

The attention market: a blind spot for the European Commission

Are competition authorities paying enough attention to attention?

Concurrences Antitrust Writing Awards

Submission Student Paper

Anouk van der Veer LLM

1. Introduction

By dominating today's society, online platforms caught the eyes of competition authorities. This resulted in investigations into abuse of dominance by, amongst others, Google,¹ Facebook², Apple³ and Amazon.⁴ The evaluation of each of these cases starts with defining the relevant market following the Market Definition Notice.⁵ However, the application of this framework to the digital environment is not without difficulties. To that end, this paper examines the inadequacies that arise in defining the product market and proposes adjustments to enable defining the online attention market.

First and foremost, this paper introduces the product of attention and explains its relevance for the enforcement of competition law. Subsequently, the distinguishing characteristics of the online attention platforms will be discussed. Thereafter, the inadequacies of the current framework are highlighted after which adjustments are suggested. This allows for an outline of the attention market in the final paragraph.

2. The product of attention

Even though users do not pay a monetary price, it is agreed that the products of online platforms are not free. The current belief is that users' data is used for commercial purposes.⁶ However, is data the critical product? One could ask themselves, is there any value left of someone's data if that person stops paying attention? Following this line of thinking, users do not pay with data, but data is acquired to get users to pay attention.⁷ Accordingly, online platforms are active in

¹ *Google Search (Shopping)* (Case AT.39740) Commission Decision C(2017) 4444 [2017]; *Google Android* (Case AT.40099) Commission Decision C(2019) 4761 [2018]; *Google Search (AdSense)* (Case AT.40411) Commission Decision C(2019) 2173 [2019].

² 'Bundeskartellamt prohibits Facebook from combining user data from different sources' (2 February 2019) Bundeskartellamt Press release <https://www.bundeskartellamt.de/SharedDocs/Meldung/EN/Pressemitteilungen/2019/07_02_2019_Facebook.html> accessed 16 June 2020.

³ 'Antitrust: Commission opens investigations into Apple's App Store rules' (16 June 2020) European Commission Press release <https://ec.europa.eu/commission/presscorner/detail/en/ip_20_1073> accessed 16 June 2020.

⁴ 'Antitrust: Commission opens investigation into possible anti-competitive conduct of Amazon' (20 November 2020) European Commission Press release <https://ec.europa.eu/commission/presscorner/detail/en/ip_20_2077> accessed 20 November 2020.

⁵ Notice on the definition of relevant market for the purposes of Community competition law [1997] OJ C 372/5.

⁶ At the beginning of this year, an Italian court fined Facebook for falsely advertising that its services were free of charge, while their users' data was used for commercial purposes. See 'Italian Court fines Facebook €5m for breaching consumer contract and recognises that personal data is a proprietary economic asset to be protected' (Euroconsumers, 14 January 2020) <<https://www.euroconsumers.org/news/italian-court-fines-facebook-eur5m-for-breaching-consumer-contract-and>> accessed 30 May 2020. Also, the Commission considers whether online platforms are active in the product market for data. See, e.g., *Facebook/WhatsApp* (Case M.7217) Commission Decision C(2014) 7239 [2014] OJ C 417/4, para 72; *Google Search (Shopping)* (Case AT.39740) Commission Decision C(2017) 4444 [2017], para 158.

⁷ John M. Newman, 'Antitrust in Attention Markets: Objections and Responses' (2020) 59/3 Santa Clara Law Review, 756 <<https://digitalcommons.law.scu.edu/lawreview/vol59/iss3/9>> accessed 19 April 2020.

the market for attention. This market forms, unfortunately, a blind spot in the current enforcement practice.⁸

What exactly is attention? Attention selects what information will reach the brain and what will be ignored.⁹ Attention is limited, both by the limited cognitive capacity to process information,¹⁰ and by time as the number of waking hours per day is limited.¹¹ Considering that attention is limited, it is well accepted that it has value.¹² This value has increased in the digital economy because the demand for attention increases. Whereas information was limited before the digital economy, and, therefore, attention widely available, the internet made information widely available, and limited the attention.¹³ The result is an increasing scarcity of attention, which increases its value.¹⁴

The value of attention can be determined by measuring the time spent paying attention.¹⁵ Accordingly, attention forms a subcategory of time.¹⁶ For example, an eight-hour working day may consist of four hours of attention.¹⁷ Attention can then be valued according to Becker's

⁸ Competition authorities already concluded cases involving online platforms, see *Facebook/WhatsApp* (Case M.7217) Commission Decision C(2014) 7239 [2014] OJ C 417/4. However, no activity has been initiated regarding the product of attention.

⁹ Dale Purves and others, *Principles of Cognitive Neuroscience* (2nd edn, Sinauer Associates, Inc. Publishers 2013) 169.

¹⁰ The brain is unable to process all the information that is presented to it. Whereas an estimated ten million bits of information per second present themselves to our brain, the brain is only able to process seven (plus or minus two) pieces of information at one time. John M. Newman, 'Attention Markets and the Law' (2019) University of Miami Legal Studies Research Paper, 28 <<https://ssrn.com/abstract=3423487>> accessed 17 March 2021. See also George A. Miller, 'The Magical Number Seven, Plus or Minus Two: Some Limits on Our Capacity for Processing Information' (1956) 63/2 *Psychological Review* <<https://doi.org/10.1037/h0043158>>.

¹¹ John M. Newman, 'Attention Markets and the Law' (2019) University of Miami Legal Studies Research Paper, Forthcoming, 28 <<https://ssrn.com/abstract=3423487>> accessed 17 March 2020.

¹² Jasper L. Tran, 'The Right to Attention' (2016) 91/3 *Indiana Law Journal*, 1029 <<https://ssrn.com/abstract=2600463>> accessed 17 March 2021; John M. Newman, 'Antitrust in Attention Markets: Objections and Responses' (2020) 59/3 *Santa Clara Law Review*, 746 <<https://digitalcommons.law.scu.edu/lawreview/vol59/iss3/9>> accessed 17 March 2021.

¹³ John M. Newman, 'Antitrust in Attention Markets: Objections and Responses' (2020) 59/3 *Santa Clara Law Review*, 746 <<https://digitalcommons.law.scu.edu/lawreview/vol59/iss3/9>> accessed 19 April 2020.

¹⁴ See e.g., Jasper L. Tran, 'The Right to Attention' (2016) 91/3 *Indiana Law Journal*, 1032 <<https://ssrn.com/abstract=2600463>> accessed 26 April 2020; John M. Newman, 'Antitrust in Attention Markets: Objections and Responses' (2020) 59/3 *Santa Clara Law Review*, 746-749 <<https://digitalcommons.law.scu.edu/lawreview/vol59/iss3/9>> accessed 19 April 2020.

¹⁵ See e.g., David S. Evans, 'Attention Rivalry Among Online Platforms' (2013) 627 *University of Chicago Institute for Law & Economics*, 1-2 <<https://ssrn.com/abstract=2195340>> accessed 16 May 2020; Jasper L. Tran, 'The Right to Attention' (2016) 91/3 *Indiana Law Journal*, 1031-1032 <<https://ssrn.com/abstract=2600463>> accessed 21 April 2020; David S. Evans, 'Attention Platforms, the Value of Content, and Public Policy' (2019) 54 *Review of Industrial Organization*, 779 <<https://link.springer.com/content/pdf/10.1007%2Fs11151-019-09681-x.pdf>> accessed 20 April 2020; David S. Evans, 'The Economics of Attention Markets' (2020) 2 <<https://ssrn.com/abstract=3044858>> accessed 22 April 2020. Another approach is to measure attention as a currency, which might be signaled by the phrase that users "pay attention" to the content on attention platforms. However, this measurement is for the purpose of this paper insufficient because competition law is not concerned with currencies. Therefore, this measurement will not be used. See Jasper L. Tran, 'The Right to Attention' (2016) 91/3 *Indiana Law Journal*, 1030 <<https://ssrn.com/abstract=2600463>> accessed 21 April 2020; John M. Newman, 'Antitrust in Attention Markets: Objections and Responses' (2020) 59/3 *Santa Clara Law Review*, 762-763 <<https://digitalcommons.law.scu.edu/lawreview/vol59/iss3/9>> accessed 19 April 2020.

¹⁶ Jasper L. Tran, 'The Right to Attention' (2016) 91/3 *Indiana Law Journal*, 1031 <<https://ssrn.com/abstract=2600463>> accessed 21 April 2020

¹⁷ Jason Fried, 'What's the Difference Between Time and Attention? A Lot' (2015) *Observer* <<https://observer.com/2015/12/whats-the-difference-between-time-and-attention-a-lot/>> accessed 22 April 2020.

economic theory of time allocation.¹⁸ For users to allocate time to consume content on attention platforms, they must value that time by at least the time they could have done something else: the opportunity costs of their time.¹⁹

Although this method cannot accurately estimate the size of the attention market, it indicates that the market constitutes a substantial part of the (US) economy.²⁰ Evans' research presented that 49% of the available hours in a day, excluding the hours for sleep and work,²¹ is spent on advertising-supported content. This results in a total of 514 billion hours on an annual basis, which is 58% more than the hours spent working.²² As time is money, Evans multiplied the 514 billion hours with \$13.60 per hour, resulting in the opportunity cost of almost \$7.0 trillion in 2019.²³ When this is compared to the value of the retail industry of \$3.9 trillion, it becomes quickly apparent the attention market should be relevant for competition law enforcement.²⁴

3. The traders of attention

Online attention platforms are the traders of attention. These platforms provide both the content to which the user pays attention and the access to this attention by selling advertising space to advertisers.²⁵ Accordingly, these platforms behave in a two-sided market.²⁶

Fig. 1 The online attention market structured as a two-sided market.²⁷

¹⁸ Gary S. Becker, 'A Theory of the Allocation of Time' (1965) 75/299 *The Economic Journal* <<https://www.jstor.org/stable/2228949>>. This theory is used by David Evans to value content. See David S. Evans, 'Attention Platforms, the Value of Content, and Public Policy (2019) 54 *Review of Industrial Organization*, 779 <<https://link.springer.com/content/pdf/10.1007%2Fs11151-019-09681-x.pdf>> accessed 20 April 2020.

¹⁹ David S. Evans, 'Attention Platforms, the Value of Content, and Public Policy (2019) 54 *Review of Industrial Organization*, 779 <<https://link.springer.com/content/pdf/10.1007%2Fs11151-019-09681-x.pdf>> accessed 20 April 2020.

²⁰ David S. Evans, 'The Economics of Attention Markets' (2020) 14ff <<https://ssrn.com/abstract=3044858>> accessed 22 April 2020,

²¹ The American Bureau of Labor Statistics conducted a survey on the hours per day spent sleeping and working. See Bureau of Labor Statistics, 'American Time Use Survey, 2018' (June 19 2019) <<https://www.bls.gov/news.release/pdf/atus.pdf>> accessed 30 May 2020.

²² David S. Evans, 'The Economics of Attention Markets' (2020) 17 <<https://ssrn.com/abstract=3044858>> accessed 22 April 2020.

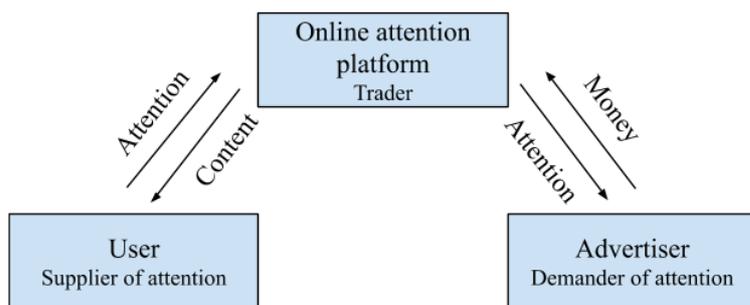
²³ David S. Evans, 'The Economics of Attention Markets' (2020) 21 <<https://ssrn.com/abstract=3044858>> accessed 22 April 2020.

²⁴ David S. Evans, 'The Economics of Attention Markets' (2020) 21 <<https://ssrn.com/abstract=3044858>> accessed 22 April 2020.

²⁵ This perspective is contrary to some academics who argue that the platform buys the attention of the user. For example, Evans suggests that bundles of content and advertisements are considered to be the price the platform offers for the time of the users, as if the platform buys time with bundles. See David S. Evans, 'The Economics of Attention Markets' (2020) 8-9 <<https://ssrn.com/abstract=3044858>> accessed 22 April 2020. I am, however, of the opinion that the platform does not buy attention, instead users supply attention in exchange for the content. In other words: it is not the platform that buys attention from the user, but it is the user that buys content with its attention.

²⁶ Jean-Charles Rochet and Jean Tirole, 'Two-Sided Markets: A Progress Report' (2006) 37/3 *The RAND Journal of Economics*, footnote 1 <www.jstor.org/stable/25046265> accessed 30 May 2020.

²⁷ Contrary to this way of structuring the market, some academics argue the structure of a distribution chain. See John M. Newman, 'Attention markets and the Law' (2019) University of Miami Legal Studies Research Paper, Forthcoming, 33-34 <<https://ssrn.com/abstract=3423487>> accessed 27 April. In my opinion, this structure is



To define the market for attention platforms, a distinction should be made between online platforms. Following the literature, a distinction between online platforms can be based on (i) the value of its product to its users, (ii) the type of interaction it facilitates, and (iii) the network externalities between the interacting user groups on both sides of the platform.²⁸

Starting with the intrinsic value of the product. This characteristic refers to the extent to which the platform is necessary for users to reach each other or whether the platform merely eases the interaction.²⁹ Regarding an attention platform, the advertisers need the platform to reach the user. Therefore, the value of the platform is more intrinsic than instrumental.

The second characteristic is the type of interaction. The most discussed interactions in the literature are a transaction,³⁰ a match,³¹ or the attraction of attention.³² An attention platform facilitates multiple interactions. First, the platform attracts its users' attention by presenting creative content in which it includes advertisements.³³ Also, attention platforms match the

contrary to reality as the user is not the seller of its attention. The platform does not buy the user's attention, instead, the user buys content with its attention.

²⁸ Daniel Mandrescu, 'Applying (EU) Competition Law to Online Platforms: Reflections on the Definition of the Relevant Market(s)' (2018) 41/3 World Competition Law and Economics Review, 459 <www.kluwercompetitionlaw.com/document/kli-woco-410307?title=World%20Competition%20Law%20Economics%20Review> accessed 20 May 2020; Ben Bloodstein, 'Amazon and Platform Antitrust' (2019) 88 Fordham Law Review, 198 <<https://heinonline.org/HOL/P?h=hein.journals/flr88&i=195>> accessed 13 May 2020. Erik Hovenkamp makes it seem as if he categorises platforms according to the nature of the facilitated interaction, but he categorises platforms according to the inherent value of the product to their users as well. See Erik Hovenkamp, 'Platform Antitrust' (2019) 44 Journal of Corporation Law, 724-726 <<https://heinonline.org/HOL/P?h=hein.journals/jcorl44&i=756>> accessed 13 May 2020. These are the most distinguishing characteristics. However, this list is not meant to be exhaustive as a definite number of characteristics cannot be identified.

²⁹ Bundeskartellamt, 'Working Paper - Market Powers of Platforms and Networks' (2016) 21 <<https://www.bundeskartellamt.de/SharedDocs/Publikation/EN/Berichte/Think-Tank-Bericht-Langfassung.pdf?blob=publicationFile&v=2>> accessed 11 May 2020.

³⁰ Lapo Filistrucchi, Damien Geradin, Eric van Damme and Pauline Affeldt, 'Market definition in two-sided markets: Theory and practice' (2014) 10/2 Journal of Competition Law and Economics <<https://heinonline.org/HOL/P?h=hein.journals/jrcolaec10&i=302>>. The distinction between online platforms is whether the platform facilitates a transaction or not, resulting in the classification of a transaction platform or a non-transaction platform.

³¹ Bundeskartellamt, 'Working Paper - Market Powers of Platforms and Networks' (2016) 19 <<https://www.bundeskartellamt.de/SharedDocs/Publikation/EN/Berichte/Think-Tank-Bericht-Langfassung.pdf?blob=publicationFile&v=2>> accessed 11 May 2020.

³² Bundeskartellamt, 'Working Paper - Market Powers of Platforms and Networks' (2016) 21 <<https://www.bundeskartellamt.de/SharedDocs/Publikation/EN/Berichte/Think-Tank-Bericht-Langfassung.pdf?blob=publicationFile&v=2>> accessed 11 May 2020.

³³ David S. Evans, 'Attention Rivalry Among Online Platforms' (2013) 627 University of Chicago Institute for Law & Economics, 35 <<https://ssrn.com/abstract=2195340>> accessed 16 May 2020; David S. Evans, 'Attention Platforms, the Value of Content, and Public Policy' (2019) 54 Review of Industrial Organization, 776-777

content with the interested user to increase the chances of the user interacting with the advertisement shown.³⁴

The final characteristic is the existence of network externalities. Network externalities can be direct or indirect, and positive or negative.³⁵ Regarding attention platforms, the user groups have different objectives. The users want to view content, whereas advertisers wish to induce users to buy its products or services. To meet the demand on the user side, the presence of advertisers is not required. However, to meet the demand on the advertiser side, the presence of the users is required.³⁶ Therefore, these platforms usually exert positive indirect network externalities in one direction towards advertisers: the more users, the more valuable the platform becomes for advertisers to join.³⁷

4. An improved approach for defining the relevant product market

The relevant market defines the boundaries within which an undertaking is constrained by competition from other undertakings. To identify the actual competitors capable of exerting competitive constraints, the relevant product market and geographic market need to be defined.³⁸ The product market comprises products that are substitutable from a consumer perspective. For these products, the undertakings compete with each other and constrain each other's ability to increase prices.³⁹ Eventually, the defined market will serve as the framework in which the Commission applies competition law.⁴⁰

As stated in the introduction, the application of the Market Definition Notice to the digital environment is not without difficulties. The reason for this lies in the different characteristics of online markets to which competition law is not accustomed. These

<https://link.springer.com/content/pdf/10.1007%2Fs11151-019-09681-x.pdf> accessed 20 April 2020.; John M. Newman, 'Antitrust in Attention Markets: Objections and Responses' (2020) 59/3 Santa Clara Law Review, 750 <<https://digitalcommons.law.scu.edu/lawreview/vol59/iss3/9>> accessed 19 April 2020.

³⁴ Andrea Prat and Tommaso M. Valletti, 'Attention Oligopoly' (2019) 1/4 Journal of the European Economic Association, 3 <<https://ssrn.com/abstract=3197930>> accessed 18 May 2020; David S. Evans, 'Attention Platforms, the Value of Content, and Public Policy' (2019) 54 Review of Industrial Organization, 777 <<https://link.springer.com/content/pdf/10.1007%2Fs11151-019-09681-x.pdf>> accessed 20 April 2020.

³⁵ Direct network externalities work in a way that the more users join *side A* of the platform, the more attractive it becomes for others to also join *side A*. Indirect network externalities arise when an increase in users on *side A* of the platform makes joining *side B* for advertisers more attractive, resulting in more advertisers joining *side B*, which in turn increases the utility of initially joining *side A*. In the case of positive network externalities, users may benefit from them. Instead, negative network externalities are not beneficial for users. See Ioannis Lianos, Valentine Korah and Paolo Siciliani, *Competition Law* (Oxford University Press 2019) 256.

³⁶ Daniel Mandrescu, 'Applying (EU) Competition Law to Online Platforms: Reflections on the Definition of the Relevant Market(s)' (2018) 41/3 World Competition Law and Economics Review, 460. <www.kluwercompetitionlaw.com/document/kli-woco-410307?title=World%20Competition%20Law%20Economics%20Review> accessed 20 May 2020.

³⁷ David S. Evans, 'The Economics of Attention Markets' (2020) 9-10 <<https://ssrn.com/abstract=3044858>> accessed 22 April 2020.

³⁸ Commission Notice on the definition of relevant market for the purposes of Community competition law [1997] OJ C 372/5, para 9. It is recalled that this paper only considers the relevant product market. The relevant geographic market is outside the scope of this paper.

³⁹ Commission Notice on the definition of relevant market for the purposes of Community competition law [1997] OJ C 372/5, para 13, 15 – 18.

⁴⁰ Commission Notice on the definition of relevant market for the purposes of Community competition law [1997] OJ C 372/5, para 2.

differences lead to inadequacies of the Market Definition Notice, mainly regarding the one-sided approach of the market definition and the substitution analysis.

4.1 The number of markets to be defined

Market definition only defines the boundaries of competitive constraints within one market, which is referred to by the ‘one-sided approach’. In this regard, a difficulty arises regarding the attention platforms that are two-sided in nature, meaning that they serve different products to different groups of users. These products may not compete with each other, and are, therefore, not within the same relevant market.⁴¹ However, these products may not be completely independent of each other either, because the demand for the products could be connected by indirect network externalities. The question is whether to define two relevant markets or only one market encompassing both sides of the platform.⁴²

Following the literature, the answer depends on whether the matter concerns a transaction platform or a non-transaction platform, in which case respectively one or two relevant market(s) should be defined.⁴³ However, this distinction is not suitable to classify every online platform, particularly in the context of online attention platforms.⁴⁴ What can be derived from this distinction are platform characteristics that are relevant in determining whether one or two relevant market(s) should be defined.

A single relevant market should be defined for platforms that require the presence of both user groups to facilitate the interaction.⁴⁵ In this case, a user on one side can only consume its

⁴¹ Daniel Mandrescu, ‘Applying (EU) Competition Law to Online Platforms: Reflections on the Definition of the Relevant Market(s)’ (2018) 41/3 World Competition Law and Economics Review, 459 <www.kluwercompetitionlaw.com/document/kli-woco-410307?title=World%20Competition%20Law%20Economics%20Review> accessed 20 May 2020.

⁴² OECD, ‘Rethinking Antitrust Tools for Multi-Sided Platforms’ (2018) 12 <www.oecd.org/competition/rethinking-antitrust-tools-for-multi-sided-platforms.htm> accessed 10 May; Jens-Uwe Franck and Martin Peitz, ‘Market Definition and Market Power in the Platform Economy’ (2019) Report Centre on Regulation in Europe, 22 <https://www.cerre.eu/sites/cerre/files/2019_cerre_market_definition_market_power_platform_economy.pdf> accessed 20 June 2020.

⁴³ Daniel Mandrescu, ‘Applying (EU) Competition Law to Online Platforms: Reflections on the Definition of the Relevant Market(s)’ (2018) 41/3 World Competition Law and Economics Review, footnote 29 <www.kluwercompetitionlaw.com/document/kli-woco-410307?title=World%20Competition%20Law%20Economics%20Review> accessed 20 May 2020; OECD, ‘Rethinking Antitrust Tools for Multi-Sided Platforms’ (2018) 42 <<https://www.oecd.org/daf/competition/Rethinking-antitrust-tools-for-multi-sided-platforms-2018.pdf>> accessed 23 May 2020. See also Lapo Filistrucchi, Damien Geradin, Eric van Damme & Pauline Affeldt, ‘Market Definition in Two-Sided Markets: Theory and Practice’ (2014) 10/2 Journal of Competition Law and Economics, 293-339 <<https://heinonline.org/HOL/P?h=hein.journals/jrcolaec10&i=302>>

⁴⁴ David S. Evans, ‘Attention Platforms, the Value of Content, and Public Policy’ (2019) 54 Review of Industrial Organization, footnote 7 <<https://link.springer.com/content/pdf/10.1007%2Fs11151-019-09681-x.pdf>> accessed 20 April 2020. Bundeskartellamt, ‘Working Paper - Market Powers of Platforms and Networks’ (2016) 20 <<https://www.bundeskartellamt.de/SharedDocs/Publikation/EN/Berichte/Think-Tank-Bericht-Langfassung.pdf?blob=publicationFile&v=2>> accessed 11 May 2020.

⁴⁵ Daniel Mandrescu, ‘Applying (EU) Competition Law to Online Platforms: Reflections on the Definition of the Relevant Market(s)’ (2018) 41/3 World Competition Law and Economics Review, 460 <www.kluwercompetitionlaw.com/document/kli-woco-410307?title=World%20Competition%20Law%20Economics%20Review> accessed 20 May 2020; Bundeskartellamt, ‘Working Paper - Market Powers of Platforms and Networks’ (2016) 28

product when the user on the other side uses its product too, so the products on both sides are insufficient without each other.⁴⁶ This results in the interdependence of demand between the user groups and the existence of strong indirect network effects.⁴⁷ In this case, the interrelated products require an assessment of the competitive effects within one market.⁴⁸

In the absence of the required presence of both user groups, two relevant markets should be defined.⁴⁹ In that case, the products are sufficient in themselves and there is no interdependence between the users on both sides, so the indirect network externalities are less strong. Defining two relevant markets recognises that the products are different and independent to such an extent that they cannot be within the same product market.⁵⁰

Considering the required presence of the users and advertisers on attention platforms, it was already determined in paragraph 3 that users do not need the presence of the advertisers, whereas advertisers do need the presence of users. This one-sided connection does not result in the interdependence between users and advertisers. Therefore, the products are sufficient in themselves and the indirect network effects are not that strong that they require the definition of one relevant market. Accordingly, two distinct relevant markets for users and advertisers should be defined.⁵¹

https://www.bundeskartellamt.de/SharedDocs/Publikation/EN/Berichte/Think-Tank-Bericht-Langfassung.pdf?__blob=publicationFile&v=2 accessed 11 May 2020.

⁴⁶ OECD, 'Rethinking Antitrust Tools for Multi-Sided Platforms' (2018) 42
<https://www.oecd.org/daf/competition/Rethinking-antitrust-tools-for-multi-sided-platforms-2018.pdf>
accessed 23 May 2020.

⁴⁷ OECD, 'Rethinking Antitrust Tools for Multi-Sided Platforms' (2018) 43
<https://www.oecd.org/daf/competition/Rethinking-antitrust-tools-for-multi-sided-platforms-2018.pdf>
accessed 23 May 2020.

⁴⁸ Ben Bloodstein, 'Amazon and Platform Antitrust' (2019) 88 *Fordham Law Review*, 215

<https://heinonline.org/HOL/P?h=hein:journals/flr88&i=223> accessed 23 May 2020.

⁴⁹ Daniel Mandrescu, 'Applying (EU) Competition Law to Online Platforms: Reflections on the Definition of the Relevant Market(s)' (2018) 41/3 *World Competition Law and Economics Review*, 461
www.kluwercompetitionlaw.com/document/kli-woco-410307?title=World%20Competition%20Law%20Economics%20Review accessed 20 May 2020;

Bundeskartellamt, 'Working Paper - Market Powers of Platforms and Networks' (2016) 28

https://www.bundeskartellamt.de/SharedDocs/Publikation/EN/Berichte/Think-Tank-Bericht-Langfassung.pdf?__blob=publicationFile&v=2 accessed 11 May 2020.

⁵⁰ Daniel Mandrescu, 'Applying (EU) Competition Law to Online Platforms: Reflections on the Definition of the Relevant Market(s)' (2018) www.kluwercompetitionlaw.com/document/kli-woco-410307?title=World%20Competition%20Law%20Economics%20Review accessed 20 May 2020, 459.

⁵¹ Supporting evidence for this has also been found in the offline market for media, radio, and TV. The Commission defined separate markets for readers/listeners/viewers and advertisers. Miguel S. Ferro, *Market Definition in EU Competition Law* (Edward Elgar Publishing 2019), 253; See e.g., *Newspaper Publishing* (Case IV/M.423) Commission Decisions [1994] OJ C 85/6; *CEP/Groupe de la Cité* (Case IV/M.665) Commission Decision [1995] OJ C 338/3; *Bertelsmann/CLT* (Case IV/M.779) Commission Decision [1996] OJ C 364/3; *Recoletos/Unedisa* (Case IV/M.1401) Commission Decision [1999] OJ C 73/8; *Gruner + Jahr/Financial Times/JV* (Case IV/M.1455) Commission Decision [1999]; *Bertelsmann/GBL/Pearson TV* (Case IV/M.1958) Commission Decision [2000] OJ C 180/14; *GIMD/Socpresse* (Case IV/M.3420) Commission Decision (2004) D/202379 [2004] OJ C 265/3; *Gruner + Jahr/MPS* (Case IV/M.3648) Commission Decision (2005) D/201691 [2005] OJ C 179/3; *Wegener/PCM/JV* (Case IV/M.3817) Commission Decision (2005) D/202967/202968 [2005] OJ C 191/3; *Burda/Hachette/JV* (Case IV/M.4122) Commission Decision (2006) D/202211 [2006] OJ C 300/5; *Schibsted Print Media AS/Metro Nordic Sweden AB* (Case IV/M.5273) Commission Decision (2008) D/205123 [2008]; *Bertelsmann/KKR/JV* (Case IV/M.5533) Commission Decision C(2009) 6933 [2009] OJ C 240/1; *News Corp/BskyB* (Case COMP/M.5932) Commission Decision C(2010) 9684 [2010] OJ C 37/5; *Anten 3/La Sexta* (Case IV/M.6547) Commission Decision C(2012) 1840 [2012]. In addition, that users and advertisers of audience-providing platforms will always be analysed within separate relevant markets was also confirmed by the

4.2 The substitution analysis

In determining which products are substitutable from a consumer perspective, several inadequacies arise. First, the product market only includes products that are perfect substitutes in the eyes of consumers. However, products in dynamic markets may as well compete for user demand with products that are not perfect substitutes or are complements. In this way, competitive constraints may be exerted from non-substitutes.⁵² Therefore, market definition should leave the focus on perfect substitutes, and focus on products that place a competitive constraint on one another instead. These products can be substitutes but as well be imperfect substitutes and complements.⁵³ The level of single-homing or multi-homing can indicate which products place a competitive constraint on one another.⁵⁴ As users multi-home to cover different needs,⁵⁵ these platforms may not be perfect substitutes in the eyes of the consumer. However, they may exert competitive constraints on attention platforms, contrary to the case when users single-home.

The second inadequacy arises regarding the practical difficulty of applying the SSNIP test, due to the absence of prices in a zero-price structure.⁵⁶ To allow application, this test should be adapted. As users pay the content with their time spent on the platform, the price-oriented test should be adjusted into a test centred around these attention costs, which relate to the exposure to advertisements during the time spent on the attention platforms.⁵⁷ The adjustment results in the assessment of imposing a ‘**Small, but Significant Non-transitory Increase in Attention**

Bundeskartellamt. See Bundeskartellamt, ‘Working Paper - Market Powers of Platforms and Networks’ (2016) 29-30 <https://www.bundeskartellamt.de/SharedDocs/Publikation/EN/Berichte/Think-Tank-Bericht-Langfassung.pdf?__blob=publicationFile&v=2> accessed 11 May 2020.

⁵² Nicolas Petit and Thibault Schrepel, ‘Evaluation of the Commission Notice on market definition in EU competition law’ (May 15 2020) European Commission Published initiatives, 1 <<https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12325-Evaluation-of-the-Commission-Notice-on-market-definition-in-EU-competition-law/F519594>> accessed 15 June 2020.

⁵³ Centro Veljanovski, ‘Markets Without Substitutes: Substitution Versus Constraints as the Key to Market Definition in Antitrust’ (2009) 2010 European Competition Law Review, 4 <<https://ssrn.com/abstract=1519957>> accessed 22 June 2020.

⁵⁴ This concept relates to the extent to which users make use of one platform, who are single-homing, or multiple platforms, in which case they are multi-homing. See Jean-Charles Rochet and Jean Tirole, ‘Platform Competition in Two-Sided Markets’ (2003) 1/4 Journal of the European Economic Association <<https://leconcurrentialiste.com/wp-content/uploads/2019/10/tirole-rochet-two-sided.pdf>> accessed 26 May.

⁵⁵ Sebastian Wismer and Arno Rasek, ‘Market definition in multi-sided markets’ (2018) Rethinking Antitrust Tools For Multi-Sided Platforms OECD, 60-61 <<https://www.oecd.org/daf/competition/Rethinking-antitrust-tools-for-multi-sided-platforms-2018.pdf#page=38>> accessed 22 June 2020.

⁵⁶ This test involves a permanent price increase of 5% to 10% and in case the consumer switches to readily available substitutes, these products have a restraining effect on the undertakings as a result of which these products will be included in the relevant product market. Daniel Mandrescu, ‘The SSNIP Test and Zero-Pricing Strategies’ (2018) 2/4 European Competition and Regulatory Law Review, 245 <<https://heinonline.org/HOL/P?h=hein.journals/core2&i=278>> accessed 20 May 2020.

⁵⁷ John M Newman, ‘Antitrust in Zero-Price Markets: Foundations’ (2015) 164 University of Pennsylvania Law Review, 169 <<https://ssrn.com/abstract=2474874>> accessed 30 April 2020; John M. Newman, ‘Antitrust in Zero-Price Markets: Applications’ (2016) 94/1 Washington University Law, 66 <<https://ssrn.com/abstract=2681304>> accessed 20 May 2020; Daniel Mandrescu, ‘The SSNIP Test and Zero-Pricing Strategies’ (2018) 2/4 European Competition and Regulatory Law Review, 245-250 <<https://heinonline.org/HOL/P?h=hein.journals/core2&i=278>> accessed 20 May 2020. Other suggestions are information cost or a quality centered test.

Cost’, the ‘SSNIAC test’,⁵⁸ after which can be evaluated whether users switch to another product to spend their time on.

The final inadequacy concerns the one-sidedness of the substitutability test. The substitution analysis focuses on finding substitutes through a price increase, isolated from products in other relevant markets. However, this disregards the effects price modifications have on other markets.⁵⁹ The products a two-sided platform provides to different users may be interrelated in such a way that a price increase of one product significantly affects the product on the other side of the platform. Therefore, these products cannot be fully analysed in isolation from each other.⁶⁰

Regarding the attention platforms, indirect network effects are exerted towards advertisers. Therefore, a price increase on the user market may affect the advertiser market as well: when a price increase reduces user demand, the advertiser demand on the other side might reduce as well. Accordingly, advertisers may experience competitive constraints that are not apparent from the SSNIAC test but caused by indirect network effects. Consequently, the two-sidedness should be included in the substitution analysis.

5. Outlining the relevant market

This paragraph intends to give a better understanding of what users and advertisers view as a substitute and subsequently, to give a better understanding of the competitive constraints on attention platforms.⁶¹

The starting point is determining the number of relevant markets that need to be defined. As already established, two distinct product markets need to be defined for users and advertisers.

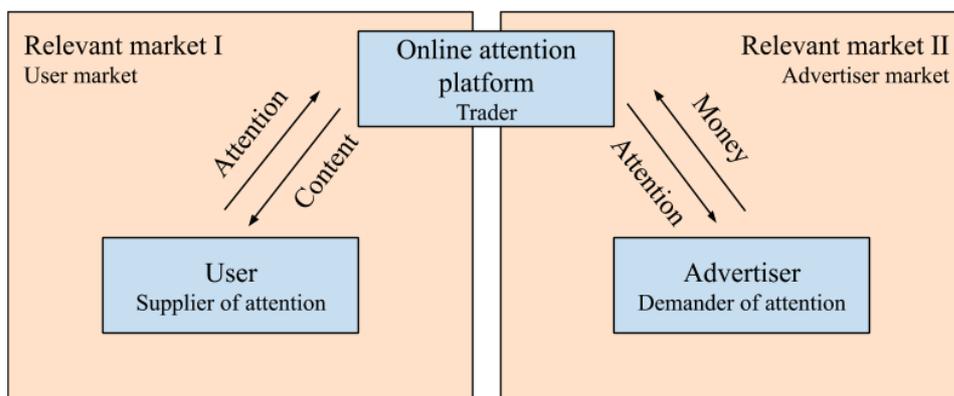
Fig. 2 Overview of the relevant markets for online attention platforms.

⁵⁸ John M. Newman, ‘Antitrust in Zero-Price Markets: Applications’ (2016) 94/1 Washington University Law, 66 <<https://ssrn.com/abstract=2681304>> accessed 20 May 2020. Newman’s test is centred around both information and attention costs and is therefore called the SSNIC test, regardless of whether the increase concerns information or attention costs.

⁵⁹ David S. Evans, ‘Two-Sided Market Definition’ (2009) ABA Section of Antitrust Law, MARKET DEFINITION IN ANTITRUST: THEORY AND CASE STUDIES, Forthcoming, footnote 30 <<https://ssrn.com/abstract=1396751>> accessed 23 May 2020.

⁶⁰ Florence Thépot, ‘Market Power in Online Search and Social Networking: A Matter of Two-Sided Markets’ (2013) 36/2 World Competition, 205 <<https://ssrn.com/abstract=2307009>> accessed 24 May 2020; Daniel Mandrescu, ‘The SSNIP Test and Zero-Pricing Strategies’ (2018) 2/4 European Competition and Regulatory Law Review, 249 <<https://heinonline.org/HOL/P?h=hein.journals/core2&i=278>> accessed 20 May 2020.

⁶¹ However, the following market definition does not constitute a comprehensive analysis, due to the lack of sufficient information and the limited scope of this paper. In practice, market definition requires a more detailed analysis including the geographic market and the supply-side substitutability.



5.1 Product market for users

The product provided to users is the content in exchange for attention. By applying the SSNIAC test, it can be evaluated whether an increase in attention costs makes users switch to other platforms. Would an additional advertisement on Facebook make users switch to Instagram? If so, these products are substitutes and within the same product market. Contrary to a switch to Instagram, the switch to Airbnb is more difficult to imagine, indicating that the products are non-substitutes in the eyes of the user, and, therefore, not within the same product market. This example indicates that the characteristics of a platform are relevant in the substitution analysis. When a user spends time on an attention platform viewing content, it is not interested in entering into a transaction, so an increase in attention costs will not make it switch to a transaction platform, excluding the product from being within the product market for users.

The same could be true for matchmaking platforms. These platforms offer a match, resulting in a transaction or not, which will not be a substitute for a user who intends to spend its time viewing content. Accordingly, platforms that only facilitate a match are not likely to be included in the product market for users.

Other characteristics that require consideration are the provision of content free of monetary charge and the online supply of content. The content on an attention platform is provided for free because the two-sidedness of the platform allows for obtaining revenue from the advertisers on the other side. In case the content is provided by a single-sided alternative, a user likely has to pay a monetary price. In case the attention costs of content increases, it is intuitive that a user is less likely to switch to a paid alternative. Consequently, paid content provided by single-sided platforms are not likely to be included in the product market for users.⁶²

Finally, the online supply of content has more possibilities than offline content, including videos, 3D-pictures and endless scrolling.⁶³ Therefore, it is less likely that an increase

⁶² This is currently the situation, but it may change over time as “freemium” – a combination of free and premium – is becoming increasingly popular. Daniel Mandrescu, ‘Applying (EU) Competition Law to Online Platforms: Reflections on the Definition of the Relevant Market(s)’ (2018) 41/3 World Competition Law and Economics Review, 481 <www.kluwercompetitionlaw.com/document/kli-woco-410307?title=World%20Competition%20Law%20Economics%20Review> accessed 25 May 2020.

⁶³ Daniel Mandrescu, ‘Applying (EU) Competition Law to Online Platforms: Reflections on the Definition of the Relevant Market(s)’ (2018) 41/3 World Competition Law and Economics Review, 481

in attention costs for online content makes users switch to offline content, resulting in offline content not being included in the product market for users.

To conclude, the substitutability analysis defines a narrow product market. It may include online two-sided or multi-sided platforms that offer content free of monetary charge and not solely transactions or matches.

5.2 Product market for advertisers

The product provided to the advertiser is the users' attention in exchange for money. The SSNIP test can be applied to see whether advertisers switch to other products in case the price for attention on a particular attention platform increases. The question is who competes for the product of attention. On the one hand, the argument is made that all attention seekers compete with each other,⁶⁴ while this perspective is, on the other hand, rejected by the comparison of the attention market with the cash market: cash is also a limited resource but that does not mean that everything that costs money is a substitute.⁶⁵ The fact that different products demand attention does not mean that all these products are substitutable for each other.

Similar to the user market, the characteristics of the attention platform are relevant in the substitution analysis. As attention platforms do not facilitate transactions, advertisers cannot use the platform as a sales or distribution channel.⁶⁶ The absence of such facilitation may make the products non-substitutable from the perspective of the advertiser. The same goes for the facilitation of a match. The match facilitated by attention platforms differs from the match facilitated by matchmaking platforms. Whereas matchmaking platforms facilitate the only match, attention platforms present content that matches the interest of the user. If an attention platform increases the price of attention, advertisers may not be likely to switch to transaction platforms or matchmaking platforms, so these products are not considered substitutes. Accordingly, these products are not likely to be included in the product market for advertisers.

As with the user market, the online supply of attention differs from offline attention. In previous findings, most recently in the *Google Shopping* decision, the Commission decided that online and offline advertisement services are not within the same product market, due to differences in pricing structure and targeting capability.⁶⁷ Another difference is that online

www.kluwercompetitionlaw.com/document/kli-woco-410307?title=World%20Competition%20Law%20Economics%20Review accessed 25 May 2020.

⁶⁴ David S. Evans, 'Attention Rivalry Among Online Platforms' (2013) 627 *University of Chicago Institute for Law & Economics*, 31, 34 <<https://ssrn.com/abstract=2195340>> accessed 16 May 2020.

⁶⁵ John M. Newman, 'Antitrust in Attention Markets: Objections and Responses' (2020) 59/3 *Santa Clara Law Review*, 763 <<https://digitalcommons.law.scu.edu/lawreview/vol59/iss3/9>> accessed 19 April 2020; Tim Wu, 'Blind Spot: The Attention Economy and The Law' (2019) 82/3 *Antitrust Law Journal*, 796 <https://www.americanbar.org/content/dam/aba/publishing/antitrust_law_journal/alj-82-3/ant-wu.pdf> accessed 21 April 2020.

⁶⁶ Daniel Mandrescu, 'Applying (EU) Competition Law to Online Platforms: Reflections on the Definition of the Relevant Market(s)' (2018) 41/3 *World Competition Law and Economics Review*, 471 <www.kluwercompetitionlaw.com/document/kli-woco-410307?title=World%20Competition%20Law%20Economics%20Review> accessed 25 May 2020.

⁶⁷ *Google Search (Shopping)* (Case AT.39740) Commission Decision C(2017) 4444 [2017] paras 247-250. See also *Google/Double Click* (Case COMP/M.4731) Commission Decision C(2008) 927 [2008] OJ C 184/10, paras 45-46; *News Corp/BskyB* (Case COMP/M.5932) Commission Decision C(2010) 9684 [2010] OJ C 37/5 para 262; *Viacom/Channel 5 Broadcasting* (Case COMP/M.7288) Commission Decision C(2014) 6461 [2014] paras

attention allows for direct interaction as the user can click on the advertisement, whereas the user has to search for the website in the offline environment. These differences make that advertisers could be less likely to switch to offline attention in case the price for online attention increases, excluding it from the product market for advertisers.

To sum up, the substitutability analysis defines a slightly broader product market for advertisers. It may consist of online platforms that offer attention, and not solely transactions or matches.

6. Concluding remarks

In the attention market, attention is traded by online attention platforms. These platforms provide content to users in exchange for attention and trade this attention to advertisers in exchange for money. The enforcement practice is not concerned with this market, even though its economic value is almost twice the value of the retail industry, and it raises issues regarding the application of the Market Definition Notice.

When defining the online attention market, at least the following inadequacies arise: (i) the one-sided approach does not correspond with the two-sided nature of attention platforms, and (ii) the substitutability assessment (a) focuses on perfect substitutes, whereas competitive constraints can also be exerted from non-substitutes, (b) suggests the application of the SSNIP test, which is difficult to apply in the absence of prices, and (c) is approached one-sided, disregarding the effects price modifications on one side may have on the other side of the platform.

This paper proposes adjustments to define the attention market. The starting point in market definition should be to determine the number of markets that need to be defined. As the products of attention platforms are sufficient in themselves and the indirect network effects not strong, two distinct relevant markets for users and advertisers should be defined. Regarding the substitution analysis, market definition should focus on products that place a competitive constraint on one another, which can be indicated by the level of single-homing or multi-homing. In addition, the price-oriented SSNIP test should be adjusted into the SSNIAC test and take account of the effects of the two-sidedness of the platform.

35-35. Daniel Mandrescu, 'Applying (EU) Competition Law to Online Platforms: Reflections on the Definition of the Relevant Market(s)' (2018), 41/3 World Competition Law and Economics Review, 476, footnote 93 <www.kluwercompetitionlaw.com/document/kli-woco-410307?title=World%20Competition%20Law%20Economics%20Review> accessed 25 May 2020.