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1 Introduction

European Union (EU) policymakers are currently considering and amending a draft Digital Services Act (DSA)¹ that is part of an ambitious package for regulating digital services. The DSA addresses the concerns raised by the content and behaviour of users on digital services, while the other part of the package, the Digital Markets Act (DMA) deals with the competition concerns raised by digital gatekeepers' presence and behaviour in markets.² According to the explanatory note on the European Commission's proposal, the DSA aims to "ensure the best conditions for the provision of innovative digital services in the internal market, to contribute to online safety and the protection of fundamental rights". It will clarify and update the existing liability rules for online intermediaries to encourage all digital services to take steps to prevent harm from illegal content and will institute due diligence obligations for online intermediary services. A draft Online Safety Bill³ has also been proposed in the United Kingdom with a similar aim of preventing harm from the dissemination of illegal and harmful content, though with a somewhat different approach.

These initiatives take as a point of departure that there is a relationship between the size of a service and the potential for harm. The DSA would create a specific category of digital services called "very large online platforms" (VLOPs), defined on the basis of reach determined by the number of active monthly recipients, for which there are additional obligations due to the "systemic risk" of "societal and economic harm" they pose (DSA, recitals 52-56; Sec. 4). This categorisation also serves a jurisdictional purpose as such platforms would be subject to additional supervision, investigation, enforcement and monitoring by the European Commission (DSA, Sec. 3). The UK's draft Bill also sets up a category of platforms that would have greater obligations because of the expected greater risk of harm due to their size, determined by number of users, and functionalities. But what exactly is the harm in largeness and how systemic is size?

This Issue Paper examines this question from the perspective of social and political theory. It aims to contribute to debates about the governance of digital services and policy aimed at preventing harms associated with the circulation of content. The DSA also covers issues of fraud and counterfeit, but these are left out of the scope of this paper. The greater potential for systemic risk to wider society from the circulation of illegal and harmful content than from such malicious consumer practices is reflected in the categories for system risk assessment in the DSA. This Issue Paper makes some recommendations for those amending and debating the draft Act to consider; however, it primarily raises points relevant for the eventual implementation of systemic risk assessments and any guidance that might be given.

After reviewing perspectives on size related to market dominance in section two, this paper returns to the roots of the harm principle as a justification for policy intervention. It then describes the concept of public harms and reveals the accumulative nature of some harms, especially societal ones. It examines the relationship between harm and benefit and the implications of the greater moral significance of harm. This is followed by a discussion of the positive obligations on states arising from fundamental rights and the harm of omission if these obligations are not fulfilled. The DSA's approach to harm is a risk-based one that **connects largeness with systemic risk** in three area of potential harm. Section four, therefore examines the concept of systemic risk, drawing on financial sector regulation, where it originated, and then identifies two potential gaps in its application in the DSA. The fifth section the discusses the three categories of risk listed in the DSA

¹ Proposal of the European Commission of 15 December 2020 for a Regulation of the European Parliament and of the Council on a Single Market For Digital Services (Digital Services Act) and amending Directive 2000/31, COM(2020) 825. This proposal will henceforth be referred to only as "the DSA" in this paper for ease of reading, but readers should be aware that it remained in draft form at the time of writing.

² Proposal of the European Commission of 15 December 2020 for a Regulation of the European Parliament and of the Council on contestable and fair markets in the digital sector (Digital Markets Act), COM(2020) 842.

³ Draft Online Safety Bill of 12 May 2021 of the UK Government https://www.gov.uk/government/publications/draft-online-safety-bill



as well as an additional category of risk, media plurality. The final section elaborates the recommendations and points for consideration.

Key messages:

- Systemic risk to society from online platforms is due to the **potential for 'public harms'**, which are harms to public institutions and processes, even essential services.
- Systemic risk to society from online platforms is also due to the potential for the **accumulation of minor harms** resulting in degradation of the social environment.
- Risk to Member State level systems should be accounted for as well as EU level, perhaps through a mechanism through which national authorities can flag platforms that might not meet the EU-level active user thresholds to be considered for VLOP designation.
- Some measure of interconnectedness should be another trigger for designation
 of VLOPs in addition to user-base defined reach due to the interlinkages inherent in
 the notion of systemic risk, such as potential for accumulation of harms across services
 and dependencies of public institutions or processes.
- Media pluralism should be a distinct risk category in which systemic risk is assessed to capture exposure diversity and internal plurality, considering the impact of content moderation, prioritisation and findability measures, and chilling user behaviour.
- For **risk assessments should be open and participatory with feedback loops facilitating iterative guidance** to be effective and point to means of mitigation. They should account for how a platform interacts with the wider social environment and with other services, and not be only internal to individual platform ecosystems.



2 Perspectives on market size and dominance

In the realm of economic regulation and competition policy there are well developed theories of harm linked to market dominance and abuse of market power that justify intervention when companies are problematically large or would be if a merger or acquisition takes place. As competition policy has been applied in the last several decades, largeness is not assumed to automatically be a problem and the potential for harm to consumer welfare is assessed, traditionally in terms of price and choice. Some scholars and practitioners of competition policy have widened these considerations of welfare to include issues related to control and choice over privacy protection, which is a fundamental rights concern and not only a matter of quality of service (Crémer et al., 2019; Furman et al., 2019; Just, 2018), and wider societal concerns such as monopsony in labour markets and impacts on innovation and media plurality (Australian Competition and Consumer Commission, 2019; Caves & Singer, 2018; Crémer et al., 2019). They have identified a variety of harms to individuals and society that might arise from the size of digital service providers in the market. Those in what Kovacic describes as the 'traditional' anti-trust camp oppose such expansion of the consumer welfare concept (Kovacic, 2021; see e.g., Wright et al., 2019), whereas others argue that the size of firms can in itself be a problem worthy of intervention (Khan, 2016; Wu, 2018). If the spread of digital service, particularly online platforms, have pushed competition authorities and economic regulators to think more widely about consumer welfare, and perhaps even consider consequences for citizen wellbeing (Broughton Micova & Jacques, 2020; van Dijck et al., 2019), it is a welcome development, but still insufficient to deal with economic and societal harm.

Looking at the connection between harm and size purely from a market perspective is inherently problematic because, of course, it is not the job of markets to protect privacy, family life, expression, public health or democracy. A recent attempt by the UK regulator Ofcom to map market failures to online harms identified five types of market failure generated by online services, each of which it found to be the source of or exacerbating all the nine different types of harm to consumers and society for which it found evidence (Ofcom, 2019). They listed market power, barriers to switching, imperfect information, behavioural biases, and negative externalities, not all of which are a related to the size of any given firm. They also may only 'exacerbate' harms in what Ofcom rightly acknowledges is a complex relationship, making it difficult to distinguish harms relationship to market failures from their relationship with the general functioning of that market or the business practices that enable growth. One confronts similar limitations as for relying upon market failure as a justification for public service media. Some would even argue that it is the marketisation and commodification of communication with the capitalist system itself that contributes to harm (e.g., Fuchs, 2021). The competition perspective has produced a number of reports that crucially highlight problems stemming from the concentrations of market power that may limit the autonomy of consumers (especially in relation to privacy), challenge the sustainability of the media necessary for expression and healthy democracy, and stifle innovation (Australian Competition and Consumer Commission, 2019; Competition & Markets Authority (CMA), 2020; Crémer et al., 2019; Furman et al., 2019). However, the poor functioning of markets and share of individual firms within them is not likely to be precise enough or have sufficient normative underpinnings.

Understanding the link between largeness and harm inherently requires not just looking at firm behaviour but delving more deeply into how digital services are used. Moore and Tambini (2018) introduce a broad concept of *dominance*, marrying the competition economics understanding with the intermediation and gatekeeping of information, ubiquity of use and dependency. The contributors to Moore and Tambini's edited volume raise concerns about platform dominance in the circulation of symbolic forms and capacity to shape desires, and the impact of dominant platforms on speech norms, political debate and democratic processes. In a recent compilation of evidence on the effects of social media on democracy, authors point to the pervasiveness of such services and the principal role of automation and sophisticated algorithms (Persily & Tucker, 2020). At stake is the extent to which services have shaped or even become our public spaces in which political and societal debate



takes place (van Dijck & Poell, 2015). The European Commission's impact assessment for the DSA stated in its problem definition that very large platforms become "into *de facto* public spaces for businesses to find consumers, for authorities, civil society or politicians to connect with citizens and for individuals to receive and impart information" (European Commission, 2020, p. 9 italics in original). For this reason a CERRE report right before the publication of the DSA argued for a category of public space content-sharing platforms to be subject to greater levels of procedural accountability (Broughton Micova & de Streel, 2020). While the link between the number of users on a digital service and the potential frequency of contact with harmful content may seem obvious, the link between largeness and the publicness of their function is more complex.

3 The harm principle as justification for intervention and regulation

The harm principle dates back to John Stuart Mill's essay On Liberty, which aimed to set limits on government action. He was primarily concerned with the individual, arguing "that the only purpose for which power can be rightfully exercised over any member of a civilised community, against his will, is to prevent harm to others" (Mill, 2009, p. 18). Mill was primarily concerned with the constraints on individual liberty resulting from the social norms and conformity of the Victorian society. He was attuned to the potential for local control through social contexts, or 'intermediate groups' such as religious institutions or cultural groups, and saw state power as an enlightened check on this (Levy, 2014). He looked to the state to prevent harm to the liberty of individuals from the social tyranny of others.

However, he acknowledged a kind of societal interest or in his words "general interest of mankind" in tolerating the harm to the losers inflicted by someone's success in fair competition within a profession, market or contest (Mill, 2009, pp. 160–161). Mill clearly stated that "the principle of individual liberty is not involved in the doctrine of Free Trade, so neither is it in most of the questions which arise respecting the limits of that doctrine" and that liberty in trade may be legitimately controlled to protect the public and individuals (Mill, 2009, p. 115). Nevertheless, this acceptance of competition-related harms, if the competition is fair, allowed the principle to make two important leaps: from harm as personal injury (physical or defamatory) to economic harm and from the individual to the corporation (Epstein, 1995). The transfer of the liberty of individuals that may be harmed by society to the freedom of firms in market that may be harmed by the behaviour of other firms emerged through several key cases in the UK and the US in the late 1800s and was eventually solidified in the US's Sherman Act, which later served as a model for competition policy in other jurisdictions as well (ibid.).

The harm principle limits of ex-post intervention by government to the prevention of harm. Taken back to its beginnings in Mill's work, however, it cannot be separated from the understanding that harm can come from the collective power of elites or from social pressures in a social context (or market).

3.1 Accumulative and public harms

Feinberg (1973, 1987) made a distinction between private harms, those of personal injury or economic loss, and public harms. His "public harm principle" justified restrictions or prohibitions "to prevent impairment of institutional practices and regulatory systems that are in the public interest" (Feinberg, 1973, p. 25). This justifies the criminalisation of acts such a tax evasion, but also ex-ante regulations aimed at protecting public institutions and essential services, such as restrictions on which professions can strike or who can serve in the military. Feinberg's concept seemed developed out of concern about the health of public institutions and the public interest. Others took it further to elaborate a notion of environmentally-mediated harms stemming from the degradation of the social environment, which have been particularly applied to hate speech (Cohen, 1993; Simpson, 2019). Individual acts, such as the expression of hate speech, may not inflict harm on a specific



individual, but can serve to condition a social environment that foments discrimination or violence against certain groups.

Harms can therefore be collective, to the public, via injury to institutions or the social environment, for example through damage to election integrity or faith in the judiciary. They can also be cumulative, contributed to by multiple minor injuries. In an effort to deal with the problem that counting too mild a harm will allow too much interference but only counting the extreme will not protect people enough, Kernohan (1993) suggests that some harms have a structure by which they are not harmful individually, but are so in accumulation. This is most easily illustrated in his example of multiple car drivers, who may not do much individually, but the cumulative effect of them all together causes highly harmful pollution are harmful. Pollution and similar environmental damage are clearly the kind of accumulative public harms that should be considered for policy intervention (Feinberg, 1987). Kernohan also lists content and speech-related ones that the DSA aims to address such as public opinion, ostracism, harassing environments and pornography, and argues that these require political intervention. In relation to online platforms, intervention could be justified if they enable accumulation to the extent that harms become public or are public due to their impact on public institutions or systems.

3.2 Harm in relation to benefit

Just as harms can be used to justify certain interventions and thus policy, benefits can be used to inform regulation that aims to produce certain benefits. However, the relationship between harms and benefits is not straightforward. Shiffrin (2012) cites as problematic the tendency of models of harm to present harm as symmetrical to benefits because they fail to consider at least two distinct asymmetries stemming from the fact that harms have special moral significance (Hanser, 2013). Firstly, even when harms and benefits are comparably sized, the reasons to act brought about by harm are stronger than those for benefits by way of refraining from inflicting harm or preventing it as opposed to facilitating a benefit or preventing its removal if already in place (Shiffrin, 2012, p. 362). Secondly, it is generally accepted that it is permissible to admit some small level of harm in order to prevent a greater harm, but not to harm in order to bestow a greater benefit (a *pure* benefit being different from the benefit of removing harm). These asymmetries point to the moral superiority of harm and harm prevention, so benefits are still morally desirable and should be sought out in regulation, but not at the risk of potential harms.

Many of the features of digital services that enable great benefits can also be used to inflict harm. For example, 'nudges' are conceived of as an intentional alteration of another person's decision-making context to influence an outcome that can be used by digital services to benefit people, such as nudging them to save money or eat healthier (Thaler & Sunstein, 2008). However, these nudges can also be used for harmful purposes such as encouraging gambling or certain behaviour in the context of political campaigns. The fine line between beneficial and harmful nudging is not so much whether or not the purpose stems from some public interest policy objectives but whether the nudging threatens individuals' autonomy by covertly manipulating them into a particular action. There may be potential for beneficial nudging that increases with the size of the platform's user base, not unlike the reach of public service announcements on broadcast media. The business models of many platforms depend on maintaining user attention and engagement, arguably through a form of nudging as well, and platform may be generating income through others using their services to nudge for harmful purposes. With any feature or functionality, whether or not the service provider bears any of the risk that it will result in harm rather than benefit will depend on its business model and the role that feature plays in it.

There has been evidence of benefit from online platforms, particularly ones for social networking and content sharing, in the form of increased democratic participation (e.g. Ricke, 2014; Tully, 2014) as a result of their communicative nature and their capacity to reach wide audiences. This is tempered by evidence that effective democratic participation is also harmed by the persistence of echo chambers (Barberá, 2020), the stifling or discouraging effects of hate speech and



disinformation (Tully, 2014), and manipulative political advertising (Fowler et al., 2020). The relationship between harms and benefits in this area are inseparable, not conceptually but practically. On the one hand, some benefits, such as improved democratic participation, cannot be garnered if the harms are not mitigated. On the other hand, just as many of the benefits to the wider society do not directly result in value for platform service providers, the costs of harms are also not likely to be born by the service providers, which affects the incentives around the risk that a benefit might be outweighed by a harm.

3.3 Positive obligations from fundamental rights

Fundamental rights in the EU are set out in the European Charter of Fundamental Rights. The Charter incorporates and emphasises those rights and freedoms articulated in the European Convention of Human Rights, to which each of the Member States have committed. A significant body of work has established that fundamental rights result not only in negative obligations on states not to impinge on them, but also positive obligations on them to create enabling conditions for their exercise (Beijer, 2015; Mowbray, 2004; Stoyanova, 2018). All rights, not just social ones, can create obligations to respect, protect and fulfil that require investment in service provision and enabling environments (Bílková, 2020). The rights of the child, for example imply not only protection against physical, emotional or mental harm, but also ensuring the conditions for well-being, including care, and enabling them to express themselves freely (see Stalford, 2012). The civic rights to free expression and to access to information have been classified as positive freedoms that states should enable the practice of and not just avoid impinging (Kenyon, 2014a, 2021). This rationale underpins the media welfare state of the Nordic countries (Syvertsen et al., 2014), and justifies state investment in public service media and media in minority languages (Broughton Micova, 2020; Kenyon, 2014b). In order to respect and protect its citizens' rights to freedom of expression it has an obligation, not only to avoid silencing them, but also to enable their expression through a pluralistic media environment and arguably public service content.

In the context of the positive obligations stemming from fundamental rights, the potential harm is one of omission (Stoyanova, 2018). Rather than harm arising from an act, a harm may arise from the lack fulfilment of the obligations. Omission is often the cause of the public harms described above. From this perspective, at stake would be the extent to which online platforms undermine or contribute to the states' fulfilment of its positive obligations.

3.4 Summary

From the literature reviewed here the following points can be drawn:

- Policy intervention can be justified in order to prevent harm, which is a morally superior aim than achieving benefit, and harm can come from the constraints of a social context or group.
- Harm can be public, namely if they affect institutions that serve the public or systems upon which the wider public depends.
- Public harm can also happen when many minor harms, or even individually non-harmful acts, accumulate into serious harm to the social (or physical) environment.
- Fundamental rights engender positive obligations on states; therefore, citizens can be harmed by obstruction of their states' fulfilment of those obligations.

How can these conclusions contribute to understanding the potential for harm from online platforms and the concept of largeness in relation to systemic risk in the context of the DSA? Firstly, the extent to which they are public is important, but this is not only a matter of their reach to individuals. It is also, or arguably more so, the extent to which any harms associated with them affect public institutions and systems upon which the functioning of society depends, or the potential for harms



to accumulate to a degree that they affect the wider social environment. Secondly, their systemic nature can be seen in the ways that they are embedded in societal systems such that they can affect states' abilities to fulfil obligations towards their citizens or that they create or enable intermediary groups or communities that define the social contexts of individuals (whether or not they are recipients themselves). Thirdly, that while there can be benefit from the large, systemic nature of platforms, the risk of harm in the systems, which is likely not to be borne by them, hold a higher moral imperative.

4 Systemic risk of harm

The concept of systemic risk has been imported from the financial sector. Even in the financial sector, it is not solely market risk nor is it limited to concerns about competition. Though surveys of the concept's use in this sector have produced a number of variations on its definition (Schwarcz, 2008; Smaga, 2014), there are common elements that constitute its key features. As Schwarcz found, common across definitions was the expectation of a trigger event and a *chain* of consequences across institutions or markets (Schwarcz, 2008). Others later elaborate this as a "contagion effect", or spreading of any shock, that distinguishes systemic risk from the idiosyncratic risk of individual institutions (Xavier Freixas et al., 2015, p. 14). Likened to a domino effect, it reflects the probability that instability of a given institution(s), for instance a firm or group holding, will spread to other parts of the system, and "thus understood as the transmission of systemic risk through various channels" (Smaga, 2014, p. 11). The connections among actors in the system is therefore crucial.

Consideration of systemic risk, therefore, is not a matter solely for an individual firm. In this context it is true that size matters but it is the "sheer size of exposure" to instability, which can be of a single firm or can be multiple firms exhibiting the same risky behaviour (Schwarcz, 2008, p. 203). Multiple small service providers producing the same risk of contagion to other parts of the system could therefore be large enough to matter. Theoretically, a relatively small actor playing a critical role in the system could also present a sizable exposure to risk if a large number of other players depend on it, for example in a gatekeeping role, such as one in control of a unique process or resources, or if it created a high degree of exposure to instability within a smaller system that was part of a larger system.

The concept of systemic risk is more about the vulnerabilities of a system than of any given service provider and directs us to pay attention to interconnections and dependencies. Also inherent in the concept is that the risk in question must result in negative consequences for the "real economy" or households (Xavier Freixas et al., 2015). When the effects of a trigger or shock is not felt in the daily lives of people then the system has mitigated the risk, even if there are negative effects for the companies involved. A crucial step is therefore in establishing the boundaries of the system and where risk of harm will move from companies to the public.

4.1 Systemic risk in banking

In the EU's 2013 Regulation that empowered the European Central Bank (ECB) in specific ways to attempt to deal with systemic risk the system in scope is "the financial system within the Union and each Member State" (Reg. 1025/2013 Art. 1). This Regulation recognises systemic risk at the level of the Member State and at the EU level and that risk at the smaller level affects the larger level. An institution can be designated 'significant', which is the Regulation's equivalent to the DSA's VLOP designation, based on EU level exposure or Member State exposure, or on its cross-border presence. The thresholds are assets over €30 billion, a greater than 20% ratio of total assets over the GDP of the participating Member State of establishment, or significant cross-border assets or liabilities, and national authorities can notify the ECB of institutions outside these thresholds that nevertheless are of significant relevance to the domestic economy (Reg. 1024/2013 Art.6).



In the financial sector the systems that may be at risk are clearly defined and their relationship is recognised. Member States' authorities can ask the EU level authority, the ECB, to essentially assume jurisdiction over institutions that pose a risk within their own financial systems.

4.2 Systemic risk in the DSA

The use of this concept in the context of the DSA therefore raises some questions related to the definition of the system in scope and what it means to be systemic in this context. The DSA is concerned with preventing 'economic and societal harms'. It appears to define the systemic nature of VLOPs as related to their role in 'facilitating public debate, economic transactions and the dissemination of information, opinions and ideas and in influencing how recipients obtain and communicate information online' (DSA, recital 53; see also explanatory memorandum p. 6). It seems to define the system as only a EU level one, however. Recital 54 explains that, due to their reach, the systemic risk VLOPs pose "have a disproportionately negative impact in the Union" and, of course, the threshold set for determining VLOP status is a number of monthly recipients based on a percentage of the total Union population. This raises two problems:

Firstly, unlike the banking regulation, it may exclude systemic risk at the Member State level, which could then also have wider effects. The elaboration of the areas of risk to be assessed in Article 26 include negative effects to public debate, public health, electoral processes, public security and the protection of fundamental rights. These are public harms, as discussed above, that involve harm to public institutions, even essential services, that are primarily at the level of individual states. The erosion of public debate or electoral integrity, even individual political autonomy, through disinformation, hate speech, or manipulative political advertising may be common problems across Member States, but the role specific services may play in the accumulation of harms that degrade the social environment could differ. The largeness of a platform at the EU level may not reflect the systemic risk it poses in some Member States. For example, a service could be well below the VLOPs Union-wide threshold yet have over 300,000 users in Estonia or Slovenia, where that reach equates to a large portion of the population and rivals the audiences for the informational content of their national media.

Secondly, determining systemic status based on the reach to individual recipients may not adequately capture the interconnectedness and dependencies that might be factors in the extent to which there is exposure to risk of economic and societal harm. The DSA defines recipients in Article 1 as any natural or legal person who uses a service but then sets a threshold based on the EU's population of natural persons. This does not then reflect the extent to connection to business or institutional users and potential for contagion or vulnerabilities due to these interlinkages. Online platforms providers operate as part of ecosystems with various business complementors (Jacobides et al., 2018; Tiwana, 2014). They can interact and overlap in integrated platform ecosystems (van Dijck et al., 2019) and be present in multiple connected markets including ones only distantly horizontally or vertically related to the services generating their reach to natural persons. They are known for network effects that define the interplay between the natural person users and business users and have been characterised as prone to lock-in effects (for accessible disscussion see Franck & Peitz, 2019). For example, a platform's engagement with large numbers of app developers may pose a risk that tools enable easy dissemination to other intermediary services with less capacity for identifying and removing harmful content, leading to accumulation of harm. The extent of a platform's interconnection with advertisers might be relevant media plurality and therefore public debate, and public institutions' reliance on a platform may be enabling a Member State's ability to fulfil its positive obligations but may also present vulnerabilities to be assessed.

The DSA sets out three areas in which systemic risk must be assessed an in all three of these there may be vulnerabilities specific to Member State level societal systems or stemming from interconnectedness rather than reach. These are likely to be particularly relevant to the potential for harm to public institutions, public harm from the degradation of the social environment citizens inhabits in their daily lives and exercise their social and political rights.



5 Harms addressed by the DSA

The DSA itself contains little direct mention of harm or harms, unlike the UK Online Safety Bill, yet the scale of VLOPs is linked to the risk of economic and societal harms in the recitals. The procedures for enforcement through Digital Services Coordinators (DSCs) requires that the DSCs' exercise of power should be proportionate to the "nature and overall actual or potential harm caused" (Recital 79) with the harshest actions, namely as temporary restrictions of access, reserved for persistent and "serious harm" (Article 41). Whereas all digital services, bar micro and small businesses, are expected to comply with minimal due diligence requirements for transparency and online safety, VLOPs are required to manage systemic risk of the following, and conduct risk assessments specific to their service in these areas:

(a)the dissemination of illegal content through their services;

(b) any negative effects for the exercise of the fundamental rights to respect for private and family life, freedom of expression and information, the prohibition of discrimination and the rights of the child, as enshrined in Articles 7, 11, 21 and 24 of the Charter respectively;

(c)intentional manipulation of their service, including by means of inauthentic use or automated exploitation of the service, with an actual or foreseeable negative effect on the protection of public health, minors, civic discourse, or actual or foreseeable effects related to electoral processes and public security. (Article 26)

This section will take each of these in turn, but as the DSA is concerned with *systemic risks* of harm it begins with a discussion of the implications of the use of this concept.

5.1 Dissemination of illegal content

The DSA does not set out the full extent of what constitutes illegal content. It defines it as content that in itself or by reference violates EU or Member State law, so there may be variation across Member States. There is not space to cover the breadth of illegal content here, so the focus is on those that seem most likely to be associated with risk of systemic failures or public harm, and for which there is a level of harmonisation through EU level legislation.

The production and dissemination of CSAM causes direct personal harm and undermines Member Sates' ability to fulfil its positive obligations to protect the rights of children. For this reason, the DSA requires due diligence from all digital services in its scope in this area. In its impact assessment for the DSA, the European Commission noted the evidence that certain kinds of illegal content, namely terrorist content and CSAM, is primarily shared through file or image hosting sites operated by small and micro-enterprises (European Commission, 2020). The crucial question in relation to VLOPs is whether more children are being abused and exploited or whether their algorithms are simply better at catching it now after significant investment in tools and capacity. The former would be a contribution to a systemic failure to protect children, while the others would indicate a benefit of scale. The evidence is mixed. The transparency reports of both Facebook and YouTube, for example, both show drastic increases in the amount of CSAM content identified and removed by their own detection systems since early 2020 (the start of lockdowns due to Covid-19). At the same time, though the international CSAM hotline network INHOPE reported that only 1% of reported content in 2020 was found on social networks and that 60% of all content reported to them was already known to them (INHOPE, 2020), in otherwise old content still spreading, but overwhelmingly in less public forums operated by smaller enterprises.

Most terrorist content is also primarily circulated on less public or even closed spaces operated by small or micro-enterprises (European Commission, 2020). However, a few high-profile events in which terrorists used the live-stream functionality and publicness of large popular online platforms to broadcast terrorist acts, which then were amplified by other users sharing the content have



justified the concern expressed by the European Commission in its impact assessment over the amplification effects of VLOPs. In addition to the obvious personal harm involved in the act, which might or might not have been encouraged by the perpetrators' ability to broadcast it widely, there is a risk of public harm from this amplification that is similar to the public harm of hate speech or other extremist content.

It is a public and accumulative harm that manifests in the long term legitimation and normalisation of existing structures (Simpson, 2019) such as prejudices, discrimination, and discriminatory hierarchies. The process of legitimation and normalisation requires more than just a large user base to receive the speech. The extent to which a VLOP may contribute to societal harm, to the degradation of the social environment, also depends on the extent to which its functionalities, and arguably its community of users, allow speakers to overcome any lack of offline authority. A recent temporal study of the social network Gab provides clear evidence of the normalisation of hateful language within its community over time (Mathew et al., 2020). It may be easy to see how a platform such as Facebook or Twitter amplifies the hate speech of Donald Trump, but most hateful or inciting speech spreading online is not issued by a person of authority, sometimes it does not even emanate from a real person.

How does the speech of people (or bots) of low or no status have an effect? Maitra (2012) explains with the offline example of a Muslim woman being berated by a white man on a crowded subway car. If no one intervenes, the man issuing the hate speech gains authority by the inaction of the others in the car despite being nobody of consequence in the wider society. The phenomenon of the 'influencer' or vlogger who manages to gain a following from absolute obscurity is well known. Some platform functionalities are particularly useful in enabling this kind of gain in status (Broughton Micova & Kostovska, 2021) and there is mounting evidence that the recommender systems of some platforms directly contribute to greater visibility for hateful and extremist content (Yesilada & Lewandowsky, 2021). Some platforms pose a greater risk of **societal harm from the long-term legitimation and normalisation of hate**, extremism or violence due to not only to size of the user base within which the minor harms of exposure to illegal content can accumulate, but also **the extent to which their features and functionality grant authority to those producing the content**.

5.2 Negative effects for the exercise of the fundamental rights

Fundamental rights are held by individual natural persons that, as discussed above, place positive obligations on states the fulfilment of which can involve the maintenance of public institutions, from social care systems to public service media. In this area of risk, the harms in questions can be either private or public. Private harms, for example, would stem from individual breeches of privacy, experiences of discrimination, or the blocking of one's expression. Public harms might take the form of erosion of public institutions charges with protecting rights or enabling their exercise, or damage to the integrity of public processes, such as the introduction of discriminatory tendencies in resource distribution mechanisms. **The individual nature of private harms does not mean that they cannot be the subject of systemic risk.** This can be readily seen in relation to the right to privacy.

Viewing consumer choice as the mechanism for ensuring privacy protection, competition policy scholars and practitioners have already identified the size-related characteristics of excessive market power and extensive network effects limiting consumers' ability to choose among services based on their privacy offer. This can result in mass numbers of individual privacy violations in cases of breaches or unilateral policy changes, as services do not give consumers meaningful control over their information or how it is used (Beales, 2019) making them reliant on the terms and functionality of the platforms. The paradox is that capital and resource rich global service providers that have significant capacity to protect the information of their users from others are also those most heavily invested in the harvesting and monetizing of their users personal and behavioural data.



View privacy protection as a duty of the state to protect fundamental rights, then another accumulative harm becomes evident. This is the normalisation of consensual surveillance that the ubiquitous garnering of consent from individuals and the propagation of the conceptualisation of personal information as something with exchange value. Evidence has shown that people are remarkably happy to sacrifice their privacy to digital services in exchange for very little (Prince & Wallsten, 2020). This may represent a systemic risk of undermining the state's ability to fulfil its obligation to protect private and family life, one in which many digital services of various types and user base could be complicit.

5.3 Media plurality as a distinct area of risk

The DSA does not include media plurality as a distinct area of risk to be assessed. It can be assumed to be covered by Article 26 (1)(b) because Article 11 of the EU Charter on Fundamental Rights, cited in the DSA contains both the individual freedom to receive and impart information and the freedom and pluralism of the media. The positive obligations deriving from these rights are translated into various public interest-based interventions by states to support public media, minority language and local media, the creative industries, and independent journalism. However, it also should be seen as a crucial element of the social system, a pre-condition even, for the public debate and dissemination of information and opinion, which, as mentioned above, are not only concerns of the DSA but also linked to the systemic role of VLOPs. It is also a place where competition-related harms are linked to political and societal harms.

The evidence that competition for audience and advertising from online platforms has had negative effects on news media, particularly local news media is clear (Australian Competition and Consumer Commission, 2019; Bell, 2018; Cairncross, 2019). Debate about media pluralism has long borrowed its terminology and measurement tools from economists (Iosifidis, 2010) and these have been useful in identifying the kinds of market failure conditions identified by Ofcom in the study mentioned at the outset of this paper as threatening what is often referred to as external media plurality (Ofcom, 2019). Dealing with some of these, namely those associated with gatekeeping, is the target of the Digital Markets Act, proposed together with the DSA to address economic issues.

However, media pluralism is not only about the number of persons with control of media companies or sustainability of a variety of media companies. There are aspects of media pluralism that cannot be addressed by interventions in media markets and are instead content-provision related risks. Media pluralism also refers to the number of persons with a broader "ability to influence and inform public opinion" (Bavasso, 2012), and the need for a variety of institutional forms with cultural and political purposes through which individuals and collectives' expression is enabled (Baker, 2006; Kenyon, 2014a). With advances in personalisation and automation, concerns about media pluralism are as much about quality of content as about the plurality of media firms or forms (Helberger et al., 2015; Parcu, 2020). As Mazzoli and Tambini (2020) point out, content prioritisation and findability are now intrinsically linked to the exposure diversity (Helberger, 2012; Smith & Tambini, 2012) side of media pluralism. As the OSCE Representative on Freedom of Media and others have recognised, harassment and bullying online, particularly of female and minority journalists, has a direct negative impact on media pluralism (Désir, 2019). This kind of behaviour can silence journalistic and other voices on platforms that have become public spaces, limiting the number and variety of those who are able to inform public opinion, infringing the rights not only of the speakers but of those who would be receivers of what they would have to say.

Media pluralism is fundamental to the distribution of communicative power in the public sphere (Karppinen, 2012). Risks (and benefits) in this area are not limited to the ability of individuals to exercise their rights through multiple media. Threats, not just to the sustainability of media due to the platform behaviour in the market, but also the findability of a variety of media forms, particularly public service, minority language or local media content, and the behaviour of users on content platforms, can have implications not just for the quality of public debate but also a state's ability to achieve other policy goals relate to other



fundamental rights. There are also risks that online platforms exacerbate the constraints on individual autonomy within intermediary groups in society or societal contexts through personalisation, algorithmic curation, or their role as gatekeepers of content. Media pluralism is therefore a complex issue tied to both societal and economic harms.

5.4 Intentional manipulation

Weapons producers in the US are famous for saying "guns don't kill people; people kill people". The US and individual state governments attempt to reduce the level of risk by intervening in another part of the system, the purchasing process by instituting waiting period and other conditions on the sale. In the heavily regulated airline industry, however, airline companies conduct significant risk assessments and take measures to mitigate the risk of someone taking over a plane and using it as a weapon. The major online platforms providers do not seem to be making a similar argument to the gun industry, at least not recently (Bridy, 2019) and have appeared relatively open to taking some responsibility for the misuse of their services to cause harm. The DSAs approach will likely result in a situation closer to that of the airlines, but online platforms diverge from airlines in two important ways.

Firstly, the business model of airlines is based on getting people safely to a destination and is only damaged by intentional manipulation, whereas most online platform providers' business models directly benefit from manipulation by users in the form of disinformation, political advertising, inappropriate content, advertising to minors, etc. Secondly, the airline companies are not likely to cause harm by flying their own planes into buildings. Some platform owning companies have been implicated in large scale manipulation in their own right (Frischmann & Selinger, 2018). Being called upon to assess the risk that others will use their services to harm may also require them to reflect on whether some of their own practices amount to such.

Private harm can occur to individuals exposed to some manipulative content or behaviour, yet it is often society, or the state, that bears the costs of these harms, for example dealing with addictive behaviours or the consequences of self-harm. Societal or public harm can occur in the accumulation of multiple minor harms, such as the public health consequences of anti-vaccination disinformation. This amounts to grave risks to individual autonomy, which is constrained by social context through conditioning and enculturation, and this has political and social consequences as autonomy is expressed through that same social context (Susser et al., 2019). Of concern, therefore, is where the extent of exposure to such manipulative content becomes so pervasive, even across platforms, that it shapes the social context for individuals' choices. The size of the user base and volume of content and use would be crucial measures for the level of risk, but also perhaps the presence of functionalities enabling cross-platform dissemination.

6 Conclusions

This Issue Paper aimed to introduce a new perspective into discussions about the regulation of online content platforms and provide a nuanced understanding about the relationship between large size and the potential for systemic harm. Its objective is to initiate conversation rather than to have anything near a final word, but it offers the following conclusions and for consideration firstly future debates about the regulation of content platforms in general and secondly for discussions on the text of the DSA and its eventual implementation.

Platforms could be considered of greater risk of harm if they:

are public, which is not only a matter of the size of their audience and the extent to which
that results in them being a public space, but also the extent to which any harm associated
with them affects public institutions, public or societal systems, or states' ability to provide
essential protections and services;



• facilitate the accumulation of harms to a degree that impacts the wider social environment, for which scale of content and users may not be the only indicative characteristic.

In order to identify platforms that pose a systemic risk and are, therefore 'large' enough to require additional measures a simple calculation of individual users may not be sufficient.

The DSA does not define the system in which it aims to prevent risk of harm. The categories of risk it expects assessments to be conducted of are ones that involve public institutions, societal systems, and social context. Based on the review of evidence and literature on systemic risk and the areas of harm cited in the DSA above, the following should be considered:

- Member State-level systems should be accounted for in the designation of VLOPs. Given that the DSA adopts a two-tiered approach in which Member State-level digital service coordinators and an EU level board with the European Commission plays a role, there could be mechanisms through which Member State authorities could request reviews of platform services active that may not meet 45 million monthly user threshold, yet may pose a risk to their Member State's societal system. If the public nature of large platforms puts public institutions, political and societal systems, and the relationship between state and citizen are at risk, then the Member State level conditions are highly relevant.
- Some measure of interconnectedness should be part of the definition of VLOPs. The DSA was proposed together with the Digital Markets Act (DMA), and these two were originally to be proposed as a single act. The DMA defines a category of gatekeeping platforms based on EEA-wide turnover and EU-wide active monthly users, but unlike the DSA it also allows for the European Commission to consider a number of other criteria associated with the gatekeeping function (for concept elaboration see Lynskey, 2017). Though the current draft could go further in terms of covering the ecosystem nature of gatekeeping platforms (De Streel, 2020), they do allow for a more nuanced way of designating a gatekeeper. It is important that the implementation of the DSA does not get mired in years of litigation over what constitutes a VLOP, however, the simple EU-wide monthly user threshold is limited. Some clear criteria could be set out to capture the interconnectedness inherent in being systemic, and reflect the potential for accumulation of harms in the societal system rather than just within a platform ecosystem. These could relate to the extent and nature of their relationships with advertisers, app developers or device manufacturers or their integration with other content services, for example.
- Media pluralism should be included as a distinct risk category for assessment. Some of the market failures associated with eroding external media pluralism through undermining the sustainability of audiovisual media services and publishers will be mitigated by the DMA, while others are addressed in the European Commission's Media and Audiovisual Action Plan⁴ and expected to be covered by a forthcoming Media Freedom Act. Exposure diversity, the pluralism of voices and opinion influencers, are content issues that should be within the scope of the DSA. Assessment in this area can draw on standards being set for content moderation (e.g. Council of Europe, 2021), protection of journalists from silencing behaviour (e.g. Chocarro et al., 2020), prioritisation and findability (e.g. Mazzoli & Tambini, 2020), and other aspects of the ways the social environment is shaped or intermediary groups are enabled so as to affect the plurality of voices and views available and discoverable.

The designation of certain platforms as VLOPs will only be meaningful if the risk assessments effectively identify systemic risks and, in doing so, point to means of risk mitigation. The DSA instructs VLOPs to conduct risk assessments that are specific to their own services, but this should not be understood to mean that they should be limited to an internal examination of practices and measures taken within VLOPs' own ecosystems. As could be seen in the discussion of the harms

⁴ The Media and Audiovisual Action Plan set of policy interventions can be found at: https://digital-strategy.ec.europa.eu/en/policies/maap-implementation



categories above, these are multi-faceted and often involve cross-platform activity and/or interaction with offline institutions or behaviour. If they are to be truly systemic risk assessments, they must consider how each platform interacts with the wider social environment and with other services that may not be VLOPs, but whose role in the amplification or accumulation process contributes to harm. Systemic risk assessments should be conducted in an open and participatory manner, which the transparency requirements and other due diligence provisions of the DSA can help facilitate. These will no doubt be learning processes for service providers, Digital Service Coordinators, the European Commission and other stakeholders, so feedback loops should be built into the process and iterative guidance can be developed. A few points that the review conducted for this paper indicate would be useful to consider are the following:

- The various ways in which a platform is public may be reflected in its interlinkages and functionalities, and not just its audience.
- The extent of to which harms are accumulative may be a longevity and context issue as much as a dissemination volume issue.
- Functionalities and even measures to combat illegal and harmful content may enable intermediary groups or societal contexts that constrain individual autonomy.
- Platforms may already be bearing the costs of some harms; who is bearing the others?

Further research into the areas of risk identified in the DSA and into the application of systemic risk in other sectors would likely be very useful ahead of the DSA's implementation.



References

Australian Competition and Consumer Commission. (2019). *Digital Platforms Inquiry: Final report*. ACCC. https://www.accc.gov.au/system/files/Digital%20platforms%20inquiry%20-%20final%20report.pdf

Baker, C. E. (2006). *Media concentration and democracy: Why ownership matters*. Cambridge University Press.

Barberá, P. (2020). Social Media, Echo Chambers, and Political Polarization. In J. A. Tucker & N. Persily (Eds.), *Social Media and Democracy: The State of the Field, Prospects for Reform* (pp. 34–55). Cambridge University Press; Cambridge Core. https://www.cambridge.org/core/books/social-media-and-democracy/social-media-echo-chambers-and-political-polarization/333A5B4DE1B67EFF7876261118CCFE19

Bavasso, A. (2012). *Media Plurality: Under the Skin of Control - Concept, Context, and Reform* (SSRN Scholarly Paper ID 2247579). Social Science Research Network. https://papers.ssrn.com/abstract=2247579

Beijer, M. (2015). Active Guidance of Fundamental Rights Protection by the Court of Justice of the European Union: Exploring the Possibilities of a Positive Obligations Doctrine. *Review of European Administrative Law*, 8(2), 127–150.

Bell, E. (2018). The Dependent Press: How Silicon Valley Threatens Independent Journalism. In M. Moore & D. Tambini (Eds.), *Digital Dominance: The Power of Google Amazon Facebok and Apple*. Oxford University Press.

Bílková, V. (2020). The nature of social rights as obligations of international law: Resource availability, progressive realization and the obligations to respect, protect, fulfil. In *Research Handbook on International Law and Social Rights*. Edward Elgar Publishing.

Bridy, A. (2019). *Leveraging CDA 230 to Counter Online Extremism* (SSRN Scholarly Paper ID 3538919). Social Science Research Network. https://papers.ssrn.com/abstract=3538919

Broughton Micova, S. (2020). The Collective Speech Rights of Minorities. In *Positive Free Speech:* Rationales, Methods and Implications. Hart Publishhing.

Broughton Micova, S., & de Streel, A. (2020). *Digital Services Act: Deepening the internal market and clarifying responsibilities for digital services*. Centre on Regulation in Europe (CERRE). https://cerre.eu/publications/digital-services-act-responsibility-platforms/

Broughton Micova, S., & Jacques, S. (2020). Platform power in the video advertising ecosystem. *Internet Policy Review*, 9.

Broughton Micova, S., & Kostovska, I. (2021). Advertising funded video-sharing platforms under the revised AVMSD: Commercial Communication Functionalities. *Journal of Digital Media & Policy*, 12(3).

Cairncross, D. F. (2019). *The Cairncross Review: A sustainable future for journalism*. UK Department of Media Culture and Sport.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/779882/021919_DCMS_Cairncross_Review_.pdf

Caves, K. W., & Singer, H. J. (2018). When the Econometrician Shrugged: Identifying and Plugging Gaps in the Consumer Welfare Standard. *George Mason Law Review*, 2018. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3205518



Chocarro, S., Clarke, S., Gutiérrez, P., & Taing, J. (2020). *Safety of Female Journalists Online- A #SOFJO Resource Guide*. OSCE Representative on Freedom of the Media. https://www.osce.org/representative-on-freedom-of-media/471903

Cohen, J. (1993). Freedom of expression. Philosophy & Public Affairs, 207-263.

Competition & Markets Authority (CMA). (2020). *Online platforms and digital advertising: Market study final report*.

https://assets.publishing.service.gov.uk/media/5efc57ed3a6f4023d242ed56/Final report 1 July 2020 .pdf

Council of Europe. (2021). CONTENT MODERATION Best practices towards effective legal and procedural frameworks for self-regulatory and coregulatory mechanisms of content moderation [Guidance Note Adopted by the Steering Committee for Media and Information Society (CDMSI)]. Council of Europe. chrome-

extension://efaidnbmnnnibpcajpcglclefindmkaj/viewer.html?pdfurl=https%3A%2F%2Frm.coe.int%2Fcontent-moderation-en%2F1680a2cc18&clen=1030307

Crémer, J., de Montjoye, Y.-A., & Schwitzer, H. (2019). *Competition Policy for the Digital Era* (KD-04-19-345-EN-N). European Comission.

De Streel, A. (2020). *Digital Markets Act: Making Economic Regulation of Platforms Fit for the Digital Age*. Centre on Regulation in Europe (CERRE). https://cerre.eu/publications/digital-markets-act-economic-regulation-platforms-digital-age/

Désir, H. (2019). Communiqué by the OSCE Representative on Freedom of the Media on Media Pluralism, Safety of Female Journalists and Safeguarding Marginalized Voices Online. OSCE Representative on Freedom of the Media. https://www.osce.org/representative-on-freedom-of-media/411917

Epstein, R. A. (1995). The harm principle-and how it grew. *The University of Toronto Law Journal*, 45(4), 369–417.

European Commission. (2020). Impact Assessment Accompanying the document Proposal for a regualtion of the European Parliament and of the Council on a Single Market For Digital Services (Digital Services Act) and amending Directive 2000/31/EC. European Commission. https://ec.europa.eu/newsroom/dae/document.cfm?doc_id=72160

Feinberg, J. (1973). Social philosophy.

Feinberg, J. (1987). Harm to others (Vol. 1). Oxford University Press on Demand.

Fowler, E. F., Franz, M. M., & Ridout, T. N. (2020). Online Political Advertising in the United States. In J. A. Tucker & N. Persily (Eds.), *Social Media and Democracy: The State of the Field, Prospects for Reform* (pp. 111–138). Cambridge University Press; Cambridge Core. <a href="https://www.cambridge.org/core/books/social-media-and-democracy/online-political-advertising-democracy/democracy/online-political-advertising-democracy/dem

https://www.cambridge.org/core/books/social-media-and-democracy/online-political-advertising-in-the-united-states/98F09A1F61A67819A70C22920BE4674D

Franck, J.-U., & Peitz, M. (2019). *Market Definition and Market Power in the Platform Economy*. Centre on Regulation in Europe (CERRE). https://cerre.eu/publications/market-definition-and-market-power-platform-economy/

Frischmann, B., & Selinger, E. (2018). Re-engineering humanity. Cambridge University Press.



Furman, J., Coyle, D., Fletcher, A., Marsden, P., & McAuley, D. (2019). *Unlocking Digital Competition: Report of the Digital Competition Expert Panel*. Digital Competition Experts Panel, UK Government.

Hanser, M. (2013). Harm. In *International Encyclopedia of Ethics*. American Cancer Society. https://doi.org/10.1002/9781444367072.wbiee186

Helberger, N. (2012). Exposure Diversity as a Policy Goal. *Journal of Media Law*, *4*(1), 65–92. https://doi.org/10.5235/175776312802483880

Helberger, N., Kleinen-von Könisglöw, K., & van der Noll, R. (2015). Regulating the new information intermediaries as gatekeepers of information diversity. *Info (Bingley)-The Journal of Policy, Regulation and Strategy for Telecommunications, Information and Media*, 17(6), 50–71.

INHOPE. (2020). *Annual Report 2020*. INHOPE. https://inhope.org/media/pages/the-facts/download-our-whitepapers/c16bc4d839-1620144551/inhope-annual-report-2020.pdf

Iosifidis, P. (2010). Pluralism and Concentration of Media Ownership: Measurement Issues. *Javnost - The Public*, 17(3), 5–21. https://doi.org/10.1080/13183222.2010.11009033

Jacobides, M. G., Cennamo, C., & Gawer, A. (2018). Towards a theory of ecosystems. *Strategic Management Journal*, *39*(8), 2255–2276.

Just, N. (2018). Governing online platforms: Competition policy in times of platformization. *Telecommunications Policy*, *42*(5), 386–394.

Karppinen, K. (2012). *Rethinking media pluralism* (Vol. 1–1 online resource (ix, 239 pages).). Fordham University Press; WorldCat.org. http://site.ebrary.com/id/10613087

Kenyon, A. T. (2014a). Assuming free speech. The Modern Law Review, 77(3), 379-408.

Kenyon, A. T. (2014b). Free-media-speech: Free speech and public media. *International Journal of Media & Cultural Politics*, 10(2), 155–162. Communication & Mass Media Complete.

Kenyon, A. T. (2021). *Democracy of Expression: Positive Free Speech and Law*. Cambridge University Press.

Kernohan, A. (1993). Accumulative Harms and the Interpretation of the Harm Principle. *Social Theory and Practice*, 19(1), 51–72.

Khan, L. M. (2016). Amazon's antitrust paradox. Yale LJ, 126, 710.

Kovacic, W. (2021). The Roots of America's Competition Revolution. *Promarket*. https://promarket.org/2021/09/21/the-roots-of-americas-competition-revolution/

Levy, J. T. (2014). Centralization in a Democratic Age: Tocqueville and Mill. In *Rationalism, Pluralism, and Freedom*. Oxford University Press. https://doi.org/10.1093/acprof:oso/9780198717140.003.0009

Lynskey, O. (2017). Regulating 'Platform Power'. LSE Law, Society and Economy Working Papers,

Maitra, I. (2012). Subordinating speech. Speech and Harm: Controversies over Free Speech, 94.

Mathew, B., Illendula, A., Saha, P., Sarkar, S., Goyal, P., & Mukherjee, A. (2020). Hate begets hate: A temporal study of hate speech. *Proceedings of the ACM on Human-Computer Interaction*, 4(CSCW2), 1–24.



Mazzoli, E. M., & Tambini, D. (2020). *PRIORITISATION UNCOVERED: The Discoverability of Public Interest Content Online*. Council of Europe. https://rm.coe.int/publication-content-prioritisation-report/1680a07a57

Mill, J. S. (2009). *On Liberty*. The Floating Press; eBook Collection (EBSCOhost). https://search.ebscohost.com/login.aspx?direct=true&db=nlebk&AN=313940&site=eds-live&scope=site

Moore, M., & Tambini, D. (2018). *Digital Dominance: The Power of Google, Amazon, Facebook and Apple*. Oxford University Press.

Mowbray, A. (2004). The development of positive obligations under the European Convention on Human Rights by the European Court of Human Rights. Bloomsbury Publishing.

Ofcom. (2019). *Online market failures and harms*. Ofcom. https://www.ofcom.org.uk/phones-telecoms-and-internet/information-for-industry/online-policy-research/online-market-failures-and-harms

Parcu, P. L. (2020). New digital threats to media pluralism in the information age. *Competition and Regulation in Network Industries*, 21(2), 91–109.

Persily, N., & Tucker, J. A. (2020). *Social media and democracy: The state of the field, prospects for reform* /. Cambridge University Press; UEA Library catalogue. https://search.ebscohost.com/login.aspx?direct=true&db=cat07845a&AN=uea.1156444005&authtype=sso&custid=s8993828&site=eds-live&scope=site

Prince, J., & Wallsten, S. (2020). How Much is Privacy Worth Around the World and Across Platforms? *Available at SSRN 3528386*.

Ricke, L. D. (2014). The Impact of YouTube on U.S. Politics. Lexington Books.

Schwarcz, S. L. (2008). Systemic risk. Geo. Lj, 97, 193.

Shiffrin, S. V. (2012). Harm and Its Moral Significance. Legal Theory, 18(3), 357-398.

Simpson, R. M. (2019). 'Won't Somebody Please Think of the Children?'Hate Speech, Harm, and Childhood. *Law and Philosophy*, *38*(1), 79–108.

Smaga, P. (2014). *The concept of systemic risk*. Systemic Risk Centre, London School of Economics and Political Science.

Smith, R. C., & Tambini, D. (2012). Measuring Media Plurality in the United Kingdom: Policy Choices and Regulatory Challenges. *Journal of Media Law*, *4*(1), 35–63. https://doi.org/10.5235/175776312802483862

Stalford, H. (2012). *Children and the European Union: Rights, welfare and accountability*. Bloomsbury Publishing.

Stoyanova, V. (2018). Causation between state omission and harm within the framework of positive obligations under the European convention on human rights. *Human Rights Law Review*, 18(2), 309–346.

Susser, D., Roessler, B., & Nissenbaum, H. (2019). Technology, autonomy, and manipulation. *Internet Policy Review*, 8(2).

Syvertsen, T., Mjøs, O., Moe, H., & Enli, G. (2014). *The media welfare state: Nordic media in the digital era*. University of Michigan Press.



Thaler, R. H., & Sunstein, C. R. (2008). *Nudge: Improving Decisions about Health, Wealth, and Happiness*. Yale University Press. https://books.google.co.uk/books?id=dSJQn8egXvUC

Tiwana, A. (2014). *Platform ecosystems: Aligning architecture, governance, and strategy.* Morgan Kaufmann; cat07845a.

https://search.ebscohost.com/login.aspx?direct=true&db=cat07845a&AN=uea.862761829&authtype=sso&custid=s8993828&site=eds-live&scope=site

Tully, S. (2014). People You Might Know: In G. Patmore & K. Rubenstein (Eds.), *Law and Democracy* (pp. 153–172). ANU Press; JSTOR. http://www.jstor.org/stable/j.ctt13wwvp7.12

van Dijck, J., Nieborg, D., & Poell, T. (2019). Reframing platform power. *Internet Policy Review*, 8(2). https://doi.org/10.14763/2019.2.1414

van Dijck, J., & Poell, T. (2015). Social Media and the Transformation of Public Space. *Social Media* + *Society*, *1*(2), 2056305115622482. https://doi.org/10.1177/2056305115622482

Wright, J. D., Dorsey, E., Klick, J., & Rybnicek, J. M. (2019). Requiem for a paradox: The dubious rise and inevitable fall of hipster antitrust. *Ariz. St. LJ*, *51*, 293.

Wu, T. (2018). The Curse of Bigness: Antitrust in the New Guidled Age. Columbia Global Reports.

Xavier Freixas, Luc Laeven, & José-Luis Peydró. (2015). *Systemic Risk, Crises, and Macroprudential Regulation*. The MIT Press; eBook Collection (EBSCOhost). https://search.ebscohost.com/login.aspx?direct=true&db=nlebk&AN=1017949&authtype=sso&custid=s8993828&site=eds-live&scope=site

Yesilada, M., & Lewandowsky, S. (2021). A systematic review: The YouTube recommender system and pathways to problematic content.

