Understanding of Trade

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S O C I A L
E C O N O M I C S
L A B

Motivation: How do People Reason about Trade and Trade Policy?

1. How do people **perceive** and **understand trade** and trade policy?

    Efficiency gains?

    Distributional impacts (workers, firms, and consumers)?

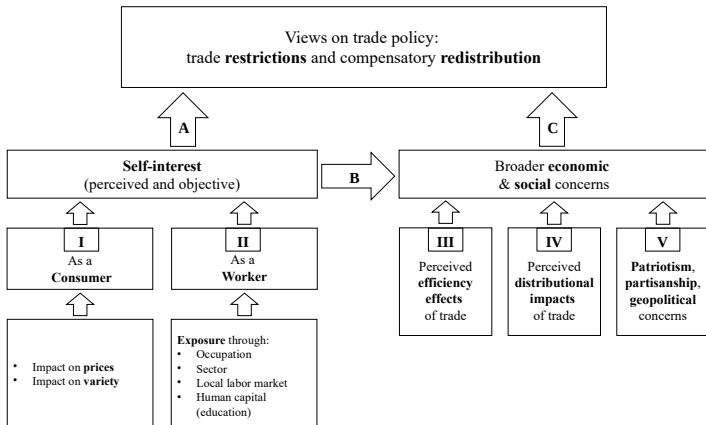2. Which **factors shape** their **support** for different trade policies?

    Material self-interest?

    Broader social and economic concerns?

    Trade restrictions vs. compensatory redistribution?

Address these questions using **surveys** and **experiments**.

The Factors Shaping Views on Trade Policy

Social Economics Surveys and Experiments

- Surveys have been used for a long time for measurement & statistics.

    We now have high-quality admin data on many variables (income, family situation, employment, etc.)

- Yet, **some things remain invisible** in data other than survey data (even great data!): **perceptions, attitudes and beliefs, knowledge, and reasoning.**

    Critical role in social, economic, and political outcomes.

- Revealed preference approach – our holy grail – can be challenging due to lack of data and identifying variation.

    We often do not "reveal" our beliefs, attitudes, perceptions, etc. on important issues with our micro, observed behaviors.

- Surveys are more than a measurement tool. Control of data generating process. **"Creating your own identifying variation and uncovering the invisible."**

Using Surveys

- Survey answers are correlated with real-world behaviors (see Fehr et al. (2020), Tannenbaum et al. (2020), Funk (2016), and Hainmueller et al. (2015), and the review in Stantcheva (2022)).

- If used well, approach can be applied to many settings and questions (including as complement to other approaches).

- New mobile technologies & platforms offer opportunities.

- For the results to be reliable, it is critical that these surveys are well-designed, carefully calibrated, and deployed on appropriate samples.

- **Comprehensive guide**: "How to Run Surveys: A guide to creating your own identifying variation and revealing the invisible."
  (`socialeconomicslab.org/how-to-run-surveys/`)

Surveys and Sample

Data collection: 2 surveys of US residents between 18 and 70. `▶ Table`

> **Survey 1**: 1,771 respondents between August and September 2019.

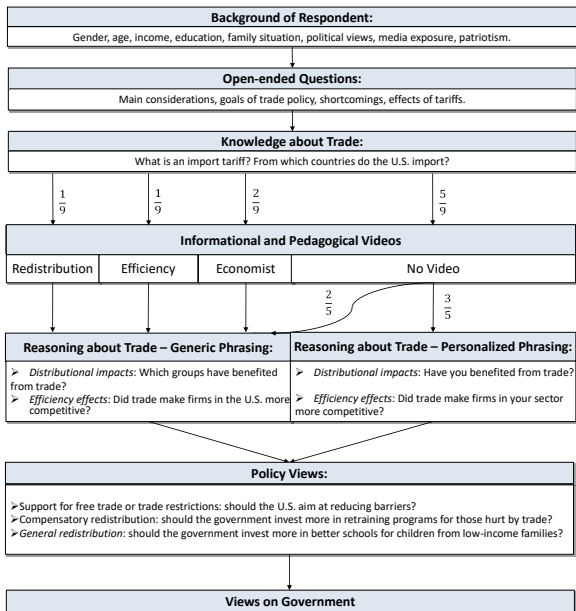> **Survey 2**: 2,148 respondents between November and December 2020.

Question design: balanced and benchmarking, images, minimize sensitive questions.

Avoiding selection: Recruit respondents without revealing topic or our identity.

Careless responses: timer on each page; attention check questions.

Feedback post-survey: 80% thought was unbiased; 12% thought was left-wing biased; 8% right-wing.

Survey 1 Structure

Background of Respondent:

Gender, age, income, education, family situation, political views, media exposure, patriotism.

Open-ended Questions:

Main considerations, goals of trade policy, shortcomings, effects of tariffs.

Knowledge about Trade:

What is an import tariff? From which countries do the U.S. import?

$\frac{1}{9}$ $\frac{1}{9}$ $\frac{2}{9}$ $\frac{5}{9}$

Informational and Pedagogical Videos

| Redistribution | Efficiency | Economist | No Video |

$\frac{2}{5}$ $\frac{3}{5}$

Reasoning about Trade – Generic Phrasing:	**Reasoning about Trade – Personalized Phrasing:**
➢ *Distributional impacts*: Which groups have benefited from trade? ➢ *Efficiency effects*: Did trade make firms in the U.S. more competitive?	➢ *Distributional impacts*: Have you benefited from trade? ➢ *Efficiency effects*: Did trade make firms in your sector more competitive?

Policy Views:

➢Support for free trade or trade restrictions: should the U.S. aim at reducing barriers?
➢Compensatory redistribution: should the government invest more in retraining programs for those hurt by trade?
➢*General redistribution*: should the government invest more in better schools for children from low-income families?

Views on Government

Distributive Effects Treatment

There are often both **winners** and **losers** from trade.

When there is more trade, all **households who consume** the imported goods can gain from it. The benefits from increased trade can be perceived by a **large group**, throughout the country.

The losers from trade are generally a **smaller group**, often concentrated in one place or industry. However, their losses can be very large, and therefore more **visible**.

Efficiency Effects Treatment

When there is more trade between the two countries, companies in the car sector from country A will be able to **export more** of the goods and services they produce and increase their profits.

Firms in the clothing sectors will not be able to export much because they cannot produce as cheaply as the firms in country B. In these sectors, companies may **close down** because of the new foreign competition.

More trade can also increase **learning** between firms and people in countries A and B as well as the diffusion of **knowledge and technology**.

This can make all firms and people more productive.

In a larger market, domestic industries have to be more efficient to remain competitive.

Economist (= Efficiency + Distributive Effects) Treatment

Imagine that a country, that we call country A, starts trading more with a foreign country, called country B.

Imagine that the U.S. starts trading more with a foreign country, called country X.

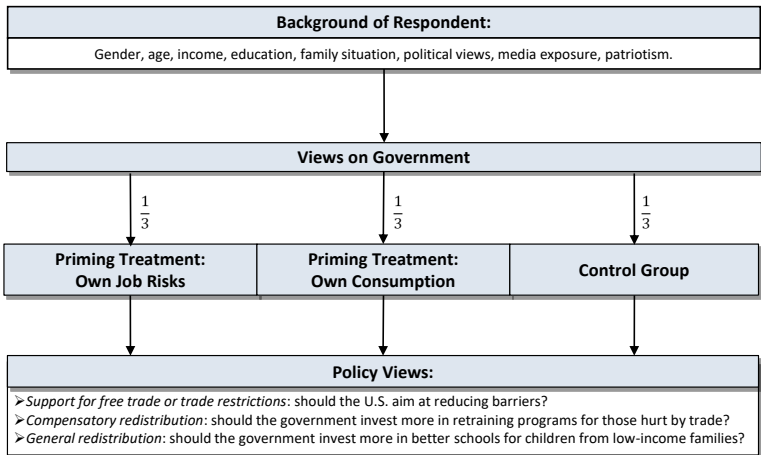In a larger market, domestic industries have to be more efficient to remain competitive.
This can raise U.S. firms' **productivity** and spur long-run **economic growth**.

The government can try and reduce the losses by **helping U.S. workers** in the sectors hurt by trade such as the clothing sector.

Survey 2 Structure

Background of Respondent:
Gender, age, income, education, family situation, political views, media exposure, patriotism.

Views on Government

$\frac{1}{3}$ $\frac{1}{3}$ $\frac{1}{3}$

Priming Treatment: Own Job Risks	Priming Treatment: Own Consumption	Control Group

Policy Views:
➤ *Support for free trade or trade restrictions*: should the U.S. aim at reducing barriers? ➤ *Compensatory redistribution*: should the government invest more in retraining programs for those hurt by trade? ➤ *General redistribution*: should the government invest more in better schools for children from low-income families?

Own Job Risks (Priming) Treatment

What are the main considerations that come to your mind when you think about the U.S. trading with foreign countries and how your job has been affected by it? [Open ended]

Since 2000, more than 5 million jobs in the manufacturing sectors have been lost. One of the causes behind this decline is the increased competition with foreign countries that pay lower wages to their workers. How serious of a threat do you think trade with foreign countries pose for the future of your sector?

Do you agree or disagree with the following statement? "Because of trade and the resulting competition with foreign countries that pay lower wages to their workers, my wage has not grown as fast as it would otherwise have"?

How likely do you think it is that, over the next 10 years, your job will be outsourced, offshored, or automated because of competition with foreign countries?

Own Consumption (Priming) Treatment

Imagine the U.S. did not trade goods and services with other countries. What are the main things you feel like you'd be missing? [Open-ended]

Can you think of some goods only produced in foreign countries that you regularly buy and consume because of trade with foreign countries? Please describe. [Open-ended]

Do you agree or disagree with the following statements?

- Trade with other countries has decreased the prices of the goods I regularly buy by increasing competition among firms.

- Trade with other countries has increased the variety of the goods I have access to in ordinary stores.

Descriptive Statistics: Knowledge and Policy Views

Views on Trade Policy

- Trade policy is multifaceted:

  Trade restrictions.

  Redistribution policy: compensatory redistribution (targeted, e.g., direct assistance, retraining programs, or transfers) or general redistribution (indirect, income-targeted policies, e.g., transfers or wage subsidies).

- Most respondents (63%) are supportive of free trade.

- Preferred policy to help workers in declining industries: direct assistance and retraining (53%), production subsidies (11%), and import restrictions (36%).

- Many respondents believe the government should be responsible for regulating trade (61%), and ensuring the stability of the dollar (75%).

Knowledge about Trade Policy (I)

(a) From Which Country Does the U.S. Import the Most?
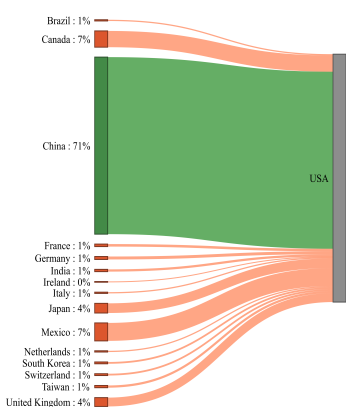
(b) From Which Country Does the U.S. Export the Most?
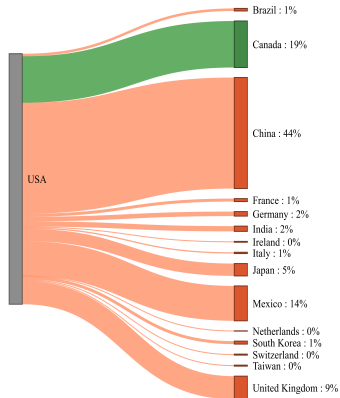
Knowledge about Trade Policy (II)

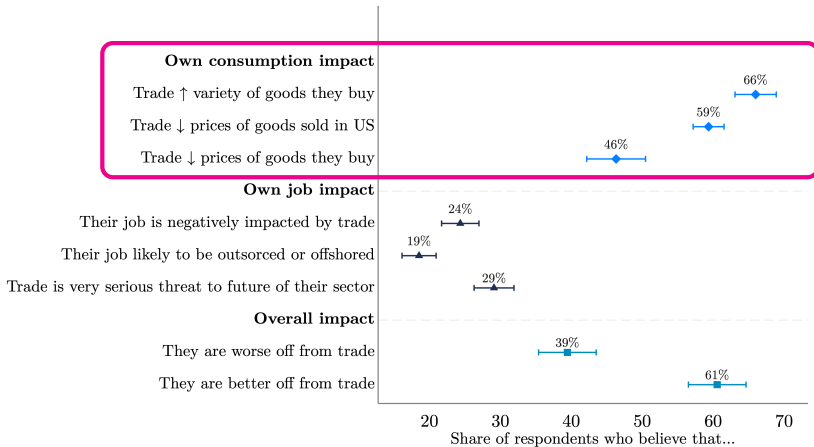Share of Correct Answers to Trade-Related Knowledge Questions
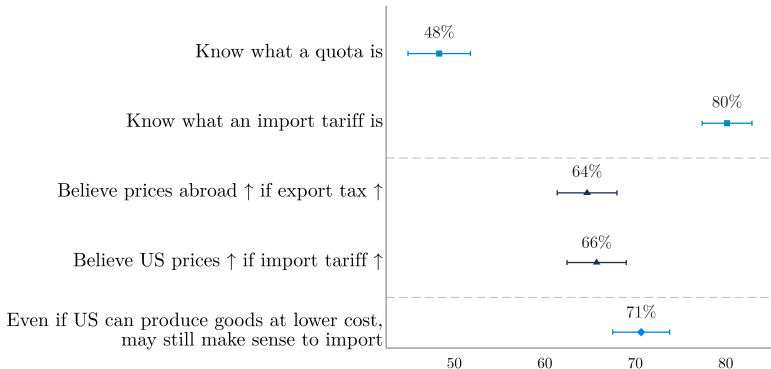
Diffuse Consumer Gains and Concentrated Job Losses
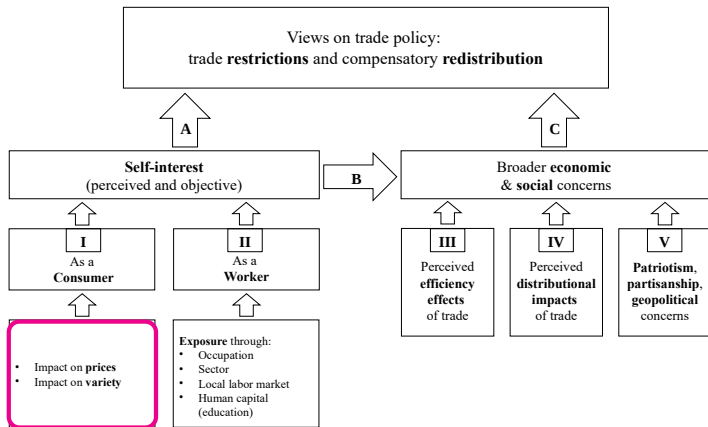
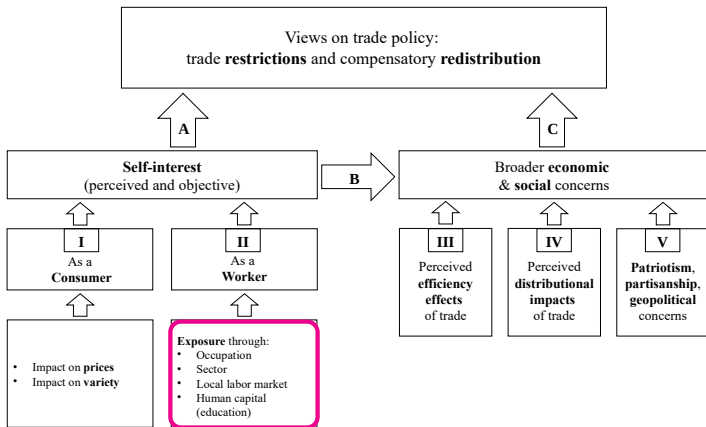# Perceived Personal Impacts as Consumers
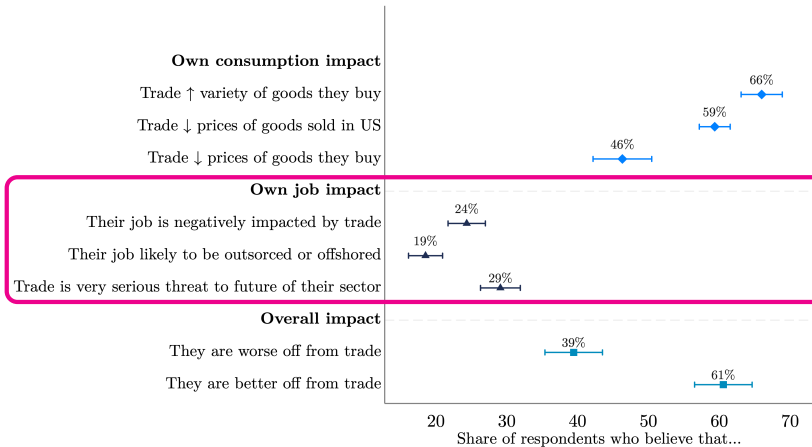
Perceived Personal Impacts as Consumers

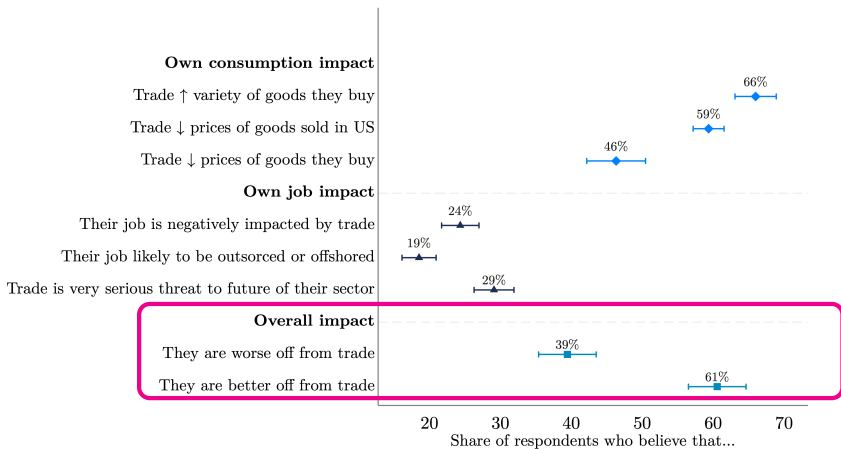**Own consumption impact**
Trade ↑ variety of goods they buy — 66%
Trade ↓ prices of goods sold in US — 59%
Trade ↓ prices of goods they buy — 46%

Own job impact
Their job is negatively impacted by trade — 24%
Their job likely to be outsorced or offshored — 19%
Trade is very serious threat to future of their sector — 29%

Overall impact
They are worse off from trade — 39%
They are better off from trade — 61%

Share of respondents who believe that...

Perceived Personal Impacts as Workers

Perceived Personal Impacts as Workers

Overall Impact from Trade

Own consumption impact
Trade ↑ variety of goods they buy — 66%
Trade ↓ prices of goods sold in US — 59%
Trade ↓ prices of goods they buy — 46%

Own job impact
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Overall impact
They are worse off from trade — 39%
They are better off from trade — 61%

Share of respondents who believe that...

The Link between Perceived and Actual Exposure to Trade

Correlation between Perceived and Objective Exposure Measures
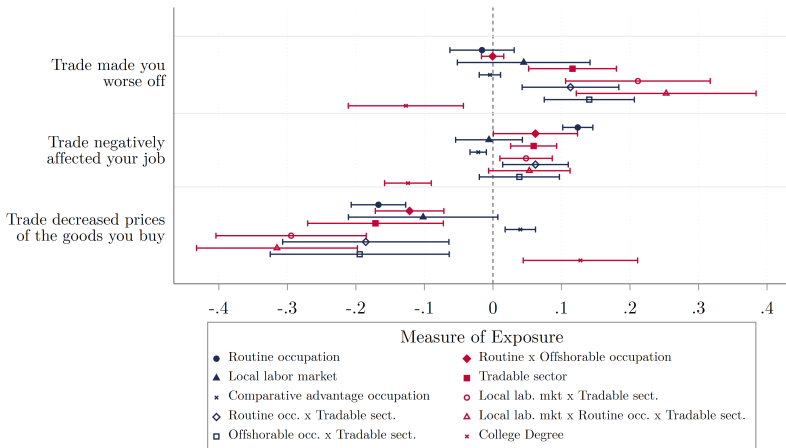
Self-interest and Support for Free Trade
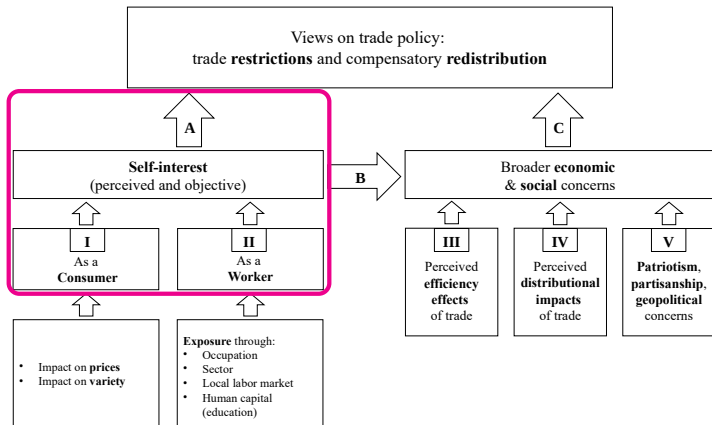
Perceptions of consumer gains are not correlated with support for free trade

Consumption gains

Trade decreases prices of consumer goods

Treatment: Own Consumption

Job impacts

Comparative advantage occupation

Routine & offshorable occupation

Tradable sector

Perceived exposure (being worse-off from trade)

College

High-income

Treatment: Own Job Risks

-.4 -.3 -.2 -.1 0 .1 .2 .3 .4

Perceptions of consumer gains are not correlated with support for free trade

Own job risks are significantly correlated with support for free trade

Own job risks are significantly correlated with support for free trade

Consumption gains
- Trade decreases prices of consumer goods
- Treatment: Own Consumption

Job impacts
- Comparative advantage occupation
- Routine & offshorable occupation
- Tradable sector
- Perceived exposure (being worse-off from trade)
- College
- High-income
- Treatment: Own Job Risks

-.4 -.3 -.2 -.1 0 .1 .2 .3 .4
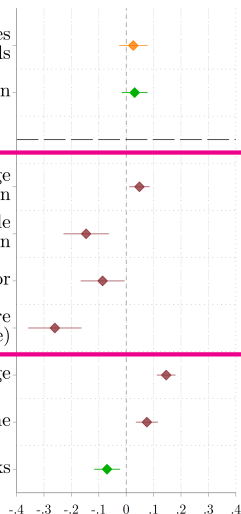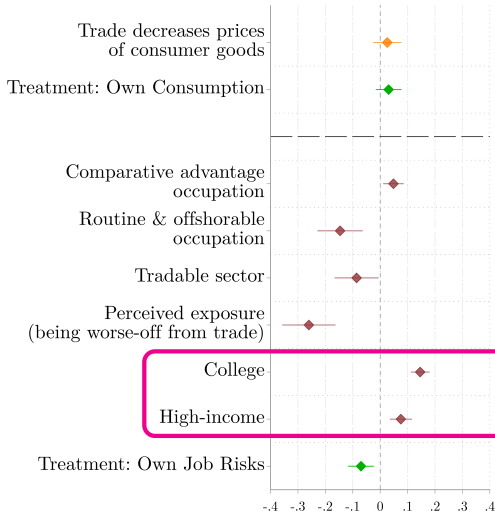
Own job risks are significantly correlated with support for free trade
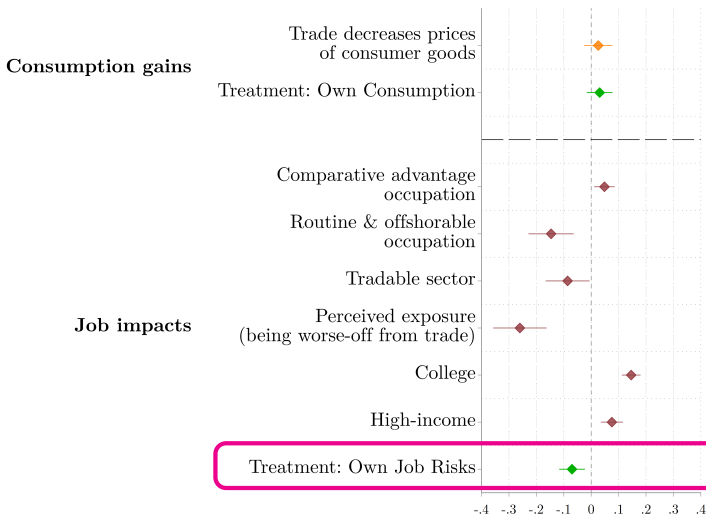
Finding 1: Perceived job risks matter more for policy views than potential consumer gains.

Research has highlighted the diffuse consumer gains and concentrated job losses from trade.

I directly show the impact of these two considerations on people's views about trade.

Respondents perceive consumer gains from trade as vague and diffuse.

A minority of respondents feels directly threatened by trade via their job but this exposure is pivotal for their views on trade.

$\Rightarrow$ perceived job risks matter more than potential consumer gains.

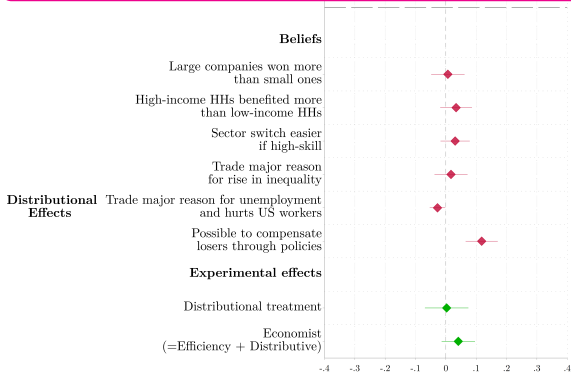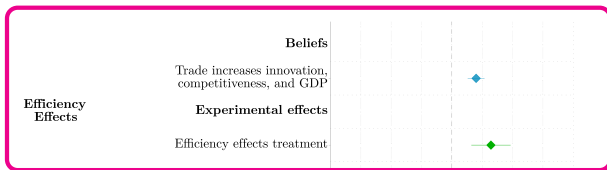# Efficiency versus Equity Concerns and the Importance of Compensatory Redistribution

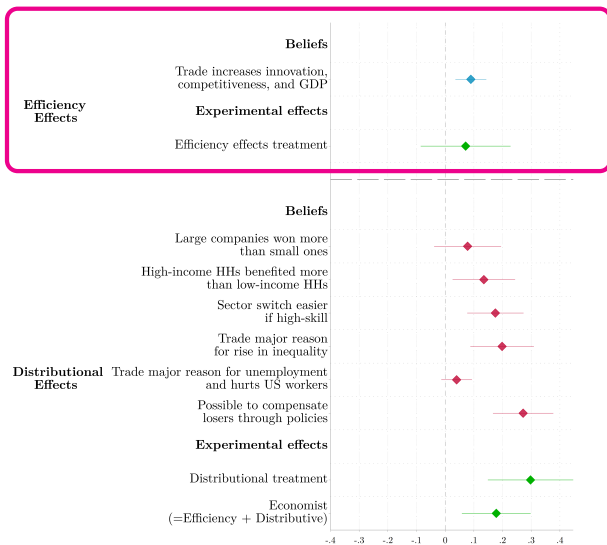# The Role of Perceived Efficiency Effects of Trade
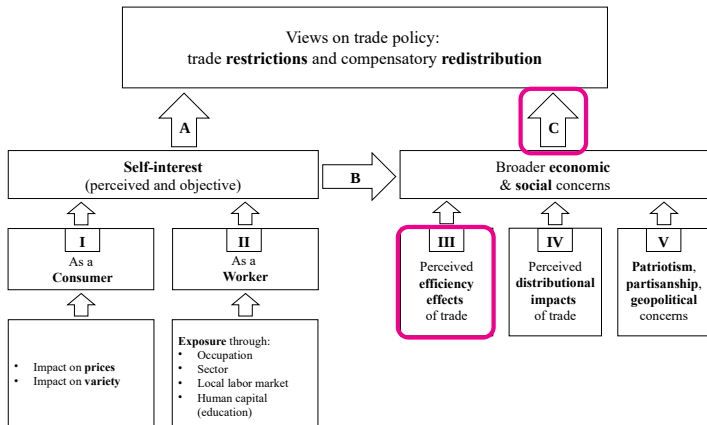
Many Respondents Think Trade has Positive Efficiency Effects
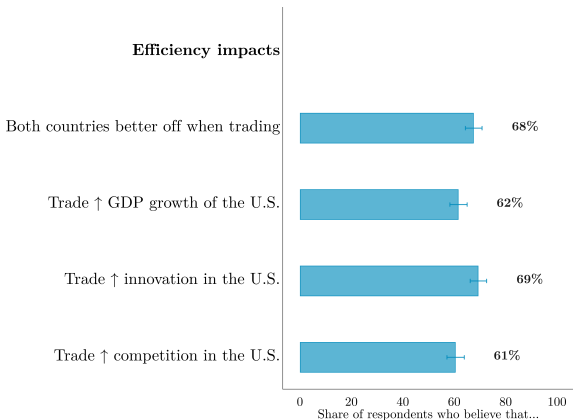
Effect of Perceived Efficiency Effects on Policy Views: Support for Free Trade
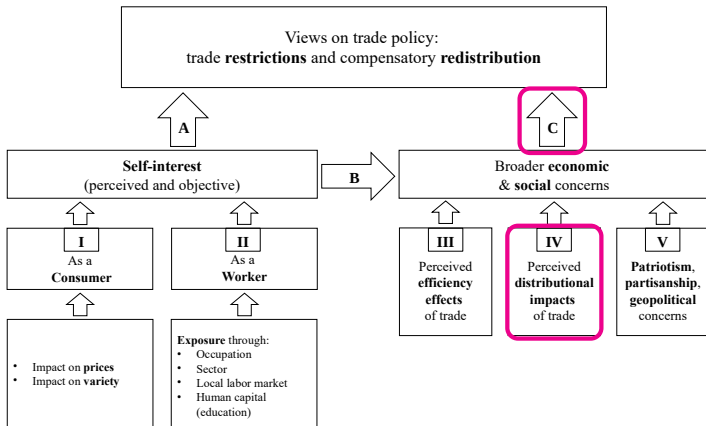
Effect of Perceived Efficiency Effects on Policy Views: Support for Redistribution
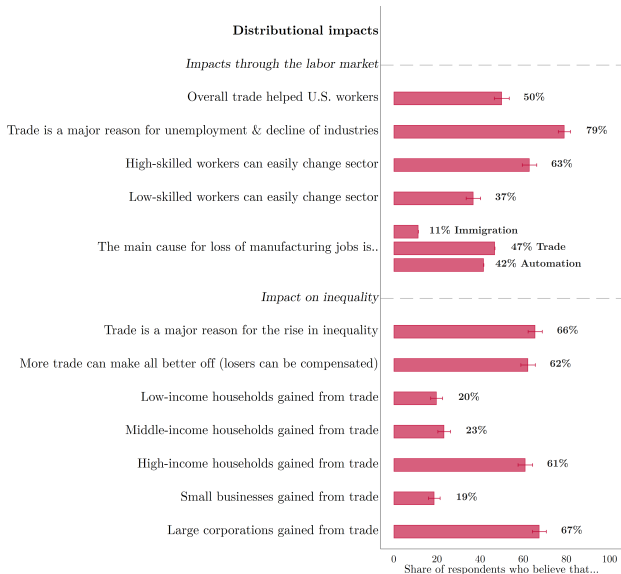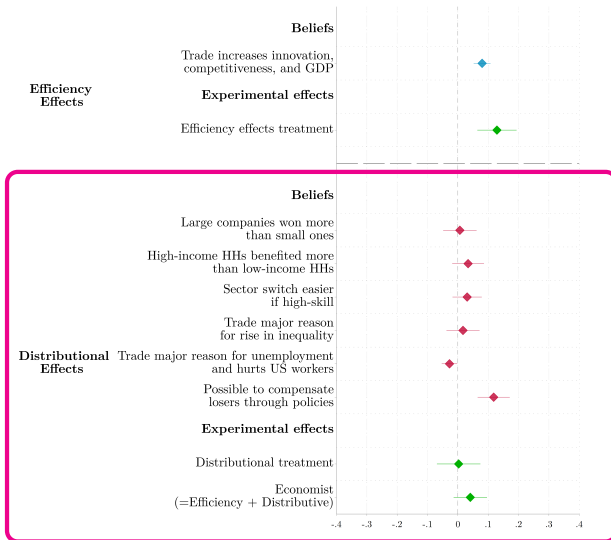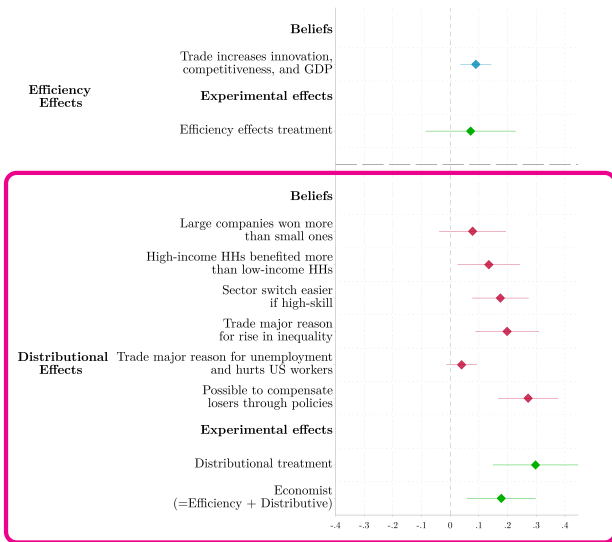
The Role of Perceived Distributional Impacts of Trade

Respondents Understand that Trade Can Have Adverse Distributional Impacts

Distributional impacts

Impacts through the labor market

Overall trade helped U.S. workers	50%
Trade is a major reason for unemployment & decline of industries	79%
High-skilled workers can easily change sector	63%
Low-skilled workers can easily change sector	37%
The main cause for loss of manufacturing jobs is..	11% Immigration
	47% Trade
	42% Automation

Impact on inequality

Trade is a major reason for the rise in inequality	66%
More trade can make all better off (losers can be compensated)	62%
Low-income households gained from trade	20%
Middle-income households gained from trade	23%
High-income households gained from trade	61%
Small businesses gained from trade	19%
Large corporations gained from trade	67%

Share of respondents who believe that...

Effect of Perceived Distributional Impacts on Policy Views: Support for Free Trade

Effect of Perceived Distributional Impacts on Policy Views: Support for Redistribution

Finding 2: Efficiency versus equity concerns and the importance of compensatory redistribution

People care about the broader efficiency gains and adverse distributional consequences from trade beyond their own material self-interest.

Many respondents believe in positive efficiency gains in the form of higher competitiveness, innovation, and growth.

Respondents also **understand that trade can have adverse distributional consequences.**

Agreement on some of the winners from trade, namely large companies and high-income households.

More pessimism and disagreement on how trade benefits workers, people with low incomes, and the middle class and how it shapes inequality and unemployment.

Finding 2: Compensatory redistribution is crucial

Belief that is most predictive of support for open trade is that trade generates a variety of efficiency gains.
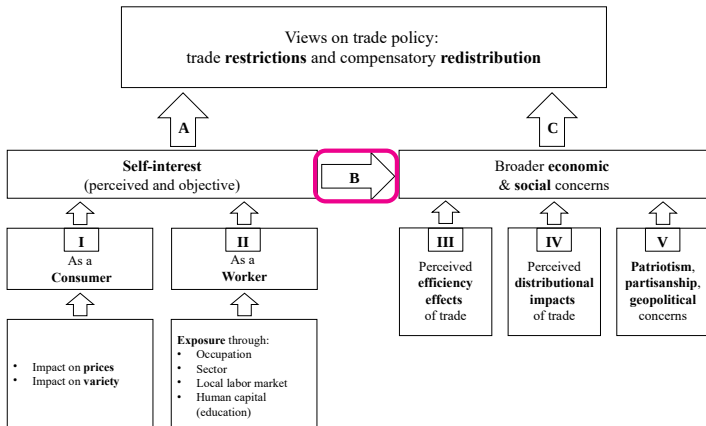
People who believe that those hurt by trade can be helped using other tools (i.e., compensatory redistribution) do not oppose free trade, even if they are convinced that it will entail adverse distributional consequences. **Instead, they support more redistribution.**

Findings highlight that **the two facets of trade policy (trade barriers & compensatory policies) are driven by different considerations and are indissociable in people's minds.**

Need to provide such redistribution and ensure citizens understand it if support for free trade is to be maintained.
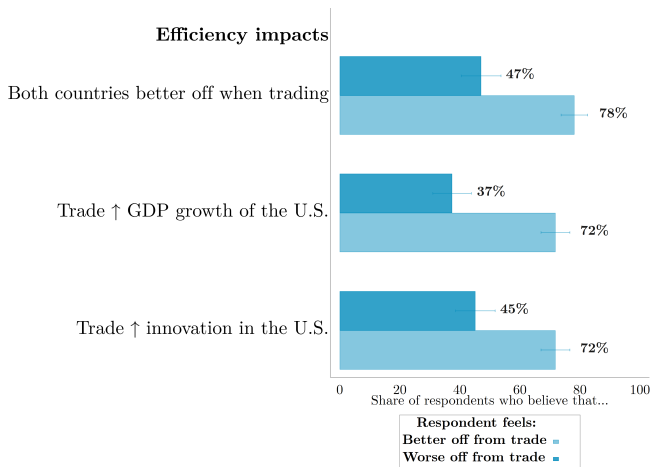
The Direct and Indirect Roles of Exposure to Trade

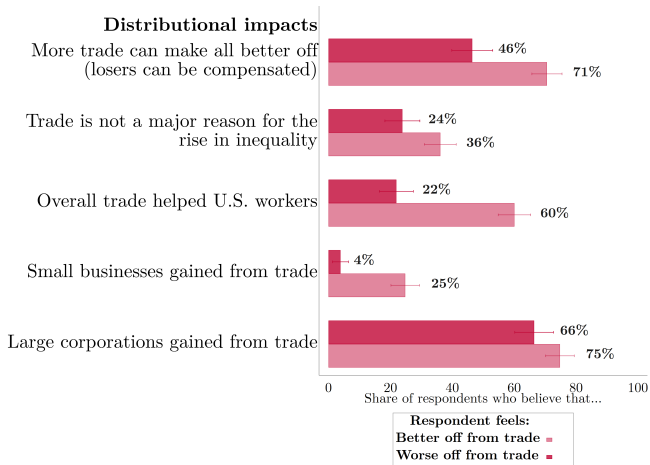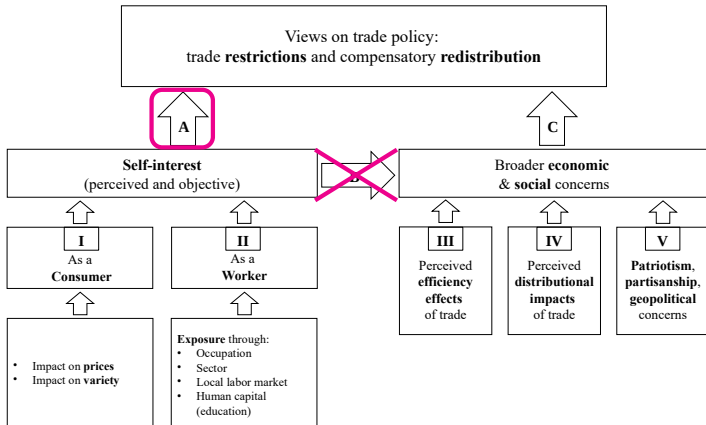# Exposure to trade shapes beliefs about broader impacts of trade

Exposure to trade shapes beliefs about broader efficiency impacts of trade

Efficiency impacts

Both countries better off when trading — 47% / 78%

Trade ↑ GDP growth of the U.S. — 37% / 72%

Trade ↑ innovation in the U.S. — 45% / 72%

Share of respondents who believe that...

Respondent feels:
Better off from trade
Worse off from trade

Exposure to trade shapes beliefs about broader distributional impacts of trade

Distributional impacts

More trade can make all better off (losers can be compensated)
- 46%
- 71%

Trade is not a major reason for the rise in inequality
- 24%
- 36%

Overall trade helped U.S. workers
- 22%
- 60%

Small businesses gained from trade
- 4%
- 25%

Large corporations gained from trade
- 66%
- 75%

Share of respondents who believe that...

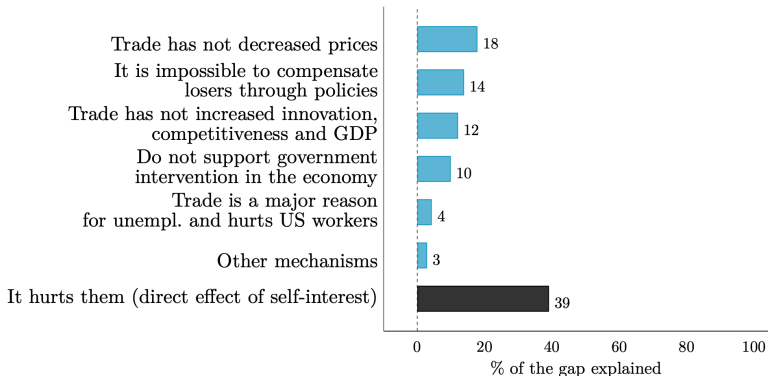| Respondent feels: |
| Better off from trade ■ |
| Worse off from trade ■ |

# The Direct Effect of Exposure from Self-Interest

Gelbach Decomposition
of Support for Free Trade (1/4)

Those who perceive they are **worse off from trade** support less free trade because they believe that...

|	
Trade has not decreased prices	18
It is impossible to compensate losers through policies	14
Trade has not increased innovation, competitiveness and GDP	12
Do not support government intervention in the economy	10
Trade is a major reason for unempl. and hurts US workers	4
Other mechanisms	3
It hurts them (direct effect of self-interest)	39

% of the gap explained

Gelbach Decomposition
of Support for Free Trade (2/4)

Those who are in **routine & offshorable occupations** support less free trade
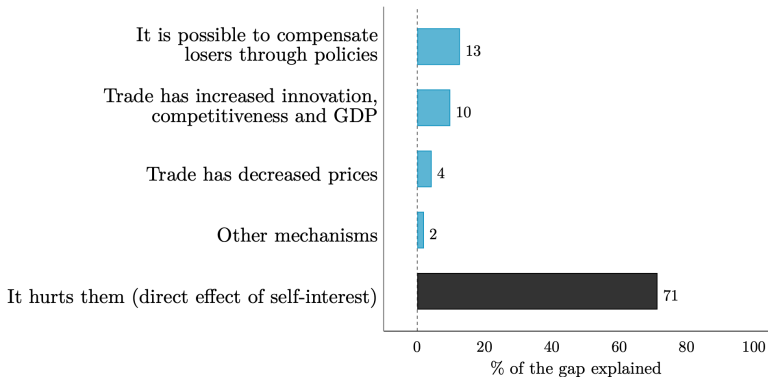because they believe that...
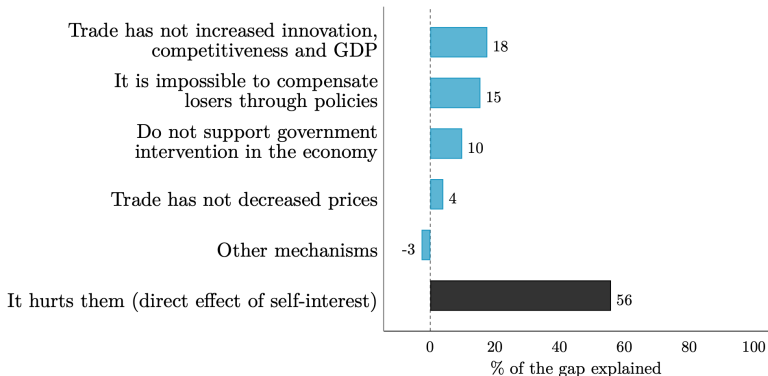
Gelbach Decomposition
of Support for Free Trade (3/4)

Those who are in **tradable sectors** support less free trade because they believe that...
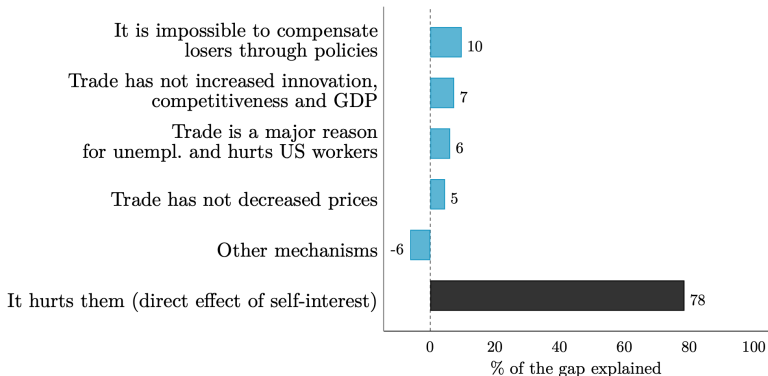
Gelbach Decomposition
of Support for Free Trade (4/4)

Those who are in **comparative advantage occupations** support more free trade because they believe that...

A Note on the Special Role of Education

- College-educated respondents systematically perceive higher efficiency gains from trade.

- They also perceive less adverse distributional effects from trade.

- Finally, they also support free trade and redistribution significantly more. ▶ Figure

  > Higher support for trade among the college-educated is in line with the factor endowment model (and self-interest) if education is taken as a proxy for human capital.

Finding 3: The indirect and direct effects of exposure to trade

As we saw, **respondents' trade-related experiences**, as captured by their subjective and objective exposures through their work (their sector, occupation, and local labor market), are significantly correlated with their support for trade restrictions.

In fact, personal exposure shapes not only respondents' assessment of how trade affects them but also their perceptions of the broader efficiency and distributional impacts of trade on others and the US.

Both the direct and the indirect effects are important.

A decomposition shows that **the indirect effect is 30-60%**.

Conclusion

- Respondents perceive gains from trade as consumers to be vague and unclear but perceive potential losses as workers to be concentrated and salient.

- People's policy views on trade do not only reflect self-interest. Respondents also care about trade's distributional and efficiency impacts on others and the US economy.

- Respondents' experience, as measured by their exposure to trade through their sector, occupation, and local labor market, shapes their policy views directly (through self-interest) and indirectly by influencing their understanding and reasoning about the broader efficiency and distributional impacts of trade.

Thank you!

SOCIAL ECONOMICS LAB

APPENDIX

Sample and US Population Characteristics ▶ Back

	US Population	Survey 1	US Population in the Labor Force	Survey 2
Male	.48	.5	.52	.49
18-29 years old	.22	.23	.21	.26
30-39 years old	.21	.21	.24	.22
40-49 years old	.2	.2	.23	.2
50-59 years old	.19	.18	.2	.21
60-69 years old	.18	.18	.12	.11
$0-$19,999	.12	.15	.07	.16
$20,000-$39,999	.15	.19	.14	.19
$40,000-$69,999	.21	.23	.21	.22
$70,000-$109,999	.21	.19	.23	.18
$110,000+	.31	.25	.35	.25
Four-year college degree	.21	.28	.24	.23
High-school graduate or less	.39	.19	.34	.23
Employed	.71	.68	.96	.9
Unemployed	.02	.05	.03	.09
Married	.56	.56	.58	.56
White	.59	.78	.6	.69
Black/African-American	.11	.06	.11	.11
Hispanic/Latino	.2	.06	.2	.08
Asian/Asian-American	.07	.06	.06	.04
Democrat	.30	.33	.30	.45
Republican	.26	.34	.26	.29
Independent and other	.44	.32	.44	.26
Voted for Clinton at the 2016 presidential election	.48	.39	.48	.46
Voted for Trump at the 2016 presidential election	.46	.45	.46	.45
Sample size		1771		2148

Support for Free Trade and Redistribution (Definitions)
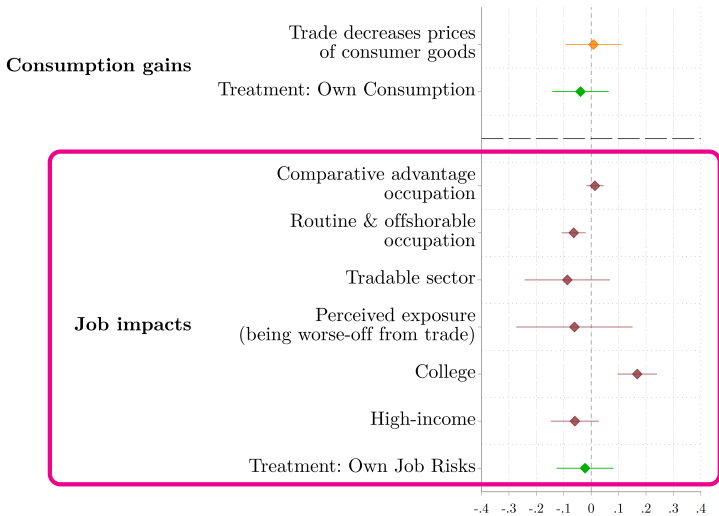
Support for free trade captures whether the respondent thinks that the U.S. should aim to reduce trade barriers.

Support for Redistribution measures support for redistribution policy. It is constructed following the methodology of Kling, Liebman, and Katz. It consists of an equally weighted average of the z-scores of all redistribution-related variables and is further divided by its standard deviation.

> Higher for respondents who agree that the best tools to help workers are more generous transfers and direct assistance to workers (rather than restricting imports or subsidizing production in their industry) and who want to increase spending on support and retraining programs for workers displaced by international competition and trade. It is also increasing in support for more general (non-trade specific) redistributive spending such as help for those out of work, better schools for children from low-income families, and wage subsidies.

Perceptions of consumer gains and support for redistribution

| | | -.4 -.3 -.2 -.1 0 .1 .2 .3 .4 |

Consumption gains
- Trade decreases prices of consumer goods
- Treatment: Own Consumption

Job impacts
- Comparative advantage occupation
- Routine & offshorable occupation
- Tradable sector
- Perceived exposure (being worse-off from trade)
- College
- High-income
- Treatment: Own Job Risks

Own job risks and support for redistribution

A Note on the Special Role of Education

Support for Free Trade
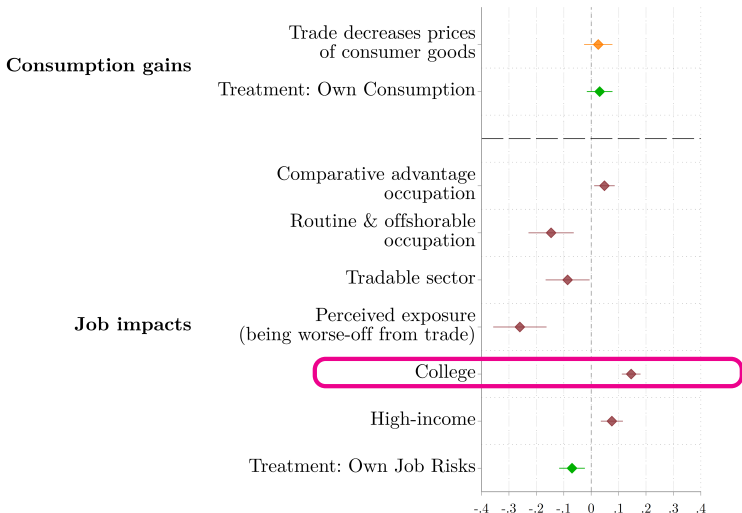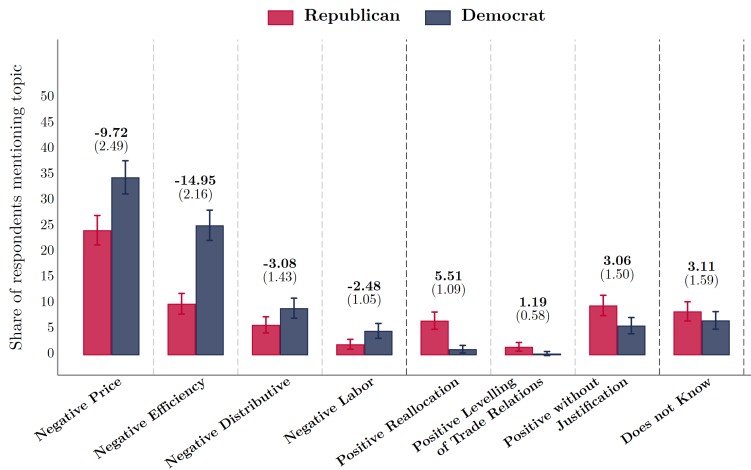
A Note on the Special Role of Education

Support for Redistribution
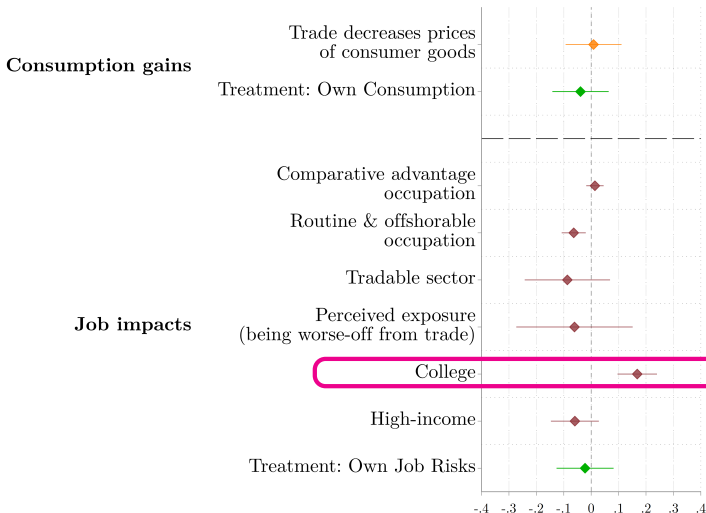
What do you think would be the effects on the U.S. Economy if barriers to trade, such as tariffs, were increased? ▸ Considerations

Keywords (1/2) Negative

Negative Price: (hit, destroy, bad, negat, suffer, disast, disastr, downfal, detriment, recess, depress, troubl, unhappi, hurt, harm, hit, loos, lost, damag, pay, worst, wors, fragil, pay, cost, impact) & (consumer, peopl, citizen, household, american, us), (increas, higher, high, up, rais, more, soar) & (price, cost), pay, inflationa, inflat, expens, hard & purchas, afford, less & cheap;

Negative Efficiency: (destroy, bad, negat, suffer, disast, disastr, downfal, detriment, depress, troubl, unhappi, hurt, harm, kill, death, shrink, declin) & (effici, compet, competit, innov, technolog, growth, economi), (increas, higher, high, up, rais, more, soar) & tax, ineffici, recess, depress, loss, economi & (collaps, down, shrink, hurt, crash, wors, slowdown, hamper, slow, hinder, negat), (slow, reduc) & growth, decreas & gdp;

Negative Distributive: (hit, destroy, bad, affect, negat, suffer, disast, disastr, downfal, detriment, recess, depress, troubl, unhappi, hurt, harm, hit, loos, lost, damag, pay, worst, wors, fragil, pay, cost, out & work) & (manufactur, farmer, busi, busine, busin, job, firm, poor, poorer, middleclass, middl & class, workingclass, compani, bottom, industri, lower & class, sector), layoff, bankrupt, bankruptci, poor & poorer;

Negative Labor: (hit, destroy, bad, negat, suffer, disast, disastr, downfal, detriment, recess, depress, troubl, unhappi, hurt, harm, hit, loos, lost, damag, pay, worst, wors, loss) & (labor, job, unemploy, salari, union, wage, outsourc, worker, employe, employ, manufactur, manufact, manufacur, manufactrur, manugfactur), (increas, high) & unemploy, retrain, (decreas, low, lower) & (salari, wage, employ), (few, fewer, lessen) & job;

Keywords (2/2) Positive

Positive...: Words included: good, posit, benefit, benefici, better, thrive, strengthen, improv, stronger, help, nice, great, bolster, improv, increas;
Words excluded: catastroph, loss, lose, destroy, bad, negat, suffer, disast, disastr, downfal, detriment, depress, troubl, unhappi, hurt, harm, kill, death, shrink, declin, lost, price, cost, afford, expens, (pay & more), inflat;

...Reallocation: own, ourselv, domest, work, job, farmer, demand, local, (product, buy, protect, support, good, posit, benefit, benefici, better, thrive, strengthen, improv, stronger, help, nice, great, economy) & (our, usa, america, american, us);
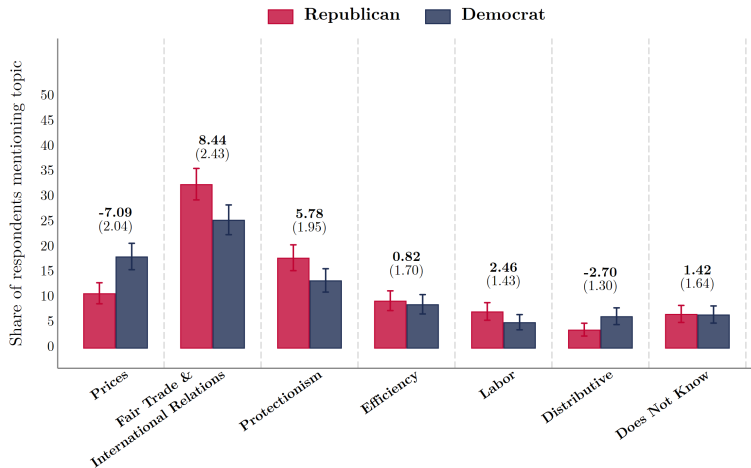
...Levelling of Trade Relations: fair, (other & countri), china, chines;

...without Justification: Answers in the *Positive* section that were neither in *Reallocation* nor in *Levelling of Trade Relations*.

When you think about trade policy and whether the U.S. should put some restrictions on trade with other countries, such as tariffs, what are the main considerations that come to your mind? ‣ Back

Topic Analysis: Keywords for the Main Topics Identified ▸ Back

Efficiency: effici, compet, competit, innov, technolog, ineffici, growth, gdp, tax, economi, (more & varieti), (stock & market);

Price: cost, price, afford, (pay & more), inflationa, inflat, expens, (impact, suffer, affect, hurt, effect, hit, loos, lost, pay) (consum, citizen, peopl, american, household);

Fair Trade & Int. Relations: fair, unfair, imbal, balanc, justic, equal, (even & (share, valu)), reciproc, cooper, (mutual & (benefit, benefici)), equit, (take & advantag), (play & field) china, retali, retaliatori, ((other, foreign, those, relat, relationship, certain) & countri), mexico, (intern & trade), negoti, renegoti, (advantag & us), (trade & war), isol, isolation, isolationist, (world & economi), (pay & back), cheat;

Distributive: ((impact, suffer, affect, hurt, effect, hit, loos, lost, difficult, difficulti, problem, horribl) & (farmer, busi, busine, busin, firm, poor, poorer, middleclass, (middl & class), industri, sector)), winner, loos, corpor, workingclass, ((expens, under) & (busi, busin, busine)), (lower & class), (better & compani);

Protectionism: ((made) & (usa, america, us)), ((buy, protect, support) & (usa, america, american, local)), ((restrict, tariff) & (fine, good, need, use, reason, some, necessari));

Labor: labor, job, unemploy, salari, union, wage, outsourc, worker, employe, employ, retrain.