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Quality considerations in the zero-price economy – Note by Germany

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This document reproduces a written contribution from Germany submitted for item 2 of the joint meeting between the Competition Committee and the Committee on Consumer Policy on 28 November 2018.

More documentation related to this discussion can be found at:

www.oecd.org/daf/competition/quality-considerations-in-the-zero-price-economy.htm

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1. This submission provides a short introduction to the relevance of quality considerations as a competitive parameter in zero-price markets (**1.**). Characteristics of zero-price markets with respect to quality (**2.**) and specific quality features and their challenges for competition law enforcement (**3.**) are discussed. The submission closes with conclusions (**4.**).

1. Introduction

2. Business models shaped around zero-price products are not entirely novel: media companies have long offered radio, television or even newspaper content to consumers free of charge, funded by advertising revenues, and multi-sided markets with a zero-price component also existed for some time before the emergence of the digital economy.[1] In many cases, consumers provide their attention as a time resource or valuable data to the respective supplier. However, the role of zero-price offers has increased with the rise of digital platforms. A wide range of new business models has emerged that force competition authorities to examine zero-price offers more often, and address novel parameters of the competitive process such as privacy protection. For the German Competition Authority ('Bundeskartellamt') meeting the tasks under the German Competition Act ('Gesetz gegen Wettbewerbsbeschränkungen', 'GWB') in light of the particular features associated with the substantive assessment of the market conditions in the zero-price economy poses some new challenges.

3. The zero-price economy has characteristics that differ from some of the general attributes that are usually essential to constitute a market.[2] One major difference is the lack of cost comparability for consumers. As the products or services are offered for free, consumers do not make their purchase decisions based on prices.[3] Instead, qualitative judgements become more relevant. Since price competition does not feature on the zero-price market side, the comparison of offers focuses on other parameters. Thus, companies in the zero-price economy primarily compete on different terms, such as the quality of their products and services among others.[4]

4. Against that background, the 9th amendment to the GWB which came into force on 9 June 2017, contained a new Section 18 (2 a) GWB that clarifies that the assumption

[1] OECD - DAF/COMP(2018)14, p. 4.

[2] For conceptual considerations regarding the treatment of free platform services see Bundeskartellamt - Market Power of Platforms and Networks, pp. 32 et seq., available at: https://www.bundeskartellamt.de/SharedDocs/Publikation/EN/Berichte/Think-Tank-Bericht-Langfassung.pdf?__blob=publicationFile&v=2.

[3] With regard to regulated markets with little or no room for price competition see also OECD - DAF/COMP/WD(2018)12, p. 10 et seq.

[4] Bundeskartellamt/Autorité de la concurrence, Joint Paper on Competition Law and Data, p. 27, available at http://www.bundeskartellamt.de/SharedDocs/Publikation/DE/Berichte/Big%20Data%20Papier.pdf?__blob=publicationFile&v=2.

of a market shall not be invalidated by the fact that a good or service is provided free of charge. The novel provision reflects the conceptual groundwork of the Bundeskartellamt which illustrated that the use of zero-price offers can still constitute a market under competition law since a user group that uses the service for free should at least be considered a market under competition law if it shares a platform with a paying user group. As already explained in its *Google/VG Media* decision[5], there is a close connection between all the commercial activities of a multi-sided platform in that they pursue an overall profit-making purpose. Consequently, all the relationships on a particular platform could be classified as market relations where a positive price is set on one side, .e.g. in order to monetise the indirect network effects.

5. In multi-sided markets, setting a price of zero for one customer group may make perfect sense for the platform provider also if the service does not come along with any negative good tied to it. Instead, the relevant question for the platform provider is to what extent he can monetize the presence of these customers on other market sides. For the purposes of market definition for internet platforms, there should thus be no need for the agency to establish that providing data is of negative value to customers or to even quantify this negative value. As free-of-charge markets may be defined due to the existence of a different customer group being charged, there is no need to find a 'currency' from the viewpoint of the customers that are not being charged.[6]

6. Hence, it is important for the Bundeskartellamt to be aware of the factors that lead to lower or higher quality in zero-price markets as sound antitrust law enforcement also seeks to increase quality, lower costs and incentivize innovation by protecting competition. This submission explores various features that are considered to increase quality in zero-price markets but at the same time also may raise antitrust concerns. This especially concerns data, network effects as well as privacy.

2. Characteristics of zero-price markets

7. Attributes of a market with perfect competition usually comprise homogenous products or services, low barriers to entry and exit and perfect information. Markets with zero-price products or services can however substantially deviate from that ideal.

8. Zero-price offers in a given market are diverse and contextual which leaves little room for general assumptions. They can be heterogeneous, comprising a high degree of product differentiation. The existence of entry barriers might differ across markets. While the initial launch of a simple application might not impose high entry barriers, the feedback loop of network effects might display higher barriers where the quality of the offer increases with the number of users or the data available to the company.

9. It is also frequently argued that markets where services are free for end users are particularly prone to multi-homing. There are some limits to this assertion however. Switching costs can prevent consumers from using various providers. The lack of interoperability between different systems might also reduce the ability of consumers to have simultaneous recourse to different offers. Consumers may pay more attention to

[5] Google/VG Media decision of 8 September 2015, B6-126/14.Linke

[6]OECD - DAF/COMP/WD(2017)33, p.8.

quality when services are free because in this context, quality is the only dimension of competition between platforms; yet, in a market characterized by network effects and experience effects (possibly related to the volume of data collected)[7], new entrants may not be able to provide services of a quality as high as those of established undertakings and might not be able to compensate for this lower quality by proposing lower prices.[8]

10. While the potential for multi-homing and, more generally, low switching costs, may decrease the market power of established undertakings this potential multi-homing is not necessarily a countervailing factor. When considering data as a relevant factor for market power, the degree of usage might have an impact on the relevance of multi-homing. Indeed, user-based data may only make a difference if end-users multi-home and use rival providers sufficiently frequently – a rather tall order when network and experience effects are at stake.

11. Moreover, information on quality may not be readily available. Consumers make qualitative judgements based on the quality of the products. However, this might mean that they need to try the product first in order to be able to make a decision, which might eventually result in a lock-in effect. Information on quality is more complex than a simple price and more resource intensive to gather. At the same time, information intermediaries have gained importance in the digital economy. A certain lead in information may be able to steer consumers to certain offers and thereby affect competition. If vertical integration comes into play, information intermediaries may exploit information asymmetries in order to benefit from these in neighbouring markets.

2.1. Network effects

12. So-called "network effects" are a characterising element of multi-sided markets. Platforms can charge different prices to different customer groups. In many cases, especially in digital markets, services are provided at zero price for a certain customer group. The term "network effects" refers to how the use of a good or service by a user impacts the value of that product for other users. Such effects may be "direct", when the benefit that users of one group get from a specific service depends on the number of other users from this group using the service. Telecommunication networks are the classic example. The more people use them and can be reached, the more useful they are. Indirect network effects exist when the value of a service or product for a specific group of users increases (positive network effects) or decreases (negative network effects) with the number of users of another group.[9] Network effects may spur a self-reinforcing positive feedback loop, i.e. a situation where success feeds success, that represents an important factor in strengthening a company's market power or even creates a lock-in effect for its customers. Accordingly, the risk of market tipping is related to the presence of network effects and needs to be closely monitored. Tipping means that a market in the zero-price economy or in another sector is in the end served by only one provider and other providers leave the market.

[7] Experience economies designate the cost reduction (or, possibly, quality increases) of products as their volumes of production/consumption increase.

[8] Bundeskartellamt/Autorité de la concurrence, Joint Paper on Competition Law and Data, p. 29.

[9] Bundeskartellamt - Working Paper on Market Power of Platforms and Networks, Executive Summary, p. 3, available at http://www.bundeskartellamt.de/SharedDocs/Publikation/EN/Berichte/Think-Tank-Bericht-Zusammenfassung.pdf?__blob=publicationFile&v=4.

13. At the same time, network effects may also boost competition on the market, as they may cause the rapid growth of new market players, thereby fostering market entry. Network effects can also raise the switching costs incurred by users.

14. The switching costs not only include the costs of "connection" to a different provider, but also the opportunity costs, i.e. the loss of the benefits of other alternatives when one alternative is chosen. Switching to another provider will only be attractive for users if the benefit created by the new network outweighs the switching costs. If the benefit from the installed base of the previous network is high, the benefit of a new network must be even higher. Low switching costs make zero-priced markets more contestable.

15. In a multi-homing scenario users use several, possibly differentiated providers for comparable services in a zero-priced market. Switching costs are low and users are not locked into the network of a single provider which may in turn foster competition on quality parameters. Entry barriers might be lower if a new entrant does not have to convince customers to exclusively replace their existing source with its novel offer. Hence, multi-homing can act as a countervailing factor against the self-reinforcing feedback loop effect of network effects and reduce the risk of market tipping in the case of substantial multi-homing. All in all, the extent of network effects has to be evaluated on a case-by-case basis: both their absolute importance and how they evolve as new customers are gained can vary depending on the service under consideration.

2.2. Competition law concerns

16. Often, network effects are mentioned with a self-strengthening scenario in mind that can favour market concentration. They are also seen as a potential barrier to entry or an element of such barrier and thus as a factor which limits competition. In such context data collection and data usage could possibly also reinforce network effects, when an increase in a firm's user share enables it to collect more data than its competitors, leading to higher quality products or services and further increases in market shares.

17. However, network effects may also be beneficial to new market participants if they are able to attract a high number of users for other reasons (e. g. because of an innovative feature), thereby increasing their attractiveness to future users thanks to network effects. Therefore, network effects can also stimulate competition by giving an entrant the potential to rapidly increase its consumer base. Depending on various parameters such as the level of fixed costs or the differences in the undertakings' market shares, network effects could thus either reinforce or attenuate competition.[10]

2.3. Report on modernisation of domestic antitrust law

18. The Federal Ministry for Economic Affairs and Energy recently commissioned a study by renowned experts on the need to modernise the norms on abusive practices with regard to non-dominant market players and platforms with superior market power. The study was presented to Peter Altmaier, Federal Minister for Economic Affairs and Energy in Germany, on 4 September 2018.[11]

[10] Bundeskartellamt/Autorité de la concurrence, Joint Paper on Competition Law and Data, p. 28.

[11] Schweitzer/Haucap/Kerber/Welker, Modernisierung der Missbrauchsaufsicht für

19. The study deals inter alia with platform markets with a tendency for market tipping, i.e. strong positive network effects. According to the authors, a new provision could prohibit the abusive hindering of competitors by thwarting multi-homing and switching to other platforms if such a conduct could foster market tipping.[12]

20. Another suggestion entails a clarification of the concepts for assessing market power. The study introduces the notion of "intermediation power" as a concept that highlights that dominance may not solely derive from a position as a buyer or supplier, but also from the strong position as a gatekeeping intermediary.[13]

2.4. Decisional practice

21. In its *Immonet/Immowelt*[14] merger clearance decision the Bundeskartellamt found that the merger between two runner-up online real estate platforms can prevent the relevant market from tipping into a monopoly in favour of the market leader, strengthen the multi-homing user pattern and reduce the asymmetries between the merged platforms. The key activity of an online real estate platform is to act as an intermediary between providers of real estate (private or commercial providers, often represented by commercial estate agents) and property seekers (private or commercial clients, also represented to some extent by commercial estate agents). A successful intermediation between a property provider and a property seeker is followed up with a direct transaction on a specific property. The objective of online real estate platforms is to bring two sides (property providers and property seekers) together. At the time, the active online real estate platforms did not charge users on the property seeking side any fees. The platforms' turnover was therefore achieved exclusively with fees payable by providers of property. In that regard, the offer was only zero-priced for property seekers. Such scenarios are typical for zero-price markets since zero price-offers are usually still profit-oriented.

22. Online real estate platforms are characterised by pronounced indirect network effects since a larger number of real estate providers leads to more consumers joining the platform, which in turn has a positive impact on the group of real estate providers. The merger provided the opportunity for a second big platform to promote multi-homing by service users, thus intensifying competition. The decision illustrates that ambivalent nature of network effects that can also help to challenge an incumbent's position under certain circumstances.

marktmächtige Unternehmen, available at: https://www.bmwi.de/Redaktion/DE/Publikationen/Wirtschaft/modernisierung-der-missbrauchsaufsicht-fuer-marktmaechtige-unternehmen.pdf?__blob=publicationFile&v=15.

[12] Schweitzer/Haucap/Kerber/Welker, Modernisierung der Missbrauchsaufsicht für marktmächtige Unternehmen, p. 60 et seq.

[13] Ibid, p. 66 et seq.

[14] Immonet/Immowelt, decision of 20 April 2015, B6-39/15.

3. Quality features in the zero-price economy

3.1. Data

23. Data can help to improve an undertaking's product or service. On the one hand this can be achieved by learning effects as in the case of web search engines. It can be assumed that more searches together with the possibility to observe on what results each user clicks can help improve and refine the search engine as well as the implementation of a supporting algorithm.[15] This can improve the search results' quality, which in turn can lead to more people using the search engine. Online shops use their data on made and unmade purchases to recommend products to their customers. Social network providers select the most relevant pieces of information for a given user thanks to the activity of that user on the social network.[16] Finally, access to user data allows the platform to target the ads that it publishes to the characteristics of each of the users of the platform or to a group of them.

24. Similarly, many software products installed on personal computers or smartphones collect detailed information about the usage of such products. Prominent examples are web browsers and operating systems. Also, many, if not most, websites gather detailed information on the user's journey through their site and use this information to identify those parts which have been used intensively or to minimize technical problems. This information can be used e. g. to extend those parts of the website that were read most often or to accelerate a software product's most used functions in order to improve the product.

25. Data is in theory a non-rival resource because unlike money its consumption by one company doesn't exclude simultaneous consumption by other companies. The collection and processing of user data has become of crucial importance for business models for improving service quality, developing new products, and the value of personal data in Europe alone has been forecast to grow to almost EUR 1 trillion annually by 2020.[17]

3.1.1. Competition law concerns

26. The economic sectors with zero pricing where the collection and use of data is often seen as particularly important, such as search engines or social networking for instance, are often particularly concentrated, with a few operators already holding very high user shares. The development of data collection and usage on those markets may thus reinforce the market power of leading companies on these markets. The role of data analytics in compensating for (or exacerbating) a small-sized dataset should therefore not be underestimated.[18]

27. The marginalisation of smaller competitors due to differentiated data access might also be self-reinforcing: access to a larger amount of data may support better services, which in turn attract more customers – and more data ("snowball effects"). By contrast, smaller companies might attract fewer consumers and as a result have less data. As the gap in market share increases, so might the gap in data collection, which could further increase

[15] Bundeskartellamt/Autorité de la concurrence, Joint Paper on Competition Law and Data, p. 9.

[16] Ibid, page 33.

[17] OECD - DAF/COMP(2018)14, p. 4.

[18] Bundeskartellamt/Autorité de la concurrence, Joint Paper on Competition Law and Data, p. 13.

the gap in the quality of services provided to customers. Finally, the higher revenues earned by larger undertakings could fuel higher investments (such as new algorithms, new functionalities, entry on adjacent markets, etc.), thereby attracting even more customers and more data. Such a trend could harm competition by converging towards a monopolisation of data-related markets.[19]

28. The use of third parties' data may be an alternative to the direct collection of data. Indeed, such an intermediated access to data can be less costly: the fixed costs of data collection are shared over a greater number of data-using undertakings. A company may buy from the data broker only the data that it needs in terms of volumes and variety without incurring a large fixed cost. Furthermore, the services proposed by data intermediaries are numerous and can include data analytics, thereby further reducing the fixed costs associated with data exploitation. Resorting to a data intermediary can also help a company expand the volume and/or scope of its own datasets or the quality of its data exploitation services.[20] This could help to reduce asymmetries in markets and the risk of tipping.

29. Even though every company could in theory buy "third-party data" in order to match the incumbent's data trove, this might not be possible in practice due to the quantity and quality of the established company's data set. In some sectors, the leading companies may have such a large customer and information base that the question arises whether any third party is able to match the same volume and variety of data. This may particularly (but not exclusively) be the case in zero-price markets such as search engines or social networks where "free" attractive services are offered to a wide base of users, which, in turn, generate a large volume of data which may not be accessible to competitors.

30. It should be kept in mind that the ability to extract information from data does not rely exclusively on the amounts of data available but also on the algorithms that analyse data, which are not all of the same quality.[21] The different levels of competitiveness or quality on a data-related market are therefore not fully attributable to a larger or poorer set of data collected by competitors.[22]

31. The 9th amendment to the GWB contained amendments that also address the developments in the zero-price economy. The new Section 18 (3 a) GWB added a non-exhaustive list of criteria to be taken into account in the competitive assessment of market power, in particular in the case of multi-sided markets and networks, supplementing the traditional criteria (e.g. market shares or barriers to market entry). The provision lists the following factors that feature in the assessment of market power:

- Direct and indirect network effects,
- Multi-homing and switching costs,
- Economies of scale in connection with network effects,

[19] In some cases, the development of data can also reduce entry barriers, for instance when those data gained on a given market can be used to identify and satisfy the needs of consumers on another market.

[20] Bundeskartellamt/Autorité de la concurrence, Joint Paper on Competition Law and Data, p. 39.

[21] Nils-Peter Schepp and Achim Wambach, On Big Data and its Relevance for Market Power Assessment, Journal of European Competition Law & Practice, 2016, Vol. 7, No. 2, p. 122 .

[22] Bundeskartellamt/Autorité de la concurrence, Joint Paper on Competition Law and Data, p. 48.

- Access to data relevant for competition, and
- Innovation-driven competitive pressure.

32. The list represents the legislative response to the characteristics of digital platforms or networks. The criteria reflect in particular the conceptual work of the Think Tank Internet of the Bundeskartellamt and illustrate the relevance of data as a parameter for competition.[23] However, as the German legislator mentioned in the amendment's statement of legislative intent and in line with the practice of the Bundeskartellamt, the assessment of market power should always be based on a holistic view of all circumstances.

3.1.2. Decisional practice

33. In its *dating platform*[24] merger decision the Bundeskartellamt cleared the merger of the two leading paid-access online dating platforms in Germany *inter alia* due to the ongoing mobile conversion that was fostered by an innovative mobile-exclusive market entrant with a mostly free-of-charge business model and the dynamics of the internet. These factors indicated that it was unlikely that the parties had a dominant position in the market and that market tipping was imminent.

34. Despite the broad range of payment models and differentiation of online dating offers, the Bundeskartellamt defined a singles dating market as the relevant product market. According to the authority's investigations, the additional product properties of a matchmaking service, i.e. personality tests, the suggestion of partners on the basis of special algorithms, the objective to establish a long-term relationship often pursued by matchmaking services and the differences in pricing, do not cater to any more special demand than the one addressed by dating services with a simpler structure. This also applies to platforms that are tailored to specific target groups. Furthermore, the purpose of the widely used multi-homing approach, where several platforms are used alongside each other, is not to cover any complementary requirements (on different markets), but to increase the probability of finding a match.

35. The ambivalent effect of the indirect network effects was clearly demonstrated in the market, e.g. in the case of the entry of the mobile platform tinder.com which very quickly reached millions of users. The development of mobile applications as part of the general shift towards mobile applications indicated strong market dynamics.

36. The mobile applications enable the platform users to search for people looking for a date within a specific radius of their current location. These new entrants focused on mobile-optimized solutions and relied heavily on so-called word-of-mouth marketing which could be seen partly as an expression of their competitive edge with regard to some quality features (e.g. the combination of user location and personal data to offer streamlined dating services for mobile users). This also affected the incumbent online dating platforms as the success of such dating apps challenged the web-based business model that is largely based on longer computer sessions.

[23] Bundeskartellamt - Working Paper on Market Power of Platforms and Networks, available at http://www.bundeskartellamt.de/SharedDocs/Publikation/EN/Berichte/Think-Tank-Bericht-Langfassung.pdf?__blob=publicationFile&v=2.

[24] OCPE II Master/EliteMedianet, decision of 22 October 2015, B6-57/15.

37. Since the entry into force of the 9th amendment to the GWB, those criteria were first examined in two interrelated cases of the Bundeskartellamt at the end of 2017. Access to data was among the relevant factors of the Bundeskartellamt's *CTS Eventim* decisions[25] that adressed exclusivity agreements used by the company and a planned vertical merger. Both decisions do not concern zero-price offers but their implications for the role of data in the competitive assessment are noteworthy for a zero-price dimension as well. In November 2017, the Bundeskartellamt prohibited CTS Eventim's plans to acquire the majority stake in the companies belonging to the Four Artists concert and event agency. As the operator of by far the largest ticketing system in Germany, CTS Eventim holds a dominant position in the ticketing market. Concert and tour organisers as well as advance booking offices are dependent on it. Additionally, CTS Eventim has a powerful market position in the sale of tickets via its own online ticket shop "eventim.de" which gives it an additional competitive advantage in particular in its access to relevant customer data. By acquiring Four Artists the company would have gained control of additional relevant ticket quotas and expanded its market position further. Four Artists represents approximately 300 national and international artists.

38. In December 2017, the Bundeskartellamt prohibited CTS Eventim from using exclusivity agreements which the ticketing company concluded with organisers of live entertainment events and advance booking offices. The clauses in question stipulate that the contracting parties may only sell tickets exclusively or to a considerable extent via CTS's "eventim.net" ticket sales system. The Bundeskartellamt considered these agreements an abuse of market power.[26] As part of its investigation, the Bundeskartellamt examined whether the control over specific user and sales data represented a factor that supported the dominance of the leading ticketing system. The Bundeskartellamt found that the market leader benefited from a substantial lead over its competitors in its access to this data which is relevant for competition as it is used for marketing and pricing purposes and cannot be duplicated by less frequented ticketing systems. This lead was not mitigated by multi-homing due to its limited presence in this case that was further diminished by the exclusivity agreements in place.

39. In December 2017, the Bundeskartellamt sent Facebook a preliminary assessment notice for suspected unilateral conduct. The Bundeskartellamt's preliminary findings are that Facebook has a dominant position in the German market for social networks, where Facebook offers its services on a zero-price basis to end consumers and abuses this position by making the use of its social network conditional on the user's permission to allow Facebook to limitlessly collect any kind of user data from third party sources and merge it with the user's Facebook account. Third party sources include company-owned services like WhatsApp or Instagram but also websites and apps operated by other providers which Facebook can access via APIs. This means that Facebook can obtain data e.g. if a website with the Facebook 'like' button is accessed, even if the button is not clicked. The Bundeskartellamt holds the view that this fact is most likely unknown to the users. With regard to the company's dominant position in the market, the Bundeskartellamt considers that Facebook imposes terms and conditions that are unfair, also taking account of the legal principles and valuations laid down in data protection law.

[25] CTS Eventim, decision of 6 December 2017, B6-132/14-2; CTS Eventim/Four Artists, decision of 23 November 2017, B6-35/17.

[26] Bundeskartellamt, Annual Report 2017, p. 28 et seq.

40. An entire chapter of the above-mentioned study on the modernisation of domestic antitrust law is devoted to possible abuses and remedies in access to data issues. The study explores several options with regard to data as a parameter for competition and market power such as an evolution of the essential facility doctrine towards more flexibility.[27] The authors also discuss some possible amendments to the domestic legal framework with regard to the control of data in aftermarkets. The authors discuss the possibility to introduce a presumptive example clarifying that a refusal to grant access to an undertaking that needs automatically generated machine or service data for a substantial value creation in a value creating network can constitute an abuse.[28] Competition law enforcement might in return result in increased data-sharing obligations in the zero-price economy.

41. Data control may be of increased importance with regard to conglomerate structures in the zero-price economy. Hybrid platforms that act as an intermediary and service provider for third parties can realise data synergies beyond the data collected from their own commercial transactions with consumers.[29]

3.2. Privacy

42. In the zero-price economy, the question of privacy might become particularly relevant from a competition standpoint if a given undertaking benefits from a strong market position towards its customers. Indeed, firms that enjoy a powerful position on a zero-priced market may be able to gain further market power through the collection of more consumer data and privacy degradation. If two horizontal competitors compete on privacy as an aspect of product quality, their merger could be expected to reduce quality.[30] A reduction of privacy might be the equivalent of a reduction of product quality. Privacy might play a more important role as a parameter of competition in the future. So far, it mostly comes under scrutiny from a consumer protection angle but the competition dimension of privacy protection is not entirely new to enforcers.[31]

43. The last reform of the relevant legal framework granted the Bundeskartellamt new competences in the area of consumer protection under economic aspects. The authority can now conduct sector inquiries under aspects of consumer protection and act as amicus curiae in civil proceedings in that area.

[27] Schweitzer/Haucap/Kerber/Welker, Modernisierung der Missbrauchsaufsicht für marktmächtige Unternehmen, p. 131 et seq.

[28] Ibid, p. 156 et seq.

[29] Bundeskartellamt – Arbeitspapier zur Tagung des Arbeitskreises Kartellrecht, 4 October 2014, p. 12 et seq., available at https://www.bundeskartellamt.de/SharedDocs/Publikation/DE/Diskussions_Hintergrundpapier/AK_Kartellrecht_2018_Hintergrundpapier.pdf?__blob=publicationFile&v=3.

[30] CMA, The commercial use of consumer data (2015), https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/435817/The_commercial_use_of_consumer_data.pdf, p. 95.

[31] See for example Microsoft/LinkedIn (Case Comp/M.8124), Commission Decision 6 December 2016 para. 350.

3.2.1. Sector inquiry

44. In December 2017 the Bundeskartellamt launched another sector inquiry into smart TVs. The inquiry focusses on the suppliers' handling of user data. In contrast to conventional TV sets, smart TVs have an Internet connection, which can not only be used to receive data and programmes, but also to transmit user data. The aim of the sector inquiry is to find out if and to what extent the producers of such devices record, share and commercially exploit personal data, and if the affected persons are informed accordingly. The results of this sector inquiry will be summarised in a report. However, the legislator has solely granted analysing and consulting powers for the time being.

3.3. Advertising

45. Content providers often do not charge consumers for their services but rely on funding through advertising. From a consumer perspective, advertising and its content can be dimensions of quality to the extent that at least some consumers prefer (1) to be exposed to as few advertisements as possible, and/or (2) to be exposed to high-quality advertisements.[32] Similar to data collection, advertising entails a trade-off not only for content providers, but also for consumers. More advertising leads to additional revenues for the provider (which may fund further investment in higher quality). In addition, some zero-price online services offer consumers a premium option that avoids advertisements in exchange for paying a fee. Such hybrid business models give consumers the opportunity to determine in monetary terms the value they would derive from avoiding advertisements.[33] Online advertising has experienced an extraordinarily high rate of growth in the last 20 years. The market volume in Germany alone is estimated at five to nine billion euros.

3.3.1. Sector inquiry

46. In February 2018, the Bundeskartellamt launched a sector inquiry into the online advertising sector to examine and analyse competitive conditions in the industry.[34] The aim of the sector inquiry is to obtain information about the effects of current and foreseeable technical developments on the market structure and the market opportunities of the various players.

47. The analysis focuses in particular on the market structure in the sense whether closed systems of a few large providers actually exist and what significance these systems have. It will examine the significance of different technical services and the way in which they function. These include options for measuring visibility, collecting data and preventing fraud as well as services more on the level of the actual marketing and procurement of ad spaces.

4. Conclusions

48. How to measure and evaluate quality parameters depends on the specific circumstances of the individual case.

[32] OECD - DAF/COMP(2018)14, p. 8.

[33] Ibid, p. 9.

[34] Bundeskartellamt, Press release of 1 February 2018.

49. The idea that data is in theory a non-rival does not *prima facie* eliminate the finding of a substantial competitive edge based on the exclusive control over competitive relevant data, as the duplication might not represent a feasible option in a given case.

50. The interface between data as a quality parameter, new data protection rules at the European level and competition law enforcement requires competition enforcers to evaluate the ability of the antitrust toolbox to meet the new challenges and to conduct pioneer investigations.

51. The established concepts for access to data under the competition law framework might require some evolution if the data set comprises personal data as well.

52. The competence and resources to conduct sector inquiries may nourish the conceptual groundwork and casework in the zero-price economy.