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Master's Thesis

Assessment of Mergers in the Digital Economy under the EU Merger Control

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Introduction

The **motives** of choosing the topic – having completed an internship at the Competition Council of the Republic of Lithuania has influenced my decision to select this topic. This is a new and developing field which has not been fully explored yet and presents new challenges for both national and supranational competition law authorities.

The **object** of the research – this research is aimed at mergers in the digital economy and the European Union merger regime.

The **aim** of the research is to assess mergers in the digital economy under the EU merger control regime.

The **tasks** – there are three main tasks which relate to the aim of this paper:

1. Why mergers in the digital economy are different compared to mergers in traditional markets?
2. Whether the current European Union Merger Regulation jurisdictional criteria are appropriate for catching mergers in the digital economy?
3. What kind of implications does data-related issues have for the Commission's analysis of substantive issues in merger cases?

The **relevance** of the topic and its **importance** both to the theory and practice – currently digital markets are becoming more and more important. There are large online platforms which were non-existent in the past. With the world evolving, there is a need to understand whether improvements to law are necessary as well. Competition law is not an exception. Mergers in the digital economy will become even more important in the future, therefore, there is a need to correctly address this field. So far, the authorities have been lenient towards mergers in this field, consequently, it is important to evaluate whether this may lead to underenforcement.

The **originality** of the Master's thesis – this thesis is different compared to other works because it combines the substantive issues (e.g. big data) analysed in cases and procedural aspects (i.e. turnover thresholds) both of which relate to the digital economy and at the same time goes throughout the EU merger procedure.

The intended ways and **methods** to carry out the tasks of the research – there will be a few methods used: logical analysis method – research will be guided by the rules of logical reasoning and conclusions will be drawn from findings; comparative analysis – two or more different ideas will be compared to find the most significant differences, identify the better approach, and then draw conclusions based on that; lastly, the method of systematic analysis will be used to summarise all findings relevant to the research question.

The most important **sources** – a variety of primary and secondary sources will be considered throughout this thesis. The most important primary sources will be the European Commission’s merger decisions which are linked to digital markets. Considering the fact that the Commission is a body which has the authority to oversee the compliance with other binding documents and non-binding acts of the Commission (i.e. the European Union Merger Regulation, the Commission’s Guidelines), these will also be analysed. The most important secondary sources will be textbooks and articles published by academics connected to digital markets. These sources have been selected because they will be used in order to explain EU law and potential problems arising in particular situations where EU law is applied.

The **structure** of the paper – in the first chapter the focus of research will be on the specifics of the digital economy. First, there will be an overview of statistics to understand the importance and scale of digital mergers. Then, in order to better understand the differences between traditional markets and digital markets there will be an overview of key aspects which are prominent in digital markets followed by a discussion of what kind of implications these features have for the competitive assessment.

The second chapter will be about the EU merger control regime and jurisdictional criteria that the Commission is using in its merger review procedure. This is an important chapter because without this step the Commission would not be able to analyse the substantive issues. The current regime will be introduced and discussed, then there will be examples of different frameworks used by some EU Member States followed by a discussion on why it is better or worse than the Commission’s framework. Finally, a suggestion whether there is a need to improve the current framework of the Commission and if the answer is positive, then what kind of changes are needed.

The third chapter will be linked to substantive issues which are specific to merger cases in the digital economy. There will be an overview of substantive assessment and what kind of implications data-related issues have for this assessment. This involves discussion on why price is not a relevant metric when measuring consumer harm and why different standards need to be used. What that standard could be and how it would be used. Finally, there is a discussion on whether data-related issues need to be addressed by the Commission or other authorities and the connection between these different regimes.

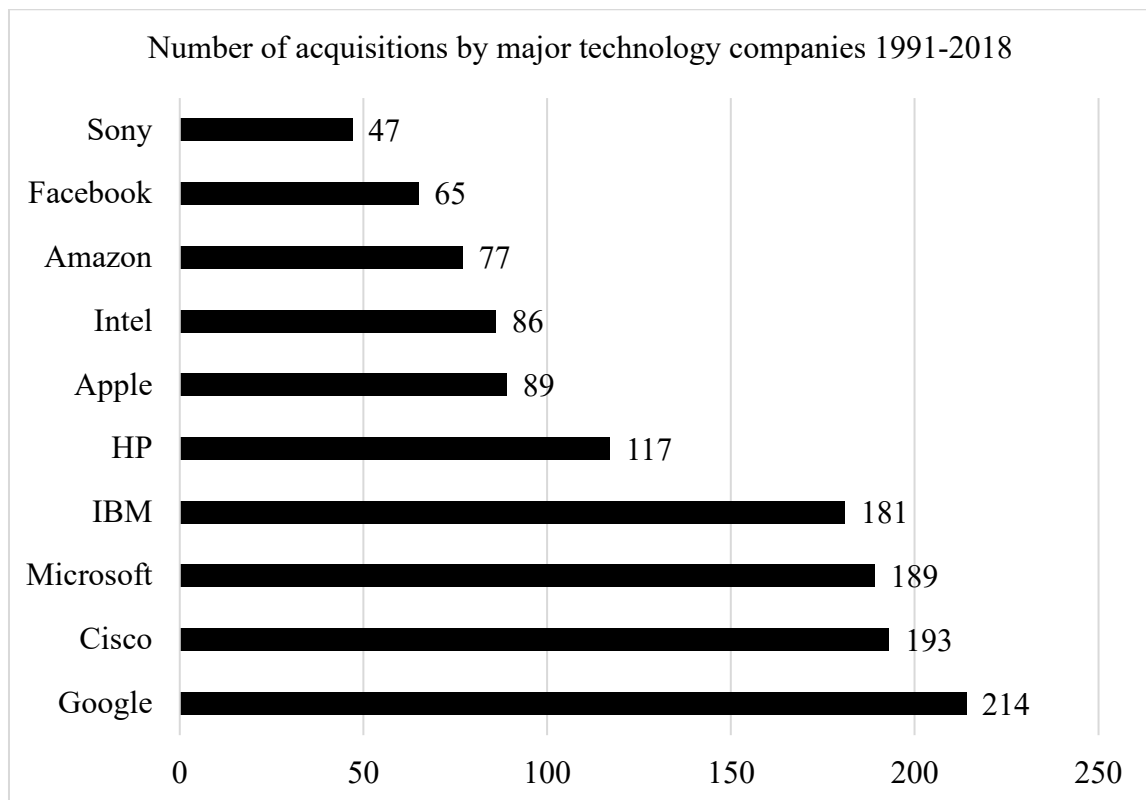
This thesis will be finalized by a conclusion which takes into account all relevant issues discussed in all parts and then at the same time the proposals will be introduced to suggest how these existing problems could be resolved.

1. Differences Between Mergers in Traditional Markets Compared to Mergers in the Digital Economy

1.1. Preliminary Observations and Statistics

Over the last decade, Google, Microsoft, and Apple combined have acquired over 350 companies and around 500 since 1991¹. The number of acquisitions should be a signal for competition authorities to assess firm's acquisition strategy, and, in order, likely merger effects.

Table 1. Acquisitions by major technology companies.



Source: Visual Capitalist, Visualizing Major Tech Acquisitions (1991-2018). Available at <https://www.visualcapitalist.com/interactive-major-tech-acquisitions/> accessed on 17 November 2019.

¹ Tweak Your Biz, Tech Acquisitions Over 10 Years: Who's Leading? Available at: <https://tweakyourbiz.com/business/mergers-and-acquisitions/leading-tech> accessed on 12 September 2019.

The highest value of one acquisition was Microsoft paying \$26.2 billion for LinkedIn in 2016 with some other high-value acquisitions on the list as well:

Table 2. Example of high value acquisitions in digital market.

Year	Acquirer	Company acquired	Transaction value (\$ million)
2006	Google	YouTube	1,650
2007	Google	DoubleClick	3,100
2011	Microsoft	Skype Technologies	8,500
2011	Google	Motorola Mobility	12,500
2012	Facebook	Instagram	1,000
2012	Microsoft	Yammer	1,200
2013	Google	Waze	970
2014	Apple	Beats Electronics	3,000
2014	Google	Nest Labs	3,200
2014	Google	Deepmind Technologies	625
2014	Facebook	WhatsApp	19,000
2014	Facebook	Oculus	2,000
2016	Microsoft	LinkedIn	26,200
2017	Apple	Shazam	400
2018	Amazon	Ring	1,200

Sources: CB Insights, Infographic: Google’s Biggest Acquisitions. Available at: <<https://www.cbinsights.com/research/google-biggest-acquisitions-infographic/>> accessed on 17 November 2019; CB Insights, Infographic: Microsoft’s Biggest Acquisitions. Available at: <<https://www.cbinsights.com/research/infographic-microsoft-biggest-acquisitions/>> accessed on 17 November 2019; Money Inc, The 10 Largest Facebook Acquisitions on Record. Available at: <<https://moneyinc.com/10-largest-facebook-acquisitions-record/>> accessed on 17 November 2019; CB Insights, Infographic: Apple’s Biggest Acquisitions. Available at: <<https://www.cbinsights.com/research/apple-biggest-acquisitions-infographic/>> accessed on 17 November 2019; CB Insights, Infographic: Amazon’s Biggest Acquisitions. Available at: <<https://www.cbinsights.com/research/amazon-biggest-acquisitions-infographic/>> accessed on 17 November 2019.

The high number of acquisitions is not slowing down. On the other hand, the number of cases considered by the Commission remains stable. This can be explained by the existing EU Merger Regulation laws – only those mergers which exceed the turnover threshold set by the Commission must be notified. The test applied to digital mergers was the same as for traditional markets (Significant Impediment to Effective Competition – SIEC test), therefore, the Commission disregarded other concerns such as privacy concerns and the role of data. No major digital mergers investigated by the Commission have been blocked.

However, Google/DoubleClick and Apple/Shazam both were only cleared after phase 2 investigation. This leads to a theoretical problem. There are two types of errors in merger control – false positives (i.e. a merger is blocked when it should have been allowed to go through) and false negatives (i.e. a merger is allowed to go through even though it should have been blocked). When speaking about digital platforms, there have been no false positives where major digital companies would have been involved. This in turn would mean that there probably occurred some false negatives in process of merger enforcement. No false positives and an existing probability that there were some false negatives would mean that there has been underenforcement in digital markets. Therefore, it is vital to analyse whether greater enforcement is needed and what should be done in order to maintain effective competition in digital markets.

1.2. Key Features of the Digital Economy

Digital economy refers to an economy which is based on digital computing technologies. For the purposes of this thesis digital economy is defined as an economy where companies supply products/services to consumers over the Internet (e.g. search engines, advertising services, social networks, etc). Merger, according to Oxford English Dictionary, in the general business context, refers to the combination or amalgamation of a commercial company, institution, etc. with another entity, it can also refer to the consolidation of two or more companies into one. Process of digitization changes the nature of markets and introduces new pro- and anti-competitive strategies. The European Union competition policy needs to adapt to these changing trends and new challenges in order to continue benefiting the consumers. Mergers in the digital economy are playing an increasing role in the economy as a whole. The current European Union Merger Regulation (EUMR) framework has been functioning for many years and provided a solid basis for protecting competition law in the EU. However, when this current framework was developed, digital ecosystems and specific characteristics of online platforms did not exist.

In order to evaluate whether competition law can effectively deal with large digital market players and prevent anti-competitive behaviour in which they can engage, there is a need to understand why digital markets are different compared to the traditional markets, what specific features are present and what kind of implications it can have for the competitive assessment. The features listed here are by no means exhaustive and they are not necessarily present in all digital markets. A case-by-case analysis is required to determine to which degree each feature is present in every individual scenario. Because of these specific

characteristics in digital markets strong “economies of scope” exist and allow large market players to entrench their strong market position. Economies of scope in essence mean that the average total cost of a company’s production decreases when there is an increasing variety of goods produced and this is very prominent in the digital economy. The difference with the economies of scale is that here efficiencies are formed by variety, not volume.

1.2.1. Extreme Returns to Scale

Even in traditional markets bigger players are often more efficient than small ones, however, digital markets take this to the extreme – the cost of production is much less than proportional to the number of customers served². Information can be transmitted to a large number of people at a very low cost after it is created (i.e. once a search engine has been developed it can serve a huge number of people for a relatively low price)³. Consequently, this means that if two firms are producing the same product and competing on the same market, then they will not be able to cover their costs⁴. This means that in order for these firms to cover their (total) cost, they would need to price above the cost of serving an additional consumer (the marginal cost) and each of them would find it profitable to lower their price to steal the other’s clients⁵. This also has implications for firms wanting to enter the relevant market – no firm will want to enter a market which is dominated by an incumbent, even when that incumbent is making large profits, unless the firm which is willing to enter has a much superior and cheaper technology than the dominant firm on the market⁶.

1.2.2. Network Externalities

The more users are using the service, the better that service becomes. When new market players enter, it is not enough for them to offer better quality services or lower prices than the existing market players. Network effects can prevent a superior platform from becoming the leading service provider. This advantage depends on a number of factors which will be discussed (e.g. multi-homing, data portability, etc.).

² Crémer et al., Competition policy for the digital era, Final report, 2019, p. 20. Available at: <<https://ec.europa.eu/competition/publications/reports/kd0419345enn.pdf>> accessed on 4 December 2019.

³ Ibid.

⁴ Ibid.

⁵ Ibid.

⁶ Ibid.

Network effect can be divided to direct and indirect⁷. Direct – an increase in the number of users brings benefits to the same users (i.e. the value of a social media site increases as more users join it because consumers can interact with a larger number of other users; in search engine markets network effects are less visible – the more search queries, the better the search quality becomes over time). Indirect – an increase in the number of users brings benefits to a different group of users, typically where the market is two-sided or multi-sided (i.e. more users on a social media site means that advertisers can reach a larger audience). Network effects reinforce the positive ‘feed-back loop’ and this can make a market prone to ‘tipping’, which means that network effects create a snowball effect which leads to a market which is dominated by one service⁸.

Network effects are important for a few reasons. First, there is a need to take it into account when measuring competitive pressure, ease of entry and expansion on a market where the merger takes place. Network effects can be pro-competitive if they encourage competitive pressure among firms to gain new customers and increase their customer base. This means that larger customer groups can be reached on big platforms. It is a common feature of the digital economy – where network effects are strong, the more users are using product/service the larger benefits those users can get. On the other hand, on markets where there are large firms with large customer bases, network effects can act as a barrier for new firms to enter the market and expand – no one would move to a new platform which has significantly less users. This would prevent the development of a superior platform and that platform overtaking an inferior one. Second, network effects can be important when measuring whether merger-specific effects on competition will be strengthened as a result of that merger and whether it will increase the size of the merged entity’s network and thus its market power in such a way as to cause competitive harm.

⁷ Michael L. Katz and Carl Shapiro, “Systems Competition and Network Effects” *Journal of Economic Perspectives*, 8 (2), 1994, pp 96-102.

⁸ OECD, Data-Driven Innovation for Growth and Well-Being: Interim Synthesis Report, October 2014, p. 29. Available at: <<https://www.oecd.org/sti/inno/data-driven-innovation-interim-synthesis.pdf>> accessed on 4 December 2019.

1.2.3. *Multi-Sidedness*

Often distinct services are offered to different groups of customers, but the demands of those customer groups are interlinked and the platform acts as an intermediary between those groups. These platforms can serve two distinct customer groups (two-sided platform) or more than two (multi-sided platform) – for example, eBay is a platform which connects sellers of goods with potential buyers of those goods⁹. Two-sidedness is a case of network externalities. The more buyers there are the more beneficial it is for sellers to use eBay, conversely, the more sellers sell their goods on eBay, the more beneficial for buyers it is to use it.

There is more than one type of multi-sided platforms. For example, transaction platforms offer a possibility for different customer groups to interact with one another directly and conclude a transaction. Non-transaction platforms are not directly aimed at facilitating trade between different customer groups – platform brings together the group of users and the group of advertisers, but the transaction is not concluded through the platform or even observable by the platform operator. Sometimes it might be difficult to find the difference between these two types, then it would be a “hybrid” platform.

Multi-sidedness is important to the competitive assessment because it means that the needs of different groups of multi-sided platform users are interdependent. *Stucke and Grunes* identify three main areas of competition: first, on the free side of the market, where competition is on non-price parameters (such as quality, which includes privacy protection and innovation); second, on the paid side of the market, where competition is for advertising, and; third, competition between the companies collecting valuable data to use as important input across different markets¹⁰. This interdependency means that standard competitive assessment will not be viable for these markets because it means that factors such as a price increase or quality decrease to one group of participants reduces the demand not only by that group but also by the other groups who then have fewer participants with which to interact¹¹. For this reason, multi-sidedness needs to be taken into account when analysing digital platforms.

⁹ For the purposes of this paper multi-sided platforms could be referred to as two-sided and *vice versa*.

¹⁰ Maurice E. Stucke and Allen P. Grunes, *Big Data and Competition Policy* (1st ed., Oxford University Press, 2016), p. 116.

¹¹ David S. Evans, *Multisided Platforms, Dynamic Competition, and the Assessment of Market Power for Internet-Based Firms*, *University of Chicago Coase-Sandor Institute for Law & Economics Research Paper no. 753*, 10 March 2016, p. 3.

1.2.4. Competition For the Market

In fast-moving markets competition often happens *for* the market rather than *in* the market. In these markets characterized by strong network effects competition is very aggressive at an early stage of the market development, therefore having superior technology at an early stage may result in dominance – successful innovators become market leaders for some time¹². Competition largely relates on the introduction of new products and technologies. Dominance in these markets can be very ‘fragile’ – a more advanced product needs to be introduced in order to take over the dominant one (e.g. in the music industry market cassette tapes were overtaken by CDs, later on CDs were overtaken by music streaming services). In these markets the existence of potential competition is not mirrored in market shares, therefore, looking at these variables may be flawed to understand the situation in the relevant market¹³. Also, efficient industry performance can largely depend on modest entry barriers where firms are competing *for* the market¹⁴.

1.2.5. Multi-Homing

In some markets, users tend to multi-home – they use multiple services/products of the same type. In this way those users who multi-home can get more benefits than users who choose to single-home. Users might choose to do it for a number of reasons. One of them could be network effects – they want to reach users using different platforms and in order to do that they need to use a specific platform. There might be other reasons based on user’s preferences. Most of the time multi-homing is free or prices are very low, and it is easy to start using them. Multi-homing trends can change over time as some apps lose popularity, new players enter the market. Multi-homing can be seen as a source of countervailing buyer power if by multi-homing customers can counter the increase in market power that a merger would likely create. In some cases, multi-homing may mitigate negative impact of network effects which arise from a merger.

1.2.6. Switching Costs

When users are using services, they supply service provider with information, which helps to custom tailor those services for the particular user. On the other hand, similar service provider will not have this information about user’s preferences if that particular user is not using its service. If the user decides to stop using the current service and switch to another

¹² Marcus Glader, *Innovation Markets and Competition Analysis, EU Competition Law and US Antitrust Law: New Horizons in Competition Law and Economics* (Edward Elgar Publishing Limited, 2006), p. 42.

¹³ Ibid.

¹⁴ Ibid.

one, that new service provider will not be able to provide such high-quality service because it simply will not know the user as good as the other provider. It is said that switching costs are working in favour of incumbents and, what is even worse for the potential entrants, it works in a nonlinear way:

‘Convincing ten people connected in a network to switch to your incompatible network is more than ten times as hard as getting one customer to switch. But you need all ten, or most of them: no one will want to be the first to give up on the network externalities and risk being stranded. Precisely because various users find it so difficult to coordinate to switch to an incompatible technology, control over a large installed base of users can be the greatest asset you can have’¹⁵.

However, when switching costs are being measured, it is important to take into account what kind of service is being analysed. For example, when consumers are switching to another email provider, one would lose not only all the information in its inbox, but also its email address which is problematic if the address is widespread, while switching to another consumer communication application would mean that the user would lose their text messages which usually consist of short and spontaneous chats, which do not carry long-term value for consumers¹⁶. Therefore, switching costs can be low or high depending on the type of service used.

1.2.7. Zero Price Effect

Standard theoretical perspective suggests that when a consumer can choose between several products, they will buy one which offers the highest cost-benefit difference. However, according to the zero-price effect, decisions about free goods are different – in this case people do not simply subtract costs from benefits, instead, they perceive benefits associated with free products as higher¹⁷. The authors carried out experiments related to the psychology of free prices and found out that when the participants were faced with a zero price, then more of them chose the cheaper option disregarding the fact that the other product better suited their preferences¹⁸. According to the experiment, individuals act as if

¹⁵ Carl Shapiro and Hal R. Varian, *Information Rules: A Strategic Guide to the Network Economy* (2nd ed., Harvard Business School Press, 1999), pp 184-185.

¹⁶ Case COMP/M.7217 – *Facebook/WhatsApp*, para 113.

¹⁷ Kristina Shampanier et al., Zero as a Special Price: The True Value of Free Products, *26(6) Marketing Science* 742, 2007, p. 744.

¹⁸ *Ibid.*, p. 744-749.

zero price of a good not only decreased the cost of that good but also added to its value. Authors suggest that “free” goods impact the decision-making process of individuals and they tend to choose an option with no downside (i.e. no cost)¹⁹.

This is very prominent in the digital economy. Because of extreme returns to scale, marginal cost of participants to software-based platforms running in the cloud is virtually zero and because of this, a tendency between multi-sided platforms exist, that it can offer a group of participants to use the platform for free²⁰. It does not mean that the platform is not benefiting from consumers who do not pay for using their services. It means that one customer group is paying for services (usually on the advertising side of the market) while the other (which is more price sensitive) receives it for free. On one-sided markets firms may offer their products for consumers free of charge in order to generate a critical mass of users by relying on network effects or low marginal costs of distribution. After that, the product can be monetized at a later stage. In some cases where the price for product/service is zero, users may be paying with other (often non-monetary) means – such as their user-data. Controversially to traditional markets, in some cases, zero monetary price can potentially be above the competitive market price. Traditional ‘Small but Significant and Non-transitory Increase in Price’ test (SSNIP test) cannot be used in this case as it simply would not work because raising the price by a small increment would not do anything since 5 percent of nothing is still nothing.

The fact that products/services are offered free of charge is very important in terms of jurisdiction and substantive assessment. If one of the merging parties is offering services free of charge it means that it has limited or no revenues which in turn means that the merging parties can escape EU Merger Regulation turnover thresholds. This was the case in several mergers involving large corporations. It might mean that here is an enforcement gap. This issue will be discussed at a later stage of this thesis.

¹⁹ Kristina Shampanier et al., Zero as a Special Price: The True Value of Free Products, *26(6) Marketing Science* 742, 2007, p. 751.

²⁰ David S. Evans, Multisided Platforms, Dynamic Competition, and the Assessment of Market Power for Internet-Based Firms, *University of Chicago Coase-Sandor Institute for Law & Economics Research Paper no. 753*, 10 March 2016, p. 16.

1.2.8. Role of Data

Nowadays digital technologies allow companies to collect, store and use large amounts of data. The value of data is continuously increasing. Differently than in traditional markets, digital economy markets are based on software. Enriching those markets with new features is much simpler than in traditional markets. Many digital platforms collect these large amounts of user data to build their datasets which enable them to improve their services and develop new products. Because of this, data can be seen as a valuable asset in the digital economy. Gartner Research defines big data as ‘high-volume, high-velocity, and/or high-variety information assets that demand cost-effective, innovative forms of information processing that enable enhanced insight, decision making, and process automation’²¹. These three parameters are often referred to as the ‘three Vs’ of big data and sometimes a fourth ‘V’ (veracity) is added. Volume refers to the amount of data collected and processed – this was the initial definition of big data²². Velocity refers to the speed at which data is generated, accessed, processed, and analysed²³. Variety refers to the unstructured datasets from sources as diverse as web logs, social media, mobile communications, etc²⁴. Lastly, veracity refers to the quality of data – whether data can be viewed as accurate and reliable²⁵.

Firms aim to better understand users’ behaviour and preferences to offer better quality products. The more data a firm can obtain and analyse, the better the products they offer will be. The better the product, the more users it attracts. In order to gain large profits while using very exploitative business strategies at the same time, there is a need to combine standard personalized data with different types of more sophisticated personalized data. Personal data or individual data is information which can help to identify an individual. There are many personal data categorisation ways. For example, by the way it is collected. According to World Economic Forum’s classification, data can be gathered on a voluntary basis, by observing, or by inferring²⁶. Volunteered data is created and explicitly shared by individuals (e.g. personal Facebook profile, sharing something on your profile); observed data – captured by recording the actions of individuals (e.g. location data collected when

²¹ Gartner Glossary, Big Data. Available at: <<https://www.gartner.com/it-glossary/big-data/>> accessed on 17 November 2019.

²² OECD, Data-Driven Innovation for Growth and Well-Being: Interim Synthesis Report, October 2014, p. 11. Available at: <<https://www.oecd.org/sti/inno/data-driven-innovation-interim-synthesis.pdf>> accessed on 4 December 2019.

²³ Ibid.

²⁴ Ibid.

²⁵ IBM, Big Data & Analytics Hub, The Four V’s of Big Data. Available at: <<https://www.ibmbigdatahub.com/infographic/four-vs-big-data>> accessed on 10 October 2019.

²⁶ World Economic Forum, Personal Data: The Emergence of a New Asset Class, June 2010. Available at: <http://www3.weforum.org/docs/WEF_ITTC_PersonalDataNewAsset_Report_2011.pdf> accessed on 29 August 2019.

using smartphones, clicking somewhere on a website); inferred data – data about individuals based on analysis of volunteered or observed information (e.g. credit scores, individual searching for certain products online and then website suggests related products to buy)²⁷. There are more ways to categorise data. For the purpose of this paper OECD data definition is appropriate – a broad understanding of personal data which can include all different categorisations²⁸.

Big data can be used to exploit consumers. The problem is that Internet users are often unaware of the value of their data²⁹. Users leave a trail of data which consists of various personal information which is very valuable for the companies. Through analysing it companies can learn more about individuals and then use it in their advantage³⁰. For example, better personalized targeted advertising can be used to target those customers who are more likely to buy the advertised product (i.e. this increases the advertisers' willingness to pay for advertising services which in turn means higher profits for the platform offering those services); second, individualized advertising – recommending goods/services tailor-made for the individual user (i.e. increased amount of transactions, therefore, increased revenues); third, improved opportunities for data-based price discrimination (i.e. based on individual patterns and search histories assumptions can be made about customers willingness to pay for products/services – this means that in some cases more products can be sold or products can be sold for a higher price after the price is adjusted to better suit the users)³¹.

²⁷ World Economic Forum, Personal Data: The Emergence of a New Asset Class, June 2010, p. 7. Available at: <http://www3.weforum.org/docs/WEF_ITTC_PersonalDataNewAsset_Report_2011.pdf> accessed on 29 August 2019.

²⁸ OECD, Exploring the Economics of Personal Data: A Survey of Methodologies for Measuring Monetary Value, *OECD Digital Economy Papers*, No. 220, OECD Publishing, Paris, 2013, p. 8. Available at: <https://read.oecd-ilibrary.org/science-and-technology/exploring-the-economics-of-personal-data_5k486qtxldmq-en#page1> accessed on 4 December 2019.

²⁹ Federal Trade Commission Report, 'Protecting Consumer Privacy in an Era of Rapid Change: Recommendations for Businesses and Policymakers', 2012, p. 68. Available at: <<https://www.ftc.gov/sites/default/files/documents/reports/federal-trade-commission-report-protecting-consumer-privacy-era-rapid-change-recommendations/120326privacyreport.pdf>> accessed on 4 December 2019.

³⁰ Maurice E. Stucke and Allen P. Grunes, *Big Data and Competition Policy* (1st ed., Oxford University Press, 2016), p. 28.

³¹ Maurice E. Stucke and Allen P. Grunes, *Big Data and Competition Policy* (1st ed., Oxford University Press, 2016), p. 29; Oliver Budzinski and Annika Stohr, Working Paper: Competition policy reform in Europe and Germany – Institutional change in the light of digitization, *Ilmenau Economics Discussion Papers 117*, Ilmenau University of Technology, Institute of Economics, November 2018, p. 10; Morgan Wild and Marini Thorne, Citizens Advice, A Price of One's Own: An investigation into personalized pricing in essential markets. Available at: <<https://www.citizensadvice.org.uk/Global/CitizensAdvice/Consumer%20publications/A%20price%20of%20one's%20own%20final.pdf>> accessed on 16 September 2019.

1.2.9. Ecosystems

Ecosystems refer to a system of many different products or services combined into one large unit (e.g. Google would be a good example of this – through its links on Google search it can direct users to its email, cloud service for documents and photos, YouTube, etc). This is when a need to analyse a “walled garden” strategy arises³². This strategy refers to the bundling of various online services into one data-based platform in order to allow users to enjoy as many online activities as possible within one platform – by doing this, the platform company can maximize its knowledge about the consumer³³. This helps companies to reduce their costs by analysing their target audience and offering their products to the actual target audience. There are other efficiencies as well: improvement of production processes, forecasting market trends and improved decision-making³⁴.

Here competition is different than in traditional markets because firms compete for “access points” to consumers³⁵. Those access points can be different – mobile phones and tablets for example act both as sensors (which collect data from consumers) and delivery devices (which provide services for consumers)³⁶. These access points are more convenient to use if services from the same ecosystem are used. If a platform has control over such device then it becomes a gatekeeper in terms of access to consumer data and capacity to deliver content and services³⁷. These multi-functional devices have replaced many other alternatives from the past which usually had one function (e.g. watches, maps, calculators). This has implications for the competitive assessment because if customers are drawn into ecosystems then their ability to switch can be reduced. It can be seen that it is especially difficult to switch when referring to smartphones. If one selects to buy an Apple iPhone, it will be impossible to run an alternative operating system on this device. Furthermore, the user will also probably use Apple’s browser, mail service and other applications because this is the most convenient option. More and more large digital market players are involved in such ecosystem building. Google and Apple for example have their own personal digital assistants like Alexa and Siri – they make it easier for users to navigate between their provided services and look for alternatives. Assistants do all the thinking for the user. This

³² Oliver Budzinski and Annika Stohr, Working Paper: Competition policy reform in Europe and Germany – Institutional change in the light of digitization, *Ilmenau Economics Discussion Papers 117*, Ilmenau University of Technology, Institute of Economics, November 2018, p. 12.

³³ *Ibid.*, p. 12.

³⁴ OECD, Big Data: Bringing Competition Policy to the Digital Era, DAF/COMP(2016)14, p. 8. Available at: <[https://one.oecd.org/document/DAF/COMP\(2016\)14/en/pdf](https://one.oecd.org/document/DAF/COMP(2016)14/en/pdf)> accessed on 4 December 2019.

³⁵ Crémer et al., Competition policy for the digital era, Final report, 2019, p. 48. Available at: <<https://ec.europa.eu/competition/publications/reports/kd0419345enn.pdf>> accessed on 4 December 2019.

³⁶ *Ibid.*

³⁷ *Ibid.*

service makes it easy to switch between the services provided in the ecosystem but difficult to switch to a competing ecosystem or service. Ecosystems make it difficult for competition authorities to carry out competitive analysis. Ecosystems increase entry barriers and market concentration – large market players can acquire small companies which compete in separate relevant markets but after the acquisition that large player can easily enter a new relevant market.

1.3. Competition Law Adjustment for the Digital Economy

The Commission has been using its framework for a long time, facing various challenges and protecting competition in a wide variety of different markets. However, a high number of acquisitions in the digital sectors shows how important it is and highlights the fact that in the future the importance of this sector will only grow. Until now, when speaking about digital platforms, there have been no false positives where major digital companies would have been involved but taking into account large number of mergers it possibly means that there were some false negatives in process of merger enforcement. No false positives and an existing probability that there were some false negatives would mean that there has been underenforcement in digital markets. It can be seen that digital markets have many specific features which are relevant for the competitive assessment. It is vital to understand that all of these specific features such as network externalities, double-sided markets, big data and other influence the way in which markets operate and the assessment process needs to be adjusted in order to protect effective competition in digital market. The Commission will only be able to correctly address this field if it can understand this sector just as good as the digital companies operating in it.

2. The Current European Union Merger Control Jurisdictional Framework and its Suitability for Analysing Mergers in the Digital Economy

2.1. The European Union Merger Control Regime

In the EU mergers are governed by the European Union Merger Regulation (EUMR). It is used to assess whether a merger is compatible with the common market and is a tool which can help to prevent lasting damage to competition before it occurs. Mergers which ‘significantly impede effective competition’ are declared as incompatible with the common market and cannot be carried out³⁸. Effective competition on the market has to be preserved in order to maximise the consumer welfare – this is one of the main concerns of the competition policy³⁹. When assessing a merger, the Commission follows the criteria stated in the EUMR – it includes definitions such as ‘structure of the markets concerned’, ‘actual or potential competition’, ‘market position of the undertakings concerned’, and other criteria which are taken into account to a certain extent depending on individual cases⁴⁰. Competition authorities usually do not take into account non-competition law issues, however, some of them do allow broader criteria of public interests to be taken into account⁴¹. Specifically, in the digital economy one of the examples of these would be the collection and processing of personal data.

Not all mergers are assessed under the EUMR. The Commission needs to have jurisdiction in order to start the substantive analysis. Currently, the EUMR enables the Commission to investigate all concentrations with a “community dimension” – this dimension is established on basis of the turnover of the parties to the merger in order to identify the importance of a specific merger⁴². However, even if a merger escapes the community dimension, it can be reviewed by the Commission if: the merging parties request it, or; national competition authorities in at least three Member States are competent to review it, and those Member States approve such a request⁴³. Also, Member State(s) may request the Commission to review a merger without the community dimension if the merger ‘affects

³⁸ Council Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings (the EC Merger Regulation), Official Journal L 24, 20.01.2004, Article 2(3).

³⁹ Richard Whish and David Bailey, *Competition Law* (8th ed., Oxford University Press, 2015), p. 860.

⁴⁰ Council Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings (the EC Merger Regulation), Official Journal L 24, 20.01.2004, Article 2(1).

⁴¹ Richard Whish and David Bailey, *Competition Law* (8th ed., Oxford University Press, 2015), p. 860.

⁴² Council Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings (the EC Merger Regulation), Official Journal L 24, 20.01.2004, Article 1(2).

⁴³ *Ibid.*, Article 4(5).

trade between Member States’ and threatens to ‘significantly affect competition’ in those Member States⁴⁴.

In order to assess whether the merger is compatible with the common market the Commission uses ‘significant impediment to effective competition’ (SIEC) test. If the merger significantly impedes effective competition, it will be declared as incompatible with the common market, if, on the other hand, the merger is declared as compatible, it can be carried out⁴⁵. To evaluate this, the Commission carries out a comparative analysis of two scenarios – what would happen if the merger is implemented, and the counterfactual, what would happen if the merger is not carried out. The Commission takes into account the current situation in the market but in some situations, this is not appropriate and then the Commission can also take into account future changes which can be reasonably predicted⁴⁶. To assess the merger the Commission needs to define the relevant product and geographic markets for which it uses Market Definition Notice, at this stage the Commission may be using ‘small but significant and non-transitory increase in price’ (SSNIP) test to carry out the competitive assessment⁴⁷.

2.2. Turnover-Based Threshold

Currently, the EUMR enables the Commission to investigate all concentrations with a “Union dimension” – this dimension is established on basis of the turnover of the parties to the merger in order to identify the importance of a specific merger⁴⁸. Due to the specifics of the digital economy, concerns have arisen that turnover-based threshold might not be adequate to catch some significant transactions. Many start-ups in the digital economy focus on building large user base at first to monetise their product at a later stage, consequently, turnover based thresholds fail to catch mergers where one of the companies is a start-up with large user base or a business potential. The only way for the Commission to have jurisdiction over such mergers is to analyse a merger which was referred by a Member State under Article 22(1) of the EUMR, or the merging parties themselves

⁴⁴ Council Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings (the EC Merger Regulation), Official Journal L 24, 20.01.2004, Article 22.

⁴⁵ Ibid., Articles 2(2) and 2(3).

⁴⁶ Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings, OJ C 31, 5.2.2004, para 9; Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings, OJ C 265, 18.10.2008, para 20.

⁴⁷ Commission Notice on the definition of relevant market for the purposes of Community competition law, OJ C 372, 9.12.1997.

⁴⁸ Council Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings (the EC Merger Regulation), Official Journal L 24, 20.01.2004, Articles 1(2) and 1(3).

requested the Commission to analyse the merger instead of filing documents in at least three Member States, the so called “one-stop-shop”⁴⁹. The concerns regarding a potential enforcement gap can be analysed in light of WhatsApp’s acquisition by Facebook⁵⁰. The transaction did not fall under the jurisdictional scope of the EUMR because at the time of the merger WhatsApp’s annual turnover was only USD 10 million. The case was referred to the Commission via the case referral mechanism because the merger triggered national thresholds in three Member States⁵¹. The fact that Facebook was willing to pay USD 19 billion for a start-up which generates annual turnover of USD 10 million was a signal that a merger is of a strategic importance in the digital economy. In March 2016 the European Commissioner for Competition Margrethe Vestager noted the importance of data and how it affects the turnover thresholds:

‘The issue seems to be that it’s not always turnover that makes a company an attractive merger partner. Sometimes, what matters are its assets. That could be a customer base or even a set of data. In the pharmaceutical sector, it might be a new drug that’s been developed but not yet approved for sale. Or a company might be valuable simply because of its ability to innovate. A merger that involves this sort of company could clearly affect competition, even though the company’s turnover might not be high enough to meet our thresholds. So, by looking only at turnover, we might be missing some important deals that we ought to review’⁵².

Later same year the Commissioner stated that there is a need to find another metric which could replace the turnover threshold:

‘A company might even buy up a rival just to get hold of its data, even though it hasn’t yet managed to turn that data into money. We are therefore exploring whether we need to start looking at mergers with valuable data involved, even though the company that owns it doesn’t have a large turnover’⁵³.

⁴⁹ Council Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings (the EC Merger Regulation), Official Journal L 24, 20.01.2004, Article 4.

⁵⁰ Case COMP/M.7217 – *Facebook/WhatsApp*.

⁵¹ Council Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings (the EC Merger Regulation), Official Journal L 24, 20.01.2004, Articles 4(4); 4(5); 9; 22.

⁵² Speech by Margrethe Vestager, ‘Refining the EU merger control system’, Studievereinigung Kartellrecht (Brussels, 10 March 2016).

⁵³ Speech by Margrethe Vestager, ‘Big Data and Competition’, EDPS-BEUC Conference on Big Data (Brussels, 29 September 2016).

These acquisitions may be designed to eliminate a company which might become a rival in the future⁵⁴. Furman Report suggests that the CMA (or other competition authorities) should develop and use a clearer framework for looking beyond current market conditions to examine how the transaction might affect future innovation and consumer welfare⁵⁵. *Shapiro* suggests that applying tougher standards to mergers that may lessen competition in the future but do not lessen competition right away would be the right thing to do⁵⁶. The problem in this situation is that the competition authorities will struggle to predict whether two firms would become significant competitors in the future. This is especially difficult in the digital economy where products/services evolve over short periods of time. Inevitably, this would mean an increased number of false positive merger decisions, however, this should not be a problem because that would strike a fairer balance between false positives and false negatives.

2.3. Situation in Austria and Germany

Two EU Member States adapted new merger control rules in order to capture similar high-value transactions where one of the parties does not generate large annual turnover. Under the rules, if transaction value exceeds a certain amount, then the merger needs to be referred to the national authorities⁵⁷.

The German authorities are updating its competition law framework every four years. In 2017 Germany amended their competition law for the 9th time, focusing on the issues in the digital economy. Germany introduced Section 35 (1a) of Act against Restraints of Competition (GWB) in order to close a gap in the system of merger control in an increasingly dynamic economic environment, taking into account progressive digitalisation and integration of economy and society. The value of information and other resources (e.g. innovation, know-how, and market presence of a company) may be better suited to define the actual value of the digital merger. In the updated law value of consideration is set at

⁵⁴ Crémer et al., Competition policy for the digital era, Final report, 2019, p. 110. Available at: <<https://ec.europa.eu/competition/publications/reports/kd0419345enn.pdf>> accessed on 4 December 2019.

⁵⁵ Report of the Digital Competition Expert Panel, Unlocking digital competition, March 2019, p. 93. Available at: <https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/785547/unlocking_digital_competition_furman_review_web.pdf> accessed on 4 December 2019.

⁵⁶ Carl Shapiro, Antitrust in a time of populism, *International Journal of Industrial Organization*, Vol. 61, 2018, p. 739.

⁵⁷ For more see e.g. Michael Mayr, Austria to introduce transaction value merger notification threshold, *Kluwer Competition Law Blog*, 10 April 2017; Werner Berg and Lisa Weinert, New merger control thresholds in Germany – beware of ongoing transactions, *Kluwer Competition Law Blog*, 7 June 2017.

EUR 400 million and defined as “all assets and other monetary benefits” in a broad sense⁵⁸. The aim of the new threshold is to cover cases where current turnover and the purchase price for the company differ to a disproportionate extent⁵⁹. This is the case with young innovative start-ups which reinforce dynamic competition by introducing innovative business models but have no significant revenues.

This new reform helps competition authority to identify anticompetitive practices in digital markets which are data driven. However, *Budzinski and Stohr* notes that while these are very welcome improvements to competition policy, one problem, which was neglected by the amendment, still remains. While data-based price discrimination can be considered in the cases where market power exists, incentives to implement this discrimination technique exist considerably below market power thresholds where markets are data driven⁶⁰. This is an issue which already exists in markets such as online airline ticket sales or online shops (e.g. Amazon). In this sense, the need to further improve competition policy framework in Germany still remains.

Austria, closely following Germany, introduced a consideration threshold value of EUR 200 million as of 1 November 2017. The new test now has four cumulative elements: parties have a joint global turnover of EUR 300 million; a joint Austrian turnover of EUR 15 million; the value of the consideration for the transaction is more than EUR 200 million, and; the target is active in Austria to a significant extent⁶¹. The new regime aims to capture mergers which do not have a high turnover at the time of the merger but exhibit significant competitive potential. The consideration threshold introduced in Austria is 50% lower than in Germany (EUR 200 million compared to EUR 400 million). Contrary to the German law, the Austrian law does not include a definition of ‘value of consideration’, however, the Austrian legislator included a definition closely resembling the German law in the preparatory materials for the Austrian law: ‘the consideration consists of all assets and other

⁵⁸ Bundeskartellamt and Bundes Wettbewerbs Behörde, Guidance on Transaction Value Thresholds for Mandatory Pre-merger Notification (Section 35 (1a) GWB and Section 9 (4) KartG), p. 3. Available at: <https://www.bundeskartellamt.de/SharedDocs/Publikation/EN/Leitfaden/Leitfaden_Transaktionsschwelle.pdf?__blob=publicationFile&v=2> accessed on 4 December 2019.

⁵⁹ *Ibid.*, p. 1.

⁶⁰ Oliver Budzinski and Annika Stohr, Working Paper: Competition policy reform in Europe and Germany – Institutional change in the light of digitization, *Ilmenau Economics Discussion Papers 117*, Ilmenau University of Technology, Institute of Economics, November 2018, pp 22-23.

⁶¹ Bundeskartellamt and Bundes Wettbewerbs Behörde, Guidance on Transaction Value Thresholds for Mandatory Pre-merger Notification (Section 35 (1a) GWB and Section 9 (4) KartG), p. 7. See also <<https://iclg.com/practice-areas/merger-control-laws-and-regulations/austria>> accessed on 3 September 2019.

benefits in kind, which seller receives from purchaser in connection with the merger (purchase price), in addition to the value of possible liabilities accepted by the purchaser'⁶². Therefore, "assets" have a wide meaning – money, transfer of voting rights, securities, tangible and intangible assets. Another important criterion is the requirement to carry out significant activities in Austria. Not only current sales activities but also activities aimed at market entry and R&D activities (if the research results will likely be marketed in Austria) both will be regarded as domestic operations⁶³. Also, operations must be significant. If the turnover adequately reflects market position and competitive potential, domestic revenues of less than EUR 0.5 million will not be regarded as significant, if, on the other hand, turnover cannot be an adequate indicator of the position in the market and potential (which is relevant for the digital economy), the significance of target's activities will be assessed on industry-specific indicators (e.g. monthly active users and unique visitors)⁶⁴. It seems that this new law is drafted in a way as to catch a larger number of digital mergers because the thresholds are set comparably low and there are many cases when activities will be considered as 'significant'.

A Joint Guidance Paper drafted by the Bundeskartellamt and the Austrian Federal Competition Authority on the application of the new transaction value threshold should help to bring more clarity on how mergers need to be analysed. *Theodor Thanner*, Director General of the Austrian Federal Competition Authority said:

'The thresholds in Austria and Germany are similar in scope. In view of the close cooperation between our two authorities we therefore consider it appropriate to publish a joint guidance paper on how the respective laws should be interpreted. Using case examples, the paper explains how key criteria of the new provisions are to be applied and defined'⁶⁵.

⁶² Dieter Hauck, Austrian Competition Law Reform and the Value of a Merger in the Digital World, *Journal of European Competition Law & Practice*, Vol. 9, No. 5, 2018, p. 326.

⁶³ *Ibid.*, pp 326-327.

⁶⁴ *Ibid.*, pp 327.

⁶⁵ Bundeskartellamt press release, Joint guidance on new transaction value threshold in German and Austrian merger control submitted for public consultation, Bonn, 14 May 2018. Available at: <<https://webgate.ec.europa.eu/multisite/ecn-brief/en/content/joint-guidance-new-transaction-value-threshold-german-and-austrian-merger-control-submitted>> accessed on 4 December 2019.

This is a welcomed addition which includes examples of mergers in the digital economy, however as it is clear looking at relevant case law, mergers in the digital economy are often very unique and what applies in one scenario may not be suitable in other⁶⁶.

2.4. *Proposals in the UK*

An independent Digital Competition Expert Panel issued a report on Unlocking digital competition (Furman Report), which recommended changes to the UK's competition framework when faced with challenges in digital market both in the UK and internationally. There were recommendations to update the existing rules which govern merger enforcement and other suggestions which would boost competition in digital markets. The two most important suggestions among many others would be: first, to require all digital companies designated with a "strategic market status" to make the Competition and Markets Authority (the CMA) aware of all intended acquisitions, and; second, change legislation to allow the CMA to use a 'balance of harms' approach which takes into account the scale as well as the likelihood of harm in merger cases involving potential competition and harm to innovation⁶⁷.

Later on, in 2019 Lear Report was published in relation to ex-post assessment of merger control in digital markets⁶⁸. Four recent digital merger clearance decisions were considered to evaluate whether they were reasonable based on the evidence available at the time, and whether now, when knowing the way in which market evolved, allowing those mergers led to a detrimental outcome. In this report it was concluded that there were some gaps in the analysis of previous cases, however, they do not undermine the legitimacy of the clearance decisions and even after some time has passed it is not clear whether competitive harm has arisen because of these gaps⁶⁹. There are recommendations provided for future investigations which suggest how the counterfactual should be defined and developing a

⁶⁶ Bundeskartellamt and Bundes Wettbewerbs Behörde, Guidance on Transaction Value Thresholds for Mandatory Pre-merger Notification (Section 35 (1a) GWB and Section 9 (4) KartG), p. 22. Available at: <https://www.bundeskartellamt.de/SharedDocs/Publikation/EN/Leitfaden/Leitfaden_Transaktionsschwelle.pdf?__blob=publicationFile&v=2> accessed on 4 December 2019 – an example demonstrating situation similar to the one in Facebook/WhatsApp merger illustrating that turnover is not a suitable benchmark.

⁶⁷ Report of the Digital Competition Expert Panel, Unlocking digital competition, March 2019, pp 12-13. Available at: <https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/785547/unlocking_digital_competition_furman_review_web.pdf> accessed on 4 December 2019.

⁶⁸ Lear Report, Ex-Post Assessment of Merger Control Decisions in Digital Markets, Final Report, May 2019. Available at: <https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/803576/CMA_past_digital_mergers_GOV.UK_version.pdf> accessed on 4 December 2019.

⁶⁹ Ibid., pp 117-118.

better understanding of key markets in the digital sector⁷⁰. Also, more focus should be placed on the transaction value – when the price paid by the acquirer seems hard to explain based on current or likely future earnings, rationale for the acquisition should be scrutinized, because the purpose might be killing off emerging competition⁷¹. Nonetheless, a certain degree of uncertainty will always remain.

The CMA agrees that digital sector poses new challenges for the competitive assessment. Nevertheless, the official position which is voiced by the CMA is that the current regime is fit for purpose to address them and there is no need to make any fundamental changes. In relation to jurisdiction, alternative test exists in the UK – if the turnover-based test is not met, then parties' combined share of supply is considered, if it exceeds 25% and any kind of increment in share is brought about by the deal, the CMA can exercise jurisdiction. It is a flexible test and the CMA has consistently been able to exert jurisdiction over transactions in digital markets, where turnovers of targets are limited, but the value of deals high⁷². Chief Executive of the CMA, Dr Andrea Coscelli, suggests that reinventing current CMA's approach may lead to more harm than good⁷³.

2.5. Joint Memorandum of BeNeLux Countries

Recently Belgian, Dutch and Luxembourg competition authorities issued a “joint memorandum” on challenges which the authorities face in the digital world. This memorandum focuses on important questions in merger control: need for guidance in this fast-moving sector, debate on an *ex ante* instrument which would provide binding commitments without establishing an infringement, and on “killer acquisitions”, which might be escaping current jurisdictional thresholds and allowing dominant platforms to purchase small start-ups before they become competitors⁷⁴.

⁷⁰ Lear Report, Ex-Post Assessment of Merger Control Decisions in Digital Markets, Final Report, May 2019, pp 44-46. Available at: <https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/803576/CMA_past_digital_mergers_GOV.UK_version.pdf> accessed on 4 December 2019.

⁷¹ Ibid., p. 45.

⁷² Speech, Dr Andrea Coscelli, Competition in the digital age: reflecting on digital merger investigations, OECD/G7 conference on competition and the digital economy, 3 June 2019. Available at: <<https://www.gov.uk/government/speeches/competition-in-the-digital-age-reflecting-on-digital-merger-investigations>> accessed on 4 December 2019.

⁷³ Ibid.

⁷⁴ Joint memorandum of the Belgian, Dutch and Luxembourg competition authorities on challenges faced by competition authorities in a digital world, 2 October 2019, p. 2. Available at: <https://www.belgiancompetition.be/sites/default/files/content/download/files/bma_acm_cdcl.joint_memorandum_191002.pdf> accessed on 17 November 2019.

The authorities are proposing to discuss some issues which cause underenforcement in this sector: the way in which competition authorities should assess the competitive potential of start-up companies, a change in jurisdictional thresholds, whether there is a need to implement a balance of harms test, whether in some situations the burden of proof should be reversed, etc⁷⁵. They note that these studies would be most useful for the European Commission's Directorate General of Competition – past acquisitions by the main platforms and past merger decisions should be taken into account. Furthermore, the authorities are proposing to introduce *ex ante* guidance on specific issues before relevant case law is developed by authorities and courts – the European Commission should be expected to do this in the first place. In fast moving markets it is vital to act within a reasonable time period in order to meet the legitimate expectations of stakeholders. Therefore, where infringement cases concern novel issues, there is a need for: an early identification and case allocation and fast track cooperation in related cases as envisaged in the ECN 'early warning' procedure, a further optimization of accelerated procedures such as single or multiple Member State competition authority settlements and commitments, etc⁷⁶. However, even this would not be enough. *Ex ante* guidance papers should be issued on specific issues in the digital economy as soon as possible to impact new developments⁷⁷. Also, introduction of fast-track and less formal procedures is suggested – case-by-case guidance letters would be issued to individual companies – this would not require a legislative change⁷⁸.

Current ex-post enforcement is too slow in digital and other fast-moving markets. *Ex ante* intervention is suggested in this case in order to prevent anti-competitive behaviour by dominant companies which act as gatekeepers to online ecosystems⁷⁹. This mechanism would allow competition authorities to impose remedies on dominant companies to prevent competitive concerns even without establishing an infringement. If the nature of the *ex ante* tool would be non-punitive then it could enable a constructive dialogue between the authorities and dominant companies, this might lead to voluntary acceptance of reasonable

⁷⁵ Joint memorandum of the Belgian, Dutch and Luxembourg competition authorities on challenges faced by competition authorities in a digital world, 2 October 2019, p. 3. Available at: <https://www.belgiancompetition.be/sites/default/files/content/download/files/bma_acm_cdclcl.joint_memorandum_191002.pdf> accessed on 17 November 2019.

⁷⁶ Ibid., p. 4.

⁷⁷ Ibid.

⁷⁸ Ibid.

⁷⁹ Ibid., p. 5.

commitments at an early stage, consequently avoiding long legal battles⁸⁰. However, if non-punitive methods are not effective, then a punitive mechanism should be in place⁸¹. The memorandum acknowledges that further development is needed to control the growth of platforms and prevent killer acquisitions – problems which are difficult to control with ex-post enforcement.

2.6. EUMR Jurisdictional Thresholds Update

Current EU turnover-based thresholds are problematic for the digital economy. There is a risk of underenforcement. Often mergers in the digital economy involve parties where one of them has limited turnovers which allows them to avoid the Commission's jurisdiction, however, this does not mean that they are irrelevant for the competitive assessment. The doubts about the effectiveness of national referrals remain – it may be insufficient given that only a small number of jurisdictions have transaction-value-based thresholds in force, therefore the referrals to the EU will not always be predictable. Furthermore, if a referral is made under Article 22 of the EUMR, the Commission examines the impact of the concentration within the territory of the referring Member States but will not have jurisdiction in Member States which did not join the request. When speaking about national authorities, different national authorities do take different approaches on enforcement in digital markets. Some countries (e.g. Germany) take on difficult cases and are at the very forefront of examining digital markets, while on the other hand, some states are reluctant and stay away from such cases. Therefore, when it comes to large tech-giants the Commission seems to be the authority which should take on them and lead the way in order to ensure uniform application of laws. It has the strongest authority given its supranational nature and strong enforcement powers as well as its strong willingness to impose stringent fines on big digital companies. The examples of Germany and Austria could be followed to improve the current EU merger regime. Also, an analysis of the strategic relevance of mergers in shielding broader ecosystems from competitive threats would be useful. Acquisitions of small start-ups by dominant platforms should be analysed as a possible defensive strategy against partial user defection from the ecosystem as a whole. By introducing transaction value threshold, the enforcement gap would be closed and small turnover mergers which could potentially be a threat to effective competition would be

⁸⁰ Joint memorandum of the Belgian, Dutch and Luxembourg competition authorities on challenges faced by competition authorities in a digital world, 2 October 2019, p. 6. Available at: <https://www.belgiancompetition.be/sites/default/files/content/download/files/bma_acm_cdcl.joint_memoandum_191002.pdf> accessed on 17 November 2019.

⁸¹ Ibid.

caught. The introduction of this threshold on the EU level would also stress the importance of the turnover-based test. However, the problem with this is that companies themselves set the value of the transaction. They may be manipulating by creating various payment structures in order to set a lower price for the transaction in order to escape the transaction-value-based threshold⁸². This means that the threshold may not be sufficient enough and new guidelines would need to be developed, which would explain precisely how all the payments (including monetary payments, voting rights, assets subject to transfer, etc.) should be calculated⁸³. These changes in the EUMR would mean more additional work for the Commission and firms. There would be a need to minimise the administrative burden and transaction costs of notifying the Commission. Moreover, there is a need to ensure that principles of public international law are respected – requirements to show local nexus (i.e. in order to establish jurisdiction, an immediate and substantial effect of the concentration in the EU must be shown⁸⁴. Besides, harmonious co-existence of a non-turnover-based threshold for the EUMR with national merger control regimes need to be ensured⁸⁵. It is also problematic to set a right limit which is not too low nor too high. There could be special requirements for transactions with specific characteristics (e.g. acquisitions by dominant firms in markets characterised by strong network effects)⁸⁶. Lastly, *Ex ante* guidance on specific issues before relevant case law is developed by authorities and courts could be introduced as offered in the memorandum of BeNeLux countries to impact new developments in this area rather than just relying on ex-post enforcement, which is too slow for digital sectors.

However, for the time being the Commission could wait and see how transaction value-based thresholds implemented in Austria and Germany change the situation in those countries and take decisions then. Correspondingly, the Commission will continue using the existing EUMR framework and rely on the referral system to ensure that transactions on EU level are caught. If this does not prove to be effective, then the Commission should strengthen its framework by following EU Member States and implementing the suggested changes.

⁸² Hanna Stakheyeva and Fevzi M. Toksoy, Merger control in the big data world: to be or not to be revisited? *Actecon, The Output, Selected Essays*, 2017, p. 72.

⁸³ *Ibid.*

⁸⁴ Case T-286/09, *Intel Corp. v European Commission*, ECLI:EU:T:2014:547, para 233.

⁸⁵ Crémer et al., Competition policy for the digital era, Final report, 2019, p. 114. Available at: <<https://ec.europa.eu/competition/publications/reports/kd0419345enn.pdf>> accessed on 4 December 2019.

⁸⁶ *Ibid.*

3. Data-Related Specifics of the Digital Economy Relevant for the Commission's Analysis of Substantive Issues in Merger Cases

3.1. Market Definition

Market definition is one of the most fundamental elements of all investigations, when the authorities are carrying out substantive analysis, including mergers. It provides a framework for the authorities for the eventual examination of whether a certain transaction is likely to produce anticompetitive effects on the market. One feature which is very prominent in the digital economy is fast-moving nature of this sector. Enormous number of products/services is constantly brought onto the market and existing products are being continually upgraded. This means that defining relevant product market may become challenging because the tools that are being used to define traditional markets may not be suitable for markets where products can be enriched with new features relatively fast and easy, in that way the boundaries between markets covering different services are blurring. Markets can often be overlapping, firms operating on adjacent markets may become competitors in the future.

In many digital merger cases the Commission ruled that 'the exact market definition can be left open'⁸⁷. The Commission decided that the precise market definition is not necessary in these scenarios and mergers can be assessed on alternative relevant product markets. However, the Commission does try to find potentially narrower relevant markets. In Facebook/WhatsApp, the Commission examined whether consumer communication apps could be further divided according to their intended use⁸⁸. Indeed, it is possible to divide them further. For example, WhatsApp could be used on smartphones but not on tablets or PCs⁸⁹. This demonstrates that consumer communication apps can be divided into further segments based on which operating systems they can be used. In Microsoft/Skype case the Commission examined whether consumer communication market could be further segmented based on platforms, operating systems, and functionalities offered⁹⁰. These are not the only cases when the Commission is trying to identify narrower markets⁹¹. It is assumed that in the future, markets should be defined widely because in the digital industry,

⁸⁷ Case COMP/M.5727 – *Microsoft/Yahoo!Search Business*, para 81; Case COMP/M.6281 – *Microsoft/Skype*, para 43; Case COMP/M.7217 – *Facebook/WhatsApp*, para 33; Case M.8124 – *Microsoft/LinkedIn*, para 87.

⁸⁸ Case COMP/M.7217 – *Facebook/WhatsApp*, para 60.

⁸⁹ *Ibid.*, para 18.

⁹⁰ Case COMP/M.6281 – *Microsoft/Skype*, paras 29; 42; 55.

⁹¹ See also Case M.8124 – *Microsoft/LinkedIn*, paras 89; 95 – the Commission questioned whether social networking services could be further segmented according to their intended use; COMP/M.5727 – *Microsoft/Yahoo!Search Business*, para 75 – the Commission questioned whether there is a difference between search and non-search advertising.

where market structure is rapidly changing, it is important to look at them as widely as possible to capture the potential future competitors⁹².

The critical issue is whether one market for the platform as a whole should be defined or rather several markets corresponding with each of the sides of the platform (e.g. in Facebook/WhatsApp the Commission identified separate relevant markets for the services provided to users on the one side of the market and the services offered to advertisers on the other side: on the user side the relevant market was for consumer communication services and social networking sides, and on the advertiser side the Commission identified the segmentation of the online advertising market)⁹³. This is an important question because the platforms in such cases can experience competitive pressure not only from other multi-sided businesses competing on only one side of the market, but also from single-sided firms. A user of an online search engine may regard services of travel agencies as a substitute to the search functionality offered by the search engine⁹⁴. Even if there is only one overlapping customer side, platforms can still be regarded as competitors (e.g. search engine offering advertising services can compete with social networks on advertiser side, but it would not be considered as a substitute by social network users). In online markets, where only one market for a platform as a whole is defined, it would not be possible to take into account many companies which are competitors on only one side of the market. If separate relevant markets are defined for each platform, then it makes it possible to assess competitive pressure which a firm is dealing with on all market sides and this would lead to an appropriate market definition. Nevertheless, there are no obvious borders and it is difficult to define “isolated” markets. The tests for market definition was built for standard goods and services and it was traditionally used to isolate problems⁹⁵. Due to the fact that markets in the digital world are very dynamic, they cannot be so clearly defined as in the old economy, therefore, the Expert Panel in their report for the Commission suggests that the authorities should put less emphasis on market definition and focus more on theories of harm and identification of anti-competitive strategies⁹⁶.

⁹² Hanna Stakheyeva and Fevzi M. Toksoy, Merger control in the big data world: to be or not to be revisited? *Actecon, The Output, Selected Essays*, 2017, p. 73.

⁹³ Case COMP/M.7217 – *Facebook/WhatsApp*, paras 13-83.

⁹⁴ Florence Thepot, Market Power in Online Search and Social Networking: A Matter of Two-Sided Markets, *World Competition*, 36(2), 2013, p. 207.

⁹⁵ Crémer et al., Competition policy for the digital era, Final report, 2019, p. 46. Available at: <<https://ec.europa.eu/competition/publications/reports/kd0419345enn.pdf>> accessed on 4 December 2019.

⁹⁶ *Ibid.*

3.2. *Measuring Market Power*

Market power is a criterion which is used to prove whether an undertaking is dominant in a relevant market. Traditionally, market shares were used for this analysis – dominance was assumed when market shares were above a certain threshold. In digital markets market shares fluctuate regularly. WhatsApp situation would be an example – in Microsoft/Skype it was not considered as a competitor in the market for consumer communication services but after a few years it became one of the market leaders. This is an example that in digital markets past market shares may not accurately represent the competitive constraints exercised by a company at the time of the assessment of a merger or in the near future. One could look at the strength of potential competition in the form of the existence of entry barriers and recent market entry by new firms in order to assess whether a particular undertaking is able to behave independently from its competitors, customers and consumers. This is not like traditional markets where competition is based on price and output. In dynamic industries companies compete for the market. A firm can be under a significant competitive pressure even if its market shares are high, as long as entry barriers are low⁹⁷.

Furthermore, because market power is not a good indicator of dominance in digital markets, the Commission has to consider for how long a dominant firm has upheld its position. If a firm has upheld its dominant position for a long time, it could mean that this position is not that ‘fragile’. For example, in Google Shopping case the Commission found that Google had extremely high market shares combined with a period of dominance which had been held for nearly ten years in the majority of EEA countries⁹⁸. This period is far too long in fast moving industries to be considered as a ‘fragile’ monopoly position. One of the opinions in OECD Hearings in 2012 suggested that a rule of thumb in digital markets to presume dominance is if a dominant firm remains unchallenged for five years⁹⁹. Therefore, in digital markets a presumption exists that firm is dominant even if it does not have extremely high market shares but remains unchallenged for a longer period of time.

⁹⁷ Florence Thepot, Market Power in Online Search and Social Networking: A Matter of Two-Sided Markets, *World Competition*, 36(2), 2013, pp 218-220.

⁹⁸ European Commission, Press Release, Antitrust: Commission fines Google €2.42 billion for abusing dominance as search engine by giving illegal advantage to own comparison shopping service, Brussels, June 2017. Available at: <https://ec.europa.eu/commission/presscorner/detail/en/IP_17_1784> accessed on 4 December 2019.

⁹⁹ OECD, The Digital Economy, DAF/COMP(2012)22, p. 7. Available at: <<http://www.oecd.org/daf/competition/The-Digital-Economy-2012.pdf>> accessed on 4 December 2019.

Data could be an important criterion to measure market power as well. If a firm has vast amounts of data which cannot be obtained by the competitors, then this might lead to market dominance¹⁰⁰. Another important issue is related to the characteristics of data – it becomes outdated quite fast because personal living conditions change, and old data becomes irrelevant¹⁰¹. In order to keep the data up-to-date firms need to innovate which also means that there are additional costs¹⁰². Lastly, it is not enough to collect big amounts of data alone – it has to be processed. This comes at a cost as well because specific problems arise when large datasets need to be analysed which might lead to incorrect results¹⁰³. The Commission has focused on the discussion about data in relation to market power in several cases. The Commission analysed network effects and the fact that other market participants were collecting user data in Facebook/WhatsApp case. Also, in Microsoft/Yahoo! The Commission considered the fact that the collection of large amounts of data could enhance market power. The report for the Commission suggests that the discussion about market power should analyse access to data which is available to the presumed dominant firm but not to competitors, on a case-by-case basis¹⁰⁴.

In their paper for the Commission authors suggest that there is no single parameter for competition authorities to measure market power or to declare that a firm is dominant¹⁰⁵. The authors agree with the view of Professor *Morton*, that the assessment of market power has to be case-specific, take into account behavioural economics insights about the strength of consumers' biases towards default options and present gratification, and be aware of all the ways by which incumbents are protected from competition¹⁰⁶. This means that the competition authorities cannot rely on the old assumptions about market shares and will have to do more than just look at high market shares to determine that an undertaking is dominant. Many factors need to be taken into account to measure market power in the digital economy. Nonetheless, high market shares should not be considered completely irrelevant when assessing mergers in the digital economy. Quite contrary – where high market shares are combined with strong network effects, special attention must be paid as

¹⁰⁰ Crémer et al., Competition policy for the digital era, Final report, 2019, p. 49. Available at: <<https://ec.europa.eu/competition/publications/reports/kd0419345enn.pdf>> accessed on 4 December 2019.

¹⁰¹ Jan Kramer and Michael Wohlfarth, Market power, regulatory convergence, and the role of data in digital markets, *Telecommunications Policy* 42, 2018, p. 166.

¹⁰² Ibid.

¹⁰³ Ibid.

¹⁰⁴ Crémer et al., Competition policy for the digital era, Final report, 2019, p. 49. Available at: <<https://ec.europa.eu/competition/publications/reports/kd0419345enn.pdf>> accessed on 4 December 2019.

¹⁰⁵ Ibid., p. 50.

¹⁰⁶ Ibid.

this might help to further improve firms' market positions. High market shares should be considered as a starting point for the Commission to analyse a merger together with other relevant criteria.

3.3. *Data-Related Theories of Harm*

The goal of EU merger control is to define the potential harmful effects to competition in the future. The Commission uses a theoretical test of competitive harm to assess whether there is a possibility that the merger will have negative impact for the market and consumers. However, for the theory to apply there is a need for sufficient evidence to prove the theory¹⁰⁷. This is done in order to ensure that the anti-competitive effects are logically consistent and not just purely speculative.

The first theory is that data can be used to strengthen a position by eliminating potential competitors. In this situation large market players buy small start-ups with a quickly growing user base and significant competitive potential, which have the potential to become a competitive threat to them in the future but have limited market power at the time. The situation is more complex when a company is buying start-ups which do not offer identical services and do not operate on the same market. However, at some point in the future the markets may overlap, and two firms would turn into competitors. This way firms holding strong market positions have the ability to hinder new competitors which are trying to enter the market as well as increase their market power. In many cases these acquisitions can escape the Commission's jurisdiction because start-ups often have low turnovers.

This theory was analysed in Facebook/WhatsApp case. The Commission analysed two theories of harm which could have resulted in Facebook strengthening its position in the online advertising market: introducing advertising on WhatsApp, and/or using WhatsApp as a potential source of user data for the purpose of improving the targeting of Facebook's advertising activities outside WhatsApp¹⁰⁸. There was a possibility that after the transaction targeted advertising could be introduced on WhatsApp by analysing user data collected from WhatsApp users and this would reinforce Facebook's position in the online advertising market¹⁰⁹. However, to do this there was a need to change WhatsApp's privacy policy. Firstly, the Commission observed that there is a theoretical possibility that after the

¹⁰⁷ Richard Whish and David Bailey, *Competition Law* (Oxford, Oxford University Press, 8th ed, 2015), pp 864-866.

¹⁰⁸ Case COMP/M.7217 – *Facebook/WhatsApp*, para 167.

¹⁰⁹ *Ibid.*, para 168.

merger WhatsApp will change its privacy policy in order to offer targeted advertising¹¹⁰. In the end the Commission concluded that even if targeted advertising is introduced, competitive concerns would only arise if there were not a sufficient number of alternatives, while, in this case, post-merger, a sufficient number of actual and potential competitors offering targeted advertising will remain on the market¹¹¹. Secondly, after the transaction the merged entity could start collecting WhatsApp's user data to improve the accuracy of the targeted ads on Facebook to WhatsApp users that are also Facebook users¹¹². This would strengthen Facebook's position in online advertising market since it would have more data available¹¹³. This would also require a change in WhatsApp's privacy policy and a match between each user's WhatsApp profile to their Facebook profile, however, the parties submitted that there are major technical obstacles to achieve this¹¹⁴. The Commission again concluded that this would only raise competitive concerns if the concentration of data within Facebook's control would allow it to strengthen its position in advertising¹¹⁵. Because after the transaction a large number of alternatives will remain on the market, also, a significant number of other market participants are collecting user data alongside Facebook, what is more, even if the merged entity starts using WhatsApp user data to improve targeted advertising, a large amount of Internet user data valuable for advertising purposes, which is not within Facebook's exclusive control, will remain to be available¹¹⁶. Nonetheless, the Commission analysed data concentration to the extent that it was likely to strengthen Facebook's position in the online advertising market, and concluded that "any privacy-related concerns flowing from the increased concentration of data within the control of Facebook as a result of the transaction do not fall within the scope of the EU competition law rules but within the scope of the EU data protection rules¹¹⁷."

Secondly, there is a theory that while a merger between an established undertaking and an innovative newcomer has only a low impact on the existing market structure (because of low market shares of small start-ups or no horizontal overlap), in data-related markets such merger could result in differentiated data access and increase the concentration of data, related to this market if the newcomer has access to a large database (i.e. combination of

¹¹⁰ Case COMP/M.7217 – *Facebook/WhatsApp*, para 173.

¹¹¹ *Ibid.*, paras 176-179.

¹¹² *Ibid.*, para 180.

¹¹³ *Ibid.*, para 184.

¹¹⁴ *Ibid.*, para 185.

¹¹⁵ *Ibid.*, para 187.

¹¹⁶ *Ibid.*, paras 188-189.

¹¹⁷ *Ibid.*, para 164.

data)¹¹⁸. Access to more diversified data can further strengthen the economies of scope and improve the quality of the collected information overall¹¹⁹. This makes it difficult for the competitors to match the quality of the dominant firm, thus reinforcing its strong market position¹²⁰. This leads to a situation where the competitors would not be able to replicate the information which can be obtained by combining datasets, therefore, the competitors would incur higher costs to produce the same information, which in turn means higher price or lower quality of services¹²¹.

This was analysed in Google/DoubleClick where Google wanted to acquire an ad service provider in order to obtain DoubleClick's valuable data to use for its personalized and targeted advertisements. Both companies strongly relied on data analysis. One of the foreclosure scenarios analysed by the Commission was whether the combination of customer provided data would help Google to strengthen their position because competitors would not be able to replicate combined data, and this would allow Google to raise its prices for intermediation services¹²². The parties provided information that DoubleClick's current contract with advertisers do not allow data to be used for behavioural targeting¹²³. However, the Commission stated that the contracts can be easily renegotiated and modified. On the other hand, there are no incentives for DoubleClick to renegotiate the contracts as their non-neutral position as a service provider would make customers switch to another provider¹²⁴. Also, after analysing the situation, the Commission concluded that the data collected was 'relatively narrow in scope' and other companies active in the market 'have the ability to collect large amounts of more or less similar information' which can be useful for targeted advertising¹²⁵. Therefore, merging datasets together would be unlikely to squeeze out competitors and enable Google to charge higher prices for intermediation services¹²⁶. The Commission analysed the merger only from the perspective of competition law in order to answer the question whether the merger would impede effective

¹¹⁸ Autorite de la concurrence & Bundeskartellamt, Competition Law and Data, 2016, p. 16. Available at: <https://www.bundeskartellamt.de/SharedDocs/Publikation/DE/Berichte/Big%20Data%20Papier.pdf?__blob=publicationFile&v=2> accessed on 15 November 2019.

¹¹⁹ Nils-Peter Schepp and Achim Wambach, On Big Data and Its Relevance for Market Power Assessment, *Journal of European Competition Law & Practice*, 2015, p. 3.

¹²⁰ *Ibid.*, p. 2.

¹²¹ Autorite de la concurrence & Bundeskartellamt, Competition Law and Data, 2016, pp 11-13. Available at:

<https://www.bundeskartellamt.de/SharedDocs/Publikation/DE/Berichte/Big%20Data%20Papier.pdf?__blob=publicationFile&v=2> accessed on 15 November 2019.

¹²² Case M.8124 – *Microsoft/LinkedIn*, para 359.

¹²³ *Ibid.*, para 361.

¹²⁴ *Ibid.*, para 363.

¹²⁵ Case COMP/M.4731 – *Google/DoubleClick*, paras 268-277.

¹²⁶ *Ibid.*, para 366.

competition. The Commission did not consider the effects which the combination of large datasets could produce on privacy. The merger was cleared by the Commission as it could not prove that there would be any anti-competitive effects in any of the relevant markets¹²⁷. Nevertheless, the Commission affirmed that fundamental rights (privacy and data protection) must be respected and the new entity is obliged to abide Community legislation in relation to the processing of personal data¹²⁸.

Similarly, in Microsoft/LinkedIn the Commission assessed the combination of data in relation to online advertising. The Commission stated that ‘data combination could only be implemented by the merged entity to the extent it is allowed by applicable data protection rules’¹²⁹. The Commission held that in this situation data can be protected by relevant national law, the Data Protection Directive, and the then-upcoming General Data Protection Regulation¹³⁰. The Commission assumed that the combination of data is allowed under the applicable data protection legislation but there are two ways in which data combined could raise horizontal issues¹³¹. First, the combination of datasets may increase the merged entity’s market power or increase barriers to entry in the market for actual or potential competitors which might need this data, and, second, even if combination of datasets is not possible, the merger could eliminate competition between the parties who previously competed with each other on the basis of data they controlled¹³². However, the Commission concluded that these concerns are unlikely to rise after the merger¹³³. *Vestager*, commenting on this merger suggested that the Commission closely monitors mergers where big data is involved, and that companies are not supposed to use data to ‘shut rivals out of the market’, however, in this case it was not a problem because ‘other companies still had access to plenty of data’¹³⁴. Regarding privacy concerns, in its press release, the Commission stated that:

‘Privacy related concerns as such do not fall within the scope of EU competition law but can be taken into account in the competition assessment to the extent that consumers see it as a significant factor of quality, and the

¹²⁷ Case COMP/M.4731 – *Google/DoubleClick*, para 367.

¹²⁸ *Ibid.*, para 368.

¹²⁹ Case M.8124 – *Microsoft/LinkedIn*, para 177.

¹³⁰ *Ibid.*, paras 177-178.

¹³¹ *Ibid.*, para 179.

¹³² *Ibid.*, paras 179-180.

¹³³ *Ibid.*, para 181.

¹³⁴ Speech by Margrethe Vestager, Announcement: Clearing the path for innovation, Web Summit, Lisbon, 7 November 2017.

merging parties compete with each other on this factor. In this instance, the Commission concluded that data privacy was an important parameter of competition between professional social networks on the market, which could have been negatively affected by the transaction¹³⁵.

Thus, it can be seen that the Commission does recognize that data privacy can be a non-price parameter of competition but does not address the question whether collection of large datasets is detrimental to consumers because they could be exploited through the use of data. The Commission draws a clear line between two different legal regimes. The main concern of the Commission is whether rivals of the merging parties would continue to have access to useful data. It distances itself from the data protection law and refers these issues elsewhere. It can be said that the Commission uses data protection rules to limit the boundaries of its merger review procedure rather than expand it.

Lastly, there is a theory that data can be used for input foreclosure. This is relevant in non-horizontal markets. When two firms merge (upstream and downstream), the merged entity is likely to restrict access to data for its' customers downstream, which otherwise would have been supplied prior to merger. This not only raises prices for the competitors but also allows the new entity to charge higher prices for consumers. There is no need to drive the competitors out of the market in order for the Commission to find a SIEC violation – increased prices for the consumers give rise to SIEC¹³⁶.

Input foreclosure was discussed in Microsoft/LinkedIn case. The competitors claimed that LinkedIn's data would constitute important input in the near future, and Microsoft could restrict access to LinkedIn's full data for the purposes of machine learning (ML) in competing customer relationship management (CRM) software solutions, therefore, it would be difficult for other CRM software solutions to compete and bring innovation to the market¹³⁷. The Commission analysed Microsoft's ability to foreclose competing providers and concluded that the merged entity would not be able to do that, because: first, LinkedIn did not have a significant degree of market power in any potential relevant upstream market; second, Microsoft is subject to European data protection laws which limit

¹³⁵ European Commission, Press Release, Mergers: Commission approves acquisition of LinkedIn by Microsoft, subject to conditions, Brussels, 6 December 2016, IP/16/4284. Available at: <https://ec.europa.eu/commission/presscorner/detail/en/IP_16_4284> accessed on 4 December 2019.

¹³⁶ Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings, OJ C 265, 18.10.2008, para 31.

¹³⁷ Case M.8124 – *Microsoft/LinkedIn*, para 246.

its ability to undertake any treatment of LinkedIn's full data, what is more the Commission noted that the upcoming (at the time) General Data Protection Regulation (GDPR) may further limit it; third, all major CRM vendors are already offering advanced functionalities to their CRM customers based on ML, and none of these offerings have been developed or required for its use access to LinkedIn's full data; fourth, there are other alternatives for LinkedIn's data and it is not the only type of data which is necessary¹³⁸. It was concluded by the Commission that the transaction does not raise serious doubts regarding input foreclosure effects to the detriments of CRM software solution providers¹³⁹.

These cases demonstrate that big data is an important factor in the digital economy. It can cause competitive concerns, however, by looking at the relevant cases which involve data-related issues it seems that the mergers have been cleared because of the specific characteristics of data. The Commission often uses the argument that data is widely available to the competitors, therefore downplaying the harm caused by the undertakings. On the other hand, the Commission has started to accept that data protection and privacy issues could be a matter of competition law. *Stakheyeva and Toksoy* argue that two regimes are inseparable in those mergers, where big data is involved¹⁴⁰. Data in online markets is of a bigger significance than in traditional markets. Many digital platforms collect large amounts of user data to build their datasets which enable them to improve their services and develop new products. Because of this data can be seen as a valuable asset in the digital economy. Looking at the relevant cases it seems that mergers in the digital economy where companies use big data are very likely to include data protection and privacy elements, therefore, these issues need to be addressed¹⁴¹.

3.4. New Consumer Welfare Standard

The possibilities which came with emergence of online business enable large market players to increase their profits by exploiting weaker party – the users. Many services, such as social networks, communication services and other have imposed 'take it or leave it' terms and conditions on its users which allow them to collect user data with almost no limits¹⁴². To assess whether a merger could have a negative impact on the effective

¹³⁸ Case M.8124 – *Microsoft/LinkedIn*, paras 253-264.

¹³⁹ *Ibid.*, para 277.

¹⁴⁰ Hanna Stakheyeva and Fevzi M. Toksoy, Merger control in the big data world: to be or not to be revisited? *Actecon, The Output, Selected Essays*, 2017, pp 74-75.

¹⁴¹ *Ibid.*, p. 76.

¹⁴² Press Release, Bundeskartellamt, 'Bundeskartellamt prohibits Facebook from combining user data from different sources', 7 February 2019. Available at:

competition and consumers, the Commission most often measures price, however, this is not the only parameter as other (non-price) parameters such as product quality can be taken into account¹⁴³. In digital markets, where services are often offered at zero price, other non-price-based parameters need to be assessed. Some authors suggest that reduction of privacy can be considered as reduction of product quality¹⁴⁴. If post-merger companies merge their datasets and as a result of this privacy levels decrease, it would mean that the product quality is lower. Quality as a competition parameter seems reasonable in theory, but problematic to apply in practice. Currently there are no sufficiently effective methods to monitor the decrease in quality. Even if new methods are developed to monitor quality in the context of user privacy, the question remains whether it is for the competition authorities to assess this¹⁴⁵. It is unclear how competition authorities could define what constitutes an optimal level of privacy. What is more, product quality can have more than one aspect. User may lose privacy, but they can be compensated by increasing the quality of other features. By using personal data companies can offer better targeted advertising or individualised products¹⁴⁶. This creates a problem because some users might see an increase in data sharing as degradation of quality, others may see it as a quality improvement because of better targeted advertising¹⁴⁷. It would mean that quality depends on consumer perception. Then the authorities would need to balance the harm that privacy-sensitive consumers suffer to the benefits that less privacy-sensitive consumers receive because of data collection¹⁴⁸. What is more, quality is not a mono-dimensional feature – it cannot be based only on privacy, it may depend on other parameters (e.g. speed or accuracy)¹⁴⁹. It means that even if levels of privacy are reduced for users, it would be difficult to assess whether the overall quality of digital goods decreased¹⁵⁰. Nevertheless,

https://www.bundeskartellamt.de/SharedDocs/Publikation/EN/Pressemitteilungen/2019/07_02_2019_Facebook.pdf?__blob=publicationFile&v=2 accessed on 14 November 2019.

¹⁴³ Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings, OJ C 31, 5.2.2004, para 8.

¹⁴⁴ Allen P. Grunes and Maurice E. Stucke, No Mistake About It: The Important Role of Antitrust in The Era of Big Data, *University of Tennessee Legal Studies Research Paper No. 269*, 2015, pp 4-5.

¹⁴⁵ Darren S. Tucker, 'The Proper Role of Privacy in Merger Review', *CPI Antitrust Chronicle*, 2015 (2), pp 2-4.

¹⁴⁶ Oliver Budzinski and Annika Stohr, Working Paper: Competition policy reform in Europe and Germany – Institutional change in the light of digitization, *Ilmenau Economics Discussion Papers 117*, Ilmenau University of Technology, Institute of Economics, November 2018, pp 10-11.

¹⁴⁷ Geoffrey A. Manne and Ben Sperry, 'The Problems and Perils of Bootstrapping Privacy and Data into an Antitrust Framework', *CPI Antitrust Chronicle*, 2015, p. 4.

¹⁴⁸ Geoffrey A. Manne and Ben Sperry, 'The Problems and Perils of Bootstrapping Privacy and Data into an Antitrust Framework', *CPI Antitrust Chronicle*, 2015, p. 6.

¹⁴⁹ Giuseppe Colangelo and Mariateresa Maggiolino, Data Protection in Attention Markets: Protecting Privacy Through Competition? *Forthcoming, Journal of European Competition Law & Practice, Bocconi Legal Studies Research Paper No. 2945085*, February 2018, p. 9.

¹⁵⁰ *Ibid.*, p. 10.

privacy being a difficult metric to measure does not mean that it can be disregarded by the authorities.

3.5. *Paying with Data*

When parties notify the authorities about a merger, there is no requirement to inform consumer or data protection authorities and obtain their approval. From a privacy perspective online markets raise new issues which did not exist in traditional markets. In the digital world, companies can collect vast amounts of information and use it for consumer profiling – this might lead to users losing their digital identities, which means that the consumers lose control of their preferences, consumption habits, and all other characteristics which identify individuals. Large firms operating in digital markets have a strong bargaining position against online platform users which have no choice but to agree to default terms and conditions presented by the company in order to use online services. Users are the weaker party which needs to be protected in this situation. Relying on data protection laws probably would not help in this scenario as it cannot block mergers. Quite the opposite, data protection compliance checklist may even confirm that a firm is complying with data protection regulation – there will be no violation if users freely give their consent to standard terms and conditions which most of the time are too extensive to read. What is more, when the Commission is relying on market foreclosure test in order to find a violation, it is serving competing rivals who need access to data held by another competitor, but the interests of online platform users are overlooked. The interests of consumers cannot be overlooked otherwise there is a risk of consumer harm occurring from exploitation, which in turn leads to a risk of underenforcement, therefore, the relationship between competition law and data protection law needs to be analysed.

The only possibility to assess whether the merger will not infringe data protection laws is for the competition authorities when assessing the merger. If this is the case, then it means that the competition authorities possibly have the administrative burden to ensure merger compliance with relevant data protection rules. However, as discussed before, the Commission does not deal with privacy and other data-related issues if it is irrelevant for the competitive assessment¹⁵¹. General presumption is that competition law was not intended to address breaches of privacy rules. However, the Commission agrees and

¹⁵¹ Case C-238/05, *Asnef-Equifax, Servicios de Informacion sobre Solvencia y Credito, SL v Asociation de Usuarios de Servicios Bancarios (Ausbanc)*, ECLI:EU:C:2006:734, para 62. Note: this was a case under Article 101 TFEU.

recognises that users can be seen as paying with their data and data protection has been recognised as ‘an important parameter of competition’¹⁵². Therefore, personal data can be perceived as a non-monetary form of payment for services used on the Internet (i.e. the users are giving away some of their privacy in order to use services which are offered for free). Even if competition law and data protection serve different goals, privacy issues cannot be excluded from the analysis carried out by the Commission because collection and use of personal data can have implications on competition law dimension as there may be a close link between the two¹⁵³. If the Commission starts looking at data as a means of payment rather than just a mere factor of quality, then it would be possible to establish direct consumer harm when the data provided by a consumer becomes less and less valuable (i.e. less/lower quality free services are available for the same amount of user data than in the past). However, this is far more complex to measure than price.

3.6. Merging Competition Law and the GDPR

In Germany, Bundeskartellamt investigated Facebook under suspicion that Facebook’s conditions of use are in violation of data protection provisions¹⁵⁴. Facebook collects data on users outside of Facebook via Facebook Business Tools which are integrated by advertisers, app developers and publishers, also, from its corporate services claiming that the data are required to provide the service to fulfil Facebook’s legitimate interests¹⁵⁵. Competition authority found that by collecting data from outside of Facebook and merging it with data collected on Facebook without user consent constituted an abuse of a dominant position on the social network market in the form of exploitative business terms pursuant to the general clause of Section 19(1) of the GWB¹⁵⁶. The authorities saw this as a violation of data protection law based on the GDPR¹⁵⁷. The Bundeskartellamt held that it is

¹⁵² EU Commission, Director-General for Competition, Johannes Laitenberger, Speech: EU competition law in innovation and digital markets: fairness and the consumer welfare perspective, Brussels, 10 October 2017, p. 6. Available at: <https://ec.europa.eu/competition/speeches/text/sp2017_15_en.pdf> accessed on 4 December 2019.

¹⁵³ Autorite de la concurrence & Bundeskartellamt, Competition Law and Data, 2016, pp 23-24. Available at:

<https://www.bundeskartellamt.de/SharedDocs/Publikation/DE/Berichte/Big%20Data%20Papier.pdf?__blob=publicationFile&v=2> accessed on 15 November 2019.

¹⁵⁴ Bundeskartellamt, ‘Bundeskartellamt initiates proceeding against Facebook on suspicion of having abused its market power by infringing data protection rules’, March 2016. Available at: <https://www.bundeskartellamt.de/SharedDocs/Meldung/EN/Pressemitteilungen/2016/02_03_2016_Facebook.html> accessed on 15 November 2019.

¹⁵⁵ Bundeskartellamt, Facebook, Exploitative business terms pursuant to Section 19(1) GWB for inadequate data processing, Case Summary B6-22/16, February 2019, p. 3. Available at: <https://www.bundeskartellamt.de/SharedDocs/Entscheidung/EN/Fallberichte/Missbrauchsaufsicht/2019/B6-22-16.pdf?__blob=publicationFile&v=3> accessed on 4 December 2019.

¹⁵⁶ Ibid., p. 7.

¹⁵⁷ Ibid.

indispensable to examine the conduct of dominant companies under competition law in terms of their data processing procedures especially when it relates to online business. In their view, the GDPR can be applied by authorities other than the national data protection authorities¹⁵⁸. This approach demonstrates that data protection can supplement competition law because it allows competition authorities to use data protection laws in order to address new forms of anticompetitive behaviour in digital markets. The GDPR provisions, such as data portability relate to the right to transfer data from one electronic processing system to another, without being prevented from doing so by the controller¹⁵⁹. Some companies impose contractual restrictions on customers and consumers, which in turn means that they are unable to export their data to another provider¹⁶⁰. Article 20 of the GDPR states that:

‘The data subject shall have the right to receive the personal data concerning him or her which he or she has provided to a controller in a structured commonly used and machine-readable format and have the right to transmit those data to another controller without hindrance from the controller to which the data have been provided’.

Due to this provision, the users are guaranteed the right to transfer their data to other online service providers. This will reduce switching costs and reduce the negative effects of digital ecosystems. New platforms will have a chance to offer better quality services for users by receiving their past data and users will be able to switch to services providers which offer higher quality services (e.g. switching to a new consumer communication app which offers more privacy).

However, this German concept would probably fail under EU competition law, because, as it can be seen from previously mentioned cases, the Commission clearly separates data protection and competition law from each other. Some authors agree that this separation makes sense – the purpose of competition law is to protect the competitive process rather

¹⁵⁸ Bundeskartellamt, Facebook, Exploitative business terms pursuant to Section 19(1) GWB for inadequate data processing, Case Summary B6-22/16, February 2019, pp 8-9.

¹⁵⁹ Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation), Article 20.

¹⁶⁰ Competition Policy Statement of VP Joaquin Almunia on the Google antitrust investigation, 21 May 2012, Brussels, Speech 12/372. Available at: <https://ec.europa.eu/commission/presscorner/detail/en/SPEECH_12_372> accessed on 4 December 2019.

than protecting consumers from data privacy infringements¹⁶¹. On the other hand, data protection laws ensure the protection of the fundamental rights and freedoms of consumers. It is said that these two systems may serve different goals¹⁶². Therefore, scholars have identified some problems why these two different regimes cannot be supervised by competition authorities alone. First, enforcing two different legal regimes within one authority (i.e. public enforcement of data protection law by national competition authorities that is juxtaposed to the public data protection enforcement by data protection supervisory authorities) would bear a potential risk of incoherent decision making and lack of legal certainty¹⁶³. The requirement of legal certainty applies to data protection law in the context of the GDPR¹⁶⁴. In order to establish a coherent interpretation of data protection law there is a need to create an enforcement system which is solely established by data protection supervisory authorities which would not be contradicted by simultaneous public enforcement by competition authorities that classically pursue different policy objectives¹⁶⁵. Next, the enforcement of data protection law by competition authorities may also be in breach of Article 52 of the GDPR and the requirements of complete institutional independence¹⁶⁶. According to this, the supervisory authorities' personnel are supposed to be the guardians of the fundamental right of privacy – they must guarantee a high level of protection of fundamental rights and freedoms with respect to the processing of personal data¹⁶⁷. This role cannot be fulfilled by the competition authorities' personnel because despite the fact that they are independent in their decision making, they pursue objectives

¹⁶¹ Giuseppe Colangelo and Mariateresa Maggolino, Data Protection in Attention Markets: Protecting Privacy Through Competition? *Forthcoming, Journal of European Competition Law & Practice, Bocconi Legal Studies Research Paper No. 2945085*, February 2018, p. 9.

¹⁶² Autorite de la concurrence & Bundeskartellamt, Competition Law and Data, 2016, p. 23. Available at: <https://www.bundeskartellamt.de/SharedDocs/Publikation/DE/Berichte/Big%20Data%20Papier.pdf?__blob=publicationFile&v=2> accessed on 15 November 2019.

¹⁶³ Jorg Hoffmann and German Oscar Johannsen, EU-Merger Control & Big Data on Big Data-specific Theories of Harm and Remedies, *Forthcoming, Marco Botta, Josef Drexl (eds.), EU Competition Law Remedies in Data Economy, Springer 2019, Max Planck Institute for Innovation & Competition Research Paper No. 19-05*, p. 35.

¹⁶⁴ Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation), Recitals (6) and (7).

¹⁶⁵ Jorg Hoffmann and German Oscar Johannsen, EU-Merger Control & Big Data on Big Data-specific Theories of Harm and Remedies, *Forthcoming, Marco Botta, Josef Drexl (eds.), EU Competition Law Remedies in Data Economy, Springer 2019, Max Planck Institute for Innovation & Competition Research Paper No. 19-05*, p. 36.

¹⁶⁶ Case C-518/07, *European Commission v Federal Republic of Germany*, ECLI:EU:C:2010:125, para 56. Note: complete institutional independence with regard to the processing of personal data relates to institutional independence rather than functional independence.

¹⁶⁷ Jorg Hoffmann and German Oscar Johannsen, EU-Merger Control & Big Data on Big Data-specific Theories of Harm and Remedies, *Forthcoming, Marco Botta, Josef Drexl (eds.), EU Competition Law Remedies in Data Economy, Springer 2019, Max Planck Institute for Innovation & Competition Research Paper No. 19-05*, p. 38.

that relate to the protection of effective competitive markets¹⁶⁸. However, as mentioned before, competition law does recognize privacy rights of citizens but chooses to analyse data protection only to the point which is necessary for the competitive assessment rather than to protect rights of privacy of Internet users. This cannot be considered as an equal supplement to data protection supervisory authorities. Therefore, data protection enforcement by competition law authorities may be in breach of Article 52 (5) of the GDPR.

3.7. *What Should the Commission Protect?*

General presumption is that competition law was not intended to address breaches of privacy rules, however the Commission accepts that data protection and privacy could be a matter of competition law. Privacy and data protection aspects need to be respected when considering substantive issues in mergers. Merger Guidelines could be updated to fit the features of the digital economy. Furthermore, during the substantive analysis the emphasis should be placed on non-price effects, such as privacy and data protection or product quality. Competition authorities cannot overtake the tasks of data protection authorities, nonetheless, these two different regimes could work together to ensure that both competition law and consumer protection is functioning appropriately. If a digital merger is under review by the competition authorities, it could be cooperating with data protection authorities on issues related to privacy and data protection. This would probably be an administrative burden which may prolong merger review procedures but, on the other hand, it would ensure that the users' fundamental rights are respected.

¹⁶⁸ Jorg Hoffmann and German Oscar Johannsen, EU-Merger Control & Big Data on Big Data-specific Theories of Harm and Remedies, *Forthcoming*, Marco Botta, Josef Drexl (eds.), *EU Competition Law Remedies in Data Economy*, Springer 2019, Max Planck Institute for Innovation & Competition Research Paper No. 19-05, p. 39.

Conclusions and Proposals

1. As it can be seen from the first part of this thesis, digital economy contains certain characteristics which make it different compared to traditional markets. However, these characteristics do not mean that the authorities are not able to deal with digital markets with the current tools that they have. The Commission has been using its framework for a long time, facing various challenges and protecting competition in a wide variety of different markets. However, a high number of acquisitions in the digital sectors shows how important it is and highlights the fact that in the future it will be even more important. Until now, when speaking about digital platforms, there have been no false positives where major digital companies would have been involved but taking into account large number of mergers, it possibly means that there were some false negatives in process of merger enforcement. No false positives and an existing probability that there were some false negatives would mean that there has been underenforcement in digital markets. It can be seen that digital markets have many specific features which are relevant for the competitive assessment. It is vital to understand that all of these specific features such as network externalities, double-sided markets, big data and other influence the way in which markets operate and the assessment process needs to be adjusted in order to protect effective competition in digital market – in order to correctly address the issues prominent in this sector the Commission needs to be able to understand it just as good as the digital companies operating in it. There is no need to invent anything new – better understanding of these markets can help to correctly assess the situation in them. Over the long practice of the Commission there were many diverse cases which made it well educated and competent enough to deal with challenges present in this sector.
2. As the second part of the thesis identify, current EU turnover-based thresholds are problematic for the digital economy. There is a risk of underenforcement. Often mergers in the digital economy involve parties where one of them has limited turnovers which allows them to avoid the Commission's jurisdiction, however, this does not mean that they are irrelevant for the competitive assessment. In order to improve the current merger regime, past merger decisions could be reviewed by the Commission to analyse whether they were correct at the time knowing how the markets evolved to understand which mergers were allowed to be carried out incorrectly and what predictions about future situations in the market were wrong. Referrals may be also problematic as only a small number of EU Member States utilise the transaction-value-based test. The Commission seems to be well placed to tackle this issue as it has the strongest authority given its

supranational nature and strong enforcement powers as well as its strong willingness to impose stringent fines on big digital companies. The examples of Germany and Austria could be followed to improve the current regime. By introducing transaction value threshold, the enforcement gap would be closed and small turnover mergers which could potentially be a threat to effective competition would be caught. However, the problem with this is that companies themselves set the value of the transaction. If the new thresholds are introduced, the companies may start manipulating by creating various payment structures in order to set a lower price for the transaction in order to escape the transaction-value-based threshold. These changes in the EUMR would mean more additional work for the Commission and firms. There would be a need to minimise the administrative burden and transaction costs of notifying the Commission. *Ex ante* guidance on specific issues before could be drafted as offered in the memorandum of BeNeLux countries to impact new developments in this area rather than just relying on ex-post enforcement, which is too slow for digital sectors. In the future, the analysis could include an analysis of the strategic relevance of mergers in shielding broader ecosystems from competitive threats. Acquisitions of small start-ups by dominant platforms could be analysed as a possible defensive strategy against partial user defection from the ecosystem as a whole. The Commission should observe the situation in Austria and Germany see how transaction-value-based thresholds change the situation in those countries and introduce changes to the law then. For the time being, the Commission will continue using the existing EUMR framework and rely on the referral system to ensure that transactions on EU level are caught.

3. Finally, when the Commission is examining substantive issues, it only acknowledges indirect consumer harm which occurs but fails to assess direct harm because privacy and data protection are not the goals that competition law is pursuing. However, when the Commission does analyse a case which is related to digital markets, often it can struggle to assess privacy and data protection issues. Privacy and data protection are difficult to assess because competition law is designed for monetary assessment. It is a complex task to put price on quality and, accordingly, measure harm to privacy and personal data. General presumption is that competition law was not intended to address breaches of privacy rules, however the Commission accepts that data protection and privacy could be a matter of competition law. Privacy and data protection aspects need to be respected when considering mergers. Merger Guidelines could be updated to fit the features of the digital economy. Furthermore, during merger analysis the emphasis should be placed on non-price effects,

such as privacy and data protection, product quality. Competition authorities cannot overtake the tasks of data protection authorities however these two different regimes could work together to ensure that both competition law and consumer protection is functioning appropriately. Better coordination is needed between the institutions. Wider scope of competition, consumer and data protection laws. This could help to better address enforcement gaps and empower one authority for areas which cannot be dealt by other institutions. If a digital merger is under review by the competition authorities, it could be cooperating with data protection authorities on issues related to privacy and data protection. This would probably be an administrative burden which may prolong merger review procedures but, on the other hand, it would ensure that the users' fundamental rights are respected.

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Abstract

It can be seen that digital markets are becoming more and more significant in today's economy. The statistics show that there were many acquisitions in the digital field by the major technology companies and this trend is continuing to grow. With the world evolving, there is a need to understand whether improvements to existing laws are necessary as well. So far, the authorities have been lenient towards mergers in this field, consequently, it is important to evaluate whether this may lead to underenforcement. The aim of this thesis is to assess mergers in the digital economy under the EU merger control regime. The focus is on the substantive issues (e.g. big data) analysed in cases and procedural aspects (i.e. turnover thresholds) both of which relate to the digital economy, at the same time going throughout the EU merger procedure. Three themes are emphasized: first, key differences between traditional markets and digital markets and discussion of what kind of implications these features have for the competitive assessment; second, the EU merger control regime and criteria that the Commission is using in its merger review procedure, and; third, an overview of substantive assessment and what kind of implications data-related issues have for this assessment. The thesis concludes that the tools of the Commission are fit for purpose even in the digital economy and there is no need to change it, nevertheless, the Commission needs to be aware of the specifics in digital markets. Finally, recommendations are provided on how to apply the law in order to ensure effective competition in the digital economy and adequately protect the consumers.