

중국 인터넷 금융 리스크 관리 및 대책 연구

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Research on China's Internet Financial Risk Supervision and Countermeasures

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요약 최근 인터넷 금융이 중국 내에서 다양하게 통합되면서 새로운 형태의 금융이 형성되고, 중국의 실물경제 구축과 포용적 금융으로 빠르게 새로운 금융의 통로가 되고 있다. 본 논문은 중국 인터넷 금융플랫폼의 패널자료를 토대로 인터넷금융위험의 영향요인을 랜덤효과모형을 이용하여 분석한 결과 다음과 같은 결과를 얻었다: (1) 금융플랫폼의 사용자펀드와 플랫폼펀드관리를 통하여, 인터넷상의 거래에서 금융리스크를 효과적으로 줄일 수 있다. (2) 규제정책을 통해 플랫폼 자금이 소수의 대출자에게 집중되는 것을 피함으로써 인터넷 금융거래의 위험을 효과적으로 줄일 수 있다. (3) 자금의 유동성 통제는 인터넷 금융 거래의 위험을 효과적으로 감소시킬 수 있다. 연구결과로, 인터넷 금융의 건전하고 지속가능한 발전을 위한 규제정책에 대한 최적화 전략을 제안하였다.

주제어 인터넷 금융, 리스크 관리, 전자상거래 플랫폼, P2P 온라인 대출, 확률적 효과 모델

Abstract In recent years, China's Internet finance industry is hot. There is no doubt that Internet finance has been fully integrated into China, forming a new form of financing, and rapidly becoming a new channel for investment and financing in China, shouldering the responsibility of inclusive financing and building China's real economy. However, with investment, there are risks. Based on the panel data of China's Internet financial platform, this paper uses the random effect model to study the influencing factors of Internet financial risks, and draws three conclusions: (1) The user funds and platform funds of the financial platform will be managed separately by the bank, which can effectively reduce the risk of financial transactions on the Internet; (2) The risk of Internet financial transactions can be effectively reduced by avoiding the concentration of platform funds in the hands of a few borrowers through regulatory policies; (3) The liquidity control of funds effectively reduces the risk of Internet financial transactions. Based on the conclusions, we propose optimization strategies for regulatory policies to achieve the healthy and sustainable development of Internet finance.

Key Words Internet finance, Risk supervision, E-commerce platform, P2P online loan, Stochastic effect

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1. Introduction

In recent years, Internet finance has entered the financial market in a new way. Internet finance is based on big data and is also a product of the times. With the rapid development of finance in a short period of time, the legal risks related to credit risk also need to be resolved, and the corresponding regulatory framework needs to be constantly improved. From the current situation, Internet finance has developed rapidly, but most scholars believe that the core of Internet finance still does not leave the financial category. A more comprehensive analysis of the factors affecting the development of Internet finance in China can reveal new ideas and models of financial sector supervision, and provide pertinent suggestions for the government to make regulatory decisions.

Internet lending is a kind of Internet finance. It has developed very rapidly in China, and the Chinese government has made great efforts to monitor it. However, Internet lending is still a new thing in China. The lack of understanding of Internet lending, a new financial method, has resulted in a lack of relevant regulatory system and regulatory agencies, and weak government supervision. The existence of these problems has made the development of China's online lending industry chaotic and disorderly, and there are great hidden dangers. As of June 2018, there were 4347 platforms violating the financial law in China, with serious loopholes. There were 6183 online lending industries (including closures and loopholes), accounting for 70.31% of the total.

From the perspective of social development, the development of Internet finance will have a profound impact on the improvement of the social and economic system. However, in the development of Internet finance, we need to see its risk points, such as the illegal financing of 50 billion yuan of Internet financial risks, which has caused countless people to lose their property and their families to ruin, and caused huge

losses for the social people and socio-economic development. The frequent thunder storms on P2P platforms also highlight the disadvantages of China's Internet regulation. Therefore, government departments need to face up to the lack of technology in the development of Internet finance. From the reality of China, we should formulate effective regulatory measures and use advanced governance concepts and practices to guide the current and future of China's Internet finance.

At present, most of the Internet financial risk supervision measures are "leak stoppers" and post regulation of standardized development. How effective these supervision policies are and whether they have played their due role in preventing Internet financial risks need to be tested empirically. This paper analyzes and summarizes the current research status of relevant issues, and provides solutions to solve the current problems in Internet financial supervision, and points out the direction for building and improving the Internet financial risk supervision system.

2. Advance research

Due to the late start of Internet financial supervision and the short time for most of the regulatory measures to be introduced, there have been fruitful studies and discussions on the characteristics and attributes of Internet financial risks, as well as the ideas and models of Internet financial supervision.

As a hot research topic, China's Internet financial supervision is a key factor restricting the development of Internet finance. Experts and scholars have already conducted in-depth research on it.

Among them, Liu Da (2009), based on the QDII dual sports supervision model, proposed a theoretical comprehensive thinking on innovative supervision system at a broader macro level: coordination between innovation and risk, harmony between supervision and development, simultaneous development of economic

responsibility and social responsibility, and balance between national interests and public interests. Li Cheng (2013) selected economic variables reflecting financial supervision to analyze the effects of macro prudential supervision, and used quantitative methods to empirically analyze the effectiveness of financial supervision with data from China, the United States, Japan and the United Kingdom. The research conclusion shows that the degree of macro prudential implementation and the degree of realization of financial supervision objectives are relatively low in China, mainly because the central bank's position in financial stability is not significant enough, and the pro cyclical nature of financial supervision leads to insufficient sensitivity to systemic financial risks; The administrative intervention in financial supervision goes beyond the influence of the financial legal system and, to a certain extent, affects the internal operating mechanism of the financial system. Zhang Haojia (2018), based on the panel data of the Internet financial platform, used a random effect model to study the impact of Internet financial regulatory policies on Internet financial risks, and then evaluated the effectiveness of regulatory policies. Song Yuying (2020) used the survey data of the International Monetary Fund on the implementation of macro prudential regulation in various countries from 2000 to 2013 to conduct empirical analysis in combination with the global liquidity data provided by the Bank for International Settlements. The empirical results show that under the open conditions, macro prudential regulation can effectively reduce the level of credit imbalance in various countries; financial openness will not affect the implementation of macro prudential supervision. Yang Chengyu (2021) studied the impact of China's shadow banking scale expansion on the financial market through the SVAR model. The research finds that: the expansion of shadow bank scale drives the expansion of deposit market and money supply market, and the two markets accelerate

the expansion of shadow bank, forming liquidity bubbles in financial market; The scale expansion of shadow banks has limited impact on the inter-bank market, and the inter-bank lending rate has played a certain role in regulating. Based on the research conclusion, this paper puts forward policy suggestions on scientific supervision, risk mitigation and reasonable development of shadow banks from the policy level. By analyzing many research methods, this paper mainly adopts the panel data research method selected by Zhang Haojia (2018).

3. Research Design

3.1 Research Hypothesis

3.1.1 Banking supervision

The risks of Internet finance are different from those of traditional finance. In traditional finance, because of the endorsement of national and government credit, depositors basically do not need to worry about capital security. Financial risks mainly come from financial institutions' insufficient grasp of the borrower's credit information and changes in the borrower's repayment ability; In Internet finance, the data and information resources obtained by Internet finance enterprises through network information technology enable them to understand the real situation of users with lower cost and higher efficiency, reducing the risk of financial enterprises, but at the same time, due to the decentralization of users, it is difficult to really obtain the credit status of borrowers, increasing the risk of financial enterprises. (Liang Qi, 2015)

Fund misappropriation has always been a major problem in the development of Internet financial platforms. The platform misappropriates investors' funds by means of self-financing, short bid investment and other means, often resulting in the platform being unable to honor investors' income and principal, which leads to the event that the volume of funds has run

away. (Zhang et al, 2018)

Bank custody means that the bank manages funds and the platform manages transactions. The user funds and platform funds of the financial platform will be managed separately by the bank, and their transactions and settlements will be carried out within the banking system, separating funds from transactions. As a result, the platform cannot directly access funds and misappropriate customer funds, which can effectively reduce the risk of Internet financial transactions. The assumptions used to verify this are as follows:

H1: The supervision of user funds and platform funds of financial platforms by banks can effectively reduce the risk of Internet financial transactions.

3.1.2 Financing concentration

The more decentralized the loans, the less vulnerable the platform is to regional or industrial risks, and when a single borrower defaults, the risk loss of the platform is small. Currently, the borrowers on the platform are enterprises with large borrowing amount and long term, which means that the loans may be concentrated in the same industry for a long time. Once the industry cycle declines and policy restrictions affect, the platform is vulnerable to concentration risk. (Claessens et al., 2014; Cerutti et al., 2015; Zhang et al, 2018) Therefore, avoiding the concentration of platform funds in the hands of a few borrowers through government regulatory policies will help reduce the possibility of excessive risk losses on the Internet financial platform. The assumptions used to verify this are as follows:

H2: The risk of Internet financial transactions can be effectively reduced by avoiding the concentration of platform funds in the hands of a few borrowers through government regulatory policies.

3.1.3 Control of capital flow

The risk that financial institutions cannot obtain

sufficient funds in time or at a reasonable cost to pay the debts due is the most typical and destructive risk in traditional finance. (Shao Hanhua, 2017) At the early stage of the development of Internet finance, although the liquidity risk has not yet fully emerged, it has been aggravated and amplified due to the particularity of Internet finance. If there is an online "run", its harm and impact will be even more extensive and far-reaching. (Zhang et al, 2018) Avoiding too long loan term can reduce the impact of unreasonable matching to a certain extent. Therefore, liquidity control of funds can help reduce Internet financial risks. The assumptions used to verify this are as follows:

H3: The liquidity control of funds can effectively reduce the risk of Internet financial transactions.

3.2 Panel data model

Common data forms include time series data, cross sectional data and panel data. In the panel data linear regression model, if the intercept term of the model is different for different sections or different time series, but the slope coefficient of the model is the same, the model is called a fixed effect model. In addition to random effect model, typical panel data analysis methods include fixed effect model and mixed effect model. The fixed effect model (FEM) assumes that all included studies have the same amount of real effects, while the real effects in the random effect model change with different studies. The random effect model (REM) regards the original (fixed) regression coefficient as a random variable. (Cheng Lili, 2017)

When studying the effectiveness of Internet financial supervision policies, it is one-sided to simply use cross-sectional data or time series data. Panel data can relatively fully combine the advantages of cross-sectional data and time series data to display more information about individual dynamic behavior

and reflect the effect of Internet financial supervision from multiple perspectives. In addition to the rectification and regulatory measures such as licensing and prohibition, the current Internet financial regulatory policy mainly focuses on the regulatory development and compliance management. From this perspective, Internet financial risk regulation has some similarities with traditional financial risk regulation. Therefore, we can learn from CLAESSENS et al. (2014), CERUTTI et al. (2015), Liang et al. (2015), Shao et al(2017) and Zhang et al(2018) studied the effectiveness of banking prudential supervision policies. This paper will use panel data model to test the impact of Internet financial supervision policies on Internet financial risks.

$$Risk_{it} = \sum_k \lambda_k Reg_{k, it} + \sum_j \eta_j Control_{j, it} + e_{it} \quad (1)$$

$$Risk_{it} = \sum_k \lambda_k Reg_{k, it} + \sum_j \eta_j Control_{j, it} + u_i + e_{it} \quad (2)$$

Among them, The independent variable $Reg_{k, it}$ is a set of indicators used to reflect China's Internet financial supervision. Dependent variables include loan limit (bol), bank deposit (bdm), financing concentration (fc), third-party guarantee (tpg) and risk provision (rp).

The independent variable $Control_{j, it}$ is a group of control variables. Dependent variables include liquidity index (liq) and listing system (li).

The independent variable $Risk_{it}$ is the Internet financial risk variable. In this paper, Z-Score is selected to represent the overall operation risk of Internet finance, and is adjusted according to the characteristics of Internet finance platform. $Z = \frac{ROA + CAR}{\sigma}$ (ROA), where ROA stands for return on assets and CAR stands for capital asset ratio, σ (ROA) represents the standard deviation of return on assets. The larger the Z value, the smaller the risk of platform failure.

In the research of Zhang Haojia (2018), through the LM test provided by Breusch et al. (1980), it was proved that there is a dummy variable u that does not change with time. Therefore, research model (2) should be used to study the impact of Internet financial risks.

See Table 1 for specific definitions of relevant variables.

<Table 1> Variable measurement

variable	Symbol	definition	source
Indicator variable	$Reg_{k, it}$		Zhang Haojia (2018)
Borrowing limit	bol	Number of people with loan balance exceeding 200000 yuan	Interim Measures for Business Activity Management of Online Loan Institutions Measures (2016)
Bank deposit	bdm	Whether the platform implements bank deposit, the implemented value is 1, and the unrealized value is 0	Guidelines for Online Loan Fund Depository Business (2017)
Financing concentration	fc	Proportion of loans of top 50 borrowers	Zhang Haojia (2018)
Third party guarantee	tpg	The platform guarantee mode is third-party guarantee. The third-party guarantee is assigned with a value of 1, and the non third-party guarantee is assigned with a value of 0	The Special Rectification and Acceptance of P2P Network Loan Risk Notice of Work (2017)
Risk reserves	rp	The platform guarantee method is risk provision, which is assigned as 1, not 0	The Special Rectification and Acceptance of P2P Network Loan Risk Notice of Work (2017)
Control _{j, it}			Zhang Haojia (2018)
Liquidity index	liq	Average loan term of users	Zhang Haojia (2018)
Listed Department	li	Platform background, the listed system platform is assigned 1, and the non listed system platform is assigned 0	Zhang Haojia (2018)

4. Empirical research

4.1 Sample selection

This paper selects five years' data of P2P online loan platform from August 2015 to August 2019 as the research sample. The sample data comes from online loan home, online loan Tianyan and other platforms.

The sample platforms include: Lujin Service, Paipai Loan, Dianrong Network, Jumbo Finance, Pocket Finance, Youwo Loan, Dongfang Hui, Yonglibao, Xinxin Loan, Lettuce Finance, Tounar.com, Group Loan Network, PPMoney, Renrenjucai, People's Loan World, Credit Finance Wealth, Youjin Fund, Shanyi Loan, Xiaoying Finance, Finance Farm, Aiqianjin, Souyi Loan, 51 characters, Jumbo Finance, Yiren Loan, Dianrong Network, Lujin Service, Yiwang, Building Block Box Shoujinwang.

After deleting 315 samples with incomplete data, we obtained the balanced panel data of 2160 observations from 30 platforms in 5 years. The selected sample platform has been operating for more than 2 years, with a financing quota of more than 500 million. The sample covers various platform backgrounds, investment periods, platform revenues and business types, which can basically reflect the overall situation of the P2P online loan industry. Descriptive statistics of main variables are shown in Table 2 and correlation is shown in Table 3.

<Table 2> Description Statistics of Main Variables

Variables	Mean	STD	Min	Max
bol	0.306	1.027	0	13.91
bdm	0.651	0.482	0	1
fc	15.48	24.43	0.02	100
tpg	0.212	0.418	0	1
rp	0.277	0.446	0	1
liq	10.13	9.433	0.938	35.39
li	0.250	0.434	0	1
ZScore	40.64	35.51	9.283	215.58

<Table 3> Correlation

	bol	bdm	fc	tpg	rp	liq	li
bol	1						
bdm	.987	1					
fc	.589	.667	1				
tpg	.678	.751	.788	1			
rp	.657	.681	.675	.687	1		
liq	.778	.784	.764	.758	.743	1	
li	.458	.385	.495	.436	.483	.757	1

4.2 Mediation effect of bank supervision

<Table 4> Estimation Results of Stochastic Effects of Banking Supervision

	1	2	3	4	5
	Z	Z	Z	Z	Z
bdm	2.508* (4.22)	2.527* (4.09)	2.528* (4.08)	2.527* (4.07)	2.526* (4.06)
bol		-0.320 (-0.81)	-0.322 (-0.78)	-0.321 (-0.80)	-0.322 (-0.79)

Note: * represents a significant change of 1%.

From Table 4, we can see the Z value changes of the subordinate variables of the indicator variable Reg_{kit} , namely, the borrowing limit (bol) and the bank depository (bdm), in the analysis results of the random effect model.

The change of the borrowing limit (bol) in the model is not significant, which indicates that the bank's policy on platform borrowing limit has no significant impact on Internet financial risk. Internet finance has played an important role in solving the problem of microfinance loans, especially for small and micro enterprises. At present, most platform borrowers have borrowed more than 200000 yuan. At the same time, due to the fact that the online loan platform registration has not been completed and the lack of national online loan platform information sharing system, it is impossible to know whether the borrower's loan exceeds the limit and carries out restrictions. Therefore, it is difficult to assess the effect of this policy now, and its impact on Internet financial risk is not obvious.

The bdm of bank depository is positive in the

random effect result, and has a significant change of 1%, indicating that the platform's realization of bank depository helps reduce risks. In fact, the problem of capital misappropriation has always been a major problem in the development of the Internet financial platform. The platform misappropriates investors' funds by means of self financing, short bid investment and other means, often resulting in the platform being unable to honor the investors' income and principal, which leads to the event that the volume of money runs away. Bank custody means that the bank manages funds and the platform manages transactions. The user funds and platform funds of the financial platform will be managed separately by the bank. The transaction and settlement will be carried out within the banking system, separating funds and transactions, so that the platform cannot directly contact funds and misappropriate customer funds.

To sum up, the supervision of user funds and platform funds of financial platforms by banks can effectively reduce the risk of Internet financial transactions. Assumption 1 holds.

4.3 Financing concentration and capital flow of P2P online loan platform

(Table 5) Estimation Results of the Stochastic Effects of Financing Concentration and Capital Flow of P2P Online Loan Platforms

	1	2	3	4	5
	Z	Z	Z	Z	Z
fc	-0.158* (-6.31)	-0.160* (-6.22)	-0.161* (-6.18)	-0.161* (-6.19)	-0.161* (-6.16)
tpg					-2.133 (-0.17)
rp					-6.388 (-0.49)
liq	-0.277* (4.58)	-0.285* ** (-4.61)	-0.309* (-4.63)	-0.309* (-4.62)	-0.309* (-4.61)
li	-13.29 (-1.01)	-13.25 (-1.08)	-13.15 (-1.16)	-13.33 (-1.18)	-13.51 (-1.19)

Note: * represents a significant change of 1%.

From Table 5, we can see the change of the Z value of the index variable Regk,i the financing concentrationfc, third-party guarantee tpg, risk provision rp and control variable Controlj,it included in it, the liquidity index liq ,listing system li and other variables included in it in the analysis results of the random effect model.

The coefficient of financing concentration fc is negative in Table 5 and changes significantly at a significant change of 1%, indicating that platform loan diversification helps reduce risk. The more decentralized the loans, the less vulnerable the platform is to regional or industrial risks, and when a single borrower defaults, the risk loss of the platform is small. Currently, the borrowers on the platform are enterprises with large borrowing amount and long term, which means that the loans may be concentrated in the same industry for a long time. Once the industry cycle declines and policy restrictions affect, the platform is vulnerable to concentration risk.

The third-party guarantee tpg and risk provision rp do not change significantly in Table 5, indicating that third-party guarantee and risk provision have no significant difference in the impact on Internet financial risks compared with other platform guarantee methods. Third party participants are usually insurance companies or guarantee companies. The performance guarantee insurance of insurance companies against Internet financial platforms is actually a kind of credit guarantee insurance. According to the Interim Measures for the Supervision of Credit Guarantee Insurance Business, the balance of the insurance companies' retained liability does not exceed 5 million yuan at most. Most of the third-party guarantee companies have weak capital strength, while the Internet financial platform loan business is relatively risky and the number is generally large, It is difficult for insurance companies and third-party guarantee companies to make large compensation, so it is difficult for the promotion policy of third-party

guarantee to achieve the expected effect of reducing Internet financial risks. Most of the risk reserves of Internet financial platforms only draw a small part of the investment funds of investors or the platform itself, which is difficult to fully cover bad debts, and the platform can also withdraw this money at any time. Therefore, risk reserves are difficult to play a role in reducing Internet financial risks. Although the current regulatory policy of prohibiting institutions within the jurisdiction to continue to withdraw and increase risk reserves has little effect on Internet financial risk prevention, it may prevent the platform from taking this opportunity to publicize, reduce the information asymmetry of investors, and thus reduce Internet financial risk.

Therefore, avoiding the concentration of platform funds in the hands of a few borrowers through regulatory policies will help reduce the possibility of excessive risk losses on Internet financial platforms. Assumption 2 holds.

The listing coefficient li does not change significantly in Table 5, indicating that although the listing of the online loan platform can help the platform improve its popularity and gain more investment and reputation, the online loan platform management is complex and the capital changes rapidly. Therefore, the impact of post listing information disclosure on Internet financial risks is not obvious.

The liquidity index liq has a significant change of 1% in Table 5. From its sign, the larger the liquidity index is, the smaller the Z index is, which means that a longer loan term will aggravate the risk of platform failure. From this point of view, the stronger the liquidity of funds, the more favorable it is for controlling Internet financial risks. Liquidity risk is the most typical and destructive risk in traditional finance. It refers to the risk that financial institutions cannot obtain sufficient funds in time or at a reasonable cost to pay the debts due. At the early stage of the development of Internet finance, although the liquidity

risk has not yet fully emerged, it has been aggravated and amplified due to the particularity of Internet finance. If there is an online "run", its harm and impact will be even more extensive and far-reaching.

Avoiding too long loan term can reduce the impact of unreasonable matching to a certain extent. Therefore, liquidity control of funds can help reduce Internet financial risks.

4.4 Assumptions

To sum up, Table 6 Assumption Result Establishment Table can be obtained.

[Table 6] Assumption Result Establishment Table

NUM	hypothesis	Whether it is established
H1	The user funds and platform funds of the financial platform will be managed separately by the bank, which can effectively reduce the risk of Internet financial transactions.	establish
H2	The risk of Internet financial transactions can be effectively reduced by avoiding the concentration of platform funds in the hands of a few borrowers through regulatory policies.	establish
H3	The liquidity control of funds can effectively reduce the risk of Internet financial transactions.	establish

5. Conclusion

5.1 Research results

Based on the analysis of the assumptions in Table 6, the conclusions of this study are as follows:

The user funds and platform funds of the financial platform will be managed separately by the bank, which can effectively reduce the risk of Internet financial transactions.

The risk of Internet financial transactions can be effectively reduced by avoiding the concentration of platform funds in the hands of a few borrowers through regulatory policies.

The liquidity control of funds effectively reduces

the risk of Internet financial transactions.

5.2 Implications for China's Internet financial risk supervision countermeasures

5.2.1 Improve supervision height

In terms of bank supervision, we will strengthen bank custody and supervision by strengthening bank supervision with the help of the government and institutions. The Guidance on Promoting the Healthy Development of Internet Finance in 2015 also effectively divides and clarifies the responsibilities and work contents of Internet finance supervision units. First, the Central Bank supervises Internet payment services; The CSRC is mainly responsible for the crowdfunding of stocks and the sale of Internet finance. It has defined the supervision responsibilities that each regulatory authority needs to perform, and has put forward guidance on the supervision of the Statutory Regulations, classified supervision, coordination supervision and innovation supervision. The supervision framework and system are always based on "one bank, three committees". By giving play to its core role of guidance and supervision, the government has carried out in-depth supervision on Internet finance, adjusted the means of supervision in real time according to market changes, and allowed bank supervision to play its due value and role, thus reducing the risk of Internet finance.

5.2.2 Strictly implement information disclosure standards

With the development of the Internet financial market, the current credit rating system cannot keep pace with the development of Internet finance. Our credit investigation system is far behind. In order to solve this problem, the People's Bank of China issued the Notice on the Preparation of Personal Credit Information Services, which made detailed information report records for enterprises and the public with the

help of the credit information system. To improve the role of Internet financial supervision, government departments need to play a top design role and establish a sound credit rating system for Internet financial enterprises, so that they can master the development of Internet financial enterprises with the help of dynamic credit ratings and avoid the birth of Internet financial risks. And perfect credit scoring can realize the dynamic detection of Internet financial risks and curb the crazy expansion of bad Internet financial platforms at the source.

5.2.3 Improve the government credit system

To protect the rights and interests of financial consumers, if government departments can take the lead and industry associations can participate, a complete set of Internet financial credit reporting system can be established. With the help of big data technology, dynamic detection and behavior analysis of Internet financial companies can be carried out. With the help of big data technology, business risks of Internet financial companies can be deeply explored. The perfect Internet financial credit reporting system can improve the risk vigilance of investors and eliminate the inducement of advertising marketing by dynamically monitoring and warning the abnormal data according to the industry development rules.

5.3 Research limitations

This study has the following limitations: First, this study is to study the government supervision behavior of Internet finance from the perspective of Internet financial platform capital supervision and flow. There is no expanded research on the platform scale and fixed assets changes of the Internet platform, which can be discussed in future research. Second, the data of this study is from 2015 to 2019. Whether the research results are applicable to China's Internet financial platform after the new epidemic remains to be studied.

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