

Study on Impact of COVID-2019 on the Development of Financial technology on Internet Banking in China Based on Comparative Data

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Abstract—Covid-19 epidemic has had a significant impact on the production and life of the whole society. People urgently need noncontact financial solutions, and online banking has become a hot spot. China's Internet penetration rate rose rapidly from 16% in 2007 to 71.6% in June 2021, and the number of mobile Internet users reached 1.007 billion. By 2020, the scale of China's third-party payments has exceeded 400 trillion yuan, and the scale of noncard payments accounts for 63.4%, of which about 80% belongs to mobile payments. This paper analyzes the literature and evaluates the hot cases during the epidemic period based on China's Internet banking operation data before and after the epidemic. Based on the strategic management theory, this paper uses the mature external analysis model PEST model for analysis, evaluates the impact of covid-19 on the Internet banking industry, and puts forward methods to overcome these impacts.

Keywords- Internet Banking; Development Strategy; COVID-2019

1 INTRODUCTION

COVID-2019 has had a profound impact on both China and the world. COVID-2019 is a significant public health emergency with the fastest spread, the broadest range of infections, and the most challenging prevention and control since 1949[1]. The Chinese government has adopted decisive and effective quarantine and a series of epidemic prevention measures. 1.4 billion Chinese people self-quarantine and maintain social distancing during almost the same period. By April 2020, the epidemic has been effectively controlled in China, and many enterprises and units have gradually begun to resume work. COVID-2019 is a public health issue and a complex economic, social, and political issue that has impacted all walks of life[2].

As an emerging industry, China's first Internet bank was born at the end of 2014[3]. In the absence of mature development experience to learn from facing the impact of sudden large-scale public events, the shock of the financial industry, which is extremely sensitive to environmental changes, is even more intense. As the first country to suffer the epidemic's impact, China has accumulated valuable experience in using financial technology to support the real economy, especially in providing credit support to stranded enterprises and individuals.

By observing the changes in China under the influence of the COVID-19 epidemic, this article analyzes the changes in the living environment of Internet banking companies before and after

the epidemic and the impact of the outbreak on Internet banks to propose development policy recommendations for Internet banks to respond to the new situation of the epidemic.

This research has both theoretical and practical significance. On the one hand, by combining the strategic management theory with the actual situation of sudden changes in the corporate development environment caused by large-scale public emergencies, the analysis of corporate development is a discussion of the Internet banking market positioning and development strategy theory, and it is also the supplement and perfection of the strategic management theory of Internet banking has specific theoretical significance. On the other hand, it is of practical importance to discuss how Internet banking, as an emerging industry, promptly faces drastic changes in the development environment to straighten out the influencing factors and make strategic adjustments.

2 THEORY AND METHOD

2.1 Theoretical basis

Since the 1960s, strategic management theory has been used to guide business practices[4]. Management experts in different periods have different definitions of corporate strategy. Strategic management theories have also undergone a process from static to dynamic, from the separation of strategy formulation and implementation to a combination, and from a single strategy to a comprehensive strategy[5]. Corporate strategy refers to an enterprise's development plan and goals based on the internal and external environment and resources to continuously obtain new competitive advantages to achieve sustainable and stable development[6]. Strategic management is a process of formulating and implementing strategies to achieve strategic goals. It is a process of managers developing corporate strategies and implementing dynamic management of corporate strategies. It mainly includes determining strategic direction, analyzing the strategic environment, formulating a strategic plan, implementing strategic evaluation and control[7]. According to the length of time, corporate strategy can be divided into short-term strategy, medium-term strategy, and long-term strategy; according to the nature and characteristics of the strategy, it can be divided into stability strategy, growth strategy, austerity, and positioning strategy. Strategies at the business level can be classified into cost-leading strategies, differentiated strategies, and focused strategies[8]. Since the 1960s, strategic management theory has been used to guide business practice. The development process can generally be summarized in three important stages: the classical strategy theory stage, the competitive strategy theory stage, and the resource-based view strategy theory stage.

The PEST analysis method is an external environmental analysis tool that analyzes the four types of factors of the macro-environment: Political, Economic, Social, and Technological. The political environment includes a country's social system, the nature of the ruling party, and the government's guidelines, policies, and decrees. The economic climate has an industrial structure, economic growth, market interest rates, people's living standards, consumption tendency, etc.; various factors in the economic environment will impact the company's operations[9]. The social environment includes the social atmosphere and the education level of the people. The characteristics of the social environment are that it will affect the lifestyles of market consumers and the needs and expectations of products and services and cause changes in consumer behavior.

Technical factors include all organizations and behaviors involved in creating new knowledge and transforming new knowledge into new outputs, products, processes, and materials.

2.2 Research methods

This article uses qualitative analysis methods for research. Based on strategic theory, this article investigates Internet banking to understand the epidemic's impact on the development of Internet banking before and after the epidemic and lays the foundation for proposing Internet banking development strategies. Check the relevant literature to ensure the correctness and accuracy of the data and literature. At the same time, the published data is cited, supplemented by qualitative analysis in the form of graphs, and the PEST tool is used to analyze the strategy to ensure that rational analysis and conclusions can be drawn.

3 THE IMPACT OF COVID-19 ON THE COMPANY'S EXTERNAL ENVIRONMENT

The Internet Bank of China was born late, and the first one was established in December 2014. There are currently five (see Table 1). WeBank, which Tencent backs, is in the leading position in the industry, and the second is the online merchant bank, which is supported by Alibaba and Ant Financial[10]. The two banks conduct business based on the Tencent ecosystem and the Alibaba Group ecosystem. They have developed rapidly and achieved remarkable results. They have become relatively competitive banks in the financial industry. Although the other three banks are currently unable to compare with the above two banks in scale, they have also developed rapidly.

Table 1 China's Representative Internet Bank

<i>Name</i>	<i>Date of establishment</i>	<i>Background</i>
WeBank	December 16th, 2014	The bank led by Tencent Group is China's first Internet bank.
Internet Commercial Bank	June 25th, 2015	Ant Financial takes the lead in creating.
Suning Bank	June 16th, 2017	Co-founded by Suning Yunshang and other companies.
Xinnet Bank	December 28th, 2016	Established by shareholders such as Xiaomi, New Hope Group, and Hongqi Chain.
Zhongbang Bank	December 28th, 2016	Founded by Zall Holdings, OneNet Technology, Orshan Investment, and other companies.

Since the PEST model is a recognized important tool for analyzing the macroenvironment, we will conduct a detailed analysis of the epidemic's impact on Internet banks from four aspects: political environment, economic environment, social environment, and technological environment.

3.1 Political Environment

In 2013, the Chinese government began to allow private companies to spontaneously establish financial institutions that assume their risks, including private banks. This means that in China, private companies are also eligible to enter the banking industry. Since then, private capital began to pour into the banking industry. In 2015, the Chinese government put forward the "Internet +" plan in the government work report to support the development of mobile Internet and encourage the healthy development of Internet finance, hoping to promote the integration of Internet technology and traditional financial industry and promote the healthy development of the Internet financial industry[11]. Guide Internet companies to enter the international market. Since then, encouraging policies on Internet finance have been gradually introduced throughout the country. In the same year, Internet finance was included in China's 13th Five-Year Plan for the first time, elevating Internet banking to a level where government work will be vigorously developed in the future[12]. In terms of policy, under the impact of the COVID-19 epidemic in 2020, it has played an active role in the development of Internet banking on the one hand and has also played a negative role on the other.

In recent years, Internet finance is gradually breaking the traditional corporate financial service model by relying on "big data" advantages and has become a new force to promote the development of small and micro enterprises[13]. At this particular historical stage, fighting the epidemic, resuming work, resuming production, and restoring the economy have become the themes of the world, and Internet banking will be given heavier responsibilities and expectations. The Chinese government has issued a series of policies to support the development of enterprises, including "bank-tax interaction." "Bank-tax interaction" refers to the cooperation of taxation, banking and insurance regulatory departments, and banking financial institutions to help companies convert tax credit into financing credit and alleviate corporate financing difficulties. On April 7th, 2020, the State Administration of Taxation and the China Banking and Insurance Regulatory Commission jointly issued the "Notice on Playing the Role of "Bank-Tax Interaction" to Help Small and Micro Enterprises resume Work and Production," requiring that under the framework of the "Bank-Tax Interaction" the support policies that have been implemented, In response to the urgent funding needs of small and micro enterprises during the epidemic, we will increase tax credit loan support and strive to help small and micro enterprises resume work and production to tide over the difficulties. Since the epidemic, especially in February and March, the number of loan households and loan lines granted by commercial banks using the "Bank-Tax Interaction" tool has increased significantly. "Bank-Tax Interaction" loan balance has increased by 77 billion, and many loans have increased. 120,000 households. The full-on-line contactless loan service provided by Internet banks compensates to a certain extent for the delays in resuming work at traditional bank outlets and the inability to restore small and micro-financial services promptly fully. Taking WeBank as an example, the data shows that the number of loan accounts and loan balances of WeBank's small and micro enterprises accounted for nearly 20% and 10% of the country's credit balances; in the "bank-tax interaction" of micro-enterprises, the proportion of loan balance increased from about 11% at the end of 2018 to about 26% at the end of the first quarter of this year.

The policy encourages small and micro enterprises and self-employed businesses to promote the growth of "long tail" customer groups. The General Office of the State Council of China mentioned that in 2020, the Chinese government would support flexible employment through

multiple channels and set a reasonable management model for vendors with no fixed business premises. Li Keqiang, Premier of the State Council, stated that the small economy is an essential source of jobs, and it is the fireworks of the world. Just like "Gao Dashang," it is China's vitality. After China's "street stall economy" has become a hot spot. The stalled economy refers to an economical form formed by obtaining a source of income through stalls. Many places have issued policies to encourage the development of a "ground economy." Since the introduction of the policy in March to allow vendors to temporarily occupy roads for business operations, as of May 21st, 2020, only one city in Chengdu has added more than 100,000 jobs. The economic entities of the stall are scattered individuals and families, which are also the "long-tail" customers that Internet banks pay attention to. The rapid increase in customer base provides a good foundation for the development of Internet banking.

The work report of the Chinese government also pointed out that new formats such as online services have played an essential role in the fight against the epidemic. We must continue to introduce supporting policies, comprehensively promote the "Internet +," and create new advantages in the digital economy. In this context, Internet banks' digital and online service capabilities continue to provide substantial financial support for resuming work and production and boost domestic demand. In the case of e-commerce banks, the loan business of e-commerce banks mainly serves small and micro enterprises, self-employed individuals, and three rural customers. According to two data reports, as of the end of June 2020, its loans and advances amounted to 112.03 billion yuan, compared with 70.03 billion yuan at the end of 2019, an increase of nearly 60%.

However, the policy also harms the interests of banks. During the epidemic, the Chinese government has introduced a series of policies to support the development of enterprises, including requiring banks to cut interest rates or provide loans to enterprises without interest. On February 1st, the People's Bank of China and other five departments jointly issued the "Notice on Further Strengthening Financial Support to Prevent and Control the Novel Coronavirus Pneumonia Epidemic." Micro-enterprises do not blindly draw out loans, cut off loans, and suppress loans. It is necessary to improve the efficiency of examination and approval, reduce loan costs, improve loan renewal arrangements, and increase credit loans and medium- and long-term loans to help enterprises tide over difficulties. This has created policy pressure on revenue for commercial banks whose nature is enterprise. For online banks whose customer groups are mainly small and micro customers, they are guided by policies.

Under the influence of the policy, in the first half of 2020 alone, WeBank implemented policies such as deferred repayment for approximately 130,000 small and micro enterprises, involving more than 30 billion loans; it also provided loans to the four provinces Hubei, Guangdong, Henan, and Zhejiang. Particular interest rate cut policy. By February 2nd, the Internet Commercial Bank also targeted 1.5 million Hubei small shops and 300,000 small medical shops fighting the epidemic. They continued to lend without borrowing, and they reduced their interest rates by 10%—Unfortunately, those suffering from COVID-19 pneumonia. Small shop owners can be exempted from the interest in full.

The government's advocacy of rational consumption, control of advanced consumption, and waste reduction has indirectly affected credit business development. On June 29th, 2020, the China Banking and Insurance Regulatory Commission's official website issued the "Consumption Reminders of the Consumer Insurance Bureau of China Banking and Insurance

Regulatory Commission on the Reasonable Use of Credit Cards," stating that the Consumer Protection Bureau of China Banking and Insurance Regulatory Commission issued the No. 4 Risk Reminder for 2020 to remind consumers: Correctly understand the functions of credit cards, use credit cards rationally, establish scientific consumption concepts, consume rationally, and reasonable overdrafts. Compared with credit cards, Internet banking is more convenient to operate, easy to open, only a few minutes, easy to import, fast to lend, and often limited time interest-free policy, so young people generally like it. The guidance of credit consumption has weakened consumer demand and restricted credit behavior.

3.2 Economic environment

Small and micro enterprises contribute more than 50% of China's tax revenue, more than 60% of GDP, more than 80% of urban labor employment, and more than 90% of enterprises. However, due to the small loan lines, bad mortgages, and high risks of small and micro enterprises, traditional banks' proportion of financial support is deficient. The simplification of the financial system restricts the financing and loans of Chinese SMEs and is not conducive to the development of SMEs. Under the impact of the COVID-19 pneumonia epidemic, small and micro enterprises and individuals with weak anti-risk capabilities have become more demanding for funds, and the demand for "long-tailed customers" has increased. Research data shows that 82% of small and micro enterprises face a funding gap due to the epidemic's impact, and 71% of the interviewed companies believe that they can survive the outbreak if they can get the loan. The resumption of work and production of the long-tailed customer base requires financial assistance from the bank, and they also have an urgent desire for funding. Driven by the "street stall economy," many families and even working employees will take on the streets in their spare time to start a "small business" to subsidize their families. The activeness of the street economy stimulates economic development. At the same time, individuals and families with small businesses and weak financial capacity carry out economic activities, which increases the demand for capital turnover and drives the development of lending. These "small and micro customers" are also the principal customers that Internet banks pay attention to. China's Internet banks have adopted a series of measures to strengthen credit support for small and micro-businesses, including issuing loans to small and micro-businesses through a "contactless" approach. From March 5th to April 30th, there were fewer than two Internet merchant banks. Within a month, it cooperated with the industry to issue 366.7 billion "contactless" loans, serving 8.4 million customers. According to the 2019 annual report of the Internet Commercial Bank, the number of customers served in 2019 was 20.87 million, with an average of only 1.74 million per month.

However, at the same time, under the influence of the COVID-19 epidemic, social and economic instability has appeared. The development of enterprises is complex, and there have been many layoffs, bankruptcies, and business shrinkage. As a result, it is difficult for enterprises and individuals to repay loans, resulting in significant credit problems and bringing risks to the development of banks. At the same time, due to the substantial instability of the economic market, Internet banks have adjusted their loan risk assessment models from the perspective of protecting themselves, and the amount of creditable business has also been reduced accordingly. According to a People's Bank of China report in August last year, 40% of households in China have zero savings. In China, nearly 60% of people under the age of 35 have no protection. Before the epidemic, many families relied on monthly wages to maintain their everyday life. However, the sudden arrival of the epidemic, suspension of work, production suspension, layoffs, salary cuts,

etc., have significantly impacted individual families and brought a lot to bank operations—a considerable risk. Online banking customers are concentrated in scattered individuals and small and micro enterprises, and the impact is even more significant, and the chances are increased.

3.3 Social environment

With the gradual liberalization of China's financial controls, with China's large population base, growing demand for financing, and outdated traditional banking services, the P2P network lending financial business has experienced explosive growth in China, absorbing a lot of private deposits and grabbing an increased market share of borrowing and lending. As of the end of July 2018, only 1,645 P2P platforms are operating normally, and 4740 platforms have problems, accounting for 74%. People gradually lose confidence in P2P. As a bank, WeBank, which is based on Tencent, has become one of the investment and financial management objects that people are willing to trust.

The number of Chinese Internet users exceeded 900 million, and mobile Internet users reached 897 million. The proportion of Internet users using mobile phones to access the Internet reached 99.3%. As of March 2020, the average weekly online time of Chinese netizens is 30.8 hours. Affected by the COVID-19 pneumonia epidemic at the beginning of 2020, the online time of netizens has increased significantly, an increase of 3.2 hours from the end of 2018. In addition, as the uncertainty of the COVID-19 epidemic continues to grow, people are increasingly more inclined to choose a contactless lifestyle, such as online shopping and online administration of government affairs. The online demand for banks has also increased accordingly. It can be said that the COVID-19 epidemic has changed people's lifestyles to a certain extent, and this has laid a good user base for the development of Internet banking.

However, the epidemic has exacerbated the credit crisis of many companies. The epidemic has caused some companies to face survival crises such as the rupture of capital chains, leading to a series of social phenomena and situations of social trust. Internet banks must diversify their operations to expand their business, including firms not involved in large financial institutions. For example, rent loans. "Rental loan" is a hazardous operation mode, and many large banks will not pass such a project. However, To expand their business, Internet banks have also participated in rental loans. In the "Thunderstorm" Eggshell Company incident, the third-party financial institution is WeBank.

Leasing companies are the core of the "rental loan" operating model and the source of multiparty crises. Once hit, the leasing company's capital chain is straightforward to break. Financial institutions use tenant rents as collateral to provide loans to leasing companies and are the main contributors to the "rental loan" operating model. Once the capital chain is broken, financial institutions will find it difficult to recover loans from tenants or leasing companies. When the tenant refuses to repay the loan, financial institutions often report insufficient personal credit information as grounds for coercing the tenant to continue to perform the contract, intensifying the contradiction between the tenant and the tenant.

Specifically, the profit model of some long-term apartment rentals such as Eggshell Company is that tenants have to pay through the APP designated by Eggshell when signing a contract. Eggshell will borrow a year's rent from the bank and then use the money to invest. Affected by the epidemic, many parents renting apartments, including the listed company Eggshell, are in a hurry due to the funding chain. In the epidemic this year, the investment income of eggshells is

not good, and there is no way to pay the landlord's annual rent, so the landlord will rush the tenant if he can't get the money. Third-party financial institutions sign loan contracts with individual tenants. Even if the long-term rental platform goes bankrupt, tenants must continue to repay their loans on their credit. At present, WeBank has loaned more than 1.5 billion yuan to eggshells. Although the long-term rental platform has closed down, financial institutions can also collect debts from tenants, but for WeBank, it faces tremendous pressure to recover loans from the scattered 160,000 eggshell tenants. At present, the eggshell restructuring plan is under discussion. If Eggshell can "live" in the future, the corresponding risks will also be solved. However, the problem is that if Eggshell goes bankrupt, it will bring significant losses to WeBank. This time, due to the eggshell long-term rental platform incident, not only did WeBank lose funds, but it also got an immeasurable crisis of customer trust.

The epidemic has brought the risks of consumer credit to the surface. The consumer credit business of financial institutions is faced with risk exposure of the existing credit business, bottlenecks in the collection business, difficulties in credit expansion, and complex fraud risk management. Since the beginning of this year, the lockdown, postponement of work, resumption, self-isolation, under-starting, and other conditions have led to a decline in the income of some residents, shrinking consumer demand, and a decline in repayment ability and willingness to repay. According to the "Report on Diagnosis of the Impact of the Epidemic on the Financial Health of Weak Economies and Policy Recommendations" issued by the China Institute of Inclusive Finance (CAFI), after the epidemic, the income and expenditure management of the working class was poor, and emergency fund reserves were insufficient, 73% of working-class families cannot make ends meet. Once called "sub-optimal," this low- and middle-income group once called "sub-optimal" has a tight capital chain. The overdue consumer credit targeted at them has accelerated, and stock risks have surfaced. Internet banking is aimed at "long-tail" customers such as small and micro enterprises and individuals and has been dramatically affected by the shock. Therefore, banks face more significant risks. Before 2019, WeBank's liquid asset coverage ratio increased year by year, but in the first half of 2020, there was a considerable decline, incredibly qualified, and high-quality liquid assets fell sharply (see Table 2).

Table 2 WeBank Liquidity Coverage Ratio (RMB million)

	2020	2019	2018
<i>Liquidity coverage ratio</i>	474.98%	585.20%	286.71%
<i>Qualified high-quality liquid assets</i>	63738.02	87170.39	7966.62
<i>Net cash outflow</i>	13419	14895.74	2964.77

3.4 Technical environment

Relying on smartphones and the Internet, financial technology combines big data, cloud computing, artificial intelligence, blockchain, and other technologies to reshape the economic ecology. The further in-depth and development of Internet finance based on "Internet transforming traditional industries" and "Internet +" has considerably impacted the development of the traditional financial industry and brought new development prospects to China's financial sector. At present, many financial institutions have begun to try to use big data to drive related financial business operations. As an application scenario of Internet financial technology, Internet

banking has increasingly become the focus of attention. However, commercial banks are inadequate in cutting-edge science and technology, and the development of financial technology by commercial banks is mainly for the construction and operation of the banking system. In addition, commercial banks have fewer active innovations and a longer innovation cycle, so their technology R&D and application capabilities exist; there are obvious shortcomings.

In this fight against the epidemic, in terms of serving small and micro enterprises through digital financing, the online contactless financial services provided by various banks have enabled financial technology to play a role as a macroeconomic stabilizer. All banks have begun to focus on investing in network technology, increasing technology development, and promoting the development of financial technology. Research shows that the growth of digital financing has weakened the impact of the COVID-19 epidemic on small Chinese household businesses. Internet banking, which is born with the advantages of financial technology, embodies the outstanding benefits of technology. The "contactless" service method has made positive breakthroughs in digital financing services during the epidemic, expanding the coverage and availability of financing services. Automated credit approval procedures, networked product marketing methods, and intelligent risk management and control have all demonstrated the advantages of online banking developed based on financial technology. For example, Weizhong Bank's Weiye Loan customers can apply online and make loans online. If an enterprise involves and meets the conditions, it can get a loan in as short as one minute, which is exceptionally efficient.

Internet banking incorporates cutting-edge technologies such as artificial intelligence, blockchain, cloud computing, and big data into the risk control system and applies them to customer identity authentication and intelligent customer service. At the same time, because most Internet banks have the background support of large Internet companies, they can obtain a lot of personal data and social data, which can be important information for effectively judging the ability of customers to repay loans in the epidemic. For example, for WeBank, which is based on Tencent, through WeChat, QQ, Tencent games, mini-programs, etc., data on customer travel, education, consumption, online behavior, social circles, etc., can be effectively obtained. For online merchant banks with Alibaba as their background, many small and micro enterprises can bring a lot of operating data. These are difficult for traditional commercial banks to obtain. Under the impact of the epidemic, the market environment and social environment are complex and changeable. Because of the multi-faceted data acquisition, online banking can adjust their business in time.

The low-cost advantage of online banking was fully demonstrated during the epidemic. First of all, due to the impact of isolation, many terminals of traditional banks are in a state of suspension or version suspension, but staff salaries and site fees need to be paid continuously. Online banking does not have this part of the cost. At the same time, Internet banks use digital technology to solve the problem of corporate risk assessment, and blockchain technology is applied to the online contract, deposit, and arbitration scenarios to ensure that the data is accurate, complete, and credible. Customers can sign an electronic loan contract online and withdraw money conveniently after online electronic signature, legal person identity verification, and corporate account binding. According to the estimation of the Internet Commercial Bank, the operating cost of issuing a loan is about RMB 2.3, and the same loan, if it is done offline, will cost about RMB 2,000. Give full play to the business and technological advantages; purely online operations

help enterprises and individuals handle business without leaving their homes, effectively avoid epidemic infections, and reduce corporate operating costs.

3.5 Industry environment

From the perspective of potential new entrants, the impact of potential entrants, including traditional commercial banks and Internet companies, especially direct selling banks, will be substantial. In November 2015, China's Internet giant Baidu and China CITIC Bank announced the establishment of a bank, but it operates as a direct bank. It can be said that there are many potential entrants to Internet banking, and the competition is fierce. However, due to the high barriers to entry in the banking industry, potential new entrants are not dominant, and there will be no significant threats in the short term. From the perspective of suppliers, as a bank, its suppliers are mainly depositors. As an emerging business, Internet banking is also dominated by individuals and small and medium-sized enterprises. Compared with scattered depositors, the status of Internet banking industry leader enables it to have more substantial bargaining power. In terms of negotiating power with buyers, the customer groups of Internet banks are mainly individuals or small and micro enterprises who cannot obtain traditional bank loans. This group has many individual loan funds that require a small number of funds but requires a short time. The amount and conditions for obtaining loans are determined by their behavior on the credit reporting platform. Buyers often have very high loyalty. Therefore, Internet banks have strong bargaining power for buyers. In summary (see Table 3), it can be seen that the external environment of Internet banking is relatively optimistic, and the environmental pressure is not too great. However, both opportunities and challenges are emphasized whether it can continue to maintain its No. 1 position in the industry.

Table 3 Analysis of the Five Forces of Internet Banking

Five Forces Analysis	
<i>Potential entrant threat</i>	Higher
<i>Threats to competition in the industry</i>	Lower
<i>Supplier's bargaining power</i>	Low
<i>Buyer's bargaining power</i>	Low
<i>Substitute threat</i>	High
<i>Conclusion</i>	Low external environmental pressure

4 THE IMPACT OF THE COVID-19 EPIDEMIC ON ENTERPRISES

During the epidemic, the cost advantage of Internet banks was fully demonstrated. Compared with many traditional commercial banks, Internet banks hardly set up branches, which reduces branch construction and maintenance costs, such as branch staff labor costs, site costs, maintenance and cleaning costs, infrastructure costs, etc. Many traditional commercial bank branches were closed during the epidemic or half-closed, but various fees still need to be paid. Internet banking can get rid of this part of the cost to the maximum. At the same time, due to the

application of financial technology, Internet banks have advantages in quickly identifying effective customers, adjusting risk models in time, 24 hours a day uninterrupted service, and AI scenario applications, reducing risk costs, labor costs, and saving credit costs.

The epidemic has boosted the popularity and acceptance of online banking operations. During the epidemic prevention and control period, people are isolated, and many public places are closed, services that can directly contact people are stopped, and traffic is not smooth. However, in China, the online and offline demand for almost 100% of food, vegetables, fruits, and other daily necessities has been quickly realized. Government agencies have launched a large number of online services, online appointments, and other services through online coordination, command, and deployment while ensuring accurate docking and efficient deployment of production and consumption online; when the epidemic is slightly alleviated, they will be launched at the right time in the online office mode, a large number of people start to work from home. During the epidemic prevention and control period, new business formats, new retail, and new models that have been tested and proven to be effective have been further developed after the epidemic has stabilized, and various online office software that can achieve unique collaboration is popular. Before the epidemic, many people would follow their past living habits and go to business outlets to handle business, believing that face-to-face transactions are safe. However, during the COVID-19 epidemic, people changed their living habits and ideas. More people choose online services for banks, reducing physical business outlets and increasing their trust in online banking services. To a certain extent, it makes up for the shortcomings of online banking compared to traditional banks that have less customer credit because they do not have physical outlets. At the same time, due to the epidemic, people have also been more actively learning the skills of doing things online and have improved their ability to use online banking.

The epidemic has enhanced the competitiveness of Internet banks in the financial sector. The epidemic's social credit crisis has made people more willing to choose banks for investment and financial management, dramatically weakening the competitiveness of various previous P2P financial management methods. During the epidemic, many companies went bankrupt, and people paid more attention to the safety of funds. Compared with the economic boom before the epidemic, people were more inclined to risk investment and more willing to stable investments after the epidemic. Internet banks such as WeBank with Tencent as the background and Internet Banking with Alibaba as the ground can meet people's demand for online operations and meet people's need for trust in banks.

They increased business risk. Many corporate operating and personal credit risks have soared during the epidemic, bringing significant risks to banks. At the same time, due to work stoppages, production stoppages, etc., unemployment and people's income decline, and the bank's ability to obtain savings has also responded to the slide. After the first half of 2020, online commercial banks' core tier 1 capital adequacy ratio and capital adequacy ratio have dropped by 4.69% and 4.63%, respectively, which is a significant decline. In terms of asset impairment losses, online merchant banks recorded 1.4 billion yuan in impairment losses in the first half of 2020, compared to 1.65 billion yuan in 2019, which accounted for almost 85% of the last year in the first half of this year. This is not only the case with online commercial banks, but the data of WeBank is not optimistic (see Table 4). Take WeBank's net stable funding ratio as an example. The so-called net stable funding ratio (NSFR) refers to the ratio of stable funds available to commercial banks to the stable funds required for business. Support capacity, the regulatory requirement for the proportion of stable net funds, is not less than 100%. It can be seen from Table IV that, although

the balance of stable net funds of WeBank in the first half of 2020 is still within a safe range, it is lower than before.

The proportion of net stable fund Internet banks exposed problems in their business philosophy and business decision-making. Internet banking has maintained a rapid growth and expansion model in its development in the past few years. Although the main customers served are small, medium, and micro enterprises and individuals, the growth is impressive (see Figure 1). Take WeBank as an example. If it continues to use its past expansion policy during the epidemic and gets involved in high-risk rental loans and other businesses, it will face an impact similar to the collapse of an eggshell company. For banks, this is not only a loss of funds but also a loss of credit.

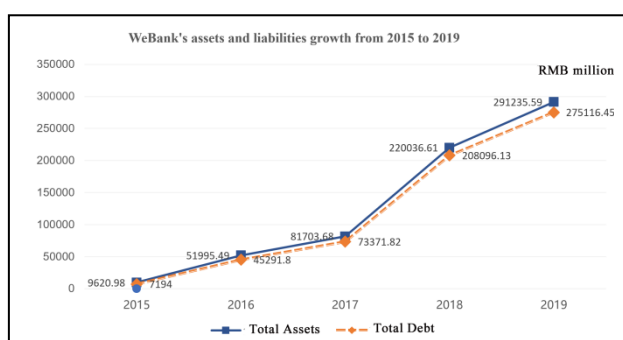


Figure 1 WeBank's assets and liability growth.

5 ANALYSIS AND CONCLUSION

The impact of COVID-19 on Internet banking is two-way. The epidemic has increased the demand for funds and increased social demand for online banking services. Internet banking has won customers' favor with the contactless services and simple, convenient, and low-threshold operation services its technical advantages provide. Internet banks have played their technological and cost advantages in the epidemic. Remote assistance, 24-hour uninterrupted service, fast lending speed, manual + machine learning model, etc., all demonstrate the technological vitality of Internet banking.

The epidemic has accelerated people's acceptance of Internet banking. Internet banking has been facing the problem of changing consumer attitudes and financial management methods. Under the influence of COVID-19, customers' financing, financial needs, using financial products, and purchasing attitudes have all changed. Due to maintaining social distancing, people are gradually accepting to leave physical business outlets and turn to online banking services. The epidemic has highlighted the advantages of Internet banks and reduced the competitive pressure on Internet banks. However, traditional commercial banks, which are competitors of Internet banking, have been hit by the epidemic, and many outlets have been forced to go out of business, bearing heavier cost pressures. Other competitors of Internet banks, such as P2P platforms, are more inclined to choose banks as investment and wealth management platforms due to the epidemic's crisis of social trust. At the same time, the epidemic has also brought some adverse effects. The first is to increase business risk. The customer groups of Internet banking services are mainly small and

micro enterprises and individuals. These groups have weak anti-risk capabilities. Under the impact of large-scale public incidents, their anti-risk capabilities are even more vulnerable, bringing significant risk to bank operations.

Generally, productivity and income will be affected after a major epidemic. For example, during and after the Spanish flu, savings and investment potential were adversely affected. Under the impact of COVID-19 pneumonia, online banks will also be involved in their storage and wealth management businesses. At the same time, influenced by the policy, it is necessary to transfer interest income. The epidemic also exposed the shortcomings of Internet banking's rapid development and expansion policy in recent years. To expand their business, Internet banks are involved in some high-risk credit areas or credit methods. Under the epidemic's impact, if there is a problem in one of the links, it will cause losses to bank operations and credit.

In general, Internet banking can stand out in the epidemic thanks to the power of financial technology. Internet banks born out of financial technology have the advantages of contactless services, 24-hour uninterrupted services, convenient operation methods, lower costs, and bank license credit. However, in the epidemic, Internet banks are also facing more significant operational risks. If we continue to use the previous radical development model, there is a risk of more significant losses. Therefore, we believe that in the post-epidemic era, Internet banks should firmly grasp the foundation of their business, continue to expand their technical capabilities, standardize their business behaviors, serve small and micro customers as the purpose, reduce risks as the goal, and explore the legal, compliance, and flexible development models. At the same time, it is necessary to actively cooperate to provide financial support for small and medium-sized enterprises in compliance with the requirements of national policies, support the resumption of work and production to restore economic development, and strengthen its credit and reputation building.

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