

# Emotions and Policy Views

Yann Algan

Eva Davoine

Thomas Renault

Stefanie Stantcheva



SOCIAL  
ECONOMICS  
LAB

# Outline

- ▶ **The Demand Side of Emotions: the Rise of the Emotional Voter**
- ▶ **The Supply Side of Emotions**
- ▶ **Experimental Effect of Emotions on Policy Views**
- ▶ **Positive vs. Negative Emotions**
- ▶ **Disentangling Negative Emotions: Anger vs. Fear**
- ▶ **Appendix**

# Motivation: The Rise of Emotions in Policy

Emotions have become important in the public sphere and discourse, yet difficult to study.

Emergence of “Emotional communities” characterized by shared experiences of anger, outrage, and resentment (e.g., MeToo, Gilets Jaunes . . .)

Populist discourse also often based on these negative emotions.

This paper:

Documents rise of emotions on the supply and demand side of policy (among citizens and policymakers on social media and in political speeches)

Survey experiment (A) to show causal effect of positive vs. negative emotions on policy views

Survey experiment (B) to distinguish between fear and anger

# Literature

- **Pivotal role of emotions in shaping judgments, decisions, and political choices**

- ▶ Lazarus (1991), Marcus (2002), Loewenstein, (1996, 2000), Putman (2020), Rosanvallon (2021), Clore et al. (2001), Clore & Huntsinger (2007), Rahn (2000), Van Zomeren (2021), MacKuen et al. (2010), Boxell et al. (2024), Ladd & Podkul (2018), Jost (2019), Marcus et al. (2019), Vasilopoulou & Wagner (2017), Rico et al (2017), Widmann (2021), Ward et al (2024)

Contribution: Causal impact of emotions on policy views in economics

- **Experimental designs exploring the role of emotions in shaping policy views**

- ▶ Manzoni et al. (2024), Tilley & Hobolt (2024), Lo et al. (2022), Gonthier (2023), Albertson & Gadarian (2015)

Contribution: Comprehensive analysis of the role of both positive and negative emotions independently of context

- **Determinants of policy preferences**

- ▶ Stantcheva (2020, 2021, 2022), Binetti et al (2024), Dechezlepretre et al (2025), Roth et al (2022), Sawulski et al. (2024), Bremer & Burgisser, (2023), Andre et al. (2023), Giglio et al. (2021), Bailey et al. (2019), Goetzmann et al. (2022)

Contribution: Emotions complement traditional cognitive processes in shaping policy attitudes



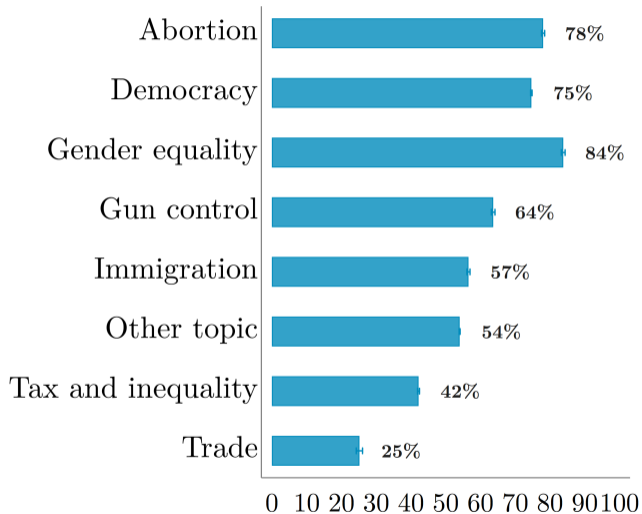
# Outline

- ▶ **The Demand Side of Emotions: the Rise of the Emotional Voter**
- ▶ The Supply Side of Emotions
- ▶ Experimental Effect of Emotions on Policy Views
- ▶ Positive vs. Negative Emotions
- ▶ Disentangling Negative Emotions: Anger vs. Fear
- ▶ Appendix

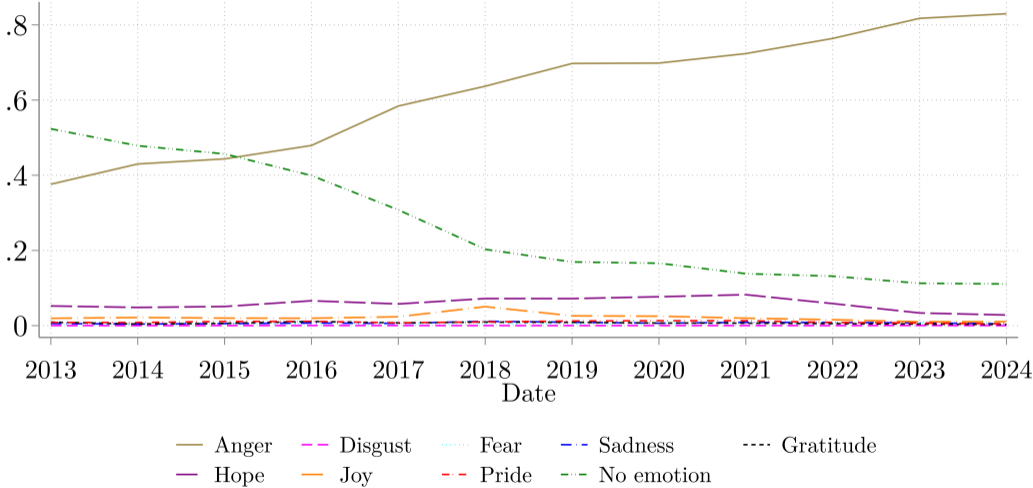
# Twitter data

- Tweets from partisans' accounts about policy issues
  - ▶ Demand side: perspectives and affiliations of the public
  - ▶ Sample of 762 users who have most frequently retweeted tweets from official political accounts
  - ▶ 679,760 tweets sent between January 2013 and November 2024 with keywords:
    - ★ Immigration, terrorism, crime, war, justice, injustice, inequality, abortion, gun, education, climate, inflation, price, job, tax, trade, economy, growth, budget, deficit, debt, health, healthcare, Medicare, Supreme Court, policy, government, congress, or senate.
- Tweets about climate change
  - ▶ Every tweet posted between the 5th and 10th minute of each hour of all tweets with keywords:
    - ★ Climate change, global warming
  - ▶ 3.7 millions tweets sent on Twitter between January 2013 and April 2023 from 1.5 million distinct users

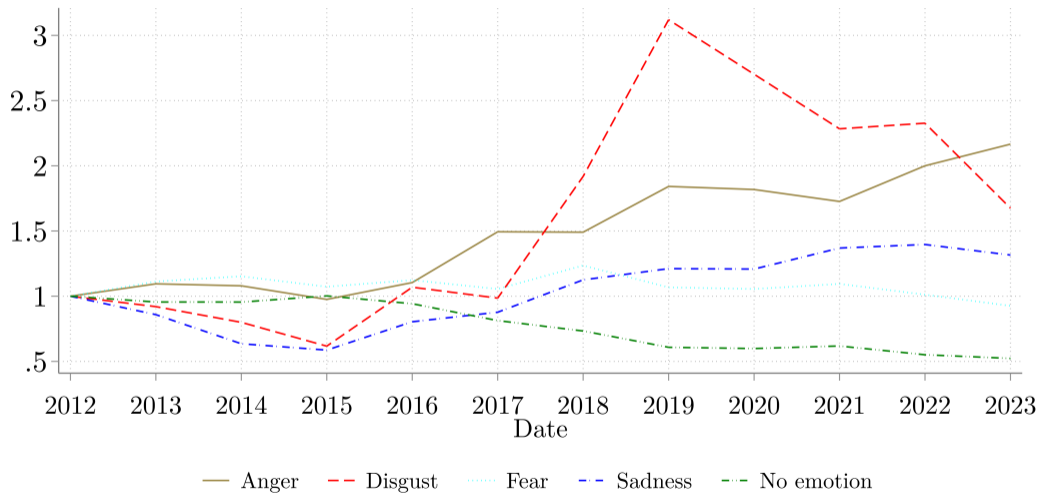
# Share of affective partisans' tweets by topic



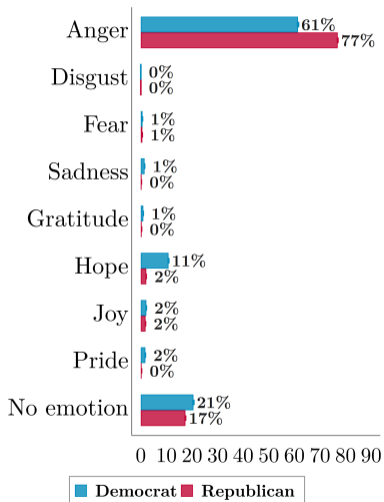
# The rise of anger in partisans' tweets on policy issues



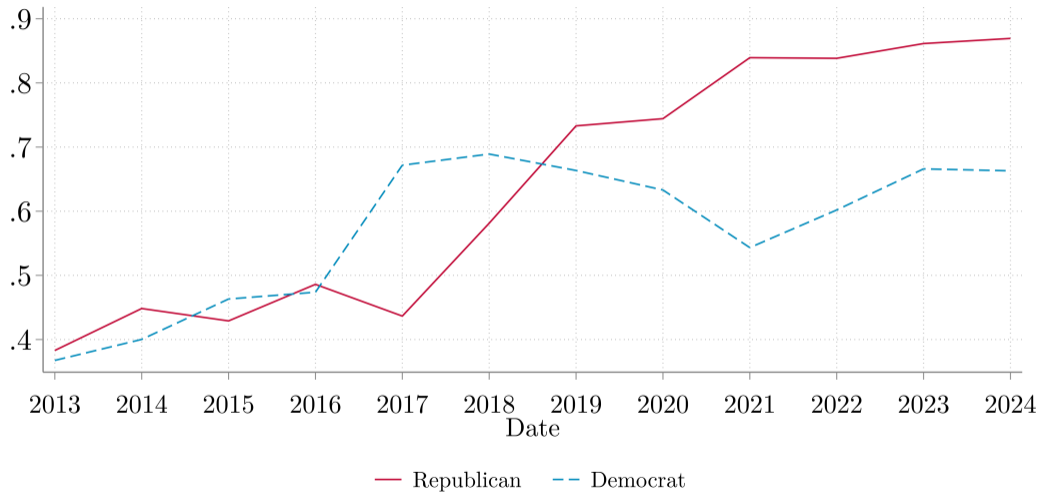
# The rise of anger & disgust in tweets on climate change



# Emotions on policy issues by political affiliation



# The rise of anger for both Democrats & Republicans



# Outline

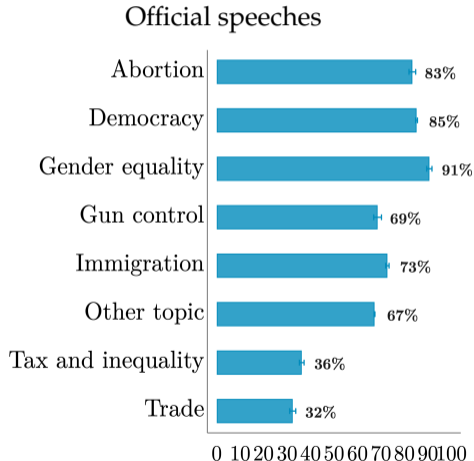
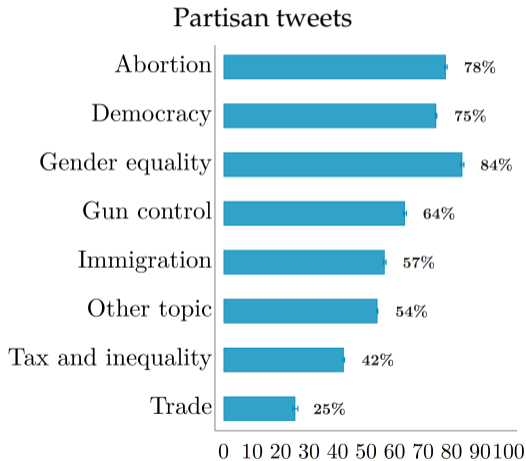
- ▶ The Demand Side of Emotions: the Rise of the Emotional Voter
- ▶ **The Supply Side of Emotions**
- ▶ Experimental Effect of Emotions on Policy Views
- ▶ Positive vs. Negative Emotions
- ▶ Disentangling Negative Emotions: Anger vs. Fear
- ▶ Appendix



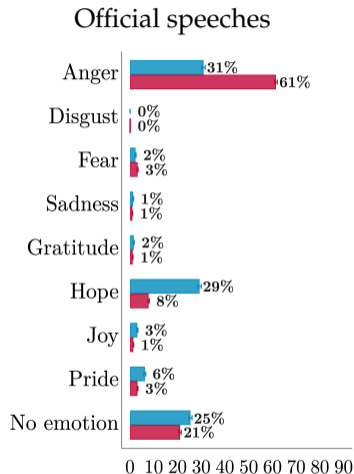
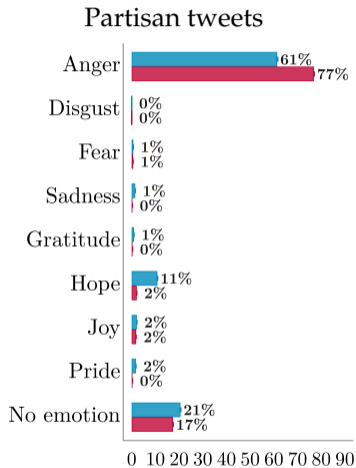
# Supply-side data

- Tweets from official party accounts
  - ▶ Extracted from:
    - ★ Republican Party accounts: @GOP, @HouseGOP, @SenateGOP
    - ★ Democratic Party accounts: @TheDemocrats, @HouseDemocrats, @SenateDems
  - ▶ 395,272 tweets sent between January 2013 and November 2024
- Political speeches & interventions
  - ▶ Factba.se / Rollcall database
  - ▶ All public interventions from Harris, Biden, and Trump from January 2023 to November 2024
  - ▶ Diverse range of interventions: interviews, press briefings, press conferences, remarks, speeches, and vlogs
  - ▶ 1,992 interventions

# Supply matches demand: Share of affective tweets by topic

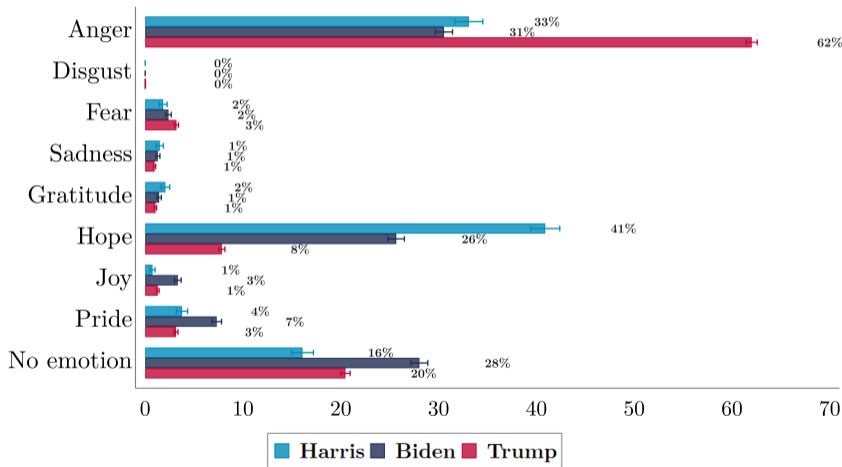


# Supply matches demand: Emotional content

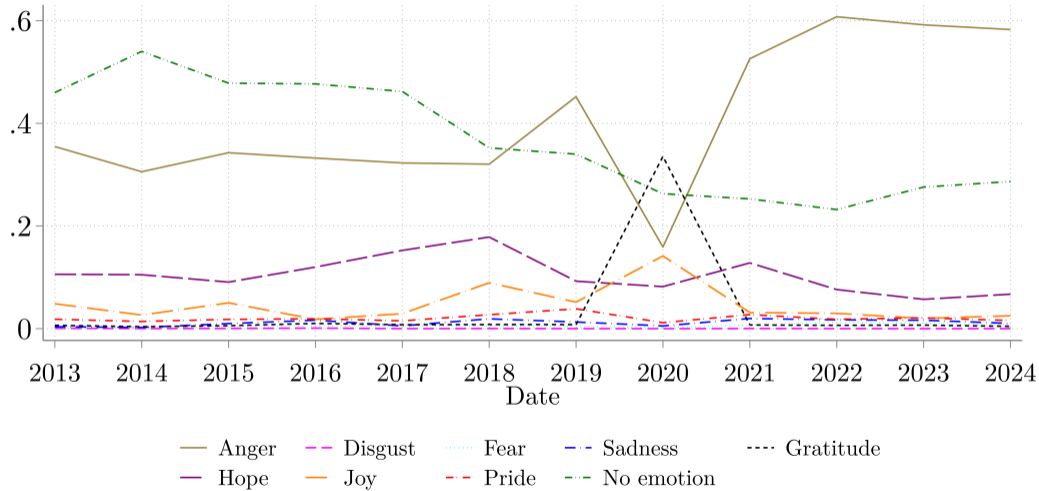


■ Democrat ■ Republican

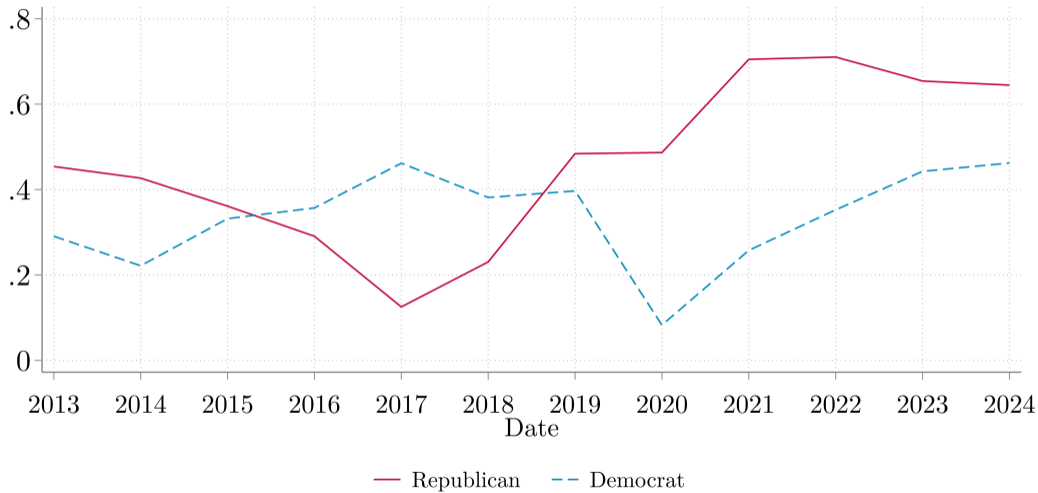
# Emotional content in speeches during the 2024 U.S. presidential election



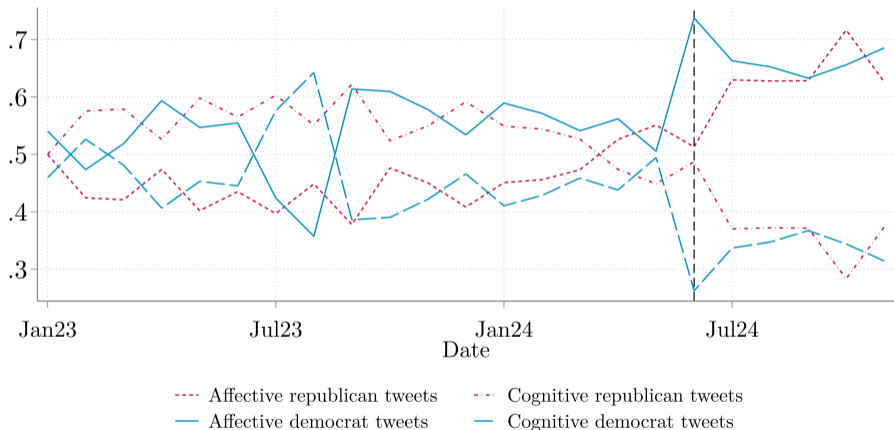
# Evolution of emotional content in official tweets



# The rise of anger in official tweets



# Affective vs. cognitive official tweets around the 2024 presidential election



# Outline

- ▶ The Demand Side of Emotions: the Rise of the Emotional Voter
- ▶ The Supply Side of Emotions
- ▶ **Experimental Effect of Emotions on Policy Views**
- ▶ Positive vs. Negative Emotions
- ▶ Disentangling Negative Emotions: Anger vs. Fear
- ▶ Appendix



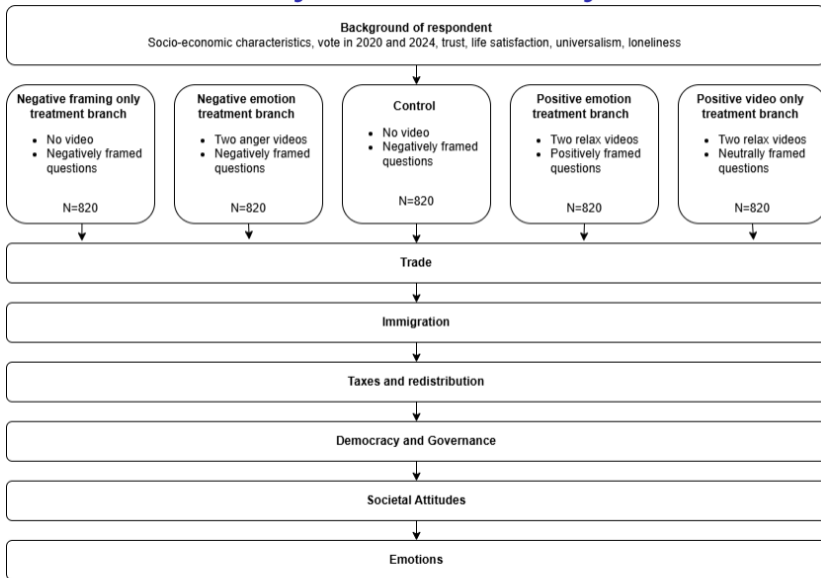
# Two surveys

- Survey A: Positive vs. negative emotions
- Survey B: Anger vs. fear

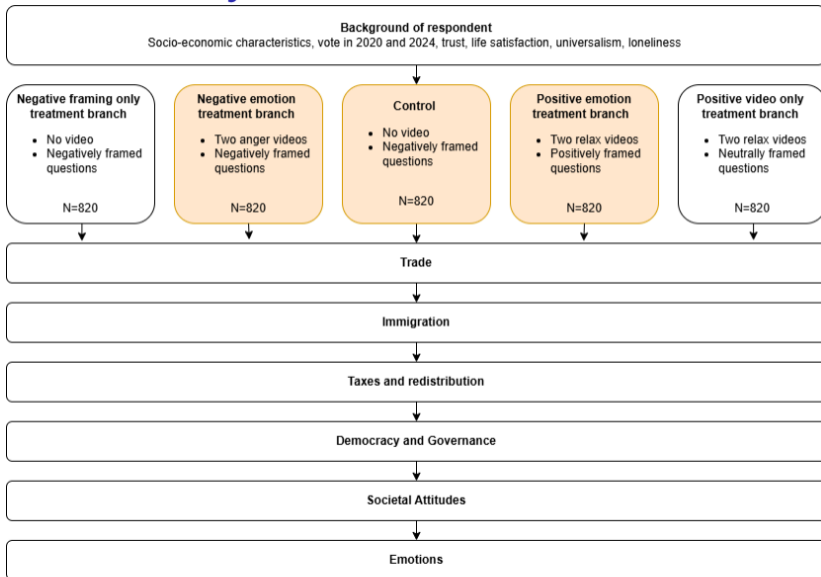
# Outline

- ▶ The Demand Side of Emotions: the Rise of the Emotional Voter
- ▶ The Supply Side of Emotions
- ▶ Experimental Effect of Emotions on Policy Views
- ▶ **Positive vs. Negative Emotions**
- ▶ Disentangling Negative Emotions: Anger vs. Fear
- ▶ Appendix

# Survey flow - Survey A



# Survey flow: main treatments



# Positive treatment branch



First relax video (i)



First relax video (ii)



Second relax video

→ Serene music and scenery: snow-capped mountains, lavender fields, a flowing river

Example of a positively framed question:

*When you think about US trade with other countries, what are some of the things, if any, that make you feel optimistic?*

# Positive treatment branch



First relax video (i)



First relax video (ii)



Second relax video

→ Serene music and scenery: snow-capped mountains, lavender fields, a flowing river

Example of a positively framed question:

*When you think about US trade with other countries, what are some of the things, if any, that make you feel optimistic?*

Neutral treatment: No video + neutrally framed question:

*When you think about US trade with other countries, what are the main considerations that come to your mind?*

# Negative treatment branch



First anger video (i)



First anger video (ii)



Second anger video

→ Outrage-inducing scenery: corruption and corporate negligence killing 84 persons in a wildfire

Example of a negatively framed question:

*When you think about U.S trade with other countries such as China, what makes you really angry and revolted?*

# Negative treatment branch



First anger video (i)



First anger video (ii)



Second anger video

→ Outrage-inducing scenery: corruption and corporate negligence killing 84 persons in a wildfire

Example of a negatively framed question:

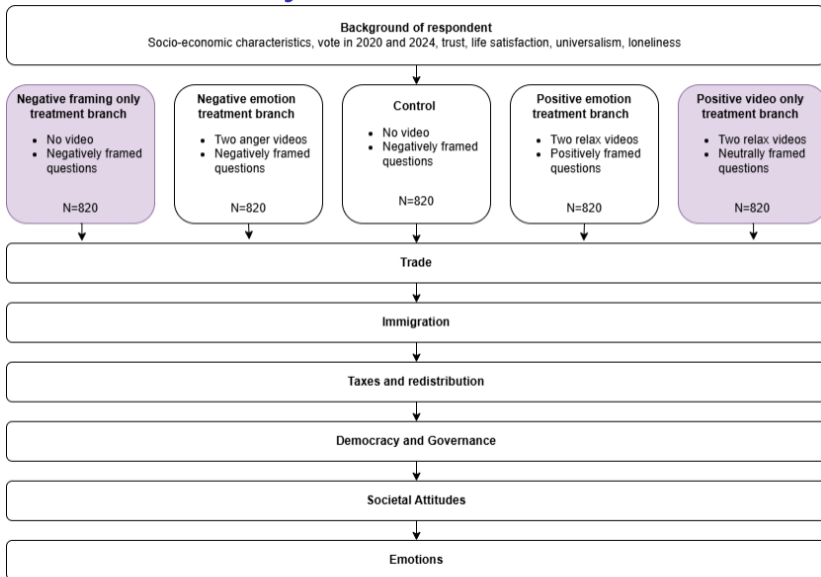
*When you think about U.S trade with other countries such as China, what makes you really angry and revolted?*

Neutral treatment: No video + neutrally framed question:

*When you think about US trade with other countries, what are the main considerations that come to your mind?*



# Survey flow: robustness



# What makes people angry or optimistic about trade?

## Optimistic

- Trade has benefits (41%)
- Enhance product diversity (15%)
- Fairness essential (13%)
- Interdependence essential (13%)
- Increase U.S. manufacturing (9%)

## Neutral

- Fairness essential (57%)
- Tariffs' price impact (15%)
- Jobs lost due to imports (12%)
- Equity of trade balance (9%)
- Quality concerns (7%)

## Angry

- Worrying import reliance (35%)
- China exploits U.S. (34%)
- Trade imbalance hurts U.S. (12%)
- Child labor issues (7%)
- Low quality of imports (6%)
- Increase U.S. manufacturing (6%)

# What makes people angry or optimistic about immigration?

## Optimistic

- Illegal immigration is a growing concern to be controlled (34%)
- Immigrants seek better life opportunities (18%)
- Immigrants have a positive economic contribution (13%)
- Diversity enriches society (12%)
- Protect legal immigration (12%)
- Reforms are needed (9%)

## Neutral

- Stop illegal immigration (35%)
- Safety concerns (22%)
- Protect legal immigration (18%)
- Should vet immigrants (17%)
- Take citizens' job (8%)

## Angry

- Fear entry of criminals (31%)
- Illegal immigration burdens resources (22%)
- Anger over immigrants' treatment (21%)
- Lack of border control is concerning (19%)
- Take citizens' job (8%)

# What makes people angry or optimistic about redistribution?

## Optimistic

- No optimism about wealth distribution (35%)
- Rising inequality concerns lead to change (26%)
- Hard workers succeed (18%)
- Mobility opportunities (17%)
- Tax wealthy more (4%)

## Neutral

- Inequality is major concern (59%)
- All should have equal opportunities (17%)
- Tax wealthy more (11%)
- Wealth distribution extremely uneven (8%)
- Middle class is shrinking (3%)
- Rich keep getting richer (3%)

## Angry

- Growing inequality (42%)
- Inequality limits mobility (26%)
- Tax loopholes for the rich (20%)
- Corporations prioritize profits over employee welfare (8%)
- Middle class is shrinking (3%)

# What makes people angry or optimistic about democracy?

## Optimistic

- Division affects optimism (59%)
- Democracy allows citizens to participate and vote (16%)
- Freedom of expression is essential (13%)
- Political debates serve as platform for discussion (5%)
- Need for compromise across political parties (5%)
- Younger are more engaged (3%)

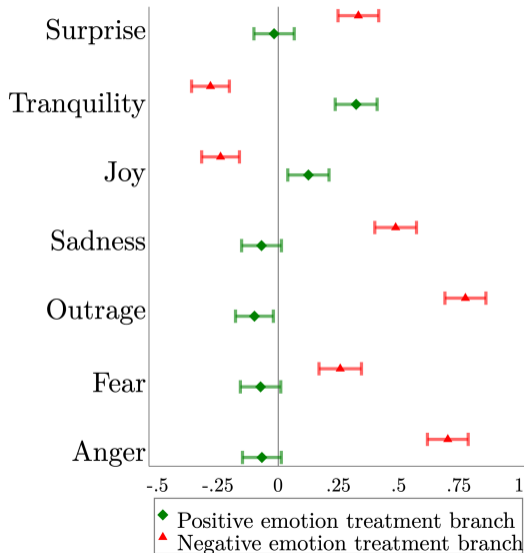
## Neutral

- Polarization is harmful (29%)
- Protection from corruption (26%)
- Hostile political debate (18%)
- Media biases influence public opinion (10%)
- Unfair elections (9%)
- People do not understand how it works (9%)

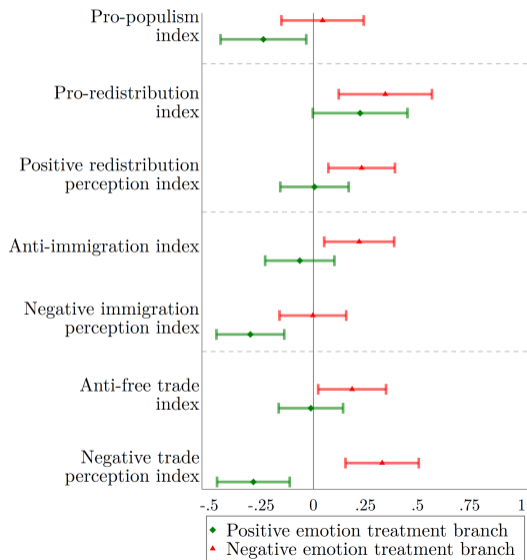
## Angry

- People feel unheard and disenfranchised (29%)
- Frustrating polarization of political debates (28%)
- Fake news distort reality (16%)
- Money corrupts politics (15%)
- Lack of constructive dialogue and compromise (10%)
- Electoral college undermines fair representation (3%)

# Effect of the treatment on emotions ('First-stage')



# Effect of the treatment on policy views ('Second-stage')

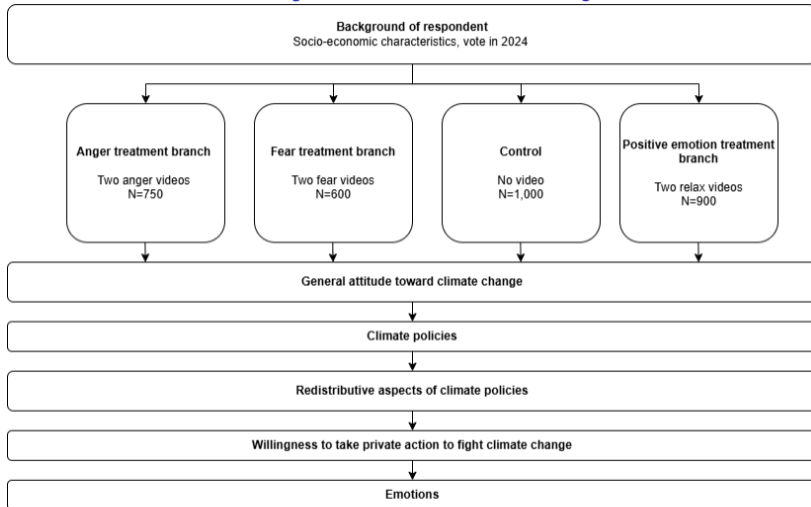


# Outline

- ▶ The Demand Side of Emotions: the Rise of the Emotional Voter
- ▶ The Supply Side of Emotions
- ▶ Experimental Effect of Emotions on Policy Views
- ▶ Positive vs. Negative Emotions
- ▶ **Disentangling Negative Emotions: Anger vs. Fear**
- ▶ Appendix



# Survey flow - Survey B



# Fear treatment branch



First fear video (i)



First fear video (ii)



Second fear video

Fear-inducing scenes:

- Terrifying wildfires without assigning blame, featuring trapped victims & distressed firefighters

# Fear treatment branch



First fear video (i)



First fear video (ii)



Second fear video

Fear-inducing scenes:

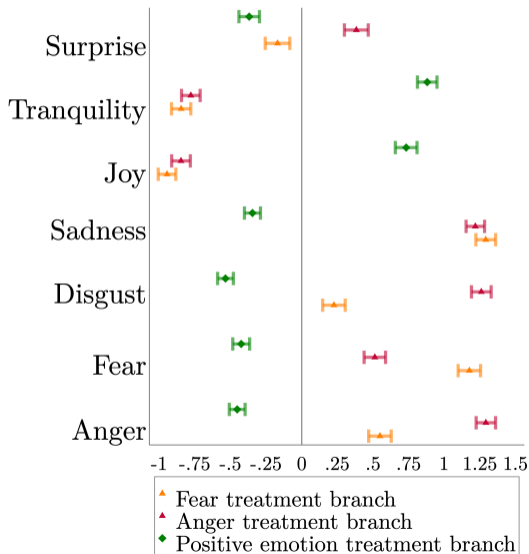
- Terrifying wildfires without assigning blame, featuring trapped victims & distressed firefighters

Anger treatment branch: Negative emotion video from Survey A

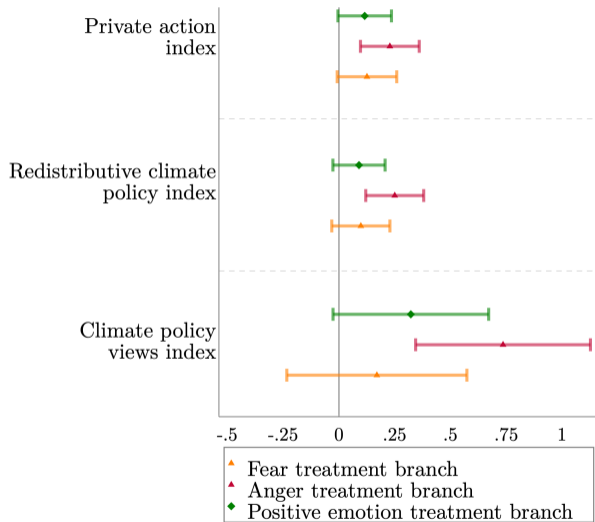
Positive emotion treatment branch: Positive emotion video from Survey A

Control: No video

# Effect of the treatment on emotions



# Effect of the treatment on climate change attitudes



◀ Indices definitions

# Next steps: Experiment on Twitter Users

Select twitter users through survey platform.

Experiment 1: test whether the same treatments that induce emotions also induce people to retweet tweets expressing policy views ('real-stakes' effect of the treatments).

Experiment 2: randomly expose users to tweets on the policy views, varying the emotional content (anger, neutrality, positivity) and study which tweets get retweeted more.

In addition: check whether fact-checking alert, search for information, and malleability to framing are affected by the emotional state.

# Conclusion: Emotions matter for policy views

**Rise of emotions in the public debate**, as seen on social media and official speeches

Anger especially has taken over.

**Shifting respondents' emotional state changes their policy views.**

Negative emotions lead to more anti-immigration, anti-trade & pro-redistribution views

Positive emotions lead to less populist/anti-democratic tendencies.

On climate change: Anger mobilizes, fear paralyzes?

Are effects short-lived?

Likely yes, but is a moot point if public debate keeps fostering these emotions all the time

# THANK YOU!



SOCIAL  
ECONOMICS  
LAB



# Outline

- ▶ The Demand Side of Emotions: the Rise of the Emotional Voter
- ▶ The Supply Side of Emotions
- ▶ Experimental Effect of Emotions on Policy Views
- ▶ Positive vs. Negative Emotions
- ▶ Disentangling Negative Emotions: Anger vs. Fear
- ▶ **Appendix**

# LLM prompt to distinguish affect from cognition

You are an AI assistant tasked with classifying the given sentence/tweet.

**Rules:**

- Do not generate, infer, or suggest any responses outside the list.
- Your response must be exactly **one** of the provided answers.
- Do **not** provide explanations, justifications, or additional context.
- If the answer is unclear or ambiguous, default to **"unsure"**.

**Task:**

- **Question:** Is the following sentence / tweet cognitive (appeal to logic, facts, and rationality) or affective (appeal to feelings, values, and emotions) ?
- **Sentence:** "" + document["text"] + ""
- **Potential Answers:** - cognitive - affective - unsure
- **Your response should be only one of these words.**

# Survey A - Indices definitions (1/2)

## **Negative trade perception index**

- Trade entails winners and losers and it is impossible to compensate those who lose from it
- Trade causes unemployment
- Trade increases inequalities

## **Anti-free trade index**

- U.S. should aim to reduce trade and increase barriers to trade
- Strong trade ties are not important
- Support 60 % tariffs on China

## **Negative immigration perception index**

- Unemployed out of 100 U.S.-born
- Unemployed out of 100 legal immigrants
- Immigrant's poverty is due to lack of effort
- Immigration the US economy
- Immigration threatens the US culture

## **Anti-immigration index**

- Reduce immigration
- Support deportation
- Oppose U.S. aid for migration causes
- Support ideological screening for citizenship

# Survey A - Indices definition (2/2)

## Positive redistribution perception index

- Poverty is due to circumstances beyond one's control
- High earners pay lower tax share
- High taxes reduce inequalities

## Pro-redistribution index

- Government should reduce inequality
- Support corporate minimum tax hike
- Support top income tax hike
- Support price gouging ban

## Pro-populism index

- Strong leader is good governance
- Experts ruling is bad governance
- Democracy is bad governance
- Elections are unfair
- Politicians serve the rich/powerful

# Survey B - Indices definitions

## Climate policy views index

- Support U.S. participation in the Paris Agreement
- Support tax incentives for renewable energy projects
- Support legislation aimed at increasing the proportion of electric cars sold
- Oppose policy to expand fossil fuels in the U.S.
- Support policies that require electric utilities to produce from renewable energy, even if it costs extra for the household
- Willing to pay more to get for electricity if it comes from renewable energy sources
- Support a ban on combustion-engine cars
- Support a carbon tax with cash transfers

## Redistributive climate policy index

- Support a progressive carbon tax for high-income people only
- Support increase in funding for minorities that are disproportionately harmed by pollution

## Private action index

- Willing to reduce meat consumption
- Willing to reduce the number of flights taken
- Everyone should reduce their number of flights