A Review of Research on the Impact of Digital Finance on Corporate Governance

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Abstract: The development of digital finance has brought changes to the capital market, therefore, digital finance has received key attention from academics, and related research on digital finance has been a hot topic discussed by scholars, and the related research results are also very rich. This paper mainly combs through the relevant literature on digital finance in China, summarizes the important role played by digital finance in China's economic market, and at the same time focuses on summarizing the relevant findings of digital finance on corporate governance, and finally provides a summary review of the literature.

Keywords: Digital finance; Corporate governance; Economic effect

1. Introduction

In the last decade or so, China's digital finance has continued to develop, profoundly changing the country's traditional financial system. Academics unanimously believe that the development of digital finance in China originated from the launch of Alipay in 2004, which marked the beginning of digital finance, and since then, the Internet and information technology have truly entered the business model of the financial industry. Against this background, this paper mainly combs through the current research status of digital finance, and further summarizes the relevant research on digital finance on corporate governance, and finally conducts a research review.

2. Overview of digital finance

2.1. Digital finance concepts and development

Digital finance refers to a new type of financial service developed on the basis of the Internet and information technology. Digital finance is rich in types, including Internet payment, mobile payment, online banking, financial service outsourcing, online loan, online insurance, online fund, etc., all of which belong to digital financial services, including credit, loan and remittance financial services. Relying on technological advantages and the support of the financial market environment, China's digital financial services industry has been developing rapidly and has become a global leader in the development of digital financial services, with Ant Financial, Digital Currency, Alipay, WeChat Pay and others leading the way. The development of digital finance not only promotes the prosperity of the financial industry, but also facilitates the life of the general public. With the continuous development of science and technology, Internet technology continues to penetrate the financial industry, and various digital financial products such as Internet loans and digital currencies continue to appear, improving the level of financial services through digital services, broadening investment and financing channels, and promoting the development of the financial industry.

2.2. Current status of research on digital finance

Current academic research on digital finance mostly focuses on its economic consequences, which is the core content of digital finance research. Among them, research results on the impact of digital finance on high-quality economic development, rural revitalization, poverty reduction effects, industrial structure and other aspects are abundant. Regarding the impact of digital finance on economic high quality in China, academics generally believe that digital finance is an important driver for promoting

China's economic high-quality development, and this research conclusion has been verified in Chinese provincial panel data[1]. In 2017, the 19th CPC National Congress Report put forward the implementation of the strategy of rural revitalization, and rural revitalization is an important part of the cause of the great rejuvenation of the Chinese nation. Rural finance is an important part of digital finance, and digital finance is an important booster for the development of the cause of rural revitalization^[2], the technological and informatization features of digital finance optimize the resource allocation of the financial industry, alleviate the contradiction of capital distribution to a certain extent, and enable the rapid development of the financial industry in the vast number of rural areas and remote mountainous regions^[3], and improve the quality of life of the people. In terms of the poverty reduction effect, many scholars agree that the development of digital finance plays an important role in poverty reduction. The technological and informatization advantages of digital finance can lower the threshold of the financial industry, reduce transaction costs^[4], relax liquidity constraints, and improve the efficiency of payment^[5], thus playing a significant poverty reduction effect. For the research on how digital finance affects industrial structure, most scholars in the academic community agree on the view that there is a threshold effect of the impact of digital finance on industrial structure. The relationship between digital finance and industrial structure is nonlinear^[6]. In the low-end manufacturing industry, digital finance has a significant role in promoting the development and upgrading of the low-end manufacturing industry, however, the positive effect in the high-end manufacturing industry is not obvious^[7]. There is heterogeneity in the impact of digital finance on industrial structure, especially in the case of different urbanization level regions, east, middle and west China, and relatively poor and non-poor counties in China, the role played by digital finance is significantly different. Digital finance mainly plays a role in the transformation and development of industrial structure by influencing the allocation efficiency of capital and improving the efficiency and quality of technological innovation^[8]. In addition, digital finance can also reduce the level of environmental pollution, protect the environment[9], play the "green effect", and promote the effective improvement of green total factor productivity.

From the above research status and conclusions of digital finance, it is clear that digital finance has had a significant impact on the macroeconomy, and that digital finance has given full play to its positive effects on the macroeconomy, which are also present in microenterprises, as shown by the following literature review.

3. Digital Finance and Corporate Governance

There is a wide range of research related to digital finance, of which the study of the impact of digital finance on microenterprises is an important part, especially in the study of its impact on corporate governance, which is very rich in content, and the use of research design and methodology has gradually matured and rigorous.

Digital finance is a product of the development of science and technology, and the development of digital finance has an impact on the economy in every aspect. In terms of capital utilization, digital finance improves the speed of capital flow in the market, and enterprises, as the most active group in the capital market, the impact of the development of digital finance on them is also unquestionable. In recent years, the impact of digital finance on corporate governance has become a hot topic in academia, and most of its research focuses on the impact of digital finance on corporate financing constraints, investment efficiency, corporate innovation, total factor productivity and other aspects.

3.1. Digital finance and corporate finance constraints

Difficulty in financing has always been a business dilemma for Chinese enterprises. Due to the unstable development of China's financial market and imperfect system, enterprises are therefore facing greater financing pressure. And in recent years, with the continuous penetration of digital finance, financial technology and industry have been transformed. The application of Internet technology has reduced transaction costs, and the development of information technology has reduced the degree of information asymmetry in the financial market, which have brought enterprises a better financing environment and more financing channels. Digital finance has improved business processing efficiency and created more financial service products with special features. Digital financial innovation plays a coupling role in reachability, accessibility, efficiency and risk control, broadens financing channels, improves credit availability^[10], reduces financing costs, brings more financing choices to SMEs, and alleviates the problem of SMEs' financing difficulties^[11]. Digital finance can also alleviate the

financing constraints of SMEs by regulating supply chain finance^[12], and can alleviate the financing difficulties brought by equity pledges.

3.2. Digital finance and corporate investment efficiency

China's traditional financial system has always been in the status quo of imperfect and uneven development. The emergence of digital finance has improved the efficiency of financial transactions and broken down traditional financial transaction barriers and transaction costs. Therefore, to a certain extent, it has played the role of supplementing traditional finance, become an important support for the development of real enterprises, improved the market participation and risk-bearing capacity of real enterprises, and then promoted the efficiency of enterprise investment and alleviated the problem of underinvestment^[13]. Digital finance can also improve enterprise investment efficiency by alleviating financing constraints^[14]. Digital finance can also promote corporate investment efficiency by affecting the cost of cash holdings and debt financing of firms^[15]. However, there is heterogeneity in all the effects of digital finance on corporate investment efficiency. At different levels of regional marketization^[16], there are differences in the positive role played by digital finance on firms' investment efficiency. In general, the positive role of digital finance is more obvious in higher urbanization level, non-state-owned enterprises, higher marketization level, and growing manufacturing enterprises.

3.3. Digital finance and enterprise innovation

If enterprises want to maintain long-term stable development and improve their core strength, they must pay attention to the development of innovation activities, improve technological innovation capacity, and let innovation lead enterprises to the road of sustainable development. The management of innovation activities is also an important part of corporate governance. Whether enterprise innovation activities can be carried out smoothly and whether they can efficiently produce innovation results are all closely related to the enterprise's technological innovation capability. In recent years, the Internet, big technology, cloud computing and other high-tech skillfully and effectively combined with financial services, digital finance has been vigorously developed, which also profoundly affects the innovative development of enterprises. The development of digital finance and the increase in the coverage of its use is an important incentive to promote the innovative activities of enterprises and the output of scientific and technological achievements^[17]. There is heterogeneity in the incentive effect of digital finance on firms' innovation. In different regions, the level of development as well as the coverage of digital finance varies and produces different effects. Compared with the developed regions in the east, the incentive effect of digital finance on corporate innovation is more obvious for firms in the central and western regions of China^[18]. For different types of firms, the impact of digital finance is also different. The incentive effect of digital finance is more pronounced in high-tech SMEs and private SMEs than in other firms^[19]. The promotion effect of digital finance on corporate innovation is more significant among firms with different levels of governance, especially among small and micro enterprises with asymmetric information and poor internal governance^[20]. These findings are supported by empirical evidence from the data of China's New Third Board listed companies^[21], the data of small and micro enterprises^[22], the data of small and medium-sized enterprises (SMEs)^[23], the data of GEM listed companies^[24], and the data of Shanghai and Shenzhen A-share listed companies^[25]. The heterogeneity of the incentive effects of digital finance further proves the positive effects of digital finance on enterprises.

3.4. Digital finance and enterprise total factor productivity

The impact of the development of digital finance on the total factor productivity of enterprises is also an important part of the research on the impact of digital finance on corporate governance, and the academic community is quite rich in research results in this area. The total factor productivity of an enterprise is an important factor in whether it can successfully transform and upgrade and move towards high-quality development. "Economy is the body, finance is the lifeblood", we should stimulate the role of financial development, so that finance can make more effective help for the development of the real economy, and promote the real economy to the direction of high-quality development. Therefore, whether digital finance can effectively play the advantage of optimizing resource allocation and become a booster for enterprises to enhance total factor productivity has been the focus of academic attention. At present, in the analysis of the relationship between digital finance and enterprise total factor productivity, most of the research conclusions show that digital finance can effectively play the advantage of resource allocation, reduce the degree of information asymmetry of

enterprises $^{[26]}$; can reduce the threshold of financial services, improve the efficiency of the service $^{[27]}$, alleviate the difficulties of financing $^{[28]}$, so as to effectively enhance the total factor productivity of enterprises. This research conclusion is also proved by empirical evidence such as the data of Chinese A-share listed companies in Shanghai and Shenzhen and the data of A-share listed companies.

4. Conclusions

Currently, there is a wealth of research related to digital finance, both in terms of its impact on the macroeconomic and microcosmic corporate aspects. By combing through the relevant literature, it can be found that digital finance has had a significant impact on numerous aspects of corporate governance. Relevant studies in academia have focused on discussing the impact of digital finance on corporate financing constraints, investment efficiency, corporate innovation, and total factor productivity. Among these numerous studies, most of the literature reaches a high degree of consistency in the research conclusions reached, and some of the literature discusses various heterogeneities. And the sample data used in these studies cover various types of listed companies in China, and all of them adopt rigorous empirical research methods, which enhance the persuasiveness of the findings. However, it should be noted that digital finance has not been developed in China for a long time, and the development system formed has not yet matured, so the problems of digital finance itself cannot be ignored. Most of the current academic research on the impact of digital finance on corporate governance tends to focus on the positive effects of digital finance, and very few studies have been able to explore the problems of digital finance in depth. Therefore, the potential problems of digital finance and how to solve them deserve in-depth discussion by academics, which may also become the mainstream direction of digital finance research in the future.

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