
Giorgio Sacerdoti					
Shree Baboo Servansing					
Yasuhei Taniguchi					
David Unterhalter					
Yuejiao Zhang					
...					

### First Stages (basic and interaction specifications), continued

	Only		Full Specification		
	$\mathcal{E}_\ell^{16}$	$\mathcal{E}_\ell^{16}$	$\mathcal{E}_\ell^{16}$	$\mathcal{E}_\ell^{16} \times Edu_\ell$	$\Delta_{00}^{14} CH_\ell^{US}$
...					
Share No BA '90			<b>1.202</b> (.184) <sup>***</sup>	<b>.839</b> (.104) <sup>***</sup>	<b>.236</b> (.172)
Observations	3,104	3,104	3,091	3,091	3,091
$R^2$	.142	.106	.142	.170	.796

*Sources:* WTO DS Data ('16) to DS507 (Apr 2016); MIT Election Data & Science Lab; CBP; ADHM ('20).  
*Notes:* State FE; weighting by citizen voting-age population. WTO-AB exposure under lenient HS-NAICS mapping. Standard controls (1990 unless noted): Vote % Republican (1992, 1996), % age 65+, % female, % non-hispanic white, % non-hispanic black, % hispanic, % rural, % foreign-born, employment (1995), % unemployed, median household income. Occupation controls (ADHM '20), except specifications with only WTO-AB Exposure '95-'16 ( $\mathcal{E}_\ell^{16}$ ): offshorability, routine task intensity. Standard errors in parentheses clustered at state level: \*  $p$  0.1, \*\* 0.05, \*\*\* 0.01.

## Reduced Form and Robustness

- Reduced Form: *significant effects in absence of education interaction*
- China Shock IV as Control: *similar*
- USTR measure of complainant wins: *similar*
- Share of agreement-article wins for complainant per dispute: *similar*
- WTO-AB exposure based on strict HS-to-NAICS mapping: *similar*



## Agenda

- Institutional Context
- Data
- Identification
- Electoral Outcomes
- Now What?

## Now What?

- Hypothesis: Employment at risk drives electoral outcome
- Alternative hypothesis: Information drives electoral outcome

## Now What?

- Hypothesis: Employment at risk drives electoral outcome
  - Freund/Sidhu '17 (WP): Job loss by county not related to votes
  - Adverse WTO-AB rulings not related to imports in event studies
- Alternative hypothesis: Information drives electoral outcome
  - American Presidency Project, Google searches

## WTO Mentions in Presidential Campaigns

	2012	2016
W. Mitt Romney	2	
Hillary D. R. Clinton		0
Bernard Sanders		1
Donald J. Trump		38

*Source:* American Presidency Project (Woolley & Peters 2021).

*Notes:* 111 mentions of “WTO” or “World Trade Organization” in any campaign document or campaign verbal statement in 2012 or 2016.

## Concluding Remarks

- Trade agreements in operation can affect domestic politics
- Reference to adverse WTO rulings contributes to vote share gains for anti-WTO presidential candidate in 2016
- County-level education is important mediator
- Mere information channel is plausible

*BACKUP*

## Typical Campaign Statement on WTO by Donald J. Trump

*Your state has lost one-third of your manufacturing jobs since NAFTA, and one-fourth of your manufacturing jobs since China joined the World Trade Organization.*

*These were both Bill Clinton deals backed by Hillary Clinton.*

*The Clintons robbed Pennsylvania, stole your jobs, and shipped them to other countries—we are going to bring them back.*

*It used to be that cars were made in Flint and you couldn't drink the water in Mexico. Today, the cars are made in Mexico and you can't drink the water in Flint.*

*We're going to turn it all around.*

- Trump, D.J.: Remarks, Sun Center Studios in Chester Township, PA. *American Presidency Project* 2021.

**First Stage (interaction specification IV-24)**

	$\varepsilon_{\ell}^{2016}$	$\varepsilon_{\ell}^{2016} \times Edu_{\ell}$	$\Delta_{2000}^{2014} CH_{\ell}^{US}$
$\Delta$ China imports abroad '00-'14	.015 (.014)	.008 (.008)	.931 (.073)***
Georges-Michel Abi-Saab	.004 (.004)	.002 (.002)	.0003 (.007)
James Bacchus	-.018 (.007)***	-.010 (.004)***	-.015 (.009)*
Luiz Olavo Baptista	-.016 (.007)**	-.008 (.004)**	.007 (.010)
Lilia R. Bautista	-.029 (.012)**	-.015 (.007)**	.007 (.013)
Christopher Beeby	.013 (.024)	.007 (.014)	.019 (.029)
Ujal Singh Bhatia	-.025 (.018)	-.012 (.010)	.013 (.015)
Peter Van den Bossche	-.006 (.013)	-.004 (.007)	.027 (.033)
...			



**First Stage (interaction specification IV-24), continued**

	$\mathcal{E}_\ell^{2016}$	$\mathcal{E}_\ell^{2016} \times Edu_\ell$	$\Delta_{2000}^{2014} CH_\ell^{US}$
...			
Claus-Dieter Ehlermann	.025 (.011)**	.014 (.006)**	.001 (.013)
Said El-Naggar	.021 (.024)	.012 (.013)	-.010 (.042)
Florentino P. Feliciano	-.016 (.007)**	-.009 (.004)**	-.001 (.011)
A.V. Ganesan	.007 (.005)	.004 (.003)	.0009 (.004)
Thomas R. Graham	.038 (.022)*	.019 (.012)	-.026 (.027)
Jennifer Hillman	.038 (.025)	.022 (.014)*	.015 (.044)
Merit E. Janow	-.0007 (.003)	-.0003 (.002)	-.008 (.007)
Julio Lacarte-Muró	.018 (.010)*	.010 (.005)**	.003 (.016)
...			

## First Stage (interaction specification IV-24), continued

	$\mathcal{E}_\ell^{2016}$	$\mathcal{E}_\ell^{2016} \times Edu_\ell$	$\Delta_{2000}^{2014} CH_\ell^{US}$
...			
Mitsuo Matsushita	-.0004 (.021)	-.0003 (.012)	-.004 (.022)
Shotaro Oshima	-.044 (.021)**	-.026 (.012)**	.007 (.019)
Ricardo Ramírez-Hernández	.039 (.013)***	.021 (.007)***	-.041 (.027)
Giorgio Sacerdoti	.005 (.003)*	.003 (.002)	-.0009 (.005)
Yasuhei Taniguchi	-.007 (.005)	-.004 (.003)	.001 (.007)
David Unterhalter	.023 (.010)**	.011 (.005)**	-.004 (.018)
Yuejiao Zhang	-.006 (.007)	-.003 (.004)	.013 (.013)
...			

### First Stage (interaction specification IV-24), continued

	$\mathcal{E}_\ell^{2016}$	$\mathcal{E}_\ell^{2016} \times Edu_\ell$	$\Delta_{2000}^{2014} CH_\ell^{US}$
...			
Share No BA '90	1.148 (.175)***	.813 (.099)***	.247 (.170)
Observations	3,091	3,091	3,091
$R^2$	.170	.194	.809

*Sources:* WTO DS Data ('16) to DS507 (Apr 2016); MIT Election Data & Science Lab; CBP; ADHM ('20).  
*Notes:* State FE; weighting by citizen voting-age population. WTO-AB exposure under lenient HS-NAICS mapping. Standard controls (1990 unless noted): Vote % Republican (1992, 1996), % age 65+, % female, % non-hispanic white, % non-hispanic black, % hispanic, % rural, % foreign-born, employment (1995), % unemployed, median household income. Occupation controls (ADHM '20): offshorability, routine task intensity. Standard errors in parentheses clustered at state level: \*  $p$  0.1, \*\* 0.05, \*\*\* 0.01.

## Change in Trump-Romney Vote Share: IV-24 Comparison to IV-agg

	OLS	IV-24	OLS	IV-24	OLS	IV-24
WTO-AB Exposure '95-'16	.023 (.004) <sup>***</sup>	.086 (.024) <sup>***</sup>	.008 (.003) <sup>***</sup>	.021 (.016)	-.061 (.035) <sup>*</sup>	-.876 (.252) <sup>***</sup>
Δ China imports '00-'14			.006 (.002) <sup>***</sup>	.004 (.002) <sup>*</sup>	.006 (.002) <sup>***</sup>	.003 (.003)
Share No BA '90			.414 (.031) <sup>***</sup>	.394 (.037) <sup>***</sup>	.394 (.029) <sup>***</sup>	.069 (.089)
WTO-AB Exp. × Sh. No BA					.124 (.060) <sup>**</sup>	1.674 (.465) <sup>***</sup>
Observations	3,104	3,104	3,091	3,091	3,091	3,091
KP <i>F</i> stat.		11.72		7.08		7.97
Cragg-Donald <i>F</i> stat.		9.83		7.54		2.00
Stock-Yogo CV 10% bias		11.06		11.06		10.71

*Sources:* WTO DS Data ('16) to DS507 (Apr 2016); MIT Election Data & Science Lab; CBP; ADHM ('20).  
*Notes:* State FE; weighting by citizen voting-age population. WTO-AB exposure under lenient HS-NAICS mapping. IVs: 24 WTO-AB judges, Δ China imports '00-'14 abroad. Standard controls (1990 unless noted): Vote % Republican (1992, 1996), % age 65+, % female, % non-hispanic white, % non-hispanic black, % hispanic, % rural, % foreign-born, employment (1995), % unemployed, median household income. Occupation controls (ADHM '20): offshorability, routine task intensity. Standard errors in parentheses clustered at state level: \* *p* 0.1, \*\* 0.05, \*\*\* 0.01. Critical value (CV) for Cragg-Donald *F* stat.

## WTO Mentions in Congressional E-newsletters

	Negative	Positive	Total
Any mention	72	98	193
Specific dispute	52	51	120
Specific dispute and Respondent U.S.	47	14	75

*Source:* Congressional E-newsletters 2009-2021.

*Notes:* 193 mentions of “WTO” or “World Trade Organization” in any congressional e-newsletter.