How big data of financial technology affect China's financial market over the past 20 years

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Abstract. During the past 20 years, financial technology especially big data financing is developed rapidly. Compared to the world, China is caching the speed of financial development with its whole potential. Financial technology especially big data has been used in various parts of the economy like decision making, risk management, marketing service, etc. It is positively and negatively affecting the whole economy, and traditional financial businesses, in particular, a lot. However, with certain improvements, the financial market with financial technology has an optimistic future in China.

Keywords: financial technology, big data financing, financial market, China economy

1 Introduction

In recent years, financial technology has been developing rapidly in China. A number of financial products developed due to the progress of Technology. Yu'e Bao, for example, is slowly changing people's way of daily cash management and daily payment, which has triggered many academic discussions. Compared with traditional bank deposits with regulated interest rates, Internet financial products have the characteristics of interest rate maximization and convenient transaction and have been popular since their introduction. Taking Yu'e Bao as an example, it has developed rapidly since its launch in 2013 and became the largest fund in the world in 2017, and with 1.689 trillion in Q1 2018.

As shown in Figure 1, in 2021, China's financial technology size attained around 7512 billion yuan, which increased by 16%. It was predicted that the size will attain 10099.3 billion in 2023 with a growth rate of 15.1%(Zhongguancun Internet Finance Research Institute,2022)[19].
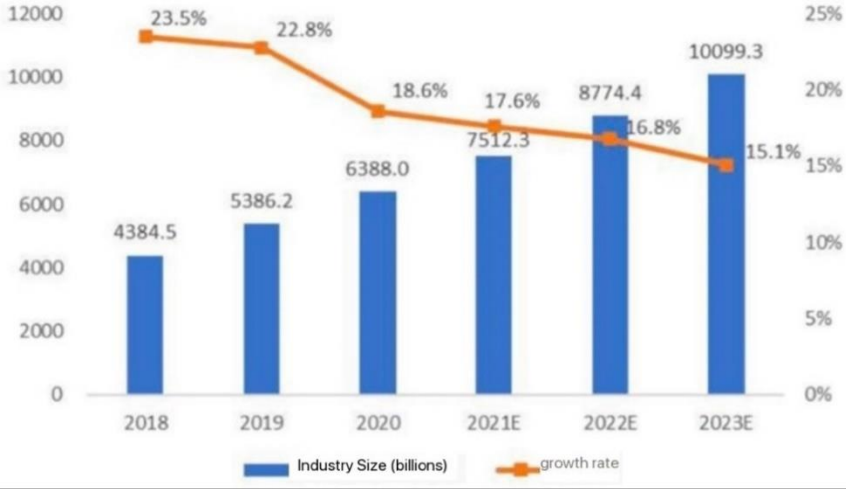
Fig. 1. Zhongguancun Internet Finance Research Institute,2022 [3]

As shown in Liang Yaxin (2021), the scale of China's artificial intelligence core industry exceeds 180 billion yuan, and the scale of relevant industries exceeds 740 billion.[7] In 2021, China's big data industry will reach 751.2 billion yuan, with a year-on-year growth of 17.6%.

Fintech (financial + technology) is an innovation of the services and products of the traditional financial industries, which has increased efficiency, and decreased cost. Fintech is a new type of financial service model for investment, payment, financing, information media, etc. The fin-tech makes it possible for a financial product to have the characters of high yield, good liquidity and principal safety. The financial asset portfolio could also reach the balance of security, profitability, and liquidity to a certain extent, which could create a multi-objective portfolio.

The concept of Bigdata was proposed by the EMC company in the year 2011. Big Data is reshaping Fintech by using the system to analyse the raw information and use model to find the accuracy. Because of that, big data can be used to predict the behaviour of the customer, make the strategic decision better, and make more sophisticated financial decisions. In industries, people used it for consumption prediction and analysis, production decision-making, risk management, transaction of financial assets, regulating the financial market so on and so forth. It is an important tool that is used in financial industries, and it became more and more popular.

However, As Zhang Qi (2020) said, China's financial technology has structural imbalances, it surpassing the United States in some areas, but not in basic research. Many people in China are worried about the development of financial technology may affect traditional commercial banking and the financial system in a negative way.[18] Most research in China only touches the general part of fin-tech, while the detailed use and effect of Big Data and the fintech industry are still under-researched.

The essay, first of all, it systematically reviews the development status of big data and fintech and its impact on the financial market. Based on the technical and financial

attributes of big data and fintech, the paper analyzes its double-sided impact on the financial market. Based on the analysis mechanism, relevant suggestions are put forward from the perspectives of individuals, enterprises and the government to promote the healthy and stable development of big data and fintech and maximize the economic and social welfare of China.

The arrangement of the paper is as follows. The second part is a literature review, which reviews the literature from the perspectives of big data, fintech and their impact on the stock market, business model, asset management and banking. The third part is the core discussion, which analyses the favourable and unfavourable effects of fintech and big data from several scenarios such as payment and stock market, and analyses its potential mechanism and economic principles behind it. The last part is the summary, based on the discussion gives relevant suggestions.

2 Literature review

2.1 Introduction of Financial technology

Since the development of information and internet technology is quick, there is a crossover among the industry of financial and information technology. Financial technology included 6 common core functions: payments, insurance, deposit and lending, capitalization, investment management, and market provisioning(Lee et al., 2018)[10]. Technology and big data hugely impact the financial market. According to the data surveyed by Accenture, from 2010 to 2016, the global financial technology investment had achieved with total 12.2-billion-yuan equivalent (the same below), increasing by nearly 12 times. In 2017, there were 649 financing transactions in the global science and technology finance field, with a financing amount of 137.9 billion yuan. LingFei(2020) pointed out that the development of technology transformed and upgraded the traditional financial industry by using Big Data to create the images of the users.[6]

2.2 Introduction of big data

With the wide popularization and mature development of big data technology, the application of financial big data has become a hot trend in the industry. As shown in ZhaoBo (2018) the research of PwC showed that among all financial technologies, big data was the first choice for investment and application in the financial industry.[18] And based on application, the financial industry had massive data resources. The financial industry should be one of the industries that are most willing to invest in information. After years of information precipitation in the past 20 years, a large amount of high-value data had been put into various systems, so basic resources for data analysis were available.

In China, lots of securities companies begin to launch huge amounts of Big Data of financial technology themes reports. As shown in LingFei (2020), In December 2011, China's Ministry of Industry and Information Technology announced 4 key technological innovation projects in the 12th Five-Year Plan, which were Processing technology, information perception technology, information transmission technology, and

information security technology.[12] All of this technology's innovation projects would lead to the development of Big Data. This showed that China's government paid enough attention to Big Data in financial technology since 2011.

2.3   The affect to stock market

The stock market is affected by the development of big data of financial technologies. Dong Jing (2022) believed that fintech made stock price fluctuations "personalized and divorced from common market trends", thus reducing the synchronicity of stock prices. First, fintech solved information asymmetry and made information orderly and transparent.[4] Secondly, fintech transformed the business model of enterprises, alleviated the financing constraints of enterprises, and reduced the withholding of information. Public company analysts could have a more effective read on companies. Moreover, fintech made listed companies get more attention, and the stock price reflected more corporate information.

Big data made the stock market have enough information to discover. Yang Can (2022) believed that fintech information entering the market could increase the information content of the stock market [17]. For fintech facilitated the mining of information and reduced the cost of investors' time. There is a weak relationship between financial market fluctuation and policy-making. Li and Zheng(2022) used the EPU index, based on big data analysis, to show that both the overall policy uncertainty and the specific policy uncertainty index had a positive impact on the volatility of the financial market.[15]

2.4   Affect to business

The business is also affected by the development of fin-tech, especially big data. Mai Xin (2022)found that fintech development in China was rising steadily, with uneven levels, high in the east and low in the west.[9] Overall, he believed fintech was effective in increasing enterprise value. Specifically, fintech could promote enterprise innovation and technological innovation; reduce market friction, and reduce intermediary information collection costs. Zhang and Xiong (2015) provided an introduction to China's financial market and the credit system and showed that the 100Credit company used big data to solve a lot of financial institutions' problems like risk control and profitability.[19] He argued that the value came from the big data volume and prediction correctness.

EY Nasution (2021) believed that FinTech was the use of financial system technology which produced new products, services, technology, and/or business models and could have an impact on monetary stability, financial system stability, efficiency, smoothness, security, and reliability. [8]

Fintech had huge impacts on enterprises. Jin Chuanwei (2022)took the listed enterprises in the Chinese A-share market from 2011 to 2020 as research samples, and found that fintech had a significant positive effect on enterprise innovation, and promoted the creation of fintech, financing constraints, and enterprise innovation by easing the financing constraints of enterprises. [1]

Pang Jingru(2022) believed that the development of small and Macro businesses is affected by the low support of financial technologies. The small and Macro business has low risk-taken ability and size. Macro and small companies are having problems using financial technologies. They are lacking attention to financial technologies, lack fin-tech innovation, and lack talented people to develop fin-tech. The Fin-tech will positively affect small and macro enterprises. It enlarged their financing channel, and reduce the financing cost of small and micro enterprises.[11]

2.5　Fin-tech on asset management

The fin-tech is helpful to the asset management. Xing Siyuan (2021)believed that fintech increased households' allocation of risky assets and had a weak impact on households' active time deposits.[14] Fintech had significant benefits for households in eastern China to allocate risky assets.

Wu Mengke(2023) believed that since the development of fin-tech, there are many investment products coming out like Intelligent investment advisers.[13] Investor nowadays is using AI, and Bigdata, to choose to divide their investment product into different kinds to separate their risks and gain high earnings. However, there are a lot of challenges for this kind of investment. Investment technologies like intelligent investment advisors are easy to be interfered with by people, and it is difficult to guarantee independence and objectivity. The advisor's algorithm model and data integration need to be strengthened either. There is Insufficient supervision of the investment technologies. The financial products and investment demand are often difficult to match also. So we must respond to the challenges that come with the investment technology, and transform intelligent investment advisers into real productivity.

2.6　Effect on traditional banks.

Traditional banks are affected by financial technologies a lot. Non-performing assets and fixed assets reduced the efficiency of banks. Currently, banks lack effective management of non-performing assets, while fintech could improve the overall efficiency of commercial banks (Wu Meiqing, 2022).[13] The city commercial bank was established late, and its technology had great room for progress. It was sensitive to the changes in fintech. The higher the level of fintech development, the lower the economic capital, which could mitigate bank risks and improve productivity. Banks needed to improve their capital management capabilities, develop fintech based on their advantages, and use fintech to improve their risk management capabilities.

Zhang Qi (2020) showed that fintech drove the transformation of banks, but threatened traditional banks, especially traditional small and medium-sized banks.[18] Lou Yunfan(2023) believed that with the development of bid data, AI and the financial industry, Big data, and artificial intelligence continue to integrate with traditional finance to promote the sustainable development of financial market.[5] Traditional banks should improve their service quality, improve the regulatory level, find new profit growth points, and better assume the responsibility of serving the real economy.

2.7   The risks alert of Fin-tech

Yan Dawei (2022)believed that inclusive finance should be developed and big data should be used to improve risk control ability[16]. We should use financial technology to stabilize capital market expectations and improve the system for preventing systemic financial risks. Building identity infrastructure of the digital economy to promote the development of the digital economy. Carielloet.al(2016)[2] discussed systematic risk modelling. The model was based on data from financial markets and financial tweets. And FinTech may help to detect the risk of bank default.

2.8   The risks of Fin-tech

As shown in Cheng et al. (2021), the big data extended the borders of traditional data, algorithms, and systems, meanwhile bringing certain risks.[2] The financial market was no longer limited to traditional banking and trading systems, stocks, and futures markets, spreading to various fields, therefore a lot of risk and challenges were generated. The essay talked about different kinds of financial risk in the big data era, like financial fraud; challenges of financial risk management like the need to use multi-dimensional data, dynamic and real-time characteristics, long-range and heterogeneous dependent nature, and camouflage.

3   Discussion

3.1   The difference between the traditional financial industry and the financial technology industry

The fintech market is the integration of a variety of scientific technology into the operation and management of the financial industry, financial products, and services. compared to the traditional financial industry, the fin-tech industry has lower costs, enhanced service, improved marketing, etc. The fin-tech company used those to increase its competitiveness of itself in the market. Since network information technology is keeping developed in recent years, the content of fin-tech is keeping increasing, it now includes Artificial intelligence, Big Data, cloud computing so on and so forth.

In contrast, the traditional financial industry is one based on financing. In a broad sense, financial activities with deposits, loans, and settlements can be regarded as traditional finance. It has two basic traits, the first one is there are relatively fixed and actual financial trading outlets; the second one is that the main transaction financing objects are currency or gold and silver which with the same meaning as currency. For example, commercial banks, insurance, and securities.

The fin-tech industry caused attacks to traditional financial industries, this is due to the improvement of efficiency; the enlargement of the market which cause the move in of large technology companies that increased the competitiveness of the financial industry; the improvement of basic services of fin-tech organizations. Those leads to a decrease in business volume, and profit space of traditional financial companies. This leads to a lot of traditional financial companies beginning to abolish some of their

outlets. So, fin-tech companies forced a lot of traditional companies to transform and upgrade themselves to find new roads for them to develop steadily or gradually changed into fin-tech companies.

Take the Shenzhen Ping and Bank as an example, the bank was a traditional financial bank, however, it tried to convert to the fin-tech companies in recent years. In the year 2019, the bank exploit 2 fin-tech projects and made a variety of product that meets the different consumer's needs in the market. They also upgraded the important system of the bank in order to compete with the fintech companies with Big Data etc. They improved their risk management system, payment system, AI service, etc. They make their project standard and data turn and use the Big Data for business management. They also, innovate their service by using AI customer service, AI quality inspection, AI risk control, etc. They did this in order to increase their competitiveness in the financial market with the development of fin-tech.

3.2   The use of Big Data in financial technology in the financial market:

3.2.1 Improving the risk management system

Since the broker has a massive amount of data for their consumers, they could use quantitative analysis to judge the risk by acquiring the data from Big Data. For example, they could build a model in the prospect of prospect choice, risk of customers, credit of customers, transaction method, etc. This Big Data of financial technology allows brokers to analyze the risk of their customers more deeply, and accurately. So, the chance of choosing the wrong stock, or bonds will decrease, and the chance of an unwell corporation with other organization or their customers will decrease. In 2021, In Beijing, Shanghai, and some other cities tried to use fin-tech technology for risk management of payment and tried to improve the risk regulation abilities of financial organizations.

3.2.2 Decrease the asymmetric information

Since the time Big Data come, a lot of resources will transmit from financial institutions quickly. Since financial institutions could get more information in shorter times, they could make a quicker decision process. Big Data will increase the efficiency of resource allocation by the decrease in cost, time, and limitation of acquiring information. There will be less asymmetric information happening in the market. That information also decreases the chance of banks making mistakes. As well, financial organizations could get a lot of information by analysis from customers' transaction information, cash flow, change of data, etc. This could also help the financial institution to gain more customers and provide better service to customers. Big Data will make the relationship between the financial institution and customers more trustworthy.

3.2.3 Increasing decision making efficiency

Since the financial organization got more data, the financial organization could acquire more data from the real world. Instead of using static ways to analyse the whole market, they could use dynamic ways to analyse the market, since the Big Data increased the amount of information they get, and the speed of information for the

organization to get. In addition, the organization could construct a system of decisions. The system could detect the change in the market within the seconds, it could compute the data faster and remake the decisions immediately. So, the financial organization could react to the market more accurately and immediately.

3.2.4 Improving the financial system's regulation

Due to Big Data, the regulation system could acquire more data, so it could improve the regulation of the financial system. When the regulation system has massive information to analyse, they could identify suspicious information and illegal operation more accurately and use fewer human members to regulate. The system could detect the suspicious reaction within seconds and send the alert immediately, which increased the efficiency of system regulation. A good regulation system is important for the development of the financial system in long term. If the regulation of financial services is not complete, some people may have illegal actions like "Rat trading" (when trading, the member of the trading group offered each other a special lower price for work). However, Big Data could provide more information to regulation organizations to support them, which makes the complex financial system more organized, and secure.

3.2.5 Attract more customers by using precise marking service

The financial origination could construct the big data system, and use the system, to identify the needs of customers by marketing precisely. This technique could make the financial organization recommend suitable products to consumers by finding their investment tendency. The products will be more customized to clients' need. And this will improve the experience of customers. Since there is a massive amount of competition in the traditional financial market, the financial product needs to be more innovative in order to improve the comprehensive competitiveness ability of the product.

For example, With the development of fintech, there will be more and more variety of fin-tech products in the financial market. In order to choose the best-fitted product for consumers, the financial organization could classify the risks of the products, the liquidity of the products, and the returns of the financial products, and list them from high to low. The business could allocate the product based on the suitability of their client by using Big Data, internet technology, a short quiz, etc. Especially, we could maximize the effectiveness of fintech financing assets by optimizing the allocation and creating a multi-objective portfolio for the client.

3.3   The advantage of big data in Fin-tech

3.3.1 The increase in function of the financial market

With the fin-tech companies, the financial market will integrate into the local economy, residents' life, and work. Recently, lots of transactions happen on the internet. In daily life, people could use the online bank platform to pay for their daily needs with cyber money. During Bigdata era, much of the data from financial organizations will be shared on the internet, so the information could flow freely, and asymmetric

information will decrease. Resource allocation will break through the time, space, and industry constraints which will increase efficiency.

The information of big data in the financial market could also be used as evidence of credit evaluation and investigation systems by tract the action of investors. The reduction of information asymmetry and the credit of participating individuals can be effectively incorporated into the pricing model, which greatly enhances the pricing ability, scope, and efficiency of the financial market and makes the role of price signals timelier and more effective. In addition, the predictive ability of big data will change the mode of risk management and decision-making from static to real-time. The individual network behavior and motivation will be included in pricing from risk and financial decision-making of the financial organizations. Finally, the integration of services will be deepened. It will greatly expand the boundary of financial services; The service financial organization made will be more detailly, and the amount of personalization of service will be greatly increased.

3.3.2 Decrease the operating cost

Due to that most companies in financial industries are moving toward the fin-tech, and lots of services of banks moved online, this decreased the number of outlets of the bank which decreased the cost of rent, wages electricity, etc. Big data also improved the information collection abilities of banks. In terms of credit service, banks could acquire the overall information of customers much more quickly because of Big Data. So the bank could increase the efficiency of risk management and decrease the loss on credit service. At last, because of the Big data in fintech, the efficiency of each of their business operation will increase to a certain extent, which makes their overall efficiency increase which caused a huge amount of decrease in cost.

3.3.3 Promoting the innovation of the financial market

Because of the competition that brings by the fin-tech organizations, a massive amount of banks decided to restore their market strategy and make their operation method towards the fin-tech companies. For example, China Merchants Bank uses Big Data technology to construct a dual-dimension risk control model for the bank's financing and commerce. They also used artificial intelligence machines' self-learning functions to optimize the risk control model. Which makes their product more innovative and competitive. As well, the bank of communication China constructs an audio and video platform to create an online banking platform. They also use Image recognition, optical characters, etc. to recognize and extract the identity of their customers and notice the main trait of customers. This innovation of service enhanced the quality of service of the bank, which make them more competitive in the financial market. Since there are a lot of banks that innovate them-self, this brings innovation and improvement to the whole financial industry.

3.3.4 Stabilize the financial market

The financial market needs to be stabilized in order to defend against risk and attack. It means the price of products and services will not change too quickly and affect the

economy. Since fin-tech organizations break through the monopoly of the traditional market, the investor has more freedom to choose the staff. This causes a decrease in the power of traditional banks which decreased the instability of the financial market in China. Also, the fintech companies increased the transparency of information. Fin-tech companies could get all information and decrease the asymmetric information. So, the risk will exposure more, and the investor could manage their risk better. This will also cause the stability of the financial market.

3.3.5 It will make the diversified financial organizations

Since fin-tech is a combination of technology and finance, it could bring a lot of scientific technology into the product. Since the market of fin-tech companies is keep enlarging, there is a corresponding professional investment institution for these emerging industries. It will provide a variety of services to support for scientific and technological development of fin-tech companies at various development time points and stages. With their support, the financial organization will get more investment, and make more innovation in their service and product. With the newly transformed traditional financial organizations. Fintech organizations could take the advantage of traditional and technological financial institutions. And diversified both the traditional and technological institution's products and services.

3.4   The disadvantage of use of Big Data in fin-tech

3.4.1 The use of Big data in fin-tech company will hugely affect traditional financial companies

In money-saving and borrowing services, the Fin-tech product always has higher returns for saving and less interest rates for borrowing because the overall cost of fin-tech companies is less than commercial banks. Especially when borrowing money, the Fin-tech company like Huabei, Jeiba, and Haoqihuo always do not require the qualification and mortgage. So this will affect the business and project in large commercial banks. People will be more likely to move into the product of fin-tech companies, which might cause a huge attack to commercial banks in the short run. The amount of money saved in the commercial bank will decrease, and borrowing will decrease as well, this brings a risk to the traditional financial market and society.

In addition, since the fin-tech companies use big data to create online banks, people in China could use online paying methods like WeChat and Alipay on their phones to purchase for their daily needs instead use cash or a card. In order to normalize the online bank, the country will make a lot of rules and regulations. However, the rules and regulation might also affect the commercial banks, so the commercial bank has to conquer the rules while their customers and business decrease. This will create a lot of challenges for the commercial bank.

3.4.2 It will bring a huge risk to traditional commercial banks

The traditional commercial bank will face the risk of losing talented people. This is because, since the development of fin-tech companies, the commercial bank will face

a lot of competition. Even though the people in the traditional financial market have a deep knowing financial knowledge, due to the competition, traditional banks have to dismiss a lot of trained staff in certain services, because they have to cut down their business in order to survive in the market. The traditional financial organization will be forced to lose a lot of talented people in this way. Except that, due to the fin-tech organization being more efficient and having more customers. They could give their staff a higher wage, so many talented people in the commercial bank will move into the fin-tech organizations. So traditional banks will also face the risk of a shortage of talented people.

Furthermore, the traditional bank may face the risk of technique problems. Lots of traditional banks are developed many techniques in past years. However, those traditional techniques will be substituted by the fintech organizations, because the use of big data is more efficient and convenient. This will make the technique of traditional commercial bank become useless. So, they have to develop a new technique or use Big Data techniques. In certain changes, the traditional bank will not have enough competition in the financial market and face the risk of having less business to do. So, lots of small traditional banks may go bankrupt.

3.4.3 There is a risk of technology to itself

Since the fin-tech organizations are using scientific technology, they relied on the internet, big data, cloud computing, and Artificial intelligence a lot. They use the technology to make their own systems. Because of that, once there is a technical error or algorithmic error, it will lead to the problems such as mismatch between credit reporting and loan limit, illegal supervision, errors in the financial intelligence operation, failure of online payment transactions, etc. This will cause the loss of the banks and customers. Except that, since the fin-tech organizations use the banks a lot, it gives chance for hackers to find security loopholes to destroy the infrastructure the fin-tech companies relied on. It might cause information disclosure and property loss.

3.4.4 the financial technology supervision system of China is still lagging behind

Since the development of the fin-tech industry is super-fast in China, China's financial industry regulation cannot catch the speed of its development. So, there are not enough laws and regulations to support the industry. So, it is hard to identify the law violation of financial products provided by fin-tech industries. The financial supervision department cannot accurately capture the development trend of financial technology in a timely manner. Plus, China's overall regulatory technology level is still low, and regulatory technology needs to be strengthened. Therefore, it required that the regulatory authority in China also try to combine its regulation function together with technology to reduce costs and improve regulatory efficiency.

3.5   what to do next

In the past 20 years, the financial industries had an obvious development and breakthrough. The big data of fin-tech hugely affect the financial industry either in positive

or negative ways. In order to make sure the healthy development of the financial industry in China that under the Era of big data, we should have some improvements and regulations for financial industries. The fin-tech industry should also Standardize management and improve internal risk management system.

3.5.1 The banks should strengthen the risk awareness of their staff

The risk that fin-tech brings to the commercial bank could be avoided by System monitoring and taking measures in advance. So commercial banks should promote the risk avoidance culture in regular work, and let all staff recognize the culture. In addition, the risk management system is also really important. Staff in banks needs to be regulated and follow the principle under the rules. The rules should evolve with the effect of the fin-tech organization on commercial banks, while it also needs to be practicable in order to decrease the negative impact of fin-tech development efficiently.

For fin-tech organizations especially, they should make sure the computer and internet systems are secure and running properly. Since fin-tech organization has hugely relied on big data and computer programs, the security of the internet is the most important factor to care about. They should limit the number of people who could access the important information in the organization's database. And create strong passwords, user identification, and verification. The organization should keep the safety of the server by using a firewall, and anti-virus software. For important information, organizations should strongly encrypt it before saving, it in order to prevent attacks from hackers.

3.5.2 The commercial bank could cooperate with fin-tech organizations closely

Because the fin-tech is hugely developed, the commercial bank could follow the trend. The commercial bank could use the advantage of financial technology organizations to enlarge their customer base and efficiency of service. They could still keep their traditional advantages and resources, but intergrade with financial technology industries to decrease the asymmetrical information, increase data analysis ability, increase operation efficiency so on and so forth. Especially in recent years, due to the pandemic of covid-19, China's government is promoting "social distance" which means they suggest people do not make physical contact with others. It is hard to provide service underline. So, it will be a good choice if traditional banks could cooperate with financial organizations. The cooperation could decrease their cost and increase the revenues and profits of commercial banks.

3.5.3 Both the traditional and technological financing organizations should improve their human capital

The worker is the key factor production of the business. High-quality human capital is required for the fast development and construct of Big data systems which will lead to the development of financial industries. Traditional banks also need talented staff to maintain their business. So every bank in the financial industry should invest more in the education of their staff. Every staff member should participate in the training to ensure the integrity of the talent training. The training objectives should be clear, and

the high-quality big data talents training should be the key training objective to provide support for the construction of the big data platform. This could prevent the leakage of employment from traditional banks.

4   Conclusion

In the past 20 years, the financial industries had an obvious development and breakthrough. The big data of fin-tech hugely affect the financial industry either in positive or negative ways. In order to make sure the healthy development of the financial industry in China that under the Era of big data, we should have some improvements and regulations for financial industries. The fin-tech industry should also Standardize management and improve internal risk management system. There following are some suggestions.

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