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## THE ATTENTION MARKETS AS A CHALLENGE FOR COMPETITION POLICY

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### RYNKI UWAGI JAKO WYZWANIE DLA POLITYKI KONKURENCJI

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**Summary:** The article concerns a problem from the border of competition policy, economics and business. The practices of companies such as Facebook, which dominate the attention markets, have sparked a discussion about the effectiveness of traditional competition policy. The aim of the work is an attempt to indicate that the nature of the object of exchange and the specificity of these monopolized markets require changes in antitrust policy. The first part characterizes the attention markets and the nature of the object of exchange. The second part characterizes the traditional competition policy. The third part presents arguments in the current discussion on the effectiveness of competition policy and presents proposals for technical changes in this policy. Then, presents arguments that the discussion should primarily concern fundamental changes and indicates the need to change the approach to attention markets and broaden the criteria for assessing anti-competitive practices by criteria for assessing their human dimension.

**Keywords:** competition policy, attention, attention market, two-sided platform, digital economy.

**Streszczenie:** Artykuł dotyczy problemu z pogranicza polityki konkurencji, ekonomii oraz biznesu. Praktyki firm, takich jak np. Facebook, które dominują na rynkach uwagi, wywołały dyskusję na temat skuteczności tradycyjnej polityki konkurencji. Celem pracy jest próba wskazania, że charakter przedmiotu wymiany oraz specyfika tych zmonopolizowanych rynków wymagają zmian w polityce antymonopolowej. W pierwszej części autor charakteryzuje istotę rynków uwagi, a szczególnie naturę przedmiotu wymiany. W drugiej charakteryzuje istotę, cel i narzędzia tradycyjnej polityki konkurencji. W trzeciej przedstawia argumenty w dotychczasowej dyskusji nad skutecznością polityki konkurencji oraz prezentuje propozycje technicznych zmian w tej polityce. Następnie przedstawia argumenty za tym, że dyskusja powinna przede wszystkim dotyczyć zmian fundamentalnych oraz wskazuje na konieczność zmiany w podejściu do rynków uwagi i poszerzenia kryteriów oceny praktyk antykonkurencyjnych o kryteria oceny ich ludzkiego wymiaru.

**Słowa kluczowe:** polityka konkurencji, uwaga, rynek uwagi, platforma dwustronna, gospodarka cyfrowa.

## 1. Introduction

The Internet, the development of information and communication technologies, universal access to devices enabling communication, as well as gathering, sending and receiving information have triggered creativity in the way of doing business. New technical possibilities allowed to solve the age-old problems of entrepreneurs related to the distribution of goods and services. Two-sided or multilateral platforms have become one such solution, which, like a lens, focuses the attention of consumers and then provides access to it for interested entrepreneurs. These platforms are also called attention markets. Many of them are controlled by companies such as Google, Facebook and Apple. The activities of these companies in the European Union force to ask the question of whether modern countries as well as the European Union itself, are able to meet, within the framework of their competition policies (antitrust policies), the challenges posed by the owners of modern markets of attention.

The purpose of the work is an attempt to indicate that the nature of the object of exchange in attention markets, as well as the specifics of the functioning of these highly monopolized markets, require changes in antitrust policy. These changes should have not only a technical, but above all a fundamental dimension. In other words, there is a need to create completely new foundations for competition policy.

## 2. Attention as the subject of market exchange

The human body is needed for life not only for oneself, but also for other people. Access to it is possible either through assault or by gift or through an organized exchange system such as the market.

In the market, the use of the human body takes various forms. First of all, it is treated as a spare parts reserve (e.g. hair, kidneys, heart, sperm, ovum, blood). It is also desirable as a living whole, as an environment in which products and services are created directly. This is the case with surrogates, i.e. women who decide to get pregnant and give birth to another person's child, people engaged in prostitution, or those availing their bodies for medical tests. Yet the human body is also desirable because of the properties that can be properly processed, and then in the form of units of service sold on the market. This is the case with the knowledge and skills acquired in terms of the specific tasks necessary to perform in a given production process, called in economic literature human capital. The property of the human body, which thanks to modern communication and information technology and easily accessible communication tools is an increasingly desirable resource, is human attention.

From the psychological point of view, attention is the system responsible for the selection of information and preventing the negative effects of overloading the cognitive system with excess data. It is characterized by the selectivity of information sources, searching the perceptual field, maintaining readiness for action, the ability

to handle simultaneous actions and transversal between tasks. It is a homogeneous mechanism that uses various cognitive resources.<sup>1</sup>

From an economic point of view, attention is a resource. There are several reasons for this. First of all, human attention is always directed at something or someone (so it has different applications). Secondly, it is limited because the brain has temporal and physical limitations in processing information. Third, attention selects information.<sup>2</sup> Fourth, attention affects the decisions and behavior of the person who is its subject, but also the decisions and behavior of those people who direct their attention to this person. Attention therefore influences people's decision and behavior in the context of market exchange<sup>3</sup>. The stream of consciousness that produces attention provides the context for human action. In other words, it is a scarce resource that has the potential to stimulate the activities of many people and which can be used in various ways.

Both economists<sup>4</sup> and entrepreneurs show interest in attention as a resource. There is a research area in economics theory called attention economics which is still underdeveloped. It focuses on the concept of information and information overload. The starting point in attention economics is the assumption that the information overload causes problems in its management, and more precisely in the way of reaching the right person with it. Therefore, attention is desirable as a mechanism absorbing and filtering information. H. Simon was among the first to notice this attention function. Searching for the answer to the question of how to design organizations in an information-rich world, he stated that the wealth of information causes a scarcity of attention, and the solution to this problem may be new information processing devices.<sup>5</sup> Similar conclusions were made by R. Lanham, who pointed out that the information must be properly filtered to be transmitted. In his opinion, the role of such a filter is rhetoric, i.e. the art of giving information a specific style.<sup>6</sup> Other researchers point out that attention has become a currency

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<sup>1</sup> E. Nęcka, J. Orzechowski, B. Szymura, 2013, *Psychologia poznawcza*, Wydawnictwo Naukowe PWN, Warszawa, pp. 177-228.

<sup>2</sup> T. Wu, 2017, *Blind Spot: The Attention Economy and the Law*, March 26, Antitrust Law Journal, Forthcoming, p. 12, <https://ssrn.com/abstract=2941094> or <http://dx.doi.org/10.2139/ssrn.2941094>.

<sup>3</sup> M.H. Goldhaber, *The Attention Economy and the Net*, First Monday, vol. 2, no. 4, 7 April 1997, <https://firstmonday.org/ojs/index.php/fm/article/view/519/440> (10.09.2019); G. Franck, 1999, *The Economy of Attention*, Telepolis, 7 December, <https://www.heise.de/tp/features/The-Economy-of-Attention-3444929.html> (10.09.2019).

<sup>4</sup> A. Festré, P. Garrouste, 2012, *The 'Economics of Attention': A New Avenue of Research in Cognitive Economics*, GREDEG Working Papers 2012-12, Groupe de REcherche en Droit, Economie, Gestion (GREDEG CNRS), University of Nice Sophia Antipolis.

<sup>5</sup> This is the argument made by H.A. Simon, 1971, *Designing Organizations for an Information-Rich World*, [in:] Greenberger M. (ed.), *Computers, Communications, and The Public Interest*, p. 40.

<sup>6</sup> R.A. Lanham, 2006, *The Economics of Attention*, The University of Chicago Press, Chicago and London, p. 19.

that can be used to make exchanges, just like using money.<sup>7</sup> Still others question the possibility of dealing with the problem of information overload through modern devices and suggest as a solution to find better ways to manage attention.<sup>8</sup>

Before economists, the importance of attention was noticed by entrepreneurs. In order to sell their goods, they searched for various forms of advertising reaching consumers' minds with information about it. The Internet and the development of information and communication technology have given these activities a dynamic and increased impact. These factors have contributed to the digitalization of a significant part of the economy and streamlined the process of acquiring, collecting, sorting, transmitting, as well as creating and transforming information.

The digital part of the economy is in the form of the value web. This is a multiple interlinked value chains that have converged into a web of services and assets (e.g. content, brand, app, app store, set top box, Internet access, smart TV). Each service and asset is a node in the web. Different arrangements of these nodes mark different ways of information flow, and thus content and services, to the end users. Moreover, during the transmission of content and services the company combines its assets with other assets to create new services within the value web.<sup>9</sup> Some of the key assets are in the form of platforms which are the technical basis for aggregating and providing services or content, and mediate between their suppliers and recipients. There are three types of platforms based on three business models: the subscription model in which the end-users pays for a service (like CANAL+, Netflix); the advertisement model in which the end-users provide revenues indirectly by being exposed to advertising (like YouTube); and the access model in content or app developers pay to reach end-users (like an App store).<sup>10</sup> The purpose of the services provided by the platforms is on the one hand to attract attention through a communication service or content, and on the other to provide access to this attention to interested entrepreneurs. It should be noted, however, that the term 'content' is broadly understood here. In some cases, e.g. online games, the difference between content and the service disappears. Similarly, the difference between a content creator and its user disappears. Some companies (Facebook, Twitter, YouTube) base their business model only on content created by users.

The digitization of the economy has allowed for the more precise targeting of information thanks to the ability to focus and then group streams of attention of a significant number of people at the same time. Thanks to this, a new type of business activity was created, i.e. an attention broker or attention seeker.

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<sup>7</sup> T. Wu, *Blind Spot...*, op. cit., p. 13.

<sup>8</sup> T.H. Davenport, J.C. Beck, 2002, *The attention economy: understanding the new currency of business*, Harvard Business Review Press, Revised edition, p. 9.

<sup>9</sup> E. van Gorp, O. Batura, 2015, *Challenges for Competition Policy in a Digitalised Economy*, Directorate General for Internal Policies Policy Department A: Economic and Scientific Policy, IP/A/ECON/2014-12, PE 542.235, July, pp. 17-22.

<sup>10</sup> *Ibidem*, p. 8.

An attention broker is an enterprise that obtains and resells attention. This is a special form of a two-sided market intermediary that works as a platform. Hence, these platforms are called two or multi-sided platforms, and the markets they create are called two or multi-sided markets.

An attention broker connects buyers and sellers from different markets and allows them to make transactions.<sup>11</sup> It participates in two different transactions almost simultaneously: a transaction in which entities use money and a transaction in which the role of money is played by attention. The broker resells the collected attention in the form of access to it, most often in such a way that it adapts the shared stream of attention to the needs of stakeholders. He/she can do this because he/she has a collection of information about the preferences of the “attention giver” collected during the attention gathering process.

When it comes to pricing, the attention broker makes three key decisions. First, it sets the price of the “honey” – the service or content that will attract as many entities as possible. He/she often sets that price at zero to induce the largest possible audiences. Secondly, this sets the resale price of a given stream of attention to entities interested in accessing this stream. Thirdly, this sets a “attentional price”, i.e. how many ads to exchange for a given stream of attention, assuming that the ad devalues the content or services that attract attention.<sup>12</sup>

Competition between attention brokers focuses mainly on the quality of content and the services used as “honey” for attention providers. This is because the price of access of the applicants to the platform is usually zero, attention is a rare good, and the beneficiaries not only require more and more streams of attention, but above all require a specific type of attention streams. This means that the attention broker must constantly introduce innovations such as new distribution channels, new products, new techniques, etc., which will attract attention and keep it. The consequence of this is the constant change of boundaries of attention markets.

The markets in which attention brokers operate are strongly monopolized and individual enterprises have access to significant resources of attention. According to research from January 2019, the social platforms that enjoyed the greatest interest of users were: Facebook (2.271 billion active accounts), YouTube (1.900 billion active accounts), WhatsApp (1.500 billion active accounts) and FB Messenger (1.300 billion active accounts). The most visited websites were: google.com (average time spent during the day: 9 minutes 12 seconds), youtube.com (21 minutes 36 seconds), facebook.com (11 minutes 44 seconds).<sup>13</sup> The size of these markets is also illustrated by the data in Table 1.

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<sup>11</sup> J.Ch. Rochet, J. Tirole, 2004, *Two-Sided Markets: An Overview*, IDEI Working Paper, p. 5.

<sup>12</sup> T. Wu, *Blind Spot...*, op. cit., p. 19.

<sup>13</sup> *Digital 2019: Global Internet Use Accelerates*, <https://wearesocial.com/blog/2019/01/digital-2019-global-internet-use-accelerates> (11.09.2019).

**Table 1.** Data describing attention markets (January 2019)

Region	World	Europe	Poland
Total population (billion)	7.676	0.846	0.038
The year on year change %	+1.1%	+0.2%	-0.2%
Unique mobile users (billion)	8.842	1.101	0.058
The year on year change %	b.d.	+0.5%	+0.4%
Internet users (billion)	4.388	0.724	0.030
The year on year change %	+9.1%	+7.6%	+1.1%
Active social media users (billion)	3.484	0.462	0.018
The year on year change %	+9.0%	+3.2%	+5.9%
Mobile social media users (billion)	3.256	0.393	0.016
The year on year change %	+10.0%	+4.5%	+14.0%
Time per day spent using the Internet	6 hours 42 minutes	b.d.	6 hours 2 minutes
Time per day spent using social media	2 hours 16 minutes	b.d.	1 hour 45 minutes

Source: *Digital 2019: Global Internet Use Accelerates*, <https://wearesocial.com/blog/2019/01/digital-2019-global-internet-use-accelerates> (11.09.2019).

The specificity of the digital economy based on economies of scale and network effects, the specificity of two-sided platforms, and above all the nature of attention itself, raises concerns as to whether the competition process in attention markets is not endangered. Are modern competition protection tools adequate enough to the changing business models that national antitrust authorities are able to effectively achieve the goals of competition protection?

### 3. The essence, goals and tools of competition policy

The development of attention markets is a challenge not only for themselves, but also for the policies of individual countries. In addition to such policy areas as taxation, intellectual property protection and privacy protection, this development also affects competition policy.

Competition policy is the state's actions that are aimed at protecting competition as a condition for the efficient functioning of the market. It is a manifestation of state interventionism and falls within the scope of the allocative role of the state.

The beginnings of antitrust policy date back to 1890, when the Congress of the United States of America passed the Sherman Act. This was an expression of the state's opposition to the growing number and strength of trusts. It has also become a reference point for antitrust legislation in other countries of the world. In the European Union, antitrust law was shaped in the 1960s. European antitrust policy is developed from two central rules set out in the Treaty on the Functioning of the European Union: article 101 of the Treaty and article 102 of the Treaty. The

European Commission is empowered by the Treaty to apply these rules and has a number of investigative powers to that end. The Commission may also impose fines on undertakings which violate EU antitrust rules. In Poland the antitrust system dates back to the 1930s and from the very beginning it was aimed at the excessively strong cartels. An important step in the development of the competition protection system was the Act of 15 December 2000 on competition and consumer protection. The Act defined the principles of the functioning of the entire system of competition and consumer protection, in which the President of the Office of Competition and Consumer Protection (UOKiK) takes the central position. Poland's accession to the European Union on 1 May 2004 completed the process of harmonizing Polish antitrust law with EU regulations. Since accession, the Office has operated within the scope of the European Competition Network (ECN).

The purpose of applying antitrust law is laying down the framework for the development and protection of competition, and sets out the principles of actions to be undertaken, in the public interest, in order to protect the interests of undertakings and consumers<sup>14</sup>. It follows that the Act is aimed at protecting both competition as such and at protecting entrepreneurs and consumers, carried out in the public interest. However, judicial decisions have established the supremacy of competition protection as an institutional phenomenon.<sup>15</sup> From a legal and policy point of view, the market fails. Competition, which is its important feature, is not its permanent attribute. Under the market mechanism, competition may disappear because the market may be dominated by one or more entities. Therefore the protection of competition by the state is the overarching goal of this policy.

In economics, two approaches to the purpose of applying antitrust law are indicated: structural and efficiency.<sup>16</sup> The first approach was developed as part of the Harvard School of Economics, and its main idea is that through antitrust law, the state should influence the structure of the market. This approach refers to the original objectives of antitrust legislation, its *ratio legis*, the case law of American courts developed at the initial stage of the application of antitrust laws and is a consequence of the experience gained from the concentration of industry and the excessive market power of entrepreneurs and the resulting power. According to this approach, the objectives of antitrust policy are:<sup>17</sup>

- protection of small and medium enterprises,
- redistribution of income,

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<sup>14</sup> Art. 1. ust. 1. ustawy z dnia 16 lutego 2007 r. o ochronie konkurencji i konsumentów (Dz.U. 2007, nr 50, poz. 331).

<sup>15</sup> C. Banasiński (ed.), 2018, *Polskie prawo antymonopolowe. Zarys wykładu*, Wolters Kluwer, Warszawa, p. 30.

<sup>16</sup> Z. Jurczyk, 2007, *Cele polityki antymonopolowej w teorii i praktyce*, [w:] Banasiński C., Stawicki E. (eds), *Konkurencja w gospodarce współczesnej*, UOKiK, Warszawa, pp. 15-23.

<sup>17</sup> Z. Jurczyk, 2012, *Kartele w polityce konkurencji Unii Europejskiej*, Wydawnictwo C.H. Beck, Warszawa, p. 71.

- maintaining local business control,
- counteracting the excessive concentration of political power.

The efficiency approach, which currently dominates in theory and practice, developed by the Chicago School of Economics, is based on an analysis of market behavior of entrepreneurs. According to this approach, the purpose of antitrust rules is consumer welfare realized by protecting market efficiency. The effect of applying this doctrine is that the antitrust authorities move away from the formalistic approach to entrepreneurial behavior in favour of assessing the effectiveness of competition. Therefore the measure of this effectiveness is not the number of competing entities, but consumer welfare.

Competition policy instruments used in the European Union, and thus in Poland, are:

- counteracting undertakings violating the prohibition of competition-restricting practices
  - relative prohibition anti-competitive agreements
  - absolute prohibition of abuse of a dominant position
- counteracting infringements of the collective consumer interests
- counteracting anti-competitive concentrations of entrepreneurs (e.g. mergers, takeover of control, acquisition of an organized part of assets or establishment of a joint business entity) and their associations

The basic elements outlined above form an overview of competition policy. As will be presented below, attention markets have seen practices that have undermined the effectiveness of competition policy and sparked a discussion about the need to change it.

#### 4. Premise for changes in competition policy

In Europe the discussion on the effectiveness of competition policy was triggered by the practices of such dominant actors in attention markets as Google and Facebook. In 2012, Facebook took over its largest competitor in the attention market Instagram (about 30 million users),<sup>18</sup> and in 2014 the WhatsApp application (about 450 million users).<sup>19</sup> In turn, Google has already been punished three times by the European

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<sup>18</sup> The intention of this concentration was not subject to notification to the European Commission due to the insignificant turnover of Instagram. However, it required the consent of the US Federal Trade Commission (FTC) and the UK Antitrust Authority Office of Fair Trading (OFT). OFT did not find in Instagram a competitor for Facebook in the advertising market. OFT analysis did not take into account Instagram's strength resulting from the length of time spent by users as well as from the number of these users. Look at: Dec. nr ME/5525/12 – Facebook/Instagram, 14.08.2012, <https://assets.publishing.service.gov.uk/media/555de2e5ed915d7ae200003b/facebook.pdf> (11.09.2019).

<sup>19</sup> The acquisition of WhatsApp was not subject to the obligation to notify the European Commission. The basis for the analysis of the concentration by the European Commission was the Facebook application submitted pursuant to article 4 paragraph 5 of Council Regulation (EC) No 139/2004 of

Commission for abusing its dominant position. In June 2017 the Commission fined Google €2.42 billion. Google abused its market dominance as a search engine by giving an illegal advantage to another Google product, its comparison shopping service.<sup>20</sup> In July 2018 the Commission fined Google € 4.34 billion because since 2011 Google has imposed illegal restrictions on Android device manufacturers and mobile network operators to cement its dominant position in general internet search.<sup>21</sup> In turn, in March 2019, the European Commission ordered Google to pay a fine of EUR 1.49 billion because Google abused its market dominance by imposing a number of restrictive clauses in contracts with third-party websites which prevented Google's rivals from placing their search adverts on these websites.<sup>22</sup>

The discussion triggered by these practices focuses on technical issues. The question is whether this is the right subject of discussion in the face of not only the specifics of attention markets, but also general trends in the process of implementing new technologies in social life.

One of the elements of competition policy indicated to change is the analytical approach of antitrust authorities to individual cases. The traditional causal approach is one-way: Structure → Conduct → Performance. The antitrust authority begins its case analysis by determining the market structure (defining the relevant market, determining competitors, determining their market power), then, based on the designated relevant market, analyzes the company's practice and assesses whether it is anti-competitive or not. Meanwhile, in the attention markets, firms often compete by developing new business models and, by doing so, continuously redefine the boundaries of a market or create new markets. The traditional analytical approach is therefore accused of not taking into account the inverse causal relationship: Structure ← Conduct ← Performance. According to this approach, the relevant market should be treated as a function of the company's activities, and not as a rigid structure needed to determine market power, and the antitrust authority should focus on identifying business models that may be competitive for the audited.<sup>23</sup>

Another element of competition policy that requires a change, are the analytical tools used to define the relevant market, determine the market power of its participants, and predict changes in the market.<sup>24</sup>

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20 January 2004 on the control of concentrations between undertakings. And in this case, the Commission saw no threats to competition in three relevant markets. Look at: Dec. nr COMP/M.7217 – Facebook/WhatsApp, 10.03.2014, [http://ec.europa.eu/competition/mergers/cases/decisions/m7217\\_20141003\\_20310\\_3962132\\_EN.pdf](http://ec.europa.eu/competition/mergers/cases/decisions/m7217_20141003_20310_3962132_EN.pdf) (11.09.2019).

<sup>20</sup> Source of information: [https://europa.eu/rapid/press-release\\_IP-17-1784\\_en.htm](https://europa.eu/rapid/press-release_IP-17-1784_en.htm) (11.09.2019).

<sup>21</sup> Source of information: [https://europa.eu/rapid/press-release\\_IP-18-4581\\_en.htm](https://europa.eu/rapid/press-release_IP-18-4581_en.htm) (11.09.2019).

<sup>22</sup> Source of information: [https://europa.eu/rapid/press-release\\_IP-19-1770\\_en.htm](https://europa.eu/rapid/press-release_IP-19-1770_en.htm) (11.09.2019).

<sup>23</sup> E. van Gorp, O. Batura, *Challenges for...*, op. cit., pp. 50-51.

<sup>24</sup> Ibidem, pp. 52-57 and K. Kanton, J. Łukawski, S. Murek, *Rynek uwagi: pojęcie i wyzwania przy antymonopolowej ocenie koncentracji*, Internetowy Kwartalnik Antymonopolowy i Regulacyjny 2018, nr 8(7), pp.18-23, DOI: 10.7172/2299-5749.IKAR.8.7.1.

The specificity of the attention market makes the determination of the relevant market according to existing methods questionable. First of all, in the case of bilateral platforms, the problem arises of whether in a given case the antitrust authority should consider exchange relations on each side of the platform or only on the one on which the exchange of goods and money takes place. Should one or more relevant markets be defined? Secondly, when determining the relevant product market, the SSNIP (small but significant and non-transitory increase in price) test is used, which allows determining whether given goods / services are treated as substitutes by buyers and which is based on prices expressed in money. Meanwhile, in the attention markets there are no money prices on one side of the platform. Thirdly, the complexity and dynamics of changing attention market boundaries means that an antitrust authority's attempt to capture some solid market structure can lead to erroneous analyzes and assessments.

Problems related to the specifics of the attention market also arise regarding the assessment of the market power of entrepreneurs. First, the problem is the inability to determine the relevant market, which means that it is impossible to define all competitors and thus the reference points for assessing market power. Secondly, when determining market power, antitrust authorities refer to the category of money turnover to estimate the market share of an entity or merging entities. Meanwhile, in the attention markets where content and services are exchanged for attention, no monetary turnover is generated.

Another problem arises in matters related to the supervision of concentrations. In these cases, the antitrust authority must examine the effects of the proposed concentration. It must therefore predict the state of the market that may arise as a result of concentration. There is therefore a serious concern about whether these predictions are adequate for attention markets. It is difficult to assume that the market analyzes made by the antitrust authority anticipate the market better than those entities whose activities will generate this state in the future.

The proposed changes in competition policy do not touch the essence and purpose of the policy itself. These suggestions are only technical guidelines. Meanwhile, the attention market problem has become more serious, and the changes that should take place in competition policy should be primarily fundamental. Here are the premise to support this.

First, attention cannot be treated like any other thing being exchanged. It is an inseparable part of man and it cannot exist as an independent whole. Attention trading is therefore a form of human trafficking. Whether such trade should be legal at all should be determined by whether it is carried out knowingly, with the consent of the attention subject.

Secondly, there are two types of attention on the attention market. Attention as a raw material obtained from its entities in exchange for the content / services offered and attention as a product to which access is sold or which is sold in the form of information on subjects of attention. Insofar as people do it consciously, the exchange of raw material attention to content/services is barter, thus it is not

a medium of exchange, but its subject. Only as part of the platform is it subjected to “processing” and made available in an attractive form to advertisers or other entities. Therefore, “attention givers” are not only consumers, but at the same time they are suppliers of the factor of production, which is their integral part, hence they are products themselves. This raises legitimate concerns about how this factor is treated and what its individual and social effects are.

Thirdly, traditional competition policy concerns practices that exchange things and activities, not people. This is based on the belief that there is such a thing as the economy as an organized whole, in which each entity performs a specific function, and the market is an organized system of indirect exchange, which is to serve the development of the economy. Competition is understood here as a creative, pro-development type of rivalry between market players for the ability to meet human needs. Initially, competition policy makers protected it for political and social reasons. It was only with time that the emphasis was placed on its economic dimension, and economic theory, mainly neoclassical, served as a justification for the state’s activities in this policy. The attractiveness of economic arguments is due to the fact that economics does not consider the nature of the objects of exchange and the exchange itself, and treats the exchange of things and people the same, hiding this diversity of nature behind the word “individual.” The human dimension of the object of exchange in attention markets therefore calls into question the correctness of the application of competition policy justified only by one type of argument.

Fourthly, competition policy has been designed with the real and material economy in mind, in which the boundaries between people and things are determined by their physicality, while attention markets are virtual (digital) markets. In digital reality, borders between people and things do not exist. In this world, everything, and therefore human attention, is reduced to a common denominator, i.e. to digital recording. The fact that a person reads what he/she reads, where he/she reads, when he/she reads, and even the book itself, is in the whole world in the form of data written in the same language. The meanings of these data in the real world are important because they allow them to be grouped and compared with other data. Therefore, the distinction between what is consumption and what is production, what is a manifestation of enjoying life, and what is the effort taken to sustain this life becomes very difficult, if at all possible. Data are the only and main product on this market. Scalability, the technical possibilities of data collection and their combination mean that in virtual reality an attempt to capture the boundaries of the relevant market is impossible because it is impossible to capture the borders of any market. Prices are also difficult to locate, estimate and correlate in this reality. Moreover, with the current technology, supported by the use of artificial intelligence for data processing, there is a chance for perfect price discrimination, as a result of which the price for a product or service will be personalized, just as it begins with products and services themselves. Is it possible to find a price that will be a reference point when assessing a given enterprise practice?

Fifth, the competition for attention does not take place within one market, but it is a competition between precisely designed, different markets, which moreover corresponds to the nature of markets that are not spontaneous orders.<sup>25</sup> In seeking attention as a data source, economic entities create markets because it allows them through setting rules for their functioning, to control both the demand and supply sides. Therefore, instead of attention market, there should be talk about attention markets. Such markets must naturally be monopolized. As shown by S. Galloway, based on the practices of companies such as Amazon, Apple, Facebook and Google, the creation of such markets can be burdened with various “sins”.<sup>26</sup>

Sixth, it should be noted that from the point of view of the state it seems more advantageous to have monopolized attention markets, because it is easier to control several large entities and even, as part of strategic goals, cooperate with them than with any significant number of them.

Seventh, sustaining limited competition by the state should not be at the expense of citizens’ development. Being in virtual reality does not remain, as confirmed by research, without consequences for the psycho-physical development of man.<sup>27</sup>

The human nature of the object of exchange in attention markets, the strong level of monopolization of these markets and their strategic importance for the state call into question the effectiveness of the traditional competition policy model. Therefore a new competition policy is needed (it may also be necessary to change its name), which will not only maintain creative and effective competition, but above all it will do it responsibly, i.e. protecting citizens from its negative effects. The goal of such a policy should be human well-being, not consumer well-being. However, such a policy must be built on a different foundation, on a different economic philosophy than before.

In the author’s opinion, such a policy should be based on the assumption that both the economy and the market are deeply embedded in society, its culture and the civilization it creates. The proposed attention markets should not only improve exchange, but also serve humanity, its multidimensional development, and the needs of the society in which they are embedded. Effective and innovative actions of enterprises, undertaken within those markets that inhibit or weaken this development, should be eliminated or changed.

The subject of antitrust authority investigation in the sphere of human attention exploitation should be entire, designed market models. It should be assumed that the entities creating and managing them are by definition monopolists and have

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<sup>25</sup> A.E. Roth, 2017, *Matchmaking – ekonomia kojarzenia stron transakcji i projektowania rynku*, MT Biznes, Warszawa, p. 272.

<sup>26</sup> S. Galloway, 2018, *Wielka czwórka. Ukryte DNA: Amazon, Apple, Facebook i Google*, Dom Wydawniczy Rebis, Poznań, pp. 195-208.

<sup>27</sup> *Psychofizyczne konsekwencje uzależnień (nalogu) komputerowo-internetowego*, <https://www.uzaleznieniabehawioralne.pl/siecioholizm/psychofizyczne-konsekwencje-uzaleznien-nalogu-komputerowo-internetowego> (11.09.2019).

a dominant position in relation to each entity using their market. Starting from this assumption, it is necessary to examine the functioning of the entire market not only in terms of its anti-competitive or exploitative dominant practices resulting from the adopted rules, but also their contribution to human development and their effects in the individual and social dimension. Efficiency and innovation should not be the only criteria for assessing designed markets and their regimes, but should be complemented by criteria for assessing their human dimension.

## 5. Conclusion

The problem presented in the article seems to be very serious, because the phenomenon of collecting and reselling attention through appropriately constructed markets will progress. Moreover, there are premises from which it can be concluded that entities constructing these markets will not only accumulate attention, but will also want to shape it, and thus stimulate human behaviour and human choices<sup>28</sup>. The function of mediating access to attention will be supplemented with a function stimulating the attention of its entities. In the face of such challenges, it seems justified to rethink competition policy first from the point of view of its essence and objectives, and only later from the point of view of instruments.

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<sup>28</sup> A.D.I. Kramer, J.E. Guillory, J.T. Hancock, 2014, *Experimental evidence of massive-scale emotional contagion through social networks*, PNAS, June 17, 111(24), pp. 8788-8790, <https://doi.org/10.1073/pnas.1320040111> (11.09.2019).

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