Online Content Regulation and Competition Policy

Imanol Ramírez.*

I. Introduction

There is increasing public pressure on internet companies to aggressively intervene with content moderation, particularly to tackle disinformation, harmful speech, copyright infringement, sexual abuse, automation and bias, terrorism and violent extremism. Events like the Russian meddling in the 2016 United States' presidential election, the genocide of Rohingya Muslims in Myanmar in 2017, and the live footage of the Christchurch terrorist attack in 2019, among others, have fueled the push for more effective online content moderation across the world.

Governments are now requiring large digital platforms, such as Facebook, Twitter and YouTube, to act further and faster with demands for increased use of technology, such as developing automated filters and algorithms, in combating perceived harms.⁵ The massive "infodemic" arising from the Covid-19 pandemic –an over-abundance of information, some accurate and some not, making it harder for people to find trustworthy sources and reliable guidance⁶ – and possible interference with the 2020 United States presidential elections are increasing the questions over the accountability of large tech platforms. This has motivated public actors to become more willing to interfere with the moderation policies of internet companies.⁷

While there are undeniably legitimate policy objectives for state intervention in online content moderation, there is the risk of an adverse effect on competition. Government regulation could serve to benefit large incumbents by raising the industries' cost of doing business, with these companies being better positioned to bear the costs. Legislators and policymakers need to be aware of the impact that increased regulation on private content moderation policies could have on competition, particularly with digital platform markets characterized by the existence of dominant firms and natural forms of market concentration. In the long run, stringent and divergent regulation across jurisdictions could help large incumbent companies cement their market position to the detriment of consumer welfare.

Section II explores the quandary of online content regulation. Section III explains how increased government intervention in online content regulation could create significant barriers to competition. Finally, section IV draws some policy conclusions and the implications for reform.

II. Content Regulation

The Internet brought a substantial improvement in global connectivity, with increased access to information and forums where ideas can be freely expressed and content can be published. Nonetheless, this connectivity also came with easier ways to access and spread illegal and harmful content since the anonymity, ease and speed of online communications permit unprecedented volume and virulence.⁸ There is mounting evidence that online actions are contributing to violence,

^{*} Imanol Ramírez is a lawyer qualified to practice in Mexico and a Senior Associate at SAI Law & Economics. Email: iramirez@llm20.law.harvard.edu

¹ See Daphne Keller, Internet Platforms: Observations on Speech, Danger, and Money, Hoover Institution, at 1, 8 (2018) https://www.hoover.org/research/internet-platforms-observations-speech-danger-and-money

² Abigail Abrams, *Here's What We Know So Far About Russia's 2016 Meddling*, Time (2019) https://time.com/5565991/russia-influence-2016-election/

³ See Paul Mozur, A Genocide Incited on Facebook, With Posts from Myanmar's Military, The New York Times (2018) https://www.nytimes.com/2018/10/15/technology/myanmar-facebook-genocide.html

⁴ Sasha Ingber, *Global Effort Begins To Stop Social Media From Spreading Terrorism*, NPR (2019) https://www.npr.org/2019/04/24/716712161/global-effort-begins-to-stop-social-media-from-spreading-terrorism. Also *see* Scott Higham and Ellen Nakashima, *Why the Islamic State Leaves Tech Companies Torn Between Free Speech and Security*, The Washington Post (2015) https://www.washingtonpost.com/world/national-security/islamic-states-embrace-of-social-media-puts-tech-companies-in-a-bind/2015/07/15/0e5624c4-169c-11e5-89f3-61410da94eb1_story.html; Eric Posner, *ISIS Gives Us No Choice but to Consider Limits on Speech*, Slate (2015) https://slate.com/news-and-politics/2015/12/isiss-online-radicalization-efforts-present-an-unprecedented-danger.html; and Drew Harwell, *Three mass shootings this year began with a hateful screed on 8chan. Its founder calls it a terrorist refuge in plain sight*, The Washington Post (2019) https://www.washingtonpost.com/technology/2019/08/04/three-mass-shootings-this-year-began-with-hateful-screed-chan-its-founder-calls-it-terrorist-refuge-plain-sight/">https://www.washingtonpost.com/technology/2019/08/04/three-mass-shootings-this-year-began-with-hateful-screed-chan-its-founder-calls-it-terrorist-refuge-plain-sight/

⁵ Daphne Keller, Internet Platforms: Observations on Speech, Danger, and Money, Hoover Institution, at 1 (2018) https://www.hoover.org/research/internet-platforms-observations-speech-danger-and-money

 $^{^6}$ World Health Organization, Novel Coronavirus(2019-nCoV) Situation Report - 13 (2020) $\underline{\text{https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200202-sitrep-13-ncov-v3.pdf}$

⁷ For instance, in the Congressional antitrust hearing of July 29, 2020, where the CEOs of Alphabet, Amazon, Apple and Facebook testified, questions about political bias in content moderation policies arose. *See* Tony Romm, *Amazon, Apple, Facebook and Google grilled on Capitol Hill over their market power*, The Washington Post (2020)

https://www.washingtonpost.com/technology/2020/07/29/apple-google-facebook-amazon-congress-hearing/; and Lauren Feiner, Big Tech testifies: Bezos promises action if investigation reveals misuse of seller data, Zuckerberg defends Instagram acquisition, CNBC (2020) https://www.cnbc.com/2020/07/29/tech-ceo-antitrust-hearing-live-updates.html

⁸ See Paul M. Barrett, Who Moderates the Social Media Giants? A Call to End Outsourcing, NYU STERN, Center for Business and Human Rights, at 10, 11 (2020)

influencing elections, spreading hateful ideologies, and threatening people's health and lives.⁹ Quick and aggressive responses to control the total volume of communications online are therefore necessary.

Large online platforms have engaged in efforts to reduce online abuse by developing advanced tools to moderate content. They have developed technology that automatically analyzes and removes content that violates their policies. These tools are complemented with trained internal teams and crowd workers who review flagged content when a more nuanced understanding of a post is necessary to take a decision. They have also made alliances with independent fact-checking organizations to help combat disinformation. Facebook even created an adjudicative body to hear some of the users' appeals to its moderation decisions. There is no perfect system or set of policies, however, since users' expectations and values vary, and mistakes are made by algorithms and human moderators alike.

For instance, as the Covid-19 pandemic continues, there has been an outbreak of misleading or false information about the virus. There are claims that the virus is a bioweapon, a product of 5G technology, or being used to re-engineer the human population. ¹⁰ In other cases, information about cures based on bleach and bananas are spread, and treatments based on alleged healing powers are sold online. ¹¹ Sometimes, this content is deliberately circulated on the Internet in order to profit from advertising, ¹² threatening the health and lives of individuals and slowing-down the nations' containment and recovery efforts.

Digital platforms have worked to stop this infodemic. They have been redirecting users from disreputable sites and prioritizing content from authoritative sources, cooperating with independent fact checkers to flag and remove disinformation, and offered free advertising to the World Health Organization and national health authorities.¹³ However, as workers remain on lock down, there is a shortage of human moderators since some content moderation cannot be performed remotely for security reasons, and thus hybrid human-computer content moderation systems remain impaired.¹⁴ Some organizations report that the platforms' responses to disinformation have slowed, and that profits are even being made from disinformation that escapes moderation efforts.¹⁵ The European Commission stated that it is closely monitoring platforms and that more information-sharing, transparency and accountability by the platforms is essential.¹⁶ These efforts are particularly necessary in encrypted messaging applications, which are at the forefront of novel digital manipulation campaigns since there is a limited understanding of covert propaganda taking place on encrypted communications due to its private nature.¹⁷

On the other side of the spectrum, however, there is an enormous amount of literature and public sentiment that believes private digital platforms are removing content based on incoherent and obscure guidelines, and thus over censoring speech. Just as there is a critical need of moderation, the danger of censorship is amplified online because online intermediaries control a vast share of communications while maintaining the power to mediate these communications. Justice Kennedy wrote for the majority of the Supreme Court of the United States that "[w]hile in the past there may have been difficulty in identifying the most important places (in a spatial sense) for the exchange of views, today the answer is clear. It is cyberspace—the 'vast democratic forums of the Internet' in general, [...] and social media in particular." As societies rely

.

https://static1.squarespace.com/static/5b6df958f8370af3217d4178/t/5ed9854bf618c710cb55be98/1591313740497/NYU+Content+Moderat ion+Report June+8+2020.pdf; and Kyle Langvardt, Regulating Online Content Moderation Langvardt, Georgetown Law Journal, Vol. 106, Issue 5, at 1359 (2018) https://www.law.georgetown.edu/georgetown-law-journal/wp-content/uploads/sites/26/2018/07/Regulating-Online-Content-Moderation.pdf

⁹ Adam Satariano, *Britain Proposes Broad New Powers to Regulate Internet Content*, The New York Times (2019) https://www.nytimes.com/2019/04/07/business/britain-internet-regulations.html

¹⁰ See OECD, Combatting COVID-19 disinformation on online platforms, at 2, 3 (2020) https://read.oecd-ilibrary.org/view/?ref=135 135214-mpe7q0bj4d&title=Combatting-COVID-19-disinformation-on-online-platforms

¹¹ See OECD, Combatting COVID-19 disinformation on online platforms, at 2, 3 (2020) https://read.oecd-ilibrary.org/view/?ref=135 135214-mpe7q0bj4d&title=Combatting-COVID-19-disinformation-on-online-platforms

¹² See Javier Espinoza and Mark Di Stefano, Fake news websites still profit from Google advertising, Financial Times https://www.ft.com/content/5f8a405c-c132-4d9b-a86f-c52884535f3e

¹³ See OECD, Combatting COVID-19 disinformation on online platforms, at 4 (2020) https://read.oecd-ilibrary.org/view/?ref=135_135214-mpe7q0bj4d&title=Combatting-COVID-19-disinformation-on-online-platforms

¹⁴ Josh Cowls, et.al., Why content moderators should be key workers: Protecting social media as critical infrastructure during COVID-19, The Alan Turing Institute https://www.turing.ac.uk/blog/why-content-moderators-should-be-key-workers; also see Open letter from content moderators re: pandemic, Foxglove (2020) https://www.foxglove.org.uk/news/open-letter-from-content-moderators-re-pandemic ¹⁵ See OECD, Combatting COVID-19 disinformation on online platforms, at 5 (2020) https://read.oecd-library.org/view/?ref=135 135214-mpe7q0bj4d&title=Combatting-COVID-19-disinformation-on-online-platforms

¹⁶ European Commission, Tackling coronavirus disinformation - Getting the facts right, Joint Communication to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions, at 8 (2020) https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020JC0008&from=EN

¹⁷ Samuel Wooley, Encrypted messaging apps are the future of propaganda, Brookings https://www.brookings.edu/techstream/encrypted-messaging-apps-are-the-future-of-propaganda/

¹⁸ See Kyle Langvardt, Regulating Online Content Moderation, Georgetown Law Journal, Vol. 106, Issue 5, at 1360 (2018) https://www.law.georgetown.edu/georgetown-law-journal/wp-content/uploads/sites/26/2018/07/Regulating-Online-Content-Moderation.pdf

¹⁹ *Packingham v. North Carolina*, 582 U.S.___, 4 – 5 (2017)

more and more on the Internet, companies who control what can be said or published online are increasingly questioned about the decisions they make, and how accountable they should be for what is said.

President Donald Trump is a main proponent of this view. With no evidence, ²⁰ he has repeatedly accused online platforms of acting deliberately biased against him, by demoting and suppressing his views and the views of conservatives. President Trump has instructed his administration to explore all regulatory and legislative solutions to protect free speech²¹ and has considered a White House-created commission that, together with other federal agencies, would examine allegations of political bias and online censorship.²² More recently, he issued an executive order to modify Section 230 of the Communications and Decency Act, a United States federal law that, with some exceptions, grants internet platforms immunity from liability for content published by third parties and for performing good faith efforts to moderate it.²³

While some are concerned with politically biased moderation decisions, others criticize the platforms for not doing enough against false information deliberately circulated online to interfere in elections. This tension between freedom of speech and reduced online harm is present in political divides and is the central conflict of online content moderation. Unfortunately, there is no perfect answer, as people's expectations and views about free expression vary enormously across the spectrum of internet users, tech company leadership, and cultures and societies as a whole.

III. Competition Barriers

Competition barriers are impediments that make market entry and expansion more difficult for firms.²⁴ High competition barriers can retard, diminish or entirely prevent the attraction, entry and expansion of rivals, which is the market based mechanism for checking market power.²⁵ Barriers to competition can arise from the market structure or industry conditions, such as costs and demand, and the behavior of incumbent firms, like entering into exclusive dealing agreements.²⁶

Laws and regulations can also create significant competition barriers. Compliance with rules may substantially increase the cost of participating in the market.²⁷ Scholars have consider regulatory or legal restrictions as some of the most substantial barriers to competition.²⁸ Incumbents firms may even lobby governments to create legal and regulatory barriers to protect their businesses.²⁹

The pressure for effective removal of illegal and harmful content online has materialized into law in several jurisdictions. In Germany, the Network Enforcement Law establishes fines up to $\mathfrak{C}5$ million for internet companies with at least 2 million users that fail to remove manifestly unlawful speech within twenty-four hours.³⁰ More recently, following a citizen consultation, the French parliament passed a law establishing fines up to $\mathfrak{C}1.25$ million for failure to comply with the obligation to take down hateful content flagged by users within twenty-four hours, and within one hour in cases concerning content flagged by authorities as child pornography and terrorist propaganda.³¹ These portions of the law, however, were struck down by the judiciary on the grounds that it unnecessarily and disproportionately infringed upon the exercise of

²⁰ In fact, a 2019 report by a Republican former senator and a law firm did not find any evidence of bias and a 2020 data-analytics report conducted on Facebook found that content from conservative news organizations dominates Facebook and often outperforms content from straightforward news organizations. See Marie C. Baca, Facebook makes small tweaks after anti-conservative-bias report. They're unlikely to make the issue go away, The Washington Post (2019) https://www.washingtonpost.com/technology/2019/08/20/facebook-makes-small-tweaks-following-anti-conservative-bias-report-theyre-unlikely-make-issue-go-away/; and Oliver Darcy, Trump says right-wing voices are being censored. The data says something else, CNN Business (2020) https://amp.cnn.com/cnn/2020/05/28/media/trump-social-media-conservative-censorship/index.html

²¹ Tony Romm, *Trump accuses social media companies of 'terrible bias' at White House summit decried by critics*, The Washington Post (2019) https://www.washingtonpost.com/technology/2019/07/11/we-will-not-let-them-get-away-with-it-trump-threatens-social-media-ahead-white-house-summit/

²² John D. Mckinnon and Alex Leary, *Trump Considers Forming Panel to Review Complaints of Online Bias*, The Wall Street Journal (2020) https://www.wsj.com/articles/trump-considers-forming-panel-to-review-complaints-of-online-bias-11590238800

²³ White House, Executive Order on Preventing Online Censorship (2020) https://www.whitehouse.gov/presidential-actions/executive-order-preventing-online-censorship/

²⁴ See OECD, Competition and Barriers to Entry, Policy Brief (2007) https://www.oecd.org/competition/mergers/37921908.pdf

²⁵ See OECD, Competition and Barriers to Entry, Policy Brief (2007) https://www.oecd.org/competition/mergers/37921908.pdf

²⁶ OECD, Competition and Barriers to Entry, Policy Brief, at 4-5 (2007) https://www.oecd.org/competition/mergers/37921908.pdf

²⁷ See Panayotis Kotsios, Regulatory Barriers to Entry in Industrial Sectors, Munich Personal RePEc Archive, at 2 (2010) https://mpra.ub.uni-muenchen.de/27976/2/MPRA paper 27976.pdf

²⁸ See Panayotis Kotsios, Regulatory Barriers to Entry in Industrial Sectors, Munich Personal RePEc Archive, at 10, 11 (2010) https://mpra.ub.uni-muenchen.de/27976/2/MPRA_paper_27976.pdf

²⁹ OECD, Competition and Barriers to Entry, Policy Brief, at 3-4 (2007) https://www.oecd.org/competition/mergers/37921908.pdf

³⁰ Network Enforcement Act (Netzdurchsetzunggesetz, NetzDG), (Federal Law Gazette I, p. 3352 ff. Valid as from 1 October 2017) https://germanlawarchive.iuscomp.org/?p=1245

³¹ Laura Kayali, *France gives final green light to law cracking down on hate speech online*, Politico (2020) https://www.politico.eu/article/france-gives-final-green-light-to-law-cracking-down-on-hate-speech-online/

freedom of speech.³² The UK went even further by proposing the creation of a new regulator with the authority to establish fines, block access to sites and establish liability to individual executives under a duty of care standard, whereby platforms will be responsible for the safety of users and to proactively prevent and tackle harm in their services.³³

In India, the regulation provides for intermediary liability subject to compliance with certain activities, such as taking down, within thirty-six hours upon obtaining knowledge of its publication, illegal content. This includes content that violates proprietary rights, is grossly harmful, harms minors, or threatens the security or sovereignty of the country.³⁴ A 2018 draft bill proposed to tighten the moderation rules by requiring platforms to remove illegal content within twenty-four hours after being notified by a court or government agency and to deploy automated tools to identify and remove unlawful content.³⁵

In Thailand, intermediaries can be held liable if they fail to delete or prevent the availability of false, partially false or distorted information that is likely to cause damage to the public or to cause public panic following government notification, giving authorities broad powers for offenses.³⁶ In Australia, platforms are required to remove content that promotes or streams abhorrent and violent material, including terrorist acts, murder, rape and torture, among others, and to refer details of the material to the federal police within a reasonable time after becoming aware of its existence.³⁷ These obligations apply to internet, content and hosting service providers, all of whom are subject to fines and imprisonment penalties in case of noncompliance.

These and other regulations across the world are creating a stringent and divergent legal environment with increased liability for firms operating in the digital landscape, including the mandatory use of technology, establishment of substantial fines, and even criminal responsibility. The immediate consequence is increasing the cost of operating in the market, as companies have to deploy the technology and resources to comply with the legal requirements and avoid liability. In some cases compliance may be very costly. For example, YouTube's Content ID, which is a technology to identify copyright infringement, cost the company \$60 million to develop.³⁸ Also, in addition to the development of artificial intelligence tools, Facebook relies on internal teams and more than 15,000 crowd workers globally for its content moderation decisions, operating with budgets in the hundreds of millions.³⁹

Moreover, some digital platform markets are also characterized by strong network effects, increasing returns to scale and scope, and an incumbency advantage flowing from data. Increased legal and regulatory barriers that raise the cost of operating in a market and accessing users in a geographic region may hinder attempts to challenge a large incumbent, as these attempts will depend on an entrant's ability to access large data sets, obtain scale, and generate its own positive network effects.

To some extent, major platforms share their moderation tools with smaller companies and cooperate in industry-wide efforts to tackle illegal and harmful content. The Global Internet Forum to Counter Terrorism, which was founded by Facebook, Microsoft, Twitter and YouTube, allows companies to automatically remove terrorist content using a unique digital signature of an image, known as hash, that is matched against a database containing previously identified illegal

³² Aurelien Breeden, *French Court Strikes Down Most of Online Hate Speech Law*, The New York Times (2020) https://www.nytimes.com/2020/06/18/world/europe/france-internet-hate-speech-regulation.html

³³ Online Harms White Paper, Presented to Parliament by the Secretary of State for Digital, Culture, Media & Sport and the Secretary of State for the Home Department by Command of Her Majesty (2019)

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/793360/Online_Harms_White_Paper.pdf

³⁴ InformationTechnology (Intermediaries guidelines) Rules, 2011, Information Technology Act, 2000 https://www.wipo.int/edocs/lexdocs/laws/en/in/in099en.pdf

³⁵ Draft The Information Technology [Intermediaries Guidelines (Amendment) Rules] 2018 https://www.meity.gov.in/writereaddata/files/Draft_Intermediary_Amendment_24122018.pdf

³⁶ Human Rights Watch, Thailand: Cyber Crime Act Tightens Internet Control, Sweeping Powers to Censor, Stifle Free Speech, Silence Critics (2016) https://www.hrw.org/news/2016/12/21/thailand-cyber-crime-act-tightens-internet-control

³⁷ Australian Government, Criminal Code Amendment (Sharing of Abhorrent Violent Material) Act 2019, Federal Register of Legislation, https://www.legislation.gov.au/Details/C2019A00038

³⁸ Daphne Keller, Internet Platforms: Observations on Speech, Danger, and Money, Hoover Institution, at 6 (2018) https://www.hoover.org/research/internet-platforms-observations-speech-danger-and-money

³⁹ Deepa Seetharaman, Facebook Throws More Money at Wiping Out Hate Speech and Bad Actors, The Washington Post (2018) https://www.wsj.com/articles/facebook-throws-more-cash-at-a-tough-problem-stamping-out-bad-content-1526393256; also *see* Charlotte Jeearchive, Facebook needs 30,000 of its own content moderators, says a new report, MIT Technology Review (2020) https://www.technologyreview.com/2020/06/08/1002894/facebook-needs-30000-of-its-own-content-moderators-says-a-new-report/

⁴⁰ The possession of large data sets allows companies to improve quality and productivity as machine learning can be applied more effectively on extensive data sets. *See* Jacques Crémer, *et.al.*, Competition Policy for the Digital Era, European Commission, Directorate-General for Competition (2019) https://ec.europa.eu/competition/publications/reports/kd0419345enn.pdf; and Luigi Zingales, *et.al.*, Stigler Committee on Digital Platforms, Final Report, George J. Stigler Center for the Study of the Economy and the State, The University of Chicago Booth School of Business (2019) https://www.publicknowledge.org/wp-content/uploads/2019/09/Stigler-Committee-on-Digital-Platforms-Final-Report.pdf

content.⁴¹ Also, Microsoft and Dartmouth College donated PhotoDNA to the National Center for Missing & Exploited Children, a hash matching technology to find and remove images of child exploitation, which is shared with smaller technology companies, developers and other organizations.⁴²

However, not all technology can be easily shared or made commercially available. Companies face the risk of being gamed by bad actors who use the information and technology to circumvent the enforcement of moderation policies. Hence, companies do not publicly reveal the details of how exactly their automated regulation systems work, so that they are not bypassed.⁴³ Furthermore, content analysis tools cannot be applied with the same reliability across different contexts since they perform best when trained to apply in a single domain. Language varies considerably across platforms, demographic groups and conversation topics, creating the need for a focus on a single domain.⁴⁴ There is also a substantial learning curve for effective content moderation, as technology companies learn by trying, failing and reiterating.⁴⁵

It is important to consider that government interventions imposing increased liability on companies' content moderation decisions could significantly raise entry or expansion barriers. Alternatively, regulation based on immunities and incentives is more protective of innovative industries, which was a factor taken into consideration by the United States Congress when passing the Communications Decency Act, and it has been vital to the expansion of the Internet and online intermediaries. Under this market-based approach, intense competition should lead to more effective moderation practices since companies will strive for consumers who are demanding higher quality.

Nonetheless, as digital markets increasingly mature, the combination of strong network effects, increasing returns to scale and scope, and the incumbency advantage arising from data could lead in some cases to unique settings with digital platform markets prone to tipping.⁴⁷ When markets tip, they create winner-takes-most or winner-takes-all environments, giving place to oligopolistic or monopolistic market structures.⁴⁸ The consequence is the creation of dominant firms and natural forms of market concentration. In these cases, it is unlikely that markets will self-correct rapidly and thus mere reliance in market forces and competition policy to achieve effective content moderation may be insufficient.

Regulation like the Network Enforcement Law in Germany address this issue by exempting companies with fewer than 2 million users while establishing significant fines for companies above that threshold that fail to remove obviously illegal speech. In this way, it takes advantage of both increased regulation on content moderation and competition policy, tackling online harms by allowing new entrants to face minimum government intervention and therefore less competition barriers. It remains to be seen, however, whether the German threshold and local regulation allow a new rival to obtain enough scale to challenge a major incumbent that is enjoying positive network effects and increasing returns to scale and scope, an incumbency advantage arising from data at a global scale with users on the tens of millions per country.⁴⁹

IV. Conclusion

As we remain physically distanced amidst the pandemic, internet services have become crucial for life, including social interaction, education and work – increasing the volume of communications and time spent online. ⁵⁰ This increase on time

⁴¹ See Global Internet Forum to Counter Terrorism: Evolving an Institution https://gifct.org/about/

⁴² See Microsoft, How Does PhotoDNA Technology work? https://www.microsoft.com/en-us/PhotoDNA/

⁴³ Shagun Jhaver, et.al. Human-Machine Collaboration for Content Regulation: The Case of Reddit Automoderator, Association for Computing Machinery, Digital Library (2019) https://dl.acm.org/doi/10.1145/3338243

⁴⁴ Natasha Duarte and Emma Llansó, Mixed Messages? The Limits of Automated Social Media Content Analysis, Center for Democracy & Technology (2017) at 3, 4 https://cdt.org/insights/mixed-messages-the-limits-of-automated-social-media-content-analysis/

⁴⁵ Monika Bickert, Defining the Boundaries of Free Speech on Social Media, The Free Speech Century, Eds. Geoffrey R. Stone and Lee C. Bollinger at 265.

⁴⁶ The legislature was concerned of cases creating disincentives for online intermediaries to expand business. Findings stated that the Internet has flourished for the benefit of all Americans with a minimum of government regulation. *See* Kate Klonick, The New Governors: The People, Rules, and Processes Governing Online Speech, Harvard Law Review (2018) at 1604-09 https://harvardlawreview.org/wp-content/uploads/2018/04/1598-1670 Online.pdf

⁴⁷ When two incompatible systems compete, there is a tendency for one system to pull away from its rivals in popularity once it has gained an initial edge. This process is known as tipping in the economic literature and results in everyone using the same system. *See* Michael L. Katz & Carl Shapiro, *Systems Competition and Network Effects*, The Journal of Economic Perspectives, Vol. 8, No. 2 (Spring 1994) at 93, 105-06 https://www.jstor.org/stable/2138538; Also *see* Luigi Zingales, *et.al.*, Stigler Committee on Digital Platforms, Final Report, George J. Stigler Center for the Study of the Economy and the State, The University of Chicago Booth School of Business (2019) at 35 https://www.publicknowledge.org/wp-content/uploads/2019/09/Stigler-Committee-on-Digital-Platforms-Final-Report.pdf

⁴⁸ *Id.* at 39; and Jason Furman, *et.al.*, Unlocking Digital Competition, Report of the Digital Competition Expert Panel (2019) at 38 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/785547/unlocking_digital_competition_furman_review_web.pdf.

⁴⁹ For instance, in 2020 Facebook had 28 million users in Germany. See J. Clement, Leading countries based on Facebook audience size as of July 2020, Statista https://www.statista.com/statistics/268136/top-15-countries-based-on-number-of-facebook-users/

⁵⁰ Alex Schultz and Jay Parikh, Keeping Our Services Stable and Reliable During the COVID-19 Outbreak, Facebook (2020) https://about.fb.com/news/2020/03/keeping-our-apps-stable-during-covid-19/

spent online has unfortunately come with an upsurge in online risks.⁵¹ Pressure for improved content moderation remains, and the need for more stringent regulation will grow more urgent among legislators and policymakers across the world, who will want to have a say in how decisions are made and pursue regulation over online speech.

Nonetheless, legislators and policymakers need to consider the effects on competition from any regulatory effort on content moderation, as entry and expansion barriers can be created in already highly concentrated market structures. Policymakers in each country face a collective action problem, whereby increased liability imposed in each jurisdiction may strengthen the market position of large incumbents operating globally by raising the costs of participating in the market for new rivals. Legislators and policymakers can work hand to hand with competition authorities and experts to take advantage of increased state regulation and market forces in order to create an adequate mix of strategies and incentives to effectively tackle illegal and harmful content online. Exempting new entrants from liability on the basis of size may be a way to move forward.

⁵¹ Internet activity for child abuse material has for instance increased and offenders are expected to be more active, as fewer moderation resources are available. *See* Jamie Grierson, *Coronavirus lockdown raises risk of online child abuse, charity says*, The Guardian (2020) https://www.theguardian.com/world/2020/apr/02/coronavirus-lockdown-raises-risk-of-online-child-abuse-charity-says