

# Anti-monopoly Regulation in Digital Economy Era

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## Abstract

This paper expounds the development background and characteristics of digital economy, and combs the existing anti-monopoly strategies. The rapid development of digital economy promotes the formation of digital platform, and the economic characteristics of digital platform determine its easy to form a monopoly position. At present, countries around the world are strengthening anti-monopoly regulations on the digital economy. In 2021, China will accelerate the revision of the Anti-monopoly Law and further improve the basic legal system of anti-monopoly, which is of great significance to strengthen anti-monopoly and prevent the disorderly expansion of capital and maintain a fair competition market environment.

## Keywords

Digital Economy; Platform Economy; Anti-monopoly Regulation.

## 1. Development of Digital Economy

### 1.1. Definition and Development Course of Digital Economy

With the continuous innovation of information technology, the new generation of information and communication technologies such as big data, artificial intelligence and Internet of Things have given birth to the digital economy and promoted its rapid development. The G20 summit in Hangzhou in 2016 published "G20 digital economy development and the cooperation initiative to digital economy is defined as" to use digital as a key factor of knowledge and information, with modern information network as the important carrier, with the effective use of information communication technology as an important driver of efficiency improvement and optimization of economic structure of a series of economic activities".

The foundation of digital economy is the development of big data. Gartner gave a clear definition of "big data" in his research report in 2001. He believed that big data is a diversified information asset, which needs new processing mode to make it have stronger decision-making power, insight discovery ability and process optimization ability. In May 2011, McKinsey Global Institute defined "big data" in its report as a collection of data so large that it is far beyond the capabilities of traditional database software tools in acquiring, storing, managing and analyzing data. It is characterized by massive data scale, fast data flow, diverse data types and low value density. In April 2012, SPLUNK became the first company to go public based on big data processing. In the same year, the UK established the world's first Institute for open Government Data and Information. In 2013, Australia, France and other countries successively identified the development of big data as their national strategies.

### 1.2. Current Situation of China's Digital Economy Development

China's big data research also started in 2012. Chinese Internet enterprises and traditional operators, led by Alibaba, Tencent and Baidu, have started the development and application research of big data. In 2014, China first mentioned the concept of "big data" in its government work report. In early 2015, Premier Li Keqiang put forward the "Internet Plus" government work action plan, aiming to promote the development of Internet, cloud computing, big data, Internet of Things and other industries to drive the upgrading and transformation of the

current manufacturing industry. At the fifth Session of the 12th National People's Congress in March 2017, Premier Li Keqiang said in his government work report that China will accelerate the growth of the digital economy, which will benefit businesses and the people. This is the first time that "digital economy" has been written into the government work report, and the government work Report also proposes to expand information consumption such as digital home and online education, promote e-commerce and express delivery into communities and rural areas, and promote the integrated development of physical store sales and online shopping (Liu Chuan, 2020).

On the overall level, China's digital economy is developing rapidly, with its growth rate ranking first in the world for three consecutive years. Data showed that the scale of China's digital economy reached 31.3 trillion yuan in 2018, accounting for 34.8% of GDP. It is estimated that by 2030, digital economy will account for more than 50% of GDP, and China will fully step into the era of digital economy. The development of digital economy, such as sharing economy, big data economy, platform economy, algorithm economy and artificial intelligence economy and other new forms of digital economy, has made various market elements achieve efficient distribution and full growth, and the overall economic efficiency of the transitional society has been significantly improved. It can be seen that the new format of digital economy has become an important fulcrum for the high-quality development of China's economy and society in the new era, which has attracted extensive attention from all walks of life. It has not only brought new challenges to the socialist economy ruled by law, given new connotations, but also expanded the new practice mode of specific fields.

Digital economy relies on efficient processing of mass data information, accurately identify diversified demands and realize the fast matching supply and demand, greatly reduce the transaction cost advantage, bring to the market and consumers more and more innovative products and services, and foster new momentum of economic development, jobs are playing an increasingly important role. More importantly, in the critical period of China's industrial structure upgrading, the new production technology and business model of digital economy will provide important reference for the digital transformation and upgrading of traditional economy, and the technology spillover effect of digital economy on traditional economy will help promote the upgrading of China's overall industrial structure. In today's digital era, the development of digital economy has become the embodiment of a country's competitiveness. It has become a national strategy to vigorously develop digital economy and make traditional economy seize the opportunity of digital transformation and upgrading. However, the digital economy with strong technical support may bring a huge impact on the traditional economy while bringing technology spillover to the traditional economy. The potential problems caused by the digital economy operators with strong market dominance are attracting more and more attention. The absolute technological advantage of digital economy compared with traditional economy enables it to better meet the diversified demands of consumers with lower transaction costs. At present, it can be seen that in some fields, when digital economy emerges and enters the market, a large number of consumers rapidly shift from the traditional economy to the digital economy. The traditional economy is greatly impacted by the digital economy, and even faces the crisis of being marginalized and squeezed out of the market. This has also led to the contraction of traditional industries and the formation of a significant income gap between traditional and digital economy workers and other social hidden dangers.

## **2. Characteristics and Performance of Monopoly in Digital Economy Era**

China has become a global power in digital technology investment and application. In recent years, thanks to technological progress, business type innovation and consumption upgrading, a large number of digital platform enterprises have risen rapidly and penetrated into more and

more industries. While the emerging digital platform greatly improves the efficiency of economic operation and changes the way of social life, it also brings some new regulatory problems.

The platform ecosystem, with platform enterprises as the main body and cloud computing, blockchain and other intelligent technologies as the support, can efficiently and scale match scattered demand and supply, becoming the sum of all economic activities and economic relations in the era of Internet economy, namely platform economy. Platform economy is a very important part of the digital economy, which is conducive to creating diversified business models and improving the efficiency of economic operation. The sustainable and healthy development of platform economy is of great significance to cultivating new economic drivers, increasing social welfare and promoting mass entrepreneurship and innovation. However, the benefits of platform economy are nonlinear, have network effects and easily form market monopoly, which causes great difficulties to supervision. The asymmetric bargaining behavior of platform economy model also makes it difficult to protect the rights and interests of platform customers. At present, due to the disorderly expansion of capital, the Internet platform economy has formed an oligopoly pattern, and there are many potential risks. Digital transformation mechanism and platform mechanism are the basis of the operation of digital economy, and the acceleration mechanism and universal benefit mechanism are the advantages of digital economy. Under the action of these unique mechanisms, digital economy shows characteristics different from traditional economy, such as sharing immediacy, infinite indexability, trans-boundary balance, diversity and precision. It not only improves the level of social productivity, accelerates economic growth and wealth accumulation, but also brings impacts and challenges to traditional economic theories.

In recent years, large platform companies have been acquiring small and medium-sized technology start-ups and closing them down after the acquisition. This behavior is known as "killer merger" in order to eliminate future competitors and target data monopoly. The dominant force in the digital market is gradually forming, and the platform industry is gradually taking on the development pattern of oligopoly. Large platform enterprises interfere in the process of market investment and innovation by constructing "kill zones". Killer mergers and acquisitions have a significant negative impact on competition and innovation, such as reducing consumer welfare and squeezing the living space of small and medium-sized start-ups. Killer mergers and acquisitions are difficult to be recognized and monitored by anti-monopoly authorities because the target enterprises are relatively young, the relevant market is difficult to define, and most of the mergers and acquisitions are not horizontal. To protect market competition and innovation environment, regulators can by adjusting the threshold of consolidated supervision, attaches great importance to review internal document, by using the counterfactual scenarios, dynamic digital marketing, strengthen international cooperation to strengthen the regulation of killer platform enterprise mergers and acquisitions, protect consumer benefits and innovation, and the number of building a healthy and orderly market competition environment.

Moreover, as digital economy is usually characterized by strong network effect and marginal cost approaching zero, once digital economy enters a market and occupies a considerable market share, it will be difficult for potential entrants outside the market to enter the market. Even if they can enter the market, they will also be difficult to form a strong competition with incumbents. In addition, Internet platform operators abuse the dominant position of market monopoly, merchants' confusion and false publicity, and the use of digital technology to implement unfair competition behavior are also some specific manifestations of platform monopoly.

### 3. Difficulties and Strategies of Anti-monopoly in Digital Economy Era

#### 3.1. Difficulties of Anti-monopoly

As a new economic format and production organization mode, platform economy plays an important role in optimizing resource allocation, promoting economic diversification and integration, promoting industrial upgrading and cross-border integrated development. The rapid rise of a large number of digital platform enterprises in China has greatly improved economic efficiency and social welfare, but also brought many new governance challenges. In recent years, there have been many anti-monopoly disputes against digital platform oligarchs. With the development of digital economy, platform abuse has both new manifestations and new forms of abuse regulated by traditional anti-monopoly law. For example, they abuse the right of platform management, restrict trading and give preferential treatment to proprietary business, abuse the control of data and algorithm, exclude or restrict competition, unreasonable implementation of mergers and acquisitions or internal integration are all typical manifestations of monopoly violations.

#### 3.2. Strategy of Anti-monopoly

In the face of platform monopoly behavior represented by predatory pricing, "choose one or the other", cross-border monopoly, merger and acquisition between platforms, algorithmic collusion or discrimination, it is not only more complicated to accurately judge, but also more controversial. In the process of anti-monopoly law enforcement, it is difficult to choose the scope and timing, obtain evidence, legal relief is not timely, law enforcement team construction lag and other challenges can not be ignored.

At the same time, the zero-survival zone strategy of large digital technology companies and the impact of the acquisition of start-ups by large companies on competition also deserve the attention of antitrust law. The regulatory problems caused by platform monopoly are prominent, and the traditional anti-monopoly analysis standards, law enforcement methods and regulatory systems need to be improved. It is an urgent problem for anti-monopoly jurisdictions around the world to properly deal with the relationship between innovation and development of digital economy and regulation of platform monopoly behavior.

At present, the anti-monopoly regulation of digital economy is faced with the dual challenges of the original economic theoretical analysis and the current legal practice. It is a particularly prominent problem in digital economy whether the algorithmic behavior of platforms is a wise unilateral market response of enterprises to maximize profits or the result of illegal collusion among competitors. Traditional antitrust analysis framework to general equilibrium theory as the theoretical foundation, its static, one-way judgment standard is difficult to apply to is characterized by dynamic, crossover of digital economy, regulation practice is hard to get rid of the relevant market definition, market dominant position determination, abuse of dominant market position determination and mutual agreement, etc.

In the face of the value conflicts in the anti-monopoly law enforcement in the era of digital economy, we should adhere to the direction of the integration of anti-monopoly economic value standards and the evolution of legal constraint standards, accelerate the transformation of the theoretical analysis paradigm of digital economy anti-monopoly, scientifically determine the objectives of digital economy anti-monopoly regulation, reform the judgment standards of relevant markets. At the same time through investigation, comprehensive response to the pragmatic strategy to carry out anti-monopoly law enforcement.

In order to encourage innovation and privacy protection, the legislative purpose and value system of anti-monopoly law should be reconstructed based on the principle of platform, data and algorithm integration. To construct a two-tier regulation model of market dominance and relative dominance; Reconstruct relevant market analysis framework; Codify the amended

essential facilities principle; Jumping out of the framework of market dominance to regulate traffic monopoly; To strengthen the supervision paradigm in advance and weaken the punishment mechanism after the event with supervision and technology, and build an anti-monopoly legal system that pays equal attention to price and quality and is governed by both law and technology, so as to help enhance the international competitiveness of China's digital economy.

From the perspective of monopoly agreement, abuse of market dominance and merger control, we should strengthen the supervision of platform competition, regulate platform competition and monopoly under the existing analysis framework and system of anti-monopoly law, and adapt to the characteristics and development changes of digital economy by perfecting and updating legislation, law enforcement and judicial technology. In addition, the competition analysis framework should be optimized, a multivariate analysis framework should be constructed including consumer welfare, user data and privacy protection, product or service quality of the platform and other factors, and competition policy tools such as market research should be improved.

While strengthening the supervision of platform competition, we should conform to the development law of digital economy and platform economy, and set the limit of anti-monopoly regulation of digital economy reasonably. We should adhere to the principles of inclusiveness and prudence, openness and transparency, flexibility and order, and take multiple measures in parallel to improve the anti-monopoly regulatory system and enhance regulatory capacity. Build a fair and orderly competition environment, innovate the way of platform competition supervision, promote the innovation and progress of relevant technology, promote the deep integration of platform economy and real economy, so as to realize the improvement of economic efficiency and social welfare, and effectively protect consumers.

## References

- [1] Chen Bing. Challenges and Responses of Regulation Algorithm operation under rule of law economy [J]. Academic Forum,2020(01):11-21.
- [2] Chen B. Challenges and methods improvement of relevant market definition in digital economy [J]. China Circulation Economy,2021(02):3-12.
- [3] Chen Fuliang, GUO Jianbin. [J]. Theoretical Discussion,2020(06):5-13.
- [4] Chen Hongfei, Hu Donglan, Li Yongjian. Anti-monopoly in the field of platform economy and killer M&A of platform enterprises [J]. Journal of Dongbei University of Finance and Economics, 2021 (01): 78-85.
- [5] Ge Heping, Wu Fuxiang. Digital economy enables high-quality economic development: Theoretical mechanism and empirical evidence [J]. Nanjing Social Sciences,2021(01):24-33.
- [6] Lin Ziyang, HAN Lixin. Challenges of platform competition to anti-monopoly regulation under digital economy [J]. China Circulation Economy,2021(02):26-36.
- [7] Liu J F. Legislative mode selection of Anti-monopoly system of Internet platform in China [J]. Price Theory and Practice :1-7.
- [8] Li Jia, LIU Lei. Platform economy model and development strategy in Internet 3.0 era [J]. Enterprise Economics,2021(01):64-70.
- [9] Liu Bai, Lu Jiarui. Potential risks and prevention of monopoly in the field of Internet platform economy [J]. Monthly Of Finance and Accounting :1-5.
- [10] Liu C. Research on the Development status and Problems of China's digital economy [J]. Science & Technology and Economy,2020(05):81-85. (in Chinese).
- [11] Liu Yun. International Trend of Internet Platform Anti-monopoly and China's Response [J]. Forum of Politics and Law,2020(06):92-101.

- [12] Qiao Yue, Yang Xi. Does platform exclusivity impede fair competition? Journal of Shandong University (Philosophy and Social Sciences edition):1-14.
- [13] Song Jianbo, Jing Jiaqi. Monopoly issues and Anti-monopoly regulation of Internet platform enterprises [J]. Finance and Accounting Monthly :1-5.
- [14] Wang Jingtian, Fu Xiaodong. The unique mechanism, theoretical challenge and Development enlightenment of digital economy: Based on the order evolution of production factors and productivity progress [J]. Western Forum,2020(06):1-12.
- [15] Wang Xianlin, FANG Xiang. The Trend, Challenge and Countermeasures of anti-monopoly in platform economy [J]. Journal of Shandong University (Philosophy and Social Science Edition):1-12.
- [16] Wu Xiaoyi, ZHANG Yajing. Development status and international competitiveness of China's digital economy [J]. Science Research Management,2020(05):250-258.
- [17] Xiong Hongru. Platform monopoly in the development of China's digital economy and its governance strategies [J]. Reform,2019(07):52-61.
- [18] Xiong Hongru. The main challenges and international experience of antitrust regulation in the era of digital economy [J]. Economic Review,2019(07):83-92.
- [19] Xu Di di. Anti-monopoly governance of ad-supported platforms in the context of digital economy [J]. Southwest Finance,2020(06):67-77.
- [20] Xu Heng, ZHANG Yilin, Cao Yujia. Digital economy, technology spillover and dynamic competition and cooperation policy [J]. Management World,2020(11):63-84.
- [21] Yang DONG. On the Reconstruction of Anti-monopoly Law: Coping with the challenge of digital Economy [J]. China Law Science,2020(03):206-222.
- [22] Zhang Huaiyin. Determination of firm market dominance in the era of digital economy: A review based on German Antitrust Enforcement Cases [J]. German Research,2019(04):114-129+151-152.
- [23] Edward M. Crenshaw, Robison K. Globalization and the digital divide: The roles of structural conduciveness and global connection in internet diffusion[J]. Social Science Quarterly,2006,87(1) : 190-207.
- [24] Andres L, Cuberes D, Diouf M. The diffusion of the internet: Across-country analysis [J]. Telecommunications Policy,2010( 34) : 323-340.