The Economics and Finance Letters
2021 Vol. 8, No. 1, pp. 92-103.
ISSN(e): 2312-430X
ISSN(p): 2312-6310
DOI: 10.18488/journal.29.2021.81.92.103

THE NEW PATTERN OF ONLINE CREDIT LOAN IN THE POST-EPIDEMIC ERA

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Article History
Received: 15 February 2021
Revised: 3 March 2021
Accepted: 17 March 2021
Published: 29 March 2021

Keywords
Financial markets
Fintech
COVID-19
Smart financial
Online credit loan
Scenario theory
Prospect theory.

JEL Classification:
D11; E22; G21.

ABSTRACT

This paper is one of the few studies that discusses the impacts and challenges of banking business, especially online credit loans (also known as Internet loans or consumption loans) from the aspects of social environment, economic development, public policy, and technological environment changes under the impact of COVID-19 epidemic. Based on authors' years of experiences in banking industry, they find that online loan products are facing with numerous problems, such as unclear position of online loan products, management dilemma of employees, dilemma between social responsibilities and debt collection, mismatch between risk and income, high bad-loan ratio issues and so on. To find effective ways to solve those problems, authors combined experience with practice and put forward several possible directions, such as seizing the opportunities of digital transformation to develop financial technology, expanding online products, establishing a new financial environment under changed consuming scene, and utilizing the strict supervision mechanism to expand traditional banking business.

Contribution/Originality: This is one of the few studies to discuss the current situation and problems of online banking business under the impacts of COVID-19. Then, ideals and solutions are presented based on the situation of reality and authors' years' experience in banking industry.

1. INTRODUCTION

Since the central bank issued its first batch of business payment licenses (known as the third party payment licenses) to 27 companies such as Alipay in May 2011, the term "Internet loan" has gradually entered into the life of Chinese people. Just two years later, in September 2013, A fintech company called "Yixin" launched its product "usyrd" which allowed borrowers to complete the whole finance process online. From them on, peer to peer lending has rapidly stepped into public view. Year 2013 is also called as "the first year of online finance". In terms of online technology, the application of 5G made it possible for things to be connected, so year 2013 is also widely considered as "the first year of the Internet of things" in China.

The emergence of online finance and the maturity of Internet technology have given birth to a large number of internet-finance entrepreneurs, which forced banks to seek breakthroughs in financial technologies. In 2020, the COVID-19 accelerated this change. The epidemic changed people's consumption habits: the increase of non-contact online business and the decrease of off-line cash flow. At the same time, financial supervision has been increasingly strict and all financial technology enterprises are included in the strong regulatory system. The number of P2P company dropped from the peak of 5000 to 3 by the end of November in 2020 (Song, 2020).

Existing studies have shown that although the epidemic has a enormous impact on consumption currently, the economy will recover quickly when epidemic ends (Li & Fu, 2020)，and the impact on the banking industry in China is still controllable as a whole (Global Banking Research Group of Bank of China Research Institute, 2020). Some scholars have proposed that commercial banks should accelerate digital transformation (Lu & Cao, 2020) to cope with the new credit demand, solve disaster recovery problems (Research Department of China Banking Association, 2020) and respond to new types of online consumption (Lu, 2020; Wang, 2020; Wu & Zhu, 2020). In this paper, the unprecedented impact of finance and consumption are investigated from four aspects: social environment, economic development, science and technology, and government policies. At the same time, business opportunities and constructive suggestions brought by the epidemic transformation are also put forward to respond to the new online consumption scene or changes.

Therefore, this paper believes that with the normalization of epidemic and the further maturity of financial technology, loan business of traditional banks will be impacted and challenged unprecedentedly. Traditional banks should firmly grasp the trend of the changes and actively deploy new loan opportunities in different consuming scenarios under the new pattern.

2. FINANCIAL ENVIRONMENT CHANGES IN THE POST-EPIDEMIC ERA

The outbreak of the black Swan event (COVID-19) has rapidly disrupted global economic, political, scientific and technological progress. This part will focus on the impact of consumption habits and loan demand from the perspectives of social environment, economic development, science and technology, and government policies.

2.1. The Change of Social Environment

"Less clustering, No gathering" is an important preventive measure for Chinese people to cope with the COVID-19 pandemic. It is generally accepted by Chinese people due to its simple operation, high popularization and strong protective effect. With the normalized prevention of the epidemic, a new way of life has been gradually formed: live and work online. According to the Statistical Report on The Development of Internet in China reported by China Internet Network Information Center (CNNIC) by June 2020, the number of Internet users in China is 940 million, which means Internet penetration rate is as high as 67% (The 46th Statistical Report on the Development of Internet in China, 2020). It is worth noting that online education, online shopping, online payment and other online applications related to the epidemic have increased most significantly. Therefore, new forms and models of consumption have gradually taken shape. It can be predicted that the proportion of online consumption will increase year by year after the post-90s and even post-00s become the main consumer force in China. Consumption demand brings financial services. With the rise of online consumption, small unsecured online loans have also ushered in the development trend. According to the <2019 China's consumer credit market research report>, Chinese online credit loan scale is expected to increase from 13 trillion yuan in 2019 to 24 trillion yuan in 2025, with a compound annual growth rate of 11.4% (Smart Finance Institute, 2020).

2.2. The Change of Economic Environment

On the one hand, the impact of the epidemic on economic is obvious. The financial situation both in China and abroad poses new challenges to China's banking. From a global perspective, according to the <World Economic Outlook report> released by the International Monetary Fund in April 2020, the global economy will shrink by 3% in 2020, which is the most severe economic recession since the Great Depression of the 1930s. Among them, developed economies generally fell into negative growth (average negative 6.1%) (International Monetary Fund, 2020). As the global economy shrinks, the financial market environment becomes more complex. Low or even negative interest rates will become normal, and the living space of banks will be further compressed. This requires commercial banks focus on the real economy and improve the service quality. Therefore, the Chinese government actively promotes the full resumption of work and production, and introduces consumption policies to stimulate consumption, such as issuing consumption coupons, reducing or exempting travel tickets, and promoting 2.5 days of rest. Major banks have also begun to promote consumer loans in fancy ways, including various interest-free policies. According to the National Bureau of Statistics, the GDP rates in China are negative 6.8%, positive 3.2%and positive 4.9% separately in the first three quarters in 2020 (Industrial Production Rebounded, 2020).

On the other hand, the epidemic has also created new economic growth points, bringing different consumption scenarios and loan demands. As mentioned above, the epidemic has changed the social environment that human beings live People have gradually accepted working shopping, entertainment, and even education or medical treatment on the internet. Even goods that was hard to be sold online in the past, such as houses and cars, are trying to make online sales. These changes will inevitably lead to the decline or even death of some industries, but also bring some new economic growth points in new industries as well as new loan opportunities. Therefore, it is absolutely necessary for bankers to investigate the Internet loan business in the new era from the perspective of new consumption scenario.

2.3. The Change of Policy Environment

Since the 2008 financial crisis, the world economy has always been in a downturn trend. Some scholars say that the impact of the new epidemic on the economy may be even greater than that of the financial crisis. It can be predicted that it will take a long time for the world economy to return to the level before the epidemic. Therefore it is impossible for China to achieve its sustainable economy growth simply rely on international demand. At the same time, with the increasing trend of anti-globalization, international unilateralism and trade protectionism, the export of Chinese products and the import of top technologies are restricted. Under the superposition of the above multiple factors, consumption will undoubtedly become the most important carriage to drive China's GDP growth. Therefore, it is particularly important to expand domestic consumption demand and innovate domestic independent technology. On the Politburo meeting of the CPC Central Committee in 30 July 2020, the Chinese government proposed a new development pattern called "dual circulation", which means that regarding the domestic economic cycle as the main body, and promote the domestic and international economic cycles mutually. The new development strategy of "double circulation" proposed by the state and "the 14th five year plan" will further promote the change of financial services under diverse consumption scenario. However, "focusing on domestic circulation" is not simply a closed-door approach. History has shown many times that opening up makes progress, and self-seclusion suffers a beating. "Double circulation" lies in promoting domestic economic development from international circulation, expanding consumer demand, and realizing mutual benefit. Besides, The Regional Comprehensive Economic Partnership Agreement (RCEP) originally initiated by ASEAN was also successfully signed in 2020 under the active initiative of China. Under RCEP, the trade barriers of the members of the fifteen member states will be broken, and the integration of industrial chains and supply chains will be accelerated, which will ultimately drive consumption rapidly. The changes in the financial environment indicate that the financial industries should also improve its service to seize the opening dividend, explore new consumption scenarios, and launch new consumption products.

2.4. The Changes of Technology

On the one hand, the science and technology war and the epidemic have attracted social attention on investment in technology. In recent years, as Western countries, led by the United States, have implemented strict policy on core technology export, China has continuously increased its investment in the field of technology. In October 2019, China strongly supported the integrated application of blockchain technology and promoted the transformation of the blockchain industry. In the same month, China's three major telecom operators launched 5G packages and took the lead in launching 5G commercial use in the world, providing powerful hardware support for various online scenarios. With the blessing of blockchain and 5G networks, big data and cloud computing make artificial intelligence a reality.

On the other hand, financial regulators are urging the financial industries to actively complete digital transformation. In September 2019, the Central Bank issued the "Fintech Development Plan (2019-2021)" and clearly stated that in the context of the technological revolution and industrial transformation, artificial intelligence, big data, cloud computing, and Information technology must be deeply integrated to provide a steady stream of innovative vitality for financial development (Sina Finance, 2020). Under the support of cross-validation and third-party data supplements, Banks will be able to achieve its risk control requirements and complete core business links online, such as credit approval, contract signing, loan payment, post-loan management, etc.. After that, service quality and efficiency will be greatly improved while financing costs will be greatly reduced. It is foreseeable that in the future, the investment and development of financial technology for financial institutions will continue to expand, and finally realize the synergy of finance and technology.

Under the double circulation pattern formed by major changes in the internal and external environment, the importance of the financial system to pull the economy has become increasingly prominent.

2.4.1. Make the Ratio of the Current Increment Number of One Industry and that of GDP at the Same Year as the Contribution Rate

As shown in Figure 1, among the major industries, “finance” and “information transmission, software and information technology service” are mostly affected by epidemic. It can be seen from figure that in June 2020, contribution rate of this two industries were quite low, which was - 32.94% and - 31.44% respectively. However, they increased to 94.74% and 90.17% rapidly in quarter 3, while number of the traditional industries such as wholesale and retail, accommodation and catering still very low.

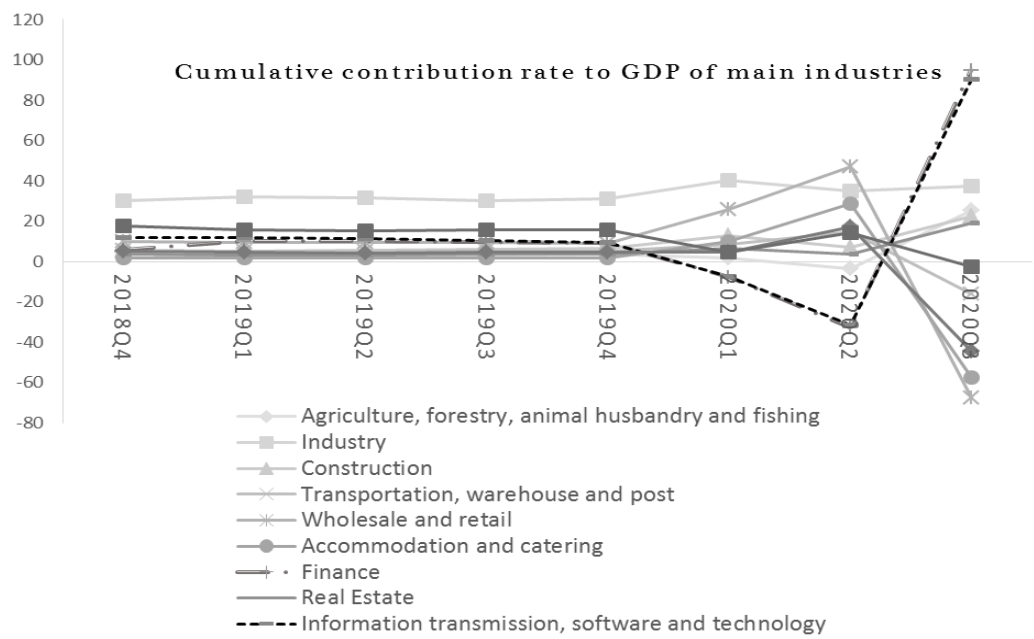

Figure-1. Contribution rate to GDP of main industries.

2.4.2. Make the Product of One Industry's Contribution Rate to GDP and the Current GDP Growth Rate as the Driving Force of Major Industries to GDP.

As shown in Figure 2, it can be seen that the finance and information transmission, software and information technology remained almost unchanged (about 0.6%) from the beginning to the end of epidemic. In addition, they are the only two industries that can contribute positively to GDP, while others have shown fierce fluctuations, especially labor-intensive industries.

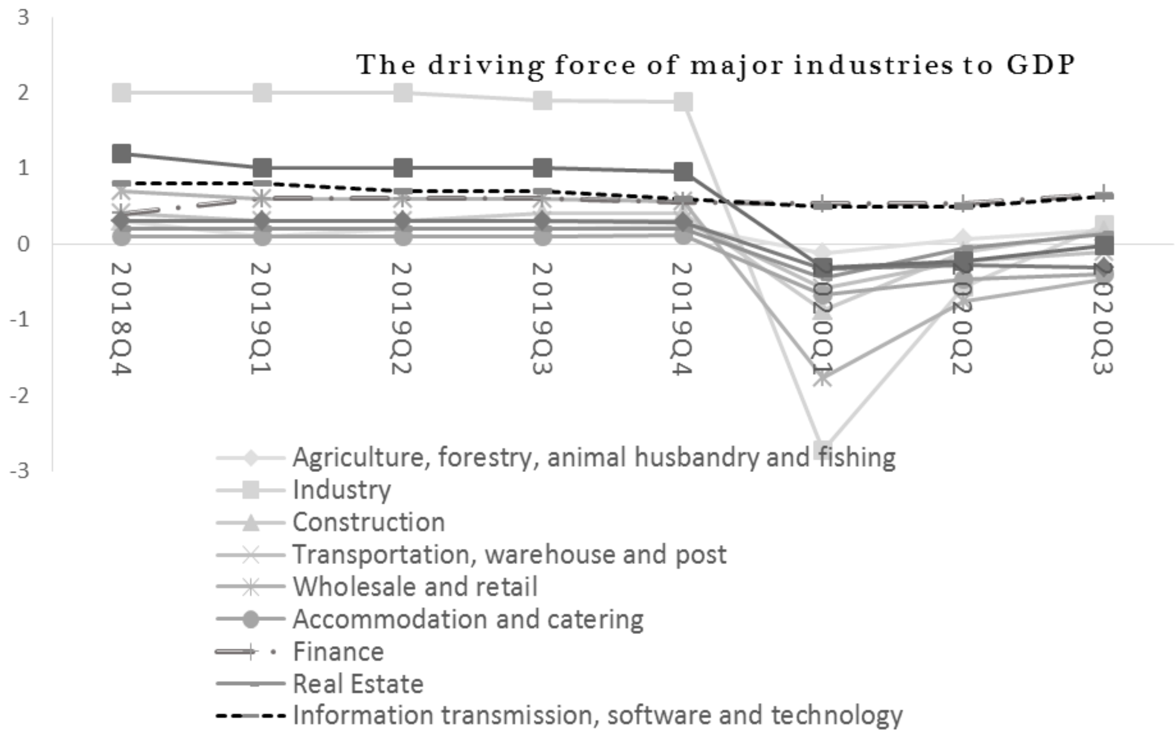

Figure-2. The driving force of major industries to GDP.

From Figure 1 and Figure 2, it is worth noting that the financial industry and information transmission, software and information technology service industries are interdependent and complementary. Thus, in the post epidemic era, promoting the deep integration of Finance and information technology is of great significance to stimulate economic growth.

3. THE CURRENT SITUATION AND PROBLEMS OF BANK CREDIT LOAN

At present, the continuous competition of market share for online loan mainly comes from four forces: The first one is the traditional commercial banks. They take advantage of their market status to continuously strengthen investment in financial technology, develop risk control models for online loans, enrich product types of online loans, and expand the scale of online loans. Some products gradually deviate from the offline audit mechanism and become "Internet loans" that in line with the regulatory definition; The second one is the new commercial banks with no "offline outlets" and only do "online business" , such as MyBank from Alibaba and WeBank from Tencent. Different from traditional commercial banks, this kind of new financial institutions seize online market share quickly rely on their advanced big data and cloud computing technology. They have a natural advantage over traditional banks in Internet applications. The third force is the sudden emergence of financial technology companies, which is the fastest growing and most controversial force at present. They have both financial and technological characteristics, such as Ant financial and JingDong digital technology, etc.; The fourth force is the auxiliary industry chain formed around online loans, such as collectors and various loan assistance institutions. While the four forces are competing and the financial structure is constantly updating, online loans have quietly become the protagonist.

From them on, the new pattern of Internet loans in the post epidemic era is gradually emerging. Although the amount of a single transaction is small, online loans are developing rapidly because of its lower-cost and easier-to-access. With the development of science and technology, Internet loans have gradually formed a diversified pattern, which is challenging traditional banking business. Although commercial banks have accelerated pace on launching and enriching online loans, there are still some problems as following:

3.1. The Positioning of Online Loan Products is Unclear

Some commercial banks are falling into the misunderstanding of utilizing online loan as a tool to attract customers, which means, they attract potential customers to register online through advertising and other marketing resources, and then guide customers to conduct offline transactions in physical outlets. However, the subsequent loan reviews, approval, the post-loan management is still handled according to the offline loan process. This kind of product positioning designed is obviously not consistent with pure online loan. Moreover, the customers who choose online loans are mostly young people, who have lively and enquiring minds. They do not trust state-owned banks as their parents do, which leads to the extremely low conversion rate of online loan customers.

3.2. The Difficulties of Acquiring Customers.

Facing with new business such as online loan, commercial banks are not only unable to acquire high-quality customers, but also unable to identify the online loan frauds. Large Internet technology companies often have high-end scientific and technological talents and powerful middle and background office. These enterprises operate flexibly and do not have redundant institutes that traditional commercial banks have. They can satisfy the potential needs of customers and customize personalized services more accurately and quickly.

With the penetration of online shopping and online payment into national life in the post epidemic era, internet technology companies can use their original data to match the most accurate consumption demand for customers. Then new customer information or consumption data in turn supplement a large number of effective data for the background office. Overall, this is a positive trend of interlocking and spiraling. However, due to the late development of science and technology and limited ability, traditional commercial banks can not find new ways to obtain customers only by relying on its existing or even lagging customer data. In addition, online loans are purely approved by online using big data, and there is no need to do face-to-face check that offline loans usually do. In addition, customer groups applying online loans are young and scattered, so online loans are usually large in number but small in amount.

As online loans have strong concealment, it is easy to form huge losses once the bank's online loan approval system exposes loopholes. Because of the poor traceability, the large number of victims and the easy formation of mass incidents, it is very difficult to solve online loan crime cases. For example, in September 2020, Sichuan police cracked a group online loan fraud case. Criminals used small profits as bait to pay false provident funds to more than 6,000 farmers in remote mountainous areas who had never paid provident funds, and then applied for online loans on their behalf. The loan limit of each farmer was 20,000 yuan to 300,000 yuan. Eventually, more than 6,000 people were injured and the bank faced losses of more than one billion yuan (Jiang, 2020).

3.3. The Post Loan Management Dilemma

It is because the product positioning of online loan is not clear, which inevitably brings difficulties in the management of offline loan. First of all, most of the bank's managers and employees have been working for a long time and accumulated rich experience.

At the same time, they have dependence on the inherent business risk model, so it is difficult for them to understand and accept online loans under digital technology. If they operate online loan products by methods of offline products, such as verifying the counter parties by telephone or even on-site, the post loan management is not only inefficiency and high-cost, but also hard to trace the authenticity of the loan purpose. In contrast, there are strict regulation rules on the use of loans. In particular, loans are forbidden to flow to the real estate market, stock market and financial management market. Due to the inadequate monitoring of the use of loans. They are subject to regulatory penalties. In recent years, with the rise of online loans, there have been many cases of bank employees being punished because of inadequate monitoring of the use of loans, and even being disqualified from employment and senior management.

3.4. Facing with the Dilemma of Fulfilling Social Responsibilities and Debt Collection

As mentioned above, the customers of online loans are mostly young, who tend to overestimate their ability to repay online loans and eventually result in excessive debt or even severe social problems. Different from traditional offline business, online loans also have difficulties in obtaining evidence.

Moreover, in reality, Chinese banks need to bear more social responsibilities than their nominal counterparts, and the supervision has strict regulations on the bank's outsourcing collection. Once the online loan borrowers breach the contract, there is almost no effective trace path. As a result, banks have to face with the problem of social responsibility brought by online loans and bear additional loan losses.

3.5. The Strange Circle of Mismatch between Risk and Income

Table-1. Basic information of online credit loans of some commercial banks (Monetary Unit: RMB Yuan).

Banks	**Maximum credit amount**	**Lowest interest rate**	**Loan period**	**Target customers**
Industrial and Commercial Bank of China	80,000	4.35%	2 Years, maximum 5 years	Customers with credit card, provident fund, social security or salary release
China Construction Bank	30,000	4.35%	Maximum 1 Year	VIP customers with good credit
Bank of China	30,000	4.35%	Maximum 1 Year	Customers with salary release, housing loans, Payment of wages, private banking, housing loans, provident fund or social security.
The Agricultural Bank of China	30,000	4.45%	1 Years, maximum 5 years	VIP customers with housing loans, salary release, provident fund etc..
Bank of Communications	30,000	4.32%	Maximum 3 Year	VIP customers with housing loans, provident fund etc..
The postal savings bank	50,000	4.80%	Maximum 3 Year	Civil servants, state-owned enterprises employees, military officers, public schools and hospitals employees.
China Merchants Bank	30,000	3.96%	Maximum 3 Year	Customers with platinum card or other VIP customers

Matching risk and income is always the basic principle of banking operation. However, with the rapid encroachment from fintech companies on the loan market, the downturn of traditional consumer credit under the influence of COVID-19 and the obstruction of offline extension channels, commercial banks had no choice but to accelerate the promotion of online loan business. But this promotion turned into an interest rate war very soon. For example, in April 2020, Agricultural Bank of China first launched "angel e-Loan" for medical-care group, and took the lead in reducing the interest rate below 4%.

In June, China Merchants Bank launched a mid-year promotion with 3.96% loan. According to the <LPR mortgage interest rate report> for the first half of 2020 issued by E-House Real Estate Research Institute, the statistical data of the first home mortgage in 64 cities showed that the average home mortgage rate in the first five months in 2020 was 5.43%, which was even around 1.5% points higher than online loans (whose risk is much higher than mortgage) (Lu, 2020). This strange phenomenon not only sends the signal of abundant liquidity to the market, but also reflects the bank's urgent attitude towards online customers. In contrast, if banks want to maintain such a low interest rate on online loans, they must reduce costs. As 5mentioned above, in order to reduce costs, enterprises must make full use of technology empowerment, which is another battlefield for banks.

3.6. The Access to Online Loans is Strict, While the Bad-Loan Ratio Continues to Rise.

In fact, although the bank's minimum interest rate for online credit is very low, in fact a few customers are able to enjoy such low interest rate. For example, the lowest rate of loan launched by China Merchants Bank is 3.96%, but only special customers with gold card (a kind of VIP deposit card) in China Merchants Bankare qualified, and other application may be as high as 7.2%.

On the other hand, according to the disclosure of Guangdong Banking Association, by the end of 2019, the amount of bad debt of online loans of banks in Guangdong reached to 1.06 million and balance reached to 6.763 billion yuan. According to China Banking Regulatory Commission, the bad debt loan ratio of personal consumer under the influence of the COVID-19 increased about 0.12% compared with that of the previous year (China Banking and Insurance Regulatory Commission, 2020).

4. IDEALS AND SOLUTIONS

Thinking decides the way out. In the post epidemic era, the environment of banks is facing unprecedented uncertainty. Only acclimating the tide of times development can we clarify thinking and find a way out.

4.1. Seize the Opportunity of Digital Transformation and Develop Financial Technology

4.1.1. The Most Important and Urgent Step is that Commercial Banks Should Firmly Grasp the Development Trend of Digital Revolution and Vigorously Develop Financial Technology

Since the end of the 20th century, the world has entered the fourth industrial revolution digital intelligence era, which is the greatest transformation of human society. The interconnection of things seems to be one of the remarkable features of the new era. In this transformation stage, digital science begins to penetrate into the development of society, economy and people, and the digital transformation of new technologies such as Internet of things, big data and artificial intelligence is the general trend. With the development of science and technology, the transparency of information and data, and the containment of Internet finance, the traditional banking industry is facing competitive pressure of "no change, no death". Firstly is the debt disintermediation, where residents' financial awareness is enhanced. Compared with deposits that have low interest rates, more and more residents prefer rate monetary funds, such as Yu Ebao.

But for banks, low-cost liabilities are greatly reduced, which highly increased it operation cost. Secondly, it is the asset disintermediation. With the approval of Internet financial banks that has simple operation thresholds, the loan business of traditional banks is gradually diverted. Take Webank as an example, the average compound growth rate of loan scale is as high as 245%. Finally, it is the payment disintermediation. The third-party payment has penetrated into the daily life of residents, and is far ahead of the bank payment. This directly affects the intermediate income of banks. Therefore, if traditional commercial banks want to retake its losing market share, they must seize the opportunities of the fourth industrial revolution. In details, they include exploring the interactive scene business generated by the combination of 5g technology, cloud computing, artificial intelligence and finance, carrying out digital and intelligent transformation, and actively embracing the opportunities or challenges brought by digital.

4.1.2. Utilize Financial Technology to Improve the Operational Efficiency of Outlets and Reduce Operating Costs

The traditional banks attract customers, expand the scale and occupy the market share by taking offline outlets as service channels and places. However, the coverage of traditional online stores is limited, the operating cost is high and the business processing efficiency is slow. Nowadays, the major banks have begun to reform their outlets. The most direct transformation is the decrease in the number of outlets and the increase in the rate of operation out of counter. All big commercial banks are trying "light outlets". According to the daily network (NBD) statistics, in 2019, the number of outlets closed by the six major banks reached to more than 800 (Differentiated Bank, 2020). With the advent of the Internet era, the offline outlets of financial industries in the future will no longer be a place to handle traditional business, but more act as an intelligent exhibition hall that full of intelligent devices. At the same time, the online business will expand indefinitely.

4.1.3. Apply Digitization to Loan Approval Process

In the post epidemic era, banks need to persist in data mining, and connect their accumulated data with external data, such as the central bank's credit reference, ICP authentication, tax, logistics, supply chain management and others. By deconstructing expressing and managing data through science and technology, banks can get accurate portrait of customers, and realize closed-loop flow of customers' information flow. Thus, banks can reduce the dependence of historical experience, which can greatly reduce the information cost, time cost and labor cost.

4.1.4. Increase the Reserve of Financial Technology Talents

Enhancing the training of financial technology for the existing bank staff, increasing the IT talent reserve, and focusing on the introduction of high-end IT talents that cannot be endogenous or cultivated in the short term by banks. Some banks, such as Ping An Bank, have recruited 2600 scientists and 35000 R & D personnel from Oracle, IBM, MIT and other institutions in the past decade, and have deployed 8 research institutes and 57 laboratories around the world (To Tell a Good Chinese Story, 2020). At the same time, Ping An Bank has covered IT skills training for marketing employees, so that marketing staff can translate customer needs into IT language, and develop financial products with the help of scenario theory and prospect theory. Now Ping An Bank's brand identity has changed from "insurance bank" to "Finance + technology" company, ranking in the forefront of global financial institutions.

4.2. Seize the Opportunities from Consuming Scene Change in the Post Epidemic Era and Establish a New Financial Environment

The new financial pattern in the post epidemic era is gradually forming. Traditional banks should focus on the changes of the consuming scene, actively seek ideas and establish a new financial ecological environment based on the scene. As mentioned before, financial technology reshapes the form of the financial industry, and new scenarios generate demand of financial services. Commercial banks should actively use the frontier theory to study and judge the changes of consumer finance, and actively formulate strategies under the new pattern. With the continuous development of social science, the interdisciplinary integration is also deepening. The theories of sociology and psychology have been widely applied and expanded in the field of economics, such as scenario theory and prospect theory. With the help of previous research results, these theories can also provide decision-making help for the formulation of strategies under the new pattern of online loans in the post epidemic era.

Early in 1960s and 1970s, Erving Goffman found that people play different roles according to different "space" scenes in society just as they do on the stage. This is the original scene theory. Later Merowitz expanded the "space" scene to the area of "feeling", that is, the environmental atmosphere that affects people's behavior and psychology should also belong to the scene (Merowitz, 2002). Robert J Scoble further introduced "scenarios" into factors of the new era such as mobile Internet and big data, and proposed that "in the next 25 years, the era of scenarios is coming" (Scober & Israel, 2014). The Enlightenment of scenario theory to banks is that there are many new specific financial and consuming scenarios in the post epidemic era. Banks must have ability to quickly discover these new scenarios and quickly formulate strategies. In other words, if banks want to adapt to this era, the products they launch should meet the specific scenarios and needs in the post epidemic era. Specifically, in the post epidemic era, the financial service scene can be divided into online service scene and offline service scene under physical space and e-commerce, tourism, automobile, medical, campus under the application environment. Different scenarios may also be cross-integrated, resulting in numerous demand scenarios and supply scenarios. Banks should develop different financial service solutions for different scenarios.

Prospect theory is the cornerstone of modern finance. It is a kind of risk decision-making theory proposed by Daniel Kahneman and Amos Tversky. It studies people's economic behavior from the perspective of psychology and ti holds that people are not always rational. Sometimes people make decisions based on subjective judgment, so they are prone to errors. In practice, the application of this theory in banks focuses more on risk decision-making. In fact, prospect theory brings banks more inspirations such as irrational people's decision-making psychology. When displaying products, different scenarios should be designed synchronously to accurately grasp customers' choice, so as to promote transaction successfully. For example, we recommend decoration loan in Home Expo and auto consumption loan in auto market.

4.3. Seize the Opportunity of Strong Supervision and Adjust Strategy to Adapt to Changes of The Times

It took only less than 10 years for Internet finance to sprout. During this period, P2P, a kind of "network loan", which directly matches the lending parties to form a lending relationship with the help of the Internet, also appeared. However, due to the lack of supervision on the operation mode, the platform quickly deteriorated and even became a platform of illegal fund-raising under the temptation of huge interests. At the end, p2p formed bad loans of trillions yuan and made tens of millions of Internet lenders lose their money. The rapid rise of online loans also attracted many financial institutions, resulting in the phenomenon that financial institutions provide funds, platform provide customers and technical support. The government gradually realized social harm of this kind of network loan, and gradually strengthened the supervision. In July 2020, the China Banking and Insurance Regulatory Commission officially implemented management rules of Internet loans of commercial banks and limited personal credit amount of 200,000 yuan (The Central People's Government of the People's Republic of China, 2020). With the tightening of supervision, it can be predicted that in the future, P2P and other "network loans" will disappear, and the cooperation of "network loan assistance" will also be limited within the strict scope. On November 2, the Bank of China Insurance Regulatory Commission (CIRC) and the people's Bank of China jointly issued the "Interim management rules of online small loan business (Draft for comments)", which, by clarifying the leverage ratio, limits the scope of business areas, the amount of loans, etc. (Wu, 2020). It greatly constrains the wild and soaring momentum of Internet financial companies. From them on, Finance has gradually entered into the era of strong supervision, and it is foreseeable that the supervision trend will continue to be strict in the future. Of course, on the other hand, this is a historical opportunity for traditional commercial banks. Under strong supervision, the era of barbaric growth of Internet financial enterprises has passed. The strong supervision policy of Internet loans brings Internet financial companies into the same supervision category as traditional banks do, which benefits market competitiveness of commercial banks in the future to a certain extent.

4.4. Seize the Strength of Intermediary Agencies

Traditional banks have complex attitudes towards intermediaries. On the one hand, the intermediaries that carry out auxiliary business around banks do bring convenience to the business development; on the other hand, the intermediaries get a lot of transaction information or customer information from banks in cooperation opportunities. Several bad intermediary agencies use these information to seek excess income, or use interests as bait to corrode the bank employees, made banks suffer a lot under the current strict supervision. Even more, many intermediaries use their own technical advantages to find and exploit loopholes of banks system. For example, in the aspect of online loans, intermediaries find the preference of individual banks' automatic loan approval system, so as to help customers forge information, cheat the bank's automatic loan approval system to obtain loans. For above reasons, banks prefer to do all business by themselves. However, in the modern society with increasingly refined division of labor, the costs of no middleman are lower efficiency and higher cost. Therefore, in the post epidemic era, banks need to pay more attention to these intermediaries and cooperate with qualified intermediaries, especially the leading enterprises with core technology and big data. The specialist do professional works. Banks should take their own ability as a foothold, strengthen the constraints on the partners, award the cooperation institutions who can find their own technical loopholes and timely fill the loopholes, and concentrate on the bank's own business management.

4.5. Seize the Advantage of Talent Reserve and Increase Publicity

In reality, Chinese banks are subject to strict regulatory constraints, and bear great social responsibilities. In the past decades, the banking industry has been favored by graduates from various famous universities. Therefore, banks have enough talents with rich working experience and strong writing skills. Therefore, when studying and deploying loan applications in different scenarios, banks should make full use of these talents to popularize financial knowledge, legal knowledge and common sense of risk prevention to the society through different media channels. It can not only enhance customers' protection consciousness of personal information and credit data, but also enable banks to protect customers from being cheated by technical means.

Funding: This study received no specific financial support.
Competing Interests: The authors declare that they have no competing interests.
Acknowledgement: Both authors contributed equally to the conception and design of the study.

REFERENCES

China Banking and Insurance Regulatory Commission. (2020). Interim measures for the administration of petty loan. People's Bank of China. Retrieved from: http://www.gov.cn/xinwen/2020-07/17/content_5527714.htm.

Differentiated Bank. (2020). Differentiated bank offline outlets: six major banks have reduced more than 800 outlets in one year! Big banks are "slimming", while small banks are expanding. Retrieved from: https://www.sohu.com/a/386464862_813150.

Global Banking Research Group of Bank of China Research Institute. (2020). The impact of the pandemic on global banking and its response - Global banking report of Bank of China (third quarter of 2020). *International Finance*, *07*, 66-75.Available at: http://doi:10.16474/j.cnki.1673-8489.2020.07.010.

Industrial Production Rebounded. (2020). Industrial production rebounded significantly and key industries continued to make efforts. Retrieved from: http://www.ce.cn/xwzx/gnsz/gdxw/202007/17/t20200717_35346638.shtml.

International Monetary Fund. (2020). World economic outlook, April 2020: The great lockdown. Retrieved from: https://www.imf.org/en/Publications/WEO/Issues/2020/09/30/world-economic-outlook-october-2020.

Jiang, L. (2020). Online credit exposure risk control black hole! Several banks were cheated into lending more than 1 billion yuan. Retrieved from: https://finance.sina.com.cn/money/bank/bank_hydt/2020-09-29/doc-iivhuipp7143259.shtml.

Li, C. W., & Fu, Z. H. (2020). The key to deal with the impact of the epidemic on the economy is to build certainty. *Financial Research*, *03*, 3-9.Available at: http://doi:10.19477/j.cnki.11-1077/f.2020.03.001.

Lu, S. C. (2020). Advantages and prospects of financial technology development under epidemic situation. *Tsinghua Financial Review*, *05*, 93-96.Available at: http://doi:10.19409/j.cnki.thf-review.2020.05.025.

Lu, M. F., & Cao, M. S. (2020). Research on the digital transformation of commercial banks under the new epidemic situation. *Journal of Luohe Polytechnic*, *19*(5), 60-63.

Merowitz, M. (2002). Vanishing regions: the influence of electronic media on social behavior (1st ed., pp. 56-58). Beijing, China: Tsinghua university press.

Research Department of China Banking Association. (2020). Research department of China banking association. Impact of COVID-19 on banking industry and Countermeasures. *Tsinghua Financial Review*, *05*, 71-74.

Scober, R., & Israel, S. A. (2014). Age of context: Mobile, sensors, data and the future of privacy (1st ed., pp. 11). Beijing, China: Beijing United Publishing Company.

Sina Finance. (2020). The central bank printed and issued <the financial technology development plan (2019-2021)> to clarify six key tasks. Retrieved from: https://baijiahao.baidu.com/s?id=1643920208596875562&wfr=spider&for=pc.

Smart Finance Institute. (2020). Research Report on China's consumer credit market in 2019. Retrieved from: http://www.sfinst.com/?p=2888.

Song, J. (2020). Five-year's market clearing of P2P: from 5000 to 3, the mortality rate is close to 100%. *China Economic Weekly*, *20*(3), 17-18.

The 46th Statistical Report on the Development of Internet in China. (2020). The 46th statistical report on the development of Internet in China.

The Central People's Government of the People's Republic of China. (2020). Interim measures for the administration of internet. *25*, 63-70. Retrieved from: https://kns.cnki.net/kcms/detail/detail.aspx?FileName=GWYB202025018&DbName=CJFN202022020.

To Tell a Good Chinese Story. (2020). To tell a good Chinese story in 32 years: Ping An of China has transferred from financial insurance to scientific and technological innovation.

Wang, X. J. (2020). Bank product innovation starts again in the post epidemic Era. *China Financial Computer*, *05*, 43-47.

Wu, T. T., & Zhu, A. A. (2020). COVID-19 impacts on China's economy and coping strategies. *Southern Finance*, *05*, 3-11.

Wu, S. L. (2020). The Internet finance cases in the youth account for nearly 80%. The Southen Metropolis Daily, 23. Retrieved from: http://epaper.oeeee.com/epaper/A/html/2020-09/23/content_27834.htm.