

# Can Evidence-Based Information Shift Preferences Towards Trade Policy?

Laura Alfaro  
HBS, CEPR & NBER

Maggie Chen  
George Washington

Davin Chor  
Dartmouth & NBER

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## Backdrop

- ▶ Growing economic grievances have sowed the seeds for a backlash against globalization across many countries (Colantone et al., 2022)
  - ▶ Decline in manufacturing employment; weak labor market outcomes for low-skill workers; the rise in income inequality.
  - ▶ Anti-global sentiment further escalated with the pandemic (supply chains disruptions, PPE/vaccine export restrictions).

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  - ▶ Anti-global sentiment further escalated with the pandemic (supply chains disruptions, PPE/vaccine export restrictions).
- ▶ At the same time: many political actors have tapped into these grievances in campaigns and messaging pinning the blame on globalization.
  - ▶ Soaring political narratives calling for protectionist policy, rather than evidence-based information on benefits & costs of trade;
  - ▶ Rise of digital platforms: substantially lowered the barriers to disseminating fast information and political messaging.

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    - ▶ Soaring political narratives calling for protectionist policy, rather than evidence-based information on benefits & costs of trade;
    - ▶ Rise of digital platforms: substantially lowered the barriers to disseminating fast information and political messaging.
- ⇒ *Understanding how information backed by research might affect trade policy preferences is critical in the current environment.*

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  - ▶ Treatments: Narrative on the relationship between trade and U.S. labor market or price outcomes (drawing on recent economic research or data)
    - “Trade Hurts Jobs”, “Trade Helps Jobs”, “Trade Helps Prices”, “Tariff Hurts Prices” [▶ Go](#)
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  - ▶ Then solicit views on preferred economic policies.
  - ▶ Note: Evidence-based information; not hypothetical frames
- ▶ Representative samples of U.S. general population (>18K respondents):
  - ▶ Multiple rounds over 2018-2022: spans a range of global and local shocks (pandemic, supply chain disruptions, BLM movement, elections, inflation. . .)



## Preview of Findings

Evidence-based information influences trade policy preferences, but in *complex and even unanticipated ways*

- ▶ “Trade Hurts Jobs” significantly raises the likelihood of selecting protectionist policies (“more limits on imports”)
- ▶ Strikingly, “Trade Helps Prices” and “Tariff Hurts Prices” *also* raise protectionist preference (*asymmetric response* to information)

Also: a mildly positive effect with “Trade Helps Jobs”.

- ▶ All the treatment effects documented in 2018-2019 hold in 2020-2022.
- ▶ Shift toward more protectionist preferences accompanied by a more negative assessment of the impact trade has had for most Americans.

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### *What drives this surprising finding?*

- ▶ Not driven by lack of comprehension
- ▶ Attention dampens protectionist reaction to information that “Trade Helps”, but does not overturn it
- ▶ Treatments appear to interact with some markers of prior disposition toward protectionist policies, especially political identity
  - ▶ Consistent in particular with updating on the information received... but in a manner that is “*prior-biased*” (Charness and Dave 2017, Benjamin 2019)
- ▶ From directly asking: Strong priors associated with concerns about “*imports from countries like China*” and with “*competition for US jobs*”
- ▶ Points to the challenge of communicating information about potential benefits of trade, unless prior concerns related to China (geopolitics) and jobs are addressed.

## Literature

### 1. Determinants of trade policy preferences (c.f., Baldwin 1989, Rodrik 1995):

- ▶ **Economic self-interests** (Beaulieu 2002, Mayda and Rodrik 2005, Scheve and Slaughter 2001, Blonigen 2011, Blonigen and McGrew 2014, Mendez and van Patten 2022); **Sociotropic concerns** (Rotemberg 2003, Mansfield and Mutz 2009); **Behavioral: Loss aversion** (Freund and Ozcan 2008, Tovar 2009); **Political identity** (Grossman and Helpman 2021); **Information** (Ponzetto et al. 2020)
- ▶ This paper: The role of information wrt the gains and losses from trade

### 2. Randomized survey experiments to address self-selection and unobservables in individuals' exposure to information (c.f., Stantcheva 2022):

- ▶ **Immigration** (Facchini et al. 2016, Grigorieff et al. 2016, Alesina et al. 2019); **Taxes and redistribution** (Norton and Ariely 2011, Chow and Galak 2012, Kuziemko et al. 2015, Fisman et al. 2017, Alesina et al. 2018)
- ▶ **Trade** (Hiscox 2006, Nguyen 2017, Rho and Tomz 2017, Di Tella and Rodrik 2019, Rodriguez et al. 2021, Stantcheva 2022)
- ▶ This paper: Evidence-based information, succinctly communicated.  
Not hypothetical frames, short primes, assessments of/attempts to teach economic reasoning.

## Survey Design



## Survey Interface

- ▶ Mounted on Qualtrics
- ▶ User-friendly, to be completed in  $\approx 10$  minutes.

### Structure of survey:

1. Gather respondent baseline characteristics
2. Administer information treatment
3. Solicit preferred policies
4. Validate and explain choices



## Survey Instrument

### First part: Respondent background

- ▶ Basic biodata:
  - ▶ gender, age, race, state (or country) of birth, state of residence, education, employment status, sector, household income
  
- ▶ Background beliefs/positions:
  - ▶ which party's candidate did you support in the last presidential elections?
  - ▶ how much can you trust government to do what is right? what impact did NAFTA have on you and your family? children born into my community will have a better life than my generation?
  - ▶ satisfied with health of U.S. job market? willing to pay more for a U.S. brand? how big a problem is inequality in the U.S. today? how big a problem is inflation in the U.S. today?
  - ▶ gauge of loss aversion (avoiding a fee vs receiving a discount)
  
- ▶ News Sources:
  - ▶ how often do you follow the news? main news sources

## Survey Instrument (cont.)

Second part: Information treatment, drawn at random.

0. No information

1. “Trade Hurts Jobs” [▶ Go](#)

2. “Trade Helps Jobs” [▶ Go](#)

In later rounds: (i) Mixed Jobs treatments; (ii) “Sans China” variants [▶ Go](#)

3. “Trade Helps Prices” [▶ Go](#)

In later rounds: (i) “Sans China”; (ii) “Sans Cheaper” variants

4. “Tariff Hurts Prices” [▶ Go](#)

Evidence-based, relatively “scientific” narratives; no misinformation/fake news

Similar formats: Simplified, comparable texts and a figure.

## Survey Instrument (cont.)

Third part: Solicit preferred policies.

▶ **Direct questions:**

- ▶ Support placing more limits on imports? If yes, on which countries?
- ▶ Support an increase in US tariff rate to reduce imports? On which industries?
- ▶ Support signing free trade agreements with more countries?
- ▶ Of the following two policies, which do you prefer?  
More progressive taxes (higher tax rates on the top-income group); Higher tariff rates on foreign countries; Both policies; Neither
- ▶ (Support a minimum wage?)

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▶ **“Most preferred (MP)”**; pick 3 of 8, presented in randomized order:

- ★ More limits on imports from foreign countries (e.g., higher tariffs on imports);
- ★ Exiting from existing free trade agreements; ★ More limits on immigration;
- ★ Weakening the U.S. dollar, so that U.S. exports are more competitive;
- ★ Higher taxes on top income earners; ★ Higher minimum wage;
- ★ More benefits for the unemployed (e.g., unemployment insurance);
- ★ Improving education and worker training

## Survey Instrument (cont.)

### Fourth part: Validate and Explain Choices

- ▶ Did the information from the research findings you read about earlier in this survey affect your views on trade policy (i.e., the use of tariffs or limits on imports)? 1 = Strongly agree; 5 = Strongly disagree
- ▶ What impact do you think being open to international trade has had for most Americans? 1 = Extremely good; 5 = Extremely bad
- ▶ Information read earlier in this survey was on the topic of:  
trade and jobs; trade and prices; did not receive information

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- ▶ Information read earlier in this survey was on the topic of:  
trade and jobs; trade and prices; did not receive information
- ▶ I selected “More limits on imports” as a preferred policy because...
  - ★ I was persuaded/not persuaded; ★ Imports are often of lower quality;
  - ★ Imports are a potential threat to U.S. national security;
  - ★ Imports often compete for jobs with U.S. workers;
  - ★ I am concerned about U.S. imports from countries such as China;
  - ★ There are other more important concerns

Also: Open text question for any other reasons

## Implementation

- ▶ U.S. general-population samples. Representative by gender, age, race, education, region
  - ▶ Lines up with U.S. data on untargeted dimensions, e.g.: labor force participation rate, broad sector of employment [▶ Summary Stats](#)
- ▶ Multiple rounds over 2018-2022:
  - ▶ Round 1: July 2018, April 2019
  - ▶ Round 2: April-June 2020  
(Added “Tariff Hurts Prices”, Prices variant treatments; covid questions)
  - ▶ Round 3: April-May 2021  
(Added: Validation/explanation questions)
  - ▶ Round 4: April-August 2022  
(Added Jobs “Sans China” treatments; inflation question)
  - ▶ Cumulative  $N$ : > 18,000

## Survey Findings



## Preferred Policies: Summary Statistics

### Consistently across rounds:

- ▶  $\approx 60\%$  support more limits on imports, when posed as a yes/no question.
- ▶ Compare against: **23-28%** under the “choose three most preferred policies” question format (with slight uptick over time)

Instead, most support for: Education and worker training; Minimum wage; More progressive taxation

SURVEY:	Round 1, 2018-19 (N=2,277)	Round 2, 2020 (N=6,009)	Round 3, 2021 (N=4,058)	Round 4, 2022 (N=6,005)
Do you support placing more limits on imports?	0.57 [0.49]	0.62 [0.49]	0.59 [0.49]	0.58 [0.49]
Would you support an increase in the US tariff rate?	0.28 [0.45]	0.25 [0.43]	0.25 [0.43]	0.32 [0.47]
Prefer: Higher tariff rates on foreign countries?	0.44 [0.50]	0.50 [0.50]	0.47 [0.50]	0.48 [0.50]
Prefer: More progressive taxes?	0.68 [0.46]	0.65 [0.48]	0.68 [0.47]	0.68 [0.47]
Would you support signing more FTAs?	0.68 [0.47]	0.65 [0.48]	0.65 [0.48]	0.64 [0.48]
Would you support a minimum wage?	0.78 [0.41]	0.80 [0.40]	0.74 [0.44]	0.78 [0.42]
<b>Most Preferred Policies (pick 3 out of 8)</b>				
More limits on foreign imports	0.23 [0.42]	0.27 [0.44]	0.28 [0.45]	0.28 [0.45]
Exiting from FTAs	0.13 [0.34]	0.12 [0.33]	0.13 [0.34]	0.12 [0.33]
More limits on immigration	0.34 [0.47]	0.31 [0.46]	0.37 [0.48]	0.35 [0.48]
Weaken the USD	0.07 [0.26]	0.09 [0.29]	0.09 [0.28]	0.08 [0.28]
Higher taxes on top income earners	0.51 [0.50]	0.46 [0.50]	0.50 [0.50]	0.53 [0.50]
Higher minimum wage	0.61 [0.49]	0.60 [0.49]	0.56 [0.50]	0.61 [0.49]
More unemployment benefits	0.30 [0.46]	0.34 [0.47]	0.29 [0.45]	0.30 [0.46]
Improve education and worker training	0.59 [0.49]	0.49 [0.50]	0.52 [0.50]	0.56 [0.50]

## Regression specification

$$\mathbf{1}(Policy_i) = \sum_{b=1}^B \beta_b \mathbf{1}(Treatment_i = b) + X_i + \epsilon_i$$

- ▶  $\mathbf{1}(Policy_i)$ : Dummy variable for respondent  $i$ 's policy preference
- ▶  $\mathbf{1}(Treatment_i = b)$ : Dummy for whether respondent  $i$  received treatment  $b$   
(Omitted category: Pure control with no information)
- ▶  $\beta_b$ : Effect of treatment relative to the control subsample
- ▶ With randomization, respondent characteristics are balanced across treatment subsamples

## Regression specification

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- ▶  $X_i$ : Auxiliary controls. (Note: Not crucial for identification.)
  - ▶ Biodata: Dummies for gender, age group, race, level of studies, household income bins, employment status (incl. broad sector), BEA region of birth (incl. foreign-born category)
  - ▶ Prior Political position: Party of candidate supported in most recent presidential election
  - ▶ News consumption: Frequency following current affairs; Main news program source
  - ▶ County characteristics: Share college educated, ADH 2000s China import shock, manufacturing employment share urban dummy, missing dummy. (Successfully merged for >95% of respondents.)
  - ▶ Survey characteristics: Dummy for mobile device. Week dummies.
- ▶ Logit regressions, with standard errors clustered by county of residence
- ▶ Also: OLS on first principal component measure (constructed to be increasing in preferences for more limits on trade)

## Effects of Information Treatments: Pre-Covid, 2018-2019

### Jobs treatments:

- ▶ “Trade Hurts Jobs” raises propensity toward protectionist policies
- ▶ “Trade Helps Jobs” treatment: no effect

Trade Policy Questions:	(1)	(2)	(3)	(4)	(5)	(6)
	More limits on imports	US tariff rate increase	Support higher tariff	Support more FTAs	Most Pref.: More limits on Imports	First principal component
	Logit	Logit	Logit	Logit	Logit	OLS
<b><u>Treatment dummies:</u></b>						
Trade Hurts Jobs	0.060*	0.045*	0.083***	-0.046	0.080***	0.282***
	[0.032]	[0.026]	[0.032]	[0.030]	[0.024]	[0.076]
Trade Helps Jobs	0.007	0.033	0.064	0.017	0.040	0.135
	[0.035]	[0.034]	[0.041]	[0.032]	[0.027]	[0.098]
Trade Helps Prices	0.057*	0.018	0.071*	-0.007	0.069**	0.211**
	[0.034]	[0.030]	[0.039]	[0.032]	[0.028]	[0.089]
Most Pref., Randomization Order					-0.021	0.003
					[0.022]	[0.011]
Last Pres. Election: Supported Democrat	-0.042	-0.043*	-0.043	0.091***	-0.064***	-0.259***
	[0.029]	[0.022]	[0.026]	[0.027]	[0.019]	[0.075]
Last Pres. Election: Supported Republican	0.224***	0.147***	0.219***	-0.034	0.092***	0.728***
	[0.030]	[0.028]	[0.029]	[0.029]	[0.023]	[0.081]
Individual, county, week controls?	Y	Y	Y	Y	Y	Y
Observations	2,277	2,277	2,277	2,277	2,277	2,277
(Pseudo) R-squared	0.0970	0.103	0.0742	0.0746	0.0783	0.183

## Effects of Information Treatments: Pre-Covid, 2018-2019

### Prices treatments:

- ▶ “Trade Helps Prices” also raises propensity to select more protectionist policies

Trade Policy Questions:	(1)	(2)	(3)	(4)	(5)	(6)
	More limits on imports Logit	US tariff rate increase Logit	Support higher tariff Logit	Support more FTAs Logit	Most Pref.: More limits on Imports Logit	First principal component OLS
<b>Treatment dummies:</b>						
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## Effects of Information Treatments: 2020-2022

### Jobs treatments:

- ▶ “Trade Hurts Jobs” continues to induce a preference for protection
- ▶ “Trade Helps Jobs” effect now positive and marginally significant (though magnitude of effect is smaller)

Trade Policy Questions:	(1) More limits on imports	(2) US tariff rate increase	(3) Support higher tariff	(4) Support more FTAs	(5) Most Pref.: More limits on Imports	(6) First principal component	(7) Did information affect views?	(8) Impact of trade for most Americans?
	Logit	Logit	Logit	Logit	Logit	OLS	Ordered logit	Ordered logit
<b>Treatment dummies:</b>								
Trade Hurts Jobs	0.091*** [0.017]	0.071*** [0.015]	0.036** [0.017]	-0.038** [0.018]	0.033** [0.015]	0.242*** [0.043]	0.048*** [0.015]	-0.248*** [0.016]
Trade Helps Jobs	0.023 [0.018]	0.023 [0.015]	0.026 [0.018]	-0.006 [0.019]	0.009 [0.015]	0.081* [0.044]	0.030* [0.016]	-0.025* [0.015]
Trade Helps Prices	0.057*** [0.017]	0.027* [0.014]	-0.005 [0.017]	-0.001 [0.017]	0.031** [0.015]	0.109** [0.042]	0.028* [0.015]	-0.058*** [0.015]
Tariff Hurts Prices	0.040** [0.017]	0.020 [0.014]	0.017 [0.017]	-0.004 [0.017]	0.023 [0.016]	0.099** [0.042]	0.046*** [0.016]	-0.164*** [0.016]
Most Pref., Randomization Order					-0.011*** [0.002]	-0.019*** [0.006]		
Last Pres. Election: Supported Democrat	0.003 [0.014]	0.006 [0.011]	-0.042*** [0.016]	0.124*** [0.014]	-0.040*** [0.012]	-0.141*** [0.035]	0.093*** [0.013]	0.089*** [0.012]
Last Pres. Election: Supported Republican	0.193*** [0.016]	0.122*** [0.013]	0.143*** [0.015]	-0.037** [0.015]	0.141*** [0.015]	0.625*** [0.040]	0.084*** [0.013]	-0.002 [0.013]
Individual, county, week controls?	Y	Y	Y	Y	Y	Y	Y	Y
Observations	9,275	9,275	9,275	9,275	9,275	9,275	9,275	9,275
(Pseudo) R-squared	0.0766	0.0801	0.0471	0.0698	0.0796	0.153	0.0488	0.0569

## Effects of Information Treatments: 2020-2022

### Prices treatments:

- ▶ Replicate the finding that “Trade Helps Prices” shifts respondents in a protectionist direction
- ▶ Similar result with “Tariff Hurts Prices”

Trade Policy Questions:	(1) More limits on imports	(2) US tariff rate increase	(3) Support higher tariff	(4) Support more FTAs	(5) Most Pref.: More limits on Imports	(6) First principal component	(7) Did information affect views?	(8) Impact of trade for most Americans?
	Logit	Logit	Logit	Logit	Logit	OLS	Ordered logit	Ordered logit
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Individual, county, week controls?	Y	Y	Y	Y	Y	Y	Y	Y
Observations	9,275	9,275	9,275	9,275	9,275	9,275	9,275	9,275
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## Effects of Information Treatments: 2020-2022

- ▶ Consistent with the above, respondents directly affirm that treatments affected their views on trade policy. . .
- ▶ . . . and treatments associated with a worsening in respondents' assessment of the impact of trade for most Americans

Trade Policy Questions:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	More limits on imports	US tariff rate increase	Support higher tariff	Support more FTAs	Most Pref.: More limits on Imports	First principal component	Did information affect views?	Impact of trade for most Americans?
	Logit	Logit	Logit	Logit	Logit	OLS	Ordered logit	Ordered logit
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Trade Helps Jobs	0.023 [0.018]	0.023 [0.015]	0.026 [0.018]	-0.006 [0.019]	0.009 [0.015]	0.081* [0.044]	0.030* [0.016]	-0.025* [0.015]
Trade Helps Prices	0.057*** [0.017]	0.027* [0.014]	-0.005 [0.017]	-0.001 [0.017]	0.031** [0.015]	0.109*** [0.042]	0.028* [0.015]	-0.058*** [0.015]
Tariff Hurts Prices	0.040** [0.017]	0.020 [0.014]	0.017 [0.017]	-0.004 [0.017]	0.023 [0.016]	0.099** [0.042]	0.046*** [0.016]	-0.164*** [0.016]
Most Pref., Randomization Order					-0.011*** [0.002]	-0.019*** [0.006]		
Last Pres. Election: Supported Democrat	0.003 [0.014]	0.006 [0.011]	-0.042*** [0.016]	0.124*** [0.014]	-0.040*** [0.012]	-0.141*** [0.035]	0.093*** [0.013]	0.089*** [0.012]
Last Pres. Election: Supported Republican	0.193*** [0.016]	0.122*** [0.013]	0.143*** [0.015]	-0.037** [0.015]	0.141*** [0.015]	0.625*** [0.040]	0.084*** [0.013]	-0.002 [0.013]
Individual, county, week controls?	Y	Y	Y	Y	Y	Y	Y	Y
Observations	9,275	9,275	9,275	9,275	9,275	9,275	9,275	9,275
(Pseudo) R-squared	0.0766	0.0801	0.0471	0.0698	0.0796	0.153	0.0488	0.0569



## Effects of Information Treatments: Further Remarks

- ▶ Magnitude: Marginal effect of “Trade Hurts Jobs” about  $1/3$  that of self-identifying as a Republican presidential candidate supporter
- ▶ Asymmetric response to information about benefits and losses from trade
  - ▶ But contrast with Rodriguez et al. (2021): positive information about impact of trade can even move respondents to become more protectionist.
- ▶ Additional treatments:
  - ▶ Mixed jobs treatments: Positive effect, size in between pure “Trade Hurts Jobs” and “Trade Helps Jobs” [▶ Go](#)
  - ▶ “Trade Helps Prices Sans Cheaper”: Positive effect, bigger than “Trade Helps Prices” and “Tariff Hurts Prices” [▶ Go](#)
- ▶ Other covariates: [▶ Go](#)
  - ▶ Age; Household income; Employed in Ag/Mi/Mf (relative to Sv sector)
  - ▶ Candidate supported in presidential election; Media consumption (Fox News)
  - ▶ Residents in counties with high manufacturing employment share
  - ▶ Mobile device respondents

## Misunderstanding of information?

## Misunderstanding of information?

- ▶ Respondents were on average able to correctly recall broad nature of information received (“about jobs” vs “about prices”).
- ▶ Moreover: Positive treatment effects load on respondents with correct recall!

Trade Policy Questions:	(1)	(2)	(3)	(4)
	Info received on jobs? Logit	Info received on prices? Logit	First principal component OLS Info recall incorrect	First principal component OLS Info recall correct
Trade Hurts Jobs	0.130*** [0.018]	-0.044*** [0.017]	0.086* [0.051]	0.606*** [0.082]
Trade Helps Jobs	0.149*** [0.016]	-0.062*** [0.017]	-0.016 [0.055]	0.350*** [0.083]
Trade Helps Prices	-0.050*** [0.015]	0.139*** [0.018]	0.070 [0.061]	0.315*** [0.077]
Tariff Hurts Prices	-0.056*** [0.015]	0.125*** [0.016]	0.057 [0.058]	0.313*** [0.078]
Individual, county, week, rand. order controls?	Y	Y	Y	Y
Observations	9,275	9,275	5,080	4,195
(Pseudo) R-squared	0.0422	0.0313	0.147	0.178

▶ Summary Stats

# Is it Attention?

## Is it Attention?

More time spent on treatment screen associated with. . .

- ▶ amplified protectionist response for “Trade Hurts Jobs”
- ▶ dampened response for “Trade Helps”, “Tariff Hurts” (though not overturned)
- ▶ Extended attention may enhance the effectiveness of a counter narrative.

Trade Policy Questions:	(1) Info correct? Logit All	(2) First principal component OLS Below median	(3) First principal component OLS Above median	(4) First principal component OLS Top quintile
Above-median treatment duration	0.251*** [0.013]			
Above-median survey duration	-0.028** [0.012]			
Trade Hurts Jobs		0.162*** [0.050]	0.330*** [0.057]	0.497*** [0.080]
Trade Helps Jobs		0.116** [0.050]	0.051 [0.057]	0.057 [0.087]
Trade Helps Prices		0.141*** [0.050]	0.090* [0.053]	0.060 [0.076]
Tariff Hurts Prices		0.154*** [0.048]	0.057 [0.058]	0.020 [0.082]
Individual, county, week, rand. order controls?	Y	Y	Y	Y
Observations	9,275	5,760	5,754	3,643
(Pseudo) R-squared	0.0632	0.143	0.172	0.158

## Exploring Underlying Mechanisms

**Approach:** Augment baseline regressions with interaction terms between treatment dummies and underlying respondent characteristics,  $x_i$ , that proxy for potential prior markers of preferences for protection

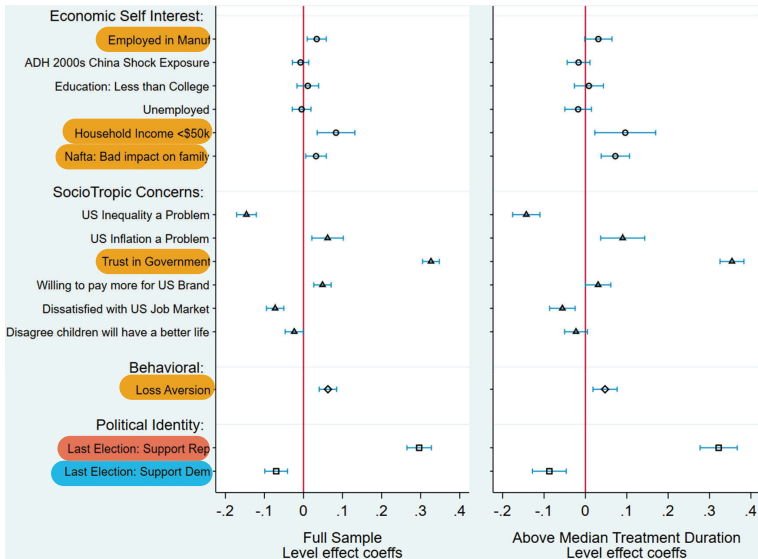
## Exploring Underlying Mechanisms

**Approach:** Augment baseline regressions with interaction terms between treatment dummies and underlying respondent characteristics,  $x_i$ , that proxy for potential prior markers of preferences for protection

Various forces/channels explored (c.f., Baldwin 1989, Rodrik 1995):

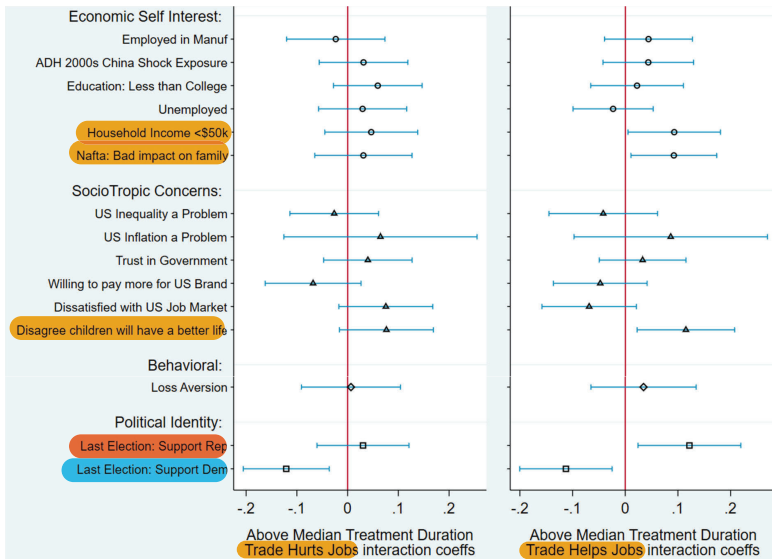
- a. Economic Self-Interest
  - ▶ Personal/Household exposure: through industry (Ricardo-Viner), skill group (Stolper-Samuelson), or location (Autor-Dorn-Hanson)
- b. Social/Sociotropic concerns:
  - ▶ Over... Income Inequality; Inflation; Supporting U.S. products; Trust in government; Health of U.S. job market; Outlook for future generations
- c. Behavioral explanations: Loss aversion (Kahneman and Tversky 1979, 1984; Freund and Ozden 2008, Tovar 2009)
- d. Identity Politics: Echo the trade policy position/ideology of the political party with which you identify (Grossman and Helpman 2021)

## Mechanisms: Level Effects (sans interactions)

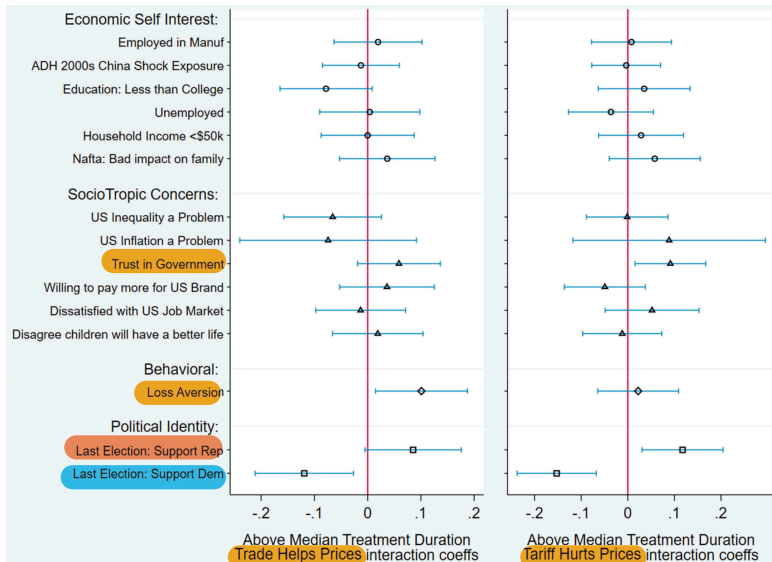




# Mechanisms: Interaction coefficients $(\alpha_b \mathbf{1}(Treatment_i = b) \times x_i)$



## Mechanisms: Interaction coefficients $(\alpha_b \mathbf{1}(Treatment_i = b) \times x_i)$



## Exploring Underlying Mechanisms: Summing Up

- ▶ “Trade Helps Jobs”: Protectionist response is stronger for households with low income, negative experience with NAFTA (economic exposure); also, those with a pessimistic view of outlook for next the generation (sociotropic)
- ▶ “Trade Helps Prices”: Protectionist response stronger for those who trust government more (sociotropic), and display greater loss aversion (behavioral)
- ▶ Across all treatments: Heterogeneous responses by prior political position, consistent with the role of identity politics
- ▶ Patterns consistent with a form of confirmation bias: *prior-biased updating*. (Charness and Dave 2017, Benjamin 2019)
  - ▶ Information that “Trade Helps” that is at odds with one’s prior disposition leads to updating of preferences in the opposite direction (i.e., away from free trade)  
  
(Other egs.: Soroka 2006 on asymmetric response to good vs bad economic information; Barrera et al. 2020 on fact-checking.)
  - ▶ Another possibility: *Information avoidance* (Goldman et al. 2017)

## Why “More limits on imports” as an MP policy?

- ▶ Directly ask.

## Why “More limits on imports” as an MP policy?

- ▶ Directly ask.
- ▶ Concerns about **China** and **Jobs** receive the highest agreement scores, consistently across treatments (regardless of whether “with China” or “sans China” in wording; or whether treatment is about jobs or prices)

Reasons: (5=Strongly agree, 1=Strongly disagree)	Not persuaded	Imports often lower quality	Imports potential threat to National security	Imports often compete for US jobs	Concerned about imports from China	Other more important concerns
<u>Information Treatment received:</u>						
Control (N = 302)	---	3.54 [1.08]	3.41 [1.12]	3.85 [1.09]	3.96 [1.08]	3.61 [1.01]
Trade Hurts Jobs (N = 270)	3.84 [1.02] <sup>Pers.</sup>	3.74 [0.96]	3.47 [1.00]	4.09 [0.91]	4.04 [0.99]	3.81 [0.94]
Trade Hurts Jobs sans China (N = 183)	3.65 [1.07] <sup>Pers.</sup>	3.64 [1.01]	3.56 [1.05]	3.98 [1.01]	3.83 [1.11]	3.70 [1.02]
Trade Helps Jobs (N = 238)	3.62 [1.04]	3.79 [1.04]	3.69 [1.07]	4.06 [0.98]	4.29 [0.97]	3.80 [0.95]
Trade Helps Jobs sans China (N = 171)	3.63 [0.92]	3.63 [1.00]	3.40 [0.99]	3.92 [0.96]	3.94 [1.18]	3.60 [0.99]
Trade Helps Prices (N = 250)	3.30 [1.02]	3.75 [0.99]	3.43 [1.06]	4.06 [0.99]	4.05 [0.98]	3.90 [0.85]
Trade Helps Prices sans China (N = 256)	3.50 [1.08]	3.70 [1.09]	3.53 [1.13]	4.09 [1.00]	4.08 [1.08]	3.81 [1.03]
Tariff Hurts Prices (N = 245)	3.27 [1.06]	3.61 [1.15]	3.50 [1.11]	3.94 [1.05]	4.12 [1.01]	3.70 [0.99]
All other Treatments (N = 775)	3.49 [1.09]	3.72 [1.06]	3.55 [1.05]	4.01 [1.00]	4.09 [0.99]	3.68 [0.95]





## Why “More limits on imports” as an MP policy?

- ▶ Respondents more likely to highlight concerns about imports from China and about jobs (relative to being persuaded/not persuaded), regardless of whether treatment is “with” or “sans China”.

Dependent variable: (5=Strongly agree, 1=Strongly disagree)	(1)	(2)	(3)
	Agreement Score: Reason for “More Limits on Imports” as a Most Preferred Policy		
Treatments in sample:	Trade Hurts Jobs with/sans China	Trade Helps Jobs with/sans China	Trade Helps Prices with/sans China
Omitted category:	Persuaded	Not persuaded	Not persuaded
Quality Concerns	-0.111 [0.087]	0.009 [0.078]	0.201** [0.080]
National Security	-0.092 [0.085]	-0.224** [0.093]	0.034 [0.088]
Compete with Jobs	0.327*** [0.074]	0.297*** [0.079]	0.590*** [0.077]
Concerns about imports from China	0.181** [0.080]	0.316*** [0.097]	0.586*** [0.083]
Other reasons	0.049 [0.081]	-0.025 [0.082]	0.316*** [0.084]
With China × Reason:			
Quality Concerns	-0.101 [0.114]	0.160 [0.106]	0.249** [0.110]
National Security	-0.282** [0.111]	0.282** [0.122]	0.087 [0.121]
Compete with Jobs	-0.077 [0.095]	0.145 [0.109]	0.170 [0.108]
Concerns about imports from China	0.014 [0.105]	0.346*** [0.122]	0.160 [0.111]
Other reasons	-0.068 [0.106]	0.215** [0.108]	0.282** [0.111]



## Why “More limits on imports” as an MP policy?

- ▶ Respondents more likely to highlight concerns about imports from China and about jobs (relative to being persuaded/not persuaded), regardless of whether treatment is “with” or “sans China”.
- ▶ **Upshot:** For these respondents who selected “more limits on imports”, **strong priors** on concerns linked to China (geopolitics?) and jobs
- ▶ Points to the difficulty of communicating research that challenges existing priors to the general public in a fast information format

## Concluding Remarks

## Summary

- ▶ Information that “Trade Hurts Jobs” shifts policy preferences in favor of protection
- ▶ Surprisingly: Information that “Trade Helps” or “Tariff Hurts” also exerts similar effects
- ▶ Randomization allows for a causal interpretation, while consistent finding across different survey rounds lends credence to broader validity
- ▶ Mechanisms:
  - ▶ Not driven by a misunderstanding of information, or lack of persuasion.
  - ▶ Suggestive evidence that more time-intensive treatments can dampen the protectionist response to “Trade Helps” information.
  - ▶ Importantly: Among those who selected “more limits on imports” as a most-preferred policy, the information appears to have reinforced prior concerns over China and jobs, and amplified protectionist preferences.

## Summary

### Broader picture:

- ▶ What does this imply for public communication with regard to the benefits and costs of globalization?
  - ▶ Individuals' trade policy preferences are not a symmetric function of the expected gains and losses from trade, but instead shaped by priors on jobs and great power competition.
  - ▶ Public messaging that focuses solely on communicating the benefits of trade are unlikely to succeed unless they address broader geopolitical concerns and concerns about the impact on jobs.
- ▶ Open questions for future work:
  - ▶ Other countries: Is this a U.S.-specific finding? Or one shared by countries that have been similarly exposed to large increases in imports from China? How about attitudes in small open economies more dependent on trade?
  - ▶ Implications for the design of information narratives?

## Supplementary Slides

More on the information treatments:

- ▶ “Trade Hurts Jobs”: Based on Autor, Dorn, Hanson 2013.  
Import competition from China weakened manufacturing employment and low-skill wages in the U.S.
- ▶ “Trade Helps Jobs”: Based on Caliendo et al. 2019.  
Trade liberalization enabled US economy to specialize more in service sector relative to manufacturing; Services job gains have outstripped job losses in manufacturing.
- ▶ “Trade Helps Prices”: Based on BLS price data.  
Imports from China lowered goods prices in the U.S.
- ▶ “Tariff Hurts Prices”: Based on Amiti et al. 2019.  
The 2018 tariffs, particularly on imports from China, raised the prices of tariff-related goods and lowered U.S. real income by \$1.4 billion per month.

## Treatments: Preamble

Preamble:

*How have globalization and imports affected workers and households? Economic researchers have been studying this issue.*

▶ Go: Trade Hurts Jobs

▶ Go: Trade Helps Jobs

▶ Go: Trade Helps Prices

▶ Go: Tariff Hurts Prices

## Treatment: “Trade Hurts Jobs”

▶ Back

Based on Autor, Dorn and Hanson (AER 2013):

*A line of recent research has shown that the United States substantially increased its imports from China, after China joined the World Trade Organization (WTO) in 2001. This was a major force behind the fall in U.S. employment in the manufacturing sector, as the figure below shows. This led to weak wage growth for the middle- and low-income workers who used to hold these manufacturing jobs.*

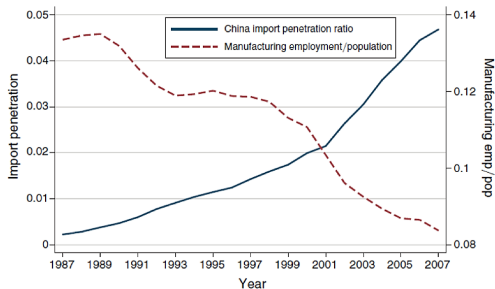


FIGURE 1. IMPORT PENETRATION RATIO FOR US IMPORTS FROM CHINA (left scale), AND SHARE OF US WORKING-AGE POPULATION EMPLOYED IN MANUFACTURING (right scale)

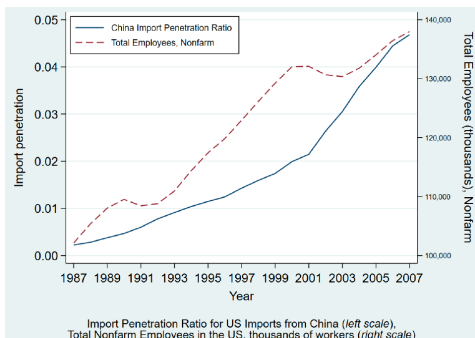


## Treatment: "Trade Helps Jobs"

▶ Back

Based on Caliendo, Dvorkin, Parro (2019):

*A line of recent research has shown that the United States substantially increased its imports from China, after China joined the World Trade Organization (WTO) in 2001. This enabled the U.S. to specialize more in the service sectors in which it is particularly productive, helping to increase the number of jobs in the U.S. economy. The figure below shows that the rise in total jobs over the last decades was substantial.*

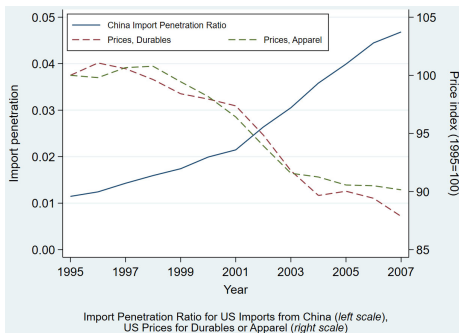


## Treatment: “Trade Helps Prices”

▶ Back

Based on BLS data:

*A line of recent research has shown that the United States substantially increased its imports from China, after China joined the World Trade Organization (WTO) in 2001. This was a major force behind the availability of cheaper goods, which benefited Americans. As imports from China increased, the prices of durable goods (computers, electrical products, furniture, etc.) and of nondurable goods such as apparel all saw declines, as the figure below shows.*

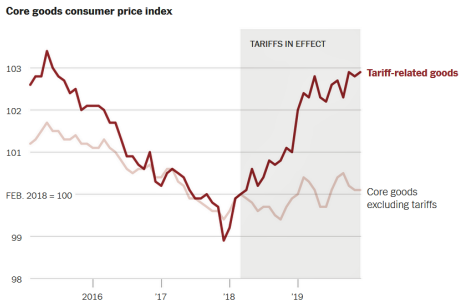


## Treatment: “Tariff Hurts Prices”

▶ Back

Based on Amiti, Redding, Weinstein (JEP 2019):

*A line of recent research has shown that the tariffs in 2018 have raised the cost of living in the United States. Over the course of 2018, the U.S. imposed tariffs on approximately \$400 billion of imports, particularly from China. This led to significant increases in U.S. prices of tariff-related goods, as the figure below shows. It is estimated that this increase in prices lowered U.S. real income by \$1.4 billion per month.*



Source: Bureau of Labor Statistics. Core goods excludes food and energy; tariff-related goods prices includes laundry equipment and other appliances, furniture and bedding, housekeeping supplies, window and floor coverings, auto parts and bicycles.

## Additional Treatments (in later rounds)

▶ Back

- ▶ Mixed Jobs treatments:
  - ▶ “Trade Hurts Jobs” + “Trade Helps Jobs”
  - ▶ “Trade Helps Jobs” + “Trade Hurts Jobs”
- ▶ “Trade Helps Prices sans Cheaper”:
  - ▶ Replace “the availability of cheaper goods” with “the increased availability of goods”
- ▶ “Sans China” variants of “Trade Hurts Jobs”, “Trade Helps Jobs”, and “Trade Helps Prices”:
  - ▶ “A line of recent research has shown that the United States substantially increased its imports from the rest of the world, as a result of globalization.”

# Comparing Respondent Pools (over time)

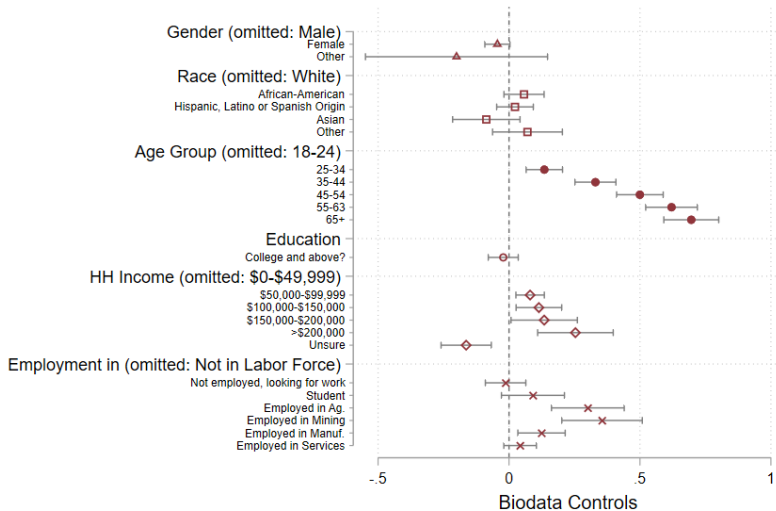
▶ Back

SURVEY:	Round 1, 2018-19 (N=2,277)	Round 2, 2020 (N=6,009)	Round 3, 2021 (N=4,058)	Round 4, 2022 (N=6,005)
<b><u>Biodata</u></b>				
Gender: Male	0.49 [0.50]	0.47 [0.50]	0.49 [0.50]	0.48 [0.50]
Gender: Female	0.51 [0.50]	0.52 [0.50]	0.51 [0.50]	0.52 [0.50]
Age: Average (approx.)	47.55 [16.78]	45.45 [16.61]	46.55 [16.69]	46.45 [16.78]
Race: White	0.61 [0.49]	0.67 [0.47]	0.62 [0.48]	0.62 [0.49]
Race: African-American	0.11 [0.32]	0.13 [0.33]	0.12 [0.32]	0.12 [0.33]
Race: Hispanic	0.17 [0.37]	0.13 [0.34]	0.18 [0.38]	0.17 [0.38]
Born in US?	0.92 [0.27]	0.92 [0.27]	0.91 [0.28]	0.92 [0.28]
<b><u>Socio-Economic Characteristics</u></b>				
Household Income: Average \$ (approx.)	58,196 [47,585]	64,886 [54,093]	62,010 [49,462]	58,785 [45,827]
Education: Average years (approx.)	11.81 [4.91]	11.56 [4.86]	11.71 [4.87]	11.70 [4.86]
Employment Status: Not in Labor Force	0.40 [0.49]	0.39 [0.49]	0.39 [0.49]	0.39 [0.49]
Employment Status: Unemployed	0.10 [0.30]	0.11 [0.32]	0.10 [0.30]	0.10 [0.30]
Employment Status: Employed	0.50 [0.50]	0.50 [0.50]	0.50 [0.50]	0.51 [0.50]
Employment Sector: Manufacturing	0.08 [0.26]	0.09 [0.28]	0.07 [0.26]	0.07 [0.26]
Employment Sector: Services	0.39 [0.49]	0.36 [0.48]	0.39 [0.49]	0.40 [0.49]
Student?	0.03 [0.17]	0.04 [0.20]	0.04 [0.20]	0.03 [0.17]
Loss aversion (Scale: 1 to 5)	---	3.11 [1.47]	3.07 [1.50]	3.06 [1.50]
<b><u>Baseline Socio-Political Attributes</u></b>				
Last Presidential election: Supported Dem.	0.41 [0.49]	0.41 [0.49]	0.49 [0.50]	0.44 [0.50]
Last Presidential election: Supported Rep.	0.34 [0.47]	0.36 [0.48]	0.33 [0.47]	0.34 [0.47]
Trust in government? (Scale: 1 to 5)	2.50 [1.05]	2.79 [1.13]	2.69 [1.11]	2.55 [1.08]
Impact of NAFTA on family (Scale: 1 to 5)	3.16 [0.90]	3.35 [0.90]	3.31 [0.87]	3.11 [0.91]
Children born into better life? (Scale: 1 to 5)	3.07 [1.13]	3.23 [1.10]	3.16 [1.15]	2.95 [1.14]
Satisfied with health of US job market?	0.48 [0.50]	0.35 [0.48]	0.40 [0.49]	0.41 [0.49]
Willing to pay more for US brand?	0.59 [0.49]	0.65 [0.48]	0.63 [0.48]	0.61 [0.49]
Inequality in US a problem? (Scale: 1 to 4)	3.01 [0.96]	2.96 [0.95]	2.97 [0.96]	2.99 [0.94]
Inflation in US a problem? (Scale: 1 to 4)	---	---	---	3.42 [0.80]

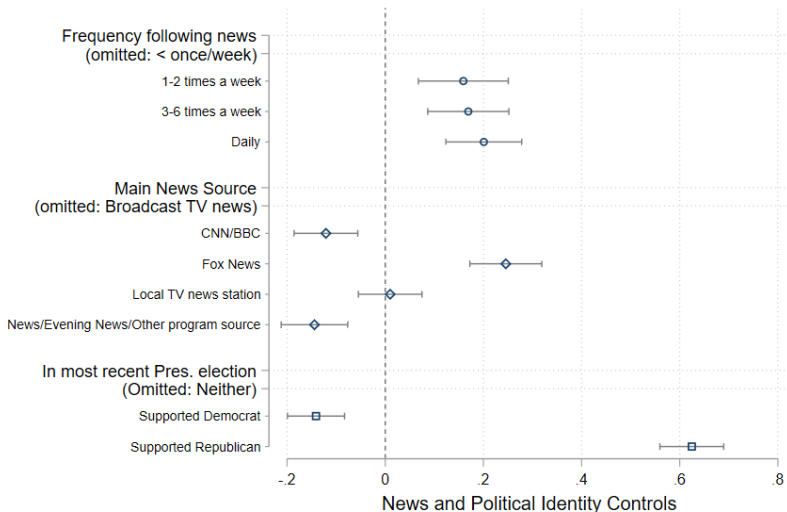


# Baseline Results: Other Covariates

▶ Back



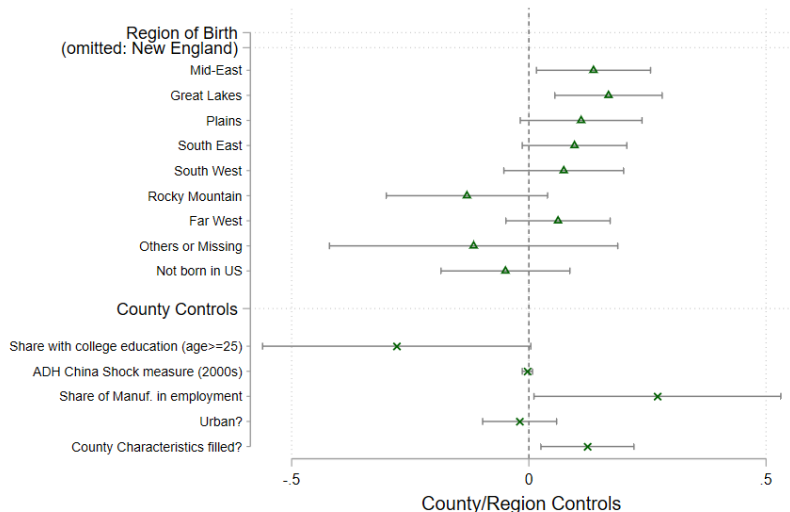
## Baseline Results: Other Covariates [▶ Back](#)





## Baseline Results: Other Covariates

▶ Back



## Recall of Information: Summary Statistics

[▶ Back](#)

SURVEY:	Round 2, 2020 (N=6,009)	Round 3, 2021 (N=4,058)	Round 4, 2022 (N=6,035)
Share of respondents who said information was about jobs	0.34 [0.47]	0.36 [0.48]	0.35 [0.48]
Share of respondents who said information was about prices	0.52 [0.50]	0.49 [0.50]	0.51 [0.50]
Share of respondents who said no information received	0.14 [0.35]	0.14 [0.35]	0.14 [0.35]
Correctly identified nature of information treatment	0.47 [0.50]	0.52 [0.50]	0.48 [0.50]
Conditional on receiving a treatment about jobs, correctly identified as such	0.42 [0.49]	0.49 [0.50]	0.46 [0.50]
Conditional on receiving a treatment about prices, correctly identified as such	0.59 [0.49]	0.63 [0.48]	0.65 [0.48]
Conditional on receiving no information treatment, correctly identified as such	0.19 [0.40]	0.25 [0.43]	0.22 [0.42]



## Additional results: Prices “Sans Cheaper”

▶ Back

- ▶ “Trade Helps Price Sans Cheaper” effect
  - > “Trade Helps Prices”, “Tariff Hurts Prices” effects

Trade Policy Questions:	(1)	(2)	(3)
	First principal component	Did information affect views?	Impact of trade for most Americans?
	OLS	Ordered logit	Ordered logit
<b>Panel B: “Sans Cheaper” Price Treatment</b>			
Trade Helps Prices	0.111*** [0.042]	0.025 [0.015]	-0.061*** [0.016]
Tariff Hurts Prices	0.103** [0.042]	0.045*** [0.016]	-0.168*** [0.016]
Trade Helps Prices sans Cheaper	0.167*** [0.049]	0.015 [0.017]	-0.059*** [0.017]
Observations	7,147	7,147	7,147
(Pseudo) R-squared	0.151	0.0518	0.0533
Individual, county, week, rand. order controls?	Y	Y	Y



