Market Definition and Dominance Analyses in Online Search and Advertising: The case of Google

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This paper discusses the European Commission’s ongoing investigation into Google’s alleged abuse of dominant position under Article 102 TFEU. Departing from the consideration that search engines are increasingly becoming the most popular gateway used to find content, I examine how the Commission can conduct its market definition and dominance analyses with reference to the *informational* character of the products that Google provides to the consumers. In that regard, the approach I follow is distinct from the existing literature that has put little if not no attention on Google’s role as “the new bottleneck for content access”.²

Part 1 studies the role of search engines in today’s information society and the implications of a firm active in this business abusing its dominant position. The findings revolve around the following considerations.

Over the past years, search engines have become one of, if not the most popular means of getting access to information. While not *all* information is nosed out and indexed by search engines, the latter have undoubtedly made a significant contribution to the construction of a media environment where information is instantly and effortlessly available. In order to grasp the role they play in our daily lives, we may ask ourselves how we would do without them. We would need to both memorize and type the URLs leading to the content in which we would be interested and discover by ourselves links to websites that could possibly contain attractive content. This exercise would render the online experience burdensome and time-consuming and would undoubtedly not allow us to reap the benefits that we enjoy today as online users. The importance of search engines in the European mediascape is illustrated by the fact that 73% of European households are now connected to the Internet³ and search engines constitute the main entry gate with the average percentage of individuals using a search engine to obtain information amounting to 71%. ⁴ Against this

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² See van Eijk (2012) who provides a comprehensive overview of how search engines operate


background, search engines are increasingly evolving into “the most important gateway used to find content” and the belief “[t]o exist is to be indexed by a search engine” is now becoming commonplace. Their growing popularity has also triggered a new era in marketing techniques and consumption patterns. In a non-linear environment, advertising was confined to businesses that could afford its excessive cost. However, the emergence of search advertising has given the opportunity to small enterprises to do much more than distributing leaflets in the neighborhoods where they are located. The pricing mechanism commonly used by search engines does not require minimum budget requirements and affords them the possibility to effectively target their customer base in accordance with the geographic and demographic criteria they themselves set. These circumstances contribute to boosting economic growth and greatly benefit consumers that may now choose among a wider variety of products of different price and quality. This explains why, despite the current economic recession, Europe’s search advertising market, which remains the biggest format in online advertising, grew at 17,9% in 2011 whereas the overall European advertising market, excluding online, grew at merely 0,8% in the same period.7

Notwithstanding the above, there are conditions characterizing this marketplace that deprive search engines of reaching their full potential, the most important being its natural trend to concentration. Entering the market requires high levels of investment which allows the firms that have already penetrated it to enjoy large economies of scale.8 In their turn, these economies of scale generate downward spiral effects meaning that the search engine with the higher traffic will tend to attract more advertisers. As the engine’s ad revenues increase and the small engines’ ad revenues decline, the latter have less money to spend on innovation that could lead to better search results. Thus, the quality of the search results declines thereby reinforcing the decline in traffic which subsequently causes a further drop in advertisers. Charging less for advertisements may not be the solution, as advertisers do not primarily seek to pay less but to reach the highest possible number of users. Small search engines find themselves in a downward spiral which, if it does not eventually crowd them out of the market, at least results in one search engine becoming increasingly dominant.9 The downward spirals are related to the search engines’ source revenue (advertising) and the network effects that exist between the

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5 Van Eijk 2012, 141  
6 Introna and Nissenbaum 2000, 171  
7 http://www.iabeurope.eu/news/europe's-online-ad-market-tops-€20bn-despite-economy.aspx It is also worth mentioning that Europe’s online advertising market grew 14,5% year-on-year to a market value of €20,9bn in 2011  
8 Center for Media Pluralism and Media Freedom, Policy Report (2013), 25  
9 This example is given in the OECD Policy Roundtable Report on Media Mergers, at p. 21. The example in the report refers to newspapers. I make some adjustments so that it is adapted to the online search world
advertisers and the users\textsuperscript{10} that contribute to the vicious cycle that was just described. These conditions explain Google’s prominent position in the global and European search engine market: the firm currently holds a 91,2\%\textsuperscript{11} of the total search engine market and a 90\% market share in many big European markets\textsuperscript{12} with other competitors such as Microsoft Bing and Yahoo! falling way behind.\textsuperscript{13}

The position that Google holds in the market may draw the attention of the European Commission as the guarantor of undistorted competition within the common market, but the only fact that the market tends to high levels of concentration and Google happens to be the market leader is not enough to establish antitrust liability. However, Google has allegedly engaged in practices that have caused great unease in the industry which explains why it has been under the antitrust microscope in several jurisdictions, including the EU\textsuperscript{14}. If the complaints filed with the European Commission are grounded, Google’s behavior may give rise to serious competition concerns. Indeed, competitors may be (or may have already been) excluded as a result of the manipulation of the search results it provides and the advertising markets may not be properly functioning if Google has managed to profitably increase ad prices above the competitive level for a significant period of time.\textsuperscript{15}

Yet, possible distortions of competition are not the only concerns to which Google’s alleged abuse may give rise. As previously mentioned above, search engines are increasingly becoming the main gateway used to find content. This must be combined with the fact that consumers believe that searching through search engines is reliable\textsuperscript{16} and that a significant percentage of Europeans get most of their news on national and European political matters from the Internet (29\% and 26\% respectively).\textsuperscript{17} In that respect, abuse of a dominant position by a search engine has implications that go far beyond the proper functioning of the internal market. Besides the obvious harm to the

\textsuperscript{10} Ibid., pp. 21 and 26
\textsuperscript{11} http://ptgmedia.pearsoncmg.com/images/9780789747884/supplements/9780789747884_appC.pdf
\textsuperscript{13} An analysis of the market shares of Google and its competitors is conducted in Case No. COMP/5727 Microsoft/Yahoo! See pp. 18 et seq.
\textsuperscript{14} On November 30, 2010, the European Commission announced that it decided to initiate an investigation into allegations that Google Inc. has abused its dominant position in the online search market, in violation of Article 102 TFEU. The decision to open a formal investigation followed complaints launched by Foundem, a UK price comparison website, Ciao, a German price comparison website and Microsoft subsidiary, and eJustice, a French search engine that allows legal professionals to access case law and legislation for free and enables consumers to find a lawyer that matches their needs. See Press Release IP/10/1624, available at: http://europa.eu/rapid/press-release_IP-10-1624_en.htm?locale=en. For recent developments on the case see: http://europa.eu/rapid/press-release_SPEECH-12-967_en.htm
\textsuperscript{15} The complaints against Google will be examined in detail in Part 2 of the paper
\textsuperscript{16} See, for instance, Rainie and Shermak 2005
\textsuperscript{17} European Commission 2011, Media use in the European Union, pp. 24 and 27
dissemination of information that the exclusion of Google’s competing services may entail for the free flow of information, the dynamics of the search engine business in general and Google’s relationship with the content industry in particular illustrate that abusing a dominant position in the search engine business may facilitate abuses in the content markets. Three examples provide sufficient proof in that regard. The first is illustrated by a complaint that was filed with the German Competition Commission by two newspapers associations, VDZ and BDZV, mainly concerning the use by Google of their members’ online content.\footnote{ICOMP, Google under the antitrust microscope, p. 7.} The complainants argued that Google posts in its news aggregator, Google News, “snippets”, i.e. summaries of current news stories, without their prior authorization and without allocating them a share of the significant advertising revenues that Google generates by using content that is exclusively produced by them.\footnote{See, for instance, http://gmail.google.com/gmail/help/privacy.html} In the era of content abundance, however, reading the news may mean merely going through snippets (it is not necessarily content but attention that lacks). If this is the case, Google may pose significant threats to traditional media outlets. Second, over the past years, Google has engaged in an intense merger activity, including concentrations with content providers (the acquisition of YouTube being a prominent example in that regard). Third, search engine providers (among them Google) check user behavior on a regular basis and the outcome of this process is used to define the search results that are ultimately displayed.\footnote{Ibid.} In a “relevance” fever, i.e. in the effort to provide the most relevant search results, Google has been launching a number of free services that allows it to get as much access to user data as possible. For instance, using Google Maps enables Google to use our current location and modify its search results accordingly. This practice, however, leads to an excessive audience fragmentation that results in insulating the citizen from exposure to differing ideas. Sunstein argues respectively that in a well-functioning system of free expression citizens must be exposed to content that they themselves would not have selected; this is important to secure against extremism, which is a result easy to foretell in cases where like-minded people speak only with themselves.\footnote{vanEijk 2006, 3} Additionally, Sunstein takes the stance that the citizens must have shared transparency/...
experiences without which a society will be unable to address social problems. In that regard, content individualization, which crowds out diverse viewpoints, harms democracy to its core. The above considerations indicate that the abuse of a dominant position in the search engine markets may harm media pluralism, a value which the European Commission is bound to protect in the implementation of the Union’s competition policy pursuant to both the Treaties (e.g. Article 167(4) TFEU) and the Charter of Fundamental Rights of the EU (see Article 11(2).

Against this background, and after discussing in detail the complaints filed with the European Commission as well as Google’s business model (Part 2), the paper will examine how the market definition and dominance analyses should take place in this case (Part 3). More particularly, Part 3 departs from the consideration that, in the framework of an Article 102 TFEU assessment, the objective of both market definition and dominance analyses is to identify the competitive constraints that the firm under scrutiny faces thereby determining whether other undertakings prevent the firm in question from behaving independently of effectively competitive pressure. In its Notice on the definition of the relevant market for the purposes of European competition law, the Commission refers to demand-side substitutability, supply-side substitutability and potential competition as the primary sources manifesting the disciplinary force on the suppliers of a given product or service. Similarly, the Guidance on the Commission’s enforcement priorities in applying Article 102 TFEU lays down that the assessment of dominance will take into consideration the constraints imposed by the bargaining strength of the undertaking’s customers (countervailing buyer power), constraints imposed by the existing supplies from actual competitors and constraints imposed by the credible threat of future expansion by actual competitors or entry by potential competitors. In that respect, an accurate definition of the competitive constraints is of utmost importance as it indicates both the markets that may suffer from Google’s behavior, but also whether Google possesses market power therein. In other words, if the competitive constraints are found to be ineffective, then Google enjoys substantial market power.

23 Ibid., 6
26 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, para. 12 [2009] OJ C 45/02
27 Ibid., para. 10
Identifying the competitive constraints in the context of a dominance case concerning the online search business is by no means a straightforward exercise. First, as a result of the rapid innovation that characterizes the industry, there arise new competitive constraints which make it difficult for an antitrust agency to delineate the relevant markets and/or determine whether a practice in which an undertaking is engaged gives rise to competition concerns. For instance, since 2001, Google has launched a number of new products such as Images Searches, Google News, Google Product Search, Google Scholar, Google Finance and Patent Search.\(^28\) These products enable the firm to acquire a vast amount of user data that allow it to improve the relevance of the results it delivers as a general search engine.\(^29\) This means in practice that, through the development of these activities, Google manages to strengthen its position as a search engine. How should this factor be taken into account when conducting an analysis for the purposes of Article 102 TFEU? Second, the ways in which traditional market definition instruments have been applied need to be adjusted to the particularities of the services provided by undertakings like Google. For instance, the Commission’s notice on the definition of the relevant market for the purposes of European competition law lays down that one way of assessing whether the consumer considers two or more products as substitutes is to postulate a hypothetical small, lasting change in relative prices of the products offered by an undertaking and evaluate the reactions of the consumers to that increase.\(^30\) If, as a result of this price increase, consumers switch to a product that is offered by another undertaking, this means that they regard the two products as substitutable and therefore the two firms operate in the same market. However, in this case, search results are provided to the consumers for free. How can we then conduct a demand-side substitutability analysis for a product like online search? Third, any attempt to identify the competitive constraints that a search engine in general and Google in particular faces cannot be based on previous Commission decisions that could provide some guidance in that respect. As I will discuss in detail in this part, the Commission’s analyses in cases affecting the media markets, including online search, fail to take account of their characteristics, namely the fact that they operate as two-sided platforms.\(^31\) These remarks indicate that in this case we may need to depart from approaches that have been followed in the past, as the latter may not result in accurate findings.

Having said that, I identify the complexities of the two-sided market in which Google is active and I analyze why it is important for an antitrust authority

\(^28\) [http://www.google.com/about/company/history/](http://www.google.com/about/company/history/)

\(^29\) The ways in which Google acquires access to user data will be discussed in more detail below. For a comprehensive overview of the methods that Google applies to get access to such data see, for instance, [http://www.seomoz.org/blog/the-evil-side-of-google-exploring-googles-user-data-collection](http://www.seomoz.org/blog/the-evil-side-of-google-exploring-googles-user-data-collection)

\(^30\) Commission notice on the definition of relevant market for the purposes of Community competition law [1997] OJ C 372/5, para. 15
to take such complexities into account (Part 3.1.). I then discuss how the Commission can conduct a demand-side substitutability assessment by considering both the advertising market and the market for the delivery of search results (Part 3.2.). Following this analysis, I study how the constraints exerted on Google by actual or potential competitors can be measured. For this purpose, I examine the role of user data in online search and inquire into how such data can inform the Commission's assessment.

Finally, some conclusions are drawn (Part 4).