



WORKING PAPERS

LAW 2018/10
Department of Law

The Big Data competition story: Theoretical approaches and the first enforcement cases

Andrea Giannaccari

European University Institute
Department of Law

**The Big Data Competition Story: Theoretical Approaches
and the First Enforcement Cases**

Andrea Giannaccari

EUI Working Paper **LAW** 2018/10

This text may be downloaded for personal research purposes only. Any additional reproduction for other purposes, whether in hard copy or electronically, requires the consent of the author. If cited or quoted, reference should be made to the full name of the author, the title, the working paper or other series, the year, and the publisher.

ISSN 1725-6739

© Andrea Giannaccari, 2018
Printed in Italy
European University Institute
Badia Fiesolana
I-50014 San Domenico di Fiesole (FI)
Italy
www.eui.eu
cadmus.eui.eu

Abstract

The article critically analyses the debate that has so far involved the Big Data phenomenon. The different theoretical arguments concerning the potential benefits and the adverse effects that can be produced by the aggregation and use of large volumes of data are addressed. In assessing the different perspectives in terms of competition law, consumer and privacy protection, specific emphasis is placed on the most significant decision-making practice. In particular, as to the merger control, the *Google/DoubleClick* and *Facebook/WhatsApp* cases are scrutinized as to test, at the enforcement level, the most challenging domains.

Keywords

Big data, Antitrust, Merger control, Privacy, Consumer protection

Author contact details

Andrea Giannaccari
LUISS Guido Carli
agiannaccari@luiss.it

Table of contents

INTRODUCTION..... 1

BIG DATA: A COMPLEX «NEW CURRENCY»..... 1

THE ECONOMIC DEBATE, BETWEEN BENEFITS AND RISKS 2

 The perceived strengths of Big Data 3

 Foreclosure concerns and other antitrust risks 4

THE UNCERTAIN REGULATION OF BIG DATA, BETWEEN COMPETITION, CONSUMER PROTECTION AND PRIVACY 6

BIG DATA AND MERGER CONTROL 8

 The Google/DoubleClick merger 9

 The Facebook/WhatsApp merger..... 11

 The Italian case: AGCM v. WhatsApp..... 13

FINAL REMARKS 14

Introduction

Over the last few years, the adoption of business models based on the collection, processing and use of large volumes of data has certainly contributed to shape the world, at least the digital one. The information obtained through different methods of data analysis has undoubtedly acquired a strategic role in the decision-making processes and in the same competition discourse. It is clear that an economy based on the availability of this resource allows to offer better products and services, fine-tune business proposals, achieve internal efficiencies, increase the level of innovation and, more generally, might contribute in terms of overall growth. As known, however, all these effects similarly raise a number of concerns in terms of market competition, privacy and consumers protection.

On these and other crucial issues the academic debate has been largely focused, drowning the attention from scholars with different backgrounds which have contributed to correctly frame several crucial profiles. Nevertheless, the approaches followed and assessments that have emerged still display a marked divergence, in almost all the relevant areas. The occurrence of a new phenomenon, of a not yet far-reaching understanding of its dynamics, in addition to the different scholarly perspectives, make the whole picture not yet clearly readable. Furthermore, the lack of a settled 'black letter' law does not help to make this research theme more intelligible.

For these and other reasons, it is maybe useful to critically review the debate that has taken place around Big Data, emphasizing the aspects that are somehow broadly endorsed at the theoretical level. Hereinafter, much of the attention is given to the enforcement, especially in terms of merger control, in both the US and UE. The aim is to assess whether the theoretical story that has been told so far is (or is not) reliable.

Big Data: a complex «new currency»

The fact that information, obtained processing large amounts of data, represents an asset of the market economies is not a new phenomenon. Several studies in the field of information economy have widely analysed its value as a strategic element in a number of different economic sectors, as well as - through the insights of the economic analysis of law - within the contractual relationships¹. Nevertheless, what has recently enhanced the debate has to be associated with the emergence of increasingly complex technologies able to improve the acquisition, collection, storage and analysis of huge volumes of data, which might enable the production on real-time information likely to give a competitive advantage to the stakeholders of the knowledge economy². Alongside the exponential growth of the computational capacity, also the increase of Internet access has contributed to the development of the digital economy and to the adoption of business models based on the treatment of large volumes of data³. In other words: personal information, including in particular those concerning consumers habits, have acquired an enormous value in the digital environment, qualifying - as noted by Howard Shelanski⁴ - as essential inputs for the competitive success. Not by chance, the examples of products, services or business models that are usually made in this regard range between the champions of digital capitalism, obviously

¹ See C. Shapiro, H. Varian, *Information Rules: A Strategic Guide to the Network Economy*, Harvard Business Review Press, 1999.

² H. Varian, *Big Data: New Tricks for Econometrics*, in «Journal of Economic Perspectives», 28, 2014, at p. 3.

³ In this respect see OECD, *New Forms of Work in the Digital Economy*, DSTI/ICCP/IIS(2015)13/FINAL, June 2016; A. Lerner, *The Role of 'Big Data' in Online Platform Competition*, (2014), available online at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2482780; in the management literature consult P. Tambe, "Big Data Investment, Skills, and Firm Value", in «Management Science», 60(6), 2014, p. 1452.

⁴ H. Shelanski, *Information, Innovation, and Competition Policy for the Internet*, in «University of Pennsylvania Law Review», 161, 2013, at p. 1688.

including Google, Amazon, Facebook, Microsoft and Uber. This is why the generic term «Big Data» has progressively get out from the computer science domain to monopolise also other academic fields, including the political and regulatory ones.

That being said, the same definitional effort has proven to be not an easy task, ranging between those who were more inclined to value features as the collection and (more or less automated) processing of Big Data; and others conversely more favourable to value the type of content embedded therein. However, it seems that over time a qualification focused on specific characteristics of Big Data has emerged. Four in particular: volume, velocity, variety and value (summarized as the «4 Vs»). As for the first terms - volume and velocity - it has been noted that the growth of online activities, together with the widespread use of smartphones and Internet platforms, have displayed an exponential increase in the data produced, with annual estimates of growth around 25 per cent. The exact amount, in terms of zettabytes, still seems to escape the most accurate appraisals, but there is no doubt that this impressive amount of data allows firms to identify essential information of their customers: age, gender, geographical location, demographic profile, family composition, eating habits, biometric data, business preferences, spending capacity and (many) other⁵. Obviously, the ability to quickly acquire and process these volumes of data, hence the speed feature, increases the release of accurate information, useful also to profile (if not even foresee) the services, products and offers to be addressed to consumers. Moreover, the aggregation is operated through a myriad of different sources, here lies the variety, in which the user can be an active source of data and information – it is the case of Facebook or WhatsApp - or retrieved through complex computer equipment, programs and algorithms. As a consequence, all these characteristics make data aggregations acquiring value. Even in the case of raw data that, as a result of different analysis and processing, allow to extract relevant information useful for different purposes⁶.

In a nutshell, it is on these four characteristics that a consensus has been reached, which is useful not only for what concerns the definitional effort of this phenomenon (some scholars rely on a slightly different number of characteristics)⁷, but also to emphasize that within the meaning of Big Data have necessarily to be included the huge amount of data, but also the ability to operate their acquisition and the processes necessary to allow their use. Finally, it is even less questioned that Big Data represents a strategic input, which is increasingly being recognised⁸, also on the institutional side, as the new currency of the new millennium.

The economic debate, between benefits and risks

Faced with the growing awareness on the importance of this matter, many scholars, primarily economists, have deservedly committed themselves to scrutinise Big Data with a view to emphasize the benefits and risks, also the competitive ones, which they are likely to generate. The endeavour, that is still in progress, has proved to be particularly useful not only for academic purposes but also to interpret the terms of a debate sometimes polarized between overly different views. In other words, between those who are more inclined to see the phenomenon as an aggregation of economic power able to raise antitrust concerns, to reduce the consumer welfare, and even affect the democratic nature of the different legal systems⁹. And who, conversely, is more willing to recognise the benefits in terms of innovation and

⁵ OECD, *Big Data: Bringing Competition Policy to the Digital Era*, DAF/COMP(2016)14, 27-Oct-2016, at p. 5 ff.

⁶ M. Stucke, A. Grunes, *Big Data and Competition Policy*, Oxford University Press, 2016, at p. 15 ff.

⁷ See, for instance, D. Rubinfeld, M. Gal, *Access Barriers to Big Data*, in «Arizona Law Review», 59, 2017, at p. 339, the authors add another V, the veracity, which indicates the data accuracy, at p. 348.

⁸ M. Vestager, *Competition in a Big Data World*, Speech, Munich, 17 January 2016, available online at: https://ec.europa.eu/commission/commissioners/2014-2019/vestager/announcements/competition-big-data_world_en.

⁹ This possibility had been strongly advanced by R. Epstein, R. Robertson, *The Search Engine Manipulation Effect (SEME) and its Possible Impact on the Outcomes of Elections*, in «Proceedings of the National Academy of Sciences», 112(33), 2015, p. E4512.

economic growth. In the impossibility to reproduce here the theoretical debate, it is presumably useful to critically review the results of the different approaches.

The perceived strengths of Big Data

As for the potential positive effects, the collection and processing of large amount of data might increase the level of innovation and bring significant efficiency gains. Firms, especially those active on-line, use data to improve the quality of products and services or to develop new ones (process commonly identified as data-driven innovation¹⁰). In this regard, for instance, it has been emphasized that search engines, through the use of advanced algorithms, are able to offer users ever-increasing accurate or high added value results. The analysis of the type of research carried out by end-users allows proposing offers fine-tuned around the user preferences, informing consumers about price trends (as is the case of search engines for travels); developing additional services (traffic information and translation services, based on user data and on their activities to increase the quality); or for other added value services usually valued by users¹¹.

Furthermore, and this is possibly the most obvious benefit (with a consequence that will be evaluated in while), many of the services offered in the Big Data environment are provided without requiring any cash payment to users, if not to almost a symbolic rate. The wide success of social platforms (Facebook), messaging applications (WhatsApp) or even search engines (Google) is due to the fact that the several billions of people using them daily 'just' give their consent to allow firms to use their data, often on different sides of the market. The possibility to monetize personal data allows to subsidize the supply of goods and services generally free of charge. According to some scholars, this model – obviously appreciated by users – would not even raise any antitrust concern. In a period in which the consumer welfare is matched with the definition of low prices, it is clear that prices and tariffs close to zero might be perceived (even in the most refined elaborations) as positive elements in terms of consumer welfare. In this perspective, the various counter-arguments, aimed at making the way less challenging to competitors, have sometimes appeared less popular. A prohibition on the collection, processing or commercial use of data would presumably increase the price of products and services for the consumers, with uncertain results that this solution would enhance the competition from rival firms¹². Furthermore, it has been noted that data are often non-rivalrous; for some observers, they are also unlikely to create insurmountable barriers to entry (especially if the data is in the public domain)¹³; and in any case they are often freely released by users. Whether there is full rationality (or, according to the legal meaning, that the consent is really informed) is another issue, precisely with a view to freely benefit from goods and services¹⁴.

Lastly, just to mention other widely credited benefits, the use of Big Data is considered able to increase the efficiency of production processes, improve the decision-making ability of managers, to more accurately predict market trends and to address in a much more targeted way (and therefore more efficiently) the same advertising. Although it is difficult to make accurate estimates in terms of overall cost savings associated with the use of Big Data, the OECD assessments indicate that by 2020 there will

¹⁰ OECD, *Data-Driven Innovation for Growth and Well-Being*, Interim Synthesis Report, October 2015.

¹¹ M. Salinger, R. Levinson, *Economics and the FTC's Google Investigation*, in «Review of Industrial Organization», 46(1), 2015, p. 25.

¹² This is the point made by T. Korber, *Common Errors Regarding Search Engine Regulation - and How to Avoid Them*, in «European Competition Law Review», 36(6), 2015, p. 239.

¹³ On this, A. Lambrecht, C. Tucker, *Can Big Data Protect a Firm from Competition?*, 2015, available online at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2705530; also, in relation to market power, N. Schepp, A. Wambach, *On Big Data and its Relevance for Market Power Assessment*, in «Journal of European Competition Law & Practice», 7(2), 2016, p. 121.

¹⁴ *Amplius*, A. Lerner, *The Role of "Big Data" in Online Platform Competition*, 2014, available online at: <http://ssrn.com/abstract=2482780>.

be benefits in the transport sector (smartphone data show global savings of around 500 billion euros); in the consumption of electricity (with benefits in terms of costs for users and pollution for hundreds of billions euros) or in the health sector (with savings - at least those measurable - of about 300 billion euros)¹⁵. All this would also be functional to boost economic growth that for the European Union alone is equal to an additional 1.9% per year within the next three years¹⁶. It is thus clear, also on the basis of a summary appraisal, that the phenomenon might positively affect many parties, yielding considerable benefits to consumers, firms and in terms of economic growth.

Foreclosure concerns and other antitrust risks

On the other hand, similar convincing reasons have emerged to point out - albeit with different emphasis - the risks for consumers, competitors and other subjects deriving from the use of Big Data. In this regard, a number of studies underlining the ways in which firms might use aggregations of data to acquire an (illegal) competitive advantage, distort the competitive level and harm consumers, have often started from the analysis of the technological platforms. The line of reasoning has frequently relied on the assumption that the market power held by the champions of the digital arena - the discourse is usually referred to Google, Facebook, Amazon and other primary stakeholders - is able to foster highly concentrated markets, scarcely contestable, and likely to pave the way to several anti-competitive infringements¹⁷. With the additional risk that this power is exercised on another side of the market (with the well-known effects and debated operational difficulties at stake)¹⁸.

In this regard, the ways in which the market power is acquired and maintained represent the first issues that have been scrutinized with some suspicion. Indeed, the most recent studies on the value chain in the Big Data ecosystem have highlighted that there are several barriers potentially able to create a durable market power in many contexts of the supply chain, likely to the appearance of different anticompetitive conducts. A first barrier, the technological one, is that the possibilities of acquisition of (some types of) data may not be easily replicated by competitors. But it has also been displayed that the cost structure in these sectors is often characterized by high economies of scale and scope, able to induce concentration among few subjects in the Big Data environment¹⁹. The technological and human resources necessary for the collection, storage and analysis of data require high fixed costs and low marginal costs. In this scenario, the use of data allows to improve one's business model (on some of the different sides), making it more difficult for rivals to emulate or challenge broadly structured and established firms. Further barriers can be associated with the network effects that usually occur within the technological platforms. Whenever the quality of products or services depends on the data collected, and the quality of the latter is in turn linked to the number of subjects that provide them, it can be extremely difficult for potential rivals not to only to win a competitive battle, but also to have some chance of entering the market²⁰. The list is much longer - there are also legal barriers (*i.e.* the different personal data regimes) or behavioural

¹⁵ OECD, *Big Data: Bringing Competition Policy to the Digital Era*, DAF/COMP(2016)14, 27-Oct-2016, at p. 8.

¹⁶ The estimation (used also by OECD, *Big Data: Bringing Competition Policy to the Digital Era*, *cit.*) is provided by S. Buchholtz, M. Bukowski, A. Sniegocki (2014), *Big and Open Data in Europe - A Growth Engine or a Missed Opportunity?*, available online at: <https://www.microsoft.com/global/eu/RenderingAssets/pdf/2014%20Jan%2028%20EMEA%20Big%20and%20Open%20Data%20Report%20-%20Final%20Report.pdf>, at p. 17 ff.

¹⁷ A particularly detailed analysis on these risks is carried out by A. Ezrachi, M. Stucke, *Virtual Competition: The Promise and Perils of the Algorithm-Driven Economy*, Harvard University Press, 2016.

¹⁸ V. D. Evans, *Attention Rivalry Among On-line Platforms and Its Implications for Antitrust Analysis*, in «Journal of Competition Law and Economics», 9, 2013, at p. 313.

¹⁹ On this aspect, The Economist, *A Giant Problem - The Rise of the Corporate Colossus Threatens Both Competition and the Legitimacy of Business*, September 17, 2016, available online at: <http://www.economist.com/news/leaders/21707210-rise-corporate-colossus-threatens-both-competition-and-legitimacy-business>.

²⁰ R. Mahnke, *Big Data as a Barrier to Entry*, in «CPI Antitrust Chronicles», 2015, available online at: <https://www.competitionpolicyinternational.com/big-data-as-a-barrier-to-entry>.

ones - but the element that emerges is that all these factors seem leading to a marked concentration of economic power in the availability of few subjects - labelled as dominant super-platforms - able to shield their position and potentially encouraged to adopt different anti-competitive conducts²¹.

It is precisely in relation to the second aspect, the unlawful practices, that the story has over time revealed a wide ranging list of anticompetitive injuries. Some authors have pointed out that the same innovative process might be damaged. Firms basing their commercial success on the acquisition and use of data would have the incentive to adopt strategies aimed at preventing or restricting to competitors the possibility of obtaining the same information, thus limiting the ability to innovate and compete with the incumbent²². But the same outcome, has also been stressed, might be achieved whenever new entrants are acquired with the aim of accessing their portfolio of data or to limit the possibilities of growth in the market. In both cases, the innovative degree would be presumably reduced. Other scholars have also highlighted that the anti-competitive use of Big Data could reduce the quality of products offered and services provided. The argument has often been evoked in relation to search engines. The more structured subjects would derive the incentive to use the users data to extract profits (at least) on another side of the market, the advertising one. They would therefore be inclined to prioritize the results of the advertisers', to the detriment of search results characterized by higher quality for the end-users. However, the argument goes (often referred to Google), the competitors would not have in any case the possibility to offer a sufficient level of quality to force the incumbent not to reduce its offer in order to obtain a higher income from another side of the platform²³.

More generally, the views aimed at highlighting the anticompetitive effects have emphasised that the damage associated with the misuse of Big Data can occur on all sides of the supply chain, both upstream and downstream. It is also in this respect that multi-sided platforms are often taken into account as virtual places where exchanges are done between different agents. Part of the scholars has thus noted that the analysis of this complex context in a welfare perspective cannot be limited to the mere acknowledgement that consumers often obtain services without paying an amount of money. A more careful analysis must take into account at least other two elements. The first is represented by the fact that the huge amount of data provided by users is able to produce - once processed - different and subtle discriminatory practices. Moreover, and it is the second significant aspect, the data protection is in this case at risk because users, once releasing the data, no longer have the real possibility of exercising some control in the digital arena, which consequently acquire the appearance of a public good²⁴. Moreover, it is often argued that users continue to use these services 'for free' because there are no substitutes and are therefore forced to pay for them making their personal data available or accessible by firms²⁵. The network and lock-in effects would do the rest, fuelling the vicious circle. Finally, the negative effects would occur also upstream, in relation to the group of subjects interacting on the different platforms. In this case, the platform owners would exercise market power to realise the most classic form of discrimination, set high prices (aware of the difficulty or impossibility to be found guilty in an antitrust perspective) or adopt various predatory strategies (let us think to the E-books case), consequently creating significant competitive concerns to the subjects placed upstream in the supply chain²⁶.

²¹ D. Rubinfeld, M. Gal, *Access Barriers to Big Data*, *cit.*, at p. 359 ff.

²² D. Sokol, R. Comerford, *Antitrust and Regulating Big Data*, in «George Mason Law Review», 23, 2016, at p. 1149 ff.

²³ M. Stucke, A. Ezrachi, *When Competition Fails to Optimize Quality: A Look at Search Engines*, in «Yale Journal of Law and Technology», 18, 2016, at p. 103.

²⁴ *Amplius*, A. Acquisti, *From the Economics of Privacy to the Economics of Big Data*, in S. Bender *et al.* (eds.), *Privacy, Big Data, and the Public Good*, Cambridge University Press, 2014, at p. 76 ff.

²⁵ M. Gal, D. Rubinfeld, *The Hidden Costs of Free Goods: Implications for Antitrust Enforcement*, in «Antitrust Law Journal», 80(3), 2016, at 521. Similarly, M. Stucke, A. Grunes, *Dancing Around Data*, *The Hill*, 2014, disponibile online a: <http://thehill.com/blogs/congress-blog/technology/226502-dancing-around-data>.

²⁶ On these issues M. Stucke, A. Ezrachi, *Looking Up in the Data-Driven Economy*, 2017, available online at: <https://ssrn.com/abstract=2975510>.

As it is evident, at least on theoretical grounds, a significant part of the competitive discourse has therefore analysed the conditions through which companies can use Big Data to preserve an unjustified competitive advantage, necessary to adopt several strategies potentially harmful for all the subjects of the supply chain, for the same competitive process, in terms of privacy protection and, ultimately, for what concerns the total welfare.

The uncertain regulation of Big Data, between competition, consumer protection and privacy

The terms of a complex debate have obviously affected the role that competition law and authorities (but also the regulatory and data protection ones) have to play in dealing with Big Data. Also in this regard the scholars have exhibited a marked disagreement. From the one side, many observers place the antitrust enforcement in a sort of residual limbo. The reasons have to be found in the benefits, previously mentioned, stemming from the aggregation, processing and use of data. However, there are also other reasons. In a general perspective, it has been noted that the hypotheses of harm to competition resulting from an exclusionary conduct are not (to date) based on strong theories, as rather on general perspectives, devoid of factual evidence, which are used in relation to the new environment. It was also argued, also to discredit the assessments aimed at advocating a more prominent antitrust role, that the track record of anti-competitive infringements linked to Big Data is limited; or that there are not class actions brought by users, especially in the US, for damages incurred as a result of the misuse of data. A further argument, often employed in the digital world, concerns the particular attention that must be placed in relation to markets characterized by innovation and fast technological change. Line of reasoning that suggests to deter the antitrust intervention due to risks of false positives, with negative effects on consumer welfare and on the same innovative degree in hyper-dynamic contexts²⁷.

This only part of the story. If the aforementioned reasons have sometimes appeared to be characterised by some laissez-faire attitude or by a Chicagoan approach, more exhaustive assessments have been released to emphasise the extreme difficulty that the competition law tools exhibit in dealing with the phenomenon. Starting from the definition of the relevant market, where the SSNIP test is of little use if it is employed in markets with several sides and whenever non-monetary transactions are in place²⁸. The same assessment of market power proves to be difficult whenever companies offer ‘free’ services to consumers in exchange for the use of their personal data. In these instances, it is usually noted, the market power may be underestimated by the authorities and the market might seem unsuitable to create any anticompetitive concern. In this scenario, the availability of huge amounts of personal data is not often perceived as a crucial element able to attribute, consolidate or unlawfully exercise market power; while the use of personal data (for anti-competitive purposes) is sometimes too easily excluded from the antitrust risks and considered to be regulated exclusively through the data protection domain.

Finally, even for what concerns the remedies it has been expressed some scepticism. In the event that the data possessed by the dominant firm were qualified as an essential resource, the discussion would be resolutely point towards the related doctrine and, therefore, in the direction of the duty to deal (and disclose the data) with the competitors²⁹. But in these circumstances, besides the difficulty in implementing a rather discredited measure, certainly in the US *post-Trinko*³⁰, the remedy could even

²⁷ A. Lerner, *The Role of "Big Data" in Online Platform Competition*, *cit.* at p. 6 ff.

²⁸ On this problem see for instance L. Filistrucchi, D. Geradin, E. Damme, P. Affeldt, *Market Definition in Two-Sided Markets: Theory and Practice*, in «Journal of Competition, Law & Economics», 10(2), 2014, p. 293.

²⁹ See D. Geradin, M. Kuschewsky, *Competition Law and Personal Data: Preliminary Thoughts on a Complex Issue*, 2013, available online at: <https://ssrn.com/abstract=2216088>, at p. 13 ff.

³⁰ V. A. Giannaccari, R. Van den Bergh, *Unilateral Conduct of Dominant Firms*, in R. Van den Bergh, P. Camesasca, A. Giannaccari, *Comparative Competition Law and Economics*, Edward Elgar, 2017, at p. 300 ff.

worsen the problems concerning privacy since the users to whom the data refer would presumably not have given any consent to their treatment by other subjects³¹.

To these (and other) reasons are usually opposed those advocating a more penetrating (and severe) antitrust control. As previously noted, the potential negative effects concern both the ways in which companies create these huge aggregations of data - making the same process sometimes impossible for the competitors (actual or potential) - and also the exercise of market power through unlawful schemes. What has to be pointed out, apart from the several details, is that the discourse has progressively affected all the illegal conducts³². For what concerns the abuses, in addition to the already mentioned hypotheses, it has been highlighted that dominant firms might adopt illegal practices to prevent or limit that other subjects access the data, in order to get an unfair competitive advantage. There is the case of the vertically integrated dominant company that uses the data acquired upstream to obtain a benefit at the distribution level, preventing downstream competitors from accessing the same information. Or, the dominant company that relies on the typical leverage through bundling or tying strategies: the aggregation of data on one side of the market can in fact be instrumental to achieve, maintain or increase the market power elsewhere. Finally, and this is the case of the procedure by the *Bundeskartellamt* against Facebook, the abusive conduct can take the (innovative) form of imposing users' unlawful terms and conditions (under the privacy law) in the process of acquisition of their personal data³³.

In postponing the analysis of merger cases, Big Data can also stimulate cartels, facilitate collusion and price coordination. In this regard, it has been extensively observed that the sharing of Big Data, of complex algorithms and of artificial intelligence devices between two or more firms can be used to define and adjust (identical) prices on the market, facilitate tacit collusion and timely monitor the compliance with an agreement³⁴. Lastly, the way in which the antitrust rules should eventually include data protection claims have surfaced. In other words, in what circumstances the competition regime might solve issues concerning end-users privacy; and how, more generally, the competition domain should deal with strategies involving the use of personal data when they are aimed at illegally bias the competitive degree. Obviously, while it has been frequently argued that the competition law is called to serve different aims, there have been (even institutional) opposite views.

Among the others, on the EU side, it has been the same European Data Protection Supervisor that has urged to devote attention to the competitive effects of Big Data in all the proceedings, focusing in particular on the relationship between personal data, entry barriers and market power³⁵. From a general perspective, it is difficult to deny that the decisions of companies, whether or not represented by the giants of the web, about the collection and use of personal data, have certainly acquired a noteworthy competitive dimension. Whenever Big Data represents a significant input for products and services, or if the level of protection offered to users affect the qualitative degree of the marketplace (thus revealing an incidence not in terms of price competition but in relation to other components of the consumer

³¹ A. Goldfarb, C. Tucker, *Privacy and Innovation*, in J. Lerner, S. Stern (eds.), *Innovation Policy and the Economy*, University of Chicago Press, 2012, p. 65 ff.

³² For a comprehensive analysis M. Stucke, A. Grunes, *Big Data and Competition Policy*, Oxford University Press, 2016.

³³ Bundeskartellamt, *Bundeskartellamt Initiates Proceeding Against Facebook on Suspicion of Having Abused its Market Power by Infringing Data Protection Rules*, Press Release, 2.03.2016.

³⁴ *Amplius*, M. Stucke, A. Ezrachi, *Artificial Intelligence and Collusion: When Computers Inhibit Competition*, 2015, available online at: <https://ssrn.com/abstract=2591874>.

³⁵ European Data Protection Supervisor, *Privacy and Competitiveness in the Age of Big Data: The Interplay Between Data Protection, Competition Law and Consumer Protection in the Digital Economy*, 2014, available online at: https://edps.europa.eu/sites/edp/files/publication/14-03-26_competition_law_big_data_en.pdf. Also, European Data Protection Supervisor, *Report of Workshop on Privacy, Consumers, Competition and Big Data*, 2014, available online at: https://edps.europa.eu/sites/edp/files/publication/14-07-11_edps_report_workshop_big_data_en.pdf.

choice)³⁶, the antitrust system cannot and should not remain passive³⁷. Rather, the challenge it has to face – it is argued by the most cautious voices – is to deal with this huge set of operational problems with the due care, avoiding excesses³⁸.

The terms of the discourse could be extended to all the analysis aimed at discovering a theoretical border between the different disciplines at stake – competition law, privacy and consumer protection – which are in turn affected by the legal specificities of the different legal systems³⁹. However, the exercise would not produce different outcomes in terms of certainties, revealing also in this regard the most disparate positions. Confronted with so different perspectives, what can be inferred? First, for the issues of interest here, the debate suggests taking particular attention in assessing these issues and in advancing the proper solutions. The Big Data phenomenon, it is increasingly noted by the scholars, still requires a precise and solid understanding. The level of uncertainty and the lack of knowledge in an area that overlaps different disciplines suggest to proceed, by scholars and authorities, with the utmost caution. Furthermore, the competitive enforcement is only now taking its first steps. Nonetheless, the lack of an extensive case law and of some black letters should not suggest that there is little room for a discipline also historically aimed at checking the enormous aggregations of economic power. For all the stakeholders, it is thus necessary to reduce the information asymmetries that characterizes a new and complex phenomenon, carefully assessing how to deal with the many concerns that it is likely to raise. And, in this perspective, it has to be valued what is slowly surfacing from the application practice.

Big Data and merger control

Faced with an uncertain theoretical framework, and missing a meaningful enforcement, there is an area - that of mergers - in which Big Data has been repeatedly subjected to antitrust scrutiny. Also in this regard, the theoretical debate has allowed to clarify the negative effects associated with the aggregation of data pertaining to different companies; but there have analysis aimed at underlining that the merger control has not to take into account issues different from prices and market structure.

In the case of mergers or acquisitions involving aggregations of data, adverse competitive effects may occur and this outcome is likely even if the traditional techniques to control these operations (based on the firms market shares) do not indicate an increase in the concentration ratio. For instance, when an already well-structured company decides to acquire a new entrant, presumably having a low market share, the market structure may not exhibit any significant change. However, whenever the entrant disposes of a large amount of data, the transaction could lead to a monopolization (in the access or use) of data in one specific market⁴⁰. Similar concerns might surface when the entity resulting from the merger adopt anticompetitive conducts stemming from the aggregation of the firms databases involved in the transaction. If the access to this data constitutes an important component for the market contestability, competitive risks cannot be ruled out if the aggregation of data is made inaccessible to

³⁶ On this, OECD, *Big Data: Bringing Competition Policy to the Digital Era*, cit., at p. 14 ff.

³⁷ On the institutional side, this argument has been jointly made by French Autorité de la Concurrence and the German Bundeskartellamt, *Competition Law and Data*, 10th May, 2016, available online at: <https://www.bundeskartellamt.de/SharedDocs/Publikation/DE/Berichte/Big%20Data%20Papier.html>. Also, EU Parliament, *Challenges for Competition Policy in a Digitalised Economy*, 2015, available online at: http://www.europarl.europa.eu/RegData/etudes/STUD/2015/542235/IPOL_STU%282015%29542235_EN.pdf, at p. 69.

³⁸ A. Grunes, M. Stucke, *No Mistake about it: The Important Role of Antitrust in the Era of Big Data*, 2015, available online at: <http://ssrn.com/abstract=2600051>, at p. 4.

³⁹ European Data Protection Supervisor, *Privacy and Competitiveness in the Age of Big Data: The Interplay Between Data Protection, Competition Law and Consumer Protection in the Digital Economy*, cit.; for a different assessment see M. Ohlhausen, M. Okuliar, *Competition, Consumer Protection, and the Right (Approach) to Privacy*, in «Antitrust Law Journal», 80(1), 2015, p. 121.

⁴⁰ N. Schepp, A. Wambach, *On Big Data and its Relevance for Market Power Assessment*, in «Journal of European Competition Law & Practice», 7(2), 2016, p. 123.

competitors (actual or potential), or in cases where it is impossible to replicate the data. The same outcome could also emerge when there is a willingness to acquire firms located upstream or downstream of the supply chain solely to access the flow of user data⁴¹.

Finally, just to remain on the most shared taxonomy, mergers or acquisitions can reduce the non-price competition in terms of the lower level of protection offered in the use of personal data. In essence, if the privacy acquires a competitive edge in one specific market, or constitutes the economic rationale underlying the merger, the invocation addressed to the authorities is to carefully consider whether these operations create the conditions (or implement the incentives) so that firms compete in terms of privacy protection. Also in this respect, if users consider privacy as a qualifying element of a product or a service, any potential decrease in the level of protection resulting from the merger should be perceived in the same way as a reduction in the quality of the product or service offered (which is a non-trivial element, as it will be observed in the *Facebook/WhatsApp* merger, see *infra* at §§ 5.2-5.3). In sum, the crucial issue was underlined on theoretical grounds by Robert Lande, precisely in relation to the concentrations. It is in the acknowledgment that if the competition law concerns consumer choice, this cannot be limited to the price dimension. The discipline has to guarantee markets able to release competitive prices, but also other forms of non-price competition, such as innovation, quality, variety of products, and also the protection of personal data. In other words, the privacy should be considered as an important component of the non-price competition, which would lead to the prohibition of an operation whenever it is likely to reduce the consumer welfare in relation to this dimension. On the other hand, it cannot be underestimated the circumstance that mergers and acquisitions concerning Big Data might increase the efficiency, giving the merging parties the ability, in terms of data possessed, to positively affect the production of goods, the supply of services or in terms of innovation⁴². Furthermore, it has to be noted that also in relation to the mergers most of the arguments aimed at denying the antitrust regime an incisive role have been used, on the assumption that the goal of the discipline has only to be the promotion of competition as a mechanism to increase the efficient allocation of resources (interpreted as low prices) or relying on the argument that the privacy concerns do not constitute a dimension that the competition domain has to take care of.

The Google/DoubleClick merger

The first antitrust case concerning Big Data, and the protection of user privacy, is presumably represented by the Google's acquisition (for more than 3 billion dollars) of Double Click, realised in 2007. At that time, both firms were relevant players in the digital market. Google already represented the most important search engine and played a significant role also in the advertising market (with shares between 30 and 40% in the EU). Double Click was instead the leading company in the provision of online advertising services. Since the two companies had large datasets concerning the users, there were repeated invitations to the respective institutions, the Federal Trade Commission and the European Commission, to consider in the assessment of the operation risks of privacy infringement and increase of the barriers to entry that could have been determined.

In a nutshell, the greatest concern consisted in the match of data related to the users searches (operated on Google search engine) with those of DoubleClick, concerning the monitoring of Internet advertising, which was likely to realize an unprecedented aggregation of data. The purchase of DoubleClick, it was claimed, would have allowed Google to track the searches made by users and also the pages accessed (including, in particular, the commercial ones), allowing it to undertake an accurate users profiling. Hence, the invitation – also by the Electronic Privacy Information Center (the authoritative research

⁴¹ I. Graef, *Market Definition and Market Power in Data: The Case of Online Platforms*, in «World Competition», 38, 2015, p. 473. Also, C. Ceriello, *EU Merger Regulation: A protectionist Regime at Odds with U.S. Regulation?*, in «Columbia Journal of European Law», 23, 2017, p. 477.

⁴² A. Grunes, M. Stucke, *No Mistake about it: The Important Role of Antitrust in the Era of Big Data*, *cit.*, at p. 11.

center on online privacy protection) – to block the merger since Google would not have had any legal obligation post-merger to protect the users privacy, guarantee the security of data storage and grant their accuracy⁴³.

Nonetheless, the FTC - with not a unanimous decision - decided to approve the operation, considering that the parties were not competitors in any of the relevant markets. In particular, as regards the combination of data, it was observed that their aggregation and processing did not constitute, for rivals, an insurmountable barrier to entry. The size of competitors - such as Microsoft, Yahoo or AOL - did not raise any competitive risk, while it was in any event possible to obtain data similar to those of the parties, in terms of quantity and quality, also for other market players. Finally, in terms of damages to users in terms of privacy violation, the FTC emphasized that statutory law did not allow to block the merger on the basis of concerns different from those typical of the merger control (although recognizing that privacy can represent a non-price competition dimension), as well as that it was not possible to impose conditions on the firms with a view to protect the users privacy⁴⁴.

However, as introduced, the decision was not taken by unanimous vote. Particular emphasis, within the debate previously reviewed, has received the opinion released by one of the FTC commissioners, Pamela Harbor. In her dissenting statement, the commissioner pointed out the risks of market foreclosure, also linked to the network effects, strongly emphasizing that the privacy dimension had necessarily to be taken into account in the decision. Thus arguing: «I dissent because I make alternate predictions about where this market is heading, and the transformative role the combined Google/DoubleClick will play if the proposed acquisition is consummated. If the Commission closes its investigation at this time, without imposing any conditions on the merger, neither the competition nor the privacy interests of consumers will have been adequately addressed»⁴⁵. In any case, the FTC did not declare that it did not have the authority to intervene if an element such as user privacy was likely to decrease the competitive degree, but that in this specific case there was no evidence of such occurrence⁴⁶.

A rather similar result was reached in the EU. Unlike the FTC, the Commission decided to focus solely on some competitive effects that could arise, thus concluding that no harmful consequences could be expected for consumers in the different relevant markets⁴⁷. Through a similar argument compared to the one employed by FTC, it was pointed out that Google would not have had the possibility to restrict or exclude other subjects from the markets related to the offer and intermediation of online advertising, that the data held by Google could also be found by competitors; and that, conversely, their aggregation would have allowed to operate a more targeted advertising towards the users⁴⁸. However, unlike the FTC, the Commission decided not to engage in an assessment of the user privacy, simply stating that the decision was aimed, according to the EU liturgy, to assess whether the operation was compatible with the objectives of the Regulation on merger control. Affirming to this end that the decision was «(...) without prejudice to the obligations imposed onto the parties by Community legislation in relation to the protection of individuals and the protection of privacy with regard to the processing of personal data»⁴⁹.

⁴³ Electronic Privacy Information Center (EPIC), *Complaint and Request for Injunction, Google & DoubleClick, Inc.*, April 20, 2007, available online at: epic.org/privacy/ftc/google/epic_complaint.pdf, at §§ 55-60.

⁴⁴ Google/DoubleClick, FTC File No. 071-0170, *Statement of Federal Trade Commission* (Dec. 20, 2007), available online at: <http://www.ftc.gov/os/caselist/0710170/071220statement.pdf>.

⁴⁵ In the matter of Google/DoubleClick, *Dissenting Statement of Commissioner Pamela Jones Harbour*, FTC File No. 071-0170 (December 20, 2007), available online at: https://www.ftc.gov/sites/default/files/documents/public_statements/statement-matter-google/doubleclick/071220harbour_0.pdf, at p. 1.

⁴⁶ Google/DoubleClick, FTC File No. 071-0170, *Statement of Federal Trade Commission* (Dec. 20, 2007), *cit.*, at p. 2-3.

⁴⁷ Case COMP/M.4731 – *Google/DoubleClick* (OJ 2008 C184/10).

⁴⁸ *Ibid.*, §§ 179-182.

⁴⁹ *Ibid.*, § 398.

Ultimately, the operation was approved in both jurisdictions, refraining to a large extent from clarifying in detail the several issues raised by Big Data in the context of mergers, especially for what concerned the privacy protection. A circumstance that led some scholars to argue that the case had thus represented a «missed opportunity»⁵⁰.

The Facebook/WhatsApp merger

Another significant case is the acquisition by Facebook of WhatsApp, realized in 2014. As known, the merger had raised doubts for the sum paid, equal to about 19 billion dollars, but especially because the messaging company did not seem to be worth this amount. At the time of the operation, WhatsApp had about 450 million users worldwide (Facebook 1.3 billion), but had an annual income of just 20 million dollars; it displayed a very small number of employees (a few tens); it did not convey any advertising offer; and did not represent a platform for other services. In other words, the acquisition price corresponded to a market capitalization of much more structured companies, such as American Airlines after the restructuring, and was about twice what had seemed the most expensive purchase made in the recent past: the acquisition of Skype by Microsoft in 2011, for 8.5 billion dollars. It was for this reason that several judgments substantially agreed that the price was excessively high and the ratio of the transaction was not fully understandable⁵¹.

That said, also in this case some concerns had been raised (on competitive grounds and in terms of data protection) that were similar to those envisaged in the *Google/DoubleClick* merger. In particular, besides the remarkable aggregation of data that the operation was likely to accomplish, it had been claimed that the Facebook business model was different from that employed by WhatsApp in relation to the management of personal data. In a nutshell, if the messaging company had assured the protection of information and had not engaged any commercial activity, it was conversely alleged that Facebook derived from the collection, processing or sale of data (for advertising and other commercial purposes) a huge flow of income. Also for these reasons, it was therefore requested the FTC (in particular by organizations active in the privacy protection) not to authorize the merger; or, in case it was approved, not to make it possible to Facebook to access user data obtained through the service provided by WhatsApp⁵².

However, following a rather brief preliminary phase, the FTC approved the merger, refraining, as traditional in these circumstances, from issuing the consent order to disclose the reasons (or impose measures) for the approval. Nevertheless, what has to be noted is that that the day the merger was approved, one of the directors of the FTC (for the Bureau of Consumer Protection) sent a letter to the parties, underlining the firms duties in relation to the aggregation, storage and use of users data. In particular, it was highlighted that Facebook had publicly declared, in announcing the acquisition, that it would not have changed the privacy policy of WhatsApp, and it was therefore warned not to change the rules concerning the processing of data already held by the company without express consent from the users⁵³. Therefore, an approval of the merger, except to intervene on the relevant aspect of personal data through a letter, recalling a public ‘assurance’ done by Facebook.

⁵⁰ A. Chirita, *The Rise of Big Data and the Loss of Privacy*, 2016, available online at: <https://ssrn.com/abstract=2795992>, at p. 5.

⁵¹ An in-depth analysis on the financial aspects of the merger has been recently done by M. Haskins, *Facebook's Acquisition of Whatsapp: The Rise of Intangibles*, 2017, an in-depth analysis: <https://ssrn.com/abstract=2974098>. Più in generale, sulla logica economica del *social network*, v. C. Yoo, *When Antitrust Met Facebook*, in «George Mason Law Review», 19, 2012, p. 1147.

⁵² Complaint, Request for Investigation, Injunction, and Other Relief, Electronic Privacy Information Center, Center for Digital Democracy, In re WhatsApp, Inc., March 6, 2014, available online at: <http://www.centerfordigitaldemocracy.org/sites/default/files/WhatsApp%20Complaint.pdf>.

⁵³ Letter from Jessica Rich, Director of the Bureau of Consumer Protection, FTC, to Erin Egan, Chief Privacy Officer (Facebook, Inc.) and Anne Hoge, General Counsel (WhatsApp Inc.), April 20, 2014, available online at:

A similar outcome was reached in the EU, in October 2014. At the end of phase 1, the European Commission decided to clear the merger, stating that the transaction did not raise any competitive risk⁵⁴. Specifically, the Commission highlighted that in none of the three markets affected by the merger - that of communication services between users, of the social networking services and those related to online advertising - there were risks of reinforcing entry barriers and therefore to restrict or eliminate the competition. The cautious Commission's analysis was based on the premise that the two companies were not rivals and that the services offered to users, especially messaging, could be replicated by other operators. In this perspective and in a rather surprising way compared to the arguments advanced in relation to the different *Microsoft* cases, the behavioural users component was valued. If in the *Microsoft* saga (both on Internet Explorer and in relation to the Media Player) the Commission had stressed the consumers inertia in finding alternative software (the so-called end-user inertia), the Commission was in this case inclined to consider the consumers sufficiently equipped to use alternative messaging platforms (highlighting the tendency to rely on multiple communication applications on the same device, the so-called multihoming), offered by the competitors already active in the market⁵⁵. Therefore, while highlighting that the parties' market shares could release an ephemeral framework in highly dynamic contexts such as the one concerned (in two of the three relevant markets the shares of the parties were significant), it was not possible to conclude that the network effects generated by the merger were likely to increase the barriers to entry (or ensure an adequate switch of the users).

According to the Commission, potential anti-competitive concerns in the advertising market were similarly missing. In this regard, which is also relevant for what concerns the aggregation of data, it was highlighted – relying to some extent on the analysis carried out in relation to *Google/DoubleClick* – that no anticompetitive concerns could arise. Even in the event, argued the Commission, that Facebook had used WhatsApp as a vehicle to find more user data, the aggregation would not have been harmful to other operators, which retained the ability to detect the consumers behaviour online through alternative sources. Furthermore, with regard to risks of data sharing between the two companies, raised by third parties during the proceeding, the Commission decided to acknowledge the assurance provided by the parties that there were technical barriers to the fulfilment of this possibility⁵⁶. Finally, in relation to the privacy issues, the problem was somehow sidestepped, even in this case relying on the *Google/DoubleClick* argument, by highlighting that «[a]ny privacy-related concerns flowing from the increased concentration of data within the control of Facebook as a result of the Transaction do not fall within the scope of the EU competition law rules but within the scope of the EU data protection rules»⁵⁷. In sum, as for the FTC, an unconditional approval of the merger. Probably, in both cases, underestimating the risks previously scrutinised associated with Big Data.

This is not the end of the case. Two years later, in August 2016, WhatsApp announced the modification of the terms of use of the service and in relation to the privacy protection, proposing (among others) the ability to match the phone numbers of WhatsApp users with the identity of Facebook ones, also for profiling purposes and for commercial use. Proposals that appeared to several observers as the final stage of the strategy. Among the first to complain, directly to the parties, against these changes (which controverted the public statements issued pending the merger approval to ensure that the data would not be shared) was the European Data Protection Supervisor, which sent a letter to the companies asking for

http://www.ftc.gov/system/files/documents/public_statements/297701/140410facebookwhatapltr.pdf. *Amplius*, sull'operazione, L. Kimmel, J. Kestenbaum, *What's Up with WhatsApp?: A Transatlantic View on Privacy and Merger Enforcement in Digital Markets*, in «Antitrust», 29(1), 2014, at p. 48.

⁵⁴ Case COMP/M. 7217, *Facebook/WhatsApp*, OJ C(2014) 7239 final.

⁵⁵ On this M. Giannino, *The Appraisal of Mergers in High Technology Markets Under the EU Merger Control Regulation: From Microsoft/Skype to Facebook/WhatsApp*, 2015, available online at: <https://ssrn.com/abstract=2548560>, at p. 6 ff.

⁵⁶ *Ibid.*, § 185.

⁵⁷ *Ibid.*, § 169.

clarifications concerning the data sharing with Facebook, on the categories of data processed and on the possible transfer to third parties⁵⁸.

It was then the turn of the Commission that started a proceeding to (re)assess the case. Already in the statement of objections a number of concerns were raised about the fact that the parties had provided misleading information during the merger scrutiny as to the technical obstacles to achieve the automatic association of user profiles between the two platforms⁵⁹. However, on 14 March 2017, the Commission received a reply from Facebook in which it was merely acknowledged that the information released on this specific issue at the time of scrutiny was incorrect and misleading, and that the behaviour of the firm had been negligent. The decision of the Commission, issued on July 26, 2017, did not go much further than the acknowledgment of the admission of guilt by the firm (which decided not even to present request for a hearing)⁶⁰. In the decision, heavily based on the procedural aspects, it was emphasised that the firm was aware at the time of the merger of the possibility of realising the matching of user profiles between the two platforms; and that the companies had already identified the technological solutions to implement the matching⁶¹. Facebook had therefore acted negligently in providing information during Phase 1, but also in the letter of reply that it had forwarded to the Commission to clarify the aspects concerning the technical integration between the platforms. However, it was reiterated by the Commission in the decision and in the press release, this proceeding was undertaken after the merger scrutiny, it did not affect the competitive assessment of the transaction, and it was specified that the possibilities of integration between the platforms had been in any event taken into account⁶². Therefore, two different infringements were identified. Pursuant to art. 14 of the Merger Regulation (which provides for penalties of up to 1% of total turnover) two separate fines were imposed, each equal to 55 million euros, recognising the gravity of the conduct, slightly mitigated by the cooperation provided by the company during the proceeding⁶³. On balance, 110 million euros (amount labelled by Commissioner Verstager as «proportionate and deterrent»⁶⁴), on a global turnover achieved by Facebook in 2016 of 25 billion euros: 0.44%.

The Italian case: AGCM v. WhatsApp

The EU case has also been scrutinised in Italy. In October 2016, the AGCM started the proceeding against WhatsApp to assess the possible violation of the Consumer Code, on the assumption that the changes made to the terms of use of the messaging application (aimed at sharing with Facebook some users data) represented an unfair commercial practice.

In the decision it was first noted, contrary to the defence brought by the company, that personal data of WhatsApp users had a significant economic value as their sharing between the two platforms allowed Facebook to improve its business activity, in terms of user profiling and for advertising purposes⁶⁵. In particular, it was stated that the modification of the terms of use represented an aggressive conduct, characterized by an undue consumer conditioning. This was due to the fact that users had been forced

⁵⁸ Article 29 Data Protection Working Party, *Letter to Mr Koum*, Brussels, 27 October 2016.

⁵⁹ European Commission, Press Release, *Mergers: Commission alleges Facebook provided misleading information about WhatsApp takeover*, Brussels, 20 December 2016.

⁶⁰ Case COMP/M. 8228, *Facebook/WhatsApp*, C(2017) 3192 final.

⁶¹ *Ibid.*, §§ 86-91.

⁶² *Ibid.*, §§ 42 and 100.

⁶³ *Ibid.*, §§ 98-102.

⁶⁴ Commission Press Release IP/17/1368 of May 18, 2017.

⁶⁵ AGCM, *Provvedimento n. 26597*, 11/05/2017, *Whatsapp-Trasferimento dati a Facebook*, in «Bollettino», n. 18/2017. See also the proceeding on unfair terms: AGCM, *Provvedimento n. 26596*, 11/05/2017, *Whatsapp-Clausole Vessatorie*, in «Bollettino», n. 18/2017.

to fully accept the new contractual terms and led to believe that in case of non-acceptance they would have been unable to use the application and their account would have been removed by the company.

To a closer look, it was argued in the decision, the contractual terms gave users the possibility not to agree to the sharing of data with Facebook, but this option had not been properly highlighted and did not appear in the main screen concerning the terms of use, but only in subsequent ones. Basically and relying to some extent on the findings of the EU decision, it was concluded that «(...) users, in exchange for services, were forced to give their consent, which includes the sharing of data with Facebook, that is wider than what is necessary to continue using the application»⁶⁶. In sum, the practice implemented by WhatsApp had therefore to be considered unfair, contrary to the professional diligence and likely to mislead users behaviour. Furthermore, the conduct was characterized by gravity as it involved the sharing and use of relevant personal data with a significant commercial value. For these reasons, according to art. 27 of the Consumer Code (which provides for the application of fines ranging between 5,000 and 5 million euro), the amount of the fine was set at 3 million euro (slightly lower than the base amount as the firm had decided to discontinue the data sharing with Facebook).

To conclude and refraining from providing the percentages of the fine with respect to the firm turnover, it seems reasonable just to ask whether, given the substance and the rationale that had inspired the concentration, we dispose of the appropriate devices (in the Italian case it has been relied on the consumer protection) to address the critical issues which might be determined by Big Data.

Final remarks

The choice to analyse in this way the Big Data phenomenon is certainly an unconventional decision. As has been observed even through this exercise, the several issues affected are likely to shake the foundations of different disciplines, create problems in terms of operational choices and challenge many economic and legal arguments. Nonetheless, the attempt is maybe useful at least to draw the attention on some fundamental aspects.

First, the academic debate has certainly contributed to reduce the information asymmetry in relation to a phenomenon, and to its underlying business models, which are extremely complex. However, although some consensus has been reached for what concerns the definitional efforts and in terms of benefits and risks associated with Big Data, there still remains a substantial knowledge gap, which certainly contributes to the emergence of overly diversified positions. Therefore, the first and perhaps not entirely obvious insight is to deal with these set of issues proceeding with the utmost caution, avoiding to rely exclusively on theoretical contributions, which could prove to be misleading when confronted with the enforcement practice.

In this perspective, also the competition discourse has proven to be characterised by a number of extremely diversified perspectives, ranging from those considering the competition rules as fundamental tools to deal with the phenomenon or, conversely, as a residual domain which has not to address concerns that must be solved by other disciplines. Also in this regard, besides the fact that the boundaries between competition, privacy and consumer protection (beyond the legal specificities of the different legal systems) are rather uncertain, it seems difficult to deny a leading role for the competition discipline. Rather, the aspect that seems to emerge is represented by the difficulty of translating and appropriately consider the Big Data phenomenon through settled schemes and within the different competition rules. It is certainly a difficult task, to start with for the institutions responsible to control the market. But the choice to not recognize a crucial role to the competition law or to underestimate the enforcement would risk dismissing the ability to cope with the infringements that can arise in the digital arena, and far more importantly - given the magnitude of the stakeholders - the same ability to deal with a huge market power.

⁶⁶ *Ibid.*, § 66.

The aggregation and use of large databases have acquired a crucial economic significance, which does not seem correct to assess only with the privacy or consumer protection domains. For the firms, the access to these data (obviously, with some user consent) represents the compensation for the 'free' use of goods and services. But it is able to attribute a huge market power, undermine the competitive offer on dimensions other than price, restrict or eliminate the access to the market to other parties, and raise a number of other anticompetitive concerns. That all this can be dealt with through the (weaker) rules on consumer protection and privacy appears at least as a sub-optimal outcome, especially if the argument is that consumers have the opportunity to take advantage of zero prices, intended as the highest possible achievement of the market.

In this regard, the merger cases briefly reviewed seems to provide further insights. First, the just mentioned difficulties seem to have characterized the different proceedings, which have sometimes embodied an excessively cautious approach in considering the possible negative effects stemming from Big Data. It is significant that in all cases, both in the US and in the EU, privacy supervisors or organizations involved in the data protection have urged the competition authorities and institutions to block the mergers, or to devote the utmost attention to the (anti-competitive) effects that the use of data could determine. Furthermore, the *Facebook/WhatsApp* case seems to have clearly provided an answer to those questioning the value of the operation. It might in fact be argued that the sum paid was the purchase price of a company holding significant personal information, estimated by Facebook at 19 billion dollars. In this respect, the Commission does not seem to have paid enough attention to the rationale of the operation (although it stressed to have carried out an even-if analysis taking into account the possibility), proposing an analysis aimed at highlighting that the parties were not horizontal competitors, and simply relying on the firm assurances that it was not technically possible to implement the integration between the platforms.

Furthermore, even the subsequent proceeding concerning the misleading information has not appeared so crucial, certainly not for the Commission's responsibility. On the contrary, this is the first case, after the revision of the Merger Regulation of 2004 (which increased the fine concerning false information, from a maximum of 50,000 euros to 1% of global turnover), in which the Commission enforced art. 14 to sanction an unlawful behaviour. And it has also to be welcomed the AGCM decision to open a proceeding at the national level. However, all this seems not enough to balance the feeling that the economic terms of the merger have been underestimated, not valuing in perspective which was the outcome that the parties were willing to achieve. And it is also significant that, once the terms of the service have been changed, the firm has decided to refrain from defending its behaviour. A circumstance that in turn leads to question whether the fines that might be imposed, at both the EU and national levels, are really able to enhance the (general and specific) deterrence.

To conclude, it is certainly difficult to release any conclusive assessment in relation to a phenomenon that still deserves a solid understanding and which seems to pose more doubts than the insights it is able so far to reveal. In any event, it seems important to continue analysing its evolution, in spite of the few *Likes* that a more marked competition enforcement should eventually receive from the industrial sector (or by a part of the scholarly community).

