

Research on the Symbiotic Development of Financial Industry and Internet Platform from the Perspective of Data Monopoly

Lingling Zhong

*Tianjin Trust Co., Ltd., Tianjin, 300074, China
tjzhonglingling@126.com*

Abstract: *Based on the research on the symbiotic development of the financial industry and the Internet platform from the perspective of data monopoly, this paper mainly analyzes five aspects: the essence and connotation of data monopoly in the information age, the causes and characteristics of data monopoly, the interaction between the financial industry and Internet platforms, the risks that data monopoly brings to the financial industry and Internet platforms, and how to promote the symbiotic development of the financial industry and Internet platforms.*

Keywords: *Data monopoly; Financial industry; Internet platform; Symbiotic development*

1. Introduction

Because of the rapid development of Internet technology on a global scale, traditional face-to-face interactions and the matching of supply and demand in the traditional market have also been subverted. Internet platforms have become essential to today's social production and trading activities. The rapid development of the platform economy is inevitable at this point in time. A platform economy is based on data, which is a production factor transformed from products. Under the combined influence of economies of scale and scope, Internet platforms will monopolize data and enter the financial industry. Many financial risks are associated with mixed cross-border operations of Internet companies, which are highly complex, spillovers, and contagious. Due to this, it is essential to conduct in-depth explorations on the symbiotic development of the financial industry and Internet platforms from a data monopoly perspective to minimize the adverse effects of Internet platform data monopoly and cross-border operations.

2. The Essence and Connotation of Data Monopoly in the Information Age

No matter in law, economics, or regulations, there is currently no unified and clear definition of data monopoly. Usually, it refers to a company or platform that uses data for production when it has a great data advantage [1]. Monopolistic behavior by elements. Influenced by the special attributes of data, the industry structure has also changed and updated. Under the circumstance that the effects of economies of scale and scope are greatly enhanced, in industries where data is the main factor of production, the monopoly phenomenon will appear more rapidly and expand to a larger scope. Today, most countries have reached a consensus on the definition of data monopoly, that is, maliciously creating barriers to market entry, breaking harmonious and effective market competition, harming consumers' interests, and curbing scientific and technological progress and innovation, etc. China has also promulgated the Anti-Monopoly Law of the People's Republic of China based on the above consensus. At this time, it is not difficult to see the adverse impact of data monopoly on the healthy development of the economy and the market. It can be seen how eliminating the impact of data monopoly as much as possible is an urgent task to be solved on the road of symbiotic development between the financial industry and the Internet platform.

3. The Causes and Characteristics of Data Monopoly

The main purpose of many Internet platforms' data monopolies is to enhance corporate market control and scale expansion. Based on improving the use value of data, let the data flow to the enterprises that

can maximize its value under the allocation of market resources. After the business closed loop is formed, some enterprises will close the data entrance so that other enterprises cannot obtain data, further forming a data monopoly [2]. The characteristics of data monopoly can be roughly divided into the following aspects.

Firstly, processing and fusion sharing are necessary for transforming data into production factors. In particular, the data cannot be used for production directly, so enterprises must first process it into elements using computing power algorithms and ensure that the dimensions and scale of the data meet the actual production requirements. The second reason is that data is extremely non-competitive and non-exclusive. In other words, it is not that once a company collects data, other companies will be prohibited from collecting data, and the data will not be degraded after it has been collected. As well as continuously generating new data, the marginal cost will decrease monotonically. As a third option, data can be personalized based on product content and marketing preferences. Fourth, data is a virtual carrier, so it often has strong liquidity and can facilitate cross-regional as well as cross-border communication. Fifth, the characteristics of multidimensionality and versatility can facilitate the realization of cross-industry applications of data [3].

4. The Interaction between the Financial Industry and Internet Platform from the Perspective of Data Monopoly

The number and scale of users of Internet platforms in the information age are enormous, but the growth rate is already slowing. In this situation, economies of scale cannot provide sufficient support for the development of enterprises, whereas economies of scope can play a leading role. An Internet platform with e-commerce as its primary business can roughly calculate a user's credit history and payment habits based on their order, logistics, and browsing records and organize them as financial services. Thus, Internet companies will adjust their strategies when the development is relatively mature, for example, through subsidiaries, mergers, or reorganizations, to offer users richer and more comprehensive services than they had originally planned to offer. Or cross-border services to complete the industrial chain in a closed loop [4]. It is anticipated that Internet companies' data dimension and concentration will also be greatly improved due to cross-border services. In addition, once the data resources are integrated, the marginal production cost of the platform will continue to decrease, and the production efficiency of the data elements will continue to improve.

This is the general process of Internet platform data monopolization in the information age. When there are a large number of bilateral or multilateral customers, the platform will also expand to other industries. Moreover, user data will continue to play an important role in cross-matching and mutual sharing, thereby strengthening the data monopoly.

5. Risks of Data Monopoly for Financial Industry and Internet Platforms

First, data monopolies can lead to price discrimination. Under the data monopoly of Internet platforms, data such as the highest interest rate potential borrowers are willing to pay, and the highest premium insurance users can pay can be obtained through big data analysis. At this time, companies will conduct price discrimination to obtain high profits. Specifically, the Internet platform will lower the prices of self-operated products and make them more accurately lower than other insurance or credit companies to seize users and the market. It will also take the same approach to monopolize investment products, thereby excluding traditional financial institutions. Moreover, due to its monopoly of data on the Internet platform, it can also make decisions regarding loan issuance when cooperating with financial institutions and is the absolute leader in the division of rights and responsibilities between the two parties when cooperating with financial institutions [5].

In this case, the platform will take advantage of data to transfer risks, reducing the proportion of investment in information services to obtain risk-free profits. For any investment institution, the lack of scene data and customers' dependence on the Internet platform makes it difficult to establish direct contact with customers. From preliminary services such as customer expansion and account opening to core steps such as review, evaluation, and monitoring, all must be carried out on the Internet platform. In the long run, investment institutions will inevitably lose their original right to speak and autonomy.

Second, data monopoly will increase the chance of cross-border and cross-domain risk cross-contamination, seriously weakening the effectiveness of the traditional financial regulatory risk prevention system. The emergence of financial technology that can provide cross-border services under

the data monopoly has changed the form of traditional financial development and greatly weakened the regulatory role of the home country. Moreover, while mastering the massive personal data of various countries worldwide, there are no unified financial technology regulatory rules, making large Internet platforms become the data center for contacting global financial institutions. In the case of efficient and unobstructed data transmission, the cross-border financial business has developed rapidly. Since many Internet platforms will develop fintech in relatively loose regions, risks will also be transmitted to other countries and regions through the data center, disrupting the financial market and causing a serious blow to the traditional financial industry.

Finally, data monopoly superimposes algorithms, which seriously damages the rights and interests of consumers. When designing algorithm rules, the Internet platform must prioritize maximizing various benefits. It only treats people as inanimate data information, and this behavior undoubtedly lacks due morality and humanity. In mining the long-tail customer market on the Internet platform under the automatic decision-making of algorithms, the characteristics of adverse selection behavior contained in credit services are very obvious. Excess credit extension easily affects potential loan users identified by this standard. And when repayment is required, due to the failure to meet the repayment requirements, a stronger and clearer credit demand will be generated, which will further lead to the consequences of individual long-term joint debt and excessive debt.

6. How to Promote the Symbiotic Development of the Financial Industry and the Internet Platform

6.1 Give Full Play to the Role of Industry Leaders

First of all, the current leading Internet platforms in the industry have created operating rules for various internal businesses. At this time, the regulatory authorities should establish good contact and communication with Internet platforms, give full play to their guiding role, and effectively strengthen the public governance awareness of large Internet companies. Consciously undertake the corresponding social responsibilities, and eliminate the internal data monopoly risk. Secondly, the regulatory authorities should guide Internet platforms to set restrictions. That is, platforms whose main business is information business cannot provide financial services to users, and platforms whose main business is the financial business cannot provide users with data. Then avoid risk cross-conduction problems caused by the mixed operation as much as possible [6]. The optimization of systems and supervision methods should also be paid attention to, and all parties' responsibilities, rights, and interests in technology business and financial activities should be clearly pointed out in laws and regulations so that the relevant business can be returned to its origins. Finally, my country's Internet Finance Association, etc., should actively take measures such as promulgating self-discipline conventions or strengthening disciplinary measures, and at the same time, should formulate clear industry standards to limit the cross-transmission of information within the Internet platform. Further, prevent them from conducting financial product marketing and other financial activities through data monopoly.

6.2 The Accelerated Speed of Formulation of Regulations in this Area

First of all, the state should speed up the formulation and promulgation of relevant laws and regulations on personal information protection so that the data ownership relationship can be clearly defined. In this process, forward-looking and comprehensiveness must be guaranteed. That is to say, targeted analysis and adjustment should be carried out on the current network data resource circulation system, which mainly refers to the flow of data between different domestic entities and across borders. Secondly, the data subject's right to control all data resources must be clear, which is the guarantee that it can authorize the Internet platform to transmit data to a third party. At the same time, the construction of legal foundations such as data flow, sharing, and rights distribution should also be put on the agenda. This is a necessary precondition to prevent data from only flowing on the Internet platform, thus forming a data monopoly. Finally, loopholes and shortcomings in financial supervision and regulations must be filled promptly. Financial and technology businesses need to be clearly divided, and efforts to protect consumers' rights and interests must be strengthened.

6.3 Increased Strictness and Intensity of Supervision and Management

First of all, the coordination and cooperation of multi-departmental units can be adopted, starting from the Internet, finance and anti-monopoly supervision, etc., to eliminate the phenomenon of data monopoly and its adverse effects. In addition, the mixed operation of the Internet platform with the

advantages of data will also threaten orderly competition in the traditional financial market, consumer rights protection, and network security. Therefore, local market supervision, financial supervision, consumer rights protection, network supervision, and other departments should also participate in the prevention and control of data monopoly to maximize the quality and effectiveness of supervision.

Secondly, China should establish regulatory cooperation on a global scale, and partners can choose international organizations or regulatory agencies in major countries or regions to effectively strengthen the country's right to speak in the cross-border flow of data and the development of international financial technology. At the same time, the process of unifying the regulatory system for the cross-border flow of data should also be accelerated. First, in terms of behavior supervision, the central and local governments should clearly divide their responsibilities and rights in supervision [7]. If the Internet platform breaks the restrictions of regional supervision and conducts cross-border business development, it should carry out risk management as soon as possible and determine the attribution of responsibilities. Second, in terms of prudential supervision, we should start with the characteristics of financial services provided by Internet platforms and strictly implement the requirements that financial business operations must abide by; It should be severely cracked down if it is based on data monopolies, such as nested business, black information box, and ambiguous rights and responsibilities. Regarding functional supervision, the focus should be on the distinction between technology business and financial attributes. That is, as long as the financial business is carried out with data advantages, it should follow unified supervision principles, and risk isolation must be strictly implemented.

7. Conclusion

In summary, it is essential to break the data monopoly in order to achieve a good and stable development of the financial industry and the Internet platform in the new era. Establish a clear distinction between technology business and financial business, acknowledge the significant contribution of information technology to risk aversion and innovation within the financial industry, and create a conducive environment for high-quality development of the Internet platform and financial industry. On December 12 last year, the State Council determined that "China will set up three more free trade parks in specific areas of Guangdong, Tianjin, and Fujian." As the first city in the north to set up a free trade zone, how to create the "Tianjin version" of the domestic free trade park on the basis of the experience of the Shanghai Free Trade Zone. Give full play to the function of free trade ports so that the capital flow of commodities and logistics safely and efficiently in the free trade zone is the direction of the future development of the free trade zone. [8] Additionally, the symbiotic and benign development of the Internet platform and the financial industry can also contribute to the realization of the country's anticipated digital economy development goals as a result of the coordinated growth of the value of various market entities in the digital economy.

References

- [1] Ma J. *Entry Barriers of Data Monopoly [M]//Regulating Data Monopolies. Springer, Singapore, 2022: 125-149.*
- [2] Liu J. *Deep learning algorithms driven by artificial intelligence technologies may cause the disruption of information interaction mechanisms and the creation of technological monopolies[C]//International Conference on Electronic Information Engineering, Big Data, and Computer Technology (EIBDCT 2022). SPIE, 2022, 12256: 413-419.*
- [3] Cheng D, Yang F, Xiang S, et al. *Financial time series forecasting with multi-modality graph neural network[J]. Pattern Recognition, 2022, 121: 108218.*
- [4] Tao R, Su C W, Yaqoob T, et al. *Do financial and non-financial stocks hedge against lockdown in Covid-19? An event study analysis[J]. Economic Research-Ekonomska Istraživanja, 2022, 35(1): 2405-2426.*
- [5] Quan L, Al-Ansi A, Han H. *Assessing customer financial risk perception and attitude in the hotel industry: Exploring the role of protective measures against COVID-19[J]. International Journal of Hospitality Management, 2022, 101: 103123.*
- [6] Belfquih M, Filali-Maltouf A, Le Quéré A. *Analysis of Ensifer arid Mutants Affecting Regulation of Methionine, Trehalose, and Inositol Metabolisms Suggest a Role in Stress Adaptation and Symbiosis Development[J]. Microorganisms, 2022, 10(2): 298.*
- [7] Jardinaud M F, Fromentin J, Auriac M C, et al. *MtEFD and MtEFD2: Two transcription factors with distinct neofunctionalization in symbiotic nodule development[J]. Plant Physiology, 2022.*
- [8] Zhong Lingling. *Suggestions on Constructing the "Four in One" Commodity Trading Model in Tianjin Free Trade Zone [J]. Tianjin CPPCC Bulletin, 2015, 0(2): 13-13*