

Standardized development of platform economy in the context of anti-monopoly——Taking Alibaba as an example

Mengjuan Wu ^{1,*}

¹ School of economics, Anhui Finance and Economics University, Bengbu, China

* Corresponding Author Email: 15020340214@xs.hnit.edu.cn

Abstract. In the era of digital economy, the platform economy has developed rapidly and has gradually become an important growth point of the market economy. The resulting platform monopoly problem is also a global challenge to anti-monopoly regulation. This paper takes the e-commerce platform of Alibaba Group as the case study object, and deeply thinks about the current state of the platform economy and the necessity of the platform economy regulation. Discuss how Alibaba's e-commerce platform can achieve sustainable development in the future under the background of anti-monopoly, hoping to enhance the adaptability of e-commerce enterprises to anti-monopoly law, strengthen industry self-discipline, drive optimization and upgrade through competition, achieve innovative development, and promote a win-win situation for harmonious development trend.

Keywords: platform economy, anti-monopoly, e-commerce platform.

1. Introduction

In recent years, as a result of the development of Internet technology, the cross-border integration of different industries such as big data and cloud computing has reduced transaction costs and search prices. As a representative of the digital economy, the platform economy has developed rapidly and has gradually become an important growth point of the market economy. The Internet platform economy's explosive growth can alleviate resource misallocation, optimize consumption structure, change consumption patterns and improve consumer experience, thereby creating more economic value. According to the "China Internet Economic Impact Report (2021)", the entire value of national e-commerce transactions was 37.21 trillion yuan in 2020, or 32.53% of the country's GDP¹.

However, due to the operating mode and typical characteristics of the platform economy, it is simple to create a variety of risks and hazards, such as price discrimination, industrial concentration, and data concentration, giving the Internet platform a monopoly-like position in the market. Platform monopoly restricts market competition, worsens the competitive environment, and industry chaos emerges one after another. Anti-monopoly regulation is conducive to rectifying industry chaos and stimulating the vitality of market innovation. Especially in the face of a new monopoly under big data technology, anti-monopoly supervision is required to be refined and specific. This challenge is also global. The European Union has imposed high antitrust penalties on companies such as Google, Apple, and Qualcomm since 2017, the U.S. Congress released an antitrust investigation report in October 2020, and the U.S. Department of Justice and the Federal Trade Commission have filed litigation in response to Google and Facebook's monopolistic conduct respectively. In formal anti-monopoly investigation, The State Administration for Market Regulation of China fined Alibaba Group Holding Co., Ltd. 18.228 billion yuan on April 10, 2021, for its monopolistic behavior[1]. Various countries attach great importance to the monopoly of Internet platforms, promote the platform economy's standardized development and stop the capital markets from expanding in an erratic manner.

China's anti-monopoly monitoring of the platform economy has been strengthened as a result of the Ali monopoly incident's anti-monopoly punishment, and it is an important issue for companies to actively regulate themselves, combat vicious competition and monopoly behavior, and further stimulate corporate innovation. In view of the problems of platform monopoly and platform

governance and a series of new challenges faced by anti-monopoly policies in the digital economy era, the practice of promoting the platform economy should be accelerated, so that entrepreneurs and managers can have a deeper understanding of the microstructure and operating mechanism of platform enterprises, so as to encourage platform firms' healthy development more effectively. This paper is divided into the following parts: firstly, based on the current research situation at home and abroad, the benefits and drawbacks of the platform economy and the monopoly of Internet platforms are examined economically. And then under the background of anti-monopoly, the necessity of regulating the platform economy is deeply considered, and finally, the e-commerce platform under Alibaba Group is taken as the case study object, and relevant suggestions are put forward on the future development of Alibaba's e-commerce platform, and how to encourage the wholesome and long-term growth of e-commerce businesses.

2. Literature review

The platform economy has an unparalleled impact on the evolution of the entire economy and society in the age of the digital economy, and it has always been a hot issue discussed by economists at home and abroad. Nick Srnicek first began to take digital economic platforms as research objects. He deeply analyzed the technical background of the rise of digital platforms, as well as the process of data capitalization and the main types of digital platforms². Ye (2016) pointed out that as the platform economy grows, it demonstrates traits like hierarchy, low-cost replication, cooperation and division of labor, openness and externality, which encourage innovation and the overall transformation and development of the economy and society[2]. Sun (2017) found that the e-commerce trading platform considerably increased customer searches while diminishing market search expenses, which had a substantial impact on the price of the retail market[3]. Li (2019) pointed out that the transition of both new and old kinetic energy is now being aided by the digital economy due to its high growth rate[4]. Xie (2019) believes that in order to integrate social production, distribution, exchange and consumption across time, location, departments and borders, the platform economy depends on effective data collecting and transmitting technologies, advanced computer capacity, and a digital platform. Activities that fervently support the growth of social productive forces[5].

At the same time, the platform economy has also intensified industry competition and caused monopoly problems, which also put forward higher requirements for government supervision. Su (2018) proposed that the high mobility of small and medium-sized Internet platform enterprises entering and leaving the market and the relative stability of the monopoly position of large Internet platform enterprises jointly formed the industry-specific "layered monopoly competition" market structure[6]. Xiao (2019) pointed out that while the platform economy injects new kinetic energy into economic development, it also causes various prominent social problems. The phenomenon of lack of social responsibility and alienated behaviors frequently appears in the platform context, and effective governance is urgently needed[7]. Qu's (2019) research shows that the strategic behavior of platforms in a competitive environment will exacerbate information asymmetry in the market[8]. Wu (2021) believes that Chinese government regulatory authorities urgently need to improve the relevant legislation on platform responsibility and clarify the punishment measures for violations of obligations, establish an institutional framework corresponding to responsibilities and scales, actively implement platform obligations, introduce a digital service coordinator system to reduce Monopoly conflicts in the digital market, consolidate the construction of anti-monopoly institutions and improve the level of anti-monopoly law enforcement capabilities[9].

As the topic of Internet monopoly gradually heats up, a new wave of discussions on the monopoly of Internet companies has been launched in academia. Many emerging Internet industries, such as ride-hailing platforms, group buying markets, and vertical e-commerce, have gradually entered the stage of oligopoly. Bai (2020) pointed out that the platform industry has become the main engine

leading China's economic growth. The means of access discrimination, information distortion and overlord clauses used not only damage the welfare of consumers but also affect the healthy development of the industry[10]. Zhao (2019) believes that the nature of monopolistic competition of platform companies is difficult to determine and also brings corresponding regulatory difficulties. A series of new attributes require the establishment of a flexible, diverse and multi-governance hybrid regulatory model[11]. Duan (2020) proposed a new framework for governing the state in the data age: a collaborative governance system with the concept of service-oriented government and the path of data openness and sharing, including the government, enterprises, social organizations and other parties[12].

Although many scholars have conducted a comprehensive analysis of the monopoly problem of the platform economy and given some specific suggestions, the existing research rarely studies the anti-monopoly problem of the platform economy from the perspective of typical cases. This paper selects a typical case of China's platform economy anti-monopoly - the Ali monopoly incident, and conducts in-depth research on the causes, manifestations and models of platform economy monopoly, and puts forward corresponding suggestions from the perspective of platform economy practice.

3. Theoretical analysis on platform economic monopoly

3.1. Theories related to platform economic monopoly

3.1.1 The theoretical basis of platform economy

Platform enterprises have the characteristics of bilateral markets, which are significantly different from the economic characteristics of traditional unilateral markets, and have cross-network externalities. The platform acts as a link to connect users on both sides, provides corresponding services to users on both sides, guides or promotes transactions between two or more customers, and charges a certain service fee at the same time. In the competition of platform enterprises, the key competitive factor is network scale, and the utility obtained by users using the platform largely depends on the number and scale of end users on the other side[13].

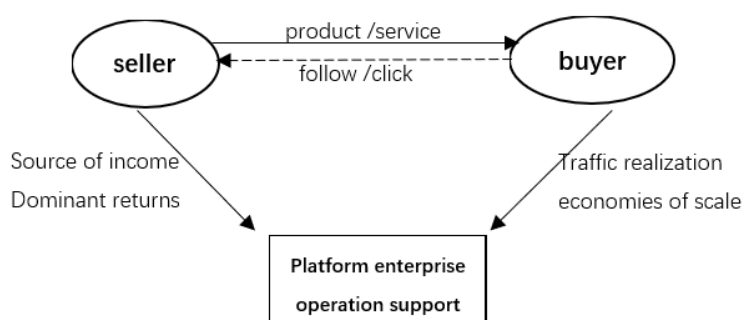


Figure 1. The microstructure and value modules of the platform economic model

Due to the different strengths of cross-network externalities among users, strong cross-network externalities among users on one side can encourage more individuals to use the platform, so the platform adopts differential pricing for users on both sides, that is, the platform's "asymmetric pricing". Platforms tend to charge lower service fees or even no fees for users (buyers) on the side with strong cross-network externalities, prompting the platform to access more users, thereby attracting the side with lower cross-network externalities Users (sellers) access, and a certain percentage of commissions are charged to merchants who access the platform.

3.1.2 Main manifestations of platform economic monopoly

3.1.2.1 Data Monopoly

The digital platform type generates a large amount of user and transaction data information due to a large amount of user traffic, and this information is owned by the platform. Data is a new type of

manufacturing material in the age of the modern economy, and it offers the platform a number of advantages. Once these data are actively used by the platform for unfair competition, it will damage the welfare of users at both ends of the platform. On the one hand, excluding new market entrants will form a monopoly power. On the other hand, there is also the use of massive user data and transaction information on the platform for algorithm control, and there are price manipulation behaviors such as the "killing" of big data.

3.1.2.2 Abuse of dominant market position

When the market share owned by the platform is large enough, if the leading companies of the platform unilaterally pursue profit maximization and do not abide by the rules and regulations, they may abuse their market position. For example, forcing platform merchants to "choose one from the other" reduces the voice and choice of other participants on the platform, and reduces the enthusiasm of other companies to innovate. As well as using market dominance to promote itself first in search results while blocking competitors' products[14].

3.1.2.3 M&A

The purpose of large-scale platform mergers and acquisitions is not to look at the economic value of the new platform, but to maintain its own market position, forcing the controller of the new platform to actively withdraw from the market through acquisitions and eliminating potential competitors. At the same time, using leverage advantages to consolidate its dominant market position, the gap with existing competitors will be further widened, and it will be more difficult for small and medium-sized platforms to subvert large platforms that have established ecosystems. The ultimate result of hunting-and-kill mergers and acquisitions is that new companies often can only be used as the head platform to improve a certain subdivision technology or micro-innovation, but it is difficult to obtain enough financing for subversive innovation, which is not conducive to innovation and development[15].

3.2. Measurement of anti-monopoly in the platform economy

It is challenging to accurately define the relevant market where a platform-based firm is located in the age of the digital economy, and it is also difficult to identify whether a platform is abusing its market position. In a traditional unilateral market, it is relatively easy to define the relevant market in which an enterprise involved in abusing its dominant market position is located. Generally, the "Lerner Index" can be used to measure monopoly power. P is the price, MC is the marginal cost, and L is the Lerner index, that is, $L=(P-MC)/P$, $L \in [0,1]$. The level of industry rivalry is assessed by calculating the degree of variation between price and marginal cost under the presumption that manufacturers aim to maximize profits. In an imperfectly competitive market, $P \neq MC$, $L \neq 0$, the larger the L , the higher the monopoly power of the firm and the less sufficient market competition[16].

In the platform economy, it is necessary to effectively define the relevant market in which a certain platform-type enterprise is located, and conduct anti-monopoly investigations based on a certain market in a relevant field where a platform has a monopoly dispute. At the same time, it is not easy for the platform to measure the Lerner index of users on both sides. Even if it can be measured, it cannot be judged by a separate Lerner index. The anti-monopoly supervision of the platform economy faces many difficulties.

4. Case analysis

4.1. Background Introduction

Due to suspected monopolistic behavior such as "choose one from two", Ali received a fine of 18.228 trillion yuan, or 4% of his sales in China for the year, which is also the largest antitrust fine issued by China to a company so far. The State Administration for Market Regulation once again emphasized that it is not acceptable to implement monopolistic agreements and take use of market

dominance to obstruct or restrict market competition using technical means, platform regulations, data, and algorithms.

“Choose one of two” used to be an important means for Ali to suppress competitors and control platform sellers. Since 2015, Ali has imposed a "choose one" condition on platform merchants using its dominating position in the e-commerce business, preventing platform merchants from creating storefronts and taking part in marketing campaigns on rival platforms, and also including "Hema Xiansheng" refusal. A series of unfair competition behaviors, such as collecting cash, acquiring Ele.me, infringing copyright, maliciously deleting rival software and blocking SF Express[17].

4.2. Analysis of the development of Ali's e-commerce platform under the anti-monopoly regulation

The impact of the anti-monopoly law on the development of e-commerce companies is two-way, with both opportunities and challenges. Anti-monopoly regulation is based on the national strategic will and emphasizes the compliance with basic principles such as creating a fair competition order, strengthening scientific supervision, stimulating innovation and creativity, promoting the healthy development of the industry, and safeguarding the legitimate interests of all parties. If Alibaba’s e-commerce platform wants to win more living space and development space, while actively cooperating with government review, it also needs to objectively examine the development environment of the industry, firmly grasp the service center, output personalized services, upgrade customer experience, and generate product brands In order to enhance user stickiness under the mandatory supervision of anti-monopoly law, avoid falling into the vicious situation of homogeneous competition, and seek new profit growth points.

4.3. Case analysis

The platform's bilateral demand groups are the key to the operation of the platform's business model. Only by playing an intermediary role to connect multiple parties and maintain the supply and demand relationship of all parties can we better provide high-quality products and services for users on both sides. Alibaba uses the combination of e-commerce and big data to effectively connect buyers and sellers. At the same time, it integrates social mobile, media entertainment, cultural industry and logistics industries, expands its business scope, builds an all-around multi-functional enterprise ecological network, and gradually builds A platform business model centered on serving users.

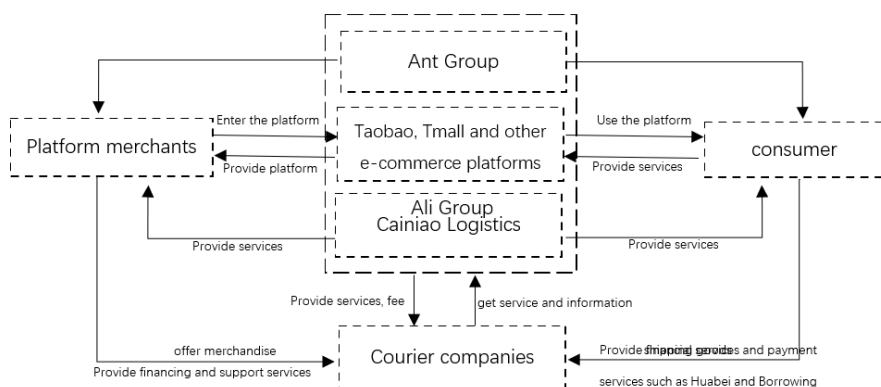


Figure 2. Alibaba e-commerce platform model

Through gradual expansion: information exchange - trading platform - integrity assurance - payment intermediary - search tool. Alibaba has created an organic unity that obtains business information through information platforms and search engines, communicates and negotiates through trading platforms, and completes secure payments through Alipay. These functions complement each other and establish Alibaba's significant competitive advantage[18].

Based on the characteristics of the platform model that connects multiple parties and serves users, it is determined that in order to meet the diversified needs of users, the diversification of the

investment scope is bound to be required. Alibaba implements concentric diversified investment, and its investment scope is relatively wide, involving different fields and developing software services, online advertising, Internet finance, mobile medical and other fields, and constantly improving the e-commerce platform[19]. At the same time, in order to control risks, the investment methods are mainly indirect investments with flexible funds and lower risks, which can also be reflected in the financial statements of enterprises. On the one hand, it can reduce the outflow of funds, and the platform companies can always maintain sufficient cash flow to prepare for good investment opportunities in the future. Obtain more advantageous resources, shorten the investment cycle, reduce investment risks, and bring considerable benefits to Alibaba.

Table 1 Alibaba Assets

Data source: Alibaba's 2022 financial report

In RMB Mn	2021	2022	YoY%
Cash and cash equivalents, restricted cash and escrow receivables at end of period	356,469	227,353	-36%
Short-term investments	152,376	256,514	68%
Net cash	359,692	342,523	-5%
Free cash flow	172,662	98,874	-43%
Capital expenditure	41,450	53,309	29%
(loss)income from operations	89,678	69,638	-22%

At present, Alibaba's e-commerce platform chooses to develop an application (APP) matrix strategy. In addition to the traditional Taobao and Tmall, it continues to expand and develop APP businesses such as Taote and Taocaicai to create personalized, immersive and interactive services for different consumption scenarios and formats. experience, attract and retain user groups with different backgrounds and shopping behaviors in the group's business ecosystem. Taobao and Tmall have become an important part of Chinese consumers' daily lives, and about 98% of AACs spending over RMB 10,000 on Taobao and Tmall in FY21 will remain active in FY22. The cost-effective product platform Taote has introduced more first-time shoppers to the group's e-commerce ecosystem. In the fiscal 2022, Taote's AAC reached a milestone of over 300 million. More than 20% of Taote's annual active consumers did not shop on Taobao or Tmall in fiscal 2022. Community business platform business Taocaicai has more than 90 million AAC in fiscal year 2022, more than 50% of which is the first time to purchase fresh products on various platforms of the group.

Table 2 Profits of Alibaba's China Commercial Division

Data source: Alibaba's 2022 financial report

In RMB Mn	2021	2022	YoY%
Customer management	304,543	315,038	3%
Direct sales and others	182,818	260,955	43%
China commerce wholesale	14,322	16,712	17%
Revenue	501,683	592,705	18%
Antitrust penalty	18,228		

Alibaba is committed to high-quality growth, serving high-quality consumer groups, continuously building high-quality digital business infrastructure, and developing the broad potential of cloud computing through high-quality technological innovation. Actively promote service upgrades and develop an application (APP) matrix strategy, which not only attracts more user groups and meets the shopping needs of different consumers, but also optimizes logistics costs by enhancing supply chain capabilities, improving consumer experience and bringing sustainable economic benefits.

5. Conclusion

To sum up, the impact of anti-monopoly regulation on the development of e-commerce platforms is multi-faceted. In addition to marking the country's determination to regulate the platform economy, it has also played a role in reshaping the industry ecology, stimulating innovation vitality, and protecting small and medium-sized enterprises. Active promotion. The goal of anti-monopoly regulation is to promptly and timely control platform activity and uphold the competitive order of the market, not to impede the platform's economic progress. At the same time, it also brings great opportunities to small and medium-sized enterprises, and can have the opportunity to impact the monopoly position of large e-commerce enterprises, thereby stimulating the innovation and development vitality of the entire industry, and creating a healthy market competition environment. To seek development, e-commerce platforms in the context of anti-monopoly should strengthen the improvement and enforcement of anti-monopoly laws, strengthen industry self-discipline, and drive optimization and upgrading through competition to achieve innovative development. Strengthen its comprehensive strength through fair competition, concentrate more high-quality resources to upgrade and standardize services to meet the needs of consumers and promote a harmonious development trend of win-win for all parties[20].

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