Actual Issues of the Fight Against Violations of Antitrust Legislation, Committed by Using of Digital Intelligence

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Abstract. The article is dedicated to the research of the problems in practice of authorized agencies, existing during the consideration of cases of the antitrust violations by using of specialized software. The task of legal regulation in contemporary conditions is to determine instruments, which could be used for prevention and constraint of the using of digital intelligence to the detriment of participants of economic affairs, by stimulating of the using of the technologies for the benefit of the competition. The special attention is focused on the issue of liability for these violations. Authors defined the preventive measures, which could provide the compliance of antitrust legislation during the development and using of price algorithms.

1. Introduction

The contemporary conditions of digital economy require the development of legal mechanisms, providing the efficient restraint of antitrust violations. Market entities increasingly use so-called "price algorithms" – the specialized software for monitoring, calculating, settlement and control of goods prices, or for the activity in trading. The access to such algorithms is provided by their installation to user computers or by means of the Internet. The advantages of price algorithms is the possibility of processing of large amount of data, what allows to react to the changing of market environment summarily.

The development of technologies in the field of digital intelligence allowed to algorithms to send price proposals in electronic tenders automatically on behalf of participants. However, it created the necessity of the research of such software measures, because their operating makes the risk of antitrust violations.

2. The problem in practice of antitrust authorities

The using of algorithms during the antitrust actions is widespread in practice. For example, the European Commission established the fact of the violation by electronics manufacturers Asus, Denon & Marantz, Philips and Pioneer the antitrust prohibition to price-fixing. The price monitoring by means of special software measures promoted to violation [1].

The analyzing of more than 2000 electronic tenders in the Russian Federation showed the functioning of tender bots, created for the activity, prohibited by antitrust legislation [2].

The decision of the FAS of the Russian Federation dated on 26th February of 2018 in the case № 1-11-18/00-22-17 [3] established, that the LG company is guilty of coordination of economic activity of

LG smartphones resellers, by means of the using of algorithm, what created the determination and fixing of prices. The company's software executed the price monitoring and wrote reports of price variances from recommended ones and sended them to managers.

The US Antitrust agency secured judgment in 2015, by proving of the intended using of computer program for the determination of common price for posters in online-stores [4].

The central problem of the using of price algorithms is the possibility of factual violation of antitrust legislation in absence of direct contact and reaching of the formal agreement between participants of economic affairs. Under the existing conditions there is the reason to talk about the origin of so-called "digital cartels"[5], which created by using of special programs, based on the digital intelligence. The science emphasizes the different scripts of conspiracy, depending from the level of technological development and using of digital intelligence; in certain scripts the subjects of economic affairs purposefully use the digital intelligence during the cartel formation, but in the script "Digital Eye/God View" algorithms determine the measures for profit optimization autonomously [6]. With that, the operating of such programs becomes independent from their developers and users, and it is difficult to define the legality of their using in context of conclusions of anti-competitive agreements and abuse of dominance by the economic entities, which use price algorithm. For example, two economic entities could use the program, based on digital intelligence, in purpose of pricing optimization. However, the program choses the strategy of price support on competitors level, as optimal one. The result of it is the conspiracy in automatic mode, which happened without participation of economic entities themselves [7].

According to the fair point of antitrust commission OECD, "technological instruments, as pricing algorithms, are progressively changing the competitive landscape in digital markets"[8]. Existing methods of the protection of competition will unlikely be enough in new era. This is why the decision of series of legal questions is necessary.

One of such questions is the liability for antitrust violations, committed by using of algorithms. This question was the subject of discussions both in science and on the level of power agencies [9]. According to the researchers position, the setting of liability of program developer regardless on his or her guilt could bring to the further indisputable bringing to responsibility in case of any program errors [10].

In Mehra S.K. view, there is such options, as "assignment of responsibility to algorithm; to algorithms users; rejection of the assignment of responsibility"[11]. However, the third option (without responsibility) could factually provide the impunity for antitrust violations, committed by using of algorithms.

The legal science knows attempts of the decision of problem of liability for the offences, committed by the subjects of digital intelligence by means of determination of their legal status. The founder of Russian fund Grishin Robotics Dmitry Grishin developed the concept of the Law in Robotechnic in 2016. According to this Concept, the legal regulation has to partially covers robots, like it covers animals. As Mr. Grishin explained, because of the absence of emotions of digital intelligence, it cannot become the subject of law. In this context, robots are similar to animals, because they cannot make autonomous actions [12].

Within the framework of the question of responsibility of algorithms users the opinion of the Chairman of Australian Competition and Consumer Commission Rod Sims seems fair: "you cannot avoid liability by saying "my robot did it"[13]. It is obviously, that algorithms cannot be received as autonomous legal subjects, because the law provides the reglamentation of the relations between humans. The legal status of algorithms have to be determined as "the special type of property or device, which acts on behalf of an owner"[14]. We suppose, that during the decision of the problem of liability in using of algorithms it would be reasonable to rely upon the concept of "a source of increased danger"[15], whose owner or user have to compensate the injury from a source of increased danger, if they will not prove, that the damage occurred by insuperable force or intent of complainant.

Contemporary algorithms operate on the base of programs, developed by humans, so they could be considered as instruments for some kind of actions. It should be taking into account that a human

stands behind any act by robot. And this human have to bring responsibility for the injury from him or her. If the injury caused by program error, a developer has to have responsibility; if caused by execution of any commands – an operator or user.

We have to note the probability of cases, when the violations, committed by using of price algorithms require to have higher level of liability. The issue is the willful antitrust violation. Algorithm functions could be used for the optimization of the information collecting and significantly simplify the achieving of anti-competitive result. Consequently the willful using of algorithm for illegal activity should be considered as the circumstance, aggravating responsibility.

The problem of the realization of liability for algorithms actions is closely associated with itemization of term "anti-competitive agreement", which usually supposes the presence of will of the parties. The definition of agreement in European Union, clarifying the Article 101 TFEU, is formulated in judicial practice and means "meeting of minds between subjects of economic activity in regards to the policy, achieving goal or perception of certain conduction market line regardless of a way of the expression of intention to comply this agreement, acting in market"[16]. The determination of possibility to recognize an agreement, concluded by using of algorithms, as equal to formal or parol agreement, is necessary.

The problem in fight against antitrust violations, committed by using of algorithms, is their high latency. The specific feature of the conclusion of anti-competitive agreements in ordinary conditions is the necessity of periodical correction of price, production volumes and other conditions. The cooperation of the subjects of illegal agreements bring to the risk of its detection by authorized agencies, but automatization of the decision making process creates additional problems for antitrust agencies.

On the other hand, the actions of programs let to the forming of additional evidences, which could be used by antitrust agencies. For example, it could be harmonization of algorithms of the sending of price proposals, the using of one IP-address [17]. As the Head of the Anti-Cartel Department of the Russian FAS Andrey Tenishev said, "auctionary robot leaves more traces, than a human. One of the contemporary ways of the proving of conspiracy in electronic tenders is the one e-mail address, one MAC-address, attributes of a file, geo-location and others. Taking into account the specific and the field of violations, it should use not only direct evidences, but also inferential ones"[18].

Antitrust agencies place programs-screenings for identification of violation evidences. This is the legal preventive measures for identification of violations on the basis of observation results [19]. The Russian Federation develops so-called "Big Digital Cat" – the collection of program instruments on the base of blockchain "technology", which allows to identify the attributes of antitrust agreements online and to form the evidences base, confirming the conclusion and realization of a relevant conspiracy with using both opened and closed sources of information [20].

With that, the legislation on the secrecy of communication could be restriction for the getting information about anti-competitive agreements. This is why the efficient investigation of violations, committed by using of algorithms requires the itemization, that the legally protected secrecy is an information exchange between humans, but not between software. The unification of the definition of secrecy gains special actuality in aspect of the fight against transborder antitrust violations and information exchange between antitrust agencies. The term digital market of goods, network effect and price algorithm also require definitions within the framework of multilateral agreement. Among the preventive measures against developers and users of algorithms we could emphasize the development of requirements to computer programs and the setting of prohibition for coordination of economic activity by using of price algorithms, which have potentially illegal functionality [21]. The European Commissioner Margrethe Vestager noted, that enterprises have to program algorithms in such a way, for the compliance of antitrust legislation [22]. It should be taking into account, that the using of algorithms itself is not antitrust violation, if they not used in purpose of price fixing among competitors, price supporting or in purpose of illegal coordination of economic activity. The functionality of algorithms allows to program them to automatic sending of price proposals in digital tenders until the limit of price proposal, installed by tender participants. In such a manner, they are

efficient instrument for realization of anti-competitive agreement, oriented to the price supporting. Such a programs could also be developed for the realization some illegal scheme, for example, "Taran Scheme" – the way of the reaching of anti-competitive agreement, which is the misrepresentation of fair tender participants, by means of sharp fall in prices, what stimulates them to give up on the competition with conspiracy participant [23]. The settlement of requirements to algorithms creates the necessity of the development of the list of eligible practices of their using. It could particularly be the monitoring of consumer prices, the monitoring of the compliance of maximal reselling price, the monitoring of the compliance of recommended prices, and also communications according to results of noted actions. It necessary to note, that the legal regulation of the using of algorithms have to take into account the risks of unreasonable using of compulsory measures, because such measures could let to the lowering of investment activity and to balk the development of new technologies.

In some jurisdictions, as the Great Britain, Iceland and Mexico, antitrust agencies have authority to impose structural or behavioral remedies within the framework of market investigations during identification of the antitrust risk [24]. This instrument could be also used for organizations, which are using algorithms in economic activity.

Another preventive measure could become the adoption by companies the self-regulating codes, which will be complied during the development and using of algorithms, and also the development by companies the internal acts, determining the order of algorithms using and measures, executed for the lowering of the risk of antitrust violation. The presence of such acts could be reason for reduction of liability in case of antitrust violation in compare with companies, which do not have such acts.

3. Conclusion

The expansion of the practice of using algorithms by companies should be considered as the positive result of technologies development. Algorithms change the characteristics of digital markets, increasing the transparency, speed of decision making process and ability of market subjects to react operatively to competitors actions. The task of legal regulation in contemporary conditions is to determine instruments, which could be used for prevention and constraint of the using of digital intelligence to the detriment of participants of economic affairs, by stimulating of the using of the technologies for the benefit of the competition.

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