

# **Diversity of exposure in social media markets: regulating or unbundling content curation\***

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## **Abstract**

Access and exposure to a diversity of voices is a fundamental pillar of democracy. On social media markets, exposure diversity is limited by various factors, one being how platforms curate the content each user sees. The algorithmic systems for content curation used by those platforms artificially can reduce exposure diversity to the benefit of profit-making parameters. This paper describes the challenge, suggests two possible regulatory solutions to address it, and proposes an analytical framework to assess and compare them. The first is to regulate content curation in a way that guarantees diversity. The second is to unbundle hosting from content curation activities, and to oblige large platforms to allow third parties to offer content curation to users. The two remedies come from different normative paths and require different enforcement mechanisms, among others. The preliminary conclusion is that the unbundling might be a better option.

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## **Keywords**

content curation - exposure diversity - social media – unbundling – regulation and competition

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## **1. Introduction**

Access and exposure to a diversity of voices are a fundamental pillar of a democracy, and a necessary premise for an open and informed public discourse that allows citizens to form their opinions and to engage in civic space. The media diversity landscape has changed substantially in the past two decades. Digitalisation and the rise of social media platforms have created numerous new channels for information and content to be produced, shared and accessed. Nevertheless, the increase of content available online might not automatically translate in an increase in the diversity of content each individual is exposed to online. This paper focuses on social media markets, and on individuals' diversity of exposure therein.

Social media platforms have revolutionised the way people communicate, access and share information. In little over a decade, they have reached billions of people around the globe, enabling exciting achievements but also raising serious concerns relating to the protection of human rights. The impact they have had on society is multi-faceted, and has opened the door to many research questions, relevant for social, political and economic studies alike. Much has been said already, both in support of and against the impact of these platforms on the economy and society. Recently, the major social media companies have been under attack for a number of reasons, facing proceedings before data protection and competition authorities as well as national and regional courts, and have been targeted by various legislative, regulatory and policy actions.

Notwithstanding this hype, the various challenges that social media platforms raise for competitors, users and society still require sustained scrutiny, and resolution. Among other questions, the way Facebook, Twitter, YouTube and similar platforms curate content remains at the centre of harsh debate. "Content curation", *per se*, is quite a vague concept<sup>1</sup>, which is accused of playing a major role in phenomena like the spread of disinformation, the creation of echo chambers, the spread of hate speech online, and the manipulation of elections, among other things.

Less prominent in the discussion of how content is curated appears to be the issue of reduced diversity of exposure for individual users, that is the reduction in the diversity of content they are exposed to, which is a tiny fraction of the diversity of content which exists online. While there are many reasons why individuals suffer from under-exposure on social media, the artificial reduction of exposure diversity caused by the profit-driven business models and automated systems used by private actors is to be further explored, not least to allow decision makers and regulators to properly approach it. This artificial reduction is what this paper focuses on. Part I briefly in-

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<sup>1</sup> In this paper, I call "content curation" the measures taken by social media platforms that affect the availability, visibility and accessibility of content, such as ranking, promotion, demotion. These measures are performed by fully or partially automated systems based on algorithms. Content curation differs from content moderation, which usually indicates the activities undertaken by social media platforms to detect, identify and address illegal content or content incompatible with their terms and conditions, such as demotion and removal. For a definition of these concepts see: European Commission, Proposal for a Regulation of the European Parliament and the Council on a Single Market For Digital Services (Digital Services Act) and Amending Directive 2000/31/EC, COM(2020) 825 final, Article 2; E. M. Mazzoli - D. Tambini, *Prioritisation Uncovered. The Discoverability of Public Interest Content Online*, Council of Europe study, DGI(2020)19, 2020.

roduces the concept of media diversity, with specific reference to exposure diversity. Part II looks at the under exposure on social media markets, and provides some arguments about the role played by content curation in this market failure. Part III suggests two possible regulatory solutions, comparing them against a list of benchmarks. Part IV briefly sum ups and provides some conclusive thoughts that might be useful for to regulators and scholars.

## Part I

### 2. Media diversity

Media diversity is used to refer to the broadest possible diversity of information, ideas and viewpoints that are communicated. Together with media plurality, which refers to the plurality of media actors, types of media, and ownership, media diversity is a component of the concept of media pluralism, an essential element of open and free debate in society, and thus a pillar of a democracy.

Media diversity is a normative value, and the way it is framed and operationalised depends on the specific legislative instrument of reference<sup>2</sup>. It is not a goal in itself but rather a means to an end: it is instrumental to the achievement a number of democratic goals, such as «promoting a critical debate and wider democratic participation of persons belonging to all communities and generations»<sup>3</sup>. As recently reminded by the Council of Europe, States have the obligation to protect media diversity by putting in place an appropriate legislative and policy framework to promote «the availability, findability and accessibility of the broadest possible diversity of media content as well as the representation of the whole diversity of society in the media»<sup>4</sup>.

However, notwithstanding its central value for media law and policy, media diversity is ill-defined, there is even conceptual disagreement on the meaning of the notion<sup>5</sup>. Research has shown that, often, the terms media pluralism and media diversity are used interchangeably<sup>6</sup>. However, some scholars insist on the fact that the two terms refer to different components and use diversity as a measure for content and pluralism as a measure for the sources<sup>7</sup>.

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<sup>2</sup> N. Helberger - K. Karppinen - L. D'Acunto, *Exposure diversity as a design principle for recommender systems*, in *Information, Communication & Society*, 21(2), 2018, 191 ss.

<sup>3</sup> Council of Europe, Recommendation CM/Rec(2018)1[1] of the Committee of Ministers to member States on media pluralism and transparency of media ownership, 2018.

<sup>4</sup> *Ibid.*

<sup>5</sup> M. Pearson - J.E. Brand - D. Archbold - H. Rane, *Sources of News and Current Affairs*, Gold Coast, 2001; Ofcom, *Measurement Framework for Media Plurality: Ofcom's Advice to the Secretary of State for Culture, Media and Sport*, 2015.

<sup>6</sup> F. Loecherbach - J. Moeller - D. Trilling - W. Atteveldt, *The Unified Framework of Media Diversity: A Systematic Literature Review*, in *Digital Journalism*, 8(5), 2020, 605 ss.; C. P. Hoffman - C. Lutz - M. Meckel - G. Ranzini, *Diversity by Choice: Applying a Social Cognitive Perspective to the Role of Public Service Media in the Digital Age*, in *International Journal of Communication*, 9(1), 2015, 1360 ss.; A. Ciaglia, *Pluralism of the System, Pluralism in the System: Assessing the Nature of Media Diversity in Two European Countries*, in *International Communication Gazette*, 75(4), 2013, 410 ss.

<sup>7</sup> A. Masini - P. Van Aelst, *Actor Diversity and Viewpoint Diversity: Two of a Kind?*, in *Communications*, 42(2),

A certain degree of uncertainty around the concept of media diversity expands to how to measure it<sup>8</sup>. Possibly the most complete indications and measures of media diversity in the EU are provided by the Media Pluralism Monitor Project, which makes clear that diversity is a complex outcome which cannot be measured by looking at one of few indicators only<sup>9</sup>. In addition, it is noted that the benchmark(s) for a satisfactory level of media diversity might vary depending on the specific goal to be achieved<sup>10</sup>.

### **3. Exposure diversity**

While discussing media diversity, various tended to concentrate on the supply side of the market, that is on the sources. However, in recent years this conceptualisation seems to have evolved, and scholars have added the diversity of exposure dimension, and argued that diversity of supply does not guarantee it. For example, with regard to traditional broadcasting, scholars have pointed at the mismatch between the diversity as sent and the diversity as received<sup>11</sup>.

Diversity of exposure is defined as indicating the diversity received and effectively consumed by individuals<sup>12</sup>. This concept looks not at the overall offering available on the market, but at the offering that is factually available to each individual and, some have argued, includes an additional element, that is the choice among the absolute amount of content available<sup>13</sup>.

To the extent that the amount of content supplied largely exceeds the amount of content that each individual can consume<sup>14</sup>, exposure diversity becomes an ever more

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2017, 107 ss.; C. Baden - N. Springer, *Conceptualizing Viewpoint Diversity in News Discourse*, in *Journalism*, 18(2), 2017, 176 ss.

<sup>8</sup> Some scholars have identified a number of sub-dimensions of diversity in order to make this measurement easier to operationalise. The main sub-dimensions are: diversity of entities, topic diversity, viewpoint diversity and structural diversity. For an overview, see: F. Loecherbach - J. Moeller - D. Trilling - W. Atteveldt, *The Unified Framework of Media Diversity: A Systematic Literature Review*, cit.

<sup>9</sup> Centre for Media Pluralism and Media Freedom, *Media Pluralism Monitor 2020*, 2020.

<sup>10</sup> D. Raeymaekers - P. Maesele, *Media Pluralism and Democracy – What's in a Name*, in *Media, Culture and Society*, 37(7), 2015, 1042 ss.

<sup>11</sup> Scholars have also argued that diversity as received was not sufficiently considered by media law and policy, and called for the integration of research from various disciplines, such as communications sciences, in media policy. See, among others, N. Helberger, *Exposure Diversity as a Policy Goal*, in *Journal of Media Law*, 1(4), 2012, 65 ss. More in general, scholars from different disciplines have noted that diversity of supply, on its own, cannot secure diversity of reception, or diversity of choice for people; see, respectively, D. McQuail, *Media Performance: Mass Communication and the Public Interest*, 1993, 158 ss.; R. Van der Wurft, *Supplying and Viewing Diversity: The Role of Competition and Viewer Choice in Dutch Broadcasting*, in *European Journal of Communication*, 19, 2004, 215 ss.

<sup>12</sup> J. G. Webster, *Diversity of Exposure*, in P. Napoli (ed.), *Media Media Diversity and Localism: Meaning and Metrics*, London, 2007, 309 ss.; P. Napoli, *Exposure Diversity Reconsidered*, in *Journal of Information Policy*, 1, 2011, 246 ss.; K. Karppinen, *Rethinking media pluralism*, New York, 2013; N. Helberger - K. Karppinen - L. D'Acunto, *Exposure diversity as a design principle for recommender systems*, cit.

<sup>13</sup> R. Van der Wurft, *Supplying and Viewing Diversity: The Role of Competition and Viewer Choice in Dutch Broadcasting*, cit.

<sup>14</sup> Since the advent of the Internet, the mismatch between diversity of content available and exposure diversity became ever more serious. Digitalisation, and the related technological developments have led

important element for the achievement of the public goals traditionally attached to diversity of content. However, to measure exposure diversity can be a difficult task: regulators appear to have struggled, in their reports, to spell out how to measure the difference between diversity of content available and diversity of exposure to content. As a consequence, exposure diversity remains substantially under-assessed. An element that certainly does not help is the scarce availability of data, which derives from a substantial asymmetry of information between content distributors and consumers or content creators in the relevant markets.

It is possible to identify a number of endogenous and exogenous factors, which might impact on diversity of exposure. The endogenous refer to the choice that individuals make about what content they want to consume, and, more in general, about how they interact with the content available<sup>15</sup>. The exogenous include various elements that reduce, select, or otherwise modify the availability of content for each individual, such as the existence of intermediaries like social media platforms, their number and the variety of business models they use.

## Part II

### 4. Exposure diversity on social media: the market failures

It is argued that exposure diversity is of utmost importance on social media markets because social media are an important channel for access to and distribution of news and information. Studies have reported an increase in the number of people that access news through Facebook, Twitter and the other major social media platforms. By way of example, Ofcom found that in 2019 about 50% of adults in the UK ac-

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to a substantial change in the scenario: from a purely quantitative perspective, currently we have more diversity of information online than ever before. Digitalisation has made the creation and distribution of content substantially easier, cheaper and faster. Therefore, at least in principle, society has at its disposal an increasingly diverse body of content. It is important to note, however, that while content and information do not appear to be subject to scarcity any more, attention is. Each person's capacity to dedicate attention to the information available online is limited; therefore, what counts from an individual perspective is not necessarily the diversity of content available, but the diversity of content each person can easily access or is exposed to. For a discussion of this topic see, among others: T. Wu, *Blind Spot: The Attention Economy and the Law*, in *Antitrust Law Journal*, 3, 2017, 82 ss.; T. B. Ksiazek - S.J. Kim - E.C. Malthouse, *Television News Repertoires, Exposure Diversity and Voting Behavior in the 2016 U.S. Election*, in *Journalism & Mass Communication Quarterly*, 2019, 1 ss.; J. Naughton, *Platform Power and Responsibility in the Attention Economy*, in M. Moore - D. Tambini (eds.), *Digital Dominance: The Power of Google, Amazon, Facebook and Apple*, New York, 2018, 388 ss.

<sup>15</sup> Some have argued that on online markets the growing power of consumers to “filter” what they see due to technological advances leads to a process of personalisation that reduces their exposure to the more or less limited list of topics and perspectives of their own choosing. See, for example, C. R. Sunstein, *Republic.com*, Princeton, 2001. On the same topic, see also: B. Bodó – N. Helberger – S. Eskens – J. Möller, *Interested in Diversity*, in *Digital Journalism*, 7(2), 2019, 206 ss.; F. Borgesius Zuiderveen – D. Trilling – J. Möller – B. Bodó – C.H. de Vreese – N. Helberger, *Should We Worry about Filter Bubbles? An Interdisciplinary Inquiry into Self-Selected and Pre-Selected Personalized Communication*, in *Internet Policy Review*, 5(1), 2016.

cessed news via social media, and the percentage is higher in people aged 16-24<sup>16</sup>. The Australian Competition and Consumer Commission (ACCC) reported that in 2019 the number of users that accessed news websites through referrals from Google and Facebook was broader than the number of users that access those websites directly<sup>17</sup>. Although recent reports signal that the social media use for news consumption has started to fall in a number of key markets after years of steady increase, chiefly because of wider users' lack of trust on this channel, it is possible to conclude that social media remains an important when not yet the major channel for news consumption, especially among younger people<sup>18</sup>.

The fundamental role played by these platforms as a vehicle for news and information appeared in all its strength during the Covid-19 pandemic. A number of governments in different areas of the world resorted to these platforms as the main channel for their information campaign about the spread of the virus and the measures to be taken to contrast it and keep population safe. The Reuters Institute 2020 Report on news consumption explains that, in average, 35% of the population used Facebook to find, share and discuss information about the virus, and 30% used YouTube. From their side, Facebook, Twitter and YouTube have been confronted with the complex challenge of tackling disinformation spreading on their platforms<sup>19</sup>. It is reported that the amount of disinformation and misinformation circulating on those platforms saw a steady increase, reaching an extremely wide base of users, sometimes putting their life and that of those nearby at risk<sup>20</sup>. The pandemic has then shed light on an significant dynamic: due to the current role that a handful of social media platforms have on access to and circulation of information, the content curation algorithm they use can have an enormous impact at individual level, on the diversity of exposure of each users and, at the collective level, on the flow of information in society.

In a similar vein, regulators and scholars noted that social media platforms play the role of gateways to news media on the Internet for a large number of citizens, and have increasing influence in shaping users' online news choices<sup>21</sup>.

A closer look at social media markets can reveal that the hiatus between diversity of content available on the market and the diversity of content each individual user is exposed to might be larger than in other media markets. A number of reasons can explain this hiatus, some of which seem to verify systemically and therefore can be qualified as market failures.

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<sup>16</sup> Ofcom, *News Consumption in the UK: Main Findings*, 2019. Similar data result from the Italian regulatory authority AGCOM report of 2018, see: AGCOM, *Rapporto sul consumo di informazione*, 2018.

<sup>17</sup> ACCC, *Digital Platforms Inquiry. Final Report*, 2019.

<sup>18</sup> Reuters Institute for the Study of Journalism, *Digital News Report*, Oxford University Institute, 2019.

<sup>19</sup> Reuters Institute for the Study of Journalism, *Digital News Report*, Oxford University Institute, 2020.

<sup>20</sup> These platforms have changed their policies to include certain disinformation on Covid-19 within the scope of the "harmful" content they remove. Cf, for example: Twitter, *COVID-19 misleading information policy*, 2020; Facebook, *An Update on Our Work to Keep People Informed and Limit Misinformation About COVID-19*, 2020.

<sup>21</sup> M. Moore - D. Tambini, *Digital Dominance: The Power of Google, Amazon, Facebook and Apple*, cit., 4; ACCC, *Digital Platforms Inquiry. Final Report*, cit.; E. M. Mazzoli - D. Tambini, *Prioritisation Uncovered*, cit.

Social media platforms use content curation algorithms<sup>22</sup> to filter and sort the amount of content available and make personalised selection for users, and they do so based on the information they collect about users by tracking their online activities and behaviours, and by gathering as many data as possible about them<sup>23</sup>.

It is argued that content curation algorithms are not neutral towards diversity. Platforms monetise users' attention and have no incentives to expose users to all content potentially available, but only to the tiny portion of it that will keep them more engaged<sup>24</sup>. The platforms therefore design their content curation activities accordingly<sup>25</sup>. In other words, the personalisation of content is not performed looking at criteria such as diversity of content or diversity of sources, but rather having as the end goal the maximisation of users' engagement and thus the maximisation of profit. Therefore, it can be expected that the algorithmic curation optimised for engagement shrinks exposure diversity<sup>26</sup>.

By way of example, during the recent ACCC's inquiry on digital platforms, Facebook indicated that its News Feed algorithms are focused on promoting "meaningful social interactions" between users, and it explained that the consequence is that users will see less public content, such as posts from media, and more posts from friends. As

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<sup>22</sup> There is a vast literature on algorithmic recommendation systems used for content curation. Traditionally, scholars distinguish between two basic methods to produce recommendations for a user: collaborative filtering (U. Shardanand - P. Maes, *Social information filtering: Algorithms for automating "Word of mouth"*, in *Proceedings of the SIGCHI conference on Human factors in computing systems*, Denver, Colorado, United States, ACM Press/Addison-Wesley Publishing Co., 1995, 210 ss.) and content-based filtering (P. W. Foltz - S. T. Dumais, *Personalized information delivery: an analysis of information filtering methods* in *ACM Commun.* 35(12), 1992, 51 ss.). Collaborative filtering is based on users' consumption and behaviour patterns, while content-based filtering produces recommendations based on shared features of the content. The kind of data and metadata needed for each of them is different: the former needs consumption data, the latter needs metadata descriptions of each item. Both systems come with shortcomings, which have led companies to use hybrid systems (F. Cacheda - V. Carneiro - D. Fernández - V. Formoso, *Comparison of collaborative filtering algorithms: Limitations of current techniques and proposals for scalable, high-performance recommender systems*, in *ACM Transactions on the Web*, 5(1), Article 2, 2011; F. Ricci - L. Rokach - B. Shapira (eds.), *Recommender Systems Handbook*, New York - London, 2015). For a discussion of the topic see also: G. Sartor - A. Loreggia, *The impact of algorithms for online content filtering or moderation*, Study requested by the European Parliament's Committee on Citizens' Rights and Constitutional Affairs, September 2020; N. Helberger, *On the Democratic Role of News Recommenders*, in *Digital Journalism*, 2019.

<sup>23</sup> Various scholars and practitioners have defined social media networks providers as "ad-funded" aggregators, who provide "free" services to consumers and monetise through ads or data collection. See, for example, M.L. Stasi, *Social Media Platforms and Content Exposure: How to Restore Users' Control*, in *Competition and Regulation of Network Industries*, 20(1), 2019, 86 ss.; C. Caffarra - F. Etro - O. Latham - F. Scott Morton, *Designing regulation for digital platforms: Why economists need to work on business models*, in *voxeu.org*, 4 June 2020.

<sup>24</sup> Studies demonstrate that the most engaging content is typically what Mark Zuckerberg called "borderline" (M. Zuckerberg, *A Blueprint for Content Governance and Enforcement*, 2018) that is the content which is more sensationalist and provocative, including those stories that appeal to our baser instincts and trigger outrage and fear. See, among many: Z. Tufekci, *The Real Bias Built in at Facebook*, in *New York Times*, 19 May 2016; S. Vosoughi - D. Roy - S. Aral, *The Spread of True and False News Online*, in *Science*, 359(6380), 2018, 1146 ss.; The Cairncross Review, *A Sustainable Future for Journalism*, 2019.

<sup>25</sup> Z. Tufekci *The Real Bias Built in at Facebook*, cit.

<sup>26</sup> T. Wu, *Blind Spot: The Attention Economy and the Law*, cit., 4; S. Wolfram, *Optimizing for Engagement: Understanding the Use of Persuasive Technology on Internet Platforms*, Testimony before U.S. Senate Subcommittee on Communications, Technology, Innovation, and the Internet, 25 June 2019.

for Twitter, the company stated that a user will see tweets from users they follow and “recommended tweets”, that is tweets that Twitter believes the user will enjoy based on their platform activity<sup>27</sup>. In both cases, the platforms’ automated systems for content curation can decrease exposure diversity of users, because they prioritise certain categories of content only, and demote or exclude others based on criteria other than diversity, and which can conflict with it.

Various scholars have recognised, at theoretical level, the impact that platforms’ algorithmic recommendation systems might have on exposure diversity<sup>28</sup>. They have also noted that these systems approach diversity differently from media policy: it is not a normative value aimed to societal enlightening, but rather a question of providing a stimulating variety for the user to stay more on the platform and to consumer more<sup>29</sup>. Thus, it is typically the diversity within a set of recommendations selected for each user, not the diversity of the entire pool of content available. While these systems are presented as tailoring to the interests and preferences of users, the data-driven inferences, which are the main part of the business model, can have as trade-off the silencing of individual and collective voices alike. In fact, because recommendation systems seem to be, in principle, set to predominantly deliver information that aligns

<sup>27</sup> ACCC, *Digital Platforms Inquiry*, Final Report, cit.

<sup>28</sup> It has to be noted, however, that empirical research on how platforms’ algorithmic recommendations systems impact exposure diversity is yet limited due to the limited availability of data, which platforms refuse to share with academics, regulators or civil society alike. Nevertheless, a number of studies have argued that diversity of exposure online has increased in the past years, not the contrary. For example, in a comparative study based on surveys data from four countries, Fletcher and Nielsen have reached the conclusion that even if one looks at social media only, people are incidentally receiving news which are more diverse in sources (R. Fletcher - R. K. Nielsen, *Are People Incidentally exposed to News on Social Media? A Comparative Analysis*, in *New Media Soc.*, 20, 2018, 2450 ss. Like many survey studies, it can be argued that the study naturally suffers from limited accuracy and reliability (M. Scharrow, *The Accuracy of Self-Reported Internet Use – A Validation Study Using Client Log Data*, in *Commun. Methods Meas.*, 10, 2016, 13 ss.). Self-reporting measures have been recently criticised for being biased toward active news choices and routine use (H. Taneja - A. X. Wu - S. Edjerly, *Rethinking the Generational Gap in Online News: An Infrastructural Perspective*, in *New Media Soc.*, 20, 2018, 1792 ss.) as well as for being particularly inaccurate when people access news via intermediaries (cA. Kalogeropoulos - R. Fletcher - R. K. Nielsen, *News Brand Attribution in Distributed Environments: Do People Know Where They Get Their News?*, in *News Media Soc.*, 21, 2019, 583 ss.). To avoid these biases and inaccuracies, Scharrow et al. have looked at large tracking datasets of individual-level browsing behaviour in Germany, collected independently in 2012 and 2018, and applied a random-effects within-between model (REWB) to identify the effects on social media and other intermediaries to news exposure. They argue that incidental news exposure, that is the news exposure users get without looking for it but simply as part of their connection to the platform, is higher for those users that access social media sites more often on a given day. However, their research seems to focus on the quantity of news exposure, rather than on the diversity of it (M. Scharrow - F. Mangold - C. Stierc - J. Breuerc, *How Social Network Sites and Other Online Intermediaries Increase Exposure to News*, in *PNAS* 117 (6), 2020, 2761 ss.). In any case, this paper argues that to assess if there is a market failure in terms of exposure diversity on social media, the counterfactual is not the market situation of ten or five years ago, as referred to by many scholars, but a present hypothetical market where content is curated in a neutral way, or where a sufficient number of alternatives for content curation are concretely available to users and there is transparency and sufficient information about how the curation is performed. If the market failure consists in the artificial and intentional limits that social media platforms put on exposure diversity today, the counterfactual should be the exposure diversity in a market where that market failure is solved, or internalised by those who cause it.

<sup>29</sup> For a discussion on how to combine these two types of diversity and create an algorithmic diversity diet, see J. K. Sørensen - J. H. Schmidt, *An algorithmic diversity diet? Questioning assumptions behind a diversity recommendation system for PSM*, Working paper, Hans-Bredow-Institute for Media Research, 2016.

with people's current interests and preferences, they might lead to homogeneity and lower users' chances to encounter different content, opinions and viewpoints. It has been argued that this might lead users into "filter bubbles" or "echo chambers"<sup>30</sup>, which are segregated and homogeneous spheres of information and debate that in the long-term erode the idea of the public sphere and its function of providing people with diverse perspectives and opinions on matters of collective relevance, which is considered to be crucial to the functioning democracy<sup>31</sup>. It is noted, however, that the empirical research about the likely effects of content curation on exposure diversity remains limited due to the scarce availability of data<sup>32</sup>.

Another way social media platforms' content curation impacts exposure diversity can be observed by looking at the relationship between these platforms and media outlets. A significant proportion of the latter's referral traffic comes from social media; therefore, media outlets consider those platforms an unavoidable trading partners to reach certain audiences<sup>33</sup>. Here again, platforms can be seen as gatekeepers, and media outlets might be forced to consider, and adjust to, the way these platforms personalise content, or their content will not get through and it will not be seen by users. As a consequence, social media platforms' algorithms have substantially changed media outlets and journalists' incentives towards the production of certain type of content. If media businesses want to monetise their content and maximise referral traffic to their websites, they should opt for the production of content that satisfies the demands of the platforms' content curation systems, rather than producing content that is in line with their editorial choices, diverse and in the public interest<sup>34</sup>. Once again, diversity appears to give way to other criteria.

The above suggests that the content curation algorithms used by social media platforms create externalities in terms of exposure diversity, which the platforms do not seem to acknowledge and to internalise. Such externalities constitute a market failure that is problematic at individual level, because it limits users' freedom of information, and at societal level, because as mentioned, exposure diversity is a normative value instrumental to a democratic system.

The preliminary conclusion is therefore that content curation systems used by social media platforms can interfere with the content users are exposed to, lowering its diversity. In this scenario, social media markets can frustrate the idea of the Internet as a manifestation of users' freedom of choice, control and sovereignty<sup>35</sup>: indeed, this

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<sup>30</sup> C. R. Sunstein, *Republic.com*, cit.; E. Pariser, *The Filter Bubble: What the Internet Is Hiding From You*, London, 2011.

<sup>31</sup> J. G. Webster, *Diversity of Exposure*, cit.; J. K. Sørensen - J. H. Schmidt, *An algorithmic diversity diet?* cit.; J. Harambam - N. Helberger - J. van Hoboken, *Democratizing Algorithmic News Recommenders: How to Materialize Voice in a Technologically Saturated Media Ecosystem*, in *Philosophical Transactions of the Royal Society A*, 376(2133), 2018.

<sup>32</sup> N. Helberger - J. Moeller - S. Vrijenhoek, *Diversity by Design*, paper prepared for the Department of Canadian Heritage and the Canadian Commission for UNESCO, 2020.

<sup>33</sup> Reuters Institute, *Digital News Report*, 2019, cit.

<sup>34</sup> ACCC, *Digital Platforms Inquiry*, cit.

<sup>35</sup> A. L. Shapiro, *The Control Revolution: How the Internet is Putting Individuals in Charge and Changing the World We Know*, New York, 2000.

idea does not hold if personalised recommendations and exposure aim to nudge users and direct their attention to selected content only<sup>36</sup>.

Exposure diversity on social media might be also impacted by other additional factors. One is a diffuse content availability asymmetry: the pool of content where content curation algorithms draw might not be a neutral representation of public opinion, but rather tend to be biased towards the interest of the most active contributors. In addition, there appears to be relatively weak incentives to share content displaying scientific or societal consensus. Finally, users' behaviours might also, to a certain extent, play a role: likes, shares, retweets, clicks and similar actions can create popularity or trigger the virality of some content<sup>37</sup>. This can be the result of genuine behaviours, but also of inauthentic behaviours: sometimes sophisticated users can put in place mechanisms to alter the automated curation systems set by platforms in order to introduce intentional distortions<sup>38</sup>.

Another factor that might have an impact on exposure diversity is the substantial lack of transparency in the market. Individuals have limited or no knowledge about how the content they are exposed to is curated by algorithms and according to which criteria; therefore, they are not sufficiently aware of the hiatus between the diversity of content available online and the diversity of content they are exposed to. In other words, users are not aware that choices that limit their diversity of exposure have been made for them; on the contrary, they might consider the newsfeed as neutral, reflecting the existing diversity and abundance of viewpoints. This lack of awareness impacts on their autonomy, and on their capacity to make choices to remedy the reduced exposure. Scholars have noted that the lack of autonomy and independence of users' decision-making is a key element of market failures deriving from gatekeeping positions<sup>39</sup>. The European Commission, in its recent proposal for a Digital Services Act (DSA), seems determined to tackle this problem in two main ways: by imposing transparency obligations on all players, and by requiring very large online platforms to provide users with the possibility «to select and modify at any time their preferred option for each of the recommender systems that determines the relative order of information presented to them»<sup>40</sup>.

What has been described so far refers mainly to the content users are passively exposed to. Users remain free, at least in theory, to actively look for more diverse and plural

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<sup>36</sup> E. Pariser, *The Filter Bubble*, cit.; C.R. Sunstein, *The Ethics of Nudging*, in *Yale Journal of Regulation*, 32, 2015, 413 ss.

<sup>37</sup> K. Thorson - C. Wells, *Curated Flows: A Framework for Mapping Media Exposure in the Digital Age*, in *Communication Theory*, 26(3), 2015, 309 ss.

<sup>38</sup> The phenomenon of inauthentic behaviours is not marginal. The big platforms dedicate increasing attention to it. For example, Facebook has started to publish regular reports on the topic, see: Facebook, *February 2021 Coordinated Inauthentic Behaviour Report*, 3 March 2021. The European Commission too is dedicating attention to the phenomenon within its strategy against disinformation; see, recently: European Commission, *Guidance on Strengthening the Code of Practice on Disinformation*, COM(2021) 262 final, 26 May 2021.

<sup>39</sup> R. Podszun, *Digital Ecosystems, Decision-Makings, Competition and Consumers – On the Value of Autonomy for Competition*, in *ssrn.com*, 2019; E. Fish - M. Gal, *Echo Chambers and Competition Law: Should Algorithmic Choices Be Respected?*, in *Competition Policy International*, 2020.

<sup>40</sup> European Commission, Digital Services Act, cit., Article 29(2).

content, either by changing the default settings on the platform or outside the platform. In practice, though, they rarely do so. Behavioural studies have documented that users do not always choose the best course of action, and are generally reluctant to act outside of the status-quo<sup>41</sup>. Furthermore, platforms are able to exploit these users' bias through specific designs that promote addictive behaviours<sup>42</sup> such as default settings, dark patterns and similar forms of nudging, which users very rarely react to<sup>43</sup>. In other words, users will rarely, if ever, change the default settings on their profile on Facebook or Twitter, despite the fact that doing so could free them from the platforms' massive interference with the content they see, and could allow them to access more diverse information. This is so for two main reasons. On the one hand, because of the mentioned extreme asymmetry of information and lack of transparency in the social media markets. On the other hand, to change default settings has a meaningful cost for users, at least in terms of time, which discourages it.

The challenges described above are exacerbated by the high concentration in social media markets<sup>44</sup>, which are dominated by a few companies only; therefore, what is distributed by or shared on these few companies is visible to a vast public, while what is not distributed by or shared on these few companies might not be visible to the majority of individuals. Moreover, social media markets present high barriers to entry and they do not appear easily contestable<sup>45</sup>. Therefore, dominant players are able to adopt business models and practices which are not driven by demand and to lower the quality of the service offered to users without suffering any competitive pressure. Users do not appear to have at disposal viable alternatives and platforms have various ways to keep switching costs artificially high<sup>46</sup>. As a result, large social media companies can play a bottleneck role in the distribution of content, and affect users' diversity of exposure. In addition, because of their size and market power, social media platforms might represent a sort of unavoidable trading partners for media outlets, which, as argued, are impacted by the platforms' content curation systems with little negotiating

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<sup>41</sup> ForbrukerRadet, *Deceived By Design. How Tech Companies Use Dark Patterns to Discourage Us From Exercising Our Right to Privacy*, 2018; Behavioural Insight Team, *The Behavioural Science of Online Harm and Manipulation, and What To Do About It*, 2019.

<sup>42</sup> Ofcom, *Online Market Failure and Harms. An Economic Perspective on the Challenges and Opportunities in Regulating Online Services*, 2019.

<sup>43</sup> Scholars and regulators have highlighted the challenges related to defaults, dark patterns and nudging. For an overview of the topic, see among others, O. Bar-Gill - O. Ben-Shahar, *Rethinking Nudge: An Information-Costs Theory of Default Rules*, in *University of Chicago Law Review*, 88, 2021, 531 ss.; Competition and Markets Authority, *Online Platforms and Digital Advertising*, Market Study Final Report, 1 July 2020; ACCC, *Digital Platforms Inquiry*, cit.

<sup>44</sup> P. L. Parcu, *New Digital Threats to Media Pluralism in the Information Age*, in *RSCAS/CMPF Working Paper*, RSCA 2019/9, 2019.

<sup>45</sup> The European Commission has explicitly recognised this problem and its recent regulatory proposal for a Digital Markets Act is supposed to solve it (see: European Commission, Proposal 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 Final, 2020/0374 COD).

<sup>46</sup> A number of distinguished studies describe the existence of these challenges in digital markets; see, for example: Ofcom, *Market Failure and Harm*, cit.; J. Cremer - Y. A. de Montjoye - H. Schweitzer, *Competition Policy for the Digital Era*, 2019; Sitlger Committee on Digital Platforms, Final Report, 2019; Competition and Markets Authority, *Online Platforms and Digital Advertising*, cit.

power. Therefore, size and market power seem to play a role in the under-exposure of users to diversity.

To conclude, this section has discussed the under-exposure to diversity on social media markets and its causes. The way social media markets work means that exposure diversity is low as a result of a number of factors, which this section has tried to list. The main appears to be the algorithmic systems of content curation used by social media platforms. Other factors that contribute to this reduction are the high market concentration and the bottleneck role that could be played by large players in the distribution of content, the asymmetry of information between platforms and users, and the absence of viable alternatives for the latter.

The key role that platforms' automated content curation systems play for exposure diversity has been acknowledged by decision makers and regulators. The Council of Europe has recommended to member States to «improve the transparency of the processes of online distribution of media content, including automated processes: - assess the impact of such processes on users' effective exposure to a broad diversity of media content; - seek to improve these distribution processes in order to enhance users' effective exposure to the broadest possible diversity of media content»<sup>47</sup>. In a similar vein, regulators have called for appropriate and consistent regulation of platforms' functions of selecting and curating content, evaluating content based on specific criteria, and ranking and arranging content for display to users<sup>48</sup>. The European Commission, in its recent proposal for a Digital Services Act (DSA), has suggested that very large online platforms perform a risk assessment with regard to their content curation systems, and that they amend the latter in a way that does not have negative effects for the exercise of freedom of expression and information by users, which exposure diversity is part of<sup>49</sup>.

The next section of this paper looks at the decision makers and enforcers' perspective and discusses two possible ways to solve the reduction of exposure diversity with regulation.

## **Part III**

### **5. Two proposals**

There are arguably various ways regulators could intervene to fix the problem at stake. *Ex ante* remedies appear to be the best fit because of the various characteristics of social media markets. First, they are fast moving markets, where developments in technology and business models occur rapidly, definitely more rapidly than in traditional *ex post* enforcement. Second, social media markets' dynamics are as such that economies of scale and scope, once achieved, raise barriers to entry and make it difficult to

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<sup>47</sup> Council of Europe, Recommendation CM/Rec(2018)1, cit.

<sup>48</sup> ACCC, *Digital Platforms Inquiry*, cit.

<sup>49</sup> European Commission, Digital Services Act, cit., Article 26. For a definition of “very large online platform” see Article 25.

reverse the situation and to make markets competitive and contestable again. Indeed, the difficulties in tackling consolidated positions of (abusive) dominance fuel extreme calls to “break up” the giants<sup>50</sup>. *Ex ante* regulation could be useful in case of markets that have already tipped, because it can lower barriers to entry and make markets contestable again.

In addition, *ex ante* remedies present a number of advantages: they can be tailored to specific situations, they can be behavioural or structural in nature, and are potentially an open-ended list. Finally, the procedure to impose *ex ante* remedies could be less formal than an *ex post* infringement procedure, and, depending on circumstances, it could imply a certain degree of negotiation, or at least confrontation, between the enforcer and the target.

In the case at hand, where we are confronted with a harm strictly linked to a market failure that is at least reinforced by the substantial market concentration and high barriers to entry, regulators could decide to use asymmetric regulation to fix the problem. Asymmetric regulation would involve imposing specific obligations on players which possess a significant degree of market power. Scholars and regulators have put forward various proposals about how to identify these players<sup>51</sup>. Indeed, numerous regulatory proposals currently discussed in different areas of the world focus on platforms with market power, therefore there is consensus on the need for asymmetric regulation.

This paper identifies and discusses two main *ex ante* regulatory solutions: (i) the imposition of a certain level of regulated diversity; (ii) the imposition of unbundling between hosting and content curation activities, in order to open the market to competitors and reinstall competitive dynamics. The first solution regulates content curation in a way that guarantees diversity. As previously explained, the under exposure in social media markets is not linked to a decrease in the availability of content, but rather to, first among others, the way the content is distributed: social media platforms distribute content to their users via content curation activities, which have the potential to decrease diversity. Seen from the user’s perspective, the decrease does not concern the content they actively access, but rather the content they are passively exposed to on a daily basis. As the market failure concerns distribution, a possible solution is to impose some form of “must view” obligation on the platforms to expose individual users to some degree of content diversity.

The second solution is to separate hosting activities from content curation activities and to oblige large platforms to allow third parties to offer content curation to the platforms’ users. For example, a user that creates or has a profile on Facebook should be asked by the platform whether she wants the content curation service to be provided by Facebook itself, or by other players to be freely selected. The option to stay with

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<sup>50</sup> See among many: A. W. Herndon, *Elizabeth Warren Proposes Breaking Up Tech Giants Like Amazon and Facebook*, in *The New York Times*, New York, 8 March 2019; Editorial, *Tech giants face new threats from the government and regulators*, in *The Economist*, San Francisco and Dallas, 14 March 2019.

<sup>51</sup> See, among others: E. Noam, *Online Video: Content Models, Emerging Market Structure, and Regulatory Policy Solutions*, in *TPRC47: The 47th Research Conference on Communication, Information and Internet Policy*, 2019; Digital Competition Expert Panel, *Unlocking Digital Competition*, 2019; Autorité de la Concurrence, *Contribution de l’Autorité de la concurrence au débat sur la politique de concurrence et les enjeux numériques*, 19 February 2020; Competition and Markets Authority, *Online Platforms and Digital Advertising*, cit.

the large platform should be presented as opt-in, rather than opt-out. Such a measure would help defend against users' unwillingness to change from the status-quo and would avoid that platforms undermine the effects of the unbundling by making the switching hard for users and by nudging them towards a locked-in situation.

Both proposals are for asymmetric regulation, based on various reasons. First, the market failure they are supposed to fix is an externality of large platforms' business models and content curation algorithms. Because of their power, these platforms account for the vast majority of the market; therefore, to address the market failure it could be sufficient to address these players. Second, additional regulatory burdens will likely weigh more on small platforms, which might not have adequate resources and tools for compliance, than on big platforms, and further strengthen the latter competitive advantage, which, as mentioned, is a factor that reinforces the market failure. Third, asymmetric regulation would be a less invasive regulatory intervention than a sector-wide regulation. These benefits would likely overtake potential trade-off of asymmetric regulation in terms of difficulties for monitoring and enforcement.

The follow-up question is to identify which platforms are large enough to warrant regulation. Regulators should set thresholds that reflect the gatekeeping capacity of platforms, and their disproportionate power towards users, rather than look at their turnover or financial capacity. Among others, regulators could consider parameters such as the number of users, the time spent on the platform or the number of interactions on the platform, to assess the size; the low ability and incentive to multi-homing for users or the economic dependency of business users to assess the gatekeeping role; and the existence of barriers to entry on existing and future services to assess if the gatekeeping position is likely to endure<sup>52</sup>.

A further step is to decide on what type of platforms the remedies should be applied. Social media platforms can be broadly divided into two categories: "generalists" and "specialised" ones. The European Commission, in its decision about the Microsoft/LinkedIn merger, explained that general social network services are used to build social relations among people who share similar personal and career interests, activities, backgrounds or real-life connections. A sub-set of social network services are focused on professional contacts and are therefore typically referred to as "professional social network" services, and should be considered a different market; the Commission considered LinkedIn an example of the latter<sup>53</sup>. Although this distinction has been made based on merger rules about market definition and market power, it might be possible to borrow these definitions and make use of them in a different regulatory context. For our purposes, the suggestion to apply diversity obligations on generalists social

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<sup>52</sup> P. Alexiadis - A. de Stree, *Designing an EU Intervention Standard for Digital Gatekeepers*, in *EUI Working Paper Series*, RSCAS 2020/14, 2020. In its recent proposal for a Digital Services Act, the European Commission has opted for the imposition of asymmetric obligations on "very large platforms", defined based on the average monthly users in the EU. A more complex assessment is foreseen in the second proposal recently issued by the Commission, the Digital Markets Act (DMA). The latter defines "gatekeepers" based on the combination of three quantitative parameters: annual turnover, average market capitalisation, and average monthly users for at least three financial years. However, the DMA also provides the possibility, for the Commission to define a gatekeeper based on a case-by-case qualitative assessment, if needed (see European Commission, Digital Markets Act, cit., Article 3).

<sup>53</sup> European Commission, *Microsoft v LinkedIn*, Case M.8124 [2016].

media, such as Facebook, Twitter and TikTok appears more proportionate to the objective of media diversity, because generalist platforms are the ones that can potentially transmit more diverse types of content and information.

In the following section, an analytical framework is suggested to compare the merits of both proposals based on a number of benchmarks.

## 6. An analytical framework to assess them

In this section, the regulated diversity and the unbundled access to content curation are assessed against a number of benchmarks, which could be useful to measure their effectiveness, strengths and weakness both from a substantive and from an enforcement point of view. The seven suggested benchmarks have been chosen to help regulators answering two key questions: what are the aims that they want to achieve; and how to do so, dealing with the related challenges.

### 6.1. Normative approach

The regulated diversity falls within the traditional State's approach to media diversity as a public objective that deserves protection<sup>54</sup>. While shaping this remedy, regulators should carefully define diversity of content and viewpoints and establish how much diversity is enough diversity: in other words, which and how many viewpoints need to reach the individual user for the latter to be exposed to a sufficient degree of diversity<sup>55</sup>.

The remedy at stake reflects a paternalistic approach to exposure diversity and it could be grounded on a participatory theory of democracy<sup>56</sup>. Under this conception, individuals' freedom and autonomy are not values *per se*, but as they are instrumental to furthering the common good. Citizens, therefore, cannot afford to be uninterested in politics because they have an active role to play in society<sup>57</sup>. Imposing citizens a certain degree of exposure diversity is substantially in line with this vision, as it helps citizens

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<sup>54</sup> This approach is based on the recognition that States have the sovereign right to formulate, adopt and implement policies and measures for the protection of diversity of cultural expression (see W. King - A. Shramme, *Cultural Governance in a Global Context: An International Perspective on Art Organisations*, London, 2019; A. Vlassis, *Diversity of Content in the Digital Age – Towards Guiding Principles*, paper prepared for the Department of Canadian Heritage and the Canadian Commission for UNESCO, 2020). Along those lines, the EU Audiovisual Media Service Directive, at Recital 25, affirms that Member States may «[...] impose obligations to ensure the appropriate prominence of content of general interest under defined general interest objectives such as media pluralism, freedom of speech and cultural diversity» (see Directive (EU) 2018/1808 of the European Parliament and of the Council of 14 November 2018 amending Directive 2010/13/EU on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the provision of audiovisual media services (Audiovisual Media Services Directive) in view of changing market realities [2018] OJ L 303, 69–92).

<sup>55</sup> The Cairncross Review, *A Sustainable Future for Journalism*, cit.

<sup>56</sup> D. Held, *Models of Democracy*, Redwood City, 2006.

<sup>57</sup> J. Strömbäck, *In search of a standard: Four models of democracy and their normative implications for journalism*, in *Journalism Studies*, 6(3), 2005, 331 ss.

to play their role.

Nevertheless, some scholars remain sceptical about the opportunity to regulate exposure diversity and impose on people the consumption of certain media, even if “valuable” ones, because it conflicts with individuals’ freedom of expression and personal autonomy<sup>58</sup>. Indeed, the European Convention on Human Rights protects the right of individuals to «hold opinions and to receive and impart information and ideas without interference by public authority»<sup>59</sup>. Therefore, any public-authority driven prescription about how much diversity of content people ought to see or consume risks crossing the line between legitimate media policy objectives and normative censorship, or the structuring of thought and societal choices by consciously manipulating or inducing biases in computational decisions. Moreover, if not well designed and enforced, the regulated exposure diversity can raise issues of transparency, ethics, security, loyalty and above all neutrality of the Internet. For this regulatory tool to be legitimate, the intent or purpose of the authorities venturing into it need to be clear and transparent, and the intervention needs to be proportionate and necessary.

On the other hand, the unbundled access to content curation lands in the economic regulation approach. Rather than imposing a minimum degree of diversity of exposure in the market, this remedy relies on competition to increase variety of content curation systems and therefore diversity of outcomes, and leaves users free to select what they prefer. The unbundling, triggering decentralisation and opening the doors to more players, could help dilute the power of current gatekeepers and build the counter powers we need to prevent a few social media platforms from becoming quasi-governments of online speech, while also ensuring that they each remain one of many content curation providers that allow people to engage in public debate<sup>60</sup>. Therefore, this regulatory approach is less invasive and more in line with a liberal democratic theory, where personal development and autonomy of citizens remains central and is respected by the State, who does not intervene but with a minimal nudging<sup>61</sup>.

## **6.2. Impact on users’ empowerment**

As recalled various times by the European Commission Executive Vice-President Vestager, users’ empowerment is a fundamental pillar of the European way, where is technology that serves people and not the other way around<sup>62</sup>. This benchmark is

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<sup>58</sup> P. Valcke, *Digitale Diversiteit. Convergentie van Media – Telecomm en Mededingingsrecht*, Brussels, 2004; P. Napoli, *Media Diversity and Localism. Meaning and Metrics*, London, 2006.

<sup>59</sup> European Convention on Human Rights [1953], Article 10.

<sup>60</sup> D. Kaye, *A New Constitution for Content Moderation*, in *OneZero.medium.com*, 26 June 2019; N. Helberger, *The Political Power of Platforms: How Current Attempts to Regulate Misinformation Amplify Opinion Power*, in *Digital Journalism*, 2020; F. Fukuyama - B. Richman - A. Goel, *How to Save Democracy from Technology. Ending Big Tech’s Information Monopoly*, in *Foreign Affairs*, January/February 2021.

<sup>61</sup> M. M Ferree - W. A. Gamson - J. Gerhards – D. Rucht, *Four Models of the Public Sphere in Modern Democracies*, in *Theory and Society*, 31, 2002, 289 ss.; J. Strömback, *In search of a standard*, cit.

<sup>62</sup> See among others: M. Vestager, *When Technology Serves People*, 1 June 2018; Ead., *Internets of the World Conference*, 5 December 2019.

strictly interlinked with the normative approach benchmark. Indeed, the users' empowerment potential of each remedy is inversely related with the level of paternalism toward users that each remedy implies.

The imposition of regulated diversity has a limited impact in terms of users' empowerment: it does not widen users' choices, but considers them passive targets of a certain policy outcome. However, depending on how the remedy is designed and on whether it is accompanied by further transparency obligations, it can raise users' awareness on how content curation algorithms work and on why they see the content they see on their feeds, pages etc. It remains true, though, that knowledge without the possibility to change or chose alternatives remains a blunt weapon. Regulators could partly obviate this problem by including rules on defaults that provide users with a certain degree of autonomy in setting their own preferences about the content they want to be exposed to. As mentioned, this path has been followed by the European Commission in its Digital Services Act proposal.

The scenario looks different in the case of unbundled access to content curation. The greater availability of choices could increase the bargaining power of users in relation to platforms, and could enable users to discipline, to a certain extent, the quality and diversity of the content offered to them by switching to another supplier of content curation if they are not satisfied by the one they are currently using. The availability of choices could also allow the fragmentation of users into groups with different preferences. In other words, in the medium and long term unbundling could strongly empower users.

To conclude, when assessing the two proposals regulators should consider that the unbundling appears to have a stronger impact on users' empowerment, which remains a policy and regulatory priority in the framework of the EU Digital Single Market.

### **6.3. Sustainability and impact on competition and innovation**

Another fundamental step in deciding which remedy to adopt is to look at the impact it has on the market at present, as well as in the years to come. Regulators should look at the goal they want to achieve in the short as well as in the medium and long term. In particular, the remedy's sustainability in the long run and its impact on competitive dynamics and innovation on the market are significant elements to consider when making the choice.

Imposing platforms to include the parameter of diversity in the design of their content curation systems (diversity by design) could create commercial constraints for the platforms, because they will not be free to optimise their algorithms for profit purposes only. The impact of this economic disincentive should be carefully evaluated, in order to avoid quality degradation or decrease of innovation in the medium and long term. In addition, regulated diversity might do little to overtake the structural market problems identified in the previous part of this paper: it does not lower barriers to entry nor it imposes any new competitive constraint on platforms, which could make them

more incline to change their content curation systems.

On the contrary, the form of unbundling suggested here appears to be capable of addressing not only the reduction of exposure diversity on social media, but also the market failure that originates this reduction. Unbundling could open the content curation market to competitors, thus making it contestable again. In the medium and long term, the competitive pressure could stimulate all companies to innovate and offer better quality services, to the benefit of consumers. If competition is reinstalled in the market, diversity of exposure could be ensured in a sustainable way both in the short term as well as in the long-term. A healthy competitive market could deliver better quality services *per se*, without the need for further regulation.

Nonetheless, unbundling could present some shortfalls too. As previously mentioned, the way content is currently shaped on social media platforms is led by the advertising-driven business model adopted by these platforms. If the alternative operators use the same business model, the problem of the reduction in the diversity of exposure might not be solved in the medium and long term. Therefore, the key question becomes how economically sustainable other business models may be, whether there are sufficient incentives to stimulate their adoption, or whether the States or regulators might have to provide these incentives.

Overall, based on the above, regulated diversity might limit platforms' monetisation mechanisms, reduce their incentive to innovation and might not help to solve the lack of sufficient competition in the market. On the other hand, the unbundled access solution could expose large platforms to more competition making markets contestable again, and could thus be expected to create incentives for innovation.

#### **6.4. Complementary measures**

This benchmark considers whether each remedy is sufficient to achieve the set goal and/or if a number of complementary measures might be needed for this purpose, as well as to avoid possible medium and long term trade-offs.

If regulated diversity is chosen, a complementary measure should be to increase transparency between social media platforms and their users, in order to diminish information asymmetry and to allow users to make more informed and conscious choices. This can be done through the imposition of detailed transparency obligations on platforms. Various regulators have already moved in this direction, such as, for example, the German broadcasting authority and, more recently, the European Commission<sup>63</sup>.

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<sup>63</sup> The recent initiative of the German broadcasting authority (the Medienstaatsvertrag or MStV) addresses media platforms and streaming services, but also "media intermediaries", which are defined as «any tele-media that aggregates, selects, and presents third-party journalistic/editorial offers, without presenting them as a complete offer». While definitions still need to be clarified, the draft MStV includes a list of digital offers ranging from search engines to social networks and news aggregators. Under the transparency provisions, media intermediaries will be required to provide information about how their algorithms operate, including the criteria that determine: (i) how content is accessed and found, and (ii) how content is aggregated, selected, presented and weighed. Indeed, transparency rules address information asymmetries for users by increasing their awareness on how what they see is selected and curated. The shortfalls for our purposes remain that MStV rules do not provide users with the possibility

In case of unbundled access to content curation one of the possible short-falls concerns the sustainability of alternative business models for content curators, which depends, to a large extent, on users' willingness to pay, which in turn depends on how much users value diversity of exposure. States could stimulate this willingness to pay through media policies that increase digital literacy. Among others, States could promote actions to increase users' awareness of the key role played by media diversity in determining their capacity to make informed decisions and engage in public life; or they could enforce policies that reduce the information asymmetries in social media markets, for example, by mandating or encouraging more transparency around platforms' business models and the use of algorithms in content curation<sup>64</sup>. These transparency measures could also reduce the competitive advantage large platforms have with regards to smaller competitors.

Another way to promote alternative business models, as well as to promote algorithms that implement diversity metrics, could be by providing support via public funding for a temporary period. In this scenario, while the costs society would have to bear may be justified by the importance of the public objective to be achieved, in the long term this solution may not be sustainable.

Finally, alternative business models could be indirectly supported by an increase in users' empowerment; regulators could encourage practices that go in this direction, and more specifically towards users' playability, that is their capacity to interact with the algorithm and to choose their preferred settings<sup>65</sup>; in other words, people should be given a voice, that is the possibility to exert a certain degree of control over the algorithms that curate the content they see<sup>66</sup>. A way to do so is to mandate platforms not to use default settings, and rather let users make their choices and to easily change them at any time. The European Commission's proposal for a Digital Services Act seems to go in this direction when it establishes that very large online platforms «shall provide easily accessible functionality on their online interface allowing the recipient of the service to select and modify at any time their preferred option for each of the recommender systems that determines the relative order of information presented to them»<sup>67</sup>.

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to choose the criteria according to which the ranking or sorting is performed. Awareness about status quo without the possibility to choose alternatives is a blunt weapon. The European Commission's proposal for a DSA also chooses the way of transparency, with a first layer of obligations imposed on all players and additional ones imposed on very large platforms. See European Commission, Digital Services Act, cit.

<sup>64</sup> Here again, default settings have a role to play. Regulators could call platforms and alternative players to guarantee, by default, a specific degree of transparency about the services they provide, and in particular about how their algorithm works. Germany is experimenting a similar approach: the German Network Enforcement Act (NetzDG) imposes transparency rules that some platforms have implemented in their default settings. However, the NetzDG does not expressly target defaults, and this is why some players, like for example Facebook, have been able to maintain their defaults, adding an alternative possibility for users which complies with the NetzDG, but which remain far less utilized by users.

<sup>65</sup> D. Tchhouali, *Analysis of Potential Measures to Support Access and Discoverability of Local and National Content*, paper prepared for the Department of Canadian Heritage and the Canadian Commission for UNESCO, 2020.

<sup>66</sup> J. Harambam - N. Helberger - J. van Hoboken, *Democratizing Algorithmic News Recommenders*, cit.

<sup>67</sup> European Commission, Digital Services Act, cit., Article 29(2).

Apart from State intervention, the shortfalls of unbundling could be addressed by multi-stakeholders forms of self-regulation. In other words, if and to the extent that competitive process would not be able to deliver sufficient quality in the medium and long term, and in order to avoid a race to the bottom with regards to alternative business models to be adopted by third-parties, multi-stakeholders' initiatives as the social media councils mentioned above could be supported to define additional diversity standards to be applied by all players in the market.

In conclusion, both regulatory solutions might need complementary measures to be implemented. For regulated diversity these measures are limited to more transparency in the market. However, as the unbundling could have a stronger impact on market dynamics, it seem to require more complementary measures to deal with the new market setting, and to nudge towards alternative business models and support their sustainability.

## **6.5. Design/Implementation**

This benchmark looks at how each measure might be designed and implemented in practice, and which weakness and strengths it implies.

Regulated diversity has to be implemented by algorithmic recommendation systems. This solution therefore implies the imposition of a sort of diversity by design. Diversity of exposure is a value, and translating a public value into a design requirement is not a simple process. Scholars have identified three main steps in this process: the conceptualisation of the value; the translation of it into one or more norms or metrics; the translation of those norms or metrics into more specific design requirements<sup>68</sup>. Technical developers might encounter difficulties in translating a normative value into concrete criteria that the system they develop has to possess and to implement. Therefore, to effectively achieve the objective, the technical and the editorial departments of social media platforms should work together<sup>69</sup>.

Moreover, attention is needed to operationalise exposure diversity while avoiding arbitrary intervention by the State. To this aim, regulators could promote and rely on multi-stakeholder solutions. This approach has been suggested by the Council of Europe, who recently called on States to encourage social media, media, search and recommendation engines and other intermediaries which use algorithms, along with media actors, regulatory authorities, civil society, academia and other relevant stakeholders to engage in open, independent, transparent and participatory initiatives aimed at improving distribution processes in order to enhance users' effective exposure to the broadest possible diversity of media content, among other aims<sup>70</sup>. The multi-stakeholder approach is supported by various actors. For example, some civil society groups have suggested the creation of "Social Media Councils", a multi-stakeholder accountability mechanism

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<sup>68</sup> I. Van der Poel, *Translating values into design requirements*, in D. Mitchfelder, N. McCarty, D. E. Goldberg (eds), *Philosophy and Engineering: Reflections on Practice, Principles and Process*, Springer, 2013.

<sup>69</sup> N. Helberger - J. Moeller - S. Vrijenhoek, *Diversity by Design*, cit.

<sup>70</sup> Council of Europe, Recommendation CM/Rec(2018)1, cit.

for content moderation on social media. The Councils aim to provide an open, transparent, accountable and participatory forum to address content moderation issues on social media platforms on the basis of international standards on human rights and could help to establish best practices with regard to exposure diversity<sup>71</sup>.

Furthermore, diversity by design should look not only at the algorithm, but also at the broader societal context where the latter is implemented<sup>72</sup>. In fact, diversity of exposure will always depend on the diversity of content available in a certain context and therefore it is a moving target, not a fixed measure. For example, the variety of content in a region of a EU state that chiefly speaks a language different from the national one might not be comparable with the variety of content available at national level. When the diversity of content increases in a certain context, the increase should be reflected in the diversity of exposure too.

Regulators could approach the operationalisation of diversity in the platforms' algorithmic recommendation systems in various ways. The first, less intrusive, is to impose to the platform an obligation with regard to the outcome, and let it free to decide how to implement it. The second is to intervene in the operationalisation process and to dictate (some of) the criteria through which the algorithm should perform content curation. The second option raises the question of which safeguards should be put in place to avoid arbitrary intervention, which could result in censorship or propaganda. Some have noted that similar problems could emerge, for example, in the approach taken in the EU Code of Practice on Disinformation<sup>73</sup>, which asks platforms to prioritize "trustworthy" content<sup>74</sup>.

A number of governments and public actors seem oriented towards the first option, and towards asking platforms to make their algorithms accommodating public interest considerations; however, it remains unclear which considerations they refer to, how platforms are supposed to operationalise this call and how regulators can monitor and evaluate platforms' efforts. To find an efficient answer to these questions, co-regulation might be a better fit than regulation. A co-regulatory response, in fact, could gain from the information companies have but regulators lack about how the algorithms work, and how to shape their design to achieve the needed results. A co-regulatory response might also make enforcement easier.

On the other hand, the unbundled access to content moderation would need to be deployed and enforced at two layers: (i) contractual terms and commercial behaviour and (ii) technical standards and protocols. The unbundling could be reflected in the contractual relationship between the large platform and the content curation providers, which could contain, at least, the obligations: not to bundle the two services; not to impose restrictions on the users' ability to use alternative players for the provision of content curation activities; to provide access to alternative players on fair, reasonable

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<sup>71</sup> ARTICLE 19, *Social Media Councils: Consultation Paper*, 2019.

<sup>72</sup> B. Friedman - D. G. Hendry - A. Borning, *A Survey of Value Sensitive Design Methods*, in *Human-Computer Interaction*, 11(2), 2017, 63 ss.

<sup>73</sup> EU Code of Practice on Disinformation, 2018.

<sup>74</sup> N. Helberger - P. Leersens - M. Van Drunen, *Germany proposes Europe's first diversity rules for social media platforms*, in *LSE blog*, 29 May 2019.

and non-discriminatory terms.

From a technical perspective, the unbundling could imply to design core services to be interoperable (for example, to design the APIs to be interoperable) at cost-based price which is objectively justifiable. In fact, in order to be able to provide content curation on social media platforms, third parties would need to have access to the platform's APIs, or to be able to integrate their own API on the social media platform. At present all the major social media platforms have their own APIs and provide app developers access to them according to different conditions, so it is reasonable to believe that the first option would be the easiest solution<sup>75</sup>. What is needed is thus a meaningful degree of interoperability. Scholars, experts and civil society have advanced proposals that span from partial and unidirectional interoperability to full protocol interoperability<sup>76</sup>. To set the adequate degree of interoperability to be imposed on major platforms could remain a regulator's task, or it could be left to the industry, with the provision of some form of independent oversight and minimum parameters to be respected<sup>77</sup>.

Furthermore, the unbundling could imply to design core services in a way that allows to manage privacy, security and similar technical concerns, in compliance with the relevant legislative frameworks as well as with industry and technical standards; not to withhold, withdraw, depreciate or otherwise change APIs in a way that has a material adverse effect on users without sufficient consultation or objective justification; to ensure that standards developed are interoperable<sup>78</sup>. This deployment of the unbundling seems to fit well in the framework of the recent European Commission's proposal for a Digital Markets Act. Indeed, the Digital Markets Act calls for gatekeepers to allow the installation and effective use of third-party applications that interoperate with the operating system of the gatekeeper<sup>79</sup>.

As for the best way to shape and enforce unbundling, because of stark information asymmetries in the market, co-regulation might once again be a better fit. A possible

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<sup>75</sup> However, some scholars remain skeptical with regards to the technical feasibility of this solution. See, for example, D. Keller, *Platforms Content Regulation – Some Models and Their Problems*, in *The Centre for Internet and Society blog*, 6 May 2019.

<sup>76</sup> Suggestions about interoperability measures and how to shape them with regards to specific use cases can be found, among others, in : J. Cremer - Y. A. de Montjoye - H. Schweitzer, *Competition Policy for the Digital Era*, cit.; I. Brown, *The technical components of interoperability as a tool for competition regulation*, OSF preprint, 2020; V. Bertola, *A Technical and Policy Analysis of Interoperable Internet Messaging*, 2020; Internet Society, *White Paper: Considerations for Mandating Open Interfaces*, December 2020; B. Cyphers - C. Doctorow, *Privacy Without Monopoly: Data Protection and Interoperability*, Electronic Frontier Foundation Paper, 2021; P. Marsden - R. Podszun, *Restoring Balance to Digital Competition – Sensible Rules, Effective Enforcement*, Konrad-Adenauer-Stiftung, Berlin, German. e. V. 2020.

<sup>77</sup> P. Alexiadis - A. de Streel - *Designing an EU Intervention Standard for Digital Gatekeepers*, cit.

<sup>78</sup> Competition and Markets Authority, *Online Platforms and Digital Advertising*, cit. It should be noted that the relevant behaviours of dominant social media platforms I deal with in this paper could be shaped as exploitative abuse towards users complemented by an exclusionary effect on competitors. Although in principle unbundling as *ex post* competition remedy could have the same or a similar impact to a regulatory unbundling, in this case, however, I am convinced that it would not. This is because the case at stake is about a persistent market failure, which is extensive, and where timely intervention is indispensable. For this reason, following what stated in Recital 16 of the European Commission Recommendation 2014/710, I suggest unbundling as an *ex ante* and not an *ex post* remedy and I call for regulatory intervention, rather than the enforcement of competition rules.

<sup>79</sup> European Commission, Digital Markets Act, cit., Article 6(1)(c).

solution could be to include unbundling and its related obligations in codes of conduct, which could be drafted mainly by companies in dialogue with regulators and then approved and made mandatory by the latter. In recent times, decision makers have expressed preference for this kind of instrument. The European Commission has resorted to it to try to solve a number of challenges hitting hard on social media platforms, such as disinformation or hate speech<sup>80</sup>. The Furman Report has suggested the development of a Code of Competitive Conduct, which would apply to digital platforms designated with a “strategic market status”<sup>81</sup>. The ACCC as well asks designated digital platforms to provide a code of conduct that governs their commercial relationships with news and media businesses<sup>82</sup>. Codes of conduct have to set the minimum requirements, but companies could go higher. However, regulators should be able to enforce those codes in case companies do not voluntarily comply; they should also have the capacity and expertise to monitor and assess the enforcement of the codes. To sum up, the design of both remedies implies solving complex technical issues. The regulated diversity needs the operationalisation, into an algorithm, of the normative value of diversity. The unbundled access requires platforms to open their APIs or to put in place similar solutions for competitors to plug-in and run their algorithms on the platform, and all this has to happen adequately protecting users’ data and by maintaining high standards of security. In both cases, the remedy asks regulators for technical expertise that they might not have internally, and it could be better implemented if regulators engage in a transparent and fruitful dialogue with companies’ technical departments, in addition to the policy and regulatory ones.

### **6.6. Consistency with existing rules that apply to social media platforms**

Social media platforms are subject to a number of different rules: some apply horizontally to all services they provide (such as competition law), while others apply only to the provision of specific services (such as data protection rules or rules on the prevention of hate speech or on the removal of illegal content). As the two proposed remedies land in a shared regulatory space, this benchmark helps regulators to assess how consistent each of them is with the existing rules social media platforms are subject to. Regulators have to consider that to impose on social media platforms a certain degree of diversity while performing content curation might imply an obligation for companies to monitor all content that circulates on their platforms. This could result in a form of general monitoring of users’ speech by private actors, which would constitute a blatant violation of freedom of expression. Moreover, such control could open the door to censorship, or to an ever greater influence on the public debate. The current EU regulatory framework provides hosting platforms with a liability exemption insofar as they do not interact in any way with the content they host. This liability exemption,

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<sup>80</sup> *Ibid.*; European Commission, *Code of Conduct on Countering Illegal Hate Speech Online*, 2016.

<sup>81</sup> Digital Competition Expert Panel, *Unlocking Digital Competition*, cit.

<sup>82</sup> ACCC, *Digital Platforms Inquiry*, cit.

provided by the E-commerce Directive<sup>83</sup>, is retained in the new Commission's proposal for a Digital Services Act<sup>84</sup>. In a scenario where companies are charged with must view obligations, it can be argued that they will necessarily interact with the content, or at least with part of it, thus losing the safe harbour, or liability exemption. Regulators should then consider the additional consequences of this remedy, and assess if the trade-offs are compatible with the results it aims to achieve.

On the other hand, the unbundled access to content curation might not necessarily imply a change in the current intermediary liability regime for social media platforms. Indeed, separating content curation from hosting, and mandating the possibility for third parties to provide content curation services on large social media platforms, does not imply matching any quotas in the diversity of sources and viewpoints, and therefore does not require the imposition of a general monitoring obligation. Aside from eliminating the risk of violating the international standards of freedom of expression, it also has the advantage of being compatible with the European Commission's proposal for a Digital Services Act.

Nonetheless, while access to the APIs is essential for this remedy to function in practice, a number of related issues must also be carefully addressed. An adequate system should be put in place in order to guarantee that both incumbent and third-party players collect, process, store and use users' data according to the General Data Protection Regulation (GDPR)<sup>85</sup> rules and principles. Civil society groups have argued that processing should be strictly limited to that needed to support interoperability<sup>86</sup>.

Some have suggested that to avoid revealing private user information to an abundance of providers, the content curation provider's system should run on the platform's infrastructure. This way, the platform that provides the hosting would be responsible for the overall user experience<sup>87</sup>. The likely weakness of this suggestion is that if the platform remains also responsible for delivering ads against the selected content, it would subtract the main avenue of monetization to content curation providers, that is to its potential competitors.

Concerns similar to those highlighted for data protection could be raised with regard to security. Here as well, the introduction of an intermediary for the content curation

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<sup>83</sup> Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market ("Directive on electronic commerce") [2000] OJ L 178, 1–16.

<sup>84</sup> European Commission, Digital Services Act, cit., Article 5.

<sup>85</sup> Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation, GDPR) [2016] OJ L 119.

<sup>86</sup> B. Cyphers - C. Doctorow, *A Legislative Path to an Interoperable Internet*, Electronic Frontiers Foundation DeepLink, 28 July 2020. On a similar vein, the European Data Protection Board (EDPB), in the context of assessing interoperable solutions for Covid-19 apps, has emphasised that interoperability should not be used as an argument to extend the collection of personal data beyond what is necessary, and that the respective roles, relationships and responsibilities of the joint controllers in regards to the data subject will need to be defined and this information needs to be made available to the data subject (see EDPB, *Statement on the Data Protection Impact of the Interoperability of Contact Tracing Apps*, 16 June 2020).

<sup>87</sup> S. Wolfram, *Optimizing for Engagement: Understanding the Use of Persuasive Technology on Internet Platforms*, cit.

could create uncertainty about the allocation of responsibilities and liabilities, which should be dissipated either through adequate contractual agreements, or, if needed, via regulatory intervention.

Finally, the implementation of algorithms for content curation, irrespective of whether they are used by large social media platforms or by alternative operators, should be compliant with international standards on human rights. In particular, the design and deployment of algorithms should comply with the criteria suggested by various norms and recommendations that are progressively contributing to shape a regulatory framework for Artificial Intelligence<sup>88</sup>. At the bare minimum, players should properly assess, both at the design phase and through the entire process, the potential impact of the algorithm on users' fundamental rights, and should put in place efficient measures to avoid or minimise any negative impacts. In addition, players should put in place adequate remedies in case the negative impact occurs and make them easily accessible for users.

To conclude, when assessed under this benchmark, the key difference between the two regulatory solutions seems to be that regulated diversity might raise conflicts with the platforms' liability regime with regards to the content they host, which are not raised by the unbundled access. This could be a major shortfall for regulated diversity, which regulators should take into due account while designing the measure.

### **6.7. Institutional considerations**

There is increasing pressure to regulate social media platforms, and calls are addressed to a number of regulators. This benchmark looks at whether and to what extent the two remedies would require a new regulator, and at how an existing regulator in charge of enforcing each of the remedy could coordinate with the others that share the regulatory space of these platforms.

Media diversity has traditionally been one of the policy objectives of media regulators; therefore, this remedy naturally lands in the scope of competence of those regulators and does not require the setting of a new one. Nevertheless, media regulators should coordinate with bodies in charge to protect people's freedom of expression rights, as the remedy impacts exposure diversity in a paternalistic way that has to be kept in check. In addition, at least a minimum degree of coordination might be required with data protection and consumer authorities, to ensure that the must carry obligations are implemented in a way that is compliant with data protection and consumer protection rules. No coordination with competition authorities seems to be required in this case. The unbundling, on the other hand, is part of the traditional toolbox of both telecom

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<sup>88</sup> High Level Expert Group on AI, *Ethics Guidelines for a Trustworthy AI*, 2019; Council of Europe Commissioner for Human Rights, *Unboxing Artificial Intelligence: 10 Steps to Protect Human Rights*, 2019; United Nations Special Rapporteur on Freedom of Expression, *Report of the Special Rapporteur to the General Assembly on Artificial Intelligence Technologies and Implications for the Information Environment*, A/73/348, 2018; United Nation Special Representative of the Secretary-General on human rights and transnational corporations and other business enterprises, *Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, Respect and Remedy" Framework*, Annex to Report A/HRC/17/31, 2011.

regulators and competition authorities. The former have traditionally applied it *ex ante* to incumbents, while the latter can impose it *ex post* on dominant platforms that abuse their position of power. As the remedy proposed here is to be applied *ex ante*, telecoms regulators might be best placed. An additional advantage would be that in the EU the majority of telecoms regulators also deal with the media sector, and thus has the expertise needed to deal with media diversity issues.

The unbundling should be shaped and enforced in a way that guarantees consumers' rights, including data protection ones. To do so, the regulator should seek the advice of data and consumer protection authorities, who have the needed expertise. This could be done in the form of consultation, which allows the regulator to analyse the issue from the different relevant perspectives and to benefit from the specific expertise it doesn't have internally. In addition, an agreement on the remedy can avoid conflicts in the enforcement phase, as through the consultation the authorities reach an agreed position on the nature of the infringement of the remedy<sup>89</sup>.

A form of coordination might be needed with competition authorities, too. First, because platforms with gatekeeping power might also reach the threshold of dominance, and thus their behaviour could become relevant under Article 102 TFEU. Second, because gatekeeping power can traduce in anti-competitive behaviours that competition authorities might decide to target *ex post*. Here again, the two regulators gain substantially from some form of cooperation that leads to an agreed remedy, and this translates also into greater legal certainty for the companies the remedy is imposed on. Indeed, there have been examples, in the past, of *ex ante* rules, which included unbundling, imposed on operators that have nevertheless been accused of infringing Article 102 TFEU while applying the remedy. An example is Deutsche Telekom: in 2003, the company was obliged to unbundle the local loop and apply wholesale prices approved by the German telecom authority<sup>90</sup>. However, the approved wholesale and retail prices were found to constitute price squeeze, contrary to Article 102 TFEU. Deutsche Telekom argued that it relied on the regulator's directions and so assumed that its pricing policy were lawful. The Commission, on its part, argued that the company had a sufficient margin of discretion in setting its pricing policy that the conduct was to be considered its own, rather than an imposition by the regulator. As the conduct was autonomous, then competition law applies, and the approach was confirmed by the Court of Justice<sup>91</sup>. A consultation among the regulator and the competition authority while shaping the remedy can improve the quality of decision making, provide more legal certainty, eliminate wasteful duplication and guarantee effective enforcement.

To conclude, from an institutional perspective, the regulated diversity is more contained in the regulatory space traditionally attributed to media regulators, and therefore might require less coordination among the latter and other regulators. On the contrary, the unbundled access, to be properly designed and enforced, might need a higher de-

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<sup>89</sup> G. Monti, *Attention Intermediaries: Regulatory Options and their Institutional Implications*, TILEC Discussion Paper, DP 2020-018, 2020.

<sup>90</sup> European Commission, Case COMP/C-1/37.451, 37.578, 37.579 — *Deutsche Telekom AG* [2003], OJ L 263/9.

<sup>91</sup> CJEU, C-280/08 P, *Deutsche Telekom AG v European Commission* (2010).

gree of cooperation among the various regulators that deal with the various aspects of the remedy, from competition to data protection ones.

As overall remark for this part, it has to be considered that while each of the benchmarks identified and used in this section has its own scope in the assessment of the two proposals, various degrees of overlaps and interplays exist among them. For example, as mentioned above, the normative approach has an impact on users' empowerment. The consistency with existing rules that apply to social media platforms has an influence in the role the regulator plays in the regulatory space he shares with the enforcers of those rules. The need for complementary rules depends on how the measure is concretely designed. Regulators, therefore, should not look at the benchmarks separately, but consider their strict relations.

## Part IV

### 7. Conclusions

The massive process of digitalisation over the past two decades has enormously increased the possibilities for individuals to create, share and access content online. While this ever wider amount of information is theoretically available for all, the ability of individuals to concretely reach and enjoy such plurality and diversity can be strongly limited, in social media markets, by a number of factors. This paper contributes to the debate by looking at under exposure to diversity on social media markets and by focusing on what could be one of its main causes, that is the way content is curated by the automated systems used by platforms. It also suggests two possible regulatory solutions and proposes an analytical framework that regulators could use to assess the solidity and efficiency of each of them under a number of benchmarks.

The first solution is to regulate diversity by imposing “must view” obligations on players with gatekeeping powers. The second is to unbundle hosting activities from content curation activities and to oblige large platforms to provide fair, reasonable and non-discriminatory access to those competitors that want to provide content curation on their platforms.

The benchmarks in the analytical framework have been selected to help regulators in their assessment, and to provide input for more research on elements that might still be unexplored or not sufficiently explored. The benchmarks look at the proposed solutions from different perspectives: their content, their impact on markets, consumers, and on the existing regulatory frameworks, and their enforcement and challenges related to institutional setting issues.

The preliminary conclusion is that unbundled access to content curation might be a better option than regulated diversity. With the unbundling, the State intervenes on market dynamics and relies on healthy competition among players to ensure diversity; in addition, it seems to provide an adequate response not only to the market failure in terms of exposure diversity, but also to other market failures in social media markets, such as the existence of high barriers to entry, the high concentration in the market,

and the lack of viable alternatives for users. This particularity might play an important role in the regulators' assessment. Indeed, in an increasing number of online marketplaces it is possible to observe various market failures at once. As often these marketplaces fall in the remit of different regulators, each of them should intervene for the aims and objectives within its remit; nevertheless, when selecting the right instrument for intervention, each regulator should also take into utmost account the impact each instrument could have on the objectives other regulators are called to ensure in the same marketplace, and choose the one that facilitates, or at least does not conflict with those objectives. The unbundled access appears to be a good example of this approach.

It remains to be noted that for this remedy to work properly and not to undermine users' human rights, a few additional challenges might need to be solved. This paper has tried to identify these challenges, while noting that they would benefit substantially from further research and debate in order to be properly addressed.

To that aim, a better knowledge of how algorithms for content curation work would certainly be beneficial for regulators to make more informed decisions. There is still need for additional research, the main obstacle to which appears to be the lack of access to the information that is needed to perform it. Regulators could play a role here too, for example by obliging platforms and content curators to be more transparent about the automated systems they use, and in general about their business models, and to oblige them to provide access to information and data for independent research. Both the DSA and the DMA proposals appear to go in this very same direction.

Furthermore, technical standards could help to make automated systems, and therefore content curation, more compliant with human rights and more sensitive to exposure diversity. To this aim, a continuous dialogue between the industry and other interested stakeholders would likely lead to better outcomes for users as well as for society as a whole.

Finally, it has to be taken into account that regulated diversity and unbundling of hosting and content curation are not necessarily mutually exclusive. There are various ways they could be combined, to different degrees. One scenario could be the regulator that imposes the unbundling and, at the same time, intervenes on the criteria or standards used by players for the provision of content shaping. In this case, the final result, that is the selection of content that users see, is not left totally to the automated system. Certain degree of experimentalism by regulators might be welcome in this scenario, where a large number of commercial and technical factors have to be considered and dealt with in order to achieve and guarantee public interest objectives. However, the regulatory instincts have to be kept in check; for this reason, regulators should remain anchored to the proportionality and necessity tests while shaping regulatory interventions.