

FACULTY OF LAW
Stockholm University

Mergers in big data-driven markets

**- Is the dimension of privacy and protection
of personal data something to consider in
the merger review?**

Oskar Törngren

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Abstract

In the digital economy service providers can offer their online services for free. Users of the service provide their personal data in return for access to it. The service provider analyses and stores the personal data. With this data service providers cannot only improve the service by tailoring it to the user but they can also sell advertisement space based on users' online activity and preferences revealed by their personal data. There has been a rise of mergers between companies in these data-driven markets. The competitive concerns relating to privacy and personal data, and how to assess them according to the EU Merger Regulation, are highly relevant and debated. This thesis aims to analyse how the dimension of privacy and personal data can be a part of the current merger review, and whether the dimension should do that by analysing the principles and policies governing the review. The EU legal method and the legal dogmatic method serve as the methods used to find the answer to the posed questions. The answers are given by investigations of how big data and personal data are used in the digital economy, what principles are governing the current merger review, the competitive concerns of data, and how data previously has been assessed in merger decisions from the European Commission and the Federal Trade Commission. On the basis of this investigation the analysis of whether the dimension of privacy and protection of personal data is something to consider in the merger review is presented. It is argued that the turnover-based thresholds are not sufficient for assessing the dimension. The reason is that firms in these markets tend to have low turnovers. Once the merger passes the thresholds and makes it to the assessment, the dimension can be considered a factor of quality in the assessment but it is argued that it is difficult to measure and assess the dimension in practice. This is because of the dominating price focused thinking of the competition authorities. It is further argued that a theory of harm related to privacy and protection of personal data can be created as long as privacy can be considered the price the consumer pays to get access to a service. As to the question of whether the dimension of privacy and protection of personal data should be a part of the merger review, it is argued that even though the goals of competition law and consumer protection law serve different goals, competition and merger policy should be sufficiently flexible to allow a dimension of privacy and protection of personal data as a goal for competition.

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1. Introduction

1.1. Background

In the ‘digital economy’¹ it is common for companies, such as search engines and social networks, to collect, analyse and store information about their users. With the personal data the service provider can better profile the users and target advertising towards them based on their behaviours and preferences. The provider of the service can use the knowledge extracted from the personal data in relations with advertisers wanting to advertise on the service. It is by selling the advertising space the provider makes its profit and can keep the service alive. In turn, users provide their personal data to get access to a platform or a service for free. Consumers do get access to the service for free but it could be said that they are actually paying with their personal data, using it as a currency, turning the free service into a transaction.

The growing importance of data for commercial purposes and the usage of big data have actualized questions about consumer protection and privacy and protection of personal data. Along with the General Data Protection Regulation (GDPR)² coming into effect in May 2018 the question of protection of personal data is highly relevant. Consumer and Data Protection authorities are however not the only authorities concerned with these kinds of questions. There has been a rise of mergers between companies active in big data-driven markets. Competition authorities have also become aware of the complex relationship between competition on the one hand, and privacy and protection of personal data on the other. How competition law can protect consumers from potential privacy risks resulting from mergers in data rich industries is one of these concerns. How big of a role does the dimension of privacy and protection of personal data play when reviewing mergers, according to the EU Merger Regulation (EUMR)³, between companies active in big data-driven markets?

¹ The Economist *Fuel of the future: Data is giving rise to a new economy* (May 6th 2017)
<<https://www.economist.com/news/briefing/21721634-how-it-shaping-up-data-giving-rise-new-economy>>
accessed 25 October 2017.

² Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such, and repealing Directive 95/46/EC.

³ Council Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings (the EC Merger Regulation).

1.2. Purpose and issues

The purpose of this thesis is to investigate how the current merger review deals with concerns of big data, and to analyse if the dimension of privacy and protection of personal data is something to be considered in the merger review.

The main issues in the thesis are therefore: How can privacy and protection of personal data become a part of the current merger review? And, should they be included in it? In order to properly address the main issues the following questions need to be investigated.

- What role does data have in the digital economy?
- What are the principles currently governing the merger review and how is the assessment done?
- What kind of competition concerns lies in the usage of big data?
- How has the question of big data, and privacy and personal data been dealt with in previous decisions?

1.3. Method

The method that will be used for this thesis is the EU legal method. The EU is an organ based on agreements between sovereign states where the states have given the union certain competences to be governed wholly or partially by the union. The EU has since the start developed into a supranational organ with its own legal order and methods of interpretation.⁴ The EU legal method in itself is not an independent course of interpretation but rather a method to interpret sources of law emanating from the institutions of EU together with other sources of law. The EU legal method uses several methods of interpretation where the most commonly used are the contextual and teleological.⁵ Regarding the teleological method of interpretation the Court of Justice of the European Union (CJEU) have developed a more flexible version which takes into consideration not only the classical meaning of the method, being the purpose or the goal of the rule, but also the aspect of the long term goals the EU have set out.⁶ The method is used to make certain that the purpose of a rule is being fostered, to avoid the situation where a literal interpretation would give an unreasonable result, as seen from a union law perspective, and to fill out the scarce regulatory framework existing within

⁴ Mats Melin and Joakim Nergelius *EU:s konstitution – maktfördelningen mellan den Europeiska unionen, medlemsstaterna och medborgarna* (7th edn, Nordstedts Juridik, 2012), p. 13-15.

⁵ Jane Reichel 'EU-rättslig metod' in Fredric Korling and Mauro Zamboni (eds), *Juridisk metodlära* (1st edn, Studentlitteratur, 2013), p. 122.

⁶ Jörgen Hettne and Ida Otken Eriksson *EU-rättslig metod – teori och genomslag i svensk rättstillämpning* (2nd edn, Nordstedt Juridik, 2011), p. 158.

the union.⁷ Other methods of interpretation useful for the application of EU law could also be found in analogical, literal and systematic methods.⁸

Many of the methods of interpretations found in the EU legal method are also found within the legal dogmatic method which will be applied in this thesis, in combination with the EU legal method. Just as the legal dogmatic method and other theories of interpretation can be applied to national law, they can also be applied to EU law.⁹ The legal dogmatic method seeks to find an answer to a certain legal issue using the sources of law. The answer is found through a discovery and an explanation of a general rule derived from these sources. The rule is then applied to the issue at hand. From the application of the general rule on the given situation the answer to the legal issue is given.¹⁰

Since competition law has a strong connection to economics it is inevitable to not come in contact with economic theories. The question arises, however, if there is a certain legal method for competition law which can take into account economic theories as a source of law and apply such theories together with the other strictly legal sources. Economic theories are not regarded as a source of law amongst the other traditional sources of EU-law; they are rather considered to be supportive sciences. This is mainly because there are several different competing economic theories and not one specific that have been established. From a judicial methodological point of view it is difficult to justify the choice of one economic theory as that choice will be perceived as arbitrary. The same goes for the margin of appreciation the Commission holds and the limited legal review of its decisions; the choice of theory is discretionary (even though it is within the boundaries of the ‘the more economic approach’ the Commission applies),¹¹ and the application of a theory will not be examined unless it clearly violates any of the competition rules. Nevertheless, if another traditional legal source would support an economic theory it could be argued that the theory is a part of the legal sources. That does, however, also mean that the economic theory in itself does not possess the authoritative value to be an independent legal source. It is therefore difficult to include economic theories amongst the traditional sources of EU-law.¹² The conclusion is that there might be a certain legal method for competition law but from a strictly judicial perspective it can be problematic to apply that method since it is not supported by the traditional legal

⁷ Ulf Bernitz and Anders Kjellgren *Europarättens grunder* (5th edn, Norstedts Juridik, 2014), p. 181.

⁸ Hettne and Otken Eriksson (n 6) p. 159-168; Bernitz and Kjellgren (n 7) p. 182.

⁹ Jane Reichel (n 5) p. 109.

¹⁰ Jan Kleineman ‘Rättsdogmatisk metod’ in Fredric Korling and Mauro Zamboni (eds), *Juridisk metodlära* (1st edn, Studentlitteratur, 2013), p. 29.

¹¹ Alison Jones and Brenda Suftrin *EU Competition Law* (6th ed., Oxford University Press, 2016), p. 37-42.

¹² Hettne and Otken Eriksson (n 6) p. 122-132.

sources. Therefore, economic theories, where applicable, will only be regarded as supportive sciences in this thesis.

1.4. Delimitations

How strong the current, or future, protection of privacy and personal data is will not be considered in the thesis as that branch of law is considered a part of the consumer protection law, and not competition law. This is because the focus of the thesis will be on whether the aspect of privacy and protection of personal data is something to be considered when assessing the impact on competition a merger might have.

The thesis focuses on legal aspects at the EU level. Therefore, neither national law, nor sources thereof, will be regarded unless it is necessary to understand the EU law. As a consequence of that position, only mergers which have an EU-dimension, as set out in the EUMR, are of primary interest in the thesis. Personal data does, however, not have a direct monetary value, as opposed to turnovers, and therefore mergers without an EU dimension will also be taken into account to understand the importance of the privacy and protection of personal data in the merger review.

Other competition rules, such as cartels and other colluding agreements, according to article 101 Treaty of the Functioning of the European Union (TFEU), and abuse of dominant position, according to article 102 TFEU, will not be regarded unless it is deemed necessary for the understanding of the merger review. A critical component in the merger review which will be mentioned, but not further investigated or analysed, is the market definition in a multi-sided market. This is because the definition can form a thesis of its own. The principles governing the merger review, together with the factors that has to be taken into account in the assessment, will be examined, analysed, and compared with the privacy and protection of personal data in order to find out if privacy and protection of personal data can be a part of the review. The economic theories behind the policy of mergers will only be used as supportive sciences, and therefore only investigated to better increase the understanding for the reasoning and background to the policy.

1.5. Material

Considering the choice of subject and the area of law the thesis will deal with primary and secondary sources of EU law together with the case-law and the principles set out by CJEU. Considering that the Commission has the authority to oversee the compliance with the regulations the non-binding acts of the Commission, such as the Commission's Guidelines and notices, have a great impact on how to interpret the rules set out in various regulations,

and in particular the EUMR, and will therefore be regarded in the thesis. The binding merger decisions the Commission issues will be taken into account as well. Legal doctrine has no independent authority amongst the sources of EU-law but it is a good source for explanation of the law and for potential problems that may arise when applying it.

1.6. Outline

In the second chapter an introduction to big data will be given. This is in order to better grasp the concept and to understand how big data can be used as an asset. Personal data will then be presented and investigated to get familiarized with how personal data is defined, both generally and according to the GDPR, and how the protection of it functions. The chapter finishes with a presentation of the goals privacy protection seeks to achieve.

The next chapter will be about the principles dictating the merger review. The economics and goals of competition, and the merger policy will be examined to understand what is trying to be achieved with the merger control and to see what interests are laying behind it. The chapter finalises with a presentation of the thresholds a merger needs to meet to fall under the scope of the EUMR followed by how the merger assessment is carried out.

The fourth chapter will deal with the potential competition concerns that can arise from the special characteristics, and the use, of data. The special characteristics of data are also something that has the possibility of lessening competition and will therefore be examined. This is to better understand the implications data can have on competition and how it, at the same time, can lessen competition.

The fifth chapter will see to six merger decisions between companies in data-driven markets where big data, as well as personal data, have had an impact on the merger review. It will be seen how the relationship between big data and personal data have been reviewed and assessed. Furthermore, what standpoint which has been taken in regards of the dimension of privacy and protection of personal data in the merger review will also be investigated. This is to see how the Commission, and to some extent the Federal Trade Commission (FTC), have dealt with the competitive implications of data. A short introduction to each case and the key points with reference to the usage of personal data and big data will be processed.

In the sixth chapter the main questions will be dealt with. How privacy and protection personal data can enter the current merger review will be examined in three ways to see if the current EUMR is a proper tool for taking account of the dimension. Whether privacy and protection of personal data is something that should be in the considered in the merger review will then be examined and analysed.

The thesis finalizes with a conclusion summarizing the taken standpoints and how the EUMR, and competition generally, should relate to privacy concerns and protection of personal data.

2. Data in the ‘digital economy’

2.1. Big data

2.1.1. General

The term big data has no single definition and is not a legal term. It is a concept that has many various definitions and is defined differently depending on the context. When defined by business consultants it is considered to be ‘high-volume, high-velocity and high-variety information assets that determine cost-effective, innovative forms of information processing for enhanced insight and decision-making’, and when defined by computer scientists it is considered to be ‘a term describing the storage and analysis of large and/or complex data sets using a series of techniques including, but limited to, data bases, programming models and machine learning’. When big data is defined by privacy experts it is ‘data about one or a group of individuals, or that might be analysed to make inferences about individuals’.¹³ Even though big data have different definitions it is generally characterised by three, or sometimes four, ‘V’s’, which it is considered to be based upon: the volume of data, the velocity at which data is collected, the variety of information aggregated, and the value of data.¹⁴ Even though big data is based on features that are not entirely clear to define and can be used in different ways, it tries to describe the recent developments in digital technologies and markets which have taken place over the past two decades.¹⁵

2.1.2. Volume

The volume of data refers to the amount of data collected and processed. It was the initial definition of big data as the enormous mass of data became an issue when storing and managing it. It was considered that ‘the size of the data itself becomes part of the problem’ and that ‘the size is beyond the ability of typical database software tools to capture, store, manage, and analyse’.¹⁶

The volume of data has increased significantly since the initial definitions and will continue to grow. The global data centre IP traffic is expected to grow from 3.1 zettabytes¹⁷ in 2013 and by the end of 2018 reach 8.6 zettabytes. The reason for the increase in data

¹³ Maurice Stucke and Allen Grunes *Big Data and Competition Policy* (1st ed., Oxford University Press, 2016), p. 15.

¹⁴ Autorité de la concurrence & Bundeskartellamt *Competition Law and Data* 10 May 2016, p. 4, <<http://www.autoritedelaconcurrence.fr/doc/reportcompetitionlawanddatafinal.pdf>> accessed 24 October 2017; OECD *Data-Driven Innovation for Growth and Well-Being: Interim Synthesis Report* October 2014, p. 11 <<https://www.oecd.org/sti/inno/data-driven-innovation-interim-synthesis.pdf>> accessed 24 October 2017.

¹⁵ Autorité de la concurrence & Bundeskartellamt (n 14) p. 5.

¹⁶ OECD *Data-Driven Innovation for Growth and Well-Being: Interim Synthesis Report* (n 14) p. 11.

¹⁷ One zettabyte is equal to 1.099.511.627.776 gigabytes.

collection is the reduced costs to collect, store, process and analyse it. Another contribution to the increase in volume is that it has become easier for consumers to actively and passively disclose data through better broadband access, smartphones, social networks and e-commerce.¹⁸

2.1.3. Velocity

The velocity of big data refers to the speed of which data is generated, accessed, processed and analysed.¹⁹ The analytics of big data can have an immediate effect upon a person's surrounding environment, or decision being made about his or her life. This can be seen through real-time monitoring where autonomous systems are learning from data of previous situations that they then use to make decisions based on the analysis of that data. An example of such an autonomous system is 'nowcasting' which is where systems mine real-time data to predict events and happenings as they occur. This is carried out in order to improve the quality of policy and business decisions within companies. Within the velocity of data it is acknowledged that time is of value. That means, depending on the purpose, that the older the data is the less valuable it may be.²⁰

2.1.4. Variety

The variety of data refers to the unstructured data sets from different, various sources, such as web logs, social media, mobile communications, sensors and financial transactions. To link these various sources of data together is also considered as a part of the variety.²¹ Through fusion of different forms of data new information and facts can emerge. With these new facts companies can identify and improve profiles of individuals, track their activities, preferences and vulnerabilities. Using this information companies can target individuals with behavioural advertising, for instance.²²

2.1.5. Value

The value of big data is derived from 'big analytics', which is defined as the 'technical means to extract insights, and the empowering tools to better understand, influence or control the data objects of these insights'. The insights could, for example, be about natural phenomena, social systems and individuals.²³ These technical means and empowering tools include algorithms which can access and analyse vast amounts of information, and the concept of

¹⁸ Stucke and Grunes (n 13) p. 17-18.

¹⁹ OECD *Data-Driven Innovation for Growth and Well-Being: Interim Synthesis Report* (n 14) p. 11.

²⁰ Stucke and Grunes (n 13) p. 20-21.

²¹ OECD *Data-Driven Innovation for Growth and Well-Being: Interim Synthesis Report* (n 14) p. 11.

²² Stucke and Grunes (n 13) p. 21-22.

²³ OECD *Data-Driven Innovation for Growth and Well-Being: Interim Synthesis Report* (n 14) p. 4.

machine learning where the algorithms learn themselves tasks by crunching numbers and processing large amounts of data.²⁴

Through big analytics value is therefore derived from the other three V's. The volume of data enables firms to extract correlations from large, unstructured datasets with simple algorithms (which is said to outperform extracts of data from smaller, structured datasets with more sophisticated algorithms). The variety of data, and the fusion of it, increases the ability to derive further information from linked data. With the variety, of seemingly anonymous or non-personal data, personal information can be inferred. The velocity of data enable companies of being the first to collect, analyse and use the gathered data. Companies can compete more effectively by being the first to forecast changes in the market.²⁵

2.1.6. Big data as an asset

It is not a new phenomenon that companies rely on data to improve their businesses. In the 'old economy' firms used data for roughly the same purposes as they are in the digital economy. The use of big data for innovative and creative purposes, known as data-driven innovation, has however revolutionized the way to collect, process and commercially use and exploit data. It has become a mechanism by which products and services can be improved, and to raise economic efficiencies. Big data therefore represents a core economic asset for companies.²⁶

The fact that big data allow firms to better understand human behaviour through the revelation of patterns makes it possible for companies to better map users' and customers' behaviours and preferences. With the extracted data companies can, to a greater extent, target the customer whose shopping habits have been identified, and better understand their needs and conduct.²⁷ Through the effects of deep-learning,²⁷ companies can also figure out how users actually use a service or product. With that information they can improve the products or services they provide accordingly. An improved service which follows the patterns of its users can make more people use it.²⁸

Not only the services can be customized after the customer's preferences, advertising can be made more efficient and targeted as well. Companies can reduce their costs by getting

²⁴ Ariel Ezrachi and Maurice Stucke *Virtual Competition – The Promise and Perils of the Algorithm-driven Economy* (Harvard University Press 2016), p. 15.

²⁵ Stucke and Grunes (n 13) p. 22-28.

²⁶ Autorité de la concurrence & Bundeskartellamt (n 14) p. 9.

²⁷ Maria Wasastjerna *Big data and privacy in merger review and policy* 12 May 2017, Paper submitted to ASCOLA conference 2017, p. 5-6.

²⁸ OECD *Big Data: Bringing Competition Policy to the Digital Era* 29-30 November 2016, p. 8
<[https://one.oecd.org/document/DAF/COMP\(2016\)14/en/pdf](https://one.oecd.org/document/DAF/COMP(2016)14/en/pdf)> accessed 25 October 2017.

closer to addressing the actual target audience with behavioural targeting. With behavioural targeting means that by relying on extensive profiles generated by observing users' surfing habits online, users are targeted with specific ads based on their internet activity.²⁹ Other efficiencies flowing from the use of big data are the improvement of production processes, forecasting market trends and improved decision-making.³⁰ Access to data can also help businesses to explore new business opportunities where data gathered in the context of one service could enable new services to rise as the same data can be reused for other purposes.³¹

Exploitation of big data is not only efficient within a company; it has spill over effects on social benefits as well. For example, the tracking of mobile devices could reduce traffic congestions and save time, money and fuel. Reduction of CO2 emissions within the energy sector can be achieved by smart grid applications controlling the operation of household appliances, adjusting production capacities after forecasts of demand, and by giving feedback to consumers about their energy consumption. In the field of healthcare, the creation of electronic health records could reduce medical errors, improve diagnoses, increase efficiency in management and pricing, and promote research and development.³²

Big data as an asset is asymmetrical and has more than one side of the same coin. Companies can not only use big data to gain efficiencies, they also have the possibility to exploit consumers. This can be done by targeting the most vulnerable ones with certain sales tactics, or by discriminating those with fewer options outside the concerned firm with different prices, services and opportunities.³³ Consumers might also be unaware that they leave behind more data, or emit more digital exhaust, than what they intend to do. Such a trail of data could consist of geographical coordinates of a cell phone transmission or IP address in a server log, and the value of that digital exhaust is often unknown to the consumer. Through big analytics and amalgamation of such information trails companies can discern and reveal more about individuals.³⁴

2.2. Personal data

2.2.1. General

Personal data can be defined as 'any information relating to an identified or identifiable individual'. It is a broad concept which can include several different types of personal data:

²⁹ Autorité de la concurrence & Bundeskartellamt (n 14) p. 10.

³⁰ OECD *Big Data: Bringing Competition Policy to the Digital Era* (n 28) p. 8.

³¹ Autorité de la concurrence & Bundeskartellamt (n 14) p. 10.

³² OECD *Big Data: Bringing Competition Policy to the Digital Era* (n 28) p. 8.

³³ See generally, Ezrachi and Stucke (n 24).

³⁴ Stucke and Grunes (n 13) p. 28.

user generated content, such as blogs and commentary, photos and videos; activity or behavioural data, which includes what people search for and look at on the internet, what people buy online, how much and how they pay; locational data, which could consist of residential addresses, GPS, geo-location and IP address; demographic data including age, gender, race, income, sexual preferences and political affiliation; identifying data of official nature, such as name, financial information and account numbers, health information, social security numbers and police records.³⁵

Another way to define and categorise personal data, with a social media service as an example, is to divide the data into six parts: service data, which is provided by a user to access the service; disclosed data, which is provided voluntarily by a user in the service; entrusted data, which is also provided voluntarily but entrusted with another user on the service by commenting on their post; incidental data, which is data about a user disclosed by another user; behavioural data, which contains information about the actions a user takes on the service; inferred data, the information deduced from a user's activities, disclosed data and profile.³⁶

It is also common to categorise personal data according to its use. Often personal data is distinguished between data collected for use during an internet session, a first-party use, and data which is stored and analysed over time and/or sold to third parties, a third-party use.³⁷

Furthermore, personal data can be distinguished between that data that is personally identifiable information (PII) and that data which is not. PII is data which directly identifies a person and could include name, address, social security, health and financial information. Non-PII is data which cannot really identify a person in itself and needs context to be identifiable, such as the search terms made, which websites that have been visited, what has been purchased and how it was paid for. The line between what data is PII and non-PII is not always clear as some types of data, GPS position and IP-address for instance, fit into both categories. It becomes even less certain where the line is drawn when analytical methods constantly improve and enable better combinations of data. Data which originally is considered non-PII can be combined into PII as soon as data identifying a person can be

³⁵ OECD *Exploring the Economics of Personal Data: A Survey of Methodologies for Measuring Monetary Value* (2013) OECD Digital Economy Paper No. 220, p. 7-8, <http://www.oecd-ilibrary.org/science-and-technology/exploring-the-economics-of-personal-data_5k486qtxldmq-en> accessed 23 October 2017.

³⁶ *ibid.* p. 8.

³⁷ *ibid.* p. 8.

associated with a virtual identity. The data linked to the virtual identity will then lose its anonymity and can be used to identify the individual.³⁸

2.2.2. GDPR

In GDPR personal data is defined as ‘any information relating to an identified or identifiable natural person (‘data subject’); an identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person’.³⁹

Processing of personal data is further defined as ‘any operation or set of operations which is performed on personal data or on sets of personal data, whether or not by automated means, such as collection, recording, organisation, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure or destruction’.⁴⁰

The protection of personal data in GDPR is set out as restrictions in the processing of the data. Processing of personal data is only lawful: if the data subject has given consent to the processing; it is necessary in order to perform, or enter into, a contract; it is necessary for compliance with a legal obligation; it is necessary in order to protect vital interests of the person concerned or another natural person; it is necessary for the performance of a task carried out in the public interest or exercise of official authority; or where the legitimate interests of the controller or a third party finds it necessary, and the interests or rights and freedoms of the data subject which require protection of personal data does not override.⁴¹

Some special categories of personal data have an even stronger protection. Personal data revealing racial or ethnic origin, political opinions, religious or philosophical beliefs, trade union membership, genetic data, biometric data for the purpose of uniquely identifying a natural person, data concerning health or data concerning a natural person’s sex life or sexual orientation are prohibited from being processed.⁴²

There are, however, a few exemptions to the prohibition of processing the special categories of personal data. Where the data subject has given consent, where it is necessary in the field of employment and social security, where it is necessary to protect the vital interests

³⁸ Ibid. p. 8.

³⁹ GDPR (n 2) art. 4(1).

⁴⁰ ibid. art. 4(2).

⁴¹ ibid. art. 6(1).

⁴² ibid. art. 9(1).

of the data subject or another natural person, where processing is carried out within an organisation's legitimate activities (political, philosophical, religious etc.), the processing relates to data manifestly made public by the data subject, where it is necessary for the exercise of legal claims, where it is necessary for the purposes of preventive medicine, where it is necessary for reasons of public interest in the area of public health, or where it is necessary for archiving purposes in the public interest the prohibition does not apply.⁴³

2.2.3. Main goal of data protection

The main goals of data protection are to protect the privacy of the individual and to foster the internal market. The protection of the fundamental rights and freedoms of natural persons and in particular their right to the protection of personal data is set out in Article 8(1) of the Charter⁴⁴ and Article 16(1) TFEU. They provide that everyone has the right to protection of personal data concerning him or her.⁴⁵ Article 8 of the Charter does not only protect the individual from interferences by the state, it is a proactive right entitling the individual to expect that his or her information only can be processed by anyone under certain conditions. The conditions for anyone to process personal information includes that the processing is fair and lawful, for specified purposes, and transparent.⁴⁶

Data protection is also an instrument for positive market integration. It has earlier harmonised the privacy rules and minimised the differences between the Member States' national legislation.⁴⁷ With the GDPR the intention is to contribute even further the progress of the internal market.⁴⁸

2.3. Conclusive summary: The role of data in the digital economy

Big data is not a legal concept and defined differently depending on the context. It is a method describing the current possibilities to gather and use different kinds of data, and is commonly comprised by the three first V's which are giving big data its value. Through data management with volume, variety and velocity enabling the value of data companies can not only gain efficiencies in their services and businesses but also, in principle, help improve society as a whole. With big data companies can gather personal data to track their customers and consumers, and their behaviours. Personal data, in turn, can be described as a certain kind

⁴³ *ibid.* art. 9(2).

⁴⁴ The Charter of Fundamental Rights of the European Union (2012/C 326/02).

⁴⁵ GDPR (n 2) art. 1(2).

⁴⁶ EDPS, Preliminary Opinion, Privacy and competitiveness in the age of big data: The interplay between data protection, competition law and consumer protection in the digital economy (March 2014), p. 12.

⁴⁷ Francisco Costa-Cabral and Orla Lynskey, 'The Internal and External Constraints of Data Protection on Competition Law in the EU' LSE Law, Society and Economy Working Papers, 25/2015, p. 9.

⁴⁸ GDPR (n 2) recital 2.

of data which can be collected and analysed through big data. Personal data is defined as information identifying a (natural) person and can constitute of, and be divided into, several different kinds, uses, and categories of data. The gathering and processing of personal data, defined as any operation performed on personal data, is restricted and limited, which is how the protection of personal data works. Processing is only lawful in some circumstances, and special categories of sensitive personal data are prohibited from processing unless certain exemptions are met. The aim with the protection of personal data is to protect the privacy of individuals, as it is considered a fundamental freedom and right. It also aims to positively integrate the internal market of EU.

3. EU merger control

3.1. The underlying principles of EU merger control

3.1.1. Economics of competition

The Chicago school of economics is what is usually referred to when speaking of law and economics. It has had a great impact on American antitrust law but also on EU competition law. The effects-based approach the Commission has adopted has integrated many of the arguments originating from the Chicago school of economics.⁴⁹

The Chicago school of economics is based on the idea that every individual has distinct preferences, and acts rationally and consistently to fulfil those preferences. This idea can be described using three conditions: completeness, reflexivity and transitivity. Completeness refers to the individual being capable of comparing every available alternative, and to rank them in order of the benefit it gives the individual. Reflexivity means that the individual's choices are consistent and without bias. When the individual considers the utility not to be worth more or less than it objectively is, will the choice of the individual be consistent and without bias. With transitivity it is meant that the individual consistently values a certain utility in relation to other utilities. If utility A is valued higher than B, and B is valued higher than C, then A also has to be valued higher than C. The Chicago school further advocates non-intervention by the state because markets tend to regulate themselves. But when the market fails in its regulation, a state intervention might be justified. Legislation will then create a simulated free market.⁵⁰

⁴⁹ Vladimir Bastidas Venegas 'Rättsekonomi' in Fredric Korling and Mauro Zamboni (eds), *Juridisk metodlära* (1st edn, Studentlitteratur, 2013), p. 183.

⁵⁰ *ibid.* p. 183-186.

The Chicago school of economics is, further, considered to be a neoclassical theory of economics.⁵¹ Neoclassical economics is a metatheory which is a set of implicit rules, or understandings, for constructing other economic theories. It is based on three fundamental assumptions: people have rational preferences among outcomes; individuals maximize utility and firms maximize profits, and; people act independently on the basis of full and relevant information. Neoclassical price theory can be described as buyers attempting to maximize utility and producers attempting to maximize profits. The buyers maximize utility by increasing the purchases of a certain good until what is gained by one extra unit of the good is just enough balanced by what has to be given up, e.g. money or time, in order to obtain the good. Individuals are making their choices at the margin which is resulting in a theory of demand and supply. The producer acts in a similar way. The producers seek to maximize profits by producing units of a certain good so that the cost of producing one extra, marginal, unit is just balanced by the revenue it generates. In conclusion, agents, in the shape of households or firms, want to optimize utilities and profits while at the same time being under constraints. The tensions between the wants to optimize and the constraints are worked out in markets where prices are the signals whether these conflicting interests can be conciliated.⁵²

3.1.2. Goals of competition

The primary goal of the EUMR is to assess if a merger is compatible with the common market. In the assessment only those mergers which significantly impede effective competition are declared incompatible with the common market.⁵³

What constitutes effective competition in this context is determined by the goals competition law seeks to achieve. There are several different goals which are thought to achieve effective competition: economic efficiency through consumer (or total) welfare, protection of economic freedom and process of competition, protection of competitors, fairness, public policy and socio-political factors and the dimension of the single market within the EU.⁵⁴ Which goals competition law should pursue have been profoundly disagreed upon. The Commission has adopted the consumer welfare standard as goal for competition law. That means that the Commission's goal in their application of the competition rules is to deliver greater output, higher quality, lower prices, and more innovation in products and

⁵¹ Andrew Harrison *Business Environment in a Global Context* (2nd edn, Oxford University Press, 2014), p. 263.

⁵² E. Roy Weintraub *Neoclassical Economics* The Concise Encyclopedia of Economics (2007), <<http://www.econlib.org/library/Enc1/NeoclassicalEconomics.html>> accessed 29 November 2017.

⁵³ EUMR (n 3) art. 2(3).

⁵⁴ Jones and Sufrin (n 11) p. 26-29.

services.⁵⁵ This view can be found in the Commission's Merger Guidelines as well.⁵⁶ The European Court of Justice has, however, established a broader view on what goals the competition rules should seek to achieve. Based on the CJEU case-law⁵⁷ the goals of the competition rules are not only the protection of consumers but also protection of competitors, the single market structure, and competition as such.⁵⁸ Yet, the wording of more recent judgments, compared to earlier ones, does suggest that the CJEU have taken more regard to consumer interests.⁵⁹

Even though it is not possible to say that the consumer welfare standard is the only objective with EU competition law,⁶⁰ it can be said that competition policy is mainly concerned with keeping effective competition on the market in order to maximise the consumer welfare.⁶¹

3.1.3. Factors relevant for the merger assessment

The criteria the Commission has to take into account when appraising a merger are quite similar to those objectives of competition that the CJEU has taken the stand for. The first set of criteria consists of 'the need to maintain and develop effective competition within the common market in view of, among other things, the structure of the markets concerned and the actual or potential competition from undertakings located either within or outwith the Community'.⁶² The other set of criteria consists of 'the market position of the undertakings concerned and their economic and financial power, the alternatives available to suppliers and users, their access to supplies or markets, any legal or other barriers to entry, supply and demand trends for the relevant goods and services, the interests of the intermediate and ultimate consumers, and the development of technical and economic progress provided that it is to consumers' advantage and does not form an obstacle to competition'.⁶³ The list of criteria is non exhaustive and the Commission has to take all the factors into consideration

⁵⁵ *ibid.* p. 39.

⁵⁶ Guidelines on the assessment of horizontal mergers under the Council Regulation (EC) No 139/2004 on the control of concentrations between undertakings (2004/C 31/03) (Horizontal Merger Guidelines), para 8; Guidelines on the assessment of non-horizontal mergers under the Council Regulation (EC) No 139/2004 on the control of concentrations between undertakings (2004/C 31/03) (Non-Horizontal Merger Guidelines), para 10.

⁵⁷ Case 6/72 *Continental Can* [1973] ECR 215, para 26; Case C-52/09 *Konkurrensverket v TeliaSonera Sverige AB* [2011] ECR I-527, para 22-24; Case C-501/06 P, *GlaxoSmithKline Services* [2009] ECR I-9291, para 63; Case C-8/08 *T-mobile Netherlands BV v Raad van bestuur van de Nederlandse Mededingsautoriteit* [2009] ECR I-4529, para. 38; Case C-209/10 *Post Danmark A/S v Konkurrencerådet (Post Danmark I)* EU:C:2012:172, para 20.

⁵⁸ Bellamy and Child *European Union Law of Competition* (7th ed., Oxford University Press, 2013), p. 7.

⁵⁹ Jones and Sufrin (n 11) p. 42.

⁶⁰ *ibid.*

⁶¹ Richard Whish and David Bailey *Competition Law* (8th ed., Oxford University Press, 2015), p. 860.

⁶² EUMR (n 3) art. 2(1)(a).

⁶³ *ibid.* art. 2(1)(b).

when appraising a merger, even though they do not need to be considered to the same extent every time.⁶⁴

3.1.4. Other non-competition factors

Most competition authorities are only concerned with the competitive effects of mergers.⁶⁵ Apart from a few exemptions from the main objective of competitive effects⁶⁶, non-competition issues are not taken into account when assessing mergers.⁶⁷ Some systems of merger control do, however, allow broader criteria of public interest or public policy to be taken into account in the assessment of mergers.⁶⁸ Non-competition areas that may cause concerns in relation to mergers are fear of big businesses, loss of efficiency, unemployment, certain special sectors, overseas control, and the privacy and protection of personal data.⁶⁹

There is a fear that mergers can create an undertaking so big that it will concentrate the wealth to itself and disrupt a balanced distribution of it. A business which is that big is also feared to be anti-democratic and to restrict individual freedom and enterprise.⁷⁰

It is argued that a merger does not promote economic efficiency in the long run and therefore constitute a loss of efficiency. Instead it is thought that mergers, or rather hostile takeovers, only see to the short-term profit and have no genuine concern for the long-term prospects for the target company.⁷¹

When a merger takes place in depressed regions or where unemployment rates are already low, and results in loss of jobs, stripping of assets, and profits going to the shareholders, it may cause non-competition concerns.⁷²

The special sector area refers to having tighter control and more factors taken into account when assessing a merger which takes place in particularly sensitive sectors of the economy. Plurality of the press, national security, banking, and oil are a few examples of those sectors.⁷³ Some of these interests have already been exempted in article 21(4) EUMR.

The fear of foreign control over key businesses raises protectionist concerns. In mergers where important businesses in a country result in the company being passed on to an company

⁶⁴ Bellamy and Child (n 58) p. 613; Horizontal Merger Guidelines (n 56) para 13.

⁶⁵ Whish and Bailey (n 61) p. 860.

⁶⁶ EUMR (n 3) art. 24(4), which provides the possibility for Member States to take appropriate measures to protect legitimate interests other than those in the Regulation. Public security, plurality of the media and prudential rules are regarded as legitimate interests.

⁶⁷ Jonathan Faull and Ali Nikpay *The EU Law of Competition* (3rd ed., Oxford University Press, 2014), p. 545.

⁶⁸ Whish and Bailey (n 61) p. 860

⁶⁹ Jones and Sufrin (n 11) p. 1089-1090.

⁷⁰ Whish and Bailey (n 61) p. 869.

⁷¹ *ibid.* p. 868.

⁷² Jones and Sufrin (n 11) p. 1090.

⁷³ *ibid.*

overseas the economic advantages the merger produces do not seem to be outweighed by the loss of the decision-making process and the profits of the business that the country concerned previously had control over.⁷⁴

There has been an increased concern over the impact of transactions of personal data, the privacy of it, and the extent to which the protection of personal data should be a relevant factor in the substantive merger assessment. The acquisition of data and the advantage of it motivate mergers in businesses where personal data is a key input. This is especially in two-sided markets where consumers are offered services for free in exchange for personal data which can be used for advertisers to better target consumers with behavioural advertisements.⁷⁵

3.1.5. The positive competitive effects of mergers

A merger might produce efficiencies in a number of ways. The production of goods can turn out more efficient through the economies of both scale and scope. After a merger has taken place, the economies of scale can result in a product to be produced more cheaply, the overall use of a multi-product plant to be used more rationally or the overall cost to be lower. The economies of scope can manifest itself by lowering overall administrative costs when operating different lines of production. Other types of efficiencies that can result from a merger are that the start-up costs can be held down by using an already established distribution network, backward integration can guarantee a firm availability to raw materials, the chances of access to loans and equity capital can be improved, the deliverance of technological innovation through research and development can be greater by access to a bigger pool of industrial technology, know-how and patents.⁷⁶

Mergers can also avoid barriers to exit an industry and give the firms that wish to quit the opportunity to realise the capital from their investments. The incentive to set up a business and develop new products might be reduced if it is not possible to sell the company. The freedom to sell can constitute a reward for the risks taken of running a business.⁷⁷ In the same sense as selling the company in order to quit an industry mergers can keep businesses, which are failing and may face liquidation, still going. That means that the assets are kept in production, creditors, owners and employees are protected from the consequences of a failing firm, and that the industry the company is active in maintains stabilised.⁷⁸

⁷⁴ *ibid.*

⁷⁵ *ibid.*

⁷⁶ Whish and Bailey (n 61) p. 857-858.

⁷⁷ *ibid.* p. 859.

⁷⁸ Jones and Sufrin (n 11) p. 1086.

Mergers which create larger domestic firms, i.e. national or European champions, could mean that the ability to survive and compete on international markets increase, more effectively contribute to technological progress, and to better facilitate cross-border trade.⁷⁹ Furthermore, mergers across borders, through foreign direct investment, can help integrate international trade and give rise to an even larger competitive business environment. It also enhances enterprise development, assists human capital and triggers technology spillovers.⁸⁰

3.1.6. The negative competitive effects of mergers

A merger can have a damaging effect on competition in different ways. Mergers between operators in the same level of the economy, or horizontal mergers, can significantly impede effective competition in two main ways, in particular when creating or strengthening a dominant position; through unilateral or non-coordinated effects, and coordinated effects.⁸¹ Unilateral or non-coordinated effects of a merger occur where the reduction in numbers of players on the market, and an increase in concentration in it, allow the merged entity to exercise market power, and therefore use the ability to increase price, reduce quality, output, variety and innovation.⁸² Coordinated effects of a merger concern the situation where the result of the merger allow the merged entity to coordinate their competitive behaviour with other companies active in the market, or to solidify an already existing coordination, and exercise collective market power through tacit collusion.⁸³

In a merger where a supplier in an upstream market and a distributor in a downstream market merge, a vertical or non-horizontal merger, there are also two main ways to significantly impede effective competition: through non-coordinated and coordinated effects.⁸⁴ In the case of non-coordinated effects it is foreclosure that is relevant. Foreclosure can further be grouped into two types: input and customer foreclosure. Input foreclosure occurs when the upstream actor uses the market power to restrict competition on the downstream market through selling conditions. Customer foreclosure happens when the downstream actor uses the market power to restrict access to distributors and harm competition on the upstream market. The coordinated effects of vertical mergers are the same as with horizontal mergers.⁸⁵

⁷⁹ Whish and Bailey (n 61) p. 858.

⁸⁰ Jones and Sufrin (n 11) p. 1087.

⁸¹ Horizontal Merger Guidelines (n 56) para 22.

⁸² Jones and Sufrin (n 5) p. 1088.

⁸³ Faull and Nikpay (n 67) p. 712.

⁸⁴ Non-Horizontal Merger Guidelines (n 56) para 17.

⁸⁵ Faull and Nikpay (n 67) p. 723.

In conglomerate mergers, mergers between companies which have no horizontal or vertical effect, the harm in competition could consist of using the market power on one of the markets to foreclose competition on the other. This could be done by engaging in tying, cross-subsidising or predatory pricing.⁸⁶ There might also be a risk of loss of potential competition. Firms operating in different product markets but in the same geographic market, or in neighbouring product markets, might loosen the threat of entering one another's markets. This might also be considered as an effect of a horizontal merger.⁸⁷

3.2. The purpose of the EUMR

In the recitals to the EUMR it can be read that the completion and development of the internal market together with the lowering of international barriers will result in undertaking's reorganisations, especially in form of concentrations. Concentrations are welcome as long as they are in line with the requirements of dynamic competition and improve conditions of growth and raise the standard of living in the Community. It needs to be ensured that the process of these reorganisations does not result in lasting damage to competition.⁸⁸ The merger control is based on the notion that reorganisations of undertakings, although they generally turn out positive for the development of the market, need to be subject for control in order to make certain that they do not result in lasting damage to competition.⁸⁹

The merger control is also a tool to prevent lasting damage to competition before it occurs (ex-ante control). This is in contrast to the other legal competition controls which only can be applied after a certain type of behaviour on the market constitutes a breach of a rule (ex post control). With the ex-ante control the already existing competition in the markets can be maintained without disruption and without any competition authorities having to unnecessarily intervene. It relieves competition authorities of lengthy investigations and gives them more time to focus on the already existing ex-post breaches of the articles.⁹⁰

3.3. Scope of the EUMR

3.3.1. General

Every merger taking place within the EU does not fall within the confines of the EUMR. For a merger to be examined by the Commission the merger needs to meet certain conditions. The

⁸⁶ Whish and Bailey (n 61) p. 864.

⁸⁷ Jones and Sufrin (n 11) p. 1089.

⁸⁸ EUMR (n 3) recitals 3-5.

⁸⁹ Faull and Nikpay (n 67) p. 616.

⁹⁰ Whish and Bailey (61) p. 860-861.

EUMR is only applicable to mergers considered to be ‘concentrations’ with a ‘community dimension’⁹¹

Even though a merger does not constitute a concentration with a community dimension, a merger may also be reviewed by the Commission if the merging parties request it, there are national competition authorities in at least three member states competent to review it, and those member states approve such a referral.⁹² One or more member states may also request the Commission to review a merger even though it does not have a community dimension but the merger affects trade between member states and threatens to significantly impede effective competition in the requesting member states.⁹³ In the same way, a merger that have been notified to the Commission and threatens, inter alia, competition within one distinct market, the Commission may refer the assessment of that merger to the concerned national competition agency.⁹⁴

3.3.2. Concentration

The definition of a concentration is made wide to target operations resulting in a lasting change in control of undertakings concerned and therefore in the structure of the market.⁹⁵ A concentration consists of two situations where the result is a change in control on a lasting basis. The first situation is where two or more previously independent undertakings merge, through a ‘legal’ merger, into a new undertaking where the two former undertakings cease to exist, or where one undertaking subsumes another where the subsumed undertaking then ceases to exist.⁹⁶

The second situation arises where there is a change in control of an undertaking, whether it is through an acquisition where an undertaking gains sole control over another undertaking, or where two or more undertakings acquire joint control over another undertaking.⁹⁷ Control over an undertaking is constituted by rights, contracts or other means by which confer the possibility of exercising decisive influence on an undertaking.⁹⁸

Sole control is acquired if one undertaking alone can exercise decisive influence over another undertaking by either law or fact. Decisive influence by law can constitute a majority shareholding where the one solely controlling undertaking enjoys the power to determine the

⁹¹ EUMR (n 3) art. 1(1).

⁹² *ibid.* art. 4(5).

⁹³ *ibid.* art. 22.

⁹⁴ *ibid.* art. 9.

⁹⁵ *ibid.* recital 20.

⁹⁶ *ibid.* art. 3(1)(a).

⁹⁷ *ibid.* art. 3(1)(b); Jones and Sufrin (n 11) p. 1096.

⁹⁸ *ibid.* art. 3(2).

strategic commercial decisions of the other undertaking or where the one solely controlling undertaking is the only shareholder able to veto strategic decisions (negative sole control). By fact could mean that a minority shareholder is likely to achieve majority at a shareholders' meeting due to the absence of other shareholders. Decisive influence in other ways than voting rights, such as purchase of assets, by contract or by other means do are also included in the assessment of change in control.⁹⁹ Joint control exists where two or more undertakings have the possibility to exercise decisive influence over another undertaking and must reach agreement to major decisions concerning the controlled undertaking. The exercise of the parent companies' decisive influence often means the power to block actions which determine the strategic commercial behaviour of a company. This decisive influence can also be exercised by law or by fact.¹⁰⁰

A joint venture which is performing all the functions of an autonomous economic entity on a lasting basis is considered a concentration as well.¹⁰¹

3.3.3. Community dimension

With a merger having a community dimension the thought is to make the EUMR applicable to mergers which create significant structural changes where the impact extends beyond the national borders of any member state.¹⁰² The impact of these significant structural changes is determined, broadly, by the turnovers of the merging parties. Turnovers are used as a proxy for the economic resources being combined in a concentration, and is allocated geographically in order to reflect the geographic distribution of those resources.¹⁰³

A concentration has a community dimension where the combined aggregate worldwide turnover of all the undertakings concerned is more than 5 000 million EUR and the aggregate Community-wide turnover of each of at least two of the concerned undertakings is more than 250 million EUR. This is unless each of the undertakings achieves more than two-thirds of its aggregate Community-wide turnover within one and the same member state.¹⁰⁴ The purpose of the rule of two-thirds of the aggregate turnover in one and the same member state is to exclude concentrations where the effects are primarily felt in one member state.¹⁰⁵

⁹⁹ Commission Consolidated Jurisdictional Notice under Council Regulation (EC) No 139/2004 on the control of concentrations between undertakings (2008/C 95/01) (Jurisdictional Notice), para. 54-61.

¹⁰⁰ Jurisdictional Notice (n 99) para. 62-63.

¹⁰¹ EUMR (n 3) art. 3(4).

¹⁰² *ibid.* recital 8.

¹⁰³ Jurisdictional Notice (n 99) para. 124.

¹⁰⁴ EUMR (n 3) art. 1(2).

¹⁰⁵ Jones and Sufrin (n 11) p. 1104.

A concentration can also have a community dimension even though it does not meet the above-mentioned requirements. As long as the combined aggregate worldwide turnover of all the undertakings concerned is more than 2 500 million EUR, the combined aggregate turnover of all the undertakings concerned in each of at least three member states is more than 100 million EUR, the aggregate turnover of each of at least two of the undertakings concerned in each of at least three member states (the same member states as the previous condition) is more than 25 million EUR, and finally, the aggregate Community-wide turnover of each of at least two of the undertakings concerned is more than 100 million EUR the concentration has a community dimension. The rule of two thirds of the aggregate turnover in one and the same member state applies here as well.¹⁰⁶

3.4. The merger assessment

3.4.1. General

The test the Commission uses to assess a merger's compatibility with the common market is the 'significant impediment to effective competition', or 'SIEC', test. A merger which fails the test, and therefore significantly impedes effective competition, is not compatible with the common market. Conversely, a merger which passes the test will be compatible.¹⁰⁷

3.4.2. Competitive assessment

It is the Commission which have the burden of proving that a merger is incompatible, or compatible, with the common market. To prove that, the Commission has to demonstrate a causal link between the completion of the merger and the harm it has on competition. The standard of proof is the balance of probabilities and there is no presumption that a merger is either incompatible, or compatible, with the common market.¹⁰⁸

The assessment of a merger is forward-looking. Therefore, to assess whether a merger is likely to significantly impede effective competition, a prospective analysis of how a merger might change the factors constituting competition need to be carried out. Consequently, the SIEC test contains a comparative analysis of two versions of the future. The two compared scenarios are what would happen in the market if the merger were to be implemented and, the counterfactual, what would happen in the market in the absence of the merger. The difference between the two helps the Commission to determine the likely effects on competition.¹⁰⁹ In most cases the conditions existing at the time of the merger are enough to evaluate the effects.

¹⁰⁶ EUMR (n 3) art. 1(3).

¹⁰⁷ *ibid.* art. 2(2)-(3).

¹⁰⁸ Jones and Sufrin (n 11) p. 1134-1135.

¹⁰⁹ Faull and Nikpay (n 67) p. 668.

When future changes can be reasonably predicted to take place, however, the Commission may take those into account as well. Such future changes could be the likeliness of entry or exit of a firm, expiry of patents or technological changes.¹¹⁰ In those cases, the appropriate counterfactual will not be the existing conditions on the market, but rather the conditions with the predicted changes taken into account.¹¹¹

The Commission's assessment of mergers normally begins with a definition of the relevant product and geographic markets, with the purpose to identify the competitive constraints on the undertakings concerned, which is to be followed by the competitive assessment.¹¹² When assessing the relevant markets the Commission uses its Market Definition Notice¹¹³ and the SSNIP¹¹⁴ test.

The Commission begins the competitive assessment in a horizontal merger by using market shares and concentrations thresholds, as a rule of thumb, to identify potentially problematic mergers. Then the Commission examines the likelihood that the merger will result in any anti-competitive effects on the market through non-coordinated or coordinated effects. Countervailing factors such as buyer power, new entry, or efficiencies are then examined to see if the identified harmful effects can be outweighed. It is also considered whether the anti-competitive effects are resulting from a failing firm or from the merger.¹¹⁵

In non-horizontal mergers the Commission considers, in its competitive assessment, both the possible anti-competitive effects on the market through coordinated and non-coordinated effects, and the possible pro-competitive effects stemming from substantiated efficiencies benefitting consumers. The various chains of cause and effect are examined to make certain which effects are the most likely to occur.¹¹⁶

3.5. Commitments

The Commission may attach conditions and obligations to a decision to clear a merger. Such conditions and obligations are intended to ensure that the undertakings concerned comply with the commitments that they make to the Commission to modify their transaction in order to make it compatible with the common market.¹¹⁷ Where the undertakings modify their concentration the Commission should be able to declare it compatible. Such commitments

¹¹⁰ Horizontal Merger Guidelines (n 56) para 9; Non-Horizontal Merger Guidelines (n 56) para 20.

¹¹¹ Faull and Nikpay (n 67) p. 668.

¹¹² Horizontal Merger Guidelines (n 56) para 10.

¹¹³ Commission Notice on the definition of relevant market for the purposes of Community competition law (97/C 372/03).

¹¹⁴ Small but significant and non-transitory increase in price.

¹¹⁵ Jones and Sufrin (n 11) p. 1134; Horizontal Merger Guidelines (n 56) para 11.

¹¹⁶ Non-Horizontal Merger Guidelines (n 56) para 21.

¹¹⁷ EUMR (n 3) art. 6(2) and 8(2).

should be proportionate to the competition problem and entirely eliminate it.¹¹⁸ The Remedies Notice¹¹⁹ sets out general principles applicable to remedies acceptable by the Commission.

Commitments can relate to the structure of the concentration or the behaviour of the parties involved. A structural remedy often requires divestiture of an existing activity which can operate on a stand-alone basis.¹²⁰ A behavioural remedy could consist of termination of exclusive agreements or granting competitors access to infrastructure, key technology, or licencing IPRs.¹²¹ A structural solution might, in practice, be more preferable. It may actually prevent a SIEC and does not require any monitoring measures, whereas a behavioural solution might just have a sufficient effect to restore competition and be more difficult to control and enforce.¹²²

3.6. Conclusive summary: What are the principles of EU merger control and how is the assessment done?

The Chicago school of economics, together with the neoclassical price theory, have influenced the economic thinking of EU competition law. The basic idea is that individuals and firms seek to maximize utilities and profits through consistent choices, rational actions, and access to complete information. The EUMR seeks to prevent mergers which significantly impede effective competition. What effective competition is considered to be is not entirely clear, as several goals can be considered effective, but the common ground is that consumer welfare is the main objective with competition. The factors relevant for the merger assessment, as can be found in the EUMR, only take the form of factors related to competition. There are, however, other factors possible to take into account in the assessment that are not purely competitive. One such factor is the privacy and protection of personal data.

In general, a merger can have positive effects on competition. By, inter alia, economies of scale and scope, backward integration, and access to a bigger pool of technology a company can produce efficiencies leading to greater consumer welfare. A merger can have negative effects on competition as well. In horizontal mergers the main concerns are that a merger will, through unilateral effects, reduce the players on the market and increase its market power. In a non-horizontal merger the concerns are mostly that of input or customer foreclosure.

The purpose of the merger control, and the EUMR, is to promote the internal market and to lower international barriers between member states. Mergers are welcome as long as they

¹¹⁸ *ibid.* recital 30.

¹¹⁹ Commission Notice on remedies acceptable under Council Regulation (EC) No 139/2004 and under Commission Regulation (EC) No 802/2004 (2008/C 267/01) (Remedies Notice).

¹²⁰ Remedies Notice (n 119) para 22.

¹²¹ *ibid.* para 62.

¹²² Jones and Sufrin (n 11) p. 1196.

do not result in lasting damage to competition and that is what the merger control aim to prevent. This is done by exercising control before the merger take place. A merger will fall under the control and the scrutiny of the Commission when the EUMR is applicable. The EUMR can only be applied to concentrations having a community dimension. A concentration arises when there is a change in control over an undertaking on a lasting basis. The change can occur when two undertakings merge into one, or where one undertaking gains sole or, together with others, joint control. A merger has a community dimension if the turnovers of the undertakings involved reach certain thresholds which are to indicate that the impact of the transaction reaches beyond the national borders of any member state. The assessment itself comprises of the SIEC-test. Since the merger control is exercised ex-ante, the assessment compares the scenarios where the merger would be cleared and where it would not be. This is to see whether any competition concerns might be likely to follow from the merger. In creating the two scenarios the Commission establishes the relevant market, and from assess the concentration levels, and the likelihood that the merger will result in any anti-competitive effects on the market. Countervailing factors are taken into account to find out if the concerns can be outweighed and any eventual efficiencies stemming from the merger are also considered. In case the merger is likely to significantly impede effective competition it can still be cleared if the transaction can be subject to commitments which can relieve the merger of its competitive concerns.

4. Competition concerns regarding data in the context of mergers

4.1. General

In multi-sided data-driven markets competition takes place in three areas. On the free side of the market there is competition on non-price parameters (such as quality). On the paid side of the market the competition is for advertising, and then there is competition between the companies collecting valuable data to use as important input for different markets.¹²³ The competition concerns, related to data, can take the form of increasing a firm's market power through different barriers to entry a market, and various theories of harm relating to data. The special characteristics of data, however, can downplay these competitive concerns.

¹²³ Stucke and Grunes (n 13) p. 116.

4.2. Barriers to entry indicative of market power

4.2.1. General

Market power is defined as the ability to price above short-run marginal cost, and in a longer run, to price above average total cost.¹²⁴ Short-run marginal cost is the increase in total costs of a company caused by increasing its output by one extra unit while average total cost is the average costs related to the production of one only unit.¹²⁵ The merger control allows the Commission to prevent mergers, which would significantly increase a merged entity's market power, and would be likely to deprive consumers of certain benefits. The benefits effective competition brings to consumers are low prices, high quality products, a wide selection of goods and services, and innovation. With increased market power, though, a firm may profitably increase prices, reduce output, choice or quality of goods and services, diminish innovation or otherwise influence the parameters of competition.¹²⁶

There are two methods to measure the market power of a firm. The direct method involves an estimation of the market power by the use of econometric methods, in particular the residual demand curve, i.e. the demand curve facing only one firm, which is not supplied by any other firm in the market. The indirect method, used by the Commission and the CJEU, is a structural approach where the relevant market first is defined, and then the market power is assessed by the use of market shares and barriers to entry the market. The barriers to entry are crucial to the indirect method as they allow a firm to earn monopoly profits without constraints from other firms,¹²⁷ i.e. they are something that prevents a competitor to enter a market and therefore leave the incumbent unconstrained.¹²⁸ In horizontal mergers barriers to entry may take the form of the legal advantages the incumbent enjoys, any technical advantages it might have, and the advantages the firm has because of its established position in the market.¹²⁹

4.2.2. Legal advantages

Legal advantages are a form of barrier to entry relating to any regulatory obstacles limiting the number of market participants by, inter alia, restricting the number of licences. Licences to certain data bases or registers, through a former or current state monopoly, might give a

¹²⁴ Jones and Sufrin (n 11) p. 54.

¹²⁵ *ibid.* p. 382.

¹²⁶ Horizontal Merger Guidelines (n 56) para. 8.

¹²⁷ Jones and Sufrin (n 11) p. 55.

¹²⁸ *ibid.* p. 79.

¹²⁹ Horizontal Merger Guidelines (n 56) para. 71.

company legal advantages over potential competitors.¹³⁰ Legal restrictions in the ways of collecting data can also constitute a barrier if the incumbent already has other ways to collect data. The use of cookies is an example of this. Cookies have to be accepted in order to be used,¹³¹ but an incumbent, which already has other means to collect data without the use of cookies, does not necessarily have to be restricted by the regulated usage of cookies.¹³²

4.2.3. Technical advantages

Technical advantages a company can have could be access to essential facilities, innovation, research and development, and intellectual property rights which might make it difficult for competitors to compete successfully. Economies of scale and scope, and access to important technology could also be barriers to entry.¹³³ In relation to data, the economies of scale and scope, on both the supply and demand side, are important.

In regard to the economies of scale on the supply side, the gathering of data can lead to improvements of a data-driven service. The improvements of the service can further make it more attractive and will therefore attract even more users, rendering in more data to collect. This positive ‘feed-back loop’ can make the stronger companies get even stronger and the weaker even weaker.¹³⁴ It may be difficult for competitors to match the quality of the incumbent’s service which has gotten this positive ‘feed-back loop’ rolling.¹³⁵

Economies of scope on the supply side are about diversification. Linkage between several different sources of data gives companies more insights into user habits, can help contextualise the different kinds of data, and give greater value to it than if access only had been to a single set of information.¹³⁶ In this way companies can enjoy the benefits of the same positive ‘feed-back loop’ in that they can further improve their services with access to more diversified data. The more data a company can combine the greater are the chances to gain knowledge which can be used to strengthen its market position.¹³⁷ For a company to effectively compete in a data-driven market, a minimum of volume and variety of data needs to be accessed in order to cover investments and achieve economies of scale and scope.¹³⁸

¹³⁰ *ibid.* para. 71(a).

¹³¹ In accordance with Directive 2002/58/EC of the European Parliament and of the Council of 12 July 2002 concerning the processing of personal data and the protection of privacy in the electronic communications sector.

¹³² Daniel L Rubinfeld and Michal S Gal, ‘Access Barriers to Big Data’ (2016), p 24.

¹³³ Horizontal Merger Guidelines (n 56) para. 71(b).

¹³⁴ OECD *Data-Driven Innovation for Growth and Well-Being: Interim Synthesis Report* (n 14) p. 29.

¹³⁵ Nils-Peter Schepp and Achim Wambach ‘On Big Data and Its Relevance for Market Power Assessment’ (2015) *Journal of European Competition Law & Practice*, p. 121.

¹³⁶ OECD *Data-Driven Innovation for Growth and Well-Being: Interim Synthesis Report* (n 14) p. 29.

¹³⁷ Schepp and Wambach (n 135) p. 121.

¹³⁸ Rubinfeld and Gal (n 132) p 14.

On the demand side of the economies of scale there are direct and indirect network effects. The direct network effects occur when the usefulness of the service increases with the number of users. The more users using a social network will make the social network more useful for the users as there are more people to interact with in the network.¹³⁹ Indirect network effects occur in multi-sided markets where positive spillover network effects from one side of the market gains the other. Many data-driven services, in particular social networks, are characterized by this. The advertisers on the paid side enjoy the spillover effects from the direct network effects on the user side of the market, meaning more users will see the advertisement. Indirect network effects are, however, not necessarily symmetrical. As the advertisers might enjoy more users on the service, the reversed, that users value more advertisers and advertisement, might not be the case.¹⁴⁰

The two types of network effects reinforce the positive ‘feed-back loop’ and allow companies to gather even more data. A company can use the data gathered on one side of a multi-sided platform to not only improve its services on the platform which it collects data from, but also services offered on other platforms.¹⁴¹ Multi-sided platforms can therefore charge different prices on the different distinct markets in order to exploit the interdependence between the two sides and to integrate the network effects. That is why online platforms can offer their users services for free and cross-subsidize the zero-priced services by charging higher prices on the less price sensitive advertising side.¹⁴² The network effects reinforcing the positive ‘feed-back loop’ can further make the market prone to ‘tip’. A market ‘tipping’ is the phenomenon where the network effects create a snow ball effect possibly leading the market to be dominated by one service.¹⁴³

4.2.4. Advantages from the established position by the incumbent

Advantages an incumbent firm can possess as a result of the established position it has on the market could be the reputation of it, or that switching costs are high.¹⁴⁴ Reputation of the service provider can play a part whether a user chooses to share its personal information in order to access a service. The reputation can indicate that the data is adequately protected or the services are of high value and quality.¹⁴⁵

¹³⁹ Michael L Katz and Carl Shapiro, ‘Network Externalities, Competition, and Compatibility’ (1985) *The American Economic Review*, p. 42.

¹⁴⁰ Autorité de la concurrence & Bundeskartellamt (n 14) p. 28.

¹⁴¹ Schepp and Wambach (n 135) p. 122.

¹⁴² Rubinfeld and Gal (n 132) p. 20.

¹⁴³ Jones and Sufrin (n 11) p. 1173.

¹⁴⁴ Horizontal Merger Guidelines (n 56) para. 71(c).

¹⁴⁵ Autorité de la concurrence & Bundeskartellamt (n 14) p. 38.

In data-driven services switching costs between services can be high. This is because the service the user uses the most will give the provider of that service information about the user which it can use to better tailor the service after that particular user's preferences. This is something another provider will not have managed to do as that personal data have not been shared with it. The other provider will therefore not know the user as good as the provider of the regularly used service.¹⁴⁶ Another issue considered a barrier to entry related to switching costs is the prohibition of data portability. Data portability is the right to transfer data from one electronic processing system to and into another, without being prevented from doing so by the controller.¹⁴⁷ The company collecting the data locks data by imposing contractual restrictions on customers and consumers who are then not able to export their data to another provider.¹⁴⁸

4.3. Theories of harm related to data

4.3.1. General

When a competition authority alleges that the competition rules have been breached, a theory of harm has to be presented.¹⁴⁹ This is to ensure that the approach to the anti-competitive assessment is logically consistent and not speculative. A well-developed theory of harm should articulate how competition, and ultimately, consumers will be harmed relative to an appropriately defined counter-factual, it should be internally logically consistent, be consistent with the incentives that the parties face, and, at least not be inconsistent with the available empirical evidence.¹⁵⁰ Theories of harm related to data are the combination of datasets, input foreclosure, and the use of data to strengthen an already existing position.

4.3.2. Combination of data

The strategic aim of a merger could be to acquire and better access additional data which later can be linked to the company's existing datasets. It might not only be the case in horizontal mergers to combine datasets, but also in conglomerate mergers where access to more diversified data can further strengthen the economies of scope and improve the quality of the collected data.¹⁵¹ This can give the merged entity a competitive advantage to improve its

¹⁴⁶ *ibid.* p. 29.

¹⁴⁷ GDPR (n 2) art. 20.

¹⁴⁸ Damien Geradin and Monika Kuschewsky, 'Competition Law and Personal Data: Preliminary Thoughts on a Complex Issue' 2013(2) *Concurrences* 1, p. 9-10.

¹⁴⁹ Jones and Sufrin (n 11) p. 46.

¹⁵⁰ H. Zenger & M. Walker 'Theories of Harm in European Competition Law: A Progress Report' in J. Boureois and D. Waelbrock (eds.), *Ten Years of Effects-based Approach in EU Competition Law* (Bruylant, 2012) p. 185.

¹⁵¹ Schepp and Wambach (n 135) p. 123.

products in a way that its competitors are unable to match.¹⁵² The competition concern stemming from the combination of different sets of data, therefore, is that competitors will not be able to replicate the information that can be extracted from the combination. This will lead to higher costs on the competitor's behalf to produce the same information which will then be reflected in the price and quality of the service.¹⁵³

4.3.3. Input foreclosure

Input foreclosure is a common concern when dealing with mergers, and poses a threat to competition in data-driven markets where data works as the input. Input foreclosure occurs when the new merged entity, on the upstream market, would be likely to restrict access to the data that it otherwise would have supplied to the customers downstream. This raises the costs for the downstream competitors by making it harder for them to obtain the data for the same prices and conditions as before the merger. In this situation the merged entity can profitably increase its prices charged to consumers. It is not necessary to drive competitors out of the market for the merger to give rise to a SIEC, it is enough that the increased input costs would lead to higher prices for the consumers.¹⁵⁴ Input foreclosure can take different forms; the merged entity may decide not to deal with its competitors in the downstream market at all, it may decide to restrict supplies, raise prices when supplying competitors or making the conditions less favourable.¹⁵⁵ An input foreclosure only raises competition problems if it concerns an important input for the downstream product.¹⁵⁶

4.3.4. Data to strengthen position

A merger between two companies in separate upstream and downstream markets, where they hold strong market positions, have the ability to hinder new competitors, or start-ups, entering the market. This is done by acquiring them before they increase their market position and pose too much competition or to make sure that other, already existing competitors do not acquire these potential new competitors.¹⁵⁷ Online service providers consuming big personal data may want to merge with software and hardware producers to gain access to downstream company's valuable data-troves which they have collected from the users using their services and products.¹⁵⁸ This type of acquisition can increase the incumbent's market power and lead

¹⁵² Ocello, E. et al., What's Up with Merger Control in the Digital Sector? Lessons from the Facebook/WhatsApp EU merger case, Competition Merger Brief 1/2015 – Article 1, p. 6.

¹⁵³ Autorité de la concurrence & Bundeskartellamt (n 14) p. 16.

¹⁵⁴ Non-Horizontal Merger Guidelines (n 56) para. 31.

¹⁵⁵ *ibid.* para. 33.

¹⁵⁶ *ibid.* para. 34.

¹⁵⁷ Stucke and Grunes (n 13) p. 74-99.

¹⁵⁸ Autorité de la concurrence & Bundeskartellamt (n 14) p. 16.

to the ability of it to raise prices, reduce outputs and quality harming competitors and, ultimately, consumers.¹⁵⁹

4.4. Characteristics of data lessening its competitive concerns

4.4.1. Availability of data

Data as a raw material or input differ from other such kinds because it is considered non-rivalrous. That means that one person or entity consuming data does not stop another to do so. Data does not have an end and cannot be used up. It can be held or used by many, at the same time, without losing its value.¹⁶⁰ However, by defining data as non-rivalrous the concepts of its functionality and its value are combined, as are the concepts of non-rival goods with non-excludable goods. The fact that data easily can be copied does not mean its value is preserved. The more people having the same information decrease the value of it. Furthermore, not all data is non-excludable, i.e. if one person or entity is consuming a certain type of data, it is impossible to stop them from doing so. If data would be both non-rivalrous and non-excludable it would be considered a public good.¹⁶¹ When something is a public good it can be hard to get people to pay to consume it, which is why the public goods might not be provided by sheer market forces.¹⁶² Data can, however, not be a pure public good because people or companies may be excluded from using it. Data, of particular relevance for companies, are in exclusive control of the company that collected it. That company is the decider of its use and can deny competitors access to it.¹⁶³

In the context of the non-rivalrous nature of data it has also been suggested that data is ubiquitous, low cost and widely available.¹⁶⁴ Increased internet access and smartphone usage make sure that users are constantly creating data and leaving traces behind of their needs and preferences. The tools and data needed for storage and analysis are available for a service already when it launches which means that the service can have benefitted from insights into consumers' needs and preferences before any user has even interacted with the service. Data has therefore near-zero marginal costs for production and distribution.¹⁶⁵

¹⁵⁹ Horizontal Merger Guidelines (n 56) para. 8.

¹⁶⁰ Schepp and Wambach (n 135) p. 121.

¹⁶¹ Stucke and Grunes (n 13) p. 44-45.

¹⁶² The Economist, *Economics A-Z* <<http://www.economist.com/economics-a-to-z/p#node-21529442>>, accessed 10 November 2017.

¹⁶³ Schepp and Wambach (n 135) p. 121.

¹⁶⁴ Darren Tucker and Hill Wellford, 'Big Mistakes Regarding Big Data' The Antitrust Source (2014), p. 4.

¹⁶⁵ D. Daniel Sokol and Roisin E. Comerford 'Does Antitrust Have a Role to Play in Regulation Big Data?' in Roger D. Blair & D. Daniel Sokol (eds.), *Cambridge Handbook of Antitrust, Intellectual Property and High Tech* (Cambridge University Press, 2016) p. 6.

The occurrence of multi-homing is something that further makes the availability of data even greater. It is a phenomenon where a user uses several different services, for the same purpose, and therefore shares its data with multiple providers of that specific kind of service. In markets characterized by multi-homing a provider will not alone have access to data from one individual user as that user's has also shared its data with the competitors of the provider.¹⁶⁶

4.4.2. Substitutability of data

The substitutability of data is another circumstance that lessens the competitive implications of data. The higher degree of substitutability between merging firms' products make it more likely that the merged entity will raise prices significantly.¹⁶⁷ Online platforms, however, are quite distinguished between themselves and the most useful data to one platform might not be as useful to another. The relevance of some kind of data may vary between business models and can be relevant for one platform but not another, even though they provide the same kind of service. There is no single-product market for data because much of the data that exists cannot be substituted for other data.¹⁶⁸

Therefore, new entrants tend to niche themselves in order to meet the more precise and exact consumer needs but also to better compete in terms of data. In the niche, where the incumbent does not have the necessary data, the entrant can gather the specified data to catch up on the incumbent when it comes to the amount of valuable data. A newcomer, or a maverick firm, plays therefore a bigger role in comparison to traditional industries.¹⁶⁹

4.4.3. Value of data

The value of data has a limited span of life and increases the faster it can be collected and analysed, but it eventually lessens over time. Any competitive advantage from data is temporary and new entrants are not necessarily disadvantaged in relation to the incumbent when it comes to data collection and analysis. Conversely, it means that the incumbent is not necessarily benefitted by the possession of a large volume of data as velocity is needed to create the value of it.¹⁷⁰ Therefore, in markets relying on the timeliness of data, targeted advertising for example, the potential competitors do not have to build an equally large

¹⁶⁶ *ibid.* p. 13.

¹⁶⁷ Horizontal Merger Guidelines (n 56) para. 28.

¹⁶⁸ Schepp and Wambach (n 135) p. 120.

¹⁶⁹ Sokol & Comerford (n 165) p. 7.

¹⁷⁰ *ibid.*

dataset as the incumbent. Instead they can rely on finding ways to gather highly relevant and timely data.¹⁷¹

4.4.4. Other necessities to derive value of data

Only gathering big amounts of data does not really provide the knowledge to improve the service and the monetization of it. In order to derive value from data certain competences and technologies need to be in place. The competitive success comes, inter alia, from the engineering talent, the quality of the service, the speed of innovation, attention to consumers' needs and the technology to analyse the data. Therefore, to turn data into value, the company needs to develop a toolkit for extracting information valuable for the improvement of the service, and the organisational competence to provide the quality, innovation and the ability to meet consumer demands.¹⁷²

4.5. Conclusive summary: Is data a competitive concern?

Competition on a multi-sided market can take place in three areas: on the free side, the paid side, and the side where the important input is produced. The competition concerns regarding data in the context of mergers constitute of indications of market power through barriers to entry a market, and ways to use data to harm competition. The barriers to entry a market take the form of legal advantages, technical advantages, and advantages stemming from the position of the incumbent. The technical advantages consist mainly of economies of scale and scope on both the supply and demand side. The positive feed-back loop together with direct and indirect network effects have the ability to make it more difficult for competitors to enter the market and make it prone to tip in favour of the incumbent. Data portability and switching costs are other entry barriers related to the established position of the incumbent.

The theories of harm related to the use of data concerns the combination of datasets which competitors would not be able to replicate, the foreclosure of data as an important input in businesses, and the hunt of newcomers on the market in order to achieve more data to strengthen the market power. There are, however, circumstances which are lessening the competitive constraints of data. The fact that data is available to everyone, cannot be consumed, and that users multi-home mean that data is possible for everyone to mine, even though its value decreases the more having access to it. The value is further something that lessens competitive constraints. Although a company have access to large volumes of data it is the velocity of the analyses of the data that creates value, which makes it possible to

¹⁷¹ Schepp and Wambach (n 135) p. 121.

¹⁷² Sokol and Comerford (n 165) p. 7; *ibid.* p. 123.

compete without access to large datasets as long as the velocity of the data is greater. Data is also not always as useful to one service provider as it is to another which can make the substitutability of data low.

5. Merger decisions concerning personal data in the ambit of big data

5.1. TomTom/Tele Atlas

5.1.1. The parties

TomTom, a manufacturer of portable navigation devices and a supplier of navigation software for use in navigation devices, launched an offer to buy the listed shares in Tele Atlas, one of two main suppliers of digital map databases for navigation and other end-uses. It was constituted a concentration through the proposed acquisition but was not considered to have Community dimension as the parties did not meet the turnover thresholds. The merger would, however, have been subject for investigation according to national merger control in four Member States, and therefore a reasoned submission for referral to the Commission was sent. No other Member State objected and the proposed merger deemed to have a Community dimension.¹⁷³

5.1.2. Input foreclosure

The Commission found it likely that the merged entity would have the ability to foreclose competing manufacturers of portable navigation devices and software manufacturers either by increasing prices or by providing degraded maps or delayed updates. The conclusion was reached because the merged entity would, post-merger, have a significant degree of market power in the upstream market for navigable digital map databases, the navigable digital map databases are important input for the downstream market, and there were not sufficient timely and effective counter-strategies from rival firms. Tele Atlas sold map databases above marginal cost, had a market share of over 50% and had only one competitor with the same coverage and level of quality in their products. The input was considered critical components in the production of portable navigation devices. The other competitor in the upstream market did not constitute enough constraints on Tele Atlas, nor would a new entry on the market be likely, and the licences intermediaries had with both companies, which granted them certain conditions irrespective of the merger, only represented a third of the market.¹⁷⁴

¹⁷³ COMP/M.4854, *TomTom/Tele Atlas*, para. 1-6.

¹⁷⁴ *ibid.* para. 193-210.

The Commission found, however, that the merged entity would not have the incentive to increase prices in a manner that would lead to anti-competitive effects downstream and concluded that the proposed transaction would not lead to any anti-competitive harm on the downstream market.¹⁷⁵

A concern of exchange of confidential information arose during the investigation. Third parties feared that they would have to share information on their future competitive actions with Tele Atlas, and that that information could be obtained by TomTom. In its assessment the Commission considered the incentives of the parties to protect confidential information. Confidentiality concerns could be seen as degradation in the product because the perceived value the map holds for manufacturers of portable navigation devices would be lower if it was feared that confidential information would be shared with a competitor. The incentive to protect the confidential information was found in that the merged entity's customers would regard their database as less valuable and therefore consider switching to the competing supplier. The Commission therefore concluded that there would be incentives for Tele Atlas to mitigate its third party concerns related to confidentiality.¹⁷⁶

5.1.3. An efficiency defence

The parties argued that the merger would allow them to produce better maps faster. The integration of TomTom's data would improve Tele Atlas's map databases through feedback data from customers. The Commission found that the end-customers would certainly benefit from the improved database but that those kinds of efficiencies are difficult to quantify and the estimates which the parties provided were not particularly convincing. The Commission did not precise the magnitude of the likely efficiencies since the merger lacked anti-competitive effects with or without efficiencies.¹⁷⁷

5.2. Google/DoubleClick

5.2.1. The parties

Google is the operator of the most popular search engine, provider of free functionalities and software (toolbar for searches, Gmail, Google Maps, YouTube etc.), and provider of online advertising space on its own services and partner websites. Almost all of its revenues are derived from online advertising. DoubleClick mainly sells ad serving, management and reporting technology. It is the owner of a search engine management agency and an ad exchange platform. Google's wholly-owned subsidiary acquired all the shares in the parent

¹⁷⁵ *ibid.* para. 230, 237, 251.

¹⁷⁶ *ibid.* para. 256, 272-276.

¹⁷⁷ *ibid.* para. 238-250.

holding company owning DoubleClick and the transaction was considered a concentration. The merger was not considered to have a Community dimension as the parties did not meet the turnover thresholds but it would have been subject for investigation according to national merger control in four Member States. A reasoned submission was therefore sent for referral to the Commission, no other Member State objected, and the proposed merger deemed to have a Community dimension.¹⁷⁸

5.2.2. Focus of the assessment

The Commission made it clear in their decision that it assessed the merger under EU competition law, and the objectives the EUMR sets out. That meant that the decision was without prejudice to the obligations of the merging parties under data protection and privacy law.¹⁷⁹

The merger was subject for review in the U.S. as well where the FTC issued a statement. They commenced their investigation by stating that the FTC only focuses its assessment of mergers by identifying and remedying transactions that harm competition. They, however, took into account the possibility that the proposed merger could adversely affect non-price attributes of competition, such as consumer privacy. Yet, they concluded that privacy concerns, as such, did not prove a basis to challenge the transaction.¹⁸⁰

5.2.3. Combination of data

The Commission investigated the merger from both horizontal and non-horizontal aspects. In regard to the non-horizontal aspects the Commission assessed three different forms of foreclosure. One of these forms of foreclosure was based on the combination of Google and DoubleClick's assets. There were concerns that the combination of customer provided information data would allow the merged entity to achieve a position which the competitors could not replicate. That would result in the competitors to be marginalised and allow Google to raise its prices for intermediation services. The Commission noted that such a combination of data collections, by using IP addresses, cookie IDs and connection times to figure out which search terms were used and what websites were visited, could result in individual users' search histories to be linked with previous behaviour on the internet. That information could be used to better target ads to users.¹⁸¹

¹⁷⁸ COMP/M.4731, *Google/DoubleClick*, para. 1-7.

¹⁷⁹ *ibid.* para. 368.

¹⁸⁰ Statement of FTC concerning *Google/DoubleClick*, FTC File No. 071-0170, p. 2-3.

¹⁸¹ *Google/DoubleClick* (n 178) para. 359-360.

The parties stated however that contractual provisions prevented the use of data for behavioural targeting. The Commission stated that such provisions can be renegotiated as a result of the merged entity's new position or as a compensation given to the customers for the intrusion. There are, however, no incentives for DoubleClick to renegotiate those provisions as their non-neutral position as a service provider can make customers switch to another provider; and they have no ability to renegotiate either, as advertisers do not have an interest in other advertisers having access to their data. It would therefore be unlikely that the combination of data sets would give the merged entity the competitive advantage that could not be matched by its competitors. The data the merged entity would have access to is furthermore something that is already available to their competitors. There are third parties, internet service providers and other companies having access to users' behaviour on the internet and offering different targeting services. The Commission therefore concluded that bringing together the parties data would be unlikely to squeeze out competitors and enable them to charge higher prices for their intermediation services.¹⁸²

In the FTC's assessment of the merger the concern of combining Google and DoubleClick's datasets was addressed. It recognized the importance of the contractual provisions DoubleClick had with its customers, to whom the data belonged, that they were not allowed to disclose that information, and that Google respected those provisions. If Google were to change or breach those provisions it was not supported in evidence that, by access to DoubleClick's data, they would confer market power. The FTC further noted that neither of the data available to Google and DoubleClick constituted an essential input to a successful advertising product. The competitors to the merged entity have themselves access to valuable stores of data, are vertically integrated, and appear to be well-positioned to compete vigorously against Google in the ad intermediation marketplace.¹⁸³

The decision of the FTC was voted four against one where the dissenting opinion of Commissioner Pamela Jones Harbour considered that the merger could not be cleared without conditions. She thought that neither the competition nor the privacy interests of consumers were adequately addressed in the decision of FTC.¹⁸⁴

¹⁸² *ibid.* para. 360-366.

¹⁸³ Statement of FTC concerning Google/DoubleClick, FTC File No. 071-0170, p. 12-13.

¹⁸⁴ In the matter of Google/DoubleClick, FTC File No. 071-0170, Dissenting Statement of Commissioner Pamela Jones Harbour.

5.3. Telefónica UK/Vodafone UK/Everything Everywhere/JV

5.3.1. The parties

The two companies, Telefónica UK and Vodafone UK, together with the joint venture Everything Everywhere notified the Commission of a proposed merger where the three parties would acquire joint control over a newly created company through a joint venture. Everything Everywhere and Telefónica UK are involved in fixed and mobile telephony services whereas Vodafone UK is active in the mobile telephony retail market. The three companies would hold 33.3% of the shares and the possibility to exercise decisive influence through negative control in the joint venture. The joint venture was considered a full-functioning joint venture performing the function of an autonomous economic entity and was therefore considered a concentration. The merger further met the turnover thresholds and had a Union dimension.¹⁸⁵

5.3.2. Input foreclosure, combining data

The joint venture company would be active in the supply of data analytics services in respect of online and offline advertising and transactions, providing reporting, business development, and loyalty analytics. The three companies, and other third parties taking part of the joint venture company's services, would supply the joint venture company with consumer data. The joint venture company would use the supplied data and collect data on its own from its other services, and analyse it all in order to provide its customers with valuable insights into customer behaviour. The Commission investigated the issue of foreclosure of competing providers of targeted advertising services. It was thought that the joint venture company could combine personal information, location data, response data, social behaviour data and browsing data to develop a unique database which would become an important input for targeted mobile advertising which no competitor would be able to replicate. The database as an essential input would create a situation where other providers of mobile advertising services could be dependent of the joint venture company.¹⁸⁶ The Commission noted that the information available to the joint venture company was also available to existing and new market players which are already using it to provide targeted advertising. Customers generally give their personal data to many market players and personal data was therefore generally understood as a commodity. The Commission concluded that the joint venture company would be able to collect consumer information valuable for its big data analytics and advertising services. There were, however, many other strong competitors offering

¹⁸⁵ COMP/M.6314, *Telefónica UK/Vodafone UK/Everything Everywhere/JV*, para. 1-13.

¹⁸⁶ *ibid.* para. 529-534.

comparable solutions and would therefore not be foreclosed from an essential input and the joint venture company would not have a negative effect on competition.¹⁸⁷

5.4. Publicis/Omnicon

5.4.1. The parties

Publicis is an international communications and advertising group which provide a range of advertising services including digital advertising, creative services, media strategy etc. Omnicom is a global advertising, marketing and communications company offering a range of advertising, marketing, media and related services. Publicis will merge with HoldCo, a holding company, and cease to exist. Omnicom will merge with a wholly owned subsidiary to HoldCo where the subsidiary will cease to exist. The shareholders of Publicis and Omnicom will each hold 50% of the equity of the merged group, and it therefore constitutes a concentration. The parties reached the turnover thresholds and the merger had an EU-dimension.¹⁸⁸

5.4.2. Input foreclosure

The parties submitted that one of the rationales with the merger was to develop its activity in big data analytics. The Commission therefore assessed whether competing advertising agencies would have access to big data from other providers even if the merged entity would create its own big data analytics platform and not grant access to it to its competitors. Competitors had confirmed that they have access to a large number of third party suppliers of big data and developed their own tools and big data subsidiaries. None of the competitors thought that the merged entity would be better placed than its competitors to get access to big data analytics. The majority of the competitors thought that they would not be negatively impacted by not getting access to the merged entity's big data analytics platform. The Commission therefore concluded that there will remain a sufficient number of competitors providing big data analytics, and that no serious doubts would rise from the merger.¹⁸⁹

5.5. Facebook/WhatsApp

5.5.1. The parties

Facebook is a provider of websites and mobile applications offering social networking with consumer communications and photo/video sharing functionalities. On these websites and mobile applications Facebook also provides online advertising space. WhatsApp is a provider

¹⁸⁷ *ibid.* para. 538-558.

¹⁸⁸ COMP/M. 7023 *Publicis/Omnicon*, para. 3-8.

¹⁸⁹ *ibid.* para. 617, 625-630.

of consumer communications services on their mobile app and does not sell advertising space. Facebook acquired WhatsApp by an agreement where WhatsApp would successively merge into wholly-owned subsidiaries of Facebook and Facebook would therefore gain sole control. The merger was considered a concentration. The merger was not considered to have a Community dimension as the parties did not meet the turnover thresholds but it would have been subject for investigation according to national merger control in three Member States. A reasoned submission was therefore sent for referral to the Commission, no other Member State objected, and the proposed merger deemed to have a Community dimension.¹⁹⁰

5.5.2. Focus of the assessment

In its assessment concerning online advertising services the Commission stated that the analysis regarding potential data concentration was only analysed to the extent that Facebook was likely to strengthen its position in the online advertising market. Any privacy-related concerns flowing from the merged data sets available to Facebook after the merger did not fall within the scope of EU competition law but instead within the scope of EU data protection rules.¹⁹¹

5.5.3. Data to strengthen position

The Commission noted that since WhatsApp did not sell advertisements or collected any data about its users the merger would not increase the amount of data potentially available to Facebook. The Commission analysed, however, two theories of harm that could result in Facebook strengthening its position on the online advertising market: by introducing advertisement on WhatsApp, and using WhatsApp as a source of user data for the purpose of targeted advertising.¹⁹²

Introducing WhatsApp as a provider of online advertising space could result in targeted advertising on the application based on user data collected from WhatsApp's users and Facebook's users who are also active on WhatsApp. This could reinforce Facebook's position in the online advertising market. The Commission stated that introducing advertisement on WhatsApp would theoretically be possible but that a change in WhatsApp's privacy policy was necessary to do that. There were, however, few incentives for doing so. By introducing advertisement WhatsApp would deviate from its 'no-ads' strategy and users might switch to other applications offering the same service without ads. Furthermore, abandoning the end-to-end encryption could create dissatisfaction with the users who significantly value privacy and

¹⁹⁰ Comp/M.7217, *Facebook/WhatsApp*, para. 1-12.

¹⁹¹ *ibid.* para. 164.

¹⁹² *ibid.* para. 165-167.

security. That effect had actually been seen as a high number of German users switched from WhatsApp to another application within 24 hours from the announcement of the merger. The Commission noted that even though advertising was introduced to WhatsApp competition concerns would only be raised if there were not a sufficient number of alternatives to Facebook for the purchase of online advertising space. It then concluded that there will continue to be, post-merger, a sufficient number of actual and potential competitors offering targeted advertising.¹⁹³

Using WhatsApp as a source of user data for advertising purposes could result in collecting data from its users to improve the accuracy of targeted ads on Facebook's services where users also are active on WhatsApp. This could strengthen Facebook's position in the online advertising market since it would have access to even more data. Facebook's ability to use the data from WhatsApp would require a change in WhatsApp's privacy policy, a match between each user's WhatsApp profile to their Facebook profile (which Facebook claimed there were major technical obstacles to carry out), and abandoning the end-to-end encryption. The incentive to start collecting data from WhatsApp would be little as users would switch to other applications not as intrusive. The Commission noted again that even though a collection of data would begin post-merger the merger would only raise competition concerns if Facebook can strengthen its position in advertising as a result of the data under its control. And again, the Commission concluded that there will be a sufficiently large amount of user data valuable for advertising outside of Facebook's control even after the merger.¹⁹⁴

In connection to the merger review, in both the EU and the U.S., Facebook and WhatsApp respectively publicly pledged to not merge the two databases of user information and not to not violate WhatsApp's privacy policy.¹⁹⁵ The FTC sent a letter to the parties urging them to honour these promises made to the consumers as it otherwise could constitute deceptive or unfair practices in violation of Section 5 of the Federal Trade Commission Act.¹⁹⁶

¹⁹³ *ibid.* para. 168-179.

¹⁹⁴ *ibid.* para. 180-189.

¹⁹⁵ For Facebook's statements see Jessica Guynn *Mark Zuckerberg: WhatsApp worth even more than \$19 billion* Los Angeles Times (24 February 2014) <<http://articles.latimes.com/2014/feb/24/business/la-fi-tn-mark-zuckerberg-whatsapp-worth-even-more-than-19-billion-20140224>> accessed 2 November 2017; Jessica Guynn *Privacy Groups urge FTC to probe Facebook's deal to buy WhatsApp* Los Angeles Times (6 March 2014) <<http://www.latimes.com/business/technology/la-fi-tn-privacy-groups-urge-ftc-to-probe-facebooks-whatsapp-deal-20140306-story.html>> accessed 2 November 2017. For WhatsApp's statements see WhatsApp Blog *Facebook* (19 February 2014) <<https://blog.whatsapp.com/499/Facebook>> accessed 2 November 2017.

¹⁹⁶ Letter from Jessica Rich, Director, Bureau of Consumer Protection, Federal Trade Commission, to Erin Egan, Chief Privacy Officer, Facebook Inc., and Anne Hoge, General Counsel, WhatsApp Inc. (20 April 2014).

5.5.4. Afterplay

Two years after the merger was cleared the Commission sent a Statement of Objection to Facebook alleging the company to have provided incorrect or misleading information during the merger review. During the review Facebook had submitted that it would be unable to establish reliable matching between user's accounts on Facebook and WhatsApp. In August 2016 WhatsApp had changed its privacy policy to make it able to link a user's phone number to their Facebook identity. The Commission took the view that the technical possibility of matching identities between the services had existed already during the investigation of the merger and Facebook had therefore submitted incorrect or misleading information. The Commission pointed out that the investigation was limited to procedural rules, would not impact on the clearance decision, and that the investigation was unrelated to privacy, data protection or consumer protection issues.¹⁹⁷

5.6. Microsoft/LinkedIn

5.6.1. The parties

Microsoft is a global technology company which offers operating systems for personal computers, servers and mobile devices, and other services such as cloud-based solutions, cross-device productivity applications, hardware devices and online advertising (through its search engine Bing). LinkedIn is a professional social network which generates revenue through recruiting tools and online education courses, market solutions allowing advertising to its members, and premium subscriptions. Through an agreement plan of merger Microsoft would acquire all the shares in LinkedIn and gain sole control. The merger was considered a concentration. The merger had an EU dimension since the parties met the turnover thresholds.¹⁹⁸

5.6.2. Combination of data

The Commission investigated the combination of the parties' data in relation to online advertising. Any such combination of data could only be implemented to the extent it is allowed by applicable data protection rules. Currently the parties are subject to relevant national data protection legislation through the Data Protection Directive¹⁹⁹. When the GDPR would be applicable the Commission noted that Microsoft's ability to access and process its users' personal data would be further limited. Under the assumption that a combination of the

¹⁹⁷ European Commission press release *Mergers: Commission alleges Facebook provided misleading information about WhatsApp takeover* (Brussels 20 December 2016).

¹⁹⁸ COMP/M.8124 *Microsoft/LinkedIn*, para. 2-7.

¹⁹⁹ Directive 95/46/EC of The European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data.

two data sets were allowed under data protection legislation there were two ways in which the combined data could raise horizontal issues. The combination could increase the merged entity's market power or increase barriers to entry in the market for actual or potential competitors, and it could eliminate competition between the parties who previously competed with each other on the basis of the data they controlled. The Commission concluded, though, that these concerns were not likely to rise from the proposed merger. Microsoft and LinkedIn do not make available their data to third parties for advertising purposes, there will continue to be a large amount of user data valuable for advertising out of Microsoft's control, and the parties are small market players and only compete with each other to a limited extent in online advertising.²⁰⁰

The Commission recognised that privacy related concerns as such do not fall within the scope of competition law but that it can be taken into account in the assessment. If consumers see it as a significant factor of quality, and the merging parties compete with each other on it, it can be relevant for the assessment. The Commission concluded that it is an important parameter of competition between professional social networks on the market.²⁰¹

5.6.3. Input foreclosure

The Commission investigated whether LinkedIn's full data could constitute an important input for machine learning in the developing and functioning of advanced functionalities in customer relationship management software solutions.²⁰²

Regarding Microsoft's ability to foreclose the Commission noted that LinkedIn did not have a significant market power in the upstream market for the concerned data and was not licencing data to third parties. The data protection laws further limit Microsoft to undertake any treatment of LinkedIn's data and will be even stricter when the GDPR is applicable. The sellers of customer relationship management software are already offering advanced functionalities which have been developed without access to LinkedIn's full data. There are also other alternatives for the sources of data available as input. But, if it would be an important input in the future, it would only be one of many types of data needed for the development of the said purpose. Not only is LinkedIn's full data only third party data, which together with in-house customer data are the two data sources necessary, the relevancy of it

²⁰⁰ *ibid.* para. 167-181.

²⁰¹ European Commission press release *Mergers: Commission approves acquisition of LinkedIn by Microsoft, subject to conditions* (Brussels 6 December 2016).

²⁰² *Microsoft/LinkedIn* (n 199) para. 246-247.

depends on the industry. The Commission therefore considered that LinkedIn's full data neither is, nor will be in the near future, an important input.²⁰³

In regard to Microsoft's incentive to foreclose the Commission considered that customers unwillingness to switch providers and that all of Microsoft's largest competitors offer machine learning. Any strategy to restrict access to LinkedIn's full data for Microsoft's competitors risks turning out in losses which would not be compensated by the gains from an expanded market share. Microsoft's intentions in their internal documents and their behaviour regarding their other products suggest that they have incentive to continue collaboration with other providers. The Commission concluded that it is at least unclear whether Microsoft has the incentive to foreclose competitors by restricting the access to LinkedIn's full data.²⁰⁴

5.6.4. Data to strengthen position

The Commission assessed Microsoft's ability and incentive to, post-merger, leverage its strong market position from the markets for operating systems for personal computers and productivity software in the EEA to the market for professional social network services by means of exclusionary practices. In that assessment, of the overall likely impact on effective competition, the Commission discussed network effects in the market for professional social network services. If that market would 'tip' LinkedIn would be the only professional social network service provider in the EEA. The impact that would have on consumers would be twofold. Firstly, there would be a reduction in consumer choice of professional social networking service. Secondly, in case the foreclosure effects would lead to the marginalisation of an existing competitor offering a greater degree of privacy protection, the merger would also restrict consumer choice in relation to that important parameter of competition when choosing professional social network.²⁰⁵

5.6.5. Commitments

Microsoft offered a series of commitments to alleviate the competition concerns the Commission found. Those commitments included personal computer manufacturers to choose, over a five year period, if they want to install LinkedIn on Windows, competing networks continue to enjoy certain interoperability with Microsoft's products, and allow competing networks access to data stored in Microsoft Cloud.²⁰⁶

²⁰³ *ibid.* para. 253-264.

²⁰⁴ *ibid.* para. 265-272.

²⁰⁵ *ibid.* para. 295, 348-350.

²⁰⁶ European Commission press release *Mergers: Commission approves acquisition of LinkedIn by Microsoft, subject to conditions* (Brussels 6 December 2016).

5.7. Conclusive summary: How have the competitive concerns of data been assessed?

In TomTom/TeleAtlas the Commission recognized the importance of big data. Since the merging parties were active in an upstream and downstream market the Commission investigated input foreclosure. It concluded that TomTom would have the ability to foreclose but not the incentive to do so. The Commission also considered the dimension of privacy as the concern that TomTom would have insight into its competitors businesses arose. If it was feared that confidential information would be shared with a competitor it could be seen as degradation in the product and the value of it would be lower. The merging parties put forward an efficiency defence which the Commission figured would benefit end-consumers but did not really precise the magnitude of them because the merger lacked anti-competitive effects with or without efficiencies.

The first competition case dealing with privacy was the Google/DoubleClick merger. The Commission explicitly stated that it assessed the merger under competition law and that the decision was without prejudice to any obligations under data protection and privacy law. It examined the concern that the combination of the two companies' data, and access to personal data, could not be replicated by competitors. It was found that the potential data that would be available to the merged entity would already be available to competitors and the competitive concern would therefore be eliminated. The FTC stated that privacy concerns from the merger could affect non-price competition but concluded that it was not a basis to challenge the transaction on. The FTC then reasoned in the same way as the Commission had: the data available to the merged entity would already be available to competitors. The dissenting opinion of the FTC thought that neither the competition nor the privacy interests of consumers had been adequately addressed.

In the joint venture between Telefónica UK, Vodafone UK, and Everything Everywhere the concern was that the three companies, and other third parties, would supply the joint venture with personal data which would become an important input that no competitor would be able to replicate. The Commission reasoned in a similar manner here as in the Google/DoubleClick case and concluded that other competitors were offering the same services. Therefore, competitors would already have access to the same kind of data and the joint venture would have no negative effect on competition.

The merger between Publicis and Omnicom raised the concern that the merged entity would create big data analytics platform of its own and not grant access to its competitors. The investigation showed that there were a sufficient number of players on the market

supplying the same service as the merged entity would, and competitors thought that they would not be negatively impacted by it. It was concluded that no serious doubts would rise from the merger.

In Facebook/WhatsApp the Commission once again stated that any eventual privacy concerns stemming from the merger would fall within the scope of EU data protection rules and not the rules of competition. The Commission investigated if the introduction of advertisement on WhatsApp, and using WhatsApp as a source of user data for target advertising, would harm competition by strengthening Facebook's position in the online advertising market. The Commission concluded that the ability to carry out both of the concerns existed but that the incentive to do so was little. Facebook would not want to change the privacy conditions of WhatsApp and soil WhatsApp's reputation as a privacy-friendly service. The Commission further noted that there would be a large amount of user data available for competitors outside of Facebook's control and concluded that the merger did not pose any threat to competition. In addition, both parties publicly promised not to violate the privacy policy of WhatsApp, and the FTC sent a letter urging them not to. Two years after the clearance the Commission sent a Statement of Objection to Facebook alleging that it had provided incorrect information during the review. The Commission clearly stated that the investigation only concerned procedural rules and was not related to any privacy, data protection or consumer protection issues.

The merger between Microsoft and LinkedIn rendered the Commission to investigate if the combination of their datasets could cause competition concerns. The combination would only be allowed to the extent which data protection rules would allow. Even if the combination would be allowed under data protection rules it would not cause concerns as the parties do not make their data available for third parties for advertising purposes and there would continue to be a large amount of data outside the control of the merged entity. It was noted that privacy related concerns as such do not fall within the scope of competition law but if is regarded as a factor of quality, and companies compete on it, it could be relevant for the competitive assessment. The Commission also investigated if LinkedIn's data could constitute an important input. Microsoft would be under data protection laws restricting use of LinkedIn's data, the development of certain products have been done without LinkedIn's data as input, and it would only be one type of data needed for the products concerned. Therefore, LinkedIn's data could not be considered an important input. Regarding the incentive by Microsoft to foreclose competitors from LinkedIn's data, their previous behaviour together with that any expansion of its market power would result in losses, made the Commission to

conclude that it was unclear. Another concern that was examined was Microsoft's ability and incentive to leverage its market power from one market to another. In that assessment the Commission considered the harm on consumer if the market would tip because of network effects. The harms in question were that there would be a reduction in consumer choice of services, and a reduction in choice in relation to privacy and protection of personal data. The merger was eventually cleared subject to certain commitments from Microsoft.

As illustrated by the cases above, most mergers have been cleared because of the nature and characteristics of data. The presented theories of harm, and the competitive concerns stemming from them, have often been downplayed by the availability of data. The fact that competitors already have had access to data has reduced the impact of the merger. Another aspect worth taking into account is that only three of the six reviewed mergers met the turnover thresholds.

In regard to privacy and protection of personal data, and its involvement in the merger assessment, the opinion of the Commission has developed. From being quite distinct and clear that privacy and protection of personal data do not constitute a part of competition law, rather being a matter for data and consumer protection law, to acknowledge that it actually can be an important factor of quality companies can compete on. This is in contrast to the FTC which early acknowledged that privacy can be an important parameter to competition on quality. What is also quite clear is the fact that where the merging parties are active on a multi-sided market it is not the free side of the market that has been under scrutiny, where the direct consumer harm can be actualized. It has been the competition on the paid side of the market or for the input that has been assessed. Therefore, despite being recognized as a parameter of competition, the direct consumer harm has never really been examined properly, other as indirect harm through increased market power of the incumbent. Thus, a theory of harm, related to direct consumer harm in the form of exploitation of privacy and protection of personal data, has not yet been assessed by the Commission.

6. Does personal data fit into the current merger review?

6.1. How privacy and protection of personal data can be a part of the current merger review

6.1.1. The turnover-based thresholds

In order for privacy and protection of personal data to become a part of the merger review it has to qualify and reach the thresholds. In data-driven markets this can become a problem as

the consumers not necessarily pay with actual money, and therefore, the acquired company will have minimal or no turnover to calculate. Such a merger will not be reviewed unless it is explicitly asked by the parties.

The European Parliament has conducted a study on the challenges for competition policy in the digital economy where it, inter alia, noted the problems of pre-emptive mergers to the competitive process, and that the turnover-based threshold might not be a practical metric. It concluded that the size of the merging firms is still an appropriate measure for setting a threshold for what mergers need to be scrutinised. It further noted that in merger cases where one of the firms makes a minimal turnover, however, the turnover threshold will not be a practical metric. Instead the European Parliament suggests that the importance of scale economics and network effects should have an impact in the threshold assessment, and that the number of users together with an estimation of the size of the network effects be a better metric.²⁰⁷

The Commission, through its European Commissioner for Competition, has also noted the importance of data and how it affects the turnover thresholds. It is not always the turnover of another company that makes it attractive to acquire, sometimes it is the assets of the company which is what the merging company wants to make available for itself. A merger can clearly affect competition even though it does not meet the required turnover thresholds. By only seeing to turnover of the companies some important mergers needed for a review might be missed out.²⁰⁸ The European Commissioner for Competition has further identified that there is a need to use another metric than the turnover-based threshold. The company that owns the data might not have a large turnover which is why the Commission is exploring if it needs to start looking at the valuable data involved instead, in order to be able to make the merger assessment.²⁰⁹ In a way to explore the alternative possibilities to the turnover-based threshold the Commission has launched a public consultation on the functioning of certain procedural and jurisdictional aspects of the merger control. One of the inquiries concerned the notification thresholds where the Commission is concerned if the turnover-threshold is not efficient enough. It therefore seeks views on the matter from businesses, authorities, and

²⁰⁷ European Parliament ‘Challenges for Competition Policy in a Digitalised Economy’ (Study for the ECON Committee, Directorate-General for Internal Policies, Economic and Monetary Affairs, 2015), p. 60.

²⁰⁸ Speech by Margrethe Vestager ‘Refining the EU merger control system’ Studienvereinigung Kartellrecht (Brussels, 10 March 2016).

²⁰⁹ Speech by Margrethe Vestager ‘Big Data and Competition’ EDPS-BEUC Conference on Big Data (Brussels, 29 September 2016).

policy-makers whether if there is a gap in the merger enforcement since it may not cover all mergers having impact on the common market.²¹⁰

6.1.2. Non-price competition: a question of quality

Once the merger either has reached the turnover-based thresholds or voluntarily been notified to the Commission the privacy and protection of personal data can fall under the assessment of the Commission. Price is not the only factor the Commission has to consider when conducting its merger review. The Commission also recognizes that non-price competitive parameters such as product quality, consumer choice, or innovation might be important.²¹¹ It has been suggested that privacy and protection of personal data constitute a non-price parameter, and that it should be considered a form of competition on quality.²¹² What could amount to a reduction in quality of the product, in terms of privacy and protection of personal data, could be a lower level of privacy resulting from a merger combining different datasets. The acquisition of a competitor with a higher level of privacy may decrease the product quality as well.²¹³

The merger review has, over the past 35 years, moved toward assessing what can be measured, which is short-term pricing effects and short-term productive efficiencies. The competition analyses have often been about the question whether the merger likely will give the parties the power to raise the price of the product or service above competitive levels. The theories of harms that have been used by the authorities have often been focused on the likely impact on prices, and if the exercise of market power can be diminished by sufficient entry timely to hinder the increase in price.²¹⁴ This price-centred approach does not work in data-driven markets where services are offered for free and the potential harms are harder to quantify. When the product is free, with no price to measure, quality will often be a significant parameter of competition. Even though competition agencies can take the aspect of quality into account it has rarely happened. The competition authorities seldom analyse the effects of a merger based mainly, or solely, on non-price parameters of competition.²¹⁵ They seem to lack the tools and methodologies in order to assess privacy as a non-price parameter

²¹⁰ European Commission press release, 'Mergers: Commission seeks feedback on certain aspects of EU merger control' (Brussels, 7 October 2016).

²¹¹ Horizontal Merger Guidelines (n 56) para. 8.

²¹² Stucke and Grunes (n 13) p. 116; Autorité de la concurrence & Bundeskartellamt (n 14) p. 24; EDPS (n 46) p. 17; Schepp and Wambach (n 135) p. 124; Sokol and Comerford (n 165) p. 10; Ocello, E. et al. (n 152) p. 5.; Maureen K Ohlhausen and Alexander Okuliar, 'Competition, consumer protection, and the right (approach) to privacy' (2015) *Antitrust Law Journal*, p. 135.

²¹³ Schepp and Wambach (n 135) p. 124.

²¹⁴ Stucke and Grunes (n 13) p. 107-117.

²¹⁵ *ibid.*

of competition. This is because the dominance of neoclassical price theory for the normative understanding and methodological tools of competition analysis only focuses on price.²¹⁶

The notion of using privacy as a non-price competition parameter works in theory but presents problems in the practical application. Firstly, how to actually measure a reduction in privacy is uncertain. Secondly, even if such measures would exist, it is not for a competition authority to define an optimal level of privacy or to judge what reduction in privacy is acceptable. Thirdly, linkage between data would further mean that other efficiencies would have to be balanced against the privacy intrusion. Fourthly, the potential remedies companies would offer to relieve the competition concerns from linked data, or to safeguard a specific level of privacy, could lead to uneven restrictions on privacy on actors in the same market, which is distorting competition.²¹⁷

Product quality contains more than one aspect and can be measured on more than one dimension. An analysis of the non-price effects involving product quality across several dimensions, function and aesthetics for instance, becomes more difficult if there is a trade-off in consumer welfare between different dimensions. Such an analysis would require a comparison of the relative extent of the harm or benefit to the consumer who prefers one dimension over the other.²¹⁸ The relationship between privacy and other quality features of a service, such as better targeted advertising, is also ambiguous as access to personal data actually can improve the service itself. Some consumers may see an increase in data sharing and collecting as a degradation of the service whereas other consumers may instead see it as a quality improvement.²¹⁹ This would have the competition authority to weigh and compare the harm the consumers who are privacy-sensitive to the benefits the personal data collection and processing gives to the consumers who are not as privacy-sensitive.²²⁰ Furthermore, if subjective determinations were to be included in the assessment it could result in different treatment between mergers as the outcome depends on the preferences of the individual consumers using the service.²²¹

It has, however, been suggested that it is preferable to assess quality, and to analyse a merger, based on quality-adjusted prices instead of focusing on the quality of the product. This is to better satisfy the reigning focus on price. Yet, product quality effects can be

²¹⁶ *ibid.*

²¹⁷ Schepp and Wambach (n 135) p. 124.

²¹⁸ Geoffrey A Manne and Ben Sperry, 'The Problems and Perils of Bootstrapping Privacy and Data into an Antitrust Framework' (2015) *CPI Antitrust Chronicle*, p. 3.

²¹⁹ *ibid.* p. 4.

²²⁰ *ibid.* p. 6.

²²¹ Ohlhausen and Okuliar (n 211) p. 152.

difficult to distinguish from price effects. To remove anticompetitive quality effects from the simultaneous price effects is uncertain and imprecise; one would have to connect the reduction in a certain part of the product quality to a net gain advantage for the monopolist. Proving degradation in product-quality, as well as quality-adjusted prices, is therefore difficult.²²²

Another suggestion is to measure quality using the equivalent to the SSNIP-test, the SSNDQ-test, which stands for a small, but significant, non-transitory decline in quality. The SSNIP-test is usually used to define the relevant market but the SSNDQ-test can give an indication to the detriment in quality of a service. Since the SSNIP-test only measures the hypothetical monopolist's increase in price, in the range of 5-10 percent to evaluate where consumers would turn to get the same product, it cannot be applied to a service that is offered for free. This is because the test is purely mathematical; 5 percent out of nothing is nothing. Privacy and the protection of personal data as a parameter of quality could, on the other hand, be a part of the SSNDQ-test. In order for the test to work properly the quality component has to be measurable, objective, well accepted and transparent. The difficulties in the application of the test, aside from the insecurities of measuring quality mentioned above, are that it is presumed that consumers know when there is degradation in quality and then be willing to switch service. This may not always be the case as the consumer does not have perfect information about the service's privacy policy, and quality generally. In the same trail goes the fact that consumers cannot easily assess the quality parameters of competing services and shift to the one offering better privacy. Then there is also the status quo bias, where consumers use the default option, even though other better alternatives exist.²²³

6.1.3. Creating a theory of privacy harm

The earlier presented theories of harm regarding data put the consumer harm on the customer side of the multi-sided platform. These theories highlight the potential foreclosure effects which might enable the companies providing the platform to raise their prices non-competitively in their online services. This behaviour does, however, only create indirect end-consumer harm if the raised prices are being passed on to consumers for the advertised services.²²⁴

The question if it is possible to formulate a theory of privacy harm on the free side of the multi-sided market in order to assess the direct consumer harm actualizes. In creating a theory

²²² Manne and Sperry (n 217) p. 3.

²²³ Stucke and Grunes (n 13) p. 117-122.

²²⁴ Nathan Newman, 'Search, Antitrust, and the Economics of the Control of User Data' (2014) Yale J. on Reg. 441.

of harm on the free side of the multi-sided platform one has to accept that data can be more than an element of quality. The privacy and protection of personal data can constitute the actual non-monetary price consumers are paying in order to use the services on the free side of the multi-sided market. The personal data transferred in exchange for the service, i.e. the privacy of the consumer, can consequently be described as the price the consumer has to pay when using a service which is offered for free.²²⁵ Therefore, a decrease in privacy in the service might in turn reduce consumer welfare.²²⁶

This theory about direct consumer harm on the account of reduction in privacy is what the German Bundeskartellamt has based an investigation on against Facebook. In its case, the Bundeskartellamt argues that Facebook has exploitatively abused its dominant position by imposing unfair terms on consumers, and therefore violated its privacy rules.²²⁷ The Commission and the CJEU, however, does not particularly deal with exploitative abuses of dominant positions and are quite sceptical about it when it comes to cases of abuse of dominant position.²²⁸ In a merger case, on the other hand, the exploitative abuse could make an appearance. Since the competition authorities' concern is whether the proposed merger grants it market power to raise prices to the detriment of consumers the authorities should be able to assess to what extent privacy as the actual price for a free service is negatively affected by the merger.²²⁹ Instead of focusing on the unilateral effects on price, the competition authority could determine the incentive to impair the level of privacy when removing a close competitor. The unilateral effects analysis could also include the overall effect of the merger on privacy by assessing to what extent the strategic complementarity between the merged entity and its competitor might make other providers to lower their privacy standards.²³⁰

If privacy can be seen as a monetary price, there could be two ways to measure degradation in privacy as a form of price increase. Firstly, the degradation in privacy could be measured in qualitative terms by comparing the evolution of a firm's privacy policy with regard to a given benchmark. Data protection regulation could be regarded as an adequate

²²⁵ Michal S Gal and Daniel L Rubinfeld, 'The Hidden Costs of Free Goods: Implications for Antitrust Enforcement' (2015) NYU Law and Economics Research Paper, p. 2.

²²⁶ Newman (n 223) 442-443.

²²⁷ Bundeskartellamt, 'Bundeskartellamt initiates proceeding against Facebook on suspicion of having abused its market power by infringing data protection rules' (2016).

²²⁸ Case 26/75 General Motors v Commission ECLI:EU:C:1975:150; Case 27/76 United Brands v Commission ECLI:EU:C:1978:2; Communication from the Commission – Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings (2009/C45/02), para. 7.

²²⁹ Autorité de la concurrence & Bundeskartellamt (n 14) p. 23.

²³⁰ Elias Deutscher 'The role of personal data and privacy in merger analysis – a critical reassessment of the EU Commission's Facebook/WhatsApp decision' Paper submitted to ASCOLA conference 2017, p. 15-16.

benchmark for the determination of exploitative pricing in this case. A breach of privacy regulations indicates, therefore, exploitative conduct harming consumers.²³¹ It could also be done by following the development of a company's privacy policy, where the policy does not necessarily violate privacy regulations, but require more disclosure of user information as price increases. A comparison between the level of privacy at a given point in time with the level of privacy the policy had from the beginning, where the difference requires consumers to disclose more personal data, could be an indication on a price increase.²³²

Secondly, privacy can be quantified by measuring the consumers' willingness to pay for privacy. This can be done through conjoint studies which are done by reversed engineering of consumers' purchase decisions, where it is measured how changes in product attributes influence the consumers' preferences and evaluative judgments.²³³

6.1.4. Conclusive analysis: How can privacy and protection of personal data enter the current merger review?

The turnover-based thresholds will be problematic in mergers where the companies make minimal, or no, turnover. The dimension of privacy and protection of personal data will, in such a case, not even qualify for the assessment. In the merger between Facebook and WhatsApp, for example, the assessment would not have fallen under the Commission's scrutiny had it not been for the parties wanting it to. To miss out a review of such a merger makes the competitive concerns of data to fall under the radar of the Commission and the goals of improved consumer welfare goes lost. The problem with the turnover-based threshold in data-driven markets is quite clear: it misses several mergers needed to be assessed. Introducing a threshold focusing on the value of the transaction, to indicate if the impact of the merger goes beyond the border of any national member state, might actually be a more efficient tool in the data economy. A value-based threshold would only expand the existing range of the EUMR to also catch mergers with small, or none, turnovers posing a threat to competition. Using the impact of network effects and users as a metric would be another method probably more precise in catching mergers in data-driven markets. Such a metric would be highly market-specific, though, as not every market is as prone to create network effects and generate users as the data-driven ones. As a complement to the turnover-based threshold it might catch those mergers having low turnovers.

²³¹ Autorité de la concurrence & Bundeskartellamt (n 14) p. 27.

²³² Elias Deutscher (n 229) p. 20-21.

²³³ *ibid.* p. 22.

The idea of letting privacy and protection of personal data to enter the merger review by being assessed as a non-price parameter of quality is well consistent with the consumer welfare goal. A detriment in quality is one of the factors taken into account when assessing how the consumer welfare is affected. When there is price to assess competition authorities have had no problem formulating theories of harm or evaluating the parties' likeliness to raise prices. This is probably because the normative thinking of the dominating neoclassical price theory only focuses on price. Although, when there is no price to take into account in the merger this price-centric approach of the authorities will not work. When the service is offered for free quality emerges as the factor the firms are competing on, and should be assessed accordingly. But how to assess quality and to measure it in practice proves to be difficult. Since quality is a subjective concept and experienced differently by consumers, compared to something as objectively as price, the assessment will be more difficult to carry out. Not only does it differ between what dimension of quality is important to consumers but there is also a difference between those experiencing a reduction in privacy, when that reduction is aimed at improving the service, as a degradation of the quality of the service and those that do not experience such a quality reduction. These subjective determinations might result in mergers being treated differently as well. The ambiguity and legal uncertainty of quality in the assessment is therefore troublesome. These problems present themselves in the test using quality-adjusted prices where it is difficult to connect degradation in quality and a net gain for the monopolist. The aforementioned problems also appear in the SSNDQ-test where the problem of consumers not having perfect information and the status quo bias also make the test difficult.

The earlier formed and tested theories of harm, in the Commission's decisions, only see to the customer side of the multi-sided market. Any harm to consumers on that side comes about indirectly through the raised prices of the customers to the merged entity. If it is possible to come to terms that privacy and protection of personal data can be seen as the price the consumer pays to access a service, and not just a factor of quality, a theory of harm can be formulated. If the privacy or the protection of personal data is lessened a reduction in consumer welfare occurs as the value of the consumer's payment decreases or it is sold at too low a price. This type of exploitative abuse, however, is not typically enforced by competition authorities in cases of abuse of dominance. That might indicate that such a theory will not be investigated further and not have an impact in practice. Since the assessment of mergers focuses on the likeliness of the merged entity being able to raise prices to the detriment of consumers, though, the impact of the exploitative abuse in practice could be greater in merger

cases. By turning privacy and protection of personal data into price, the effects on that price could be assessed within the unilateral effects of a merger. Such an assessment could be done in two ways: by comparing the level of privacy toward privacy legislation or previous levels of privacy, or by measuring consumers' willingness to pay for privacy.

6.2. Should privacy and protection of personal data be a part of the merger policy?

6.2.1. Do data protection and competition serve the same goal?

The argument that privacy and protection of personal data do not belong in competition law is mainly based on that privacy and competition serve different goals. The question whether they actually do reinforces the arguments both for the pro-privacy and contra-privacy standpoints.

Both areas aspire to integrate the internal market. Data protection, through positive integration with the implementation of the Data Protection Directive and even more so with the upcoming GDPR, reaches maximum harmonisation, minimises the divergences between Member States, and introduces data protection where there was none before. Competition, on the other hand, seeks, through negative market integration, to ensure that undertakings not engage in, e.g., behaviour dividing the market through territorial allocation, restrictions on import or parallel trade. Another area where data protection and competition intersect is the concern for the consumer. The consumer welfare standard the Commission has adopted, and the CJEU to some extent, dictates that the individual consumer is the enforcement priority when assessing if a merger is compatible with the internal market. Data protection, in turn, promotes the free flow of personal data between Member States, and protects the fundamental rights and freedoms of natural persons, i.e. consumers. A shared concern between the two is also that a market failure can be the result from asymmetry in power. The market power of undertakings is subject for competition law to deal with, while the power of the merchant in the relationship with the consumer is something for consumer protection law, which data protection is considered to be a part of. It can further be said that competition law and data protection law intervene to regulate the market on different levels of the same spectrum.²³⁴

On the other side, there are arguments that data protection and competition serve different goals, have distinct substantive concerns, and enforces different kinds of harm.²³⁵ Consumer protection law seeks to ensure the integrity of each specific contractual transaction, and therefore applies a microeconomic perspective to the consumer harm. This is in contrast to

²³⁴ Costa-Cabral and Lynskey (n 47) p. 9-10.

²³⁵ Sokol and Comerford (n 167) p. 17; Autorité de la concurrence & Bundeskartellamt (n 14) p. 23.

competition law which focus on the broader macroeconomic harms, mainly with maintaining an efficient price discovery in the market.²³⁶ Broadly, it can be said that competition law aim for the availability of consumers to actually have a choice whereas consumer protection laws provide the consumers with the relevant information in order to effectively exercise the choice.²³⁷ Furthermore, competition law applies to market failures external of the individual, inter alia, reduced choices and increased prices. Consumer protection law, on the contrary, applies to correct market failures internal of the individual, such as asymmetries in information and power.²³⁸

6.2.2. Time for a revision of the merger policy?

The question whether privacy and protection of personal data really belong in the merger review rests on the policy dictating what objectives the assessments of mergers, and competition generally, should aim to pursue.

The price-based focus in competition analysis, as presented above, stems from the rise of the Chicago school. Economists and lawyers developed a tendency to dismiss other economic power, political, social, and moral concerns, and instead chose to focus on trends towards concentration and concentrated economic power. And with the rise of the current neoclassical economic thinking the price has become even more important as competition authorities only challenge mergers that demonstrably lead to higher prices.²³⁹

That may be why some argue that competition law should primarily have as its objective to focus on economic efficiency,²⁴⁰ and that privacy in the competitive assessment muddles the goal of competition enforcement.²⁴¹ It is, however, not clear that the goal of competition is to solely see to economic efficiency. Other interests, such as consumer welfare, promotion of small businesses or privacy, can, in theory, be balanced against the economic efficiency. What goals for competition to pursue have been heavily debated and changed over time. Even in the choice of what kind of welfare competition should pursue there is disagreement between consumer welfare and total welfare.²⁴²

Regardless of what exactly the current policy seeks to achieve competition law is a social construct and stems from the domestic foundations and values of each jurisdiction. It does,

²³⁶ Ohlhausen and Okuliar (n 211) p. 152-153.

²³⁷ Averitt and Lande, 'Using the "consumer choice" approach to antitrust law' (2007) *Antitrust Law Journal*, p. 176.

²³⁸ Costa-Cabral and Lynskey (n 47) p. 10.

²³⁹ Stucke and Grunes (n 13) p. 112-113.

²⁴⁰ Ohlhausen and Okuliar (n 211) p. 143.

²⁴¹ Sokol and Comerford (n 165) p. 3.

²⁴² Roger D. Blair and D. Daniel Sokol, 'Welfare Standards in US and EU Antitrust Enforcement' (2013) *Fordham Law Review*, p. 2499.

and has to, adapt to reality, experience and logic. It will therefore vary over time. As competition is a political creation it can take into account a wide range of social values specific for the area it is aimed to be applied in.²⁴³ Competition law has never been, nor will be, free from normative political, social and economic values.²⁴⁴ Consequently, competition policy does not exist in a vacuum as it is an expression of the current values and aims of society. It is as susceptible to change as political thinking is.²⁴⁵

It would, therefore, not be the first time when competition law enforcement has been used to support a related policy area where legislative reforms have failed to advance. The liberalization of the energy market and telecommunications in the EU are two examples of this.²⁴⁶ Furthermore, other bodies of law have been taken into account in the assessment of competition law. The CJEU²⁴⁷ has held that the impairment of objectives pursued by another set of national rules could be taken into account in the assessment whether there is a restriction of competition.²⁴⁸

Privacy has been recognized in the EU as a fundamental interest and a specific right,²⁴⁹ and the policies of EU shall ensure a high level of consumer protection.²⁵⁰ The Charter is binding towards every institution in the EU in regard to legislation and decisions. That means that the institutions of EU have an obligation not to produce legislative acts or make decisions violating the rights of the Charter. It is, however, not clear whether that imposes a positive obligation on the institutions to actively work for an efficient exercise of the rights of the Charter but it definitely shows that privacy is an important interest.²⁵¹

6.2.3. Conclusive analysis: Should privacy and protection of personal data be a part of the merger policy?

As can be seen, there are a few commonalities between the goals of the competition law and consumer protection law in that they both seek to integrate the internal market, have a concern for the consumer, and deal with asymmetry in power. There are also quite big differences between the two. The substantive concerns, the kinds of harms enforced, and the focus in a transaction are examples of differences. It is quite clear that competition law and consumer

²⁴³ Ariel Ezrachi, 'Sponge' (2017) *Journal of Antitrust Enforcement*, p. 3.

²⁴⁴ Ariel Ezrachi and Maurice Stucke, 'The fight over antitrust's soul' (2017) *Journal of European Competition Law & Practice*.

²⁴⁵ Whish and Bailey (n 61) p. 20.

²⁴⁶ Faull and Nikpay (n 67) 12.09.

²⁴⁷ Case C-32/11 Allianz Hungária ECLI:EU:C:2013:160, para. 46-47.

²⁴⁸ Autorité de la concurrence & Bundeskartellamt (n 14) p. 23.

²⁴⁹ The charter art. 8.

²⁵⁰ The charter art 38.

²⁵¹ Lyskey, Orla *The Foundations of EU Data Protection Law* (Oxford University Press, 2015) p. 264-265.

protection law do not clearly share the same goal. The areas are distinct and have different purposes, even though they sometimes overlap. This leans toward the conclusion that the privacy and protection of personal data is better to be supervised by data protection authorities and that branch of law, instead of competition.

The price-based thinking in competition analysis does not provide room for something that is not as easily measurable as price. Privacy and protection of personal data as a component in the merger review is therefore somewhat controversial as it is not an element measurable in price. That is probably why many are sceptic to the involvement of something as subjective as privacy and protection of personal data. With the current thinking there is not really a place for them in the merger review, or in competition, unless they are transformed or translated into prices. That is why it might be time to for the competition authorities to not only focus on price and efficiencies. Competition law is not a static instrument only made to assess price. It is a vivid and flexible one able to adapt in accordance with the values in society, and to change as time progress. That is the reason why there is not only one goal for competition to achieve, and why there have been differences in what the main goal should be. It would not either be the first time competition law adjusted itself to other bodies of law or change in society. In this time and age, privacy and protection of personal data has become a hot topic, and a fundamental interest and a specific right for people, since personal data has become the currency of the digital economy. If competition law is supposed to reflect the current society and its values, where privacy and protection of personal data is highly relevant, there should be room in the merger policy, and competition generally, to accommodate them.

7. Conclusion

The current merger control has difficulties catching mergers in big data-driven markets. It is missing out on those mergers which do not have a sufficient turnover but still have an impact that goes beyond the borders of any member state, and thus, should be subject for the merger control. This problem could be solved by introducing a threshold focusing on the value of the merger rather than the turnovers of the parties. If a merger in a big data-driven market actually gets the attention of the Commission, be it through referral from member states or parties asking for it, the Commission is ill-equipped to assess the privacy and protection of personal data in terms of quality and as a non-price parameter. The indirect consumer harm regarding the dimension of privacy and protection of personal data is something actually being acknowledged by the authorities. That dimension is, however, seldom assessed. Both the indirect and direct consumer harm in terms of the dimension are therefore not addressed properly. It is indeed possible to create a theory of such consumer harm but that would mean that privacy and personal data would have to be translated into economic terms, such as price, to reach an outcome in practice. This is due to the price-focus that dominates the competition authorities' normative thinking.

As can be seen there are a few possibilities for privacy and protection of personal data to be considered in the merger review, in theory, but the difficulties in the practical application raises quite serious obstacles. The difficulty of assessing privacy and protection of personal data as a parameter of non-price competition, and as a factor of quality, together with the fact that competition law and consumer protection law have different aims, therefore suggests that the dimension of privacy and protection of personal data is not something to be included in the merger assessment. Privacy and personal data are concerns for data protection law and authorities, and not something for competition law to deal with. However, in order not to risk that policy makers and competition authorities fall behind the technological development in big data-driven markets, and miss out on the harm on consumers an intrusion of privacy caused by a merger, a new type of economic thinking might be something worth to consider. A starting point is to review the principles and policies governing the merger control. By including privacy and protection of personal data to a greater extent among the goals of competition, and realizing that price is not the sole aim, they will have a greater impact on the decisions and make way for the challenge of measuring privacy.

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