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New digital threats to media pluralism in the
information age

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Abstract

The proliferation of news and information has reached unprecedented levels. Notwithstanding this apparent richness, increasing doubts about the quality and diversity of online news have grown for many years. The list of threats to information online is quite long. In this essay, we concentrate on economic, quality and social threats, with the goal of starting to address a few fundamental questions: is pluralistic and quality information an endangered public good in the digital age? What responses are available to preserve media pluralism and a professional process of information production as the necessary tools for a democratic society?

Keywords

Media economics, pluralism, competition, journalism.

1. Introduction*

In this digital era, the spreading of news and information has reached unprecedented levels. The results obtained, in term of basic information and the ability of the world's population to "know," using the Internet, and electronic communications and media in general, are awesome, and the 21st century has been rightly defined as the information age (Castells 1996). Nonetheless, this unprecedented abundance of information, concerns about the health of media pluralism and the quality and diversity of news, have increased in recent years. This is not a paradox.

The list of threats and concerns relating to the characteristics of information in the Internet world is quite long. We will concentrate, here, on those that we consider the most important, and we will try to examine the precise origin and content of these risks and to discuss the responses that are emerging, or are likely to emerge, from our markets and societies. In the final part of the essay, we will consider whether, faced with the lack, or weakness, of autonomous responses, there are sufficient reasons for, and concrete possibilities of, a more active public policy to defend media pluralism and the quality of information. Are media pluralism and quality information undersupplied public goods in the digital age? Are we only in the presence of a market failure that can be obviated by public intervention, or is some kind of public presence a necessity justified by a more general political and democratic foundation?

After this introduction, which motivates the theme, Section 2 discusses digital threats to media pluralism that are underlined in the academic literature, dividing them into two general categories: threats produced as a general consequence of the new economic models that have emerged with the digital revolution, and threats to the quality of information provided by the new media, which derive directly from their technological evolution.

In Section 3, we discuss the limited likelihood of an effective market response, and we therefore explore the necessity of explicit and multi-dimensional public policies to preserve quality news and media pluralism as public goods that are indispensable to democracy. A brief conclusion follows.

2. Digital threats to media pluralism

In this short overview, for ease of exposition, and conscious that categories overlap, we will separate the threats to media pluralism and quality information created by digital transformation into two main categories: the first is an economic category that primarily endangers media pluralism, while the second is a technical characteristic that mainly interferes with the quality of information. We will firstly examine those threats that are a direct consequence of the disruptive action of the digital revolution on the business models of 'traditional' media, and that are favoured by the specific economic configuration of the new online media. Then, we will concentrate on the threats to quality of information, deriving or reinforced by the technical characteristics of the new digital environment, an environment in which information is essentially produced and distributed by different subjects, and in which the weakness of the intermediation between the producers and consumers of news allows unusually wider spaces for malign and/or self-interested disinformation.

2.1 Threats to media plurality

The economic decline of the 'traditional' media can be better understood if inserted into a more general economic trend. Recent studies (e.g., Grullon et al. 2017) examine the evolution of the product market concentration in the US industries over the last 40 years, and they document the greater concentration in the US industries since the beginning of the 21st century. The study also analyses the relationship

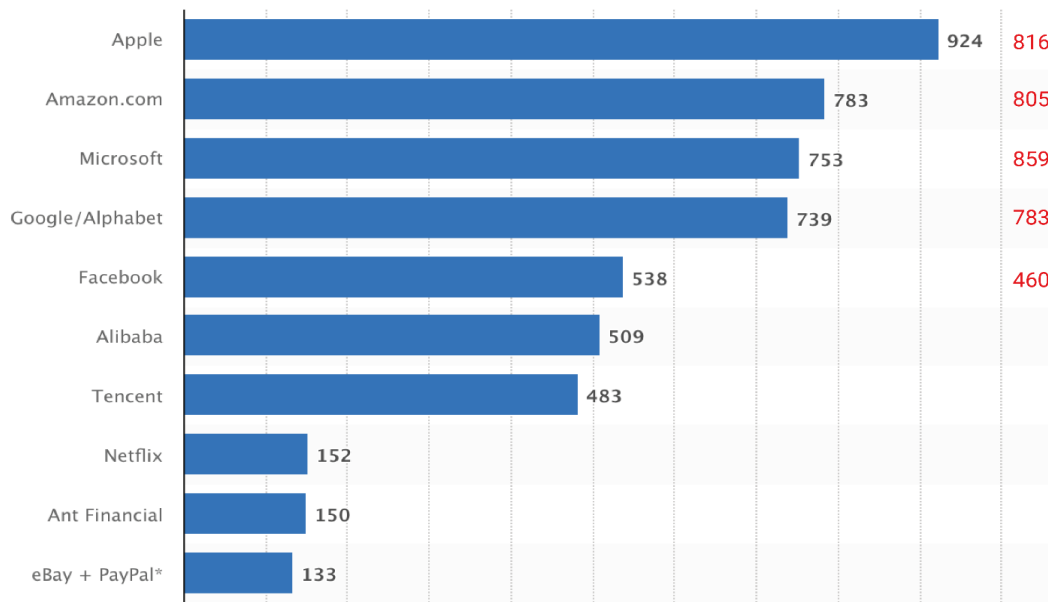
* My thanks to Elda Brogi, Chiara Carrozza and Iva Nenadic for their comments and suggestions.

between concentration and profitability, finding that industries experiencing an increase in concentration have enjoyed higher profitability, which is, in turn, reflected in higher returns to shareholders. However, higher profits that are gained through higher margins appear to be related more to increased market power, than to any increase in efficiency that is due to scale. In this respect, evidence is also provided that the completion rates for M&A transactions, including mega M&A ones, have constantly increased over time and that, in parallel, antitrust enforcement has experienced a significant decline, at least during the administration of the last two Presidents of the United States.

The culture, information and communication industries are among those that have been marked by higher concentration in recent years. While the foundational idea of the Internet was inspired by informational liberalism and was informed by a vision of networked computing as a public property that served the general interest, large parts of the web are presently dominated by a few leading players, almost all of whom are based in the US, who have consolidated their dominance over the last decade.

The acknowledgement that the group of companies, popularly called GAFAM (Google, Amazon, Facebook, Apple and Microsoft), have established a dominance on the digital markets has nowadays become common sense, and there is a rich literature that has flourished on the topic. While, as users of their services, we clearly perceive how pervasive their presence is in every single aspect of our lives, the rise of these companies has been documented by several scholars (Smyrniaios 2018; Galloway 2017; Barwise & Watkins 2018; Moore & Tambini 2018), and their scale, reach and dimension, although data relating to these are not always easily accessible (Moore 2016), are widely known. Evidence indicates that, today, these enterprises are the most valuable companies in the world in terms of market capitalization (Fig. 1).

Figure 1. Market capitalization of the biggest internet companies worldwide, as of May, 2018, (in billions of U.S. dollars. Source: Statista¹)



Edited to show most recent values shown in red

Note: in red, the most recent values of the top 5 companies. Source: Nasdaq, 01 March 2019

¹ <https://www.statista.com/statistics/277483/market-value-of-the-largest-internet-companies-worldwide/>

The literature that has focused on the analysis of the features of the business models and strategic choices that have enabled the rise of these tech giants and the establishment of their economic power on the digital markets, is abundant. Rochet and Tirole, the authors of a seminal contribution on two-sided markets (2003), firstly discussed how the business models of apparently dissimilar businesses, such as payment cards, telecommunications networks, computer operating systems and, obviously, media, all show network effects under which the value of the service for one group (e.g., advertisers) depends on how many members of the other group(s) (e.g., readers) are in the system, and vice versa. Two-sided platforms behave in ways that seem surprising, from the point of view of traditional industries, but which are perfectly reasonable once one understands the business problem of getting different groups of customers (or sides of the market) on board. Prices do not follow marginal costs on each side of the market, but their levels and structures, as well as the businesses' investment strategies, are set to optimize output by fully harvesting the indirect network effects that are available on both sides (Evans 2002). For this reason, profit-maximizing prices may entail below-cost pricing to one set of customers for the long haul, and, as a matter of fact, many two-sided platforms charge one side prices that are below the marginal cost and that, in some cases, are negative (Evans & Schmalensee 2007). Facebook, Google, and others, do not charge users for their services in order to grow their user base to a size where it becomes more attractive, and quite indispensable, to other users and to advertisers, performing the crucial roles of providing a common (virtual) meeting place and facilitating interactions between the members of the two distinct customer groups (thus minimizing, in economic terms, the transaction costs). The literature on platforms usually distinguishes between two kinds of network effects: *direct* (or same-side), which arise when the benefits of using a platform for a user is positively correlated to the number of users using the same platform, and *indirect* (or cross-group), which arise when the benefit to users in one group depends on the number of users in the other. Indirect network effects emerge in relation to pre-existing interdependence and complementarity between demands coming from different groups of consumers: this complementarity fuels a self-reinforcing feedback loop that has the effect of hardening the incumbent platform's base advantages (Gawer 2014: 1241) favouring "*winner takes all*" or "*winner takes most*" dynamics. As a consequence, in many large digital markets, competition is mostly "*for*" the market, and thus, once a company achieves clear market leadership, this appears quite impossible to displace. While Evans and Schmalensee (2016) partially contend this view, arguing that "*network effects can create great value rapidly, but they can destroy it just as fast*" (ibid.), for the majority of analysts, the rhetoric that states that, on the internet, "*competition is only a click away*" (this became Google's corporate mantra²) essentially sounds like an empty phrase, and, certainly, the tech giants seem extremely unlikely to lose dominance in their core market(s) at any time soon (Galloway 2017, Barwise & Watkins, 2018).³

The business strategies that these companies typically implement, including the gathering and exploiting of vast quantities of users' data, creating proprietary standards and platforms, realizing massive investments in R&D, both organically and through acquisitions (especially in high-potential, emerging product markets and technologies, such as augmented and virtual reality, self-driving car technology, and in the creation of connected, voice-activated home hubs), are all factors that are certainly increasing their distance from potential competitors, and that are raising formidable entry barriers to newcomers.

In any case, digitalisation has profoundly disrupted the 'traditional' cultural and information industries by: a) separating information from physical media (the non-rivalry of digital goods); b) jeopardizing pricing decisions (imposing non-exclusivity, to some extent), and giving relevance to different (non-monetary) metrics, (such as data and "attention loads", Wu 2017); c) reducing the

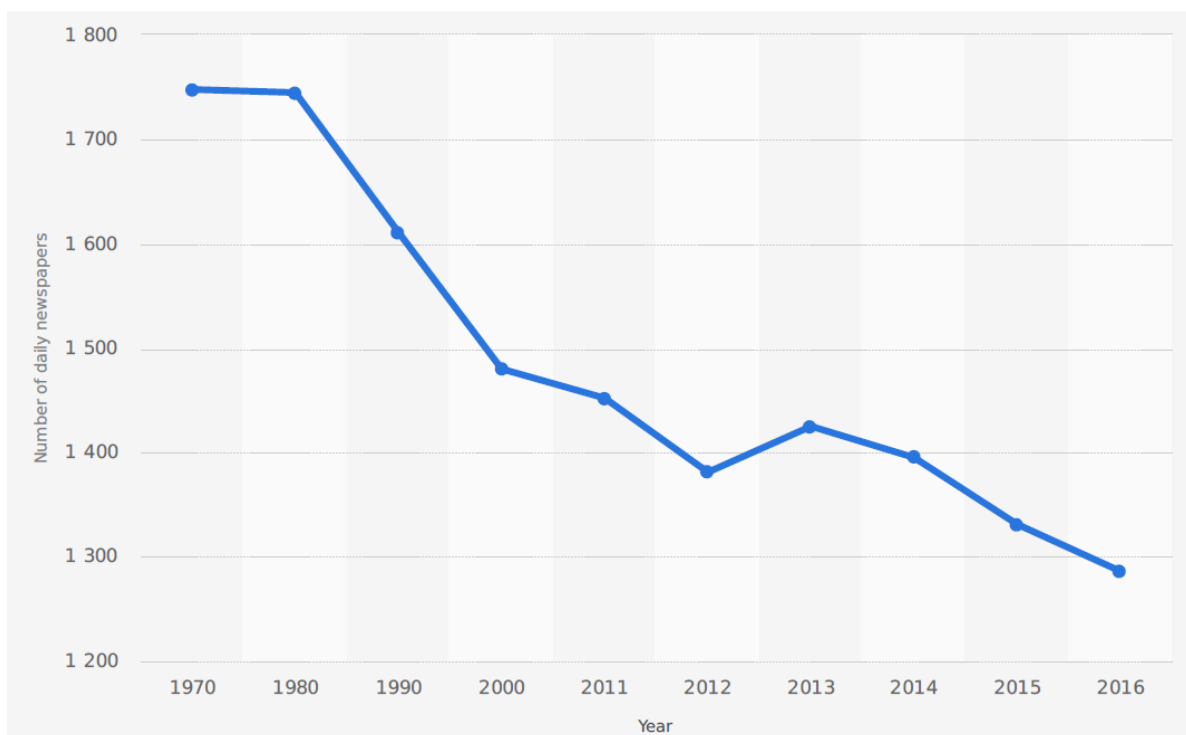
² <https://www.consumerwatchdog.org/resources/Googlepresentation.pdf>

³ Rather, the debate is focused on whether the new internet giants are different to traditional, non-digital, monopolies, and should therefore be dealt with differently. There are at least two ways in which it may be argued that digital monopolies are distinct from their analogue equivalents: prices (services appear to be given for free), and network effects (barriers to entry look less concrete and "physical" than in the traditional network industries).

marginal costs for the storage, processing and distribution of large amounts of information to close to zero; d) reducing the transaction costs of the economic exchanges even more radically than in other markets (Smyrnaioi 2018).

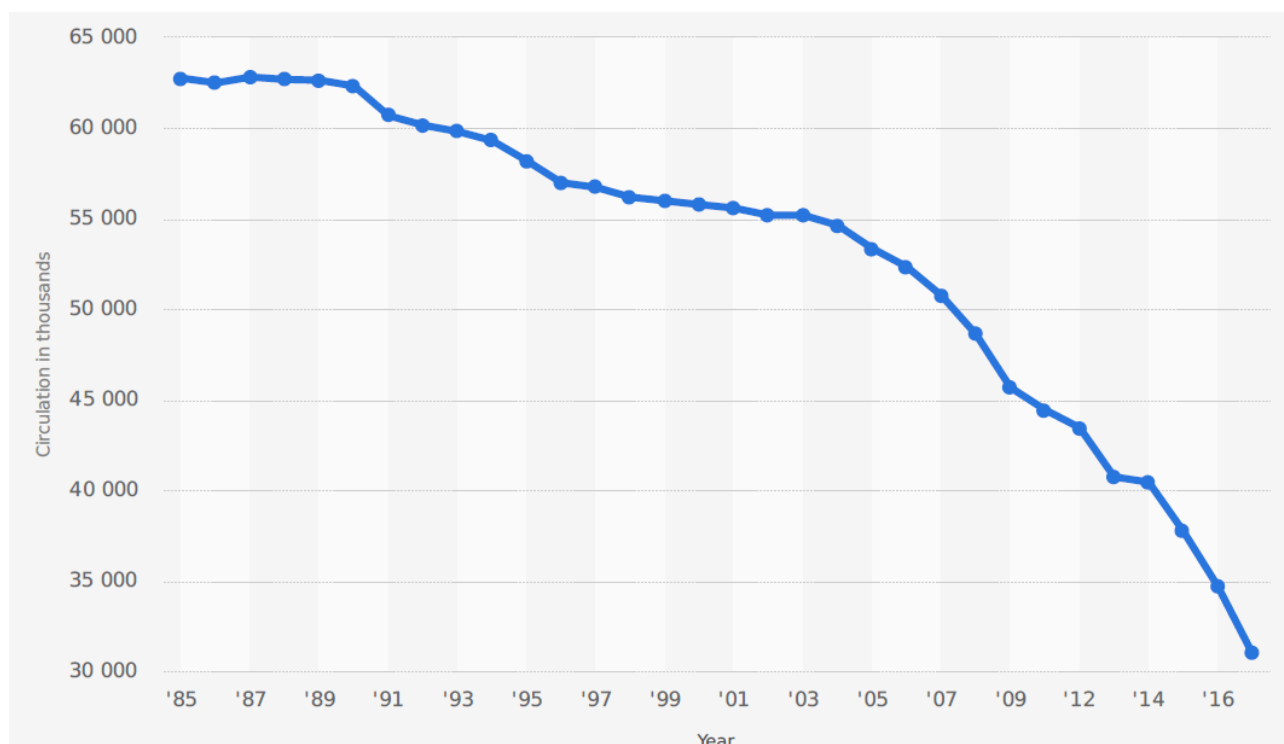
The effects of these changes can be clearly seen in the data presented in the two figures below, showing, for the US, a declining trend in the numbers of daily newspapers and in their paid circulation, which, while it had undoubtedly started some time earlier on, accelerated in a significant manner with the mass spread of digital media. Fig. 2 shows data on the number of daily newspapers circulating in the United States from 1970 to 2016: in recent decades 462 daily newspaper closed (-26%), but almost 200 of these closed between 2000 and 2016 (-13%), i.e., half of the decline is concentrated in recent years. Fig. 3 shows that, since 1985, the circulation of paid newspapers has fallen by 32 millions (-51%), but, again, the decline has been considerably accelerated with the rise of the internet era, with a reduction of more than 24 millions of copies from 2000 onwards, a decline of -45% in 15 years.

Figure 2. Number of daily newspapers in the United States from 1970 to 2016 (total number. Source: Statista⁴)



⁴ <https://www.statista.com/statistics/183408/number-of-us-daily-newspapers-since-1975/>

Figure 3. Paid circulation of daily newspapers in the United States from 1985 to 2017 (in thousands. Source: Statista⁵)



On the face of these characteristics of the online information markets, the business model of the traditional media is experiencing a progressive and constant deterioration, since digitalisation has altered the behaviours of both consumers and advertisers, therefore negatively affecting the two main sources of revenue: sales to readers/viewers and advertising. While the global advertising spend is constantly increasing, data reveals a continuous migration of advertising towards the digital environment: according to a PwC analysis (PwC, 2018), since 2016, Internet advertising revenues, mostly driven by mobile phones, have surpassed broadcasting TV revenues. Online advertising has also surpassed TV advertising in the European Union, starting from 2014: and in the period 2009-2017⁶ advertising expenditures on the Internet tripled, while expenditure on television advertising stayed more or less stable, and newspapers' and magazine advertising expenditure declined strongly. The United Kingdom is the country in Europe with the highest online advertising spending: in 2016, UK advertisers spent almost as much on online ads as advertisers in Germany, France and Italy combined. In mature markets, such as Sweden (54%), the United Kingdom (53%) and Denmark (51%), online advertisement already represents the major share of the total media advertising spend. In digital advertising, Google and Facebook have established a relatively recent⁷, but now massive, dominance (in 2017 they accounted for more than 60% of global online ad revenues⁸): the duopoly's share is even higher in European countries (in the U.K., in 2016, for example, these companies attracted over 70% of all digital advertising spending⁹). However, even if Facebook and Google's revenues continue to grow, other

⁵ <https://www.statista.com/statistics/183422/paid-circulation-of-us-daily-newspapers-since-1975/>

⁶ Data source: European Audiovisual Observatory (Council of Europe) (2017), The EU online advertising market. Update 2017, available at: <https://rm.coe.int/the-eu-online-advertising-market-update-2017/168078f2b3>

⁷ In 2012, Facebook had just over 5% of the global ad expenditure.

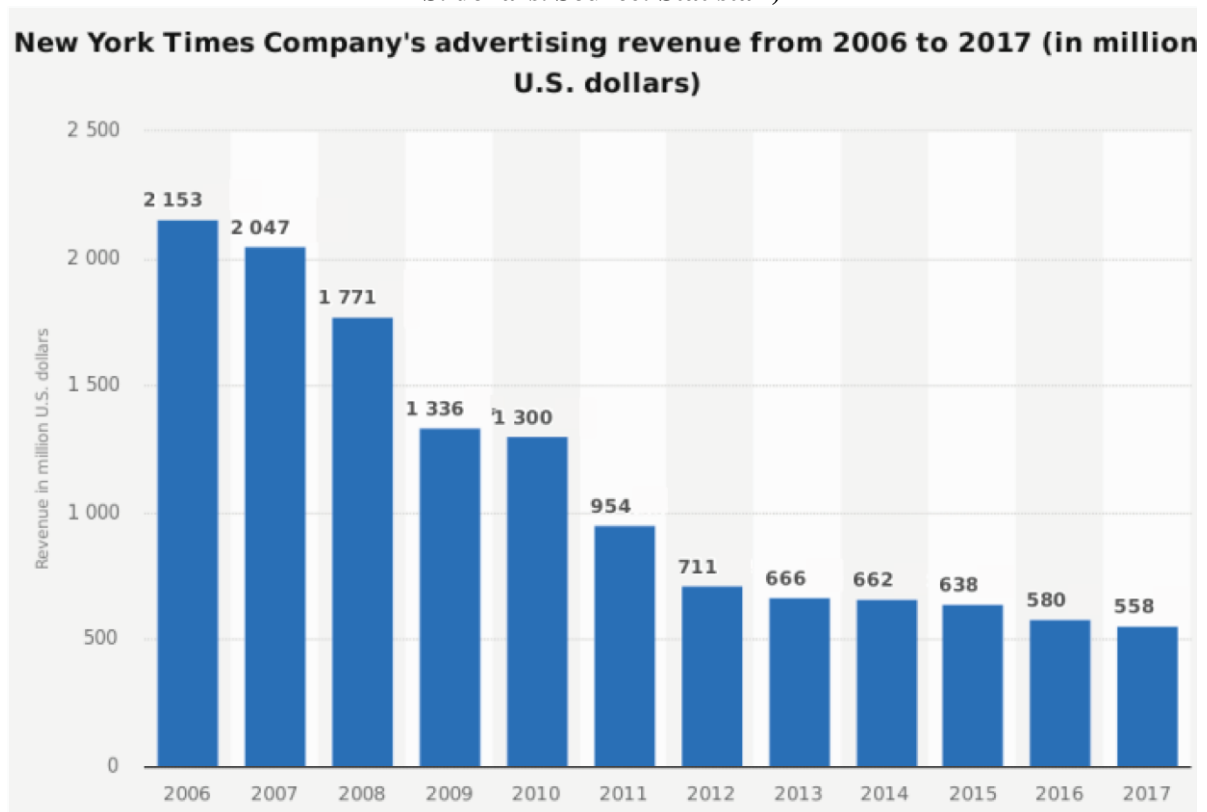
⁸ Source: Statista (<https://www.statista.com/chart/12179/google-and-facebook-share-of-ad-revenue/>)

⁹ <https://www.forbes.com/sites/johnkoetsier/2018/03/19/digital-duopoly-declining-facebooks-googles-share-of-digital-ad-dollars-dropping/>

digital companies, such as Amazon and Snapchat, have recently been emerging as important contenders in this market.

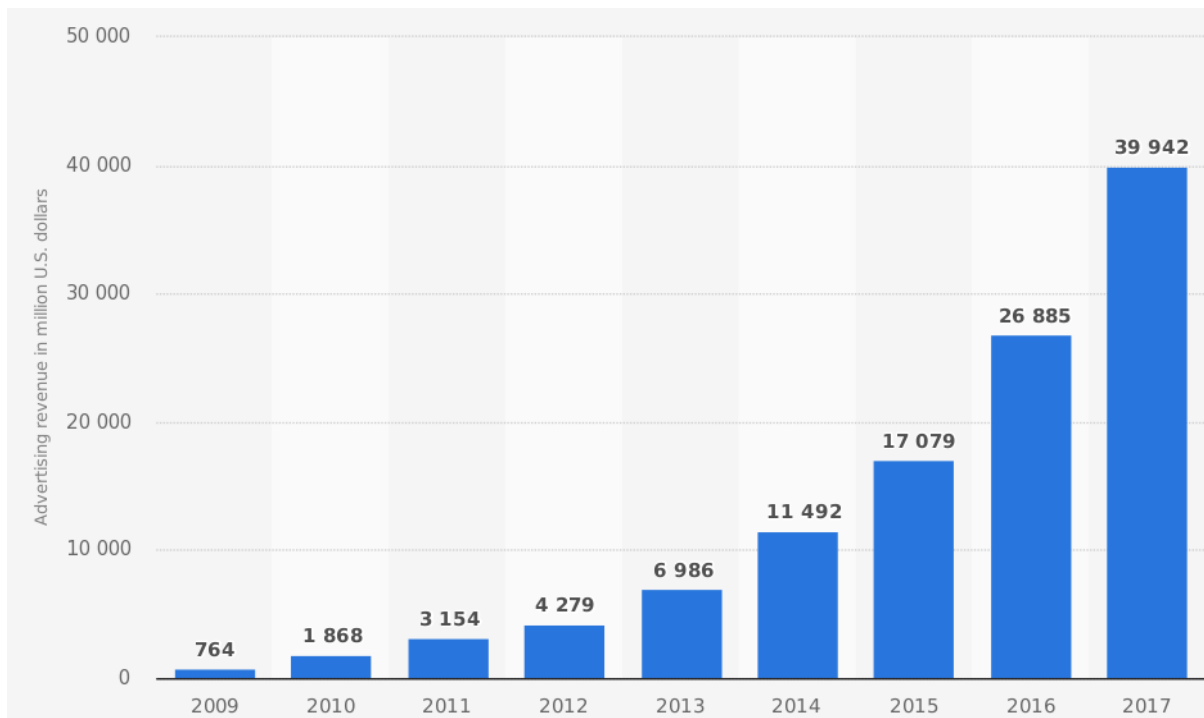
As an example, one can mirror the decline of the advertising revenues of the *New York Times*, from 2006 to 2017, with the explosion of Facebook’s online advertising revenues from 2009 onward. In the same years, while the *New York Times* (Fig. 4) lost 1,6 billions of US dollars of advertising, a scary - 74%, Facebook’s online advertising revenues (Fig. 5) jumped from 764 millions of US dollars to about 40 billions, a stunning +5.128%.

Figure 4. New York Times Company’s advertising revenue from 2006 to 2017 (in millions of U. S. dollars. Source: Statista¹⁰)



¹⁰ <https://www.statista.com/statistics/192907/advertising-revenue-of-the-new-york-times-company-since-2006/>

Figure 5. Facebook’s advertising revenue worldwide from 2009 to 2017 (in millions of U. S. dollars. Source: Statista¹¹)



In hypothesis, monopolistic threats to information seem to derive from the high market shares of a few digital gatekeepers. In particular, Google and Facebook, and, probably soon, Amazon, in their zones of the Internet, have market shares that are much higher, in global terms, and that were rarely seen in the previously dominant sectorial companies in the media world. It is possibly only public broadcasting that, before market liberalization, had a similar dominance in an information sector, but normally these companies, being under public control, were regulated by some kind of “internal” pluralism obligations, at least in democratic countries. These types of controls, or obligations to digital gatekeepers, have not existed for many years, and it is only recently that some timid self-regulatory attempts¹² have begun.

Economic threats to the historical model of financing the traditional media, which is based on the joint sale of news and advertising, or of other services (entertainment or other information services), are a source of increasing concern in relation to media plurality. The traditional media’s sources of income are rapidly decreasing, and a new economic model for the media that is based on producing and selling quality news, has not materialized on any significant scale (except for niche products, e.g., *The Economist*). The development of online advertising, and especially of ad-smart advertising, renders increasingly obsolete those generic sales of the audience to advertisers. The threat coming from the spread of self-generated content, and the impoverishment of the traditional media, may directly jeopardize the existence of a journalistic profession, thus becoming another example of the progressive disappearance of the middleman, as is happening in many other areas of the economy. The difference is that, in other areas, the middleman was often a factor of inefficiency and rent exploitation, while, in producing news, the mediation of a specific and neutral professional category has a specific role in

¹¹ <https://www.statista.com/statistics/271258/facebooks-advertising-revenue-worldwide/>

¹² The Code of Practice recently agreed with the EU Commission by the major OTT companies and the advertising industry, is an example, see:

(<https://ec.europa.eu/digital-single-market/en/news/code-practice-disinformation>).

creating or preserving quality, especially by keeping a distance between immediate and partisan interests and the news.

2.2 Threats to quality of information

Given two of the general functions of the Internet - interpersonal communication and content dissemination over digital media - the concentration of economic power presents worrying political implications: the “civic power” of the tech giants extends to the processes governing the formation and exchange of opinions and the establishment of reputation and popularity (Moore 2016). Recent events have led many scholars and analysts to “*question the role of social media seen as responsible for distributing fake news* (Allcott & Gentzkow 2017; Tambini 2017), *using manipulative psychometric profiling* (Cadwalladr 2017), *undermining authoritative journalism* (Bell 2018; Allcott & Gentzkow, 2017) and, ultimately, *jeopardizing the fairness and transparency of elections*” (Tambini 2018).

The debate about disinformation online became relevant in 2016 during the campaign for the “Brexit” referendum, and after the US Presidential Elections; since then, several studies have addressed the circulation of misleading and false news on online platforms, and especially on Facebook and Twitter. While none of the phenomena observed during these episodes is new in itself, the relevant aspect, in this context, is that online platforms help to promote the spread of news both rapidly and globally, triggering the “*viralization*” of content. The expression “fake news” has become quite popular, although there are different understandings of what exactly counts as fake news. According to Allcott and Gentzkow (2017), this could be defined as news that is “*intentionally and verifiably false, and could mislead readers*”, but many scholars refute this expression, which does not encompass the complexity of the phenomenon¹³. Wardle and Derakhshan (2017), for example, prefer to refer to categories such as *misinformation* - the inadvertent sharing of false information - *disinformation* - the deliberate creation and sharing of information known to be false, and *malinformation* - the exploitation of truthful information to do harm (either by moving private information into the public arena, or by using people’s affiliations, like their religion or sexual preferences, against them). Besides conceptual clarifications, there is still limited scientific evidence on how widespread the “*information disorder*” (ibid.) is, and on what kind of real impact it has on individuals.

Facebook has estimated that so called ‘fake news’ accounted for less than one-tenth of 1% of the civic content shared on the platform (Weedon et al. 2017), but the methodology used to estimate this percentage is not very clearly explained (Lazer et al. 2018). Another study estimated that the average American encountered between 1 and 3 stories from known publishers of ‘fake news’ during the month before the 2016 elections (Allcott and Gentzkow, 2017). Talking specifically about politics-related disinformation, a recent study, published in *Science*, reports that ‘false news’ items on Twitter are typically retweeted by many more people, and far more rapidly, than are “true news” items (Vosoughi et al., 2018).

The picture is further complicated by the widespread use of social bots, computer algorithms that automatically produce content and that interact with the social media’s human users. These bots are, in some cases, specifically designed to exploit and manipulate social media discourse with rumours, spam, malware, misinformation, slander, or even just noise. A recent study published in *Nature* (Shao et al. 2018), based on the analysis of a large corpus of news stories posted on Twitter during and following the 2016 US Presidential Elections, concludes that bots may play a critical role in driving the viral spread of content from sources with low-credibility. The authors of the study found that social bots amplify the spread of misinformation by exposing humans to low-credibility content and inducing them to share it.

¹³ In October, 2018, the U.K. government banned the term “fake news” from official documents, see <https://publications.parliament.uk/pa/cm201719/cmselect/cmcomeds/1630/163002.htm>

Besides the challenge to establish the veracity of the information being disseminated, social bots have brought a novel challenge, since they can give the false impression that some piece of information, regardless of its accuracy, is highly popular and is endorsed by many, exerting an influence against which we haven't yet developed effective social antibodies (Ferrara et al. 2016). "*Computational propaganda*"¹⁴ is the term that is often used to encompass recent digital misinformation and manipulation efforts: it is defined as the use of algorithms, automation and human curation to manipulate public opinion across a diverse range of platforms and device networks (Wooley & Howard 2016).

The new techniques of data mining, which have vastly increased the quantity and precision of voter information, contribute to the amplification of the potential harm of these practices. Contemporary political campaigns rely increasingly on detailed voters' profiling, fuelled by the available data sets relating to citizens' online behaviour, including their use of social media. While personalised political advertising (via social media) has the potential to diversify political campaigns, reaching the groups who have opted out of traditional media exposure, increasing citizens' political knowledge, and mobilising them around topics that they may find relevant - which all contribute to democratic dynamics (Zuiderveen Borgesius et al. 2018), micro-targeting voters also brings with it serious threats, such as the invasion of privacy, data breaches, a decrease in political knowledge and pluralism, manipulation, and the exclusion of certain groups (Nenadic 2018).

The personalized experience that social media and search engine algorithms can offer to their users, since they propose the information s/he would like to see on the basis of detailed analysis of his/her data, including location, past click-behaviour and search history, feed the segmentation of the public sphere into 'echo chambers' and 'filter bubbles', leading to the "*fragmentation of large but politically focused mass audiences into a huge number of isolated issue publics*" (Habermas 2006: 423). A recent investigation of the topic that was carried out by the Italian NRAs (AGCOM 2018), based on a study of the behaviour of millions of users over several years, in relation to many information sources, found that the phenomenon of "selective exposure" in the consumption of news is positively correlated to the level of activity of the users and to a greater engagement with disseminating news via social networks. In other words, those that use the social media the most are more inclined to select news confirming their views, and they are more prone to share them with their contacts. In this respect, the plurality of informative sources on the Internet does not necessarily produce the expected positive effects that are connected to the widening of the points of view that are available to the citizens. This phenomenon is the result of the combination of new sophisticated digital technologies and 'old' social dynamics, which have been known about for a long time in media and communications research. Among the social dynamics that social media designers have mostly exploited and exacerbated are: the consolidated evidence that human beings tend to establish and continue relationships with people who have views similar to their own (Granovetter 1973); that people are much more likely to trust a message coming from someone known, even if s/he suspects it to be false, or that information seekers are biased towards information sources that share and confirm their views (again according to the theory of 'selective exposure', see Sullivan 2009).

Several key threats to the quality of online information emerge from this preliminary review of contributions. In the first place, the presence of only a few gatekeepers, and the disappearance of many traditional and local media, may be a driver of excessive standardization and homogeneity of the sources of news and qualified opinions, which thus negatively affects the quality of information. The substantial absence of editorial control and editorial responsibility that has characterized major internet players so far has exacerbated, to an unprecedented dimension, the phenomena of pseudo-news of a distorted, or completely false, nature. The economic viability of "factories" of disinformation, financed through unfiltered advertising, constitutes a completely new type of threat, one that is essentially unheard of in the offline world (Martens et al. 2018).

¹⁴ See the project that the Oxford Internet Institute is carrying out in order to understand the global reach of computational propaganda that is based on the collection and analysis of a set of case-studies, <https://comprop.oii.ox.ac.uk/>

In second place, the polarization of opinions, in closed or filtered bubbles that are created by the sociological and technological dynamics of internet (social) media, can further impoverish the democratic dialogue and cause the exclusion of middle ground and conciliatory occasions for debate. These developments may change the way in which political consensus is reached and maintained, even in otherwise democratic environments.

Another relevant phenomenon that contributes to the “pollution” of the information ecosystem is hate speech online, since, as for disinformation and misinformation, online dissemination has fuelled the reach and impact of hate speech, including its appearance(s) in political discourse. Hate speech has become a common pattern of political propaganda, even in established democracies, targeting minorities, women, migrants, weaker elements of society, or simply the diversity of opinions. The phenomenon has been exacerbated by the relative anonymity that is allowed to the haters by the Internet. This creates an obvious reluctance from more reasonable and moderate voices to join any public debate on the Internet, thus immediately contributing to the further radicalization and polarization of online debate. Again, as for misinformation and disinformation, the EU, and some EU member states, have put in place, or are planning to put in place, policies involving online platforms which are required to play a role in limiting the spreading of hate speech online¹⁵.

3. Market and public responses

The situations in which technological advances upend pre-existing business models, causing a disjunction between the regulatory system governing incumbent firms and the challenges posed by the “new” economic actors, is certainly not new. These policy disruptions (Biber et al. 2017) can be of different types and a range of different regulatory options are, in principle, available to set adequate responses.

Confronted with the threats we have so far discussed, we suggest that the key question to be asked with this aim is: is there a market failure? Is the quality of information and pluralistic information a public good that is necessarily under-supplied in the digital environment? Or, is it an issue for social and political choices that has a dimension that transcends economics/consumer welfare themes, and that requires instead to be dealt with under the categories of the fundamental rights of individuals or the essential characteristics of democratic societies?

The answers to these questions are relevant to the search for effective policy solutions to the threats we have discussed above: the hypothesis of an autonomous response provided by the markets is realistic only if we are not in the presence of a systemic market failure. Can self-regulatory actions develop more rapidly and efficiently than in the past? More specifically, is an effective reaction to any threat to the quality and diversity of online information in the interest of the major internet companies? Assuming that the major internet companies will autonomously react to the degradation of information is a notion based on the expectation that they will recognize and accept some sort of “editorial responsibility”. In traditional media, editorial responsibility is an element of the business model, in fact, readership and revenue from readers, and, consequently, the revenue from advertising, were at least partially at stake in relation to the media’s credibility. The new online business models don’t seem to have the same characteristics, and the last few years have seen clear resistance from the major online companies to accepting explicit responsibility for any content that is published on their platforms. Facebook, Google/YouTube, Twitter, and others, have all refused, for years, to recognise any kind of editorial role, even if *sui generis*. Some recent attempts, like the Code of Practice that was recently agreed with the European Commission, appear to be more of a political compromise through which to pre-empt, or delay, incoming regulation, than an autonomous market response.

¹⁵ EU Code of conduct on countering illegal hate speech online 2016, available at: http://ec.europa.eu/newsroom/just/item-detail.cfm?item_id=54300

If self-regulation is an unreliable or insufficient instrument, can we efficiently apply traditional public instruments of intervention to the globalist reach of the Internet? In the end, the questions are: what are the available instruments for intervention in the digital age? Does competition law remain a sufficient, or even a relevant, tool? Which of the other possible, specifically legal or regulatory tools, can be adapted to the Internet and the online world? Are the experiences of traditional media regulation and electronic communications regulation some sort of useful guide? Do we need new specific legislation, as, for instance, with the example of net neutrality? Do we have to devise new rights or principles for the internet, or, (apparently) more simply, do we only need to find new rules with which to enforce online the rights that are already present and enforced offline? Is control of the internet a possible ground for the courts, or for administrative authorities? Or, do we need to invent some completely new tool, blending instruments in an innovative way, at least for Europe? The debate is raging: from data and privacy regulation, to the enforcement of competition law, the right way to intervene online is something that is at the core of many policy debates, and it is far from clear what this intervention might be.¹⁶

In the pages that follow, we will recall some of the elements of the discussion with regard to the different time frames of the possible responses.

3.1 Short term

In the short term, what is perceived to be the most imminent threat is that the concentration of information under only a few gatekeepers, and the technological instruments to spread disinformation through their platforms, may jeopardize the democratic debate and, in particular, they may alter electoral processes and condition their results in democratic countries.

In fact, while there are rules for traditional media concerning the equal treatment of candidates, as well as safeguards for the off-line organisation of elections, such as transparency and limits on electoral spending, these rules are vulnerable to largely being bypassed online. The EC gave recommendations to the authorities, and to political parties in the EU countries, on how to ensure the transparency of political advertising: calling for information that is available to citizens on how much money the parties spend on online advertising in a campaign; clearly indicating which party or political group is behind any paid for, online political advertisements; and informing citizens about how they are targeted in the dissemination of such advertisements.¹⁷ Political parties should set an example by making political advertising online more honest and transparent.

A growing attention and worry accompanied the approach to the European elections in May, 2019, since they are considered to be a likely moment of truth for the ability of EU institutions to contrast disinformation and manipulation online. At the moment, the main instrument proposed by the Commission appears to be a reliance on the Code of Practice, in order to address the spread of online disinformation and fake news, and this has been agreed with some major internet players, online platforms, leading social networks, and the advertising industry¹⁸. However, according to the first Report monitoring its implementation¹⁹, the platforms adopting the Code have so far failed to identify specific benchmarks that would enable the tracking and measurement of progress in the EU, a sign that the application of this instrument has so far been timid, to say the least.

¹⁶ https://ec.europa.eu/commission/commissioners/2014-2019/vestager/announcements/building-fairer-digital-world_en

¹⁷ https://ec.europa.eu/commission/sites/beta-political/files/soteu2018-factsheet-free-fair-elections_en.pdf

¹⁸ <https://ec.europa.eu/digital-single-market/en/news/code-practice-disinformation>

¹⁹ http://europa.eu/rapid/press-release_STATEMENT-19-1379_en.htm

3.2 Medium term

a) Evolution of competition law

The specific economics of multi-sided platform competition, and, in particular, the existence of cross-side network effects, where the feedback loops amplify the consequences of each action, pose concrete problems and pressing challenges to competition authorities, which have to analyse and decide if, and how, to intervene in these markets. In June, 2017, the OECD Competition Committee held a hearing to analyse whether traditional competition tools - such as those adopted for market definition, market power, and the assessment of the effects of exclusionary conduct and vertical restraints - remain sufficient, or whether they need to be redesigned and/or reinterpreted to cope with multi-sided markets. The results (OECD 2018) are that, with some exceptions, i.e., the framework to assess the effects of 'vertical restraints' and the standard econometric tools to assess 'efficiencies', which appear to still be applicable in the context of the multi-sided market, many key technical tools used by competition authorities appear to be unable to interpret and evaluate these markets. In carrying out 'market definition', the usual difficulties in operationalising the SSNIP (or SSNDQ) test are increased by the additional requirement to estimate the cross-platform network effects; the same issue emerges in the assessment of 'market power', in particular when tools based on consumer responsiveness are applied. In any case, tools that do not look at consumer responsiveness (e.g., market shares), also seem to need, at some point, adjustments or new interpretations in order to keep under consideration the existence of an interrelated market or another side of the platform. In other words, market power cannot be identified in a multi-sided platform by searching only on one side of the market. As for the tools that are used to assess exclusionary conduct, which, according to the experts involved by the OECD (2018), encounters fertile ground in multi-sided platforms, and these also appear to no longer be reliable (in particular, the price-cost tests and the recoupment tests).

A point emerging in the debate on the adequacy of the current tools and frameworks of competition policy is that the potential harms to competition that are posed by GAFAM cannot be captured primarily through price and output, but need to take into consideration the underlying structure and the dynamics of markets. According to Khan (2016 and 2018), the current framework in antitrust, which is focused on equating competition with "consumer welfare," is typically measured through the short-term effects on price and output— and it fails to capture the architecture of market power in the 21st-century marketplace. Indeed, in recent years, awareness and recognition of the non-price element of competition, such as quality, innovation and, lately, privacy (Just 2018), has emerged and has started to play a role in courts and enforcement agencies.

It is clear that, in the two-sided and multi-sided markets, traditional competition tools are particularly ill-equipped to take non-monetary metrics into consideration (Wu 2017), and most of the recent economic literature on free goods has focused on two-sided markets in which the free good is provided in exchange for attention or information (Gal & Rubinfeld 2016). While questions related to the optimal use of competition law in digital markets are intensely debated, antitrust enforcement is largely framed as being insufficient to fix the current imbalances in the digital economy, and several scholars suggest reconsidering the very goals of competition law in the digital age (Ezrachi 2018; Stucke 2012). The debate is currently polarized between those who argue that the problems with GAFAM are not competition problems, and competition authorities should therefore avoid intervention, and those advocating the abandoning of the consumer welfare standards and for a strong application of competition rules (Geradin 2018). In any case, it is evident that there is an increasing entanglement of competition law with other areas of law, and that another key point of the debate is the relationship, or, better, the appropriate combination of competition and regulation in dealing with platforms.

Solving the puzzle, and probably rethinking the scope of competition law, is particularly relevant in respect of the media and information industries, where the current role of the tech giants affects not just the markets, but, more generally, the public sphere. The issue of the limitation of ownership and concentration in the media industry is both one of the most complex areas of competition policy and one

of the most essential issues of media policy. The concentration of the market, and the dominance of only a few operators, have been traditionally considered major threats to pluralism in the media and information markets. Today, the same is true for the online platforms that are conveying most of the news and information, but that are not always even recognized as media. Nonetheless, a few major online platforms are clearly dominant, and they are dramatically changing the news environment. It has been observed that this dominance “*brings into question whether an independent and pluralistic free press can survive outside the embrace of vast social networks and search engines*” (Bell 2018).

The specific role of antitrust enforcement in this modified economic environment is drawing heated discussion. Within competition rules that are part of the Treaty on the Functioning of the European Union, the EC Merger Regulation²⁰ grants the EC the exclusive jurisdiction for large mergers between firms with a ‘European dimension’, that affect competition. The Merger Regulation includes a specific provision that relates to mergers affecting the “*plurality of the media*” (Art. 21(4)), and which allows Member States to apply a stricter evaluation metric to these mergers. Essentially, the EC allows Member States to apply tougher national regulation where they think that media pluralism may be in danger. Furthermore, in the past, several European countries have adopted sector specific rules that limit *ad hoc* media concentration, and they have entrusted media regulatory authorities with their enforcement.

Given the specific cultural and democratic nature of the media industry, limiting the dominant positions and concentration in this sector goes beyond the traditional implementation of competition rules in any other sector, since it amounts to dealing with an issue that is at the core of democratic societies. In this respect, the application of competition rules to the media industry, especially in the digital age, is probably not adequately equipped to always safeguard the values and objectives, such as the plurality of sources and the diversity of content, which are threatened by excessive market concentration. In the current panorama, which is increasingly dominated by digital quasi-monopolies, the existing national or supranational competition rules can be evaluated as being inadequate to tackle the complexities of new digital media models, and as being in need of an overarching re-orientation, one that will eventually change and update the EU Treaties. Specifically, the very idea of accepting the possibility of dominant positions in the media, which is possible in other markets, could be called into question. Most of the existing *ad hoc* limits aim to preserve media plurality (such as those limits to the ownership of newspapers, TV stations, radios, advertising resources, and so on) appear today anachronistic and probably counterproductive to achieve this purpose in the digital environment. If the democratic process is at stake, only contrasting abuses of dominance *ex-post*, after their realization, may be too late, and too little, to preserve our democracies. For this reason, searching for a more global and principled response to actual threats and challenges - such as reforming European competition law - might be a more promising strategy.

b) New institutional framework and the role of intermediaries

The spread of online disinformation and of various forms of hate speech online, joined with concerns about their impact on elections and referenda, have raised the alarm, both in Europe and worldwide. While, as mentioned above, it is still unclear how strong the effective impact of disinformation in shaping and steering public opinion is, and regulatory responses to online “fake news” are in the pipeline in many EU countries. States, international institutions, including the European Union, and private enterprises, have discussed or adopted measures – both legislative and non-legislative – to address these phenomena, and several of these measures have raised, in turn, concerns about their impact on the freedom of expression, and respect for the rule of law. One pre-eminent example is the so-called NetzDG, the German Act to Improve the Enforcement of the Law in Social Networks: this law does not establish new grounds for the limitation of the freedom of expression in the online environment, but it forces online platforms to immediately remove illegal content, based on the provisions of the German Criminal Code, or they will face significant fines. Hence, essentially, the law grants private companies

²⁰ Council Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings.

an enforcement role, not surprisingly, serious worries have been voiced by civil rights organizations about the democratic acceptability of any similar solution (Access Now 2018).

The UK is also debating “*a new settlement for the internet. Not merely a set of new standards but an institutional framework that involves a combination of ethical self-restraint on the part of the major platforms, improved competencies and self-regulation by users, and a legal framework which incentivises harm reduction and verification*” and, in the end, the creation of a “*social media regulator*”²¹.

As has already been mentioned, for the moment, the EU is trying to tackle hate speech and disinformation through a set of actions that include self-regulatory Codes of Practice. In the medium term, the suggested strategy of the High-level Group on fake news includes²²:

1. Enhancing the transparency of online news, involving an adequate and privacy-compliant sharing of data about the systems that enable their circulation online;
2. Promoting media and information literacy, in order to counter disinformation and to help users navigate the digital media environment;
3. Developing tools to empower users and journalists to tackle disinformation and to foster a positive engagement with fast-evolving information technologies;
4. Safeguarding the diversity and sustainability of the European news media ecosystem, and,
5. Promoting continued research on the impact of disinformation in Europe in order to evaluate the measures taken by different actors, and to constantly adjust the necessary responses.

This multi-dimensional approach is to be followed, and updated, by the EU Commission and the member states, in continuous collaboration with platforms, news media organizations and civil society organizations.

It is clear that if this primarily self-regulatory approach does not succeed, and doubts about it are widespread, the alternative is a direct regulatory attempt by public authorities, the EU Commission and the national regulators, but the difficulty, in terms of the efficacy and storminess of action, in the online environment, appears to be immense.

3.3 Long term

Digital media literacy and empowered journalism

Media literacy, and especially digital media literacy, is commonly perceived to be the fundamental precondition for a critical approach to online content and it is therefore a core element in the future of media pluralism. Most analysis, and many reports, agree that this is a fundamental ground for the long-term control of the disinformation threats that are growing online. This is probably the only topic about which people are concerned in relation to the immediate threat of disinformation for the democratic process, and activists worried about the preservation of freedom of expression online can find true common ground and will agree on the need for investment and action. The present situation is still particularly disappointing.

Based on the results of the MPM 2017²³, more than two thirds of EU members (24 of 28) that were examined, either have underdeveloped media literacy policies, or no media literacy policy at all. This

²¹ Damian Tambini: <https://inform.org/2018/09/22/long-read-what-would-a-social-media-regulator-actually-do-damian-tambini/>

²² <https://ec.europa.eu/digital-single-market/en/news/final-report-high-level-expert-group-fake-news-and-online-disinformation>

²³ Available at: <http://cmpf.eui.eu/media-pluralism-monitor/>

suggests that even though media literacy has often been praised as a solution to growing disinformation-related issues, there has simply been no progress since 2016. Clearly, States should invest more in education on the use of the online media for populations of different ages, but this necessary process has not even begun in most countries.

A specific focus of intervention, which is somehow related to digital media literacy, consists of favouring the technical empowerment of the journalistic profession. Offering journalists specific competencies to contrast disinformation *et similia*, and to improve the quality of information online, through fact checking tools and the automation of the news rooms, may become a long-term public policy goal. However, the latter may only be a chapter in a more general effort to find new sources of finance for investigative journalism. In the long term, in fact, the decline of the traditional media may lead to dangerous under-financing of this type of costlier, and riskier, production of quality information, a phenomenon that has probably already started at the local level, and in poorer markets. While PMS services, at least in the EU, are still a significant force, notwithstanding the political influence of Governments, it is, more generally possible that maintaining an effective presence of investigative journalism, without the direct investment of public resources, may be revealed to be impossible.

In any case, either by market forces or by public intervention, in the long term, the emergence of a new effective business model for professional journalism will become decisive, since a new economic equilibrium of edited media is probably the key to reaffirming that watchdog role of journalism which remains essential for democracy.

4. Conclusions

In this essay, we have affirmed that the threats to quality information and media pluralism online essentially come from two sources: the increasing concentration of economic resources into just a few gigantic online platforms/media, and the spreading of the disinformation that is favoured by the available technological instruments. The information crisis that this joint phenomenon generates is accelerated by the decline of the traditional media under the pressure of disruptive digital business models that are rapidly subtracting readership and advertising resources from them.

The immediate worry created by the compounding and acceleration of these processes is the evident deterioration of the democratic debate, and especially of the high and immediate risk of the manipulation of the electoral processes. Common agreed solutions, in the midst of the epochal economic and societal change that we are undergoing, are always difficult and controversial.

A short-term response to the slowing down, if not the reversing, of the deterioration of the democratic debate seems to have to rely on the self-regulation of private global players, but this response itself creates a certain degree of discomfort and apprehension. In the medium term, re-examining and adapting the consolidated legal traditions relating to competition law and the designing of specific regulatory instruments that are (re)-created for the online world, and that may reveal a safer route. In the longer term, empowering citizens, primarily through a major educational effort to create widespread digital media literacy, appears to be an uncontroversial, but long and arduous, undertaking. Finally, supporting the journalistic profession in tackling the online world and contributing to the search for a new and viable business model for investigative journalism, may become a necessary public policy.

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