[fresh_page][cn]20 [ct]MARKETING DATA IN THE PHARMACEUTICAL SECTOR: A COMPETITION LAW CONSIDERATION

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[A]1. INTRODUCTION: DATA AND ITS KEY COMPETITIVE ROLE

[b]A. Outline of this chapter

[prn]**20.1** In this chapter, we examine in first instance the increasingly crucial role of data and "big data" in the business world and its importance in competition law analysis. Secondly, we provide an overview of the relevant market definition applied by competition authorities to the markets of provision and management of pharmaceutical marketing information. Later, an outline is provided of business conduct with potential antitrust relevance that has taken place or may take place in these markets. Finally, a few remarks are made regarding merger control law in this area.

[b]B. The rise of data as a key competitive input

[prn]20.2 At this stage, we all know (particularly the non-millenials) how much the world of the Internet and the information society have changed our daily lives. Yet, for what it seems, there are still ways in which the latest technological revolution is bound to surprise us by radically changing the economy: robotics, Internet of things, energy management and self-driving cars; but perhaps what everyone talks most about in the last few years is "big data". The notion of big data reflects the fact that the information society, in its daily functioning and multiple actors' interactions generates massive amounts of data. As Eric Schmidt, Google CEO has stated, we create as much information in two days now as we did from the dawn of man until 2003. The statement certainly leaves one wondering. [prn]20.3 Indeed, in the era of the information society, data has become a key factor of production, an input without which it appears impossible to compete. Raw data is in most instances freely available and in massive amounts in the Internet through various channels or methods (Internet searches, social networks); or data is available through direct purchase either from data aggregators or intermediaries or from selected operators, either in consideration for money (e.g., data generated by pharmacies or medical personnel) or in consideration for some type of service (e.g., information provided by customers via ecommerce sites or other Internet tools). In this context, data is like a raw material which becomes valuable when appropriately selected and processed.

[prn]**20.4** Therefore, regardless of whether the information is more or less readily available, the key seems to lie in the ability to be able to collect and process enormous amounts of information in a manner that is commercially meaningful. The assignation of commercial value to enormous amounts of data seems to be associated to the notion of "big data", which is a much-used term in recent times. To examine the notion of big data, it seems appropriate to refer to the work of the data protection authorities, which come to categorise "big data" as that revolving around the following features:

[list]

Big data refers to the exponential growth both in the availability and in the automated use of information: it refers to gigantic digital datasets held by corporations, governments and

other large organisations, which are then extensively analysed (hence the name: analytics) using computer algorithms.

Big data can be used to identify more general trends and correlations but it can be processed to also be useful for individualised data analysis.¹

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[prn]**20.5** Open data often involves (i) making entire databases available (ii) in standardised electronic format (iii) to any applicant without any screening process (iv) free of charge and (v) for any commercial or non-commercial purposes under an open licence. Data can also be proprietary or closely held and be marketed for money. The latter is often the case in the pharmaceutical sector.

[prn]**20.6** Once data has been accessed, companies maximise the use of that data in a variety of manners, for instance:

[list]

Search engines use data of searches carried out by their users to improve the quality of future search results.

Search engines and social networks use big data on searches to identify marketing trends and tailor individual-specific information. Geo-location technologies (enabling digital marketing linked to exact location, for instance) can be combined with marketing information of the individual user to deliver dynamic content, on-the-spot and targeted advertising or marketing, for instance, in many ways that likely maximise the possibilities of commercial success. Likewise, e-commerce businesses use their data on actual purchases to make product recommendations and targeted promotions to individual customers.

Data can be processed to segment consumer surveys and cluster types of clients. In the case of consumer companies handling mass communication strategies, data clusters can be used to tailor targeted communications according to consumer groups' profiles.

[/list]

[prn]**20.7** Big data marketing therefore aims at segmenting data with the aim of creating targeted and relevant communications from companies to customers. Whereas the traditional approach to marketing looked at a few key market segments, digital based big-

¹ Opinion 03/2013 on purpose limitation, Article 29 Data Protection Working Party, 2 April 2013.

data marketing looks at unlimited segments seeking individualisation;² traditional marketing relies on general criteria based on demographics and mass-psychology, whereas digital age marketing looks at micro data based on each individual's geographical location, personal phone or computer use or social network profile; in traditional marketing information flows to the user, whereas in the digital world the user is a key generator of information; communications in the past were primarily broadcast or one-to-multipoint and inevitably impersonal in content, whereas in the digital world communications have the ability of being targeted and personalised/customised.

[prn]**20.8** In today's world, as mentioned, the economic and business challenge is generally not scarcity of data but, on the contrary, excess data. One important issue therefore is how to discriminate or "data-mine" relevant data. Secondly, it is important to know how to analyse the relevant information and present it in a manner that is commercially useful, understanding that the amount of information available is larger every hour. The technological advances in this field were unimaginable just a few years ago, with instant analytics which enables assessment of consumer behaviour while online to segment and anticipate consumer preferences;³ or, in the field of hardware, still almost science fiction advances such as quantum computing, which is expected to enable the massive speed and analytical capability no computer has ever come close to providing, with yet unexplored and potentially unlimited possibilities.⁴ This is indeed an area where technologies are evolving very rapidly and in many directions and a detailed description of which is well beyond the reach of this chapter.

[prn]**20.9** In the competition law world, however, it is not certain what the significance of "big" is when associated to "data". There does not seem to be a generalised distinction to establish how much data or of what quality is required to amount to "big" data. More importantly, whether or not the data is "big", does not necessarily or prima facie seem to be a determinant factor in the competitive treatment of data.⁵ What seems determinant

² Companies may look to countless segments and segmentation, popular segmentation may be carried out along the lines of historic Internet navigation, geolocation, social media, historic purchasing information.

³ See for instance: www.quantumdatascience.com/services/.

⁴ See www.theguardian.com/technology/2016/may/22/age-of-quantum-computing-d-wave.

⁵ For instance, the Joint French and German Authority Report on Competition Law and Data of 10 May 2016 ("Joint Report") refers in its title itself to "data" and not "big data". According to the Joint French and German Report, "the buzzword of choice in the current debate concerning antitrust and the digital economy, however, is often not simply 'data' but 'big data' – another concept lacking a common definition".

from a competitive standpoint is whether data is or is not a key competition factor; whether such data is or is not easily accessible; and what are the firm strategies aimed at attempting to monopolise competitively important data or make it hard to access to other companies.

[prn]**20.10** From a competitive standpoint, data has become a key driver of competition across virtually all markets. Data is "non-rivalrous",⁶ implying that, in principle, it can be used by as many actors as required, as access by one does not prevent access by many (potentially infinite) more. From a competition law enforcement standpoint, it seems therefore that access to data should generally not be a problem, unless firms somehow succeed in making it artificially difficult for a given company to be able to access data. [prn]**20.11** The OECD has outlined the need, from a policy standpoint, to treat data not as a common input, but as an infrastructure.⁷ Such approach outlines the importance given to data, but certainly it needs to be tailored to the specific case as in many instances data will be easily available and accessible.

[b]C. Pharmaceutical marketing related activities

[prn]**20.12** Pharmaceutical marketing data companies perform the role of acquiring, transforming and selling the pharmaceutical marketing information. The products to which these companies' activities refer are quite specific and technical. We are interested here in the area of prescription drugs, which present various specificities over other health products or consumer products generally. In particular, prescription drugs are used, and in many instances financed by, the national health system or health insurances systems. Customers are hospitals or the health systems and doctors are the ones prescribing drugs on the basis of standard recommendations from medical bodies regarding suitability and optimal use of every drug for each therapy.

[prn]**20.13** Pharmaceutical marketing companies' key raw input is data so the reflections of this chapter apply to these companies fully. Pharmaceutical marketing companies such as IMS Health can be viewed as a "platform" because they connect two kinds of users. However, data suppliers do not appear to derive any use from the platform in the sense

⁶ Term used by the Joint French and German Authority Report on Competition Law and Data, ibid, page 36.

⁷ See for instance the OECD Report on Data-driven Innovation for Growth and Well-being at www.oecd.org/sti/inno/data-driven-innovation-interim-synthesis.pdf.

that, for instance, Internet platforms (e.g., think of date matching sites) provide; data suppliers only benefit from these "platforms" because they receive a price in exchange for the data. However, they do not (in principle) collect any service; although they may contract services with IMS Health these services would not seem to necessarily derive or be necessarily connected with the supply of data by pharmacies to IMS Health. The situation does not seem to be comparatively the same as with credit cards, where both shops and card holders derive a benefit from being connected to the payments network; nor to a platform like Match.com, the often-mentioned example, where both types of users derive a benefit. In the absence of a service being received from the platform by both sides plugging into it, it is not entirely clear that pharmaceutical marketing companies such as IMS Health are two-sided markets if we take that notion of two-sided markets as depicted by economists.⁸ It may be, however, that companies like IMS Health and others do fit into the definition of two-side platforms if the data suppliers (e.g., pharmacies, pharmaceutical wholesalers) derive a benefit (other than, we understand, the merely financial in exchange for the data) from the platform to which the receivers of the information (pharmaceutical companies) are connected.

[A]2. RELEVANT MARKET ANALYSIS IN COMPETITION PRECEDENTS RELATED TO PHARMACEUTICAL MARKETING DATA

[prn]**20.14** Merger precedents do not identify a relevant market for *big data* as such, which seems otherwise understandable.

For instance in the *Google/DoubleClick* merger,⁹ no product market for big data is referred to, perhaps because there was no issue in that transaction related to the commercialisation of big data as a relevant input or merchandise (even though the transfer

⁸ "A market is two-sided if the platform can affect the volume of transactions by charging more to one side of the market and reducing the price paid by the other side by an equal amount; in other words, the price structure matters, and platforms must design it so as to bring both sides on board" (Jean-Charles Rochert and Jean-Tirole, "Two-Sided Markets: a Progress Report" (August 2006) *RAND J. Econ.* It would in principle seem that a pharmaceutical marketing company such as IMS Health does not charge data suppliers (rather, it pays them for the data) as it does not provide data suppliers with any service, nor does it have the ability to manipulate prices on one side of its "platform" by altering them on the other side.

⁹ Case No COMP/M.4731, of 11 March 2008.

of data is a matter clearly dealt with in the Google/DoubleClick merger decision,¹⁰ as collection of huge amounts of data is treated as a factor potentially conferring market power).¹¹ Resorting to the traditional tools for market definition,¹² big data would seem to be a definition far too broad to amount to a single relevant product market. Relevant product markets being defined primarily on the basis of demand-side substitutability, big data or data inputs should in principle be expected to be segmented along the lines of purchaser or consumer use, i.e., following some categorisation by types of data. Legally speaking, the distinction between big data or data alone is rather imprecise: when is a cluster of data large enough to deserve the labelling of "big data"? Data use or aim of the data, it would seem, is a criterion more objective and more consistent with traditional market definition tools. The merger precedents in the area of pharmaceutical market data are a good example of this, as will be discussed below.

[prn]**20.15** Pharmaceutical companies rely on several types of data, which enable them to drive their sales and marketing strategies and activities. Those data are currently collected from a relatively close circuit of sources such as pharmacies, pharmaceutical wholesalers, doctors, patients and hospitals. Furthermore, reinforced privacy practices in the health sector imply that, often, the most relevant data in this sector are not to be found in the open Internet as is the case with many mainstream consumer products.

[prn]**20.16** The European Commission has in the past considered in some detail the product market of pharmaceutical market data offered to pharmaceutical companies.

In its Decisions *IMS Health/Cegedim*¹³ and *TPG/IMS Health*,¹⁴ the EC also refers in its merger decisions to the software and services also offered to pharmaceutical companies. We will deal with the particular issue of data collected and processed with a view to being sold to pharmaceutical companies. The European Commission has

¹⁰ "Another aspect that determines DoubleClick's market position in ad serving is the extent to which Double Click can benefit from network effects in the ad serving market due to the large amounts of customer-provided-data (hereafter, CPI data) it collects on its servers hosting its products DFP and DFA on behalf of its customers (compared to the more limited amounts of CPI data collected by its competitors in the ad serving market)" (*Google/DoubleClick* merger decision, *supra* note 9, point 179).

¹¹ Pretty much the same consideration applies in connection with the merger Decision *Facebook/Whatsapp*, M.7217, of 3 October 2014, at point 180 and following.

¹² See for instance the Commission Notice on the definition of the relevant market for the purposes of Community competition law, 9 December 1997 (OJ C372), page 5.

¹³ Case No COMP/M.7337, of 19 December 2014.

¹⁴ Case No COMP/M.5736, of 2 February 2010.

identified various types of information relevant, respectively, for the following purposes downstream:

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(a) Healthcare professional databases, which contain information on the identity of healthcare professionals able to assist the pharmaceutical companies' marketing efforts. Also qualitative information on the professional's speciality, prescribing conduct, etc. is contained.

(b) Sales tracking data: enables pharmaceutical companies to monitor and analyse the sales performance of its products in order to improve its sales and marketing. The European Commission has considered it possible to categorise this type of data in (i) sales tracking data on prescription drugs; (ii) sales tracking data on over-the-counter (OTC or non-prescription) products; (iii) market intelligence services.

Sales tracking data provided on the basis of IMS's well-known (certainly to competition lawyers) brick structure,¹⁵ which enables breaking sales data down to small geographic areas with similar sales potential while avoiding breaking down data by pharmacies or individuals which is essential for data protection purposes. Sales data are organised and formatted according to the brick structure and delivered to the pharmaceutical companies. This brick structure acts as an industry standard as it enables the functioning of the relevant databases and it enables the connection and combination of different datasets from various sources in a consistent manner and software can be designed to support different datasets. The IMS brick structure is, for the European Commission, an essential input in the ecosystem in which IT services to pharmaceutical companies on the basis of the brick structure in order to be able to deliver their product to customers in a workable and user-friendly format. Software providers

¹⁵ See ECJ Judgment C–418/01, *IMS Health v. NDC Health*, of 29 April 2004. This chapter does not intend to deal with intellectual property rights or copyrighted data dealt with under the *IMS/NDC* case, an area that has already been widely commented in many other instances. It suffices to say here that the ECJ in that case applied a rather extensive interpretation of prior case law on licensing of intellectual property rights and Article 102 TFEU, establishing that a dominant company could not refuse to license its copyrighted product, in the specie the brick structure developed by IMS Health, if certain circumstances concur, i.e., (i) that the company that requested the license must attempt to offer on the market for the supply of data in question, new products or services not offered by the copyright owner and for which there is a potential consumer demand; (ii) the refusal to license is not justified by objective considerations; and (iii) the refusal is such as to enable the owner of the copyrighted brick structure to monopolise the downstream markets of pharmaceutical marketing data supply.

¹⁶ Case No COMP/M.7337, of 19 December 2014, *supra* note 13.

serving healthcare databases companies also need to rely on the brick structure to be able to combine and process the relevant data. The brick structure is not sold as a standalone product, but it is incorporated within IMS' sales tracking data. As will be seen below, the European Commission felt that it needed to ensure access of competitors to the brick structure, which was incorporated as part of the remedies of the IMS Health/Cegedim merger. But this is another matter, dealt with below.

The market for sales tracking data can be split between (i) national prescription data services; (ii) regional prescription data services; (iii) national distribution services and (iv) regional distribution services.¹⁷

At national level in Europe the product market for sales tracking data has been considered in an Article 102 TFEU Decision resulting from a complaint against IMS hmR by the Spanish National Competition Authority (NCA) of 13 July 2017 (*hmR v. IMS Health* case).¹⁸

(c) Primary market research (PMR) and real-world evidence (RWE) data. PMR involves canvassing healthcare professionals' views on pharmaceutical-related issues via questionnaires to professionals. RWE includes data collected from actual patient experience and clinical practice.

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[prn]**20.17** The above categories of data identified by the European Commission merger control practice refer to data offered to pharmaceutical companies downstream. IMS Health is the company with the strongest positioning in the market for sales tracking data for prescription drugs and OTC products (with market shares of this company ranging between 40–50% in France and 90–100% in Spain).¹⁹

[prn]**20.18** Upstream, there would be a market for the relevant marketing information supplied respectively by (i) healthcare professionals and (ii) pharmacies.²⁰ Within each of those segments, there would appear to be additional sub-markets i.e., data regarding prescription and non-prescription (or OTC) drugs although, perhaps unsurprisingly, the industry has opposed the existence of such upstream market in some instances.²¹

¹⁷ Case No COMP/M.7337, of 19 December 2014, *supra* note 13, para. 77.

¹⁸ Decision of 13 July 2017, Estudios de Mercado Industria Farmacéutica, exp. S/DC/0567/15 (hmR v. IMS).

¹⁹ Case No COMP/M.7337, of 19 December 2014, *supra* note 13, footnote 8.

²⁰ Ibid, para. 123.

²¹ Ibid, para. 125. Also *hmR v. IMS* case, *supra* note 18.

[prn]20.19 Geographic market for the provision of sales data has been considered national.²²

[prn]**20.20** It cannot be ruled out that alternative market definitions are used overtime in different circumstances and/or jurisdictions and, indeed, different delineations have already been hinted, for instance, in the United States.²³

[prn]**20.21** Collection of marketing data in the pharmaceutical sector is carried out from the actors related to the pharmaceutical sector, including for instance sales data by pharmacies (sell-out data), sales by pharmaceutical wholesalers to pharmacies (sell-in data), medical practitioners, hospitals and patients. Information streams are updated daily or monthly. Sell-in data provides coverage on the basic areas of healthcare; sell-out data is provided by a substantial number of pharmacies. The data refer both to prescription drugs and to over-the-counter products. Pharmaceutical marketing companies also collect consumer information from patients, either hospitalised or external. Panels of medical practitioners are also resorted to. In all cases, samples of data suppliers are wide enough to guarantee an accurate statistical coverage of the relevant country or region.²⁴

[prn]**20.22** In some of those instances data are normally collected using offline techniques (surveys, market studies); in some other instances online platforms are used to enable connection of the pharmaceutical marketing data company with the pharmacies and wholesalers. In these latter cases a software interface is required to enable that connection. Pharmacies use specific software to track inventories and sales of pharmaceuticals and

²² Case No COMP/M.7337, of 19 December 2014, *supra* note 13, page 15.

²³ In the United States an alternative product market definition has been advocated in court litigation (Symphony Health Solutions corp. v. IMS Health, the lawsuit is available at www.plainsite.org/dockets/ucexg21f/pennsylvania-eastern-district-court/symphony-health-solutionscorporation-et-al-v-ims-health-incorporated/). The segmentation presented in that case (which settled, so the court did not decide on the claims) is quite US specific, taking into account features of the US health system and is based on the US market downstream (client) necessities. The claimants in that case distinguished (i) the targeting and compensation data market (which includes products that provide detailed information on items such as product denomination, dosage, quantity of the drug, name of the doctor, area of specialty, location and anonymous information on patients, e.g., age, gender, location, sourcing the information from retail pharmacies and large retailers, hospitals, wholesalers etc.); (ii) the managed markets data market, which refers to products that provide insight on how decisions are made by managed care entities which may affect the drugs market performance. The products in this market provide information on drug switching due to health plan restrictions or patient sensitivities, compare drugs performance etc.; (iii) anonymous patient longitudinal data, which provides information on individual anonymous patients; and (iv) the integrated global data, which is based on metrics provided by massive amounts of data in numerous countries and regions, enables synthesising intelligence from multiple countries to give clients international insight and a competitive edge internationally.

²⁴ Description provided by IMS Health (www.actasanitaria.com/ims-health-muestra-los-medios-decomunicacion-la-realidad-del-mercado-farmaceutico/).

that software is connected with the wholesalers and the pharmaceutical marketing companies. If a second or third pharmaceutical company wishes to connect, it must then install an additional interface module to enable such interconnection.

[A]3. BUSINESS STRATEGIES RELATED TO DATA AND COMPETITION LAW

[b]A. Areas of competitive concern surrounding data

[prn]**20.23** The fact that data plays a key role in competitive analysis is beyond doubt given its key role as competitive driver, as has been discussed above. What role exactly data is to play in competitive analysis is not yet entirely clear, as data's implications are so wide-spread and potentially untested in many respects that it seems difficult to anticipate the exact implications.

[prn]**20.24** The Joint Report on Competition Law and Data, cited, refers to three possible areas where data plays a role in competitive analysis. First, data as a source of market power; second, data as a factor reinforcing market transparency; and third, data as basis for firm conduct potentially raising competition concerns.²⁵

[list]

(a) Regarding data as a source of market power, although in principle data may be widely available, even at a price, in some sectors and circumstances the leading companies may have such a large base of data that the question arises whether any third party has the capacity to match the same volume and variety of data. In an extreme hypothetical scenario, the possession of a supposedly enormous and unmatchable amount of data may amount to a barrier to entry.

The Joint Report also reminds that economic sectors such as social networking and search engines are highly concentrated. Network effects would lead to tipping towards a single, most successful, operator (snowball effects).²⁶ Clearly, the type of concern displayed here should not in principle raise any antitrust concerns, as success which is the result of competition on the merits is fine under the antitrust laws. However, this kind of barrier to entry may be a key factor in prospective analysis (merger control)

²⁵ Joint Report, *supra* note 5, page 11.

²⁶ Ibid, page 13.

as well as in the analysis of past conduct, particularly potentially abusive unilateral conduct.

In the specific area of pharmaceutical data, it cannot be ruled out as a hypothesis that massive accumulation of data may enable an incumbent company to create for itself a position very difficult to emulate by actual or potential competitors. Intuitively, however, it may seem difficult to maintain such a position permanently without resorting to additional strategies (other than pure business success and massive data accumulation) potentially relevant from an antitrust standpoint. Indeed, it would appear that the massive amounts of data generated by Google, to put an example, are difficult to generate by any company which is not Google, due to the fact that nobody else has such a successful search engine; and the same arguably applies to Facebook, as the most successful social network. Conversely, pharmaceutical data companies rely on a far more defined and limited set of data inputs (arguably enormous, but still far more focused and limited than the data handled by the Googles or Facebooks of the world), provided by the various actors relevant to the pharmaceutical sector. This may explain why the giant of the pharmaceutical marketing industry, IMS Health, has been subject to regulatory surveillance by competition authorities due to business tactics used as device to perpetuate its market position.27

(b) Regarding market transparency and the general trend identified that the increasing use of digital data is often associated with greater market transparency,²⁸ relevant data are and will continue to be available only from specific sources as previously discussed (pharmacies and pharmaceutical wholesalers, medical practitioners, patients). This makes collection of data more limited as to the sources, although arguably there will still be many such individual sources available (there are many pharmacies, many physicians, etc.). Even if many information sources are potentially available, transparency on the source is nonetheless likely to remain limited, as sources will make the information available in exchange for payment (potentially limiting the number of individual operators granting information). Transparency on the source is also likely to remain limited by the high incentives of the incumbent pharmaceutical marketing data company

²⁷ There is some evidence in this regard, as some past or pending antitrust complaints against IMS Health indicate that there are indeed competitors at least attempting to challenge IMS Health's dominance in the pharmaceutical marketing related markets. In the US, see the Symphony case, *supra* note 23. In Spain and France, see below for reference to past or pending cases.

²⁸ Joint Report, *supra* note 5, page 14.

to keep the data on the source as little available as possible to competitors and potential competitors. The latter is dealt with below.

(c) Indeed, in a market where marketing data is as valuable as it is in the pharmaceutical sector, the incentives to appropriate the marketing data for companies already enjoying a good position are obvious. In that struggle, the potential for anticompetitive conduct is evident. Below, we refer to this issue.

[b]B. Agreements and concerted practices aimed at restricting third party access to pharmaceutical marketing data

[prn]**20.25** Marketing data is the essential raw material or input without which no competition in the markets for processing and re-sale of marketing data is possible. Non-unilateral (i.e., agreements or concerted practices) strategies seeking to appropriate the pharmaceutical marketing data may take place if, for instance, a marketing information company enters into exclusivity agreements, or arrangements with similar effects to exclusivity, with the generators of marketing information (retail outlets, pharmacies, pharmaceutical wholesalers, hospitals or others as the case may be). This appropriation strategy would seek to prevent entry by alternative marketing information companies.

[prn]**20.26** The competition law on vertical restraints has made it clear that agreements by means of which a company seeks to monopolise the sales of another company (in this case, the purchase of all or most data generated by a pharmacy, etc. as pointed out above), carries with it a risk of exclusion of companies competing to purchase the same good or service (in this case, competing pharmaceutical marketing information companies), as well as a softening of competition and increased risk of collusion in cases of cumulative contracts.

[prn]**20.27** When are agreements between the pharmaceutical marketing company and the pharmaceutical data providers caught by the antitrust laws? The following criteria should apply, following the analytical framework established by the European Commission Guidelines on Vertical restraints:²⁹

[list]

²⁹ European Commission Guidelines on Vertical Restraints, of 19 May 2010 (OJ C130) (Vertical Guidelines).

(a) Market shares. Market shares of suppliers and buyers and market positioning are a key factor of the analysis. Market shares beyond 30% of relevant market on the supply or demand side will exclude from the immediate benefit of the European Commission block exemption applicable to vertical restraints³⁰ (VBER).³¹ A company with a dominant position or a company with a relevant market position even if short of dominance,³² is likely to be entering risky antitrust waters if it attempts a commercial strategy to give it control of the relevant pharmaceutical marketing data. In any event, the purchaser (the pharmaceutical marketing data company) must have some degree of market power, as in the absence of market power there will be no appreciable effect.³³

(b) Barriers to entry. As has already been discussed, relevant pharmaceutical data is a *must have* for companies willing to compete. Hence, if a given pharmaceutical marketing data company were to succeed in excluding competitors from access to all or a substantial part of the data, then data access would be an insurmountable barrier to entry into the market.

(c) Foreclosure. Conduct on the part of a pharmaceutical data company must lead to a situation where there is anticompetitive foreclosure of alternative pharmaceutical data companies. Anticompetitive foreclosure is likely to arise if the pharmaceutical data company's market share in the buyer market (i.e. share of the total purchases of pharmaceutical marketing data) exceeds 30%. Even if the market share of the pharmaceutical marketing data company does not exceed 30% of purchases, there may still be an issue where the market share in the downstream markets for resale of those data exceeds 30% and the exclusive supply relates to a particular use of the marketing data, which may well be the case regarding pharmaceutical data use. In case a pharmaceutical data marketing company is dominant in the downstream market for processing and resale of data, any obligation to supply the data suppliers are locked in by the restrictive covenants.³⁴

³⁰ European Commission Regulation 330/2010, of 20 April 2010, (OJ L102/1).

³¹ Article 3.1 VBER.

³² With a market operator such as IMS Health, which market position has been analysed by the merger control precedents set out above, the relevant test on market shares is likely to be easily passed by IMS Health, certainly on the "data demand" side.

³³ Point 194 of the Vertical Guidelines sets the relevant threshold for relevance at 30%, the same threshold as that set for operation of the VBER.

³⁴ Vertical Guidelines, *supra* note 29, point 194.

According to the Vertical Guidelines, obligations on data generators to sell their data only to a single pharmaceutical marketing data company, particularly if reinforced by English clauses informing the data buyer of better offers from alternative pharmaceutical marketing companies, may have effects akin to single buyer obligations.³⁵ (d) Efficiencies under Article 101.3 TFEU.³⁶ Agreements granting exclusivity or an effect similar to exclusivity can hardly be considered to generate efficiencies. Typical exclusivity justifications such as the need to amortise investments over time, promotion etc. do not seem to apply to a scenario where the sale of marketing data by the data generators is a purely intermediate market, with no substantial sunk costs or promotional activities.

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[prn]**20.28** Looking at the principles set out above and how they have been implemented in practice by the courts and authorities, there are various key precedents under European competition law where the European Commission and the courts have considered that exclusive supply agreements (or agreements having an equivalent effect), even if procompetitive taken in isolation, will be deemed contrary to Article 101 TFEU if:

[list]

(i) there are significant barriers to entry to competitors entering the market; and

(ii)the agreement or group of agreements in question makes a significant contribution to those barriers to entry.

[/list]

[prn]**20.29** A large marketing pharmaceutical company having locked-in a great chunk of the pharmacies, wholesalers, medical practitioners and marketing pharmaceutical data providers generally, can foreseeably be in a position where market foreclosure can take place,³⁷ a matter to be ascertained on the facts of the particular matter and on a case-by-case basis.

[prn]**20.30** Authorities in general and NCAs in particular, such as the Spanish NCA, have considered that vertical agreements may lead to illegal market foreclosure if there are situations of exclusivity, which render it impossible or very difficult for competitors to penetrate the market.

³⁵ Ibid, point 129.

³⁶ Treaty on the Functioning of the European Union, of 13 December 2007 (OJ C 326).

³⁷ See for instance the seminal *Delimitis* case, No C-234/89, Judgment of 28 February 1991, and *Langnese-Iglo* case, No C-279/95, Judgment of 1 October 1998.

One interesting case, which refers to licensing of football media rights, but which rationale is applicable to the licensing of pharmaceutical marketing data, is the Decision of the Spanish NCA of 20 April 2010, *Football agreements*.³⁸ Here, the Spanish NCA dealt with a situation where the first division football clubs licensed their rights related to the broadcasting of football events to a limited number of purchasers. To the extent that the broadcasting rights were necessary to compete in the pay and open TV markets, the licensing of those rights on an exclusive basis and for a long term to a single operator was considered to be forbidden by Articles 1 LDC³⁹ and 101 TFEU.

[prn]**20.31** In the *Football agreements* case, cited above, the Spanish NCA analysed the features of the exclusivity agreements:

[list]

(a) A term of five years was considered excessive in the football rights marketing because, amongst other factors:

There is a trend towards concentration in the market and there is a presence of dominant operators confirmed over time.

The totality or quasi-totality of the market was covered by a network of parallel exclusive agreements having foreclosing effects.

The purchasers of media broadcasting rights did not need to incur any specific investments for each broadcasting right.

Rights were (re-)sold downstream for periods of three terms (three years).

Market reality and precedent indicates that a term of three years was enough to generate the required economic efficiencies.

(b) A long-term exclusivity cannot be disguised by supposedly short-lasting agreements which may however be extended by means of rights of first refusal or English clauses which have the effect of enabling an incumbent to lock-in customers long-term.

[/list]

[prn]**20.32** Potentially, a pharmaceutical marketing company may have the (economically rational) temptation to pursue similar commercial policies as those found in the *Football rights* case. In particular, the market is concentrated, as there seems to be a company with a much greater commercial position than the others. That company may have the temptation to cover the market with a network of agreements with data generators, which

³⁸ File S/0006/07, 14 April 2010.

³⁹ The Spanish Competition Defence Act, No 15/2007, of 3 July 2007.

may turn out to have foreclosing effects; neither on the demand side, nor on the supply side of pharmaceutical data are there specific investments required for each delivery of data (leaving aside the initial investment required to set up the system of collection and management of data by the incumbent pharmaceutical data company, which is analogue to the high initial investments required in the media sector, continuing with the analogy with the football rights case). In the case of pharmaceutical marketing data, reselling downstream of the collated/aggregated/managed data does not take place under long-term duration agreements, so no restriction downstream would justify any long-term exclusivity upstream. Finally, market requirements may perhaps have justified some kind of exclusivity at the starting point of the business of the pharmaceutical marketing company; but such exclusivity by a successful incumbent who has amortised its data processing system would not be justified (other than of course as a device to enable entry foreclosure).

[prn]**20.33** The type of conduct described above by a pharmaceutical marketing company has been treated by the Spanish NCA in the *hmR v. IMS* case, cited above, under Article 102 TFEU and the national equivalent. This is discussed below.

[prn]**20.34** The rationale behind the NCA's Decision in the *Football rights* case is substantially applicable, potentially, to conduct that may arise in the pharmaceutical marketing sector by an incumbent or company having managed to get hold of a substantial chunk of the pharmaceutical information.

[b]C. Unilateral conduct aimed at restricting third party access to pharmaceutical marketing data

[prn]**20.35** In addition to the infringement of Articles 1 LDC and 101 TFEU, a single pharmaceutical marketing data company may potentially breach Article 102 TFEU, which prohibits the abuse of a dominant position.

[c]i. *Dominance*

[prn]**20.36** Dominance has been defined by the Courts⁴⁰ as a:

⁴⁰ For instance, see Judgment of the European Court of Justice No 85/76, *Hoffman-La Roche & Co AG v Commission*, of 13 February 1979.

[prn]20.37

[quotation][P]osition of economic strength enjoyed by an undertaking, which enables it to prevent effective competition being maintained on a relevant market, by affording it the power to behave to an appreciable extent independently of its competitors, its customers and ultimately of consumers.⁴¹[/quotation]

[prn]**20.38** This notion of independence is related to the degree of competitive constraint exerted on the undertaking, or undertakings, in question. Dominance entails that those competitive constraints are not sufficiently effective. Hence the undertaking in question enjoys substantial market power over a period of time. That entails that the undertaking's decisions are largely insensitive to the actions and reactions of competitors, customers and, ultimately, consumers.

[prn]**20.39** In the case of the pharmaceutical marketing information there appears to be one company, as indicated by the European Commission in the merger control precedents discussed above, which has the high market shares and market preeminence to be actually or potentially dominant depending on the particular geographic market we look at. In a recent case by the Spanish NCA, IMS Health has been declared dominant in the market for sales tracking data in Spain.⁴² This is not surprising in view of various factors, for instance, that the company has systematically had around 90% market share in the relevant market considered in that Decision.

[prn]**20.40** As it is well known, Article 102 TFEU refers to any "abuse by one or more undertakings of a dominant position" and thereby envisages that two or more undertakings may jointly hold a dominant position. Thus, Article 102 TFEU is capable of applying to situations in which several undertakings together hold a dominant position (without each being dominant individually),⁴³ and a common conduct is adopted in some

⁴¹ We refer also to EC's Guidance on the EC's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings (2009/C 45/02), para. 10.

⁴² Cited at note 18.

⁴³ Judgment of the Court of First Instance No T-24/93, Compagnie Maritime Belge Transports v Commission, of 8 October 1996, paras. 39, 60.

respects.⁴⁴ According to the case law,⁴⁵ a collective dominant position may arise where, in view of the characteristics of the relevant market and the structure of the market (i.e., oligopolistic market), it could be concluded that each member of the dominant oligopoly would, on becoming aware of their common interests, consider it possible, economically rational, and hence preferable, to adopt a common policy on the market with the aim of selling at above competitive prices on a lasting basis. In the abstract, and without attempting to draw any specific conclusions, it would prima facie seem that some of the factors conclusive to collective dominance may be present in some of the relevant pharmaceutical marketing markets.

[c]ii. Existence of abuse

[prn]**20.41** Dominance is not an offence by itself; however, the Court of Justice has found that a firm in a dominant position "has a special responsibility not to allow its conduct to impair undistorted competition in the common market". ⁴⁶

[prn]**20.42** Conduct by a dominant company aimed at preventing competitors or new entrants from accessing relevant pharmaceutical market information may clearly run counter to the European competition law rules.⁴⁷ The following types of unilateral (abusive) conduct may foreseeably take place:

[list]

(i) Exclusive dealing. As the European Commission says at paragraph 32 of the European Commission's Guidance, a dominant undertaking may be able to foreclose its competitors through the use of exclusive purchasing obligations or through rebates: the European

 ⁴⁴ Judgment of the European Court of Justice No C-140/94, *DIP SpA v Comune di Bassano del Grappa, LIDL Italia Srl v Comune di Chioggia and Lingral Srl v Comune di Chiogg,* of 17 October 1995, para.
26: "In order to find that a collective dominant position exists, the undertakings in question must be linked in such way that they adopt the same conduct in the market".

⁴⁵ Judgment of the Court of First Instance No T-342/99, *Airtours v Commission*, of 6 June 2002, paras. 61 and 62, and Judgment of the European Court of Justice No C-413/06P, *Bertelsmann and Sony Corp v IMPALA*, of 10 July 2008, paras. 121–23.

⁴⁶ Judgment of the Court of First Instance No T-65/89, BPB Industries plc v Commission, of 1 April 1993.

⁴⁷ See Section III "General approach to the exclusionary conduct" of the Communication from the Commission — Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings, No 2009/C 45/02.

Commission refers to this conduct collectively as "exclusive dealing". The Court of Justice condemned both practices already in *Hoffmann-La Roche v. Commission*.⁴⁸

Additionally, the European Commission⁴⁹ has considered that an abuse can be committed where a dominant undertaking enters into a long-term agreement which limits the customer's choice of supplier and makes access to the market more difficult to competitors. According to the European Commission, this is even more likely to be the case where the agreement in question is an exclusive or near-exclusive one.

In Spain, the NCA has issued a commitments Decision in the *hmR v. IMS* case, cited above. The case is based on a possible abuse of dominant position precisely under this count of including contractual conditions in agreements with data providers with a view to preventing or making difficult the entry of alternative operators' into the markets where IMS Health has a dominant position.⁵⁰ A similar accusation seems also to have been present in the Symphony claim in the United States.⁵¹

The *hmR v. IMS* case is the result of an investigation around pharmaceuticals sales tracking data market in Spain, and the contracts IMS Health entered into with pharmaceutical wholesalers, who are the main source of pharmaceuticals sales data. IMS Health's agreements contained the following covenants: (i) each pharmaceutical wholesaler must notify IMS Health at least three months in advance of starting to supply a competitor of IMS Health, so that IMS Health may exercise a contractual right afforded

⁴⁸ Judgment of the European Court of Justice No 85/76, *Hoffmann-La Roche & Co AG v Commission*, of 13 February 1979. In that regard, paragraph 36 of the European Commission's Guidance establishes that:

[&]quot;[T]he capacity for exclusive purchasing obligations to result in anti-competitive foreclosure arises in particular where, without the obligations, an important competitive constraint is exercised by competitors who either are not yet present in the market at the time the obligations are concluded, or who are not in a position to compete for the full supply of the customers. Competitors may not be able to compete for an individual customer's entire demand because the dominant undertaking is an unavoidable trading partner at least for part of the demand on the market, for instance because its brand is a 'must stock item' preferred by many final consumers or because the capacity constraints on the other suppliers are such that a part of demand can only be provided for by the dominant supplier. If competitors can compete on equal terms for each individual customer's entire demand, exclusive purchasing obligations are generally unlikely to hamper effective competition unless the switching of supplier by customers is rendered difficult due to the duration of the exclusive purchasing obligation. In general, the longer the duration of the obligation, the greater the likely foreclosure effect. However, if the dominant undertaking is an unavoidable trading partner for all or most customers, even an exclusive purchasing obligation of short duration can lead to anti-competitive foreclosure."

⁴⁹ Decision of the European Commission Swedish Match Svergie/Skandinavisk Tobakskompagni, case No COMP/B–2/38.381, of 22 February 2006 — De Beers.

⁵⁰ www.cnmc.es/CNMC/Prensa/TabId/254/ArtMID/6629/ArticleID/1580/La-CNMC-incoa-unexpediente-sancionador-en-el-mercado-de-suministro-de-informaci243n-sobre-ventas-a-la-industriafarmac233utica.aspx.

⁵¹ Ibid, at footnote 23.

to it of anticipated termination of the contract; (ii) If IMS does not terminate the agreement in the event the wholesaler starts supplying a competitor of IMS Health (which is its right as depicted under (i)), then the price paid by IMS Health to that wholesaler is reduced by 40% in the event that the wholesaler sells one competitor of IMS Health. In the event that the wholesaler supplies to two competitors of IMS Health, the compensation paid by IMS Health for the data is reduced by 60%; (iii) IMS Health benefited from a most favoured nation clause according to which, in case the wholesaler starts supplying one of IMS Health's competitors, then the supply to IMS Health must take place in conditions which are no worse than those offered to IMS Health's competitor(-s) to which data is also being supplied.

This *hmR v. IMS Health* case is perhaps the best example of the kind of monopolising tactics that a pharmaceutical marketing company can seek in order to attempt to exclude rivals from otherwise easily accessible data. Indeed, the marginal cost of producing the pharmaceutical data by the pharmacies and pharmaceutical wholesalers is zero or very close to zero. IMS Health compensates the data at a level which must be high enough to make it unattractive for wholesalers to sell to any of IMS Health's competitors, who would lose 40 or 60% of revenues for breaching the exclusivity. The NCA Decision does not dwell on the pricing level offered by IMS Health, although likely in this case a generous compensation may play as a barrier to entry by raising rival's costs (forcing IMS Health's competitors to pay prices well above marginal cost).

The *hmR v. IMS Health* case has been closed by a commitments Decision whereby IMS Health agrees to eliminate from the data supply contracts the MFN and early notice and early termination for breach of exclusivity clauses. Strikingly, however, the NCA's Decision enables IMS Health to maintain the clause which remunerates exclusivity by cutting by 40 or 60% respectively the compensation offered to the wholesaler that dares to breach the exclusive supply. The NCA does this without much explanation, which is surprising, because this kind of exclusivity incentive by IMS Health, a company with around 90% market share, is a type of restriction which, under the latest *Intel* case law, may only be deemed acceptable under Article 102 TFEU if, in the context of the administrative procedure, the accused company is able to prove that the conduct at stake could not have foreclosure effects, with the Competition Authority being required to investigate the extent of the dominant position, the share of the market covered by the abusive practice, the conditions and arrangements for granting the rebates in question,

their duration, amount, exclusionary strategy of as efficient competitors, etc.⁵² None of this can be inferred from the wording of the *hmR v. IMS Health* Decision.

(ii) Selective price cutting. When a dominant firm reduces its prices only to those costumers approached by a competitor, the Community courts have held that this may constitute an abuse, even when the prices remain above cost and therefore are not predatory.

The issue was highlighted in the case *Compagnie Maritime Belge*.⁵³ In that case, a shipping conference (Cewal), with a monopoly of the Europe to West Africa routes, responded to the entry of a competing line by selectively lowering its freight rates to match those charged by new entrants (Cewal's rates remained above costs). In that regard, the Court ruled that:

[quotation]where a liner conference in a dominant position selectively cuts prices in order to deliberately to match those of a competitor, it drives a dual benefit. First, it eliminates the principal, and possibly the only, means of competition open to the competing undertaking. Secondly, it can continue to require its users to pay higher prices for the service which are not threatened by that competition.⁵⁴[/quotation]

An earlier judgment regarding selective price discrimination of this kind is the one related to the *Irish Sugar* case.⁵⁵ In that case, Irish Sugar was found to have abused its dominant position on the market for the supply of retail sugar in Ireland by granting so-called "border rebates" to retailers in the border area with Northern Ireland in order to meet competition from Northern Irish suppliers. The Court noted that Irish Sugar was financing these rebates on the basis of the maintenance of its higher prices in the rest of Ireland.

Pursuant to the above, above-cost selective price cuts may lead to exclusionary effects, particularly when (i) the company applying selective price cuts is holding a superdominant position in the relevant market and (ii) when it is used as a response to the entry of a competing operator.

⁵² Judgment of the European Court of Justice No C-413/14, *Intel v. Commission*, of 6 September 2017, at points 137 and following.

⁵³ Judgment of the European Court of Justice No C–395/96P, *Compagnie maritime belge transports SA* v. *Commission*, of 16 March 2000.

⁵⁴ Judgment of the European Court of Justice No C-395/96P, Compagnie maritime belge transports SA v. Commission, of 16 March 2000, cited, para 117.

⁵⁵ Judgment of the Court of First Instance No T-228/97, Irish Sugar v. Commission, of 7 October 1999.

This type of conduct may well find its way in the pharmaceutical data related markets, as it is easy to conceive that selective price cutting may take place particularly in connection with "border clients" or clients that are being approached by new entrants.

In the *Symphony* case, already cited, one of the allegations concerned "predatory offerings" which resembled what has been described under EU law as selective pricecutting. In that case, the dominant company allegedly engaged Symphony clients in the market for managed markets data, offering those clients extremely low prices or at no charge. The allegation included an assertion that the relevant customer would no longer be contacting Symphony as the latter would not be able to compete with IMS's offer. (iii) English clauses and "most favoured nation" clauses (MFNs). Contractual clauses such as an English clause can also be characterised as abuse when they do not infringe Article 101. The European Court of Justice has stated the following concerning English clauses:

[quotation]In fact the English clause under which Roche's customers are obliged to inform it of more favourable offers made by competitors together with the particulars above mentioned – so that it will be easy for Roche to identify the competitor – owing to its very nature, places at the disposal of the applicant information about market conditions and also about the alternatives open to, and the actions of, its competitors which is great value for the carrying out of its strategy.⁵⁶

The fact that an undertaking in a dominant position requires its customers or obtains their agreement under contract to notify it of its competitor's offers, whilst the said costumers may have an obvious commercial interest in not disclosing them, is of such a kind as to aggravate the exploitation of the dominant position in an abusive way. [/quotation]

An English clause, which may be procompetitive in principle as it may toughen price competition, can also be used as a device by dominant companies to access information on offers by entrant companies and (for instance) carry out selective pricecutting of the kind described above.

MFNs have also been the object of much attention by competition authorities in recent years.

The eBooks case is a good example of how MFNs can be used to manipulate market behaviour, in that case by acting as a joint commitment device for a group of companies (publishers) to force Amazon to switch from the wholesale to the agency

⁵⁶ Judgment of the European Court of Justice No 85/76, *Hoffmann-La Roche & Co. AG v. Commission*, of 13 February 1979, para. 107.

model for the sale of Ebooks.⁵⁷ Also in Europe, courts and competition authorities have focused on the power of MFNs to act as commitment devices to keep prices artificially high.⁵⁸

In the pharmaceutical marketing data businesses, MFNs may be used as a tool to artificially raise prices charged for the sale of valuable marketing data, so that if a marketing data supplier selling its data to the incumbent pharmaceutical marketing data business operator receives a better offer from a second pharmaceutical marketing data business operator, the incumbent has a chance to match that offer. An important factor here already discussed above is that data can by its very nature be sold infinite times: pharmaceutical data suppliers could in principle make their data available to as many purchasers as required, price discrimination by the pharmaceutical data supplier being an optimal strategy enabling at the same time to maximise revenue and output. That is why MFNs in this context may be effective to exclude competitors, particularly if coupled by some type of exclusivity obligation preventing the pharmaceutical data supplier from selling to an alternative pharmaceutical data company.

In the *Symphony* case, MFNs were devised as a clause benefitting the incumbent, by guaranteeing that data suppliers would sell their data to incumbent's competitors at a higher price. In the *Symphony* case the MFN was also coupled with exclusivity obligations.

MFN clauses were also part of the *hmR v. IMS Health* case (see discussion above). In the *hmR v. IMS Health* case, the removal of the MFN clauses contained in the data supply agreements of wholesalers with IMS Health was agreed by the latter company as part of the commitments Decision.

(iv) Refusal to supply. Outside of the rather narrow circumstances of cases such as the *IMS Health/NDC* case, cited above, refusal to supply non-copyrighted data may at least in theory amount to an abuse of a dominant position, where such refusal may impede competition.

An example of such abuse has been identified in France, where Cegedim, leading provider of medical information databases in France, refused to sell its database

⁵⁷ Commission Decision *Ebooks*, case No COMP/39.847, of 25 July 2013.

⁵⁸ Decision of the Higher Regional Court of Düsseldorf of 9 January 2015 confirming the Decision of the Bundeskartellamt to prohibit the use of MFN clauses by HRS, a hotel reservations portal, which in practice prevented HRS hotel partners from making better offers anywhere else, including direct sales. Similarly in the UK, for instance, see www.gov.uk/government/news/cma-closes-hotel-onlinebooking-investigation.

(OneKey) to customers using Euris, a CRM software competing with Cegedim's own CRM software. The French Competition Authority considered that such conduct was discriminatory and because OneKey was the leading dataset on the market for medical information databases and Cegedim was dominant on the market for medical information databases, such strategy would have limited Eurim's development in a way contrary to Article 102 TFEU.⁵⁹

[A]4. DATA AND MERGER CONTROL

[b]The issue of merger control thresholds

[prn]**20.43** Due to the nature of data and data analytics, pharmaceutical marketing data companies' interaction with technology is intimate. In that regard, it is probably fair to refer to some recent developments in the area of merger control which may possibly apply to future mergers and acquisitions in this industry.

[prn]**20.44** The issue of merger control thresholds is likely to be revised in view of the mergers and acquisitions frenzy in the technology sector. Turnover thresholds are an indicator of size; but size only has any significance if considered in relative terms. In the antitrust world, such significance is normally put in contrast with the remaining competition in a given market. That is the reason why turnover thresholds as such sometimes do not signify much: banking, insurance or private equity related mergers and acquisitions may involve huge turnover figures and yet have no implication whatsoever from an antitrust standpoint. Conversely, acquisitions of technology firms with only minimal turnover may have antitrust implications when the technology or intellectual property involved, for instance, are scarce or amount to large market shares in the relevant markets.

[prn]**20.45** Some degree of concern has been sparked by the *Facebook/Whatsapp* acquisition, which could well have escaped scrutiny by the European Commission, had it not been because the notifying party used the reasoned submission system under Article 4.5 of EC Regulation 139/2004, on the control of concentrations between undertakings⁶⁰

⁵⁹ French Competition Authority Decision, No 14–D–06, and Joint Data Report, page 19.

⁶⁰ European Commission Regulation No 139/2004, on the control of concentrations between undertakings, of 29 January 2004, (OJ L 24, 29), page 1.

(ECMR), and the countries originally competent to review the merger (Spain, Cyprus and the UK) all agreed to enable the Commission to review it under the ECMR. It is symptomatic in this regard that the two most significant countries with original jurisdiction to review the merger were countries with market share-based merger thresholds: the UK has a share of supply test and Spain a market share threshold. Cyprus has, as we understand, very low thresholds. As we have advocated in the past, market share thresholds are a much better proxy of market power than turnover thresholds. The pros and cons of market share and similar thresholds have been discussed elsewhere and we refer to such discussion for more detail.⁶¹ It suffices to say here, that thresholds based solely on turnover may be ill-equipped to deal with technology mergers, also those where big data is of significance since, as we have seen, often these businesses are not exclusively based on turnover generation: the currency of these markets may sometimes not be money, but data. Furthermore, some of these acquisitions may only have a prospective value, with many millions being paid for businesses, which are sometimes little more than a gamble on the success of a new or disruptive business model.

[prn]**20.46** Already in March 2016, Competition Commissioner Ms. Vestager mentioned the issue of merger control thresholds and review of relevant technology acquisitions with a large big data component that may well go unnoticed.⁶² The solution may lie in leaving the ECMR thresholds unaltered, while relying on the streamlined referral system envisaged in the ECMR which, as Ms. Vestager recognises, has enabled Commission review of the *Facebook/Whatsapp*⁶³ merger (although arguably due to the mercy of the affected stakeholders). However, the European Commission has at least wondered if the ECMR thresholds are broad enough to catch significant transactions in the digital sectors and other industries that involve large data sets and a public consultation was issued on the topic, which did not conclude in any reform of the ECMR.⁶⁴

[prn]**20.47** The German *Monopol Kommission* recommended that turnover-based merger thresholds be complemented with some kind of transaction value threshold to be added

⁶¹ P. Callol, "A Practical Guide on How to Deal with Market Share Thresholds: Risks and Solutions in Multijurisdictional Transactions" [2012] 11 *ECLR*. That article attempted to examine with objectivity the advantages and disadvantages of market share thresholds and the tools available to maximise legal certainty and minimize prior analysis costs.

⁶² https://ec.europa.eu/commission/2014-2019/vestager/announcements/refining-eu-merger-controlsystem_en.

⁶³ Case No COMP/M.7217, of 3 October 2014.

⁶⁴ http://ec.europa.eu/competition/consultations/2016_merger_control/index_en.html.

both to the German law and the ECMR.⁶⁵ Ultimately, both Germany and Austria ended up adopting new transaction-value-based thresholds. Again, however, it must be cautioned that transaction value is not necessarily a reflection of future business success, much less of future or current market position or market power, and there are many past examples of businesses which had enormous valuations but ultimately lagged well below expectations. Likewise, these new thresholds seem not to be totally exempt of some complexity in their application.⁶⁶ Market share thresholds appear, again, as a good indicator of success in the market and actual and/or potential relevance for merger control purposes. Plus, there is plenty of experience in some jurisdictions on how to navigate this type of threshold.

[prn]**20.48** A simple reality, therefore, appears to have emerged: turnover, at least solely, may not be the appropriate tool to screen relevant mergers meriting administrative review in the disruptive data-based markets.

[b]B. Data in merger control matters

[prn]**20.49** The issue of data and big data is in the spotlight for currently ongoing mergers such as *Microsoft/Linkedin* or *Verizon/Yahoo*. Some European merger control precedents have already at least identified some issues surrounding competition appraisal of big data (see section 2 above). The Joint Data Report contains a good study of merger control precedents where data has played a role. Bearing in mind the features of pharmaceutical marketing data, we would underline the following:

[list]

(a) Dynamic competition in the electronic data related markets might normally make up for any apparent loss of competition and/or apparent barriers to entry. However, depending on research and development, marketing and other expenses, the barrier to entry caused by existing big data clusters may be considerable, although this is to be established on a case-by-case basis.

⁶⁵ "Special Report by the Monopolies Commission pursuant to Sec. 44(1)(4) of the Act against Restraints on Competition", Point 580 (www.monopolkommission.de/images/PDF/SG/s68_fulltext_eng.pdf).

⁶⁶ See the Joint German and Austrian Guidance on the matter at www.bundeskartellamt.de/SharedDocs/Publikation/EN/Pressemitteilungen/2018/09_07_2018_Leitfa den_Transaktionsschwelle.html;jsessionid=6C17521CE22CF0F37B1E671FD04A4099.2_cid387.

(b) Mergers of companies with access to client data amounting to large shares of market could in theory create a potentially considerable barrier to entry in the market. However, the merger decisions that have identified this type of potential concern, have also dismissed it, given that such a potential advantage could be matched by competitors or that the data are available in the Internet for anyone wishing to exploit them. This was assessed in the *Facebook/Whatsapp* and the *Google/DoubleClick* merger Decisions, cited.⁶⁷

A potentially larger concern may exist in transactions focused on specific sectors, where the universe of providers of relevant data may be more limited, as is the case in the telecommunications⁶⁸ or the pharmaceutical sector (even more so in the latter case due to the factors pointed out at section 1 above). Past mergers where the particular pharmaceutical marketing markets described in this paper have been assessed are rather limited. At least in one instance though, accumulation of relevant data by the merging entities has been considered in connection with the PMR market.⁶⁹

(c) Where concerns related to data accumulation in the area of pharmaceutical marketing data mergers have been posed,⁷⁰ the European Commission has accepted merger remedies designed to remove those concerns.⁷¹ Regarding vertical links IMS maintains the "brick structure" required for the services provided by Cegedim. To avoid foreclosure, the "access commitment" envisaged that the merged entity would enter, when prompted by an EEA healthcare customer, into a third-party agreement enabling the requiring health customer to share, free of charge, IMS "brick structure" with a provider of data services that had a contractual obligation with the health customer to provide those services. This remedy soothes the Commission's concerns related to the access that competing providers of healthcare professional databases need to the IP-protected brick structure of IMS Health.

[/list]

⁶⁷ M. Cole, "Data in EU Merger Control" (February 2018) *Competition Policy International Antitrust Chronicle*.

⁶⁸ EC Decision *Telefonica UK/Vodafone UK/Everything Everywhere/JV*, case No COMP M.6317, of 4 September 2012, discussion at point 538 and following.

⁶⁹ EC merger Decision *IMS/Cegedim*, *supra* note 13, point 189 and footnote 79. For a description of relevant product markets and PMR, see s 2 above.

⁷⁰ Even though the concern has been largely dismissed, again (points 208 and 213 of the *IMS Health/Cegedim* Decision, *supra* note 13).

⁷¹ EU merger Decision *IMS Health/Cegedim, supra* note 13, footnote 79.

[A]5. CONCLUSION

[prn]**20.50** The interface between large data sets and competition is an area of which implications are only starting to be explored. The markets where the interface between data and competition are likely to be more affected are technology markets or related markets displaying some of the already traditional features of high-technology markets. Dynamic competition is one of them, and such competition would be an element advising caution when administrative intervention is being considered. Another feature is the trend towards concentration or "winner takes all" as snowball or tipping effects dominate these markets, either because of the large first mover advantage benefit (which would seem to be the case in the specific area of pharmaceutical marketing data companies) or because of the two-sided nature of some markets. In such an environment, access to large data sets and the strategic use thereof may well be a competitive concern in the future. So far, it seems that competition authorities have taken a prudent approach and have generally considered that data are largely available or difficult to appropriate and that no concerns generally arise.

[prn]**20.51** Antitrust law related to company conduct may well encounter examples of companies illegally attempting to monopolise key information for themselves. This may be the case in some instances where national competition authorities have decided in the past, or are currently investigating, abusive or allegedly abusive conduct. A good example of a network of exclusive agreements coupled with MFN and early termination clauses aimed at preventing access by competitors to key information is the one dealt with in the *hmR v. IMS Health* case, discussed above in some detail, and which was solved with an (arguably) not fully satisfactory commitments Decision by the NCA.

[prn]**20.52** In the area of merger control, competition authorities seem to have identified some of the potential issues around data, both in electronic platforms mergers and in acquisitions by IMS Health in the pharmaceutical marketing sector. Generally, however, there seems to be thus far a general acceptance that data are largely available, although in some instance remedies attempt to address potential concerns related to data, as the *IMS Health/Cegedim* merger shows.

[prn]**20.53** Also in the area of merger control, some concern has been voiced by some authorities (e.g., the European Commission) that existing rules devised to discriminate mergers relevant from those which are not relevant under the merger control rules, are

not sufficient. This may have been sparked by the fact that the acquisition of Whatsapp by Facebook nearly went unnoticed by the European Commission had it not been for the mercy or goodwill of the notifying parties and the primarily affected national competition authorities. Something is likely to be done in this area to remediate what looks like a gap in current law, with jurisdictions like Germany and Austria having taken the lead. National laws such as those of Portugal, Spain and the UK, long containing market share or share of supply merger thresholds, and the great wealth of experience gained in the administration of such merger thresholds, may provide some answers.