Challenges of personal data for the competition law analysis

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Abstract - The paper argues for a better understanding of data economy by competition law authorities. Economic significance of personal data and their role in competition should be critically re-assessed for a more nuanced competition law analysis.

Introduction

Although data have always played a significant role in competition (Feinstein 2015), the recent phenomenon of Big Data triggered an intense discussion about the role of data in the competition law analysis. The sheer amount and variety of data, new technologies and ever increasing speed of data processing seem to make the difference as, by contrast to the times past, data have become a key asset and input both for traditional and digital economy companies. Designing a suitable data-based business strategy allows companies to develop or sustain competitive advantages, and they invest significant means and efforts in it.

Among the different types of data, personal data are believed to be the most valuable from the economic point of view. Personal data are any information relating to an identified or identifiable natural person (Article 4 of the General Data Protection Regulation). Analysis of personal data allows companies to tailor their offers to a specific consumer: they can learn what consumers want and improve qualities of products respectively, develop new products, adjust pricing, optimize advertising, marketing and logistics, save costs by increasing efficiency and innovative capacity of a company.

The high value of personal data lies in its inherent link to a specific person, which provides a (virtual) access to one's private life. Therefore, personal data are subject to special regulation that limits and regulates their collection, processing and usage with the ultimate purpose to protect fundamental rights and freedoms (Article 1 of the General Data Protection Regulation). Against this background, interplay of personal data and competition could be seen as a digital reincarnation of one of the fundamental discussions on the collision of economic objectives of competition law with broader socio-political values (Lianos 2013). Hence, the challenge is the balancing of economic and non-economic values in the competition law analysis. In practice, both the Commission and the Court of Justice of the European Union tend to exclude non-efficiency considerations from the competition law analysis, but take into account public interest objectives[1].

Yet, the challenging task of finding the balance between the objectives of personal data protection and competition law does not address economic aspects of personal data. Firstly, strict requirements of data protection force companies to routinely anonymise all data upon its collection so that the person to whom the data refer cannot be identified either by the data controller or by anyone else. This process allows exploiting formerly personal data commercially without limitations of data protection. Secondly, in the process of data analysis even non-personal (anonymous) or anonymised data may reveal information that relate to an identified or identifiable person (re-identification). Thirdly, even if a company fully complies with the requirements of data protection rules, it still needs to comply with the requirements of competition law with regard to the competition-related use of personal data.

Personal data and possible effects on competition law: theoretical analysis

Possible negative effects on competition that result from the uses of personal data can be summarized in the following three "theories of harm".

First, some uses of personal data harm consumers due to degradation of quality of products, loss of privacy and discouraging of innovation. To begin with, the level of privacy and data protection can be considered a part of quality or a form of non-price competition (Jones Harbour 2007). It is diminishing as more user data are collected and if their processing and use are non-transparent, especially in two-sided markets (Stucke and Grunes 2015). Further, access to personal data is important for the improvement of products' quality and development of new offers. Companies

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[1] See, for example, Case C-309/99, Wouters, ECR(2002) I-1577; Case C-519/04, Meca-Medina, ECR(2006) I-6991.

that lack data access are in a competitive disadvantage, which may further convert into insufficient quality of their products and diminish incentives to innovate in terms of the improvement of the existing products and creation of new ones (Stucke and Ezrachi 2016).

Second, restrictions on availability of personal data may create barriers for entry of competitors. Undertakings well established in the market already have a competitive advantage or even an entrenched position, not least due to their knowledge of the market and their customers, which can be extracted from the data in their possession. New entrants also need access to such data, and relevant exclusionary practices of incumbents – such as locking in consumers, refusal to provide access or license – equal to barriers for entry (Stucke and Grunes 2015; van Gorp and Batura 2015), especially in two-sided markets where one side is a transaction market supporting the non-transaction market by monetizing user data (Filistrucchi et al. 2013). Moreover, harmful effects are felt by the whole market as restrictions may reduce effective competition and consumer choice and strengthen power of the incumbent.

Third, pre-emptive mergers that pursue the goal of eliminating potential competitors as early as possible may result in a loss of effective competition and consumer choice. They are likely to be perceived as a threat by potential new entrants. In the markets with a dominant incumbent, pre-emptive mergers may entrench or increase its market power (van Gorp and Batura 2015). Paradoxically, such practices may nevertheless encourage innovation as the large sum of money paid for a startup or a possibility of a lucrative career in a leading digital company provide a significant incentive.

Personal data and possible effects on competition law: practice and recent developments

The practice of competition law analysis is lagging behind the theoretical developments, and only few elements of the presented theories of harm were considered in the analysis of the recent "data mergers" handled by the European Commission and the US Federal Trade Commission. For instance, in the mergers of Google/DoubleClick and Facebook/WhatsApp the authorities considered the implications of the transactions for the availability of data in the markets for online advertising and communications services, for market power as well as incentives of the merging entities to misuse (availability of) the combined datasets. Yet, the competition authorities failed to consider privacy-based competition and impact of the transactions on the consumer choice in non-transaction side of multi-sided market (Jones Harbour 2007). Considerations about future use of data and level of data protection were insufficiently examined (Jones Harbour 2007) or dismissed as not falling within the scope of competition law[2]. In the acquisition of DoubleClick, the authorities failed to recognize a pre-emptive merger where Google bought the leading startup competitor that owned a superior data analytics algorithm for online ad-serving. Google's developments were in a beta testing phase at that time[3].

The described shortcomings of competition law analysis, however, are not symptomatic of the inability of competition law to deal with the challenges of digital economy. On the contrary, competition law is flexible and dynamic enough and equipped with necessary instruments to deal with data-based abuses as long as it, firstly, recognizes the economic relevance of data and, secondly, considers the specifics of digital markets and of data itself (Bundeskartellamt and Autorité de la concurrence 2016), which needs to be reflected in the practice of competition law analysis.

The practice needs to be more consistent in examining all sides of multi-sided markets, including the non-transaction markets with "free" products that are paid with personal data (Stucke and Grunes 2015; van Gorp and Batura 2015) and paying greater attention to the business models of the companies. Specifically, while personal data appear as an element of examination of markets for service of data analytics, it is not clear whether data are treated as an integral part of the data analytics service or an input in this service, whether it can be traded and be in a separate data market[4]. Instead, under the influence of data protection law, it is portrayed that personal data are collected and only sold as big data en mass. Yet, processes of data collection and data acquisition differ strongly. While some companies collect data as a by-product of their main activity (e.g. a mobile telecommunications company needs the number of the call recipient in order to be able to place the call), other do so purposefully (data brokers). While some companies sell different types of datasets (unstructured, semi-structured, structured), other obtain personal information of users in return for their "free" services. This reciprocity and the presumed equivalence of the values exchanged means that the data are in fact traded by users to a company, and a market for data exists on the level of their "collection", not only when it is sold between companies.

2 Press release of 03.10.2014, , accessed 2 September 2016.
3 Case Google/DoubleClick, No COMP/M.4731 of 11.03.2008, para. 191.
4 See Case Telefonica/ Vodafone/ Everything Everywhere, No COMP/M.6314 of 04.09.2012 and Case Publicis/Omnicum, No COMP/M.7023 of 09.01.2014.

Recommendations and concluding remarks

Due to their relative novelty, processes related to personal data and their relation to management decisions are under-researched and not fully understood by economics and law. The practice of competition law analysis is, therefore, well advised to pay special attention to data science and to business models and strategies of (digital) companies (van Gorp and Batura 2015). More specifically, the competition law analysis shall take into account what business competitors are in and what their data needs are and weigh the characteristics of data accordingly. The alleged high value of personal data is based on their perceived scarcity due to limited access (also due to data protection requirements), limited scope of the data that can be purchased and high cost of collection of the economically relevant data (Bundeskartellamt and Autorité de la concurrence 2016). However, depending on the business model and industry sector, companies would see data differently; they require different types of data (e.g. real-time or historical), different amounts and quality of data.

When contemplating the role of personal data in competition, one should adopt a more nuanced view of the data-related economy. Data is not always an input in a product, although the industry branches where it plays this role – online search and online advertising – are most frequently scrutinised. Data can also be a product, for instance, for companies active in data collection and creation of databases (Feinstein 2015). Depending on what business a company is in, it may value data differently and be more or less inclined to restricting access to it. For instance, companies engaged in data analysis are unlikely to be interested in restricting access to data as they are more interested in protecting their know-how regarding algorithms, data processing and mining.

Where personal data are an input in the product, they are not the only one. Given the high level of innovativeness and disruption in the digital environment, a creative idea regarding logistics, marketing or invention of a product are a key to success. Data collection and processing may or may not inspire the creativity, but does not replace it.

Industries relying on data as input assign different value to different personal data. Where data-based decisions are taken in real time (online advertising), valuable personal data is rather short-lived (Tucker and Wellford 2014). In other industries historical data may be of greater value (e.g. information about electricity consumption for optimization of power supply[5]).

For specific companies the data generated by the users of their own products are more relevant than data acquired elsewhere if they provide only a limited insight in consumers' wishes with regard to the offered services and goods. In particular, new entrants do not necessarily need and use the same type and quantity of data as the incumbents (Tucker and Wellford 2014). The practice shows that usually new entrants do not rely on the purchased data, but start collecting and analyzing personal data from their own users the moment they enter the market. This is because data needs of incumbents and new entrants vary according to their business models (Sokol and Comerford 2016). Newcomers, especially startups, rarely enter the market with the offer identical to the one of the incumbent. Instead they focus on a specific functionality, customer segments or user interests (Tucker and Wellford 2014). Data requirements of newcomers are therefore qualitatively different and will develop gradually relying on the data generated during its activities and following the development of these activities.

Furthermore, the assumption about the value of personal data and data in general should be viewed through the prism of data analytics. While one mainly talks of data collection, raw data collected directly and immediately when the consumer used a product, rarely make sense even for the provider itself (Sokol and Comerford 2016). Data per se are necessary, but transient and inherently dumb (Kaufmann 2013). To get value out of data, one needs to apply data science to it (i.e. algorithm) and then treat the results with data crunching and analytical technologies. Depending on the algorithm, the goals set and questions asked, data would reveal different information: this analysed, secondary data are the actual valuable asset. Thus, in fact what is done to data and how it is done is more important than the data itself.

References

1. Bundeskartellamt and Autorité de la concurrence (2016). 'Competition law and data', www.bundeskartellamt.de/SharedDocs/Publikation/DE/Berichte/Big%20Data%20Papier.pdf?__blob=publicationFile&v=2, accessed 2 September 2016.
2. Feinstein, D. (2015), 'The not-so-big news about big data', www.ftc.gov/news-events/blogs/competition-matters/2015/06/not-so-big-news-about-big-data, accessed 2 September 2016.
3. Filistrucchi, L., Geradin, D., van Damme, E., and Affeldt, P. (2013), 'Market definition in two-sided markets: Theory and practice', DISEI Working paper N.05/2013. , accessed 2 September 2016.
4. Van Gorp, N., and Batura, O. (2015), 'Challenges for competition policy in a digitalized economy', Study for the ECON Committee of the European Parliament, www.europarl.europa.eu/thinktank/en/document.html?reference=IPOL_STU(2015)542235, accessed 2 September 2016.
5. Jones Harbour, Pamela (2007), Dissenting Statement in Google/DoubleClick (F.T.C. File No. 071-0170), www.ftc.gov/news-events/press-releases/2007/12/federal-trade-commission-closes-googledoubleclick-investigation, accessed 2 September 2016.
6. Kaufmann, J. (2013), 'Is your big data dumb, scary or useful?' The

5 Case EDF/Dalkia en France, COMP/M.71.32 of 25.06.2014.

Wired Magazine, www.wired.com/insights/2013/03/is-your-big-data-dumb-scary-or-useful/ accessed 2 September 2016.

7. Lianos, I. (2013), 'Some reflections on the question of the goals of EU competition law', CLES Working Papers Series 3/2013, www.ucl.ac.uk/cles/research-paper-series/research-papers/cles-3-2013, accessed 2 September 2016.
8. Sokol, D., and Comerford, R. (2016), 'Does antitrust have a role to play in regulating big data?', http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2723693, accessed 2 September 2016.
9. Stucke, M., and Ezrachi, A. (2016), 'When competition fails to optimize quality: A look at search engines', Yale Journal of Law & Technology, 18: 89-97.
10. Stucke, M., and Grunes, A. (2015), 'No mistake about it: The important role of antitrust in the era of big data', The Antitrust Source: 1-14.
11. Tucker, D., and Wellford, H. (2014), 'Big mistakes regarding big data', The Antitrust Source: 1-12.