

Supplemental Appendices: The Wrong Winners: Anti-Corporate Animus and Attitudes Towards Trade

Anil Menon[†] and Iain Osgood[‡]

[†]Assistant Professor, Department of Political Science, University of California, Merced. 313 COB2, Merced, California 95343; armenon@ucmerced.edu.

[‡]Associate Professor, Department of Political Science, University of Michigan. Haven Hall, 505 S. State St, Ann Arbor, Mich. 48104; iosgood@umich.edu.

Supplementary Materials A - Results from observational study

This supplement provides details on our observational survey. Specifically, it provides question wording for the main questions used in the survey instrument, our pre-registered hypotheses, and results based on pre-registered analyses.

Observational survey questions

Opposition to trade and trade agreements are our dependent variables across both hypothesis 1a and 1b (see page 6 of Supplementary Materials A for hypotheses). We measure opposition to trade and trade agreements using the following questions:

Do you favor or oppose the U.S. becoming more open to international trade?

- Favor a great deal
- Favor somewhat
- Neither favor nor oppose
- Oppose somewhat
- Oppose a great deal

Do you favor or oppose the U.S. making free trade agreements with other countries?

- Favor a great deal
- Favor somewhat
- Neither favor nor oppose
- Oppose somewhat
- Oppose a great deal

Both questions will be treated as numeric variables on a 5-point scale.

We ask the following two questions to get at respondent beliefs about who benefits from and is harmed by international trade.

Countries have made it easier for goods and services to cross national borders. As a result, international trade has increased significantly. In your opinion, which of the following best describes the US companies that have benefited from increased international trade?

- They are in industries where American companies sell their products outside the US
- They are in industries that face competition from foreign companies selling their products in the US
- They are large and very large companies
- They are small and medium-sized companies
- All US companies benefit from trade
- No US companies benefit from trade

In your opinion, which of the following best describes the US companies that have been harmed by increased international trade?

- They are in industries where American companies sell their products outside the US
- They are in industries that face competition from foreign companies selling their products in the US
- They are large and very large companies
- They are small and medium-sized companies
- All US companies are harmed by trade
- No US companies are harmed by trade

Respondents were supplied their answers in text format, and then prompted to make any adjustments to their previous answers if they would like. We use the second (i.e. final) responses to the questions. We focus on the difference between respondents answering “They are large and very large companies” and all other responses (grouped together) in our analysis.

We also ask our respondents to answer a series of demographic or political attitudinal questions.

In what year were you born? [Drop down list: 1920 - 2003]
[We treat the answer to this as a numeric variable.]

Lucid provided us with respondents’ gender. We coded respondent gender as a categorical variable with two levels: “Female” and “Male”.

Please indicate your racial identification (check all that apply)

- White
- Black or African American
- American Indian or Alaska Native
- Asian
- Native Hawaiian or Pacific Islander
- Hispanic or Latino
- Arab or Middle Eastern
- Other [*with free text entry*]

[We collapse this response into five categories: White; Black or African American; Latino; AAPI; and Other non-white.]

Generally speaking, do you usually think of yourself as a Republican, a Democrat, or as independent?

- Strong Democrat
- Weak Democrat

- Independent - leaning Democrat
- Independent - no preference
- Independent - leaning Republican
- Weak Republican
- Strong Republican

[We converted this to a 7-point numeric score for analysis.]

When it comes to your general political beliefs, do you usually think of yourself as conservative, moderate, or liberal?

- Extremely liberal
- Liberal
- Slightly liberal
- Moderate: middle of the road
- Slightly conservative
- Conservative
- Extremely conservative

[We converted this to a 7-point numeric score for analysis.]

Please indicate your highest level of education

- No high school diploma
- High school graduate or GED
- Some college, no degree
- Bachelor's degree
- Graduate or professional degree

[We converted this to a 2-point numeric score for comparing those with at least some college against all others.]

Lucid provided us with respondents' income. We coded income as a numerical variable, increasing in income. The lowest income bracket ("Less than \$14,999") was assigned a value of 1 and the highest income bracket (">\$250,000 and above") was assigned a value of 24.

Please indicate your current employment status

- Employed full time
- Employed part time
- Unemployed looking for work
- Unemployed not looking for work

- Retired
- Student
- Disabled

[We collapsed this variable into three categories: Employed; Unemployed; and Retired/Student/Disabled.]

Have you or has anyone in your family been positively or negatively affected by international trade?

- Positively affected
- Not affected
- Negatively affected

Have you or anyone in your family been positively or negatively affected by US corporations sending jobs overseas, also known as offshoring?

- Positively affected
- Not affected
- Negatively affected

[We converted the preceding two questions to a 3-point numeric score for analysis.]

“This country would be better off if we just stayed home and did not concern ourselves with problems in other parts of the world.”

- Strongly agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Strongly disagree

“The world would be a better place if people from other countries were more like Americans.”

- Strongly agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Strongly disagree

[We converted the preceding two questions to a 5-point numeric score for analysis.]

Observational hypotheses and data

We translate our theory above into the following testable hypotheses for a survey: We begin by assessing respondents' beliefs both about who benefits from trade and globalization among firms, and who is harmed.

Hypothesis 1a. Respondents who believe that large and very large firms are the primary beneficiaries from trade among companies will be more opposed to trade and trade agreements.

We expect this difference to occur relative to all other possible responses.

Hypothesis 1b. Respondents who believe that small and medium-sized firms are the primary companies harmed by trade will be more opposed to trade and trade agreements.

For both hypotheses, we expect the differences to occur relative to all other possible beliefs.

To test these hypotheses, we fielded a survey of American adults using Lucid Theorem.¹ Lucid Theorem provides nationally representative pools of opt-in respondents balanced on age, gender, ethnic identity, and region. We pre-registered the questions, hypotheses, and tests, and departed from the pre-registration only in employing five covariates pre-collected by the survey company rather than our own versions of the questions. We sought 600 responses and ended up with 682 usable responses that completed a minimal set of questions.²

Our first question gauges respondent beliefs about which businesses benefit from trade:

Countries have made it easier for goods and services to cross national borders. As a result, international trade has increased significantly. In your opinion, which of the following best describes the US companies that have benefitted from increased international trade?

- They are in industries where American companies sell their products outside the US
- They are in industries that face competition from foreign companies selling their products in the US
- They are large and very large companies
- They are small and medium-sized companies
- All US companies benefit from trade
- No US companies benefit from trade

Note that the first two answers operationalize the Ricardo-Viner prediction that export-competing or comparative advantage industries will benefit from (and so support) trade, while import-competing or comparative disadvantage industries will oppose trade. The third and fourth answers describe answers from the firm-centered literature, i.e. that large (or relatively productive) firms will benefit from trade while small/medium-size (or less productive) firms will not. The final two answers are designed to let respondents provide answers in line with the Stolper-Samuelson account where, in the usual formulations, owners of capital share a common opinion about trade. Recall that in the Stolper-Samuelson model there is no guarantee that a company in a capital-abundant country thrives post-liberalization producing exactly the same good it produce pre-liberalization. Instead, it may be forced to switch production to a comparative advantage good,

¹ This observational study was pre-registered on 08/02/2021: Registration ID: 20210802AA.

² 10 respondents declined the survey after reading the consent, and 41 respondents never completed a minimal set of questions, usually stopping before answering the first question.

which is of course feasible because capital is mobile across industries. Whether that means the ‘company’ benefits or the ‘capital’ (and capital-owners) benefit is a subtle point here. So to keep things simple, we focus on companies.³

We followed up with a paired question: “In your opinion, which of the following best describes the US companies that have been harmed by increased international trade?”⁴ The response options for this question are the same as those provided for the first question above (with “benefit” replaced by “harmed”). These questions provide the explanatory variables for Hypotheses 1a and 1b.

We use standard questions on support for trade and trade agreements as outcomes: “Do you favor or oppose the US becoming more open to international trade?” and “Do you favor or oppose the U.S. making free trade agreements with other countries?” Both have 5-point Likert scale responses from “Oppose a great deal” to “Favor a great deal”. We used pre-collected data from the survey company on the respondents’ age, household income, race/ethnicity, level of education, and gender. We asked respondents about their party and ideology, both on seven-point scales, and about current employment. To assess whether respondents had negative employment or income affects associated with trade, we asked whether they or anyone in their family had been negatively affected by trade and separately by US corporations sending jobs overseas. Finally, to diagnose isolationism and nationalism, we asked respondents on a five-point scale whether they agreed that “The country would be better off if we just stayed home” and “The world would be a better place if people from other countries were more like Americans”.

Our hypotheses suggest that respondents who believe that large firms are the primary winners from trade among businesses, and small and medium-sized firms (SMEs) are the primary losers, should be more opposed to trade. We first examine this claim by examining the correlation between beliefs about redistribution and trade attitudes. We focus only on showing that any correlation between beliefs about trade’s effects and trade attitudes in our sample is not the result of obvious confounding factors like political ideology or nationalism. To the extent that there is a robust correlation between the two items across the different sets of conditioning factors, we view that as suggestive but requiring experimental confirmation.

All reported models are OLS regression with OLS standard errors. In all instances, our first models will regress an attitude variable on a companies benefitted or harmed variable without any additional controls. We then introduce the control variables sequentially.

Observational findings

Beliefs about who benefits: We first examine a descriptive question: which firms do Americans think benefit from trade? Answering this question allows us to do several things. First, a significant segment of the literature uses trade’s distributive implications to understand trade preferences. To our knowledge, no study has asked respondents what their beliefs about trade’s distributive effects are among firms. Second, examining the distribution of responses allows us to ascertain whether our experimental manipulations represent beliefs

³ Note further the use of the term ‘American companies’. As in the experiment, we hope that this avoids confusion about whether foreign MNCs or other foreign firms might be under consideration.

⁴ After asking these initial questions, we quoted respondents answers back to them and provided respondents an opportunity to adjust their answers using answer choices pre-filled in with their initial answers. We did so to encourage engagement with the questions. Just under 19% of respondents altered the answers to each question upon second viewing.

Which businesses benefit from trade?

		Exporting	Import-facing	Big firms	Small firms	All firms	No firms	
Which businesses are harmed by trade?	Exporting	0.05	0.03	0.02	0.00	0.01	0.00	0.11
	Import-facing	0.11	0.07	0.07	0.01	0.04	0.00	0.30
	Big firms	0.02	0.04	0.06	0.01	0.01	0.00	0.15
	Small firms	0.05	0.05	0.15	0.00	0.03	0.00	0.29
	All firms	0.01	0.01	0.02	0.00	0.01	0.01	0.06
	No firms	0.01	0.00	0.01	0.00	0.04	0.02	0.09
		0.26	0.20	0.33	0.04	0.14	0.04	

Figure A1: Cross tabulation and marginal totals for responses on which business benefit from, and are harmed, by trade

that could plausibly be held by ordinary people. A belief that ‘big firms win from trade’ can’t be a significant driver of trade preferences if very few people hold that belief.

We first look at the marginal distributions of the answers in Figure A1. 26% of respondents think that firms in exporting industries benefit from trade, while 33% think that big firms benefit from trade. 30% and 29% respectively think that firms in import-competing industries or that small/medium-sized firms are harmed by trade. In light of the contemporary literature on trade and trade politics, these are plausible answers and it is reassuring that almost 60% of respondents supply those answers. The dominance of these answers also suggest that focusing on a contrast between “big firms win and small firms lose” and “exporting industries win and import-competing industries lose” might highlight the most important contrast.

We also examine the cross tabulation of responses. Overall, the most popular pairs of answers are “big firms win/small firms lose” (15%) and “exporting industry firms win/import-competing industry firms lose” (11%). A further 4% say that “all firms win/no firms lose” completing the classical triumvirate of responses. Another 26% or so mix-and-match across the classic theories, for example, 7% report that big firms win and firms in import-facing industries lose. Again, these findings suggest that our narrowing of the options for the

experimental tests are justified. On the other hand, about 20% of respondents fall on a diagonal where they report that the same firms win as lose. In some cases that may not be so implausible – some big firms win while others lose from trade, for example – but in other cases these answers might owe more to inattention or lack of understanding.

We now turn to our main analysis. Hypothesis 1a suggests that respondents who hold the ‘firm-centered view’ of trade’s effects should have more negative views of trade. In Model 1 of Table A1, we see that this relationship does hold unconditionally. Respondents answering that “large and very large companies” best describes the companies that benefit from trade have, on average, $-.33$ lower evaluations of trade on our five-point scale. A very similar relationship is observed as each of our controls are introduced in succession, suggesting that the unconditional correlation between distributive beliefs and trade attitudes is not a product of an obvious background confounder. Since many of these covariates are strong correlates of trade attitudes, the findings further suggest that beliefs about distribution are not strongly driven by known drivers of trade attitudes.

We also find firstly that beliefs about which firms benefit from trade have nearly identical relationships with support for trade agreements (Table A2). This provides further evidence for Hypothesis 1a. Secondly, we find a smaller and sometimes insignificant relationship between the belief that SMEs are harmed by trade and opposition. With the trade openness outcome the difference in (conditional) means is significant at the 5% level in 4 of 5 models (Table A3); with the trade agreements outcome, the difference in means is never significant (Table A4). The evidence therefore does not consistently support Hypothesis 1b although the direction of the effect is consistent enough to merit further investigation with a larger sample size in future work.

Table A1: Attitudes toward Trade Openness and Beliefs about which Firms Benefit from Trade

Group	Openness to Trade: Oppose (1) to Favor (5):				
	1	2	3	4	5
<u>Large firms benefit relative to all other options:</u>					
Large firms benefit	-0.33*** (0.08)	-0.33*** (0.08)	-0.40*** (0.08)	-0.40*** (0.08)	-0.36*** (0.08)
Age		-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)
Male		0.34*** (0.08)	0.22** (0.08)	0.25*** (0.08)	0.24** (0.07)
Black		0.04 (0.13)	0.12 (0.12)	-0.08 (0.12)	-0.13 (0.12)
Latino		0.27* (0.13)	0.30* (0.13)	0.27* (0.12)	0.21 (0.12)
AAPI		-0.01 (0.16)	0.04 (0.17)	-0.01 (0.16)	-0.04 (0.16)
Other non-white		-0.13 (0.19)	-0.20 (0.20)	-0.32 (0.20)	-0.30 (0.19)
College-educated			0.31*** (0.08)	0.24** (0.08)	0.25** (0.08)
Income			0.01* (0.01)	0.01* (0.01)	0.01 (0.01)
Employed			0.08 (0.10)	0.08 (0.10)	0.04 (0.10)
Unemployed			-0.32* (0.13)	-0.25* (0.12)	-0.27* (0.12)
Party (D=1,R=7)				-0.09*** (0.02)	-0.08*** (0.02)
Ideology (L=1,C=7)				-0.06* (0.03)	-0.05 (0.03)
Isolationism					-0.13*** (0.03)
Nationalism					0.06 (0.03)
Trade-affected					0.18* (0.09)
Offshoring-affected					0.30*** (0.08)
Intercept	3.67*** (0.05)	3.55*** (0.14)	3.40*** (0.19)	3.91*** (0.20)	3.19*** (0.26)
N	682	682	651	651	649
<u>Large firms benefit relative to exporting industries benefit:</u>					
Large firms benefit	-0.60*** (0.10)	-0.62*** (0.10)	-0.66*** (0.10)	-0.61*** (0.09)	-0.56*** (0.09)
N	397	397	376	376	375

Notes: +p<0.10, *p<0.05, **p<0.01, ***p<0.001. All models are OLS with OLS standard errors.

Table A2: Attitudes toward Trade Agreements and Beliefs about which Firms Benefit from Trade

Group	Trade Agreements: Oppose (1) to Favor (5):				
	1	2	3	4	5
<u>Large firms benefit relative to all other options:</u>					
Large firms benefit	-0.35*** (0.09)	-0.36*** (0.09)	-0.42*** (0.09)	-0.42*** (0.08)	-0.39*** (0.08)
Age		0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Male		0.28*** (0.08)	0.16 (0.08)	0.18* (0.08)	0.18* (0.08)
Black		0.06 (0.13)	0.14 (0.13)	-0.03 (0.13)	-0.06 (0.13)
Latino		0.16 (0.13)	0.21 (0.13)	0.18 (0.13)	0.12 (0.13)
AAPI		0.13 (0.17)	0.12 (0.18)	0.08 (0.17)	0.05 (0.17)
Other non-white		-0.13 (0.20)	-0.21 (0.22)	-0.31 (0.21)	-0.29 (0.21)
College-educated			0.18* (0.09)	0.12 (0.09)	0.12 (0.08)
Income			0.02** (0.01)	0.02** (0.01)	0.02* (0.01)
Employed			0.06 (0.11)	0.06 (0.11)	0.03 (0.11)
Unemployed			-0.25 (0.13)	-0.19 (0.13)	-0.20 (0.13)
Party (D=1,R=7)				-0.08** (0.02)	-0.07** (0.02)
Ideology (L=1,C=7)				-0.04 (0.03)	-0.03 (0.03)
Isolationism					-0.14*** (0.03)
Nationalism					0.04 (0.04)
Trade-affected					0.21* (0.09)
Offshoring-affected					0.16 (0.09)
Intercept	3.61*** (0.05)	3.41*** (0.14)	3.27*** (0.20)	3.67*** (0.21)	3.21*** (0.29)
N	682	682	651	651	649
<u>Large firms benefit relative to exporting industries benefit:</u>					
Large firms benefit	-0.61*** (0.10)	-0.63*** (0.10)	-0.68*** (0.10)	-0.64*** (0.10)	-0.62*** (0.10)
N	397	397	376	376	375

Notes: +p<0.10, *p<0.05, **p<0.01, ***p<0.001. All models are OLS with OLS standard errors.

Table A3: Attitudes toward Trade Openness and Beliefs about which Firms Are Harmed by Trade

Group	Openness to Trade: Oppose (1) to Favor (5):				
	1	2	3	4	5
<u>Small firms harmed relative to all other answers:</u>					
SMEs are harmed	-0.20*	-0.15	-0.19*	-0.19*	-0.16*
	(0.09)	(0.09)	(0.09)	(0.08)	(0.08)
Age		-0.00	-0.00	-0.00	-0.00
		(0.00)	(0.00)	(0.00)	(0.00)
Male		0.33***	0.22**	0.25**	0.24**
		(0.08)	(0.08)	(0.08)	(0.08)
Black		0.05	0.12	-0.08	-0.13
		(0.13)	(0.13)	(0.13)	(0.12)
Latino		0.23	0.25	0.22	0.17
		(0.13)	(0.13)	(0.12)	(0.12)
AAPI		-0.04	-0.01	-0.06	-0.09
		(0.16)	(0.17)	(0.16)	(0.16)
Other non-white		-0.09	-0.13	-0.25	-0.24
		(0.19)	(0.21)	(0.20)	(0.19)
College-educated			0.31***	0.24**	0.24**
			(0.08)	(0.08)	(0.08)
Income			0.01	0.01	0.01
			(0.01)	(0.01)	(0.01)
Employed			0.08	0.09	0.05
			(0.11)	(0.10)	(0.10)
Unemployed			-0.32*	-0.25*	-0.27*
			(0.13)	(0.13)	(0.12)
Party (D=1,R=7)				-0.09***	-0.08***
				(0.02)	(0.02)
Ideology (L=1,C=7)				-0.05	-0.05
				(0.03)	(0.03)
Isolationism					-0.13***
					(0.03)
Nationalism					0.05
					(0.03)
Trade-affected					0.20*
					(0.09)
Offshoring-affected					0.31***
					(0.08)
Intercept	3.62***	3.50***	3.35***	3.84***	3.09***
	(0.05)	(0.14)	(0.19)	(0.20)	(0.27)
N	682	682	651	651	649
<u>Small firms harmed relative to import-competing industries:</u>					
SMEs are harmed	-0.15	-0.10	-0.11	-0.12	-0.11
	(0.10)	(0.10)	(0.10)	(0.09)	(0.09)
N	404	404	380	380	378

Notes: +p<0.10, *p<0.05, **p<0.01, ***p<0.001. All models are OLS with OLS standard errors.

Table A4: Attitudes toward Trade Agreements and Beliefs about which Firms Are Harmed by Trade

Group	Trade Agreements: Oppose (1) to Favor (5):				
	1	2	3	4	5
<u>Small firms harmed relative to all other answers:</u>					
SMEs are harmed	-0.17 (0.09)	-0.13 (0.09)	-0.16 (0.09)	-0.17 (0.09)	-0.15 (0.09)
Age		0.00 (0.00)	-0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Male		0.27*** (0.08)	0.15 (0.08)	0.18* (0.08)	0.18* (0.08)
Black		0.07 (0.13)	0.15 (0.13)	-0.02 (0.14)	-0.06 (0.13)
Latino		0.11 (0.13)	0.15 (0.13)	0.13 (0.13)	0.08 (0.13)
AAPI		0.10 (0.17)	0.06 (0.18)	0.03 (0.18)	-0.00 (0.17)
Other non-white		-0.09 (0.20)	-0.14 (0.22)	-0.24 (0.22)	-0.23 (0.21)
College-educated			0.17* (0.09)	0.11 (0.09)	0.11 (0.09)
Income			0.02* (0.01)	0.02* (0.01)	0.02* (0.01)
Employed			0.07 (0.11)	0.07 (0.11)	0.04 (0.11)
Unemployed			-0.24 (0.14)	-0.18 (0.13)	-0.19 (0.13)
Party (D=1,R=7)				-0.08** (0.02)	-0.07** (0.02)
Ideology (L=1,C=7)				-0.04 (0.03)	-0.02 (0.03)
Isolationism					-0.14*** (0.03)
Nationalism					0.04 (0.04)
Trade-affected					0.23* (0.10)
Offshoring-affected					0.17 (0.09)
Intercept	3.55*** (0.05)	3.35*** (0.14)	3.19*** (0.20)	3.60*** (0.22)	3.09*** (0.29)
N	682	682	651	651	649
<u>Small firms harmed relative to import-competing industries:</u>					
SMEs are harmed	-0.12 (0.10)	-0.07 (0.10)	-0.08 (0.11)	-0.09 (0.10)	-0.08 (0.10)
N	404	404	380	380	378

Notes: +p<0.10, *p<0.05, **p<0.01, ***p<0.001. All models are OLS with OLS standard errors.

Supplementary Materials B - Results from experimental studies

Two experiments

We fielded two pre-registered survey experiments to test our experimental hypotheses (see the main paper for our experimental hypotheses). The first survey (**Lucid Experiment** in the tables below) was fielded on Lucid Theorem between August 12th-16th 2021. We pre-registered our experiment, questions, hypotheses, and tests.⁵ We targeted 1000 responses and ended up with 1079 usable responses. As with our observational study, some respondents did not complete mediation-related or demographic questions at the end of the survey or demographic questions for the survey company, so our sample size shrinks when these items are employed. Our second survey (**YouGov Experiment** in the tables below) was fielded by YouGov Omnibus from January 28th to February 2nd, 2022.⁶ The sample was generated using stratified random sampling of the YouGov Omnibus panel based on gender, age, race, and education. YouGov supplied us with post-stratification weights to ensure that the sample was nationally representative on presidential vote (in 2016 and 2020) and gender, age, race, years of education, and region. National representativeness on presidential votes in 2016 and 2020 should provide substantial help with representativeness in partisanship and ideology. The sample size for the survey was 2000. Some respondents did not provide answers to demographic questions asked by YouGov. At the request of a reviewer we only report and discuss results from **YouGov Experiment** in the main text.

Experimental survey questions

Note that the word “American” was not included in Treatment I in Lucid Experiment but is included in YouGov Experiment.

Treatment I

Research suggests that international trade has many benefits, but also costs for some groups in the United States. In particular, increased openness to international trade is likely to **benefit large and very large American companies**. However, trade is likely to **harm small and medium sized American companies**.

Given these effects of trade on companies, would you favor or oppose the U.S. becoming more open to international trade?

- Favor a great deal
- Favor somewhat
- Neither favor nor oppose
- Oppose somewhat
- Oppose a great deal

Given these effects of trade on companies, would you favor or oppose the U.S. making free trade agreements with other countries?

⁵ This survey experiment was pre-registered – [link to pre-analysis plan](#).

⁶ This survey experiment was pre-registered – [link to pre-analysis plan](#).

- ⊖ Favor a great deal
- ⊖ Favor somewhat
- ⊖ Neither favor nor oppose
- ⊖ Oppose somewhat
- ⊖ Oppose a great deal

Treatment II

Research suggests that international trade has many benefits, but also costs for some groups in the United States. In particular, increased openness to international trade is likely to **benefit American companies in industries that sell their products outside the US**. However, trade is likely to **harm American companies in industries that compete domestically with products made overseas**.

[This treatment is followed by the same questions as above.]

We ask the following questions for our subgroup analyses to evaluate heterogeneous treatment effects. Specifically, to identify individuals who might hold negative sentiments toward big businesses in general, we use the following feeling thermometer question (with the six items presented in random order):

We would like to learn about your feelings toward different groups listed below. Please position each one on a feeling scale/thermometer. The higher the number, the warmer feelings you have toward this group. For instance, a ranking of 0-49 means that you feel negative/cold feelings toward the group. A ranking of 51-100 means that you feel positive feelings toward the group. If your feelings are neutral, please select exactly 50.

- ⊖ The US Congress (Senate and House of Representatives)
- ⊖ Corporate America (aka “Big Business” or the Fortune 500)
- ⊖ The Entertainment Industry (aka “Hollywood”)
- ⊖ The Catholic Church
- ⊖ The World Health Organization (WHO)
- ⊖ The National Football League (NFL)

Note that we only use the ‘Corporate America’ thermometer in the analysis. We constructed both a continuous and binary version of this variable. The continuous version utilized the raw feeling thermometer scores. For the binary measure, individuals who provided a thermometer rating below the sample median are coded 0 (negative sentiments toward corporate America) and 1 otherwise.

To get at the respondent’s employment status we asked them the following question: Please indicate your current employment status

- ⊖ Employed full time
- ⊖ Employed part time
- ⊖ Unemployed looking for work

- ⊖ Unemployed not looking for work
- ⊖ Retired
- ⊖ Student
- ⊖ Disabled

[We collapsed this variable into three categories: Employed; Unemployed; and Retired/Student/Disabled.]

To examine whether treatment effects might be driven by feelings of job insecurity, resulting from the size of the firm an individual works at, we ask respondents to report their firm's size:

Roughly how many employees would you say work at the company, business, or organization where you are currently employed? If you work at a company with more than one location or branch, please try to answer for the company as a whole, not just your location or branch. If you work at multiple companies, please answer for the company that is your main source of income.

- ⊖ 1-5
- ⊖ 6-19
- ⊖ 20-49
- ⊖ 50-199
- ⊖ 200-999
- ⊖ 1,000-9,999
- ⊖ More than 10,000

For respondents who previously answered that they were not employed, we provide a reworded question asking them to answer the above for the last place where they worked, and providing an additional response: "I have never been employed".

We constructed both a continuous and binary version of this variable. The continuous version converted responses to a 1-7 scale and included this measure as a numerical variable in our analyses. For the binary measure, individuals who reported working at a firm whose size is below the sample median are coded 0 (small firm) and 1 otherwise. Respondents who answer "I have never been employed" are treated as NA's and dropped from this subgroup analysis.

We ask the following questions (presented in random order) for our causal mediation analysis to evaluate competing mechanisms.

To what extent do you agree or disagree with the following statements:

- ⊖ "International trade puts the jobs of people like me at risk."
- ⊖ "International trade makes the economy unfair. The rich get richer."
- ⊖ "International trade gives corporations more political power at the expense of ordinary people."

Individuals can provide one of 5 responses: strongly disagree, somewhat disagree, neither agree nor disagree, somewhat agree, and strongly agree. We convert responses to a numerical variable (1-5) in our analyses.

Coding of conditioning variables provided by Lucid

Lucid provided us with certain respondent demographics they have on file, allowing us to shorten the length of our instrument. Using these variables necessitated some slightly different coding decisions from the pre-analysis plan as follows: We coded income as a numerical variable, increasing in income. The lowest income bracket (“Less than \$14,999”) was assigned a value of 1 and the highest income bracket (“\$250,000 and above”) was assigned a value of 24. We coded respondent gender as a categorical variable with two levels: “Female” and “Male”.

All experimental models for average treatment effects

Table B1: Attitudes toward trade when primed about which firms benefit from trade

Results from Lucid Experiment:				
<u>Outcome: Attitude towards Trade Openness, Oppose (1) to Favor (5):</u>				
Average treatment effect	-0.16*	-0.19**	-0.18**	-0.15*
ATE 95% CI	[-.29, -.04]	[-.32, -.07]	[-.31, -.05]	[-.28, -.03]
N	1079	1079	1017	1017
<u>Outcome: Attitude towards Trade Agreements, Oppose (1) to Favor (5):</u>				
Average treatment effect	-0.15*	-0.17**	-0.16*	-0.14*
ATE 95% CI	[-.27, -.03]	[-.29, -.05]	[-.28, -.04]	[-.26, -.02]
N	1079	1079	1017	1017
Results from YouGov Experiment:				
<u>Outcome: Attitude towards Trade Openness, Oppose (1) to Favor (5):</u>				
Average treatment effect	-0.18***	-0.16***	-0.19***	-0.16**
ATE 95% CI	[-.28, -.09]	[-.25, -.07]	[-.29, -.09]	[-.27, -.05]
N	2000	2000	1722	1511
<u>Outcome: Attitude towards Trade Agreements, Oppose (1) to Favor (5):</u>				
Average treatment effect	-0.16***	-0.14**	-0.16**	-0.15**
ATE 95% CI	[-.25, -.07]	[-.23, -.05]	[-.26, -.07]	[-.25, -.04]
N	2000	2000	1722	1511
Controls employed:				
Demo. controls	No	Yes	Yes	Yes
Educ./Emp. controls	No	No	Yes	Yes
Party/ideology controls	No	No	No	Yes

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. All models in top half are OLS with OLS standard errors; all models in bottom half are WLS with WLS standard errors. Treated = 1 for large firms benefit/small firms harmed prompt; Treated = 0 for firms in exporting industries benefits/firms in import-competing industries harmed. Complete fitted models are reported in Tables B2-B5.

Table B2: Attitudes toward Trade Openness when primed about which firms benefit from trade (**Lucid Experiment**)

Group	Openness to Trade: Oppose (1) to Favor (5):			
	1	2	3	4
Treated (Large firms ben./Small firms harmed)	-0.16*	-0.19**	-0.18**	-0.15*
	(0.06)	(0.06)	(0.06)	(0.06)
Age		-0.01***	-0.01**	-0.01*
		(0.00)	(0.00)	(0.00)
Male		0.29***	0.27***	0.32***
		(0.06)	(0.07)	(0.06)
Black		0.35***	0.37***	0.19 ⁺
		(0.10)	(0.11)	(0.11)
Latino		0.26*	0.29*	0.20 ⁺
		(0.12)	(0.13)	(0.12)
AAPI		0.33 ⁺	0.40*	0.38*
		(0.17)	(0.19)	(0.19)
Other non-white		0.13	0.11	0.06
		(0.11)	(0.12)	(0.12)
College-educated			0.10	0.04
			(0.07)	(0.07)
Income			0.00	0.01
			(0.01)	(0.01)
Employed			0.18*	0.16 ⁺
			(0.09)	(0.08)
Unemployed			-0.13	-0.15
			(0.11)	(0.11)
Party (D=1,R=7)				-0.09***
				(0.02)
Ideology (L=1,C=7)				-0.06*
				(0.02)
Intercept	3.42***	3.52***	3.35***	3.83***
	(0.05)	(0.11)	(0.16)	(0.17)
N	1079	1079	1017	1017

Notes: ⁺p<0.10, *p<0.05, **p<0.01, ***p<0.001. All models are OLS with OLS standard errors. Treated = 1 for large firms benefit/small firms harmed prompt; Treated = 0 for firms in exporting industries benefits/firms in import-competing industries harmed.

Table B3: Attitudes toward Trade Agreements when primed about which firms benefit from trade (**Lucid Experiment**)

Group	Trade Agreements: Oppose (1) to Favor (5):			
	1	2	3	4
Treated (Large firms ben./Small firms harmed)	-0.15*	-0.17**	-0.16*	-0.14*
	(0.06)	(0.06)	(0.06)	(0.06)
Age		-0.01**	-0.01**	-0.01*
		(0.00)	(0.00)	(0.00)
Male		0.24***	0.23***	0.27***
		(0.06)	(0.06)	(0.06)
Black		0.26**	0.30**	0.12
		(0.10)	(0.10)	(0.10)
Latino		0.21 ⁺	0.19	0.12
		(0.11)	(0.12)	(0.12)
AAPI		0.27	0.38*	0.36*
		(0.16)	(0.19)	(0.18)
Other non-white		-0.02	-0.03	-0.09
		(0.11)	(0.12)	(0.11)
College-educated			0.23**	0.18*
			(0.07)	(0.07)
Income			0.01 ⁺	0.01*
			(0.01)	(0.01)
Employed			0.08	0.07
			(0.08)	(0.08)
Unemployed			-0.13	-0.15
			(0.11)	(0.10)
Party (D=1,R=7)				-0.09***
				(0.02)
Ideology (L=1,C=7)				-0.04 ⁺
				(0.02)
Intercept	3.44***	3.51***	3.35***	3.78***
	(0.04)	(0.11)	(0.16)	(0.16)
N	1079	1079	1017	1017

Notes: +p<0.10, *p<0.05, **p<0.01, ***p<0.001. All models are OLS with OLS standard errors. Treated = 1 for large firms benefit/small firms harmed prompt; Treated = 0 for firms in exporting industries benefits/firms in import-competing industries harmed.

Table B4: Attitudes toward Trade Openness when primed about which firms benefit from trade (**YouGov Experiment**)

Group	Openness to Trade: Oppose (1) to Favor (5):			
	1	2	3	4
Treated (Large firms ben./Small firms harmed)	-0.18*** (0.05)	-0.16*** (0.05)	-0.19*** (0.05)	-0.16** (0.05)
Age		0.01*** (0.00)	0.00** (0.00)	0.00** (0.00)
Male		0.25*** (0.05)	0.21*** (0.05)	0.25*** (0.05)
Black		0.14+ (0.07)	0.14+ (0.08)	0.04 (0.09)
Latino		0.10 (0.07)	0.15* (0.07)	0.08 (0.08)
AAPI		0.36** (0.14)	0.37* (0.15)	0.28+ (0.16)
Other non-white		-0.07 (0.10)	-0.07 (0.12)	-0.18 (0.13)
College-educated			0.05 (0.06)	0.02 (0.06)
Income			0.02* (0.01)	0.02* (0.01)
Employed			0.20** (0.06)	0.21** (0.07)
Unemployed			0.05 (0.09)	0.10 (0.11)
Party (D=1,R=7)				-0.10*** (0.02)
Ideology (L=1,C=7)				-0.00 (0.03)
Intercept	3.10*** (0.03)	-8.08** (2.66)	-6.81* (3.26)	-6.28+ (3.54)
N	2000	2000	1722	1511

Notes: +p<0.10, *p<0.05, **p<0.01, ***p<0.001. All models are WLS with WLS standard errors. Treated = 1 for large firms benefit/small firms harmed prompt; Treated = 0 for firms in exporting industries benefits/firms in import-competing industries harmed.

Table B5: Attitudes toward Trade Agreements when primed about which firms benefit from trade (**YouGov Experiment**)

Group	Trade Agreements: Oppose (1) to Favor (5):			
	1	2	3	4
Treated (Large firms ben./Small firms harmed)	-0.16*** (0.05)	-0.14** (0.05)	-0.16** (0.05)	-0.15** (0.05)
Age		0.00* (0.00)	0.00 (0.00)	0.00 (0.00)
Male		0.19*** (0.05)	0.15** (0.05)	0.16** (0.05)
Black		0.12 (0.07)	0.13+ (0.08)	0.03 (0.09)
Latino		0.05 (0.07)	0.10 (0.07)	0.00 (0.08)
AAPI		0.32* (0.13)	0.34* (0.15)	0.26 (0.16)
Other non-white		-0.00 (0.10)	0.02 (0.11)	-0.06 (0.12)
College-educated			0.15** (0.06)	0.10 (0.06)
Income			0.02** (0.01)	0.03*** (0.01)
Employed			0.14* (0.06)	0.18** (0.06)
Unemployed			0.08 (0.09)	0.15 (0.11)
Party (D=1,R=7)				-0.09*** (0.02)
Ideology (L=1,C=7)				-0.01 (0.03)
Intercept	3.17*** (0.03)	-3.69 (2.61)	-1.80 (3.18)	-0.86 (3.49)
N	2000	2000	1722	1511

Notes: +p<0.10, *p<0.05, **p<0.01, ***p<0.001. All models are WLS with WLS standard errors. Treated = 1 for large firms benefit/small firms harmed prompt; Treated = 0 for firms in exporting industries benefits/firms in import-competing industries harmed.

All experimental models for heterogeneous treatment effects

Table B6: Treatment effect heterogeneity on trade openness attitudes

	Openness to Trade: Oppose (1) to Favor (5):			
	1	2	3	4
Results from Lucid Experiment:				
Treated (Large firms ben./Small firms harmed)	-0.28** (0.09)	-0.40** (0.12)	-0.31*** (0.09)	-0.37** (0.13)
Positive view of corporations	0.32*** (0.09)			
Treated· Pos. view of corps.	0.27* (0.13)			
View of corporations (0-100)		0.01*** (0.00)		
Treated· View of corps.		0.01* (0.00)		
Large employer			-0.18 (0.10)	
Treated· Large employer			0.18 (0.14)	
Employer size (0-6)				-0.02 (0.03)
Treated· Employer size				0.05 (0.04)
N	1079	1079	940	940
Results from YouGov Experiment:				
Treated (Large firms ben./Small firms harmed)	-0.29*** (0.07)	-0.39*** (0.08)	-0.15* (0.07)	-0.15 (0.09)
Positive view of corporations	0.22** (0.07)			
Treated· Pos. view of corps.	0.23* (0.09)			
View of corporations (0-100)		0.01*** (0.00)		
Treated· View of corps.		0.01** (0.00)		
Large employer			0.07 (0.07)	
Treated· Large employer			-0.12 (0.10)	
Employer size (0-6)				0.02 (0.02)
Treated· Employer size				-0.02 (0.03)
N	2000	2000	1774	1774

Notes: *p<0.05, **p<0.01, ***p<0.001. All models in top half are OLS with OLS standard errors; all models in bottom half are WLS with WLS standard errors. Treated = 1 for large firms benefit/small firms harmed prompt; Treated = 0 for firms in exporting industries benefits/firms in import-competing industries harmed. Models include no controls per our pre-registration.

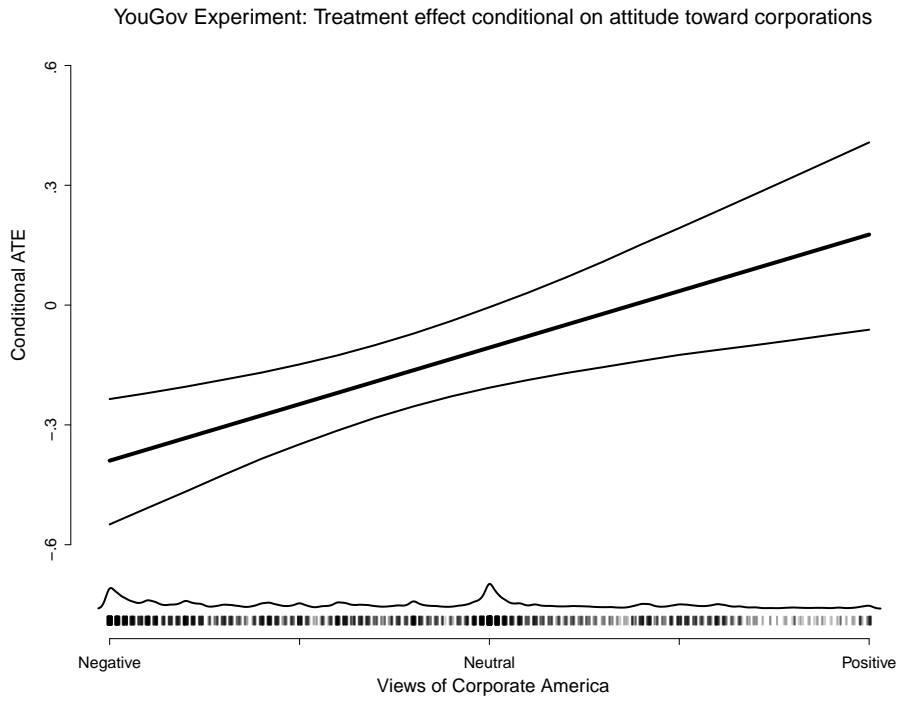
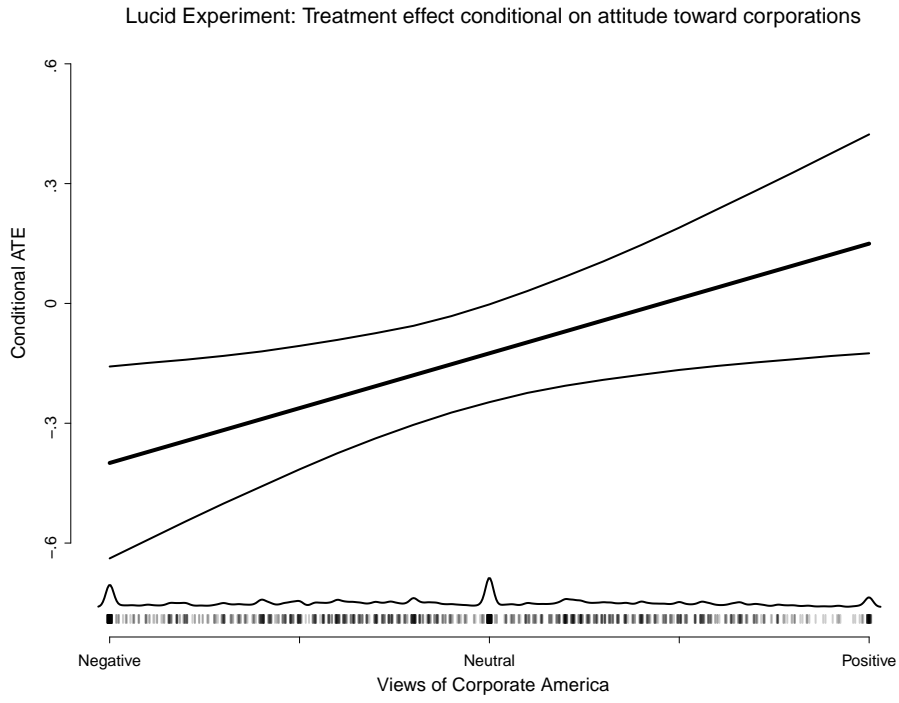


Figure B1: Conditional average treatment effect from a linear model plotted. Outcome is support for trade openness.

Table B7: Treatment effect heterogeneity on trade agreement attitudes

	Support for Trade Agreements: Oppose (1) to Favor (5):			
	1	2	3	4
Results from Lucid Experiment:				
Treated (Large firms ben./Small firms harmed)	-0.24** (0.08)	-0.32** (0.12)	-0.22* (0.09)	-0.35** (0.12)
Positive view of corporations	0.34*** (0.09)			
Treated· Pos. view of corps.	0.22 (0.12)			
View of corporations (0-100)		0.01*** (0.00)		
Treated· View of corps.		0.00 (0.00)		
Large employer			-0.08 (0.10)	
Treated· Large employer			0.07 (0.14)	
Employer size (0-6)				-0.02 (0.03)
Treated· Employer size				0.05 (0.03)
N	1079	1079	940	940
Results from YouGov Experiment:				
Treated (Large firms ben./Small firms harmed)	-0.24*** (0.06)	-0.31*** (0.08)	-0.10 (0.07)	-0.06 (0.09)
Positive view of corporations	0.20** (0.07)			
Treated· Pos. view of corps.	0.20* (0.09)			
View of corporations (0-100)		0.01*** (0.00)		
Treated· View of corps.		0.00** (0.00)		
Large employer			0.14* (0.07)	
Treated· Large employer			-0.14 (0.10)	
Employer size (0-6)				0.04* (0.02)
Treated· Employer size				-0.03 (0.02)
N	2000	2000	1774	1774

Notes: +p<0.10, *p<0.05, **p<0.01, ***p<0.001. All models in top half are OLS with OLS standard errors; all models in bottom half are WLS with WLS standard errors. Treated = 1 for large firms benefit/small firms harmed prompt; Treated = 0 for firms in exporting industries benefits/firms in import-competing industries harmed. Models include no controls per our pre-registration.

Full mediator models

Table B8: Mediation analysis of trade attitudes and beliefs about trade's distributive effects

Effect:	Lucid Experiment		YouGov Experiment	
	Estimate	95% CI	Estimate	95% CI
<u>Openness to Trade: Oppose (1) to Favor (5):</u>				
Total average treatment effect	-0.15*	[-.28, -.03]	-0.16**	[-.27, -.05]
<u>Mediator: Economic inequality effects of trade:</u>				
Coefficient from mediator model	0.21	[-.02, .43]	0.14	[-.05, .32]
Average causal mediation effect	-0.02	[-.05, .01]	-0.03	[-.07, .02]
Average direct effect	-0.13*	[-.25, -.01]	-0.14**	[-.24, -.03]
<u>Mediator: Socio-political inequality effects of trade:</u>				
Coefficient from mediator model	0.28*	[.06, .51]	0.34***	[.15, .52]
Average causal mediation effect	-0.02*	[-.05, -.00]	-0.05**	[-.09, -.02]
Average direct effect	-0.13*	[-.25, -.00]	-0.11*	[-.21, -.01]
<u>Mediator: Job insecurity effects of trade:</u>				
Coefficient from mediator model	0.25*	[.03, .48]	0.20*	[.01, .38]
Average causal mediation effect	-0.02	[-.04, .00]	-0.04	[-.09, .01]
Average direct effect	-0.14*	[-.26, -.01]	-0.12*	[-.22, -.02]
<u>Trade Agreements: Oppose (1) to Favor (5):</u>				
Effect:	Estimate	95% CI	Estimate	95% CI
Total average treatment effect	-0.14*	[-.26, -.02]	-0.15**	[-.25, -.04]
<u>Mediator: Economic inequality effects of trade:</u>				
Coefficient from mediator model	0.21	[-.02, .43]	0.14	[-.05, .32]
Average causal mediation effect	-0.02	[-.05, .01]	-0.02	[-.06, .02]
Average direct effect	-0.12*	[-.23, -.00]	-0.13*	[-.23, -.03]
<u>Mediator: Socio-political inequality effects of trade:</u>				
Coefficient from mediator model	0.28*	[.06, .51]	0.34***	[.15, .52]
Average causal mediation effect	-0.02*	[-.05, -.00]	-0.05**	[-.08, -.02]
Average direct effect	-0.11	[-.23, .01]	-0.10*	[-.20, -.00]
<u>Mediator: Job insecurity effects of trade:</u>				
Coefficient from mediator model	0.25*	[.03, .48]	0.20*	[.01, .38]
Average causal mediation effect	-0.01	[-.03, .00]	-0.04	[-.08, .00]
Average direct effect	-0.12*	[-.24, -.00]	-0.12*	[-.21, -.02]

Notes: *p<0.05, **p<0.01, ***p<0.001. All mediator models are ordinal logistic regression with treatment dummy and following controls: age, gender, race, college, income, employed, unemployed, party, and ideology. All outcome models in LHS are OLS with OLS standard errors; all outcome models in RHS are WLS with WLS standard errors. Treated = 1 for large firms benefit/small firms harmed prompt; Treated = 0 for firms in exporting industries benefits/firms in import-competing industries harmed. Complete fitted models are reported in Tables B9-B12.

Table B9: Mediator models with trade openness attitude outcome (**Lucid Experiment**)

Outcome variable Group	Econ Inq. 1	Trd open. 2	Pol. Inq. 3	Trd open. 4	Job ins. 5	Trd open. 6
Treated (Large firms ben./Small firms harmed)	0.21 ⁺ (0.11)	-0.13* (0.06)	0.28* (0.11)	-0.13* (0.06)	0.25* (0.11)	-0.14* (0.06)
Mediator: Econ. inequality		-0.18*** (0.03)				
Mediator: Socio-pol. inequality				-0.16*** (0.03)		
Mediator: Job insecurity						-0.09*** (0.03)
Age	-0.00 (0.00)	-0.01* (0.00)	0.01 (0.00)	-0.00* (0.00)	-0.00 (0.00)	-0.01* (0.00)
Male	-0.20 ⁺ (0.12)	0.30*** (0.06)	-0.12 (0.12)	0.31*** (0.06)	-0.29* (0.12)	0.31*** (0.06)
Black	0.44* (0.19)	0.23* (0.11)	0.24 (0.20)	0.20 ⁺ (0.11)	0.79*** (0.20)	0.23* (0.11)
Latino	0.49* (0.22)	0.27* (0.12)	0.03 (0.22)	0.23 ⁺ (0.12)	0.31 (0.22)	0.24 ⁺ (0.12)
AAPI	-0.17 (0.33)	0.37* (0.19)	-0.04 (0.33)	0.37* (0.19)	0.62 ⁺ (0.32)	0.42* (0.19)
Other non-white	0.36 ⁺ (0.21)	0.10 (0.12)	0.14 (0.22)	0.07 (0.12)	0.61** (0.21)	0.10 (0.12)
College-educated	-0.16 (0.13)	0.02 (0.07)	-0.12 (0.13)	0.03 (0.07)	-0.41** (0.13)	0.02 (0.07)
Income	-0.02* (0.01)	0.00 (0.01)	-0.02 (0.01)	0.01 (0.01)	-0.01 (0.01)	0.01 (0.01)
Employed	-0.02 (0.16)	0.14 ⁺ (0.08)	0.17 (0.16)	0.16 ⁺ (0.08)	0.01 (0.15)	0.14 ⁺ (0.08)
Unemployed	0.04 (0.19)	-0.16 (0.10)	-0.13 (0.19)	-0.18 ⁺ (0.10)	-0.04 (0.19)	-0.17 (0.11)
Party (D=1,R=7)	0.01 (0.04)	-0.09*** (0.02)	0.01 (0.04)	-0.09*** (0.02)	0.04 (0.04)	-0.08*** (0.02)
Ideology (L=1,C=7)	-0.03 (0.05)	-0.06* (0.02)	-0.02 (0.05)	-0.06* (0.02)	0.06 (0.05)	-0.05* (0.02)
N	1013	1013	1013	1013	1013	1013

Notes: +p<0.10, *p<0.05, **p<0.01, ***p<0.001. Mediator models (1,3,5) are ordinal logistic regression; trade openness outcome models are OLS with OLS standard errors. Treated = 1 for large firms benefit/small firms harmed prompt; Treated = 0 for firms in exporting industries benefits/firms in import-competing industries harmed.

Table B10: Mediator models with trade agreements attitude outcome (**Lucid Experiment**)

Outcome variable Group	Econ Inq. 1	Trd agre. 2	Pol. Inq. 3	Trd agre. 4	Job ins. 5	Trd agre. 6
Treated (Large firms ben./Small firms harmed)	0.21 ⁺ (0.11)	-0.12* (0.06)	0.28* (0.11)	-0.11 ⁺ (0.06)	0.25* (0.11)	-0.12* (0.06)
Mediator: Econ. inequality		-0.16*** (0.03)				
Mediator: Socio-pol. inequality				-0.15*** (0.03)		
Mediator: Job insecurity						-0.08** (0.03)
Age	-0.00 (0.00)	-0.01* (0.00)	0.01 (0.00)	-0.01* (0.00)	-0.00 (0.00)	-0.01* (0.00)
Male	-0.20 ⁺ (0.12)	0.25*** (0.06)	-0.12 (0.12)	0.26*** (0.06)	-0.29* (0.12)	0.25*** (0.06)
Black	0.44* (0.19)	0.16 (0.10)	0.24 (0.20)	0.14 (0.10)	0.79*** (0.20)	0.16 (0.10)
Latino	0.49* (0.22)	0.18 (0.12)	0.03 (0.22)	0.14 (0.12)	0.31 (0.22)	0.15 (0.12)
AAPI	-0.17 (0.33)	0.35 ⁺ (0.18)	-0.04 (0.33)	0.36* (0.18)	0.62 ⁺ (0.32)	0.39* (0.18)
Other non-white	0.36 ⁺ (0.21)	-0.06 (0.11)	0.14 (0.22)	-0.08 (0.11)	0.61** (0.21)	-0.06 (0.11)
College-educated	-0.16 (0.13)	0.16* (0.07)	-0.12 (0.13)	0.17* (0.07)	-0.41** (0.13)	0.16* (0.07)
Income	-0.02* (0.01)	0.01* (0.01)	-0.02 (0.01)	0.01* (0.01)	-0.01 (0.01)	0.01* (0.01)
Employed	-0.02 (0.16)	0.06 (0.08)	0.17 (0.16)	0.07 (0.08)	0.01 (0.15)	0.06 (0.08)
Unemployed	0.04 (0.19)	-0.14 (0.10)	-0.13 (0.19)	-0.16 (0.10)	-0.04 (0.19)	-0.16 (0.10)
Party (D=1,R=7)	0.01 (0.04)	-0.09*** (0.02)	0.01 (0.04)	-0.09*** (0.02)	0.04 (0.04)	-0.08*** (0.02)
Ideology (L=1,C=7)	-0.03 (0.05)	-0.04 ⁺ (0.02)	-0.02 (0.05)	-0.04 ⁺ (0.02)	0.06 (0.05)	-0.04 (0.02)
N	1013	1013	1013	1013	1013	1013

Notes: +p<0.10, *p<0.05, **p<0.01, ***p<0.001. Mediator models (1,3,5) are ordinal logistic regression; trade agreement outcome models are OLS with OLS standard errors. Treated = 1 for large firms benefit/small firms harmed prompt; Treated = 0 for firms in exporting industries benefits/firms in import-competing industries harmed.

Table B11: Mediator models with trade openness attitude outcome (**YouGov Experiment**)

Outcome variable Group	Econ Inq. 1	Trd open. 2	Pol. Inq. 3	Trd open. 4	Job ins. 5	Trd open. 6
Treated (Large firms ben./Small firms harmed)	0.14 (0.09)	-0.14** (0.05)	0.34*** (0.09)	-0.11* (0.05)	0.20* (0.09)	-0.12* (0.05)
Mediator: Econ. inequality		-0.31*** (0.02)				
Mediator: Socio-pol. inequality				-0.30*** (0.02)		
Mediator: Job insecurity						-0.31*** (0.02)
Age	-0.01*** (0.00)	0.00* (0.00)	-0.01*** (0.00)	0.00+ (0.00)	-0.00*** (0.00)	0.00* (0.00)
Male	-0.14 (0.10)	0.22*** (0.05)	-0.10 (0.10)	0.23*** (0.05)	-0.20* (0.10)	0.21*** (0.05)
Black	-0.11 (0.16)	0.02 (0.09)	0.00 (0.16)	0.04 (0.09)	0.08 (0.15)	0.06 (0.09)
Latino	0.16 (0.13)	0.12 (0.07)	0.07 (0.13)	0.09 (0.08)	0.17 (0.13)	0.12+ (0.07)
AAPI	-0.14*** (0.02)	0.27+ (0.15)	-0.06** (0.02)	0.27+ (0.16)	0.10*** (0.02)	0.31* (0.15)
Other non-white	-0.19*** (0.03)	-0.22+ (0.12)	0.28*** (0.04)	-0.14 (0.12)	0.64*** (0.04)	-0.06 (0.12)
College-educated	-0.13 (0.11)	-0.00 (0.06)	0.08 (0.11)	0.03 (0.06)	-0.09 (0.11)	0.00 (0.06)
Income	-0.05*** (0.01)	0.01 (0.01)	-0.02+ (0.01)	0.02* (0.01)	-0.06*** (0.01)	0.01 (0.01)
Employed	-0.03 (0.10)	0.20** (0.06)	-0.03 (0.10)	0.20** (0.06)	-0.20+ (0.10)	0.17** (0.06)
Unemployed	-0.06 (0.18)	0.09 (0.10)	0.04 (0.18)	0.11 (0.10)	-0.09 (0.17)	0.09 (0.10)
Party (D=1,R=7)	-0.06* (0.03)	-0.11*** (0.02)	-0.03 (0.03)	-0.11*** (0.02)	0.03 (0.03)	-0.10*** (0.02)
Ideology (L=1,C=7)	-0.09+ (0.05)	-0.02 (0.03)	-0.07 (0.05)	-0.01 (0.03)	0.16** (0.05)	0.03 (0.03)
N	1511	1511	1511	1511	1511	1511

Notes: +p<0.10, *p<0.05, **p<0.01, ***p<0.001. Mediator models (1,3,5) are ordinal logistic regression; trade openness outcome models are WLS with WLS standard errors. Treated = 1 for large firms benefit/small firms harmed prompt; Treated = 0 for firms in exporting industries benefits/firms in import-competing industries harmed.

Table B12: Mediator models with trade agreements attitude outcome (**YouGov Experiment**)

Outcome variable Group	Econ Inq. 1	Trd agre. 2	Pol. Inq. 3	Trd agre. 4	Job ins. 5	Trd agre. 6
Treated (Large firms ben./Small firms harmed)	0.14 (0.09)	-0.13* (0.05)	0.34*** (0.09)	-0.10* (0.05)	0.20* (0.09)	-0.12* (0.05)
Mediator: Econ. inequality		-0.29*** (0.02)				
Mediator: Socio-pol. inequality				-0.27*** (0.02)		
Mediator: Job insecurity						-0.28*** (0.02)
Age	-0.01*** (0.00)	0.00 (0.00)	-0.01*** (0.00)	0.00 (0.00)	-0.00*** (0.00)	0.00 (0.00)
Male	-0.14 (0.10)	0.13* (0.05)	-0.10 (0.10)	0.14** (0.05)	-0.20* (0.10)	0.12* (0.05)
Black	-0.11 (0.16)	0.02 (0.09)	0.00 (0.16)	0.04 (0.09)	0.08 (0.15)	0.05 (0.09)
Latino	0.16 (0.13)	0.04 (0.07)	0.07 (0.13)	0.01 (0.08)	0.17 (0.13)	0.04 (0.07)
AAPI	-0.14*** (0.02)	0.25 (0.15)	-0.06** (0.02)	0.25 (0.16)	0.10*** (0.02)	0.29+ (0.15)
Other non-white	-0.19*** (0.03)	-0.10 (0.12)	0.28*** (0.04)	-0.02 (0.12)	0.64*** (0.04)	0.04 (0.12)
College-educated	-0.13 (0.11)	0.08 (0.06)	0.08 (0.11)	0.10+ (0.06)	-0.09 (0.11)	0.08 (0.06)
Income	-0.05*** (0.01)	0.02* (0.01)	-0.02+ (0.01)	0.02** (0.01)	-0.06*** (0.01)	0.02* (0.01)
Employed	-0.03 (0.10)	0.17** (0.06)	-0.03 (0.10)	0.18** (0.06)	-0.20+ (0.10)	0.15* (0.06)
Unemployed	-0.06 (0.18)	0.14 (0.10)	0.04 (0.18)	0.16 (0.10)	-0.09 (0.17)	0.14 (0.10)
Party (D=1,R=7)	-0.06* (0.03)	-0.10*** (0.02)	-0.03 (0.03)	-0.10*** (0.02)	0.03 (0.03)	-0.09*** (0.02)
Ideology (L=1,C=7)	-0.09+ (0.05)	-0.02 (0.03)	-0.07 (0.05)	-0.01 (0.03)	0.16** (0.05)	0.02 (0.03)
N	1511	1511	1511	1511	1511	1511

Notes: +p<0.10, *p<0.05, **p<0.01, ***p<0.001. Mediator models (1,3,5) are ordinal logistic regression; trade agreement outcome models are WLS with WLS standard errors. Treated = 1 for large firms benefit/small firms harmed prompt; Treated = 0 for firms in exporting industries benefits/firms in import-competing industries harmed.

Supplementary Materials C - Results from manipulation checks and a neutral control

Manipulation checks

In this supplemental, we describe a set of manipulation checks that were conducted on a separate sample recruited through the Lucid platform. We pre-registered this experiment under the name “The Wrong Winners: Manipulation Checks and Supplementary Analyses” at OSF ([link to pre-analysis plan](#)). The sample was collected beginning January 11th, 2023 (and open but uncompleted surveys were cut off on January 16th). The complete sample size was 1610; 37 respondents declined to take the survey after reading the preamble and 3 respondents never even responded to that question. This left a usable sample size of 1570. Our target size was 1500 but the Lucid platform provides a surplus.

The manipulation checks proceeded in the same fashion as the original survey experiment, with two major differences. First, instead of asking the respondents after treatment about their attitudes towards free trade or trade agreements, we asked about their beliefs over which firms benefit from and are harmed by international trade. These questions are modeled after the questions in our observational survey (Supplementary Materials A). The complete text of the questions was:

Given these effects of trade on companies, which of the following best describes the US companies that have benefitted from increased international trade?

- They are in industries where American companies sell their products outside the US
- They are in industries that face competition from foreign companies selling their products in the US
- They are large and very large companies
- They are small and medium-sized companies
- All US companies benefit from trade
- No US companies benefit from trade

Given these effects of trade on companies, which of the following best describes the US companies that have been harmed by increased international trade?

- They are in industries where American companies sell their products outside the US
- They are in industries that face competition from foreign companies selling their products in the US
- They are large and very large companies
- They are small and medium-sized companies
- All US companies are harmed by trade
- No US companies are harmed by trade

Second, we included, in addition to the two main firm size and export-/import-competing treatments from the original experiments, a neutral control condition where we asked respondents the above questions without any preceding text. We removed the text “Given these effects of trade on companies” from the questions.

Our manipulation checks are direct tests of a key mechanism in our experimental survey design: that respondents read, react to, and are persuaded by the textual treatments preceding the questions on trade attitudes. We wish to show that our textual treatments meaningfully alter respondents’ stated views on the distributive effects of trade or that the textual treatments influence respondents in the sense that they know

the ideas with which they are being primed. We pre-registered 6 hypotheses each covering two separate tests (active treatment versus other active treatment, active treatment versus control) with 4 models for each test. This leaves a total of 48 estimates which we supply below in Tables C1 and C2.

In Table C1, we examine the effect of the “large firms benefit, small firms are harmed” treatment relative to the “export industries win, import-competing industries lose” treatment and relative to control on beliefs about trades winners and losers. In the top 1/3 of the table, we show that this treatment increases the answer “They are large and very large companies” for respondents answering about which firms benefit from trade markedly. The increase in proportion is around .16 points relative to the export/import treatment, and around .12 relative to control. This treatment increases to an even greater extent a belief that small firms lose from trade, by .19 relative to the the export/import treatment and .14 relative to control. This is seen in the middle third of Table C1. Finally, note that this treatment increases the joint response that both big firms benefit and small firms lose relative to both the export-import treatment (.14) and control (.13). Summing up, 24 out of 24 of the treatment effect estimates are consistent with our expectations and all are significant at the 5% level. Substantively, we view the estimates as meaningful and large, given that around .28 of respondents answer that large firms benefit (and .28 that small firms are harmed) under the control condition.

In Table C2, we look at effect of the “firms in exporting industries benefit/firms in import-competing industries are harmed” treatment relative to the “big firms win, small firms lose” treatment and relative to control. In the top 1/3, we see that this treatment increases the answer “They are in industries where American companies sell their products outside the US” noticeably (by .13 relative to the other active treatment and by .13 relative to control). This treatment also strongly increases the belief that firms in import-competing industries are losers from trade relative to the firm size treatment (.15) though the effect relative to control is more muted and not significant at the 5% level (it is around .05). This is seen in the middle third of Table C2. Finally, note that this treatment increases the joint response that both firms in exporting industries win and firms in import-competing industries lose relative to both the firm-size treatment (.10) and control (.09). Summing up, 24 out of 24 of the treatment effect estimates are consistent with our expectations in terms of sign and 20 out of 24 are significant at the 5% level. We again view the size of the treatment effects as meaningful, given that they are proportions.

Control condition

In this section, we describe a supplementary experiment that we conducted on another sample recruited through the Lucid platform. We pre-registered this experiment under the name “The Wrong Winners: Manipulation Checks and Supplementary Analyses” at OSF ([link to pre-analysis plan](#)). The sample was collected beginning January 11th, 2023 (and open but uncompleted surveys were cut off on January 17th). The complete sample size was 1632; 40 respondents declined to take the survey after reading the preamble and 3 respondents never even responded to that question. This left a usable sample size of 1592. Our target size was 1500 but the Lucid platform provides a surplus.

This survey was identical in design and analysis to the Lucid survey experiment described in Supplementary Materials B except for two differences. First, we included, in addition to the two main firm size and export-/import-competing treatments from the original experiments, a neutral control condition where we asked respondents the trade attitude questions without any preceding text. We removed the text “Given

Table C1: Manipulation Checks I: Effects of large firms/small firms treatment on beliefs about trade’s distributive effects

Outcome: Identify Large Firms as Beneficiaries of Trade				
<i>Comparison: T1 (Large firms/Small firms) relative to T2 (Exporting/import-competing):</i>				
T1: Large firms ben./Small firms harmed	0.17*** (0.03)	0.16*** (0.03)	0.16*** (0.03)	0.16*** (0.03)
N	1041	1041	1026	1026
<i>Comparison: T1 (Large/Small firms) relative to control:</i>				
T1: Large firms ben./Small firms harmed	0.12*** (0.03)	0.11*** (0.03)	0.11*** (0.03)	0.11*** (0.03)
N	1051	1051	1037	1037
Outcome: Identify Small Firms as Harmed by Trade				
<i>Comparison: T1 (Large firms/Small firms) relative to T2 (Exporting/import-competing):</i>				
T1: Large firms ben./Small firms harmed	0.19*** (0.03)	0.19*** (0.03)	0.18*** (0.03)	0.18*** (0.03)
N	1041	1041	1026	1026
<i>Comparison: T1 (Large/Small firms) relative to control:</i>				
T1: Large firms ben./Small firms harmed	0.15*** (0.03)	0.14*** (0.03)	0.14*** (0.03)	0.14*** (0.03)
N	1051	1051	1037	1037
Outcome: Identify Large Firms Benefit from, Small Firms Harmed by, Trade				
<i>Comparison: T1 (Large firms/Small firms) relative to T2 (Exporting/import-competing):</i>				
T1: Large firms ben./Small firms harmed	0.15*** (0.02)	0.14*** (0.02)	0.14*** (0.02)	0.13*** (0.02)
N	1041	1041	1026	1026
<i>Comparison: T1 (Large/Small firms) relative to control:</i>				
T1: Large firms ben./Small firms harmed	0.13*** (0.02)	0.13*** (0.02)	0.13*** (0.02)	0.13*** (0.02)
N	1051	1051	1037	1037
Controls employed:				
Demo. controls	No	Yes	Yes	Yes
Educ./Emp. controls	No	No	Yes	Yes
Party/ideology controls	No	No	No	Yes
<i>Notes: *p<0.05, **p<0.01, ***p<0.001. All models are OLS with OLS standard errors.</i>				

these effects of trade on companies” from the questions. Second, we included the text “American companies” as part of treatments I and II (as in the YouGov survey experiment described in the main text).

We pre-committed to reporting the differences in means across all permutations of treatment conditions, and we supply those in Table C3, investigating the same 4 models employed in the original Lucid survey experiment. Note that we pre-registered expectations about T1 (firm size) relative to Control and T2 (industry exportingness/importingness) but not for T2 relative to Control. The ATE of T2 relative to Control is supplied only for interested readers and is not a part of our main research question.

As seen in rows 1 and 4, we find that the firm-size treatment (T1) has a strongly negative effect on attitudes towards trade openness relative to control. Support for trade drops by around $-.30$ and for trade

Table C2: Manipulation Checks II: Effects of exporting/import-competing treatment on beliefs about trade’s distributive effects

Outcome: Identify Firms in Exporting Industries as Beneficiaries of Trade				
<i>Comparison: T2 (Exporting/import-competing) relative to T1 (Large firms/Small firms):</i>				
T2: Exporters ben./Import-competitors harmed	0.13*** (0.03)	0.13*** (0.03)	0.12*** (0.03)	0.12*** (0.03)
N	1041	1041	1026	1026
<i>Comparison: T2 (Exporting/import-competing) relative to control:</i>				
T2: Exporters ben./Import-competitors harmed	0.13*** (0.03)	0.12*** (0.03)	0.13*** (0.03)	0.12*** (0.03)
N	1048	1048	1037	1037
Outcome: Identify Firms in Import-competing Industries as Losers from Trade				
<i>Comparison: T2 (Exporting/import-competing) relative to T1 (Large firms/Small firms):</i>				
T2: Exporters ben./Import-competitors harmed	0.15*** (0.03)	0.15*** (0.03)	0.15*** (0.03)	0.15*** (0.03)
N	1041	1041	1026	1026
<i>Comparison: T2 (Exporting/import-competing) relative to control:</i>				
T2: Exporters ben./Import-competitors harmed	0.05 (0.03)	0.05 (0.03)	0.05 (0.03)	0.06 (0.03)
N	1048	1048	1037	1037
Outcome: Identify Exporters as Winners, Import-competitors as Losers, from Trade				
<i>Comparison: T2 (Exporting/import-competing) relative to T1 (Large firms/Small firms):</i>				
T2: Exporters ben./Import-competitors harmed	0.10*** (0.02)	0.10*** (0.02)	0.10*** (0.02)	0.09*** (0.02)
N	1041	1041	1026	1026
<i>Comparison: T2 (Exporting/import-competing) relative to control:</i>				
T2: Exporters ben./Import-competitors harmed	0.09*** (0.02)	0.09*** (0.02)	0.09*** (0.02)	0.09*** (0.02)
N	1048	1048	1037	1037
Controls employed:				
Demo. controls	No	Yes	Yes	Yes
Educ./Emp. controls	No	No	Yes	Yes
Party/ideology controls	No	No	No	Yes

Notes: *p<0.05, **p<0.01, ***p<0.001. All models are OLS with OLS standard errors.

agreements by around $-.26$ relative to control. We also find a consistently negative effect of T1 relative to T2, though the size of the effect is somewhat smaller for the trade agreements question, and not significant at the 5% level. These findings are directionally consistent with our hypothesized expectations, 12 of 16 are significant at the 5% level.

Finally, we also find that T2 (on industry exportingness or import-competingness) has a negative effect of attitudes towards trade and trade agreements relative to control. As noted, this effect is smaller than the effect of the firm size treatment relative to control.

Table C3: Priming which firms benefit from trade relative to control condition

Outcome: Attitude towards Trade Openness, Oppose (1) to Favor (5)				
<i>Comparison: T1 (Large/Small firms) relative to control:</i>				
T1: Large firms ben./Small firms harmed	-0.29*** (0.06)	-0.31*** (0.06)	-0.32*** (0.06)	-0.31*** (0.06)
N	1059	1059	1042	1042
<i>Comparison: T2 (Exporting/import-competing) relative to control:</i>				
T2: Exp. firms ben/Imp-competors harmed	-0.16* (0.06)	-0.17** (0.06)	-0.17** (0.06)	-0.17** (0.06)
N	1051	1051	1034	1034
<i>Comparison: T1 relative to T2:</i>				
T1: Large firms ben./Small firms harmed	-0.14* (0.07)	-0.15* (0.06)	-0.15* (0.06)	-0.13* (0.06)
N	1074	1074	1060	1060
Outcome: Attitude towards Trade Agreements, Oppose (1) to Favor (5):				
<i>Comparison: T1 (Large/Small firms) relative to control:</i>				
T1: Large firms ben./Small firms harmed	-0.26*** (0.06)	-0.27*** (0.06)	-0.27*** (0.06)	-0.26*** (0.06)
N	1059	1059	1042	1042
<i>Comparison: T2 (Exporting/import-competing) relative to control:</i>				
T2: Exp. firms ben/Imp-competors harmed	-0.16* (0.06)	-0.17** (0.06)	-0.17** (0.06)	-0.17** (0.06)
N	1051	1051	1034	1034
<i>Comparison: T1 relative to T2:</i>				
T1: Large firms ben./Small firms harmed	-0.09 (0.06)	-0.10 (0.06)	-0.11 (0.06)	-0.09 (0.06)
N	1074	1074	1060	1060

Notes: *p<0.05, **p<0.01, ***p<0.001. All models are OLS with OLS standard errors.