

The Value Orientation of Antitrust Law in the Context of the Platform Economy

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ABSTRACT

Antitrust challenges in the platform economy extend beyond traditional concerns of economic efficiency. Platform enterprises such as Google and Amazon, with their control over data, algorithms, and network effects, amass significant market power that impacts not only competition but also social equality, and democratic values. This study critiques the Chicago School's focus on economic efficiency, arguing that it inadequately addresses the social and political consequences of platform monopolies. A more comprehensive antitrust framework is proposed, one that includes civil rights and social equality to better regulate platform enterprises in the digital age.

KEYWORDS

Antitrust Law; Economic Efficiency; Platform Economy

In recent years, antitrust issues against platform companies have gained global attention. Over the past decade, international platform companies such as Google, Apple, Facebook, and Amazon have been involved in 111 antitrust investigations globally. In 2020, China's State Administration for Market Supervision and Administration (SAMSA) opened multiple investigations into Chinese platform-based business giants such as Alibaba and Meituan. From 2021 to 2023, while the Chinese government has issued official documents such as the Anti-Monopoly Guidelines and the Guidelines on Classification and Rating of Internet Platforms to fine-tune its antitrust operations against platform-based companies, other countries have also made antitrust against platform-based companies a critical issue: the European Union government has enacted the Digital Services Act and the Digital Marketplace Act. The German Bundestag passed the Tenth Amendment to the Act against Restrictions of Competition in January 2021 to address the monopolization of platform-based companies. The U.S. government released the report "Investigation of Competition in the Digital Marketplace" on October 6, 2020, by the House Subcommittee on Antitrust.

All of the above phenomena show that the monopolistic behavior of platform-type enterprises has become a key concern of governments. As for monopolistic behavior, a very representative solution path comes from the Chicago School of Law and Economics scholars in the United States. This solution path regards the "economic efficiency goal" as the core of antitrust. According to the Chicago School of Scholars, whether to take anti-monopoly measures depends on the monopoly behavior and monopoly state, whether the economic efficiency of society and monopoly behavior and monopoly state do not necessarily cause damage to the economic efficiency of society. In his article "The Nature of the Firm," Ronald Coase argued that contracting in the marketplace is inherently costly, so large firms, while having higher organizational costs, also avoid trivial transaction costs. Between 1950 and 1980, the Chicago School took what had been viewed as price-

locking behavior, horizontal market segmentation, restraint of trade, and bundling of transactions and gradually saw them as harmless and even beneficial under the auspices of economics.

Criticisms against the Chicago School have persisted from 1950 to the present. This paper attempts to review its theories in the context of the current era. In this paper, the platform enterprise is not a new type of enterprise but symbolizes an emerging economic form. This emerging economic form is connected with the preface technology such as big data, the internet of things, artificial intelligence, etc., which makes the relationship between people and people and people and things evolve, innovate, and subvert, and the production relationship and life pattern in the industrial era also change radically. As a result, antitrust issues also need to be considered in the context of the current era. The purpose of this paper is to critique the Chicago School's antitrust approach, which centers on "economic efficiency," in light of the characteristics of platform-based enterprises. The behavioral structure of this paper is as follows: firstly, this paper will sort out the antitrust ideas before the dominance of the Chicago School in order to reveal that "economic efficiency" is not the original purpose of the antitrust law; secondly, this paper will analyze the characteristics of the platform-based enterprises, in order to reveal that the problems brought by them cannot be solved by "economic efficiency"; secondly, this paper will analyze the characteristics of the platform-based enterprises, in order to reveal the problems brought by them cannot be solved by "economic efficiency." Then, the paper will analyze the characteristics of platform enterprises to reveal that the problems they bring cannot be covered by "economic efficiency"; finally, the paper will criticize the Chicago School of thought from a philosophical point of view. and also proposes an improved antitrust law adapted to the context of the platform economy.

1 A Neglected History of the Antitrust Laws

The 100-year judicial history of antitrust in the United States is a history in which the "rationality principle" has gradually replaced the "per se principle" (Schmalensee, 2007). The Sherman Act, as the first antitrust law, was silent on what constitutes "restraint of trade" and "monopolization," leaving it to the judicial practice and academic reflections of the following one hundred years to supplement and perfect.

In 1940, the U.S. courts first adopted the principle of per se rules to define monopolistic behavior. The per se rule requires that in an antitrust case, the plaintiff needs to provide evidence of the defendant's monopolistic behavior but does not need to prove the effect of the behavior in restricting competition, and the defendant cannot prove the legitimacy of the monopolistic behavior by providing objective proof of the legitimization of competition (Ezrachi, 2021). Under the principle of per se violation, the definition of antitrust only considers whether the formal elements are met, regardless of the motive, purpose, or effect. It is just like a traffic violation; as long as someone runs a red light, it constitutes a violation of the law without considering the reason for running the red light and the actual harm caused. In the opinion of the Federal Trade Commission's Bureau of Competition and the Antitrust Division of the Department of Justice, such restraint of trade, price locking, and horizontal market sharing are, per se, violations of the law.

Such a way of defining the term, although straightforward and easy to operate, has triggered strong dissatisfaction among scholars of the Chicago School. In their view, the Sherman Act's ambiguous provisions were a manifestation of irresponsibility, and the idea of treating monopolies as per se illegal was a misinterpretation of antitrust law. In *Antitrust Law*, Richard Posner, a pioneering figure in legal economics, wrote: "In fields where the savings from concentrating production in one or very few manufacturers would exceed the cost of monopoly pricing, and where monopoly is, therefore, more efficient than competition, there is no reason to enforce

antitrust in the sense that efficiency is the goal of antitrust."

The advent of the Chicago School prompted a shift in judicial principles from the per se violation principle to the rationality principle. The rationality principle means that in defining monopolistic conduct, one must not judge by the formal characteristics of the conduct or agreement but rather calculate the likelihood that the conduct or agreement will create both harm and incentives in the marketplace. The United States Supreme Court first put forward this principle in the *Board of Trade of Chicago v. United States* case. In that case, the Supreme Court stated: "The true test of legality is whether the restraint imposed is such as merely regulates, and perhaps thereby promotes competition, or whether it is such as may suppress or even destroy competition. To determine that question the court must ordinarily consider the facts peculiar to the business to which the restraint is applied, its condition before and after the restraint is imposed, the nature of the restraint, and its effect, actual or probable." (Ezrachi, 2021)

Subsequently, the U.S. Department of Justice and the Federal Trade Commission provided in the Antitrust Guidelines that "[w]hen participants enter into an agreement between themselves for the purpose of effecting an efficiency-enhancing integration of economic activities that is reasonably related to the integration and necessary to achieve the goal of promoting competition, then the governmental authorities should analyze their agreement under the rule of reason, even if it is of a type that would otherwise be treated under the per se violation doctrine (Xue, 2008). In the early 1980s, the lower courts also began to intensify their use of the rationality doctrine (Jacobson, 2007).

According to the principle of rationality, establishing monopolistic behavior requires the plaintiff to prove the existence of an anti-competitive effect within a given market, i.e., actual or potential harm to economic efficiency. If the initial proof is successful, it is the defendant's turn to prove that its behavior is conducive to competition in the market. In contrast to the per se violation doctrine, the rationality doctrine introduces economic theory into antitrust judicial practice. On the one hand, it does not simplify antitrust issues but somewhat complicates them - antitrust issues that could have been judged by formal elements alone must now be concluded through complex mathematical models and financial statements. However, on the other hand, it also seems to overcome a problem that has existed since the inception of antitrust law - the earliest Sherman Acts never provided a clear answer to the question "what is a monopoly." A set of answers backed by economic theory is sufficiently persuasive.

However, when scholars of the Chicago School tried their best to analyze the meaning of "monopoly" in the Sherman Act, they had already quietly internalized the concept of "monopoly" in their interpretation of "economic efficiency" as the main value goal. The main value objective of "economic efficiency" has already been embedded in the interpretation of the concept of "monopoly." As Posner states in the introduction to *Antitrust Law*, "there is no reason why antitrust law should be used to achieve goals unrelated to or even antithetical to efficiency, such as the promotion of the small business community, a goal that, whatever its intrinsic value, cannot be achieved within the framework of antitrust principles and procedures". After taking the goal of economic efficiency as the only value goal of antitrust, the subsequent discussions of scholars on the issue of antitrust are often limited to the technical issues of whether "economic efficiency" is consumer welfare or includes the welfare of the whole society, and what theories, models, and calculations can better reflect the economic efficiency. This inadvertently obscures an important reality: The Sherman Act was not enacted solely to defend the economic interests of American society. The antitrust laws were never created solely to defend economic interests.

The notion of "populism" can provide a different way of thinking. In discussing his theory of antitrust law, Richard Posner sharply criticized the ideology of "populism". "They (populism) are all based on hostility to wealth and power, suspicion of capitalism but no endorsement of socialism" (Posner,

2003). Although Posner's views on the ideology of plebeianism are radical, he accurately captures the core of plebeianism, which is the value position of hostility to power and opposition to the concentration of wealth and economic power. Prior to the formalization of the Sherman Act, the United States was confronted with a powerful political and economic movement, The Trust Movement. The movement called for reorganizing the U. S. and world economies into giant monopolies, with each sector run by a single monopoly, unencumbered by competitors or governments (Wu, 2018, p. 19). Fans of the Trust Movement used Herbert Spencer's ideology of Social Darwinism to justify the idea that the government and the public should not prevent the monopolies from taking over the economy because, through an "industrial eugenics campaign", the weakest members of the market could be eliminated and the strongest companies freed up. weak and make room for strong companies (Wu, 2018, p. 20).

In the eyes of the vast majority of the population, this ran counter to America's cultural tradition of resistance to centralization. As historian Richard Hofstadter wrote: "From its colonial beginnings through most of the nineteenth century, [America] was overwhelmingly a nation of farmers and small-town entrepreneurs—ambitious, mobile, optimistic, speculative, antiauthoritarian, egalitarian, and competitive. As time went on, Americans came to take it for granted that property would be widely diffused, that economic and political power would be decentralized." (Wu, 2018, p. 21) Changes in the economy's structure and the emergence of monopolistic organizations that threatened the interests of small producers created a public fear of the concentration of economic power. This fear stems from the public's aversion to the phenomenon of "monopoly" itself. A monopoly implies that a few control large amounts of wealth, resources, and power. This is contrary to the political ideals of President Jefferson, the founding father of the United States, who believed that the exercise of all power was to be viewed with caution and suspicion and that complete control of power should be sought (Baldwin, 1987, pp. 62-63).

To summarize, the real danger of monopoly is not the erosion of economic efficiency or social welfare but the risk posed by the concentration of power. The purpose of antitrust is not to promote economic efficiency or increase social welfare but to safeguard economic democracy and social equality. When the Sherman Act was introduced, Senator Sherman, speaking on the floor, declared that there was no problem more dangerous than inequality of condition, wealth, and opportunity. He further noted that if such power were given to one man, it would be a kingly prerogative incompatible with their form of politics. This populist position argues that "antitrust law should aim to create a democratic economic system that promotes pluralism, opportunity, autonomy, and freedom from exploitation"(First, Fox, & Pitofsky, 1991, p. xvii). This means that the case against monopolies is just as much about "dismantling power and decentralizing decision-making" as it is about political centralization (Dewey, 1991, pp. 103 – 125). Advocates of populism believe in democratic and egalitarian values that need to be defended just as much in the economic sphere as in the political sphere.

In the half-century since the enactment of the Sherman Act, plebeianism has profoundly influenced antitrust enforcement and justice in the United States. Two U.S. Presidents, Woodrow Wilson and Franklin Delano Roosevelt, continued the plebeian position. In approving the Clayton and Federal Trade Commission Acts, President Wilson stated that the purpose of the antitrust laws was to give small producers the same freedom to succeed as large corporations and to ensure that American ingenuity and creativity were not the result of the leadership of a few. Economic efficiency was not the goal of either law and the Seventh Amendment to the Clayton Act, enacted in 1950, prohibited stock or asset purchases that had the potential to lessen competition and create monopolies. The defense logic used by lawmakers at the time was to avoid letting the nation's economy fall into the hands of a few corporations and letting decisions made by large corporations determine people's destinies (Peritz, 2000, p. 196).

For President Roosevelt, the growing oligarchy of capital would threaten democratic rule. President Roosevelt saw the implementation of the Sherman Act as a demonstration that in democracies, elected representatives ultimately have the final say and viewed the antitrust laws as an antidote to the dangers of private economic power that might compete with public power. The antitrust laws thus took on constitutional significance and were used as a new kind of restraint: to limit private power by preventing the growth of monopoly corporations from becoming something beyond the control of democratic government.

Before the legal economics revolution, American courts also demonstrated a populist stance. In 1937, Alcoa was sued by the U.S. government for nearly 140 alleged antitrust violations. After the case was appealed to the Supreme Court, Judge Hand interpreted the populist stance of the Sherman Act in his decision. In his opinion, Antitrust is not only economically motivated. For indirect social or moral implications, we might prefer to construct a system of small producers, each whose success depends on their skills and character, rather than a majority of participants whom a minority must guide.

A historical review shows that the Sherman Act was not initially enacted for reasons of economic efficiency but rather to take into account other values, such as social equality and political democracy. This also shows that the values that antitrust law needs to defend are never only economic efficiency. Next, this article will return to the platform economy and analyze the characteristics of platform-based firms but argue why economic efficiency as the only goal is increasingly inappropriate for the current antitrust framework.

2 Three properties of the platform

In order to verify whether the theory of antitrust law, which takes economic efficiency as its value objective, can respond to the current problems, this paper first needs to analyze the nature of platform-based enterprises. The nature of platform-type enterprises can be summarized into three dimensions: "platform," "data," and "algorithm." "Platform" is the most typical characteristic of platform-type enterprises regarding function, structure, and carrier. "Data" is one of platform enterprises' most critical production factors. "Algorithm" is the core driving force of platform-type enterprises in scientific and technological research and development, organization and production, and operation and sales.

2.1 Platform Property

A *platform* is a space or place that provides the elements of a transaction, such as materials and information, to both parties for their benefit. Platform-based enterprises have bilateral market and cross-network externalities. A bilateral market means that the economic network constructed by the platform enterprise can connect user groups in two or more different markets and can provide network benefits to each other. Bilateral markets can directly impact the judicial determination of monopolistic behavior. The reason is that the logical starting point for the judgment of monopolistic behavior, such as abuse of market dominance, concentration of operators, and monopolistic agreements, is to define the relevant market. However, different theories can produce very different results. In the Baidu case 2008, "the first anti-monopoly case in China's Internet sector," the Beijing No. 1 Intermediate People's Court defined the relevant market as the "search engine service market." It, therefore, held that the defendant, Baidu, did not constitute an abuse of market dominance. The court held that the defendant, Baidu, did not constitute an abuse of its dominant position in the market. However, if other Internet services markets, such as online news services and instant messaging services, were considered, a very different judgment would be reached.

Bilateral markets give rise to cross-network externalities. Cross-network externalities are network effects that arise when users on one side of a platform transaction influence users on the other side. For example, on the Amazon shopping platform, an increase in the size of both consumers and resellers will increase the business value of each other: more consumers will attract more merchants, and more merchants will attract more consumers, ultimately leading to more trading opportunities. Bilateral markets and cross-network externalities create a catalytic effect. The catalysis effect refers to the fact that while serving two or more user groups, a platform-based enterprise will actively promote transactions among different user groups to maximize benefits. In the traditional economy, users are the primary network nodes. Under the platform economy, the platform, as a direct intermediary, continuously expands its scale to promote benefit growth by connecting user groups to form interactions, matching fragmented supply and demand, and forming network nodes, thus becoming the most critical node in the transaction.

Cross-network externality leads to a natural tendency for platform-based firms to expand, and catalytic effects give platform-based firms the will to expand uncontrollably. When platform capital expands to a particular scale, it leads to the generation of platform power. In Max Weber's view, power is the ability to carry out one's own will despite opposition. The most typical power is the state's power, including the legislative, judicial, and executive powers that modern states possess within their territories. Platform-based companies have similar forms of power in their platforms: (1) the rule-making power of the platform to set the rules of the platform through code programming and terms and conditions agreements; (2) the data-control power of the platform to extensively collect and possess personal information by taking advantage of the user's dependence on the products and services; (3) the behavioral-control power to regulate the various types of subjects within the platform; and (4) the dispute-disposal power to dispose of disputes when they occur on the platform (Guo & Chen, 2019, pp. 117–118).

When a platform-based enterprise influences social and economic activities by aggregating a large number of users and even possesses power beyond the state, the antitrust regulation of the platform-based enterprise cannot be limited to economic efficiency. This is because the goal of economic efficiency is to fix market failures to realize a rational allocation of resources, thereby enhancing consumer welfare and the overall welfare of society. It is based on the premise that the market and capital will not challenge the state's power. Platform companies as "capital leviathans," on the other hand, have the potential to override the premise that public power can always intervene effectively.

2.2 Data Property

Data is an important production factor in the context of the platform economy. In the past five years, official documents issued by the Chinese government, the Federal Digital Strategy and 2020 Action Plan issued by the U.S. government, and the European Union Data Strategy issued by the European Commission all show that governments have paid attention to the importance of data. Government departments and platform-based companies clearly understand the economic benefits of data, using various technologies to collect and utilize citizens' information pervasively. Individuals' basic information, consumption habits, facial features, and so on are processed through a series of digital technologies such as big data, the Internet of Things, and artificial intelligence, and then turned into data deposited into servers on the Internet. Data can not only be combined with other factors of production, such as labor, capital, and technology, to facilitate transactions or improve production efficiency but, in some cases, can completely replace traditional factors of production.

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years, official documents issued by the Chinese government, the Federal Digital Strategy and 2020 Action Plan issued by the U.S. government, and the European Union Data Strategy issued by the European Commission all show that governments have paid attention to the importance of data. Government departments and platform-based New legal issues arise. The emergence of data monopoly makes the determination of monopolistic behavior more complicated. Under the traditional antitrust system, market dominance was defined mainly by a company's market share, which depended on sales. Nowadays, platform companies are more accustomed to adopting a free strategy to obtain a large amount of data from users or other companies and then use data-driven mergers and acquisitions to kill potential competitors. The free strategy means that the SSNIP methodology cannot define the relevant market¹ and data-driven M&A cannot be considered as market concentration.

Another type of problem is the violation of citizens' privacy rights. Privacy protection and antitrust law were not directly related in the past. However, with the development of technologies such as big data, the Internet of Things, cloud computing, etc., large-scale privacy violations tend to occur more often in the platform-type enterprises that own these technologies. The way the platform-type enterprise violates the user's privacy is precise to take advantage of its monopoly position: take advantage of the unequal status of information between the two sides of the transaction, in the user to use the Internet service intentionally designed a complex agreement, so that the user seems to be "informed consent," but do not know the premise of selling their information. Alternatively, let the user be willing to sell if there is no other choice.

Platform-based enterprises expand their business territory through data-driven mergers and acquisitions utilizing user data. When platform-based companies master massive amounts of data, they develop data hegemony. Over the past two decades, Google has used its overwhelming dominance in the general online search market to expand its dominance in neighboring markets by acquiring companies such as Android, Motorola Mobility, and a range of companies with mapping-related data. When Google bought Double Click for \$3.1 billion in 2007, the head of the European Consumer Organization said that the two companies had complementary private user data and that a merger would create a user database unmatched by any of their peers. Its powerful monopoly on online advertising resources will make consumers much less selective and make Google's advertising monopoly challenging to shake.

While platform companies continue seizing user data, users willingly sell and exchange it for unequal products and services. Jakob Jensen calls the relationship between platform companies and their users "digital feudalism" (Jensen, 2020, pp. 95–109). In the context of the medieval feudal economy, commoners had to work cheaply or for free in exchange for land possession and lordship security. The feudal economy was built based on cheap or free labor; as "digital feudal lords," companies such as Facebook, Google, and Amazon base their economic revenues on the extraction and utilization of user data. In a digital feudal empire, "digital subjects" are subject to the internal community norms set by the platforms but pay the price of surveillance and dependency. Data and privacy breaches pose security risks to individuals and societies and tip the scales against individual

¹ The SSNIP method, known as the "hypothetical monopolist test," is the classic method for defining relevant markets. The specific operation is as follows: first, based on the characteristics of the commodity to be tested, identify the market of similar substitutes and form the set of commodities to be tested. Then, assume that a monopolist controls the set of commodities to be tested and examines the market conditions after the monopolist has raised prices by a small margin. If, after the price increase, a certain number of consumers switch to other similar substitutes, this indicates that there is sufficient competition in the market, and it is necessary to increase the number of other substitutes and repeat the above steps. After consumers have stopped switching to other similar substitutes, the resulting market is the relevant market that the antitrust authorities need to determine.

subjectivity. Again, this is something that cannot be covered by economic efficiency.

2.3 Algorithms Property

Algorithms, including search, profiling, and personalized recommendation algorithms, are among the most widely used technologies in platform-based businesses. =The widespread use of algorithms generates big data killing and algorithmic complicity behavior. Big data kills familiarization, which refers to platform-based enterprises through data collection and algorithms to implement differential pricing for users accurately. For example, taxi platforms set average prices for long-term customers and use low prices to attract new users. The laws of various countries explicitly prohibit price discrimination, but in real life, big data killing is challenging to regulate. Because of the algorithm's technical complexity and its platform's exclusivity, it has become a "black box" in which users are unaware of the operation process, and it is even more challenging to detect the unfair trading behavior reached in the platform. In addition, the determination of price discrimination requires that there is "no justifiable reason." However, platforms can always use real-time supply and demand, the goods' characteristics, and other reasons to defend themselves.

Also, using algorithmic opacity is algorithmic complicity. Algorithmic complicity refers to using algorithms to create a strategic business collaboration between firms to segment markets, set prices, limit production, or limit competitive opportunities. When algorithms learn through continuous learning and repeated coordination with the behavior of market players, they may automatically form a conspiracy without human intervention. Realizing such conspiracies will be more challenging to regulate because of the lack of objective negotiation and explicit cooperation.

Big data kills, and algorithmically complicit behavior are some of the manifestations of algorithmic discrimination. When mega platform-based companies embed bias in AI at the source, they are building an unequal society on all fronts. For example, the 2019 drop taxi platform restricts women's ride time in the hitchhiking business, ostensibly to protect women's travel safety and backed by the calculation results of big data. However, in reality, it is a commercial consideration to reduce the cost of safety and security, which objectively creates the social effect of gender discrimination. Even worse than algorithmic discrimination is algorithmic manipulation. In early 2020, Cambridge Analytica, a British data company, was disclosed to have stolen the personal data of 87 million Facebook users to realize algorithmic manipulation. The company meticulously analyzes users' data and then uses algorithmic analysis to target users accurately with appropriate advertisements. For example, to expand the pool of voters who agree to retain the right to bear arms. For highly neurotic voters, the company pushes ads that appear to be about vicious criminal behavior. For voters concerned about traditional habits, it pushes heartwarming ads that show family harmony, glorifying gun ownership as a family cultural tradition passed down from generation to generation in the United States.

Algorithmic discrimination and algorithmic manipulation are localized landscapes and microcosms of the algorithmic society. The algorithmic society results in platform enterprises, especially mega-platform enterprises, using algorithms to understand everything and predict everything, analyze, control, order, and shape the population as data subjects, and classify, select, understand, and make decisions about the entire population. Its ultimate form is the mega-platform enterprise's use of algorithms to influence all citizens of society, constructing a person's digital identity, digital identity, and digital connections, which in turn constructs or restricts a person's future opportunities. Behind the act of algorithmic manipulation is a power, which in turn constitutes a discourse. This discourse manifests itself directly in constraints on the identities, wills, attitudes, and ways of thinking and behaving constraining individuals. In the nineteenth century, "homosexuality" was a cultural construct shaped by specific scientific discourses and power

relations. In the digital age, our digital identities are similarly constructed by algorithms. Our credit, online activity, and consumer orientation are not natural attributes that we are born with but are the product of algorithms and the logic of capital. Economic benefits can cover none of these elements.

3 The Theoretical Limitation of Economic Efficiency Goals

The theory of antitrust law proposed by the Chicago School, which takes economic efficiency as its value objective, has two theoretical limitations: First, there is a disconnect between objective value and subjective utility. The second is that maximization of benefits does not lead with certainty to equal distributional outcomes, and in the context of the platform economy, it risks exacerbating inequality.

3.1 The disconnect between objective value and subjective utility

The Chicago School utilized a great deal of legal economics to promote the principles of antitrust law, and its pioneer, Richard Posner, also served as a representative of legal economics. However, since its inception, legal economics has faced challenges from both internal and external perspectives. The challenge of the internal perspective is to question whether optimal decisions and allocations can be clearly and accurately calculated through economics theories, models, and methods alone. Ronald Coase once criticized the economic theories prevalent in the early twentieth century as a kind of "blackboard economics," which seemed based on rigorous and detailed reasoning but was very different from real life. However, the challenge of the internal perspective did not shake the economic efficiency goal of legal economics itself; it only prompted scholars of the Chicago School to put forward more sophisticated economic theories and models and continuously improve the calculation of the utility function.

A more robust challenge comes from an external perspective. The goal of economic efficiency follows the basic principle of utilitarianism, which Bianchin has put forward since then, and tries to "maximize the happiness" of society. The question is whether happiness should be evaluated only regarding economic efficiency. In the field of cognitive science, objective value, and subjective utility are two very different concepts; the former is based on social standards and human consensus and is not subject to the individual subjective will, but the subjective utility is the conceptual projection of each individual based on different personal experiences, life experiences, and ideologies. It cannot be measured by economic efficiency.

This article illustrates this with two examples. The first example is that the same thousand dollars may be a blessing and a lifesaver for the poor and needy but insignificant for the rich and powerful. The diminishing marginal benefit characteristic of subjective utility proves that objective value differs from subjective utility. The old Chinese proverb "A's honey, B's arsenic" reflects a similar truth. The second example is that many human activities cannot be priced in terms of economic efficiency. Although in today's society, the logic of the market is encroaching on the public sphere and replacing traditional moral debates about reproduction, children, education, health, the environment, citizenship, and the distribution of public goods can increasingly be explained by the logic of the market, not all human behaviors and activities can be "priced out." There are moral limits to the market and areas where it can serve the public good but not others, such as human dignity and the equality of members of society.

Failing to take the disconnect between objective values and subjective utility seriously makes it possible to overlook the potential hidden harms in the context of the platform economy. Platform power, data hegemony, and the algorithmic society, which arise in the context of the platform economy, are all phenomena whose harms cannot be translated into monetary units and economic

benefits. For example, the leakage hazards created by platform-based companies that monitor all aspects of citizens' lives and collect and store large amounts of data can only be calculated in terms of economic benefits in terms of the harm caused to the personal safety and life and property of members of society, but not in terms of the deprivation of subjectivity and the dumping of human dignity. Another example is that platform-based enterprises constantly intervene, manipulate, and guide people's minds in the algorithmic society. Once, we strictly defined "positive freedom" and "negative freedom" and maintained autonomy and independence in the private sphere, but nowadays, every choice of every person is regulated by the "optimal solution" provided by the algorithms of platform-based enterprises. Nowadays, every choice is regulated by the "optimal solution" provided by the algorithms of the platform companies. This seems to be a great blessing when measured only in terms of economic efficiency, as algorithms are more rational than humans and allow for more informed decision-making. However, the "unidirectional decline of intelligence" (Cao, 2021, p. 116) and the loss of subjectivity in decision-making repeatedly cannot be measured regarding economic efficiency.

3.2 Maximizing benefits but not equality

The second manifestation of the endogenous limitations of the goal of economic efficiency is that it cannot necessarily lead to the value of equality. Since the birth of utilitarian philosophy, the question of maximizing happiness without sacrificing the interests of the minority has been significant. Even if the precise calculation of the utility function shows that the result is closer to maximizing efficiency, the economic needs of some people should not be satisfied at the expense of social equity.

In the context of the platform economy, the optimization of efficiency does not mean that every member of society is equally respected, but may be at the expense of the interests of some groups, and with big data and algorithmic technology, the inequality of the phenomenon will be cloaked in the cloak of rationality. For example, in this article, in the case of DDT taxi, the prohibition of providing women with ride-hailing services at night, even after sufficient argumentation to conclude that not allowing women to take rides after 8:00 p. m. is more likely to reduce the company's operating costs and the cost of social security, there is still no way to deny the harm caused by differential treatment of women's freedom of travel. The harm caused by inequality is even more significant in the case of platform-based monopolies, where the capitalist oligopoly monopolizes access to the platforms where unequal decisions are made, and unequal outcomes are generated on a large scale and repeated many times over.

The monopoly of a platform-based company creates inequality in the actions of the members of society and their speech. Facebook (now known as Meta Inc.) is the most dominant big business in the world, and according to a survey by Germany's Federal Cartel Office, "Facebook holds more than 90% of the market based on the number of users". The Australian Competition and Consumer Commission also found that "Facebook has significant market power in several markets and that this market power is unlikely to be eroded in the short to medium term." On January 8, 2021, Facebook CEO Mark Zuckerberg said he decided to indefinitely block President Donald Trump's account because of Trump's use of the social platform to fuel the riots of people attacking the Capitol. This article does not intend to comment on Facebook's move to block Trump's social accounts but instead generates a thought in the prolongation of the event: If social platforms are the main generators of public discourse in the contemporary era, does the silencing of some of the platform's users also constitute inequality in the sense of discourse? Suppose even the president of a country is at risk of being banned by platforms to the left of his ideology. How much more so are ordinary individuals and even vulnerable groups? Not to mention that the power to ban platform users is

firmly in the hands of platform-based companies, making it difficult to rule out the possibility that the banning is motivated by corporate selfishness and commercial interests.

3.3 Posner's theory of "wealth maximization"

Richard Posner proposed the wealth maximization theory to correct the limitations of economic efficiency goals. However, the wealth maximization theory did not complete its original correction; instead, it highlighted the endogenous limitations of the economic efficiency goal even more. This paper attempts to further present the endogenous limitations of the economic efficiency goal by reviewing the wealth maximization theory.

In order to dissolve the gap between subjective utility and objective value, Richard Posner chose to use the objective amount of money that can indeed be traded in the market as the basis for calculating wealth. Since each person's emotional preferences, personal preferences, and value judgments cannot be directly weighed and compared, they are all generalized to the wealth that passes for monetary value in the marketplace to measure and judge. If we want to determine whether political society has become more virtuous and fair, it is sufficient to examine whether there is an increase in total wealth. Posner to the market mechanism as an objective mechanism to determine the value of all things high and low in order to abandon the philosophy of utilitarianism to personal subjective, unmeasured "satisfaction" to determine the value of a thing. According to Posner, subjective utility depends on how much someone is willing and able to offer. For example, suppose a rich person is more willing than a poor person to bid for and buy the same sub-pituitary glandular fluid that, when injected, promotes the growth of bones. In that case, it has more excellent utility for the poor than the rich. Moreover, if an object the seller claims to want 10 million dollars for is not available to anyone willing to pay a dime, it has zero value (Li, 2005, p. 65).

However, the theory of wealth maximization does not overcome but rather exposes the endogenous limitations of the goal of economic efficiency. On the one hand, using monetary value to measure economic efficiency is not justified. In the context of sub-pituitary glandular fluid, according to the theory of wealth maximization, even if giving the poor access to glandular fluid may allow their malnourished children to develop healthily, it is still considered appropriate to allocate it to the rich if they bid more. This would further exacerbate the exploitation of the weak by the strong in society, leading to even more significant problems of inequality. Excluding Posner's theory, the unlimited seizure of user data on platforms, disregarding citizens' right to autonomy, should also be considered justified since platforms are willing to pay a higher value for the data. In contrast, users often give it up for cheap or even free.

On the other hand, the introduction of voluntariness is said to solve the problem of individual autonomy rather than providing a veneer of legitimacy for the infringement of rights by the capitalist oligarchy. Just as platforms force users to choose consent through complex user agreements, formal voluntariness hides substantive involuntariness and substantive inequality underneath formal equality.

In the context of the platform economy, the power of platform-type enterprises to use the power of the platform to tilt at the rights of individuals, the use of surveillance to illegally collect personal information and data, and the use of algorithms to subconsciously regulate people's speech, behavior, and conduct, cannot be measured in terms of economic benefits, let alone in terms of wealth in terms of monetary units. Taking the issue of privacy invasion and data collection as an example, just because an individual citizen believes that certain information is inconsequential and a platform-based company believes that it can use big data and algorithmic technology to create more wealth, it cannot be argued that data owned by the platform is a more reasonable form of distribution. Nor can we ignore the dumping of algorithms on individual subjectivity and self-

determination just because their planning of people's food, clothing, housing, and transportation is more capable of creating wealth for individuals and society. Nor can we ignore the gap between platforms and users regarding information, data, and power, which ultimately brings about inequality in status.

4 Moving Beyond the Goal of Economic Efficiency

Based on the above arguments, the antitrust law theory proposed by the Chicago School, with economic efficiency as the value goal, does not respond to many contemporary issues in the context of the platform economy, including platform power, data hegemony, and the algorithmic society. Therefore, an effective improvement is to go beyond the goal of economic efficiency and incorporate civil rights and social equality values into the antitrust law framework. In the view of this paper, there are three areas that need to receive attention:

4.1 Limiting the powers of the platform

In the face of platform power, a pluralistic legal practice should control the size of platform enterprises. The size of a platform enterprise is reflected in the amount of capital, wealth and technology at its disposal, as well as in its influence on public affairs. Drawing on the European Union's antitrust approach to platform-based enterprises, special obligations could be added to platform-based enterprises by establishing a gatekeeper system and adjusting ex post facto accountability to ex ante regulation.

The Digital Markets Act was adopted by the EU Parliament in early July 2022 and entered into force on 1 November of the same year with the unanimous consent of its 27 members. The Digital Markets Act creates additional legal obligations for mega-platforms and requires a prior filing review of mega-platforms. First, the main points of interest are that the gatekeeper regime effectively adopts a degree of per se offense principle. It is possible to be defined as a gatekeeper by having an average annual turnover of EUR 7.5bn or more in the EU over the last three financial years or an average market capitalization or market fair value of at least EUR 75bn over the last financial year, and by providing platform services in at least three Member States. It is still difficult to calculate the data scale. However, the data obtained by enterprises mainly comes from users, so the number of users can reflect the data scale held by platform-type enterprises. Similarly, the "Guidelines for Classifying and Rating Internet Platforms" issued by the State Administration for Market Supervision and Administration of the People's Republic of China (SAMSA) also define the size of a platform in terms of the number of active users on the platform, and the "Guidelines for Implementing the Main Body Responsibility of Internet Platforms" also establishes "equal governance" and "calculation of the law and regulations" for platform-type enterprises.

The legislative approach of the EU Digital Marketplace Act is more in line with the characteristics of platform-based enterprises and the current context. Establishing the status of "gatekeeper" for some platform enterprises and making them bear additional special obligations can not only control the scale of platform enterprises and prevent them from utilizing cross-network externalities and matchmaking effects to achieve capital expansion without the need to do so but also avoid the use of over-intense means such as directly splitting up and dismembering large enterprises, which have been used in the history of the United States. In 1898, the Rockefeller Mobil Oil Company, which controlled nearly 90% of oil transportation, was eventually split by the U.S. government into 34 competing oil companies. In 1949, the then U.S. Attorney General Thomas Clark filed an antitrust lawsuit against AT&T for monopolizing the telephone market with the U.S. telecoms giants, and in the face of the threat of being split and dismantled, AT&T chose to open up transistor patents and

encourage IBM, IBM, and IBM to use the patent licensing of the transistor as a means of expanding their business. Patent licensing prompted IBM, Texas Instruments, and other companies to participate in the semiconductor business. In 2000, Microsoft was also ruled to split the company in two and not to merge for ten years]. The momentum of the digital and platform economies has also come to be maintained. In addition, the gatekeeper system sets up front-loaded obligations for platform-based companies, shifting from the after-the-fact pursuit of offenses to ex-ante regulation. This shifting is in line with the characteristics of platform monopolies, which tend to cause significant negative social impacts once they expose potential risks to actual damages, such as large-scale data leakage and discriminatory algorithms.

4.2 Dissolving data hegemony

In the face of data hegemony, a pluralistic legal practice should facilitate data flows. In order to eliminate data hegemony, reference can be made to the Essential Facility Doctrine in the antitrust practices of the European Union and the United States. The Essential Facility Doctrine means that when a monopolist enjoys bottleneck control over raw materials or resources necessary for competition, the monopolist must share the facilities with competitors in the downstream market. The earliest application of the essential facilities doctrine can be traced back to the 1912 United States v. Terminal Railroad Association of St. Louis, where Terminal Railroad controlled the railway on the Sisibi River in St. Louis and refused to open it to competitors. The railway bridges were essential to the operation of other railways in the region, and the absence of rail transport would have severely impacted operations. In particular, it is evident that for some of the essential means of production, if the path of access is not provided to other operators, the possibility of their participation in economic activities will be completely stifled. In the context of the platform economy, some of the core data may constitute "essential facilities" that serve as a bridge for other small and medium-sized enterprises (SMEs) to compete in the market.

4.3 Towards algorithmic good governance

In the face of the algorithmic society, a pluralistic legal practice should strengthen the subjective status of human beings, safeguard the subjectivity and self-determination of citizens, and thus realize algorithmic good governance. A society of algorithmic good governance needs to regulate privacy infringement, discrimination, and manipulation by platform-based enterprises using algorithms.

First, it regulates privacy infringements committed by platform-based companies using algorithms. The right to privacy, which combines property and personality attributes, originated from the right to prevent the publication of art in intellectual property, and it defends a person's inner peace. In the context of the digital economy, citizens will lose their sense of security and control over their thoughts and behaviors when they feel as if they are transparent and under surveillance. Legislation should give users greater control over their data to avoid uncontrolled surveillance. Platform companies should provide users with adequate explanations of data acquisition and application, such as using pop-up windows to inform users of data acquisition and tracking, and privacy protection should be the default setting in applications and websites provided by platform companies. Data tracking by merchants should be a fully informed choice for users to release actively, rather than a manual request to prohibit. Users should be required to set an overarching privacy option when accepting platform services, whereby they can refuse all other requests for access to and tracking of their personal information, and platform-based businesses should not have the right to collect personal information beyond what is necessary for the

operation of their products. The user also has access to the data collected about him by the enterprise and the right to delete this information.

Secondly, it regulates platform-based companies' discriminatory and manipulative behavior using algorithms. Pluralistic legal practice requires that all citizens be treated equally in economic activities. Equality in this context is not only economic equality but also equality in the political and social sense. Taking China as an example, at present, China's focus on the phenomenon of algorithmic discrimination is mainly on price discrimination and laws and regulations such as the Personal Information Protection Law, the Anti-Monopoly Guidelines in the Field of Platform Economy, and the Regulations on the Administration of Algorithmic Recommendation of Internet Information Services, combined with the existing Consumer Rights and Interests Protection Law, the Price Law, the Electronic Commerce Law, and the Anti-Monopoly Law, have formed a preliminary regulatory framework for the areas of consumer protection and fair competition. The regulatory framework for consumer protection and fair competition has been formed (Zhang, 2022, p. 203). Some scholars have also proposed that the understanding of monopoly agreements and price discrimination should be expanded to include algorithmic discrimination and algorithmic conspiracy in the framework of antitrust law (Zhou, 2020, p. 40).

This paper also needs to make a defensive argument. Both as to whether privacy infringement, algorithmic discrimination, and algorithmic manipulation need to be regulated within the framework of antitrust law. This paper responds that it is indeed necessary. The reason is that in the context of the platform economy, privacy infringement, algorithmic discrimination, and algorithmic manipulation have a natural affinity with the monopoly position of platform-based enterprises. When a platform-based enterprise is in a monopoly position, it is very likely to engage in privacy infringement, algorithmic discrimination, and algorithmic manipulation. When a platform-based enterprise can engage in these behaviors, it has demonstrated its market power to a certain extent. Moreover, the social harm caused by privacy infringement, algorithmic discrimination, and algorithmic manipulation is even more severe when a platform enterprise in a monopoly position commits such acts. Facebook, for example, has taken advantage of its monopoly on social products to collect users' personal information on a wide scale and then engaged in algorithmic discrimination and algorithmic manipulation, which seriously endangered the public interests of society and national security and stability (U.S. Department of Housing and Urban Development, 2019).

5 Conclusion

The antitrust framework centered on economic efficiency, as advocated by the Chicago School, is increasingly inadequate to address the challenges posed by platform-based enterprises in the modern digital economy. This paper has examined three key properties of platform companies - their platform nature, data-centric operations, and algorithmic capabilities - to illustrate how these characteristics create new forms of power and potential for harm that extend beyond traditional economic concerns. The platform property allows companies to amass unprecedented market power and influence, often challenging the very premise of effective state intervention. The data property raises serious privacy concerns and enables new forms of market manipulation. The algorithmic property introduces risks of discrimination, manipulation of user behavior, and the gradual erosion of individual autonomy.

Furthermore, this paper has highlighted two fundamental limitations of the economic efficiency goal in antitrust theory. First, there is a disconnect between objective value and subjective utility, which means that not all harms caused by platform companies can be adequately measured or

addressed through economic metrics alone. Second, the maximization of economic benefits does not necessarily lead to equitable outcomes and may, in fact, exacerbate existing inequalities in the digital age. The review of Richard Posner's "wealth maximization" theory further underscores these limitations, revealing how a narrow focus on monetary value can justify problematic allocations of resources and power, potentially legitimizing the infringement of individual rights by powerful platform companies.

In light of these issues, it is clear that antitrust regulation in the platform economy must evolve beyond the singular goal of economic efficiency. A more comprehensive approach is needed - one that considers the broader societal impacts of platform power, protects individual privacy and autonomy, and promotes democratic values in the digital sphere. This may involve revisiting the original, more pluralistic intentions behind antitrust legislation and developing new frameworks that can effectively balance economic considerations with other crucial social and political values. Such a concept of antitrust law is not so much a product of novelty as a return to history. At its inception, antitrust law had the sole value objective of promoting economic efficiency and the ideal vision of achieving social and political equality and safeguarding civil rights. Here, a return to the history of the enactment of antitrust laws plays a role.

As platform companies continue to shape our economic, social, and political landscapes, antitrust policy must adapt to ensure it can effectively protect competition, individual rights, and the foundations of democratic society in the digital age. This will require ongoing interdisciplinary research, policy innovation, and a willingness to reconsider long-held assumptions about the goals and methods of antitrust enforcement.

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