Content Moderation and Migration in Social Media: Evidence from Musk's Twitter Acquisition

Iván Rendo (TSE)



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- Increased interest in online hateful/extreme/unsafe content:
 - E.g. spread of jihadism, bullying...
 - Jiménez-Durán (2022) links online hate to offline violence
 - ➡ EU Commission mandates the **Digital Services Act** (DSA)

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 - ➡ EU Commission mandates the **Digital Services Act** (DSA)
- Different complementary views on content moderation:
 - "Old Internet" Duch-Brown's perspective:
 - → Constant unsafe content across time BUT today good and bad people together
 - Lefouili & Madio (2022): migration = ↓ impact and enforcement costs
 - Anti Defamation League (ADL) viral video: trading-off moderation in Twitter and migration to other (hateful, small) environments

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Content Moderation, Content (Un)safety, Migration (to other platforms)

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- → What incentives do the platforms have to self-regulate
- → Characterize the **optimal regulation** to **minimize** unsafe content

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+ Empirical evidence through Musk's acquisition of Twitter

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Key Driving Force: **Endogenous composition** ~ migration

Users' trade-off: network size, quality vs (un)safe content

Platform's trade-off: participation vs unsafe content

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2. Policy:

- Misalignment of incentives between platform and regulator
- Imposing a minimal content moderation intensity (policy):
 - i. Large network effects: always superfluous
 - ii. Mid to small network effects: can be useful

Roadmap

- Theoretical Model
 - Characterization of the Equilibrium
 - Optimal Regulation

II. Empirical Evidence

THEORY

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Rk: I abstract of modelling the utility from creation of content

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3. Agents derive the corresponding payoffs from the composition of the social network

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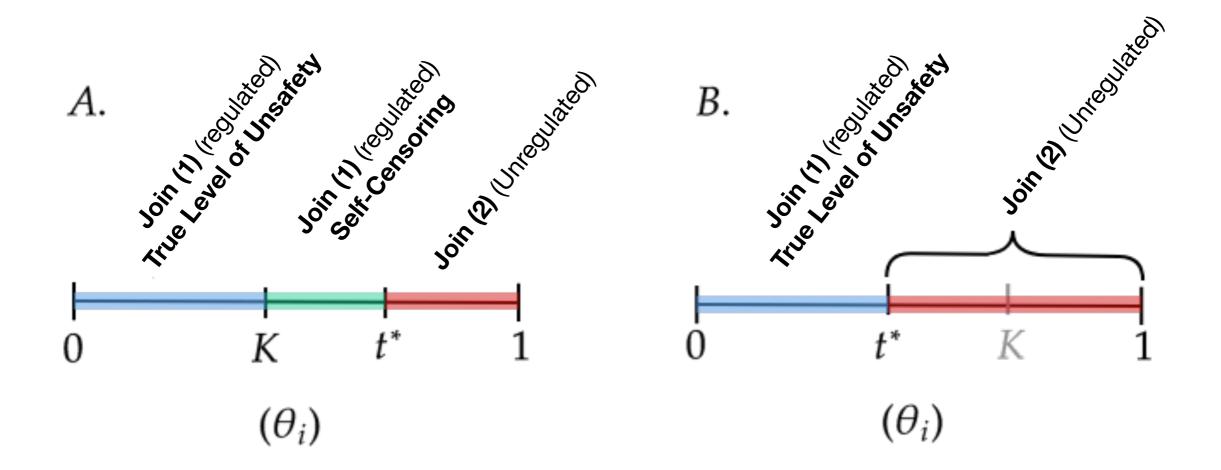
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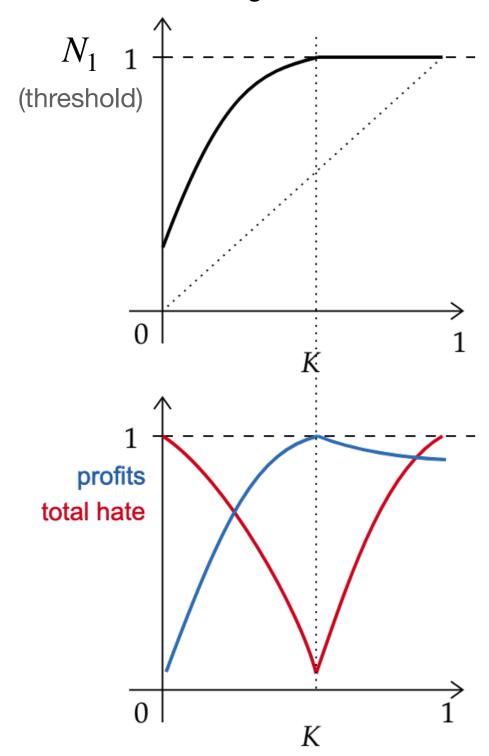
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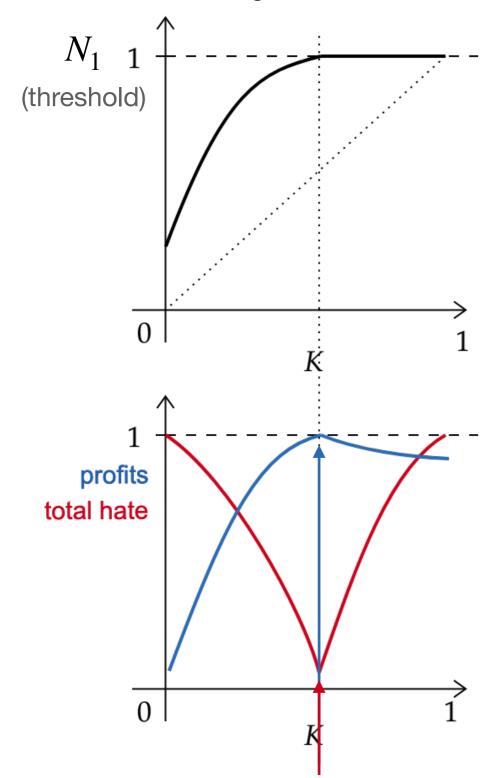
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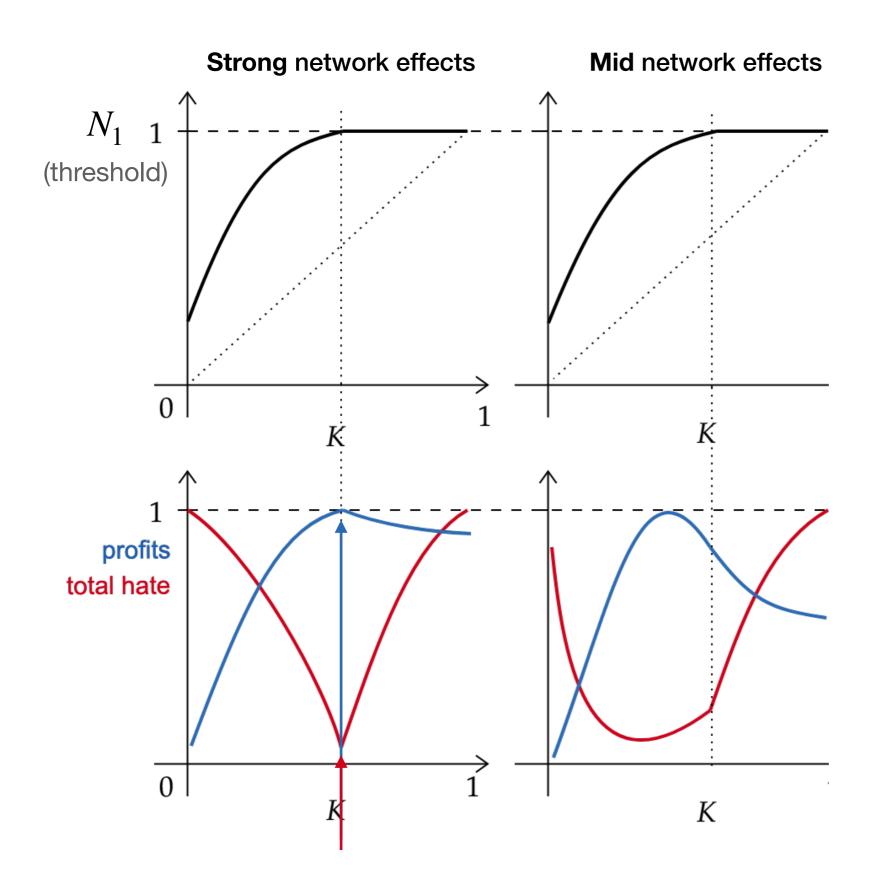


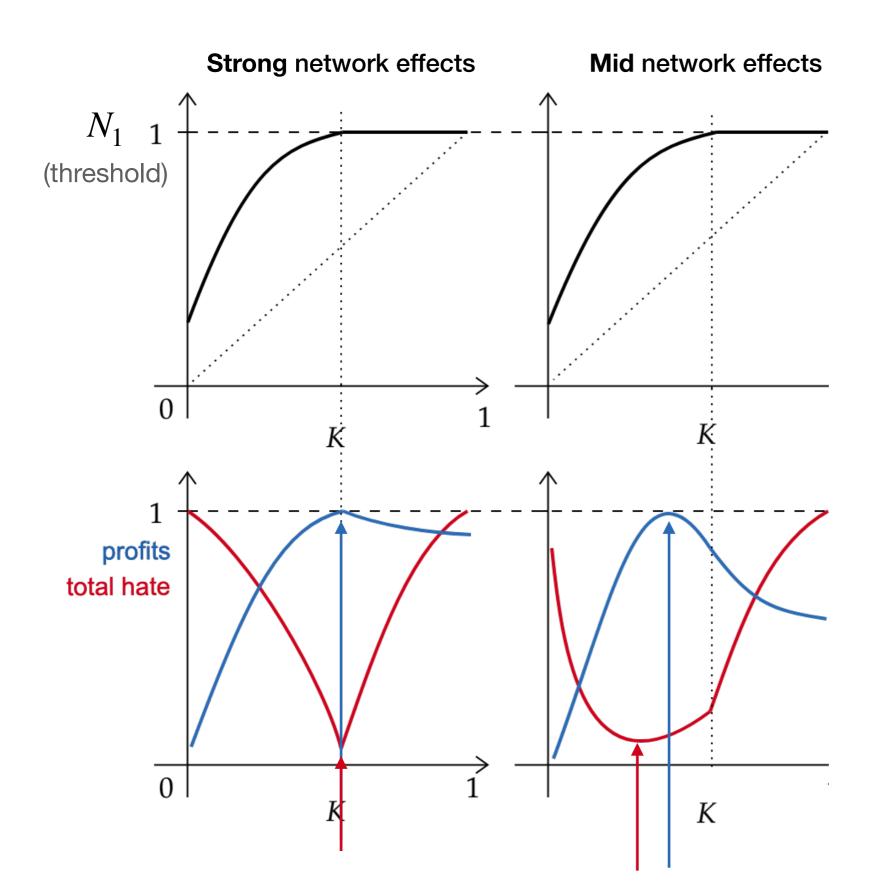
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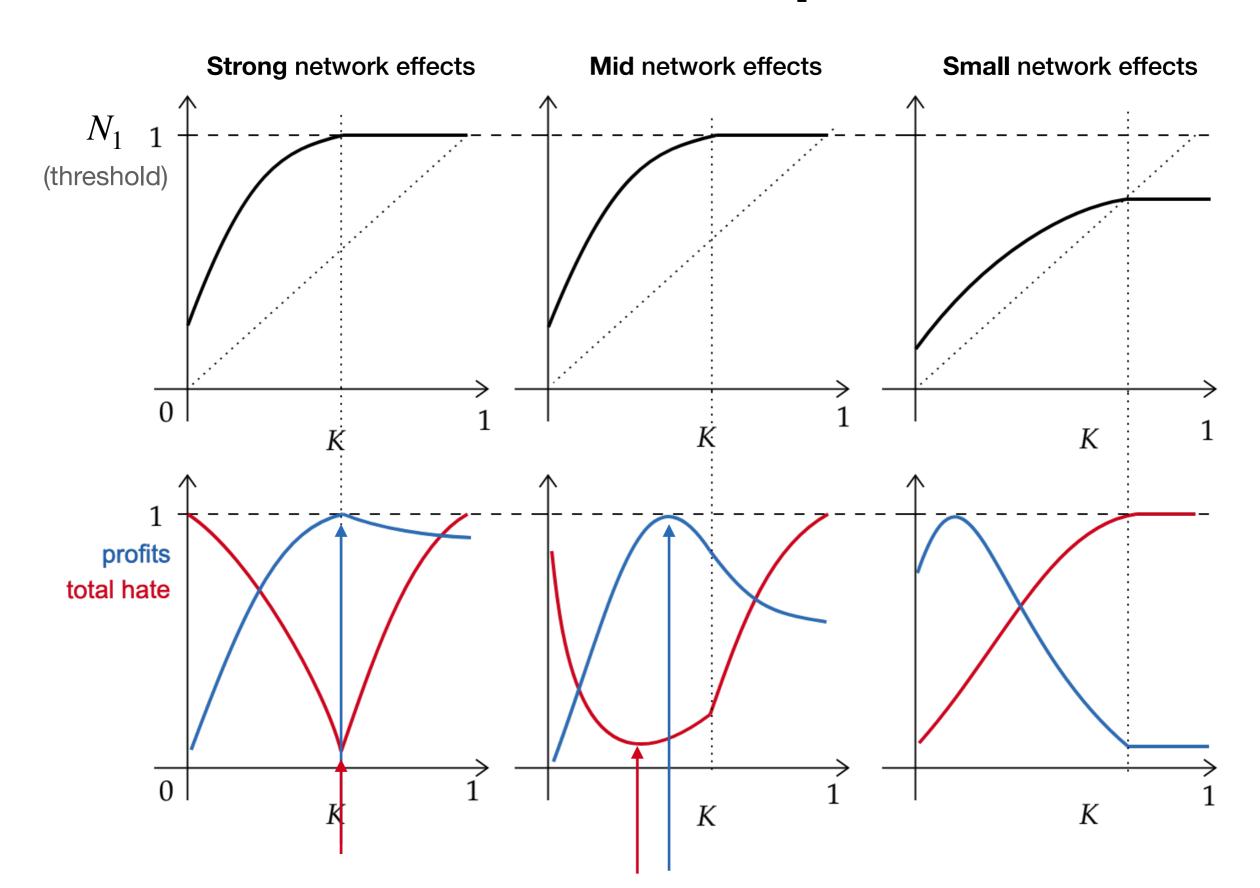


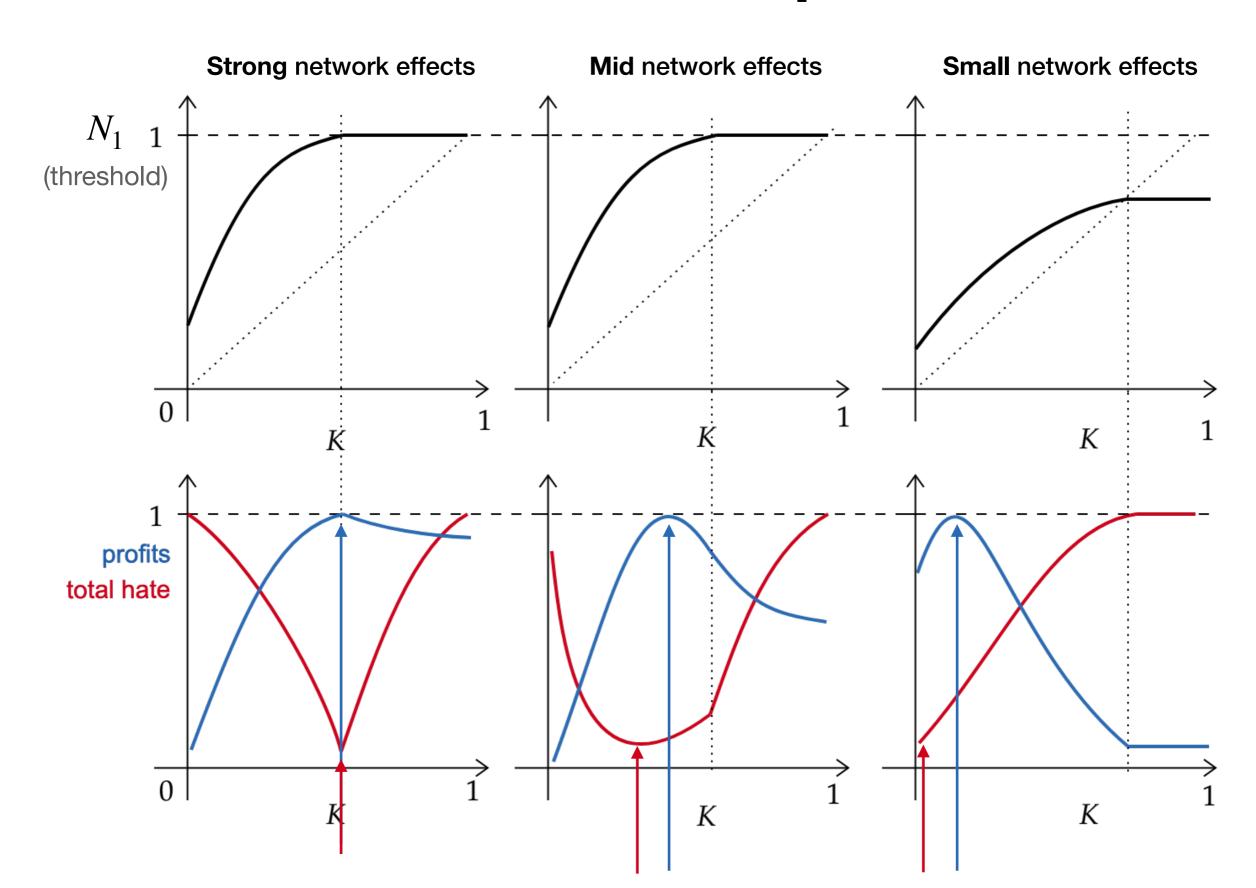
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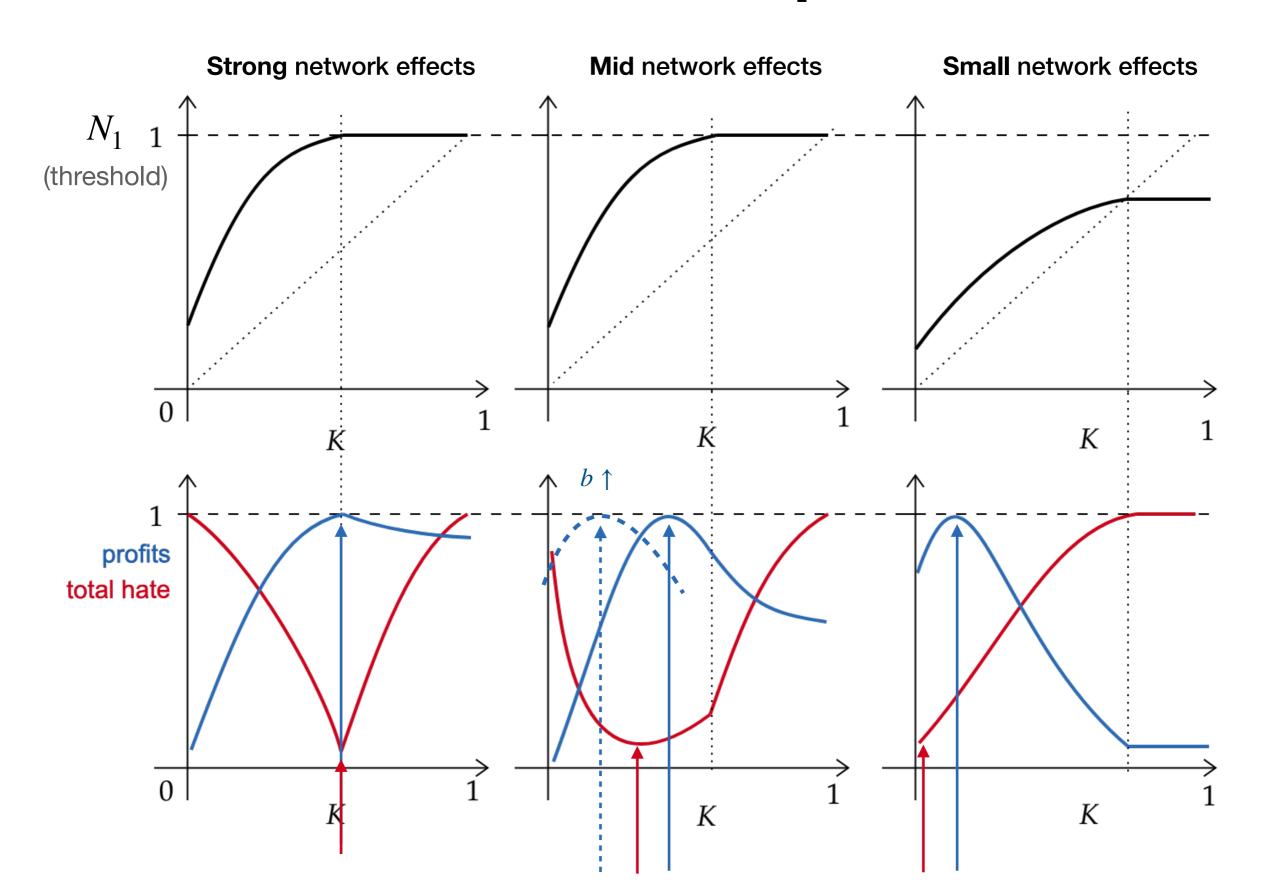




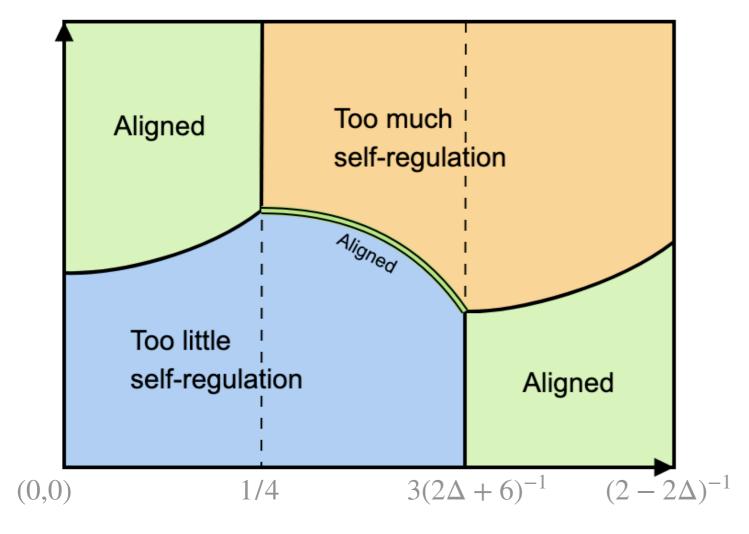






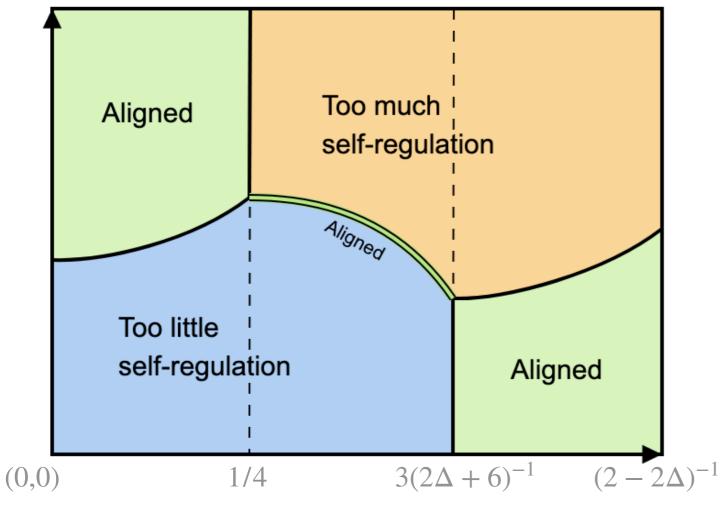


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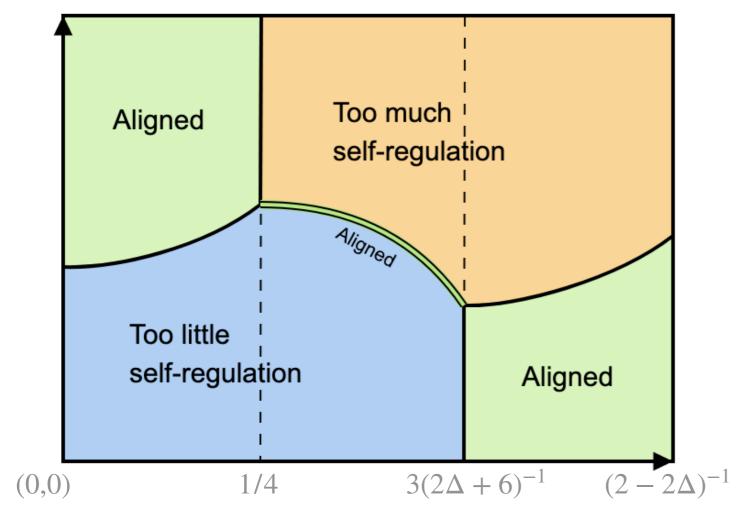
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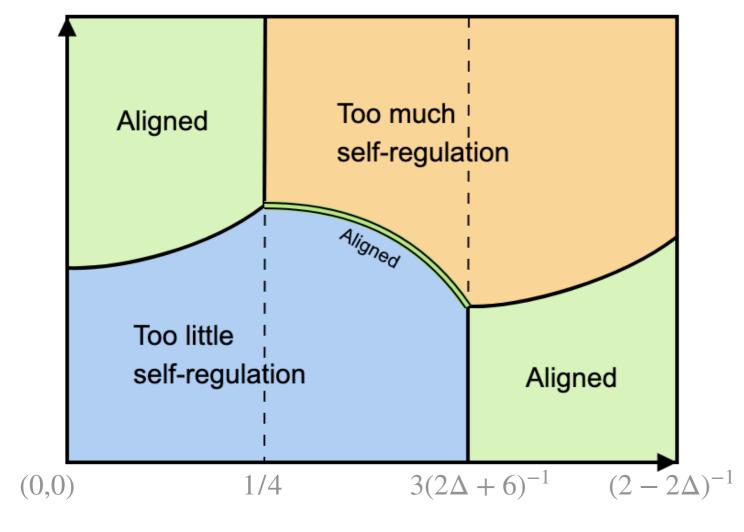
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Orange Area: the policy wouldn't bind as the minimum content imposed is higher than the optimal for the platform

(We saw this in the DSA)

EMPIRICS

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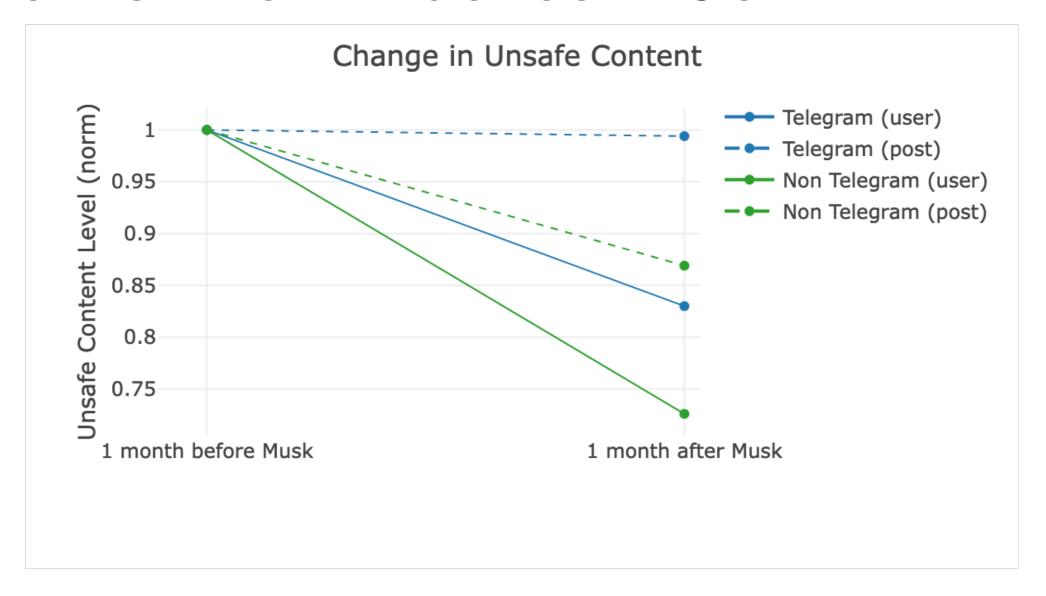
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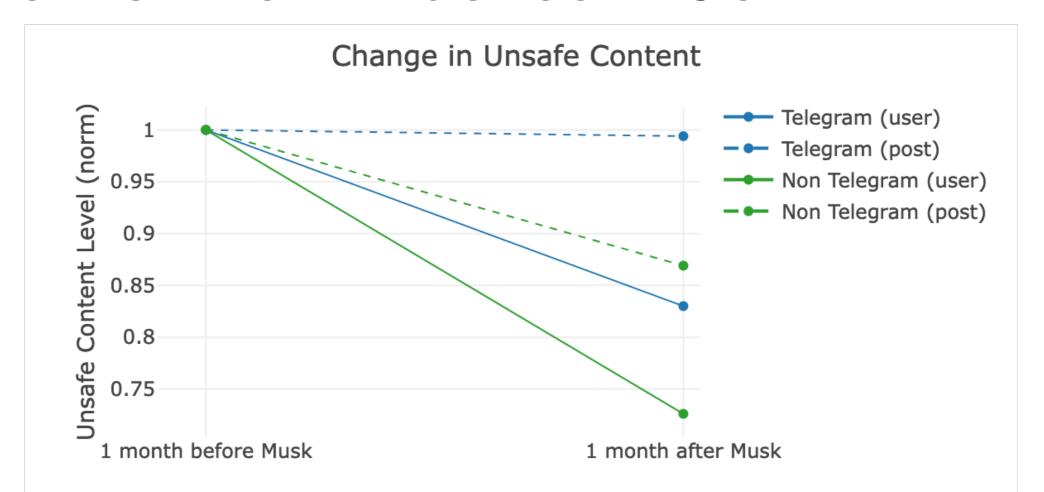
Example

In terms of *toxicity*:

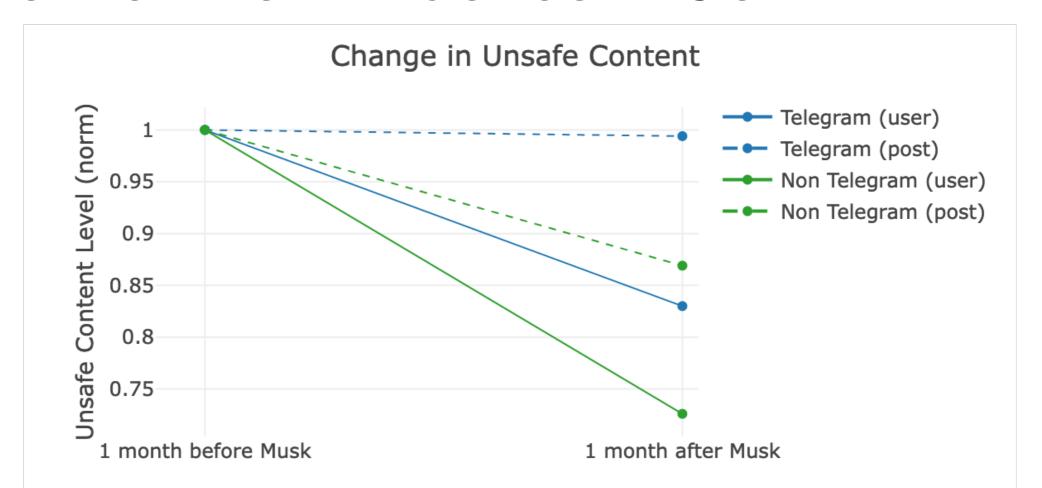
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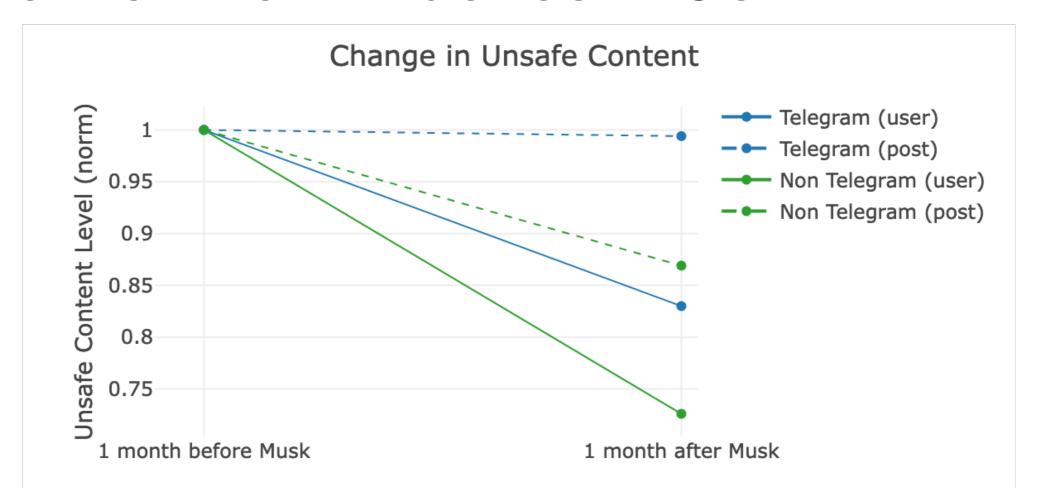




Telegram users' unsafe content descends less after Musk's acquisition



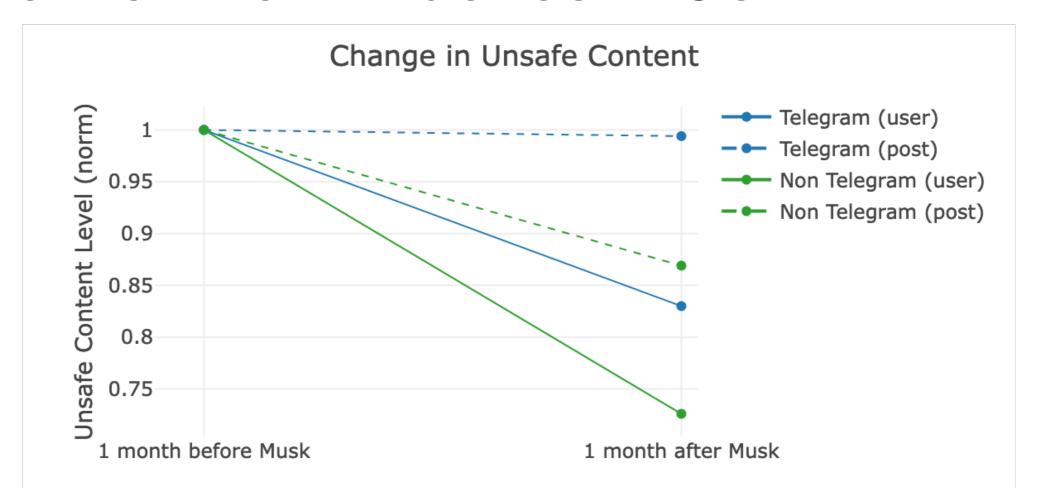
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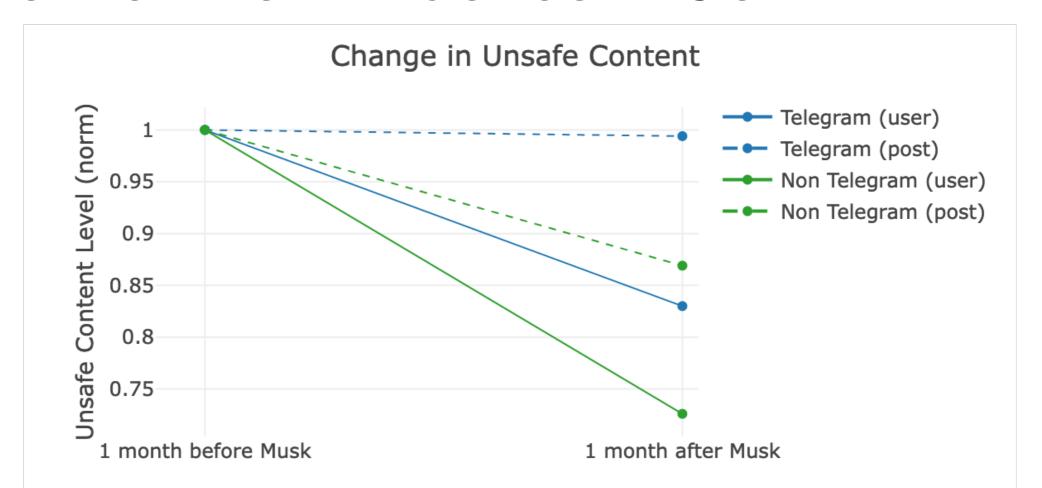
Observations:

Downwards (natural?) trend of the invasion



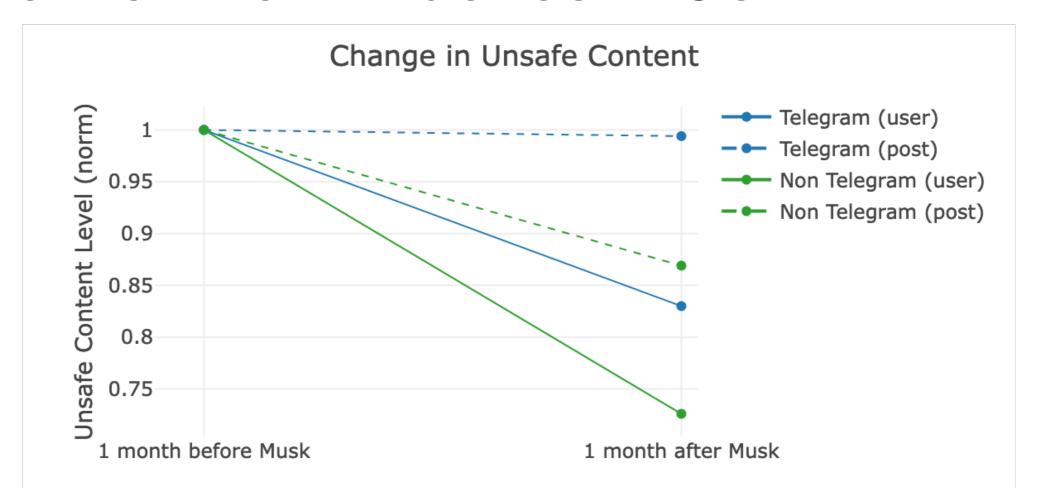
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- Downwards (natural?) trend of the invasion
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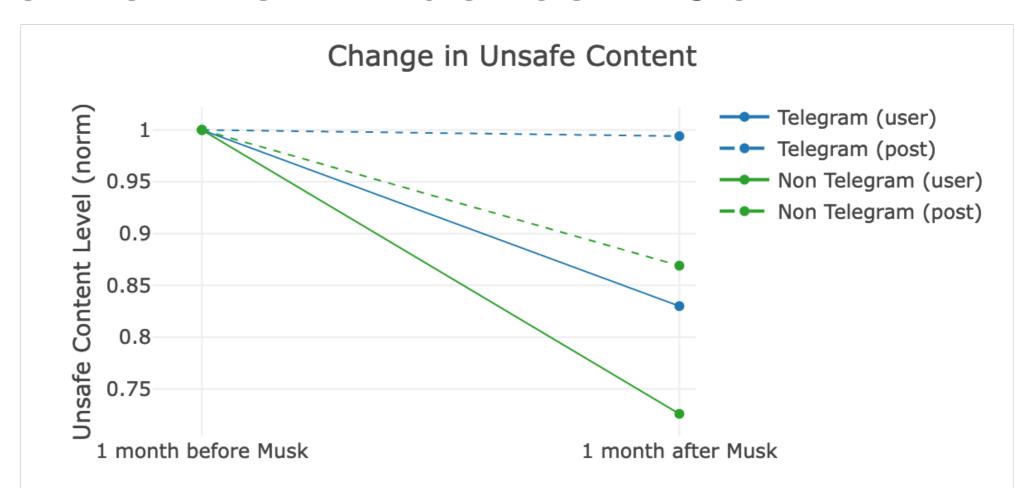
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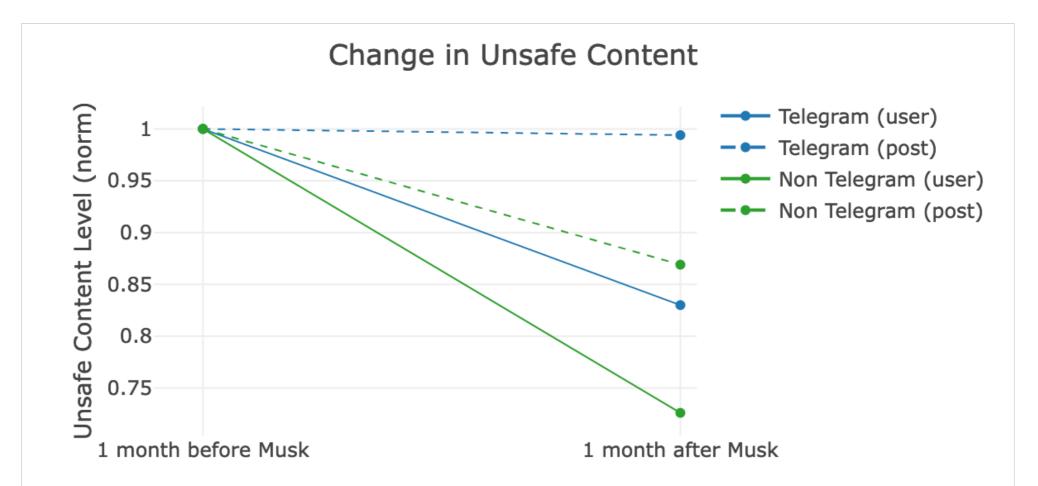
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- Large anomalous activity some specific days for non-TG users

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Difficult model to extend (low analytical tractability)

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Empirically:

Make a more suitable model (structural, with a stochastic part) Activity =\= Participation?

- + Fancy things to try:
 - Find bots? (It used to be possible before Musk)
 - Match (some) users from Telegram to Twitter

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More Important:

Merry Christmas!

Appendix

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 - Focuses in the monopolist + pricing of ads.

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Empirical Side

- Jiménez Durán (2022), Jiménez Durán, Müller & Schwarz (2022)
- Some CS Literature: Schmitz, Muric, et al. (2022 and 2023)

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 - there is a rational for stricter policy if this is the case
 - but could end up "throwing to the lions" to
 - "median" users