

YouTube Ads and Political Speeches

Applied Micro Brown Bag

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Motivation

- During the last years: increasing concerns about the effects of social media on voters.
- Driven mainly by how it contributes to political polarization or support for populists.
- Less focus on the producer-side (content creators) in the literature.
- This project focus on individual creators (not mainstream media) that discuss politics on YouTube
- How they respond to changes in monetary incentives.

YouTubers I

- Industry is relevant: 30 billion dollars to creators in the last three years
- It is argued that famous content-creators are usually not moderate + they show a polarizing trend
- From HypeAuditor
 - 20. Philip DeFranco
 - 26. StevenCrowder
 - 29. Russell Brand
 - 33. TheYoungTurks
 - 35. Jordan B Peterson
 - 38. Ben Shapiro [4.4M suscribers. Last video: 700k views]
 - ... NYT, CBSNews

YouTubers II

- We know about media slant from mainstream media (Gentzkow and Shapiro, 2010; Groseclose and Milyo, 2005)
- Less about YouTube channels.
- Do creators change their speech when monetary incentives change?
- Attempts of regulating social media
 - US (Bipartisan initiative about algorithms)
 - China (Algorithm Law, effective March 1)
 - Argentina (last week)

Question

- YouTube Partner Program
 - Pay creators according to their views
 - Ads views determine income
 - The creator choose how many ads you see (before Dec 2020)
- A change in July, 2020, increased the potential number of ads for short videos (between 8 and 10 min).
- Did this change caused an increase in supply of extreme content?

What to expect?

- Number of ads per video could increase.
- Total income per video increase.
 - This could lead to invest more time
 - Be more responsive to views
- Opportunity cost of radicalize could increase through demonetization.

Related Literature and Potential Contributions

Effects of Social Media on Political Outcomes:

- Exposure to news on political attitudes and opinion (Levy, 2021)
- Twitter and vote to Democrats 2016 (Fujiwara et al., 2022)

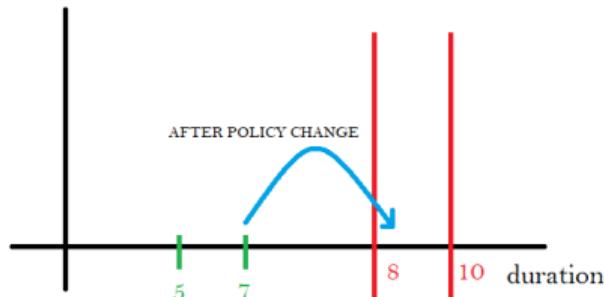
Supply:

- YouTube Ads and Content Differentiation (Kerkhof, 2020)
- Media Slant (Gentzkow and Shapiro, 2010; Groseclose and Milyo, 2005)
- Polarization in Social Media (Haroon et al., 2022)
- Political positioning in Youtube
 - Who comment? (Clark and Zaitsev, 2020)
 - Who share it? (Haroon et al., 2022)

Policy Change

- YouTube allows creators to put ads at the beginning, at the end and in the middle of the video.
- **Before July, 2020:** Ads in the middle of the video are only allowed if the video is longer than **10** minutes.
- **After July, 2020:** Ads in the middle of the video are only allowed if the video is longer than **8** minutes.
- Did the change in the feasible advertising quantity caused an increase in the supply of political extreme content in short videos?

Design



- Keep creators that usually produced content between 4 and 8.
- Compare those that increased to more than 8 (\Rightarrow and more likely to increase ads) v. those who did not.
- Duration is a choice that could be explained by other factors.
- Instrument the change with closeness to 8 before the change.

Empirical Approach

- i YouTuber, j video, t time variable.

$$Y_{ijt} = \beta_0 + \beta_1 \mathbb{1}(\Delta Sh_i > 0) \times Post_t + \gamma X_{it} + \phi_i + \phi_t + \varepsilon_{ijt} \quad (1)$$

- Instrument with closeness to 8 before the change.

$$\mathbb{1}(\Delta Sh_i > 0) Post_t = \alpha_0 + \alpha_1 Distance_i \times Post_t + \gamma X_{it} + \phi_i + \phi_t + \varepsilon_{ijt} \quad (2)$$

- $Sh_i > 0$: Share of videos above 8 minutes
- $Distance_i$: Distance of median duration of videos to the 8 minutes threshold before 2019.

Data

- Universe: 7,363 accounts with more than 10,000 subscribers (Clark and Zaitsev, 2020)
- Videos
 - Duration
 - **Captions**
 - Likes
 - Comments
 - Description

Duration with respect to thresholds

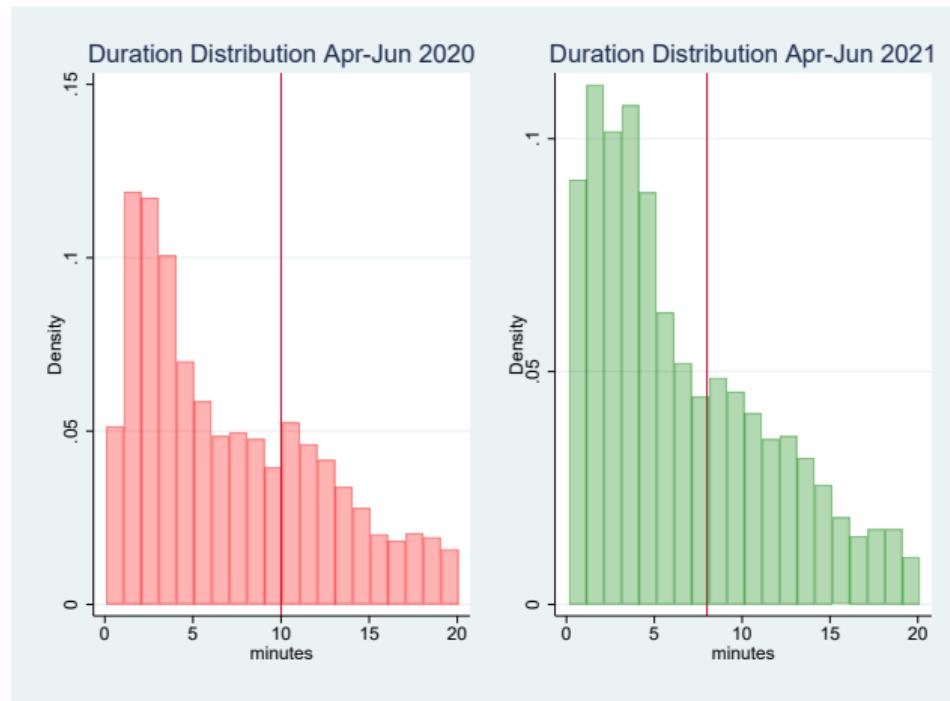


Figure: Distribution of video duration before and after

Outcome

How to measure extremism?

- Comparing with Congressional Speeches (Gentzkow and Shapiro, 2010)
- Comparing with moderate mainstream media.
- Use of angry/hateful vocabulary.
 - text2emotion: Happy, Angry, Sad, Surprise and Fear. [▶ Graphs](#)
- Clustering
 - How to define clusters?

Final Remarks

- I plan to identify some effects of increasing revenue opportunities on political speech
- Next Steps
 1. Get more data about video times and look at whether there was a change in duration.
 2. Measuring better the outcome.

Thank you!
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References I

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Duration

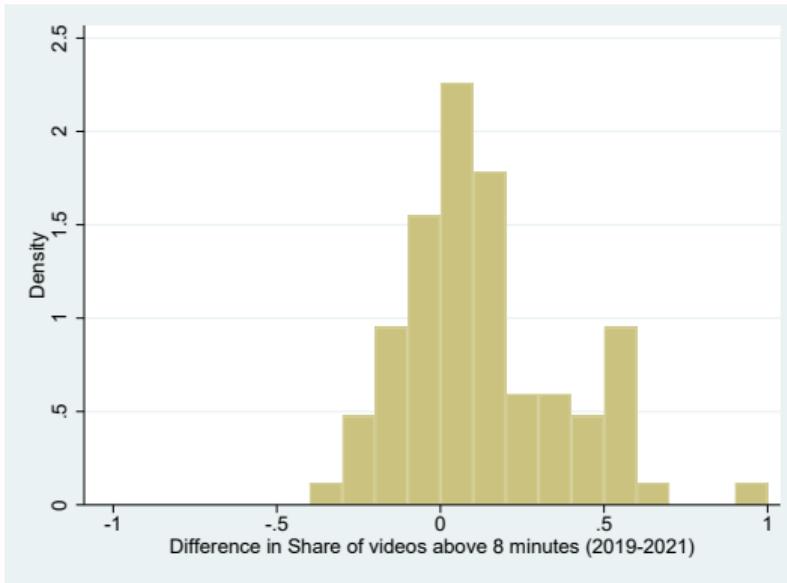
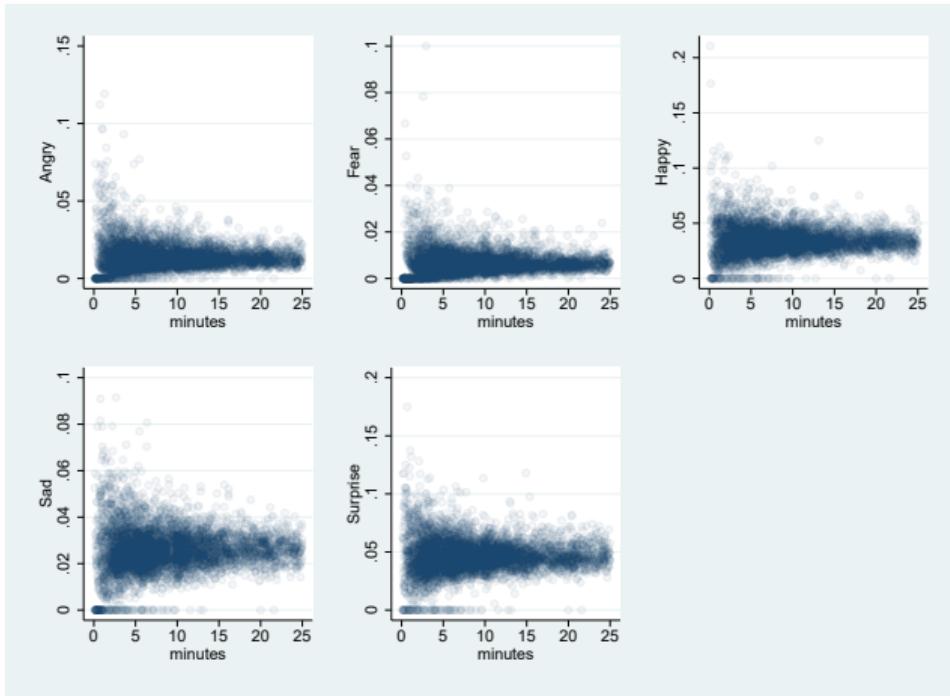


Figure: Distribution of change in share above 8

Emotion and Duration



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