

Analysis of the Impact of Fintech on Small and Medium-sized Enterprises

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ABSTRACT

Since its creation in 1838, Fintech has given a huge boost to the financial sector. Especially in recent years, Fintech innovation has developed rapidly, which has had a multifaceted impact around the world. This paper is going to study how Fintech innovation influences small and medium-sized enterprises. The research analyses the factors that drive the development of Fintech innovation at the beginning using PEST. The following article takes Alibaba as an example to analyze the impact on small and medium-sized enterprises, specifically from the advantages and disadvantages. At the end of the paper, the future development of Fintech is also anticipated. The solutions to the problems produced by rapid Fintech innovation of huge firms like Alibaba come up. This research finds that Fintech helps small and medium-sized enterprises develop in many aspects to some extent. Conclusion: there are also some disadvantages that Fintech has increased the investment risk and created a serious monopoly. However, in another way, the known disadvantages mean huge space for Fintech development. It suggests that financial firms and talents should put effort into solving problems and providing better market conditions, then the future development of Fintech innovation will be much brighter.

Keywords: *Fintech, Small and medium-sized enterprises, Alibaba, Monopoly, Financial market*

1. INTRODUCTION

The history of Fintech can be traced back to 1838 when Samuel Morse demonstrated the telegraph system for the first time. In 1966, the first transatlantic cable was laid, providing the infrastructure for financial globalization. In 1920, John Maynard Keynes published *The Economic Consequences of Power*, which discussed the connection between technology and finance. Trade Plus, founded by William Porter in 1982, launched the online brokerage investment revolution and quickly began to reduce online transaction costs. In 1993, the term Fintech appeared. Fintech is the original name of the Financial Services Technology Alliance, a project initiated by Citigroup to overcome the reputation of refusing to cooperate with external technologies. The 2008 financial crisis pushed the global financial system to the brink of systemic collapse, which can be said to be a turning point for financial technology. In 2013, Google launched Google Wallet, allowing users to use NFC technology to make purchases on their mobile phones. Apple also launched Apple Pay in 2014. The influence of

financial technology has gradually penetrated people's daily lives.

Chen et al. studied the value of FinTech innovations which is based on the data. To estimate the value of such innovations, a new method that combines observed stock price reactions with estimated Poisson arrival intensities was used. Chen et al. found that Fintech innovations are generally valuable to innovators and the financial sector as a whole while for some financial industries, certain types of innovation have a negative impact. However, there are also some limitations to this approach [1]. Samsonova and Kuzmina-Merlino posed that Latvian society is not ready to use Fintech services preferring bank services instead. They surveyed young entrepreneurs which found some supporting evidence for this. Also, this research sketched out the trends in the development of the Fintech industries. Meanwhile, based on the trends, the authors are more sure that Fintech innovations together with traditional services and achievements of banks are the basis for the digital financial companies of new generations. Finally, this paper came up with a few recommendations for enterprises [2]. Chen started with contrasts in the

development of online banking, electronic currency, and Internet finance in China and abroad. Then this paper analyzed the particular risks of Internet finance and explored the effective measures of promoting steady development in China. Based on this analysis on the current and future development, Chen summarized the trends of fintech innovation [3].

Mention investigated that some large financial institutions have also been paying close attention to the growth of Fintech and are continuously investing in it, these can help some startups grow. These companies are very heavily regulated. However, these regulations are also designed to make companies more focused on research and development and more consumer-centric. For Fintech, the outlook far exceeds the gleam of risk [4]. Puschmann researched the use of Fintech, there are huge benefits to financial markets. Not just for digital money, but for markets that provide big data so they can serve it more easily. This will bring a big change to the service industry. Fintech also acts as a mediator to keep a company from becoming too specialized or too specialized [5]. Cortina considered that Fintech has brought a new loan model, people can borrow money easily on this software, and they can judge the credibility of the borrower with lower cost, which can get more capital for some small and medium-sized enterprises. But at the same time, the disadvantage is that some people will cheat, and then the loan will not be repaid. But the advent of such technology is not necessarily a danger to traditional banks, which may co-operate in the future [6].

John indicated two questions, why “Fintech” is happening right now and getting more attention than traditional innovation normally does. It replies to the first question from four driving factors, including technology, regulation, innovation spirals, and demand, afterwards, it found innovation have a profound effect in three different depth which is the surface, genuine, foundation. From these three depths of innovation, it figures out why Fintech is popular [7]. Tianxiang took China as evidence to discuss the effect of Fintech on banks’ credit provision to SMEs. By analyzing the lending records of banks in Chinese provinces from 2011 to 2018, it presents Fintech has effectively promotion on the development of banks’ credit supply, also discussed the impact of Fintech on the bank’s credit demand of SMEs will change depending on the scale of the bank. Eventually, got the conclusion that large bank has a great promoting effect by Fintech than small bank [8]. Ahmed-Ishmel et al. examined the impact of Fintech in the operations of SMEs in Nigeria. Researched 120 small and medium scale enterprises by using a questionnaire, it indicated that Fintech has a great impact on the economy, including broader access to and the decreasing cost of goods and services and holds great potential for financial and digital inclusion, thus stimulating sustainable economic growth [9].

Tucker argued that Fintech was a different and more efficient way to deliver financial services. It was also a business innovation. The innovation of payment management was one of them, which brought automatic cash management technology to make payment more intelligent. Then there was debt finance innovation, but it made it difficult for small businesses to get funding. In addition, he was involved in a variety of other industries. Tucker believed Fintech would continue to grow [10]. Financial technology is a combination of financial technology designed to use computer software and algorithms to help the company’s operations and management and daily life. Fintech integrates technology into service products to improve consumer use and interaction. The development of financial technology benefits from the practice of financial technology, expanding horizons, and integration with new technologies. But at the same time, blockchain technology and open banking led by cryptocurrency and digital cash also require relevant departments to pay attention to network security while developing. Fintech users are very broad, ranging from banks to ordinary consumers. Julia Kagan believes that regulation is a very important point in the development process. Relevant departments should customize different regulations according to different situations [11].

Anne believes that Fintech has a great impact on the financial services industry. Fintech refers to companies that provide financial services through software or other technologies. In recent years, Fintech has begun to cover more consumer-related applications, such as fund-raising platforms. In addition, ANNE SRADERS also cited examples of blockchain and cryptocurrency, mobile payments, insurance, robot online services, stock trading applications, and budget programs. ANNE SRADERS believes that both business-to-business and business-to-customer will use Fintech, which makes their office process transactions more convenient [12].

The purpose of financial science and technology is to make financial and technology integration to achieve rapid economic development. Science and technology can help labor more efficiently into productivity to improve economic development efficiency. The rapid development of the economy also put forward higher requirements for the development of science and technology. This has a certain promotion of technology development.

2. PEST ANALYSIS OF FINTECH INNOVATION AND DEVELOPMENT

2.1. Policy

At present, there are still many defects in credit investigation in financial technology. Some illegal elements will forge some credit investigation to obtain more loans or owe more money. The government takes

this phenomenon seriously, so they introduce some regulations or let some Fintech companies use the national credit information system. At the same time, there are also very big risks for lenders, so the government will set up some regulatory agencies to help them judge whether the financial institution is viable or has more hidden terms. Governments have introduced various measures to raise the bar for starting Fintech firms, such as a new set of permits and a new set of legal procedures for setting up financial institutions. As for electronic money, many countries do not have very strict policies to regulate it, but in some places, these crypto-assets are also strictly regulated or banned. Another big concern about Fintech is the public policy on digital services, which is heavily regulated in most countries to protect people's privacy and customer information. Most countries also have very strict regulations on network security, to better protect the rights and interests of consumers and enterprises.

2.2. Economic

From the economic perspective, Fintech was driven by a collection of supply and demand factors [7]. On the supply side, the development of Fintech advanced by changes in the macroeconomic situation. In the wake of the epidemic, the supply of Fintech products has been heavily curtailed, but various financial institutions have implemented some innovations in this situation. They utilized optical technology recognition to enable customers to access financial services online, as an initiative that is widely used in the insurance industry to streamline the claims process and shorten the claims cycle; in addition, some financial institutions have launched some epidemic-exclusive produce, like Pharmaceutical R&D Special Fund, Innovative capital management products, and bonds for the epidemic and healthcare sectors. Hence, changes in the macroeconomic situation tend to make the innovation of Fintech in products.

On the other hand, the demand side of Fintech has also been impacted by the epidemic; setbacks in the economy and technology sector have led to the stagnate of development of Fintech, which leads to an increased perception of risk in Fintech, so many people are more like to save, thereby substantially increased the income of the bank. However, some financial institutions attract funds by raising deposit rates. These deposit rates are raised because the financial institutions buy low-risk bonds and fixed income; the Yu E bao from Alipay is as this model to operate. Furthermore, financial products like this are still emerging; accordingly, whether the impact of supply-side or demand side, the innovation of Fintech is always developing through economic change. Figure 1[13] showed that 60% of companies had launched and implemented new financial products and services during the epidemic, while another 32% were in

the process of launching and implementing, with value-added non-financial services being the most launched service at 31%, compared to 7% for insurance related to Covid-19. However, the overall picture reflects that the epidemic has had a catalytic effect on the innovation of Fintech products.

	Yes	In progress
Value Added Non-financial Services	31%	11%
Enhanced Fraud and/or Cyber-security Features	28%	12%
Disbursement of Covid-19 Relief/Assistance Funds	18%	7%
Hosting Covid-19 Specific Funding or Relief Campaigns	16%	6%
Credit or Micro-Credit Facility	14%	7%
Launched a Voucher System	8%	5%
Insurance Related to Covid-19	7%	5%

Figure 1 New or Updated Products/Services/Features, All FinTech Verticals (% of respondents; yes, in progress) [13]

2.3. Social

The development of financial technology has undoubtedly brought a great impact on society. The emergence of financial technology has brought new forms and patterns of society. The most obvious point is that Fintech has accelerated the efficiency of society. For example, Fintech brings more convenient and fast financial management methods to society, including automatic cash management technology. This technology eliminates the requirement of manual cash processing and automates cash processing. People can save money and use cash more efficiently. However, there are also many problems in the development of financial technology. Financial technology has brought artificial intelligence, robotics, cognitive automation, and other technologies, which will undoubtedly cause a significant increase in unemployment. Financial technology also needs to be continuously developed and improved, which requires society to be in a stage of continuous research and innovation.

2.4. Technology

Technology motivates the development of Finance. As the Chinese government introduced more policies to support the development of Fintech and the multilevel consumption has been improved, Fintech companies make great progress. Based on technological progress, innovations in both financial products and business models will also be intensified and as a result, a wider benefit-sharing will come to more participants. Technology innovation will be the first driver of development for most financial enterprises, which means that increasing the inputs of research and scale of technical cooperation is the key to sharpening the competitiveness edge. It is claimed that the intelligence in China has just begun while the fleamarket scale of Fintech is only a fraction of 5 percent to 6 percent roughly. Hence, Fintech in China has huge growth potential with the advance in technology. For example, cloud

computing is one of the technologies, which has been used in the area of the financial market for quite a long time. Ant Financials' business in innovation is also mainly based on technology.

3. THE IMPACT OF FINTECH ON SMES USING ALIBABA AS AN EXAMPLE

3.1. Positive impact

Alibaba provides a variety of logistics services to small and medium-sized enterprises, helping them reduce operating costs. Most small and medium-sized enterprises so lack capital that it is difficult for them to get sufficient loans from the bank in the face of financial problems. Ali provides credit lines to them and ensures they receive the funds rapidly and efficiently. Ali group also provides small and medium-sized enterprises with information services. With the advantages of Fintech, Alibaba conducts data analysis deeply to create an effective customer information base and narrow the information gap between the two parties in transactions. Thanks to the development of Fintech, more and more Internet giants are offering lending services, enabling borrowers in some rural areas of China to borrow in this way. The Chinese government and China Fintech, use a whole new social credit system to determine the creditworthiness of borrowers. Before the advent of Fintech, a large number of farmers could not access basic loan services, and the government also hoped to solve this problem through various other traditional banks, or some financial organizations. But this is very difficult, because of the lack of credit information in rural areas, financial institutions and borrowers have to wait a long time to be approved. That's why more and more Internet companies and smaller Fintech companies have expanded into rural financial markets in recent years. Farmers can meet their basic borrowing needs on these sites. This greatly increased the efficiency and decrease the cost of borrowing. Among them, Alibaba is one of the main companies. Alibaba launched online agricultural loan products in 2015. This program lends to agricultural users in this way, they only need to upload their identity information to borrow some large amounts of money. It is because of this Fintech that the development of Chinese agriculture is more rapid. However, these changes will also have some bad effects, because the government departments do not have perfect policies for such emerging technologies, so they will regulate this part more strictly. For some agricultural suppliers, when they are in a monopoly state, it will lead to the exploitation of farmers.

3.2. Negative impact

Alibaba had occupied an e-commerce market share of more than 50 percent in China and had a competitive advantage in the long term. Its solid assets and advanced

Fintech allow Alibaba to have a strong ability of market control. What's more, as the Ali group developed rapidly these years, small and medium enterprises have been highly dependent on the Ali group for transactions. As a result, a phenomenon of monopoly is easy to develop in such a market for Alibaba. Once monopoly occurs, a large number of small and medium-sized enterprises will be in the face of a survival crisis. In April 2021, Alibaba received a fine of 18.228 billion yuan. The main reason for the penalty is that Alibaba requires merchants on its platform to choose between the two. This means that merchants are prohibited from holding certain promotions on other platforms and can only hold promotions on their platforms. Alibaba abused its dominant market position, which resulted in them receiving this fine from them. This is a kind of illegal competition. They use unfair competitive advantages to restrict retailers' goods and services and prices. This is undoubtedly a blow to small and medium-sized enterprises, such as Jingdong Mall.

Moreover, as the platform came out, some small enterprises have little competitiveness under the comparison between firms. Additionally, if Alibaba traps in trouble, most small and medium-sized enterprises will face great crisis and a whole market get shocked.

4. SOLUTION AND FUTURE POTENTIAL

4.1. Solution

Based on Alibaba's monopolistic behavior, the General Administration of Market Regulation of China initial an investigation against Alibaba under the Anti-Monopoly Law and imposed a fine of RMB 18.228 billion for violating Article 17(1)(4) of the Anti-Monopoly Law. The implementation of the Anti-Monopoly Law not only promotes the stable and healthy development of SMEs in the Fintech industry but also gives consumers more choices. Today, China, as a developing country, has reached the 3.0 era of Fintech development. With the support of traditional financial services, and with the update of artificial intelligence, big data, and blockchain technologies, Fintech companies have launched more efficient and personalized products, such as smart investment advice and smart stock recommendation. In the future, the development of Fintech will continue unceasingly, its market size of Fintech industry in 2019 exceeds 375.3 billion yuan and is expected to exceed 543.2 billion yuan by 2022, which shows the market rapid development with SMEs playing a leading role, and also optimized the market environment.

4.2. Future development

Fintech is an industry where services and technology are actively developing. Fintech is developing at an

astonishing rate, which can be judged by increasing investment. According to experts, about 80 percent of citizens in all developed countries use Fintech services. Private venture capital reached new heights, with the number of money people invested in Fintech rising from 5% to nearly 20%. The rise of Fintech is evidence that Fintech is finally taking its place in economic innovation. The development of financial services has become the inevitable trend and future of banking, insurance, e-commerce, online payment, and other fields. Fintech determines the economic model for opening financial and non-financial markets, the channels between market participants and consumers, and the relationships between partners. The increasing ability of human beings to adapt to development and new things also puts forward higher requirements for the development of Fintech. Financial institutions are constantly perfecting Fintech and introducing it into the market to create greater added value for the digital economy. The future of Fintech is bright, and it is bound to grow faster and faster.

5. CONCLUSION

This study has presented, the development of Fintech and the main factors driving the development of Fintech, and take Alibaba as an example to study the impact of Fintech on small and medium-sized enterprises. Furthermore, we analyze the future development trend of Fintech. We find that Fintech has a huge impact on the development of small and medium-sized enterprises, helping them to have more start-up capital. Fintech has made this much easier to do than traditional lending. However, there are also some disadvantages. Due to the rapid development of Fintech, more and more people are choosing to use Fintech, and this is taking investment risk to a new level. Policies in this area are not perfect enough, so there is still a lot of room for development in this area. We hope that this study will help more people to understand the history of Fintech and to examine the benefits it brings and the loopholes that need further improvement. It will also help some small and medium-sized enterprises to better understand the pros and cons of Fintech. In the future, Fintech will be further developed to benefit more small and medium-sized enterprises, and policies in this area will improve.

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