

Stretching EU competition law tools for search engines and social networks

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Abstract: Because of their multi-sided and dynamic nature, the application of competition law to online platforms may prove challenging. The paper maintains that existing competition concepts are flexible enough to be adequately applied to search engines and social networks. It is argued that, in order to take the fast-moving nature of these industries into account, relevant markets should not be defined along strict product boundaries and that the strength of potential competition constitutes a better indicator for dominance than the size of market share. Such an approach would make competition analysis more conducive to innovation and would better recognise its role in the dynamic online intermediary sector.

Keywords: Competition law, Search engine, Social network

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INTRODUCTION

The evolution of the internet has led to the rise of different types of platforms that act as intermediaries between customer groups. Web-based businesses such as search engines and social networks aim to build an audience for advertisers. In order to attract users, these platforms provide them a free service like search functionality or social networking possibilities. Access to user traffic is sold to advertisers who generate the funding for the platform. These advertising-based online intermediaries can be seen as multi-sided platforms. In addition to their multi-sided nature, online search engines and social networks have other distinguishing characteristics. Unlike more traditional multi-sided markets such as the newspaper industry, these intermediaries are active exclusively on the internet and form part of a dynamic sector in

which innovation cycles are short and market positions can change quickly. After analysing the multi-sided and dynamic nature of online platforms, the paper discusses how the standard approach towards market definition and assessment of dominance in merger and abuse of dominance cases in EU competition law may have to be adapted to reliably assess potential competition issues with regard to search engines and social networks.

MULTI-SIDEDNESS

An important feature of online search engines and social networks that has implications for competition analysis is their multi-sidedness. Unlike for example retailers which only have to attract one type of customer, multi-sided platforms have to get different customer groups on board. Providers of search engines and social networks have to achieve a critical mass of both users and advertisers in order to successfully launch their platforms on the market. The platform enables the two customer groups to interact and to remove existing transaction costs. The essential feature of multi-sided markets is the existence of an indirect network effect between the two customer sides (Filistrucchi, Geradin & Van Damme, 2013, pp. 37-39; Evans, 2003, pp. 331-333). The more customers join one side of the platform, the more valuable the platform becomes for customers on the other side. As new users join Facebook, for example, more advertisers will be inclined to buy (additional) advertising space on Facebook, since they will reach a larger number of potential buyers. While advertisers positively value the user side, the attitude of users towards advertising on online platforms is not entirely clear. Users that are looking for a purchase will appreciate the display of relevant advertisements but others may regard the exposure to ads as a necessary cost they have to bear in order to use the service for free (Zingales, 2013, p. 31). In any case, the advertisers fund the platform and ensure that it can be offered for free. On this basis it can be argued that advertisers do exert an indirect network effect on users by way of financing the platform (Devine, 2008, pp. 82-83).

The multi-sided character of online platforms has to be taken into account in competition analysis in order to prevent that incorrect conclusions are reached about the anticompetitive nature of certain behaviour in the market. For instance, the free delivery of services on one side of a multi-sided platform usually does not indicate an anticompetitive form of predation but is a commonly used pricing structure to attract users who in their turn bring advertisers to the platform. However, the multi-sidedness of a platform may not always be critical to the competition analysis. Multi-sidedness should be seen as a matter of degree (Evans & Schmalensee, 2007, p. 173). If the multi-sided nature of a business is merely an aspect of the industry that is not determinative for a particular competition issue involving a multi-sided platform, it may not be sufficiently pronounced so as to affect the behaviour of the firm and the way in which competition takes place. Ultimately, it is an empirical question whether and in which circumstances multi-sided aspects are sufficiently substantial to have an influence on the application of competition law (Evans & Noel, 2005, p. 128).

INNOVATION PREVAILS OVER PRICE AS THE MAIN PARAMETER OF COMPETITION

Another distinguishing characteristic of online platforms is that innovation rather than price is the predominant parameter of competition. Since users have free access to many online services, they choose their provider based on aspects other than price, such as quality and innovation (*Microsoft/Skype*, 2011, par. 81-84; *Microsoft/Yahoo*, 2010, par. 119). For companies active in these markets it is therefore vital to invest in innovation in order to secure a competitive advantage in future technologies. Incumbent market leaders in dynamic industries are often replaced by new firms that introduce disruptive innovations and thereby overthrow the existing market structure. For example, IBM's leading position in the market for mainframe computers has been overturned by Intel's hardware and Microsoft's operating systems that started to dominate the market for personal computers. The reason why personal computers have replaced mainframe computers is not because of their superior technical performance but because personal computers started to meet the needs of most customers (see in general Christensen, 1997, pp. 149-151). The same has happened with the introduction of tablets and smartphones relying on internet services and mobile applications that are gradually overtaking the markets for personal computer hardware and software and have thereby diminished the significance of Microsoft's and Intel's dominance in these markets.

The fact that innovation is the most important dimension of competition in dynamic industries should be taken into account when applying competition law to these markets. While disruptive innovation takes place before market development, competition analysis relies on an assessment of a certain type of behaviour in existing markets. Traditional competition analysis may therefore not be sufficiently fit for taking this more fundamental form of innovation into account that makes existing market structures obsolete. When assessing potential abusive behaviour and proposed concentrations, competition authorities should be aware of this and adjust their analysis where appropriate.

MARKET DEFINITION

The definition of the relevant market is the first step in competition analysis. The relevant product market includes all products or services which are regarded as substitutes by consumers on the basis of their characteristics, price and intended use (European Commission, 1997, par. 7).

MARKET DEFINITION FOR MULTI-SIDED PLATFORMS

Because of the link between the two customer groups on online multi-sided platforms, it does not seem correct to define and analyse the relevant market for each side in isolation. If the provider does not behave like a one-sided firm but takes the interdependence of the two sides of the platform into account in its pricing and production decisions, the application of a one-sided logic may lead to an erroneous assessment of the competitive strength of the multi-sided business (Evans, 2003, pp. 356-358; Wright, 2004).

In three recent competition cases involving online search engines and social networks, the European Commission was confronted with this issue. In the *Microsoft/Yahoo* merger case, the Commission had to apply competition law to internet search for the first time. While the Commission did discuss the multi-sided character of search engines and distinguished between the user and the advertiser side (*Microsoft/Yahoo*, 2010, par. 100-108), it did not take a position on whether the web search activity by users should be regarded as a relevant market of its own. Instead, the Commission only assessed the legality of the transaction with regard to the market for online advertising (*Microsoft/Yahoo*, 2010, par. 85-87). However, the Commission did consider the link between the user and advertiser side by examining potential anticompetitive effects of the transaction on innovation, relevance and variety of web search by users (*Microsoft/Yahoo*, 2010, par. 202-226). In its ongoing abuse of dominance investigation

against Google that was opened in November 2010 after competitors complained about Google's search activities (European Commission, 2010), the Commission appears to distinguish two interrelated markets with regard to Google's search engine: a relevant market for web search on the user side of its platform and a relevant market for online search advertising on the advertiser side of its platform. This can be illustrated by public statements in press releases in which the Commission pointed to "concerns that Google may be abusing its dominant position in the markets for web search, online search advertising and online search advertising intermediation in the European Economic Area (EEA)" (European Commission, 2013).1 In the context of its approval of Facebook's acquisition of WhatsApp, the Commission, without explicitly referring to the multi-sided nature of Facebook's business, similarly identified separate relevant markets for the services provided to users on the one hand and the services offered to advertisers on the other hand. With regard to market definition on the user side, the Commission investigated the possibility of defining a relevant market for consumer communications services and social networking services. On the advertiser side, the Commission considered the existence of further sub-segmentations of the online advertising market (Facebook/WhatsApp, 2014, section 4).

A critical issue for market definition of multi-sided businesses is whether one market for the platform as a whole or several markets corresponding with each of the sides of the platform have to be defined. On some multi-sided platforms, a single transaction takes place between the two customer groups. As a consequence, a market player has to be active on both sides of the platform. A payment card provider, for example, has to be active on the buyer as well as on the merchant side of the platform in order to do business. It is impossible to process a transaction by using platform A on the buyer side and platform B on the merchant side. Either the buyer and the merchant both use platform A or the transaction does not take place through platform A. A payment card provider thus only experiences competitive pressure from other providers which are also active on both sides of the platform (Filistrucchi, Geradin, Van Damme & Affeldt, 2014, p. 301). This is different for search engines and social networks because no observable transaction occurs between the customer groups on these platforms. As a result, the providers may also experience competitive pressure from single-sided firms as well as from multi-sided businesses that compete on only one side of the respective online platform. For instance, a user of an online search engine may regard the services provided by single-sided libraries or travel agencies as substitutes to the search functionality offered by the search engine (Thépot, 2013, p. 207). In addition, online platforms having only one overlapping customer side may be competitors. A search engine may theoretically compete with online social networks on the advertiser side, while its users will not regard the social network features substitutable to the search services that the search engine offers. In that situation, a search engine would only compete with social networks on the advertiser side and not on the user side of its platform.2

In conclusion, online platforms on which no transaction between the customer groups takes place may experience competitive pressure from a variety of entities which cannot be taken into account when only one relevant market for the platform as a whole is defined. Therefore, the most viable option seems to be the approach taken by the European Commission to define a separate relevant market for each side of the online search engine or social network (Filistrucchi, Geradin, Van Damme & Affeldt, 2014, pp. 302-303; Hoppner, 2015, p. 352).

MARKET DEFINITION IN DYNAMIC INDUSTRIES

The statements made by the European Commission in the context of the ongoing *Google* case and its merger decisions in Microsoft/Yahoo and Facebook/WhatsApp indicate that relevant product markets are defined on the basis of the functionality offered to customers. As a result, numerous relatively narrow relevant markets can be distinguished on the internet such as, on the user side, a market for horizontal search, a market for consumer communications services and a market for social networking, and on the advertiser side, a market for online search advertising, a market for online non-search advertising and a market for social network advertising. This implies that Google and Facebook are not active in the same relevant market for competition law purposes. By defining relevant markets narrowly on the basis of the features made available to users and advertisers, the Commission implicitly chooses to focus on preserving innovation in existing markets rather than encouraging disruptive innovation in new markets. If the relevant market is defined around the specific functionality offered, potential competitive constraints from related or future services are not taken into account (Ahlborn, Evans & Padilla, 2001, pp. 161-162). This is all the more relevant in a dynamic sector as the online environment where market players typically compete by introducing new services instead of by substituting or improving existing services.

A starting point for developing a framework that is more favourable to innovation as compared to a strict product market definition would be to define markets more loosely and impose less strict market boundaries. As more hints become available on what will constitute the products or services of the future, it will be easier to identify the required inputs and thus the relevant market for innovation. It can however be doubted whether the Commission is willing to move away from a strict product market definition. If broader relevant markets are defined, the likelihood that a market player with a dominant position can be found decreases as a result of which there is less room for competition law intervention. Nevertheless, disruptive innovation has arguably solved competition concerns in cases where the Commission intervened to preserve innovation in existing markets. In the *Microsoft* case, the European Commission intervened in the market for client PC operating systems (Microsoft, 2004; Microsoft v. *Commission*, 2007). Although the Commission tried to preserve innovation in this market by forcing Microsoft to give competitors access to its technology, it seems that the competition concerns were rather solved by disruptive innovation coming from Google and others who brought the internet to the forefront, thereby diminishing the significance of Microsoft's dominant position in the market for personal computer operating systems. In the ongoing Google investigation the Commission similarly appears to concentrate on preserving innovation in the market for search engines, while one could argue that disruptive innovation coming from other internet platforms, such as social networks, and mobile applications are already reducing the relevance of Google's position in this market.

DOMINANCE

The multi-sided and dynamic nature of the online intermediary industry also raises questions about the appropriate assessment of dominance of providers of search engines and social networks. Dominance is defined in case law of the European Court of Justice as "a position of economic strength enjoyed by an undertaking which enables it to prevent effective competition being maintained on the relevant market by giving it the power to behave to an appreciable extent independently of its competitors, customers and ultimately of its consumers" (United Brands, 1978, par. 65).

DOMINANCE OF MULTI-SIDED PLATFORMS

Because of the link between the user and advertiser side of an online platform, it is important to consider both sides in conjunction with each other when assessing dominance. In a case involving payment cards, the European Court of Justice made clear that the interaction between the different sides of a multi-sided platform has to be taken into account when analysing whether a measure restricts competition under Article 101 of the Treaty on the Functioning of the European Union (TFEU). In the context of an assessment of whether pricing measures adopted by an economic interest grouping within a French payment card system were by nature harmful to the proper functioning of normal competition under Article 101(1) TFEU, the European Court of Justice argued in Cartes Bancaires that it is necessary "to take into consideration all relevant aspects [...] of the economic or legal context in which that coordination takes place, it being immaterial whether or not such an aspect relates to the relevant market." According to the European Court of Justice, that must particularly be the case when "there are interactions between the two facets of a two-sided system" such as those between the activities of the issuing of bank cards to consumers and the acquisition of merchants for their acceptance in the case at hand (Cartes Bancaires, 2014, par. 78-79). Although this case did not deal with the assessment of dominance, the statements of the European Court of Justice that all relevant aspects of the economic or legal context of a twosided system, and in particular the interaction between the two customer sides, have to be taken into account in the context of Article 101 TFEU may have relevance for competition analysis in general. When transposing the spirit of the rulings to the fields of merger review and Article 102 TFEU, the reasoning of the European Court of Justice may be interpreted as indicating that the link between the different sides of a multi-sided platform also has to be considered when analysing whether an undertaking possesses a dominant position in the relevant market.

ESTABLISHING DOMINANCE IN DYNAMIC INDUSTRIES

Market shares have always played an important role in the assessment of the competitive strength of undertakings in competition enforcement. It follows from case law of the European Court of Justice that very large market shares are in themselves, and save in exceptional circumstances, evidence of the existence of a dominant position (Hoffman-La Roche, 1979, par. 41; Akzo, 1991, par. 60). The European Commission argued in its Microsoft/Skype merger decision that market shares only provide a limited indication of competitive strength in the context of the market for internet consumer communications services because of the nascent and dynamic nature of the sector as a result of which market shares can change quickly within a short period of time (Microsoft/Skype, 2011, par. 78). In the Cisco judgment in which the legality of the decision of the European Commission to approve the *Microsoft/Skype* merger was assessed, the General Court confirmed the finding of the Commission and argued that "the consumer communications sector is a recent and fast-growing sector which is characterized by short innovation cycles in which large market shares may turn out to be ephemeral." In such a dynamic context, "high market shares are not necessarily indicative of market power and, therefore, of lasting damage to competition" in the view of the General Court (Cisco v. Commission, 2013, par. 69). Even though Microsoft would post-merger have a market share of 80% to 90% on the narrowest possible relevant market for video calls delivered on Windowsbased PCs, the Commission and the General Court concluded that the concentration would not give rise to competition concerns because of the dynamic character of the sector and the existence of sufficient alternative providers to which consumers could easily switch (Microsoft/Skype, 2011, par. 120-132; Cisco v. Commission, 2013, par. 68-95).

In *Facebook/WhatsApp*, the Commission referred to and relied upon the statement of the General Court that high market shares do not necessarily point to market power in the market for consumer communications services (*Facebook/WhatsApp*, 2014, par. 99). Both the Commission and the General Court in the context of the *Microsoft/Skype* merger as well as the Commission in *Facebook/WhatsApp* confined the statement that the value of market shares is limited for measuring the competitive strength of undertakings to the consumer communications market and did not consider the validity of this statement to other dynamic markets as well. A similar reasoning could be applied to social networks and search engines that also form part of a dynamic sector. Nevertheless, in earlier merger decisions involving internet services, in particular the acquisition of Yahoo's search business by Microsoft and the competitive strength of undertakings in the market shares to measure the competitive strength of undertakings in the markets for web search and online advertising (*Microsoft/Yahoo*, 2010, par. 112-130; *Google/DoubleClick*, 2008, par. 96-118). In addition, in the *Google* investigation the Commission referred to the market share of Google as an indication that it has a dominant position.₃

One could argue that market shares are still a good proxy for assessing market power in established dynamic markets in which market shares have been relatively stable for a longer period of time. In *Akzo*, the European Court of Justice referred to a three year period as basis for a stable market share (*Akzo*, 1991, par. 59). While social media and online search can also be regarded as dynamic sectors that are still evolving, the positions of, respectively, Facebook and Google, are more stable than that of Skype in the nascent market for communications services at the time of the acquisition by Microsoft. According to the Commission in *Microsoft/Skype*, the latter market was anticipated to grow immensely with the number of users of instant messaging expected to triple from 2010 to 2016 and the number of video calls expected to increase from 3.2 billion in 2011 to 29.6 billion in 2015 (*Microsoft/Skype*, 2011, par. 70-72).

Instead of relying on market shares, competition authorities and courts could look at the strength of potential competition in the form of the existence of entry barriers and recent market entry by new firms in order to assess whether a particular undertaking is able to behave independently from its competitors, customers and consumers. Unlike in traditional industries where competition predominantly takes place *in* the market on the basis of price and output, in dynamic industries competition typically tends to come from subsequent competitors that compete *for* the market and overturn the existing market structure. Although an undertaking may have a high market share, it can nevertheless be under significant competitive pressure if new firms are able to take over its leading position (Graef, 2014, pp. 1273-1274). As long as entry barriers are low, the market is contestable and new entrants may challenge the incumbent's market power (Thépot, 2013, pp. 218-220).

CONCLUSION

In several perspectives, online platforms raise new challenges for competition enforcement. Because of their multi-sided nature and the predominance of innovation as a parameter of competition, traditional competition analysis may not be sufficiently able to reflect the way in which competition takes place on search engines and social networks. Although these online platforms have some specific characteristics that have to be taken into account in competition law analysis, the tools that are used to define relevant markets and to assess dominance are flexible enough to be adequately applied to these services. By defining separate relevant markets for the user and advertiser side of online platforms and by considering the interaction between these two sides when assessing dominance of search and social network providers, account can be taken of the multi-sided nature of online intermediaries in the competition analysis. However, the question is whether the European Commission is also willing to adapt existing competition tools to the dynamic nature of the markets in which online platforms operate.

Since competition in dynamic markets typically leads to the development of new markets, benchmarks or proxies other than price and market share may have to be used to reliably conduct market definition and assess dominance. With respect to dominance, there is awareness that the strength of potential competition is a better proxy for market power than high market shares in dynamic industries. But as regards market definition, the European Commission still relies on narrowly defined and functionality-based relevant product markets. Because of the fast-moving nature of the sector, market boundaries are fluctuating and online platform providers may impose competitive pressure on each other despite offering different functionalities to users. In this regard, the current approach towards market definition could be adapted by defining relevant markets more loosely instead of along strict product boundaries. This would reflect the dynamic process of competition in these industries. It would require competition authorities and courts to look beyond existing markets and not limit themselves to an assessment in existing markets. This way, competition analysis can be made more favourable towards innovation in dynamic industries, such as the online intermediary sector.

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FOOTNOTES

1. The market for online search advertising intermediation is not relevant here, since it does not involve advertising on Google's search engine pages. Instead, it relates to Google's AdSense service, which enables third parties to gain revenue by selling advertising space on their own websites to Google, which looks for interested advertisers to fill these spots.

2. While the European Commission left the exact scope of the relevant market for online advertising open in *Google/DoubleClick*, *Microsoft/Yahoo* and *Facebook/WhatsApp*, the Commission did find support in the respective market investigations for the existence of separate relevant markets for online search and non-search advertising (*Google/DoubleClick*, 2008, par. 56; *Microsoft/Yahoo*, 2010, par. 71-75; *Facebook/WhatsApp*, 2014, par. 76). This would imply that search engines and social networks do not compete with each other on the advertiser side of their platforms. In the ongoing *Google* investigation, the Commission seems to be more explicitly taking the view that online search advertising constitutes a relevant market of its own. In a 2013 press release, the Commission stated in this regard: "*Google also has a very strong position in the market for online search advertising*" (European Commission, 2013).

3. In a 2013 press release, the Commission stated: *"For its general web search service (so-called "horizontal" search), Google has a market share of over 90% in the European Economic Area (EEA)"* (European Commission, 2013). In a recent speech, the Commissioner for Competition argued: *"Google has had market shares of more than 90% in general internet search in most EU Member States for many years"* (European Commission, 2015).