MERGERS IN THE DIGITAL ECONOMY: A PRACTITIONERS' OUTLOOK ON KEY MERGER CONTROL ASPECTS OF BIG DATA AND INNOVATION IN DIGITAL MARKETS





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I. INTRODUCTION

"Data-driven markets can lead to a 'winner takes all' result where concentration is a likely outcome of market success."2

The impact of antitrust laws on the Digital Economy and especially merger control in digital markets is a frequently discussed theme in recent years. It will feature even more prominently in the antitrust enforcement of major antitrust authorities around the globe in the coming years. Several years ago, online businesses started disrupting the traditional economy. Now antitrust laws and regulations have become a disruptive force in the world of tech.

M&A activity in the technology sector has become an increasingly important driver of global M&A activity. The 2015 OECD report on "Data-Driven Innovation: Big Data for Growth and Well-Being" found that the number of M&A deals in data-related sectors has increased rapidly from 55 deals in 2008 to almost 164 deals in 2012.³ Particularly in the last two years, the technology sector has become a major driver of global M&A activity. According to The Boston Consulting Group's 2017 M&A Report, deals involving technology targets totaled more than \$ 700 billion in 2016 and represented nearly 30 per cent of all M&A activity. Acquirers from both inside and outside the tech industry seek to expand their technology and digital capabilities.⁴

As this trend is expected to rise to new heights, with tech further increasing its share of global M&A activity, antitrust authorities will continue to get involved, especially in data heavy mergers where data privacy, consumer protection and innovation are at stake. Although this is a global phenomenon, the EU Commission and the German Federal Cartel Office are currently seen as important drivers at the forefront of antitrust enforcement in digital markets.

II. PROCEDURAL ASPECTS

Digital markets and specifically Big Data raise key questions as to the procedural aspects of merger control, as the mere accumulation of large sets of data does not always generate revenues which are sufficient to meet the relevant merger notification thresholds. In digital markets, revenue and profit often only come years after the start-up phase. The focus for a new player is to have a broad user-base to create network effects. To achieve this, many companies temporarily or permanently offer their services and products free of charge or only charge certain groups of users, especially on two-sided markets. Advertising revenues on a social network or a communication platform are typical examples. Therefore, a company may already have a dominant share of users and have secured a strategic market position while still not making significant, or any, revenue.

From a procedural aspect, this phenomenon recently resulted in the introduction of new thresholds by some European antitrust authorities in order to be able to effectively review mergers of data related companies. This development was in particular fueled by the *Facebook/Whatsapp* merger, that, despite a purchase price of around \$19 billion, was not subject to notification at the EU Commission level and could only be reviewed by the Commission via a submission, since Whatsapp's annual revenue did not exceed the relevant EUMR thresholds.⁵

In the past, the thresholds determining merger control filing requirements were mainly based on the annual revenue, the value of assets or sometimes the market shares of the parties. This principle proved inapt when dealing with mergers where a company's value does not result from its revenue, but rather from its potential importance in the markets.

In reaction to this, the Commission has carried out a public consultation on a reform of the EU merger control regime in 2016, specifically addressing the effectiveness of turnover-based thresholds in digital industries. Some Member States have already moved beyond and introduced new transaction-value-based thresholds in order to close the potential gap in merger control.

2 See OECD, Data-driven Innovation for Growth and Well-being, Interim Synthesis Report, October 2014.

3 See OECD, Data-Driven Innovation: Big Data for Growth and Well-Being, October 2015, http://www.oecd-ilibrary.org/science-and-technology/data-driven-innovation 9789264229358-en.

4 See The Boston Consulting Group's 2017 M&A Report, The Technology Takeover, https://www.bcg.com/de-de/publications/2017/corporate-development-finance-technology-digital-2017-m-and-a-report-technology-takeover.aspx.

5 See COM, Decision of October 3, 2014, COMP/M.7217 — Facebook/Whatsapp, paras. 9 et seq. (http://ec.europa.eu/competition/mergers/cases/decisions/m7217_20141003_20310_3962132_EN.pdf).



Germany was the first to act, having made mergers subject to notification if the value of the consideration for the merger is more than € 400 million, one party generates revenues of € 25 million in Germany, and the target company has a significant domestic activity. The new consideration-based threshold has raised significant interest globally, and has already been followed by other jurisdictions, such as Austria where a similar threshold with a consideration value of € 200 million was introduced in November 2017.

New thresholds of the kind used in Germany and Austria detach merger control from mere revenue numbers and add the value of consideration as an alternative criterion. The idea of taking the transaction's consideration into account is not a novelty of the current development, but has already been used in U.S. merger control since its introduction in 1976, where the so called *size-of-transaction-test* is applied.

The German approach differs from the U.S. principle in that it does not look at the entire size of the transaction, but only at the concrete value of the consideration itself, for the sake of simplicity.⁶

As mentioned above, the change in legislation was particularly fueled by recent mergers in the digital economy. The new threshold can also affect other markets and areas, where a company's important strategic position may not be reflected in its turnover. Examples are technology driven markets as well as biotech and life sciences, especially the pharmaceutical industry. In these markets, success and revenue can depend on substantial upfront investments for research and development. Where a company or start-up is focused on the development of a particular new technology or product and has pioneered this, it might already play an important role in the competition in the market, while its revenue will not be of any significance before the release of the product.

Merger control thresholds which are based on the size of the transaction or the consideration paid for the target face one practical problem: the effects-based approach of international law requires a sufficient connection between the merger and the jurisdiction that seeks to review it under its national competition law, the so called *local nexus*.

In 2017 the International Competition Network recommended the following with a view to size-of-transaction thresholds:

Jurisdictions may supplement their material nexus thresholds with additional, ancillary thresholds, but those thresholds alone should not be sufficient to trigger a merger notification requirement in the absence of a material nexus to the reviewing jurisdiction. Examples of such additional and cumulative screens include thresholds based on the worldwide activities of the parties or the value of the transaction.⁷

The local nexus requirement does not rule out the introduction of new transaction-size tests for the digital economy, but it is yet to be seen how this vague legal term will be interpreted in the authorities' practice. For instance, in the new German merger control law a domestic activity is already applicable "if offers by the company are used by domestic users," regardless of whether these offers aim specifically at domestic users. As regards digital markets in particular, the German and Austrian legislative explanations refer to the peculiarities of the individual branch and give examples such as the Monthly Active Users ("MAU"), i.e. unique visitors that are considered as reliable key figures for determining significant activity.

⁶ See Explanatory Memorandum of the 9th Amendment of the German Act Against Restraints of Competition ("ARC"), p. 73 (in German: https://dip21.bundestag.de/dip21/btd/18/102/1810207.pdf).

⁷ See ICN Recommended Practices for Merger Notification and Review Procedures, June 5, 2017, http://www.internationalcompetitionnetwork.org/library.aspx?search=&group=4&type=0&workshop=0.

⁸ See Explanatory Memorandum of the 9th Amendment of the ARC, p. 75.

⁹ See Explanatory Memorandum of the 9th Amendment of the ARC, p. 75; Explanatory Memorandum of the Amendment of the Austrian Antitrust Act, p. 3 (in German: https://www.parlament.gv.at/PAKT/VHG/XXV/I/I_01522/fname_618926.pdf).



III. SUBSTANTIVE ASPECTS

The substantive merger control test for digital markets is the same as for any other market: the agencies have to assess whether the transaction results in substantial lessening of competition (in the U.S.) or significantly impedes effective competition (in the EU). However, in making this assessment, competition authorities have started identifying new theories of harm deriving from the peculiarities of the digital economy.¹⁰

From a horizontal perspective, one of the most crucial tests concerns the merger's impact on innovation. The importance of innovation as a substantive aspect that competition law seeks to protect and guarantee has increased over the last years. This is particularly important in digital economy mergers, where fast moving market changes and revolutionary products and disruptive business models are the characteristics and driving factors of the industry.

Transactions can impact innovation through many different means. An obvious example would be if the merger entailed the termination of new pipeline products and services or if innovative R&D labs were closed down in its wake. In most cases, acquirers don't have a commercial incentive to stifle innovation. Rather, a strong market player is more likely to consider purchasing a potential competitor in its early stages in order to eliminate future competition and preserve its own dominant position. A merger in the digital sector can also increase market dominance through a concentration of data and can result in restrictions of access to data. Whether or not this constitutes a restriction of competition depends on the amount and the quality of the data that the target company holds, as well as how easy the access to that specific data is, whether data is available from alternative sources and the extent of its role for competition on the relevant market.

Although a key feature of data is that it is non-exclusive and reproducible, this does not hold true for structured sets of data, e.g. data contained in relational databases regarding customer data and preferences. The more voluminous and complex this structured data is, the harder it is for competitors to reproduce it. Through a merger, the new entity might combine sets of data which were previously separate, thus creating a powerful asset that could put it ahead of the competition. Where the combination of data is unique and the information extracted from it is impossible for competitors to reproduce, this may even build barriers for market entry, resulting in foreclosure effects.

Foreclosure effects may also occur from a vertical perspective if the transaction enables the merged entity to restrict or deny companies on upstream or downstream markets access to the data.¹³ In their joint paper on Big Data and Competition, the French and German competition authorities also raised the concern that parties to a merger might use their up- or downstream access to users to gather data which they could then use to boost their position in the vertically connected market.¹⁴

Whether the merger in fact leads to foreclosure effects depends significantly on the nature of the data in question and the peculiarities of the market. While the indispensability of data depends on the respective relevant market, the question of whether data can be accessed by alternative means can only be answered by taking the competitor's (or in a vertical scenario the customer's) perspective. There is a correlation between the extent of a competitor's market share and its ability to collect data; competitors are more likely to be able to collect data themselves if they have a higher market share. Data may alternatively be acquired from third parties although third party data may not be as precise or as valuable or might simply be restricted. In general, this potential defense becomes less reliable the more complex and complete the data acquired by the merger is. It will be key for companies and advisors to closely examine the situation on the market and the significance of data, and to gather reliable information ideally from neutral third parties prior to notifying a merger to a competition agency.

10 See, e.g. French Autorité de la concurrence and German FCO: Competition Law and Data (2016), p. 16, 17 http://www.bundeskartellamt.de/SharedDocs/Publikation/DE/Berichte/Big%20Data%20Papier.pdf?__blob=publicationFile&v=2); COM, Decision of May 14, 2008, COMP/M.4854 — *TomTom/TeleAtlas*; COM, Decision of February 18, 2010, COMP/M.5727 — *Microsoft/Yahoo! Search Business*; COM, Decision of March 11, 2011, COMP/M.4731 — *Google/DoubleClick*; COM, Decision of January 9, 2014, COMP/M.7023 — *Publicis/Omnicom*; COM, Decision of October 3, 2014, COMP/M.7217 — *Facebook/Whatsapp*.

- 11 See European Commission, Competition policy brief "EU merger control and innovation," of April 2016.
- 12 See German Monopolies Commission, Special Report No. 68, paras. 16-19.
- 13 See German FCO, Big Data und Wettbewerb (2017), p. 10 (in German: http://www.bundeskartellamt.de/SharedDocs/Publikation/DE/Schriftenreihe_Digitales/Schriftenreihe_Digitales_1.pdf?__blob=publicationFile&v=3).
- 14 See Autorité de la concurrence and FCO: Competition Law and Data (2016), p. 16.
- 15 See German FCO, Big Data und Wettbewerb (2017), p. 7.

Big Data and competition law cannot be discussed without taking into account the importance of data protection regulations. While ensuring privacy in the digital economy is not the task of competition law, but lies within the ambit of data protection law and its respective authorities, some competition authorities like the German FCO have considered theories of harm that also concern data protection issues. The FCO held that the excessive collection of user data by a dominant undertaking, if based on users' consent to general terms and conditions which do not comply with privacy laws, is potentially abusive conduct. In our view, it would be difficult to apply this theory of harm in a merger situation as it would confuse the forward-looking merger assessment with the conduct-specific assessment of competition law. Even if a party comes into a strong market position due to a merger there is no presumption of illegal behavior and privacy-breaches in the future. Moreover, at least for the majority of mergers which are reviewed in Phase I, it would be challenging for antitrust authorities to coordinate their assessment with the subject-matter experts from the data privacy authorities. Lastly, Big Data does not always relate to the individual data of consumers or business partners. In the years to come in particular the Internet-of-Things applications will most likely generate the largest amount of data. If companies collect such machine-generated data on their own products or services the data protection aspect is less imminent than one might think.

Mergers in the digital economy may also be specific with regard to their potential efficiencies to the benefit of consumers. Such efficiencies can set-off the concerns laid out above, provided that the parties can demonstrate such effects. Competition authorities do not deny the potential that the digital economy and Big Data bear in terms of innovation and the improvement of products.¹⁷ Data gathered from users can help companies to improve their products and adjust them to the consumers' needs and wishes. Data can also enable them to customize their products to their users' preferences. In the case of platform markets, a high user number and with it a large collection of data can lead to network effects that can provide benefits for the user and the provider alike quite aside from any competition concerns they may raise.

Thus, the role of data in merger control is ambiguous. The same effects that can raise competition concerns in one case might be viewed as pro-competitive in a slightly different scenario. The burden for authorities to demonstrate a substantial lessening or significant impediment of effective competition is high. In particular, in their merger control assessment it is important to remember that the assessment concerns an appraisal of the future. The value of data can change over time and depending on the purpose for which the data are used. Even if data seems very useful and possibly indispensable today, it is crucial to assess how long it will be useful as the technology markets are moving fast.

IV. REMEDIES

Should an antitrust authority nevertheless conclude that a merger in the digital economy raises antitrust concerns the parties need to be prepared to think about suitable remedies. Whereas authorities generally prefer structural remedies such as the divestiture of parts of a business, this is difficult if the asset to be acquired is simply a large pool of data that cannot be separated out within or from the business in a commercially sensible way.

In such a situation behavioral remedies such as access to the database are relevant. In addition, remedies relating to technological interfaces and APIs could be considered. In practice, we expect that there will be few cases that require access remedies. The threshold for authorities to demonstrate the indispensability of data is very high. For instance, when the European Commission assessed the acquisition of LinkedIn by Microsoft, ¹⁸ the remedies imposed on the buyer did not address access to LinkedIn's user data. Instead, the commitments appeared to be framed according to previous Microsoft commitments in 2004 and 2009 as they included pre-installation and API commitments. The duration of the commitments was limited to five years which seems appropriate given that significant structural changes in digital markets can take place over a very short period of time.

V. PRACTICAL CONCLUSIONS

Merger control in digital markets will be a particularly exciting area of antitrust law in the years to come. On the procedural side, the filing analysis will likely become more complex wherever new size-of-transaction thresholds require a valuation of data. This requires early coordination between the acquirer's deal team, their legal advisors and their accountants.

16 See German FCO, Big Data und Wettbewerb (2017), p. 12 et seq.

17 See Autorité de la concurrence and Bundeskartellamt: Competition Law and Data (2016), p. 9-11.

18 See European Commission, Case M.8124 – *Microsoft/LinkedIn*, December 6, 2016.

Another relevant practical point will be whether there are any arguments regarding the local nexus of the transaction in those jurisdictions that provide for a size-of-transaction test. Local counsel assistance might be required to understand the respective authority's interpretation of the national merger control provisions in this regard.

The substantive assessment in data-rich mergers will regularly go beyond market shares. Whether the merger impedes competition will depend on a variety of factors, and will in particular not be limited to the impact on competitors, but also on upstream and downstream markets including consumers.

However, we expect that the hurdle is very high for an authority to conclude that certain data is indispensable and requires access for competitors or upstream or downstream players. This is particularly true considering the effects of multi-homing, i.e. the parallel use of different platforms by customers which demonstrates that data is very often reproducible, albeit not always identical.

As practical advice for M&A teams and in-house lawyers, it is important to acknowledge the complexity of the IT questions involved. A successful merger case will require bridging the gap between software engineers and competition authorities. This means that the IT specialists of the companies need to be involved early on when assessing the effects of a merger. Even more importantly, the technology and the data need to be presented and described in a narrative that non-IT specialists in the authorities can understand.

In practice, it has to be expected that the number of informal preparatory talks with the authorities will rise as companies will want to avoid the risk of missing a potential filing obligation as well as delays based on misunderstandings regarding the technology relevant to the deal.

Lastly, we note that digital business models are regularly global. This means they will more likely than not attract interest from several authorities. Coordination and a global filing strategy are key for a successful merger control process.