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|  **BABAK NAYSARY MASTER OF BUSINESS ADMINISTRATION 2020** | **Analysis of factors influencing P2P lending industry performance in China****CUI ZHIFENG****MASTER OF BUSINESS ADMINISTRATION****FACULTY OF BUSINESS, COMMUNICATION & LAW****INTI INTERNATIONAL UNIVERSITY****2020** |

**INTI INTERNATIONAL UNIVERSITY**

MASTER OF BUSINESS ADMINISTRATION

Analysis of factors influencing P2P lending industry performance in China

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# Abstract

The emerging p2p financing method can not only meet the capital needs of individuals and SMEs, but also can effectively revitalize idle funds in the society, providing a good solution for the "difficult and expensive" SMEs in the word. Compared with other developed countries, China's P2P loan development is not yet fully mature. In particular, since 2017, the number of borrowers and lenders who conduct transactions in P2P has decreased significantly, the occurrence of default rate in the p2p industry, and the long loans periods of p2p products have caused more and more p2p companies to go bankrupt. As a combination of Internet and finance, the financial performance of p2p is mainly reflected in two aspects (ROA and ROE). This article mainly analyses the influence of internal factors on P2P financial performance. It mainly includes default rate, number of borrowers, number of lenders, industry average interest rate, Shibor and average loan term.

This article uses regression analysis and SPSS software to explore the factors that affect the p2p platform. Finally, the study found that ROE is positively correlated with the number of borrowers, the number of lenders, and the p2p industry average interest rate. However, it is negatively correlated with Shibor and default rate but not significant. Another profit indicator is ROE. We conclude that ROE is positively correlated with the number of borrowers, the number of lenders, and the p2p industry average interest rate. However, it is negatively correlated with Shibor and default rate but not significant. And made corresponding recommendations for the p2p platform so as to provide a guarantee for the stable and healthy development of the p2p platform in China.

**Key words:** P2P Online Lending, ROA, ROE, Financial Performance, Default Rate, Industry Average Interest Rate, Shibor and Average Loan Period.

**Table of contents**

[Abstract 2](#_Toc48766107)

[Chapter 1 Introduction 7](#_Toc48766108)

[1.1 Background of the study 7](#_Toc48766109)

[1.2 Problem Statement 9](#_Toc48766110)

[1.3 Research Questions 10](#_Toc48766111)

[1.4 Research Objectives 12](#_Toc48766112)

[1.5 Significance of the Study 13](#_Toc48766113)

[1.6 Scope of the study 14](#_Toc48766114)

[Chapter 2 Literature Review 15](#_Toc48766115)

[2.1 The theoretical basis of P2P network lending 15](#_Toc48766116)

[2.2 Analysis method of profitability of p2p industry 17](#_Toc48766117)

[2.3 The literature review in Overseas 18](#_Toc48766118)

[2.4 The literature review in China 20](#_Toc48766119)

[2.5 Evaluation 22](#_Toc48766120)

[2.6 Conceptual Framework 23](#_Toc48766121)

[Chapter 3 Research Methodology 26](#_Toc48766122)

[3.1 Research Design 26](#_Toc48766123)

[3.2 The research hypotheses formation 27](#_Toc48766124)

[3.2 Model for Measuring 28](#_Toc48766125)

[3.4 Study Population and Sample Selection 30](#_Toc48766126)

[3.5 Data Collection and Analysis Methods 32](#_Toc48766127)

[Chapter 4 Data Analysis and Research Findings 34](#_Toc48766128)

[4.1 Trend Analysis 34](#_Toc48766129)

[4.2 Descriptive analysis 36](#_Toc48766130)

[4.3 Pearson’s Correlation Analysis 38](#_Toc48766131)

[4.4 Multiple Linear Analysis 39](#_Toc48766132)

[4.5 Hypotheses Assessment Summary 45](#_Toc48766133)

[Chapter 5 Conclusion and Recommendations 46](#_Toc48766134)

[5.1 Conclusion 46](#_Toc48766135)

[5.2 Recommendation for P2P Industry 47](#_Toc48766136)

[5.3 Recommendation for Government Departments 48](#_Toc48766137)

[5.4 Recommendation for researcher and future research 48](#_Toc48766138)

[5.5 Limitation of the study 49](#_Toc48766139)

[5.6 Personal Reflections 49](#_Toc48766140)

[Reference 50](#_Toc48766141)

[Appendix 55](#_Toc48766142)

**Table of figures**

[Table 1: The difference operation of p2p between USA and China 8](#_Toc48766390)

[Table 2: The trend of the number of P2P 9](#_Toc48766391)

[Table 3: The sentiment of lender index in China 10](#_Toc48766392)

[Table 4: The trends of lenders and borrowers in China 34](#_Toc48766393)

[Table 5: The trends of the key elements in P2P lending industry 35](#_Toc48766394)

[Table 6: The ROA and ROE in P2P lending industry 36](#_Toc48766395)

[Table 7: The descriptive statistics of independent variables and dependent variables 36](#_Toc48766396)

[Table 8: The correlation analysis of independent variables and dependent variables 38](#_Toc48766397)

[Table 9: The model summary of independent variables and ROA 40](#_Toc48766398)

[Table 10: The ANOVA of independent variables and ROA 40](#_Toc48766399)

[Table 11: The coefficients of independent variables and ROA 40](#_Toc48766400)

[Table 12: The model summary of independent variables and ROE 43](#_Toc48766401)

[Table 13: The ANOVA of independent variables and ROE 43](#_Toc48766402)

[Table 14: The coefficients of independent variables and ROE 43](#_Toc48766403)

**Declaration**

I hereby declare that this thesis is my own work and effort and that it has not been submitted anywhere for any award. Where other sources of information have been used, they have been duly acknowledged.

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# Chapter 1 Introduction

## Background of the study

P2P online lending (also known as "P2P lending") is an abbreviation of Peer to Peer or Person to Person, which means "person-to-person lending" (Rosavina and Rahadi, 2018). The essence of P2P online lending is an Internet financial model that directly matches investors and borrowers with the Internet. This emerging model has the characteristics of flexibility, easy operation, high returns, and low transaction costs (Yoon, Li and Feng, 2019). The P2P online lending platform provides services such as credit review, information release, and transaction matching during the lending process, and acts as an information intermediary to charge a certain service fee. P2P online lending is one of the forms of online finance, which has transformed the traditional funding and financing ways through the use of Internet. It has offered a convenient and fast online transaction platform for the public (Fan, Peng, Du and Li, 2015).

P2P online lending is the financial arrangement that it best reflects the spirit of the Internet-sharing, openness, democracy, equality, and inclusiveness (Yang, Fan and Yang, 2020). It makes up for the deficiencies of traditional financial services to a certain extent, and largely reflects the democratization and popularization of financial services. First, individuals and SMEs have endogenous capital needs in the process of consumption, investment and production to meet the needs of smooth consumption, investment project start-up and liquidity replenishment. This is the internal demand for financial democratization. Secondly, there is an investment demand for wealth preservation and appreciation of private personal capital; these reasonable demands cannot be efficiently matched through traditional financial channels, and there are problems that the SMEs’ ​​capital needs are difficult to financing and private funds are difficult to invest (two more dilemmas) (Kim, 2020). P2P online lending directly matches the two sides of the lending so that the loan financing can not only meet the needs of various funds, increase the utilization of social idle funds, but also have a Pareto improvement effect on social welfare.

The P2P lending model first appeared in the United Kingdom in 2005 and then entered the United States. Lendingclub and prosper in the United States are now leaders in the world-class p2p industry (Ma and Wang, 2016). Afterwards, it became popular all over the world with its convenient, fast and flexible transaction characteristics. This model was introduced to China in 2007, and Paipaidai was the first to start operations. Subsequently, excellent online lending platforms such as Renrendai and Ping An Lufax were established. Since then, China has entered a period of rapid development of online lending.

Table 1: The difference operation of p2p between USA and China



With a large number of online lending platforms and transaction volume, the number of participants has increased dramatically. After 2017, with the implementation of government regulatory measures, the number of p2p lending platforms has shown a declining pattern. As far as the online lending platform is concerned, business boundaries are blurred, operating conditions are uneven, platform failures and bankruptcy occur from time to time, lending efficiency is low, overdue rates and default rates are biased high, which is the main problem restricting the healthy and orderly development of the P2P industry.

## 1.2 Problem Statement

P2P online lending as an Internet financial model can be seen as the highlight of private lending. It not only embodies the value of meeting personal capital needs, improving the construction of credit reporting systems, and revitalizing the idle funds of the society, but also provides a good solution to the problem of "difficult financing and high costs" faced by SMEs (Xiaoxiao and Qiangshen, 2020). This emerging financial model has greatly expanded the scope of financial transactions and played an active role in "financial disintermediation". P2P online lending uses Internet technology to solve the problem of information dispersion and asymmetry at a lower cost, but with its rapid development, there are still many risk problems, such as low level of platform risk control and high NPL ratio. In particular, there have been incidents of poor operation of industry platforms, bankruptcy, and even funding. (The Chinese Daily Report) As of the end of February 2020, Chinese normally operating P2P platforms had a peak of 4,944 in 2017, with a cumulative transaction volume of 160.862 billion yuan and a loan balance of 500.637 billion yuan. Up to now, the p2p platform has collapsed on a large scale, and only 330 are operating normally and the trading volume are also decreasing. The p2p platform failure has become the norm.

Table 2: The trend of the number of P2P

|  |  |
| --- | --- |
| Year | The numbers of p2p companies operating normally |
| 2020 | 330 |
| 2019 | 1,086 |
| 2018 | 2,504 |
| 2017 | 4,944 |
| 2016 | 3,088 |
| 2015 | 2,208 |
| 2014 | 1,320 |

The frequent occurrence of P2P online loan risk is due to the fact that P2P industry regulations have not been established, government-level supervision is not in place, the construction of the national credit system is imperfect, the platform’s own operation and risk control mechanism are not perfect, and the borrower’s default behaviour and many factors such as unbalanced investment levels of investors (Ma and Wang, 2016). The default risk of P2P platform increases with the decrease of transaction volume, and p2p default risk is the first step affecting the failure of the borrowing platform. lender will avoid p2p lending platforms with high default rates (Yoon, Li and Feng, 2019).

Table 3: The sentiment of lender index in China



Interest rate of market changes effect P2P performance. The continuous deepening of China's interest rate marketization reform, as well as the impact of economic downward pressure and the rise of platform compliance costs, the continuous decline in the comprehensive interest rate of the domestic online loan industry has a certain relationship with the performance of the p2p platform (She Shaohui, Liu Yang and Li Chengfeng, 2017).

## 1.3 Research Questions

The main problem of the bankruptcy of p2p companies is the lack of financial performance. Profitability refers to the ability of an enterprise to obtain profits, or the ability of an enterprise to increase its funds or capital. It is usually expressed in terms of the amount and level of income obtained by the enterprise in a certain period of time (Jahan, 2020). Enterprises are profit-seeking, and any enterprise takes profit as its operating goal. Whether it is an enterprise operator, creditor, or investor, they are very concerned about the profitability of the enterprise. Good profitability is a concentrated manifestation of the operator's management and management capabilities, and the basis for creditors to collect principal and interest and investors to obtain returns. When measuring profitability, one should not only look at the absolute value of the profits, but we should consider comprehensively. If an enterprise wants to obtain good profitability, it must seek to maximize the benefits obtained under a given level of risk, or to minimize the risks faced under a given level of income (Chen and He, 2019). This way the company will be able to continue its good. The profitability of the company will develop for a long time, so the profitability is very important to the enterprise.

The profitability of the p2p lending industry is the ability to obtain profit for the special subject of the p2p lending market. Whether profitability and the level of profitability are the criteria for measuring the operating efficiency of the p2p lending industry. The main business of the p2p lending industry is to act as a financial intermediary to provide financing services to fund providers and demanders. Its profitability is both general and specific. The generality is reflected in the p2p lending industry as an enterprise, and the profit maximization is also the business goal. The particularity is reflected in the p2p lending industry’s commodities, which are not ordinary commodities, but currencies, and they are highly indebted. The main source is investors. In addition, because the business risk of the p2p lending industry has an expanding effect and a contagious effect, if risk factors are not considered, it is likely to make a mistake in its profitability judgment.

In this initial P2P lending model, the platform conducts a credit review of the borrower, and then the investor and the borrower are freely matched. The p2p platform extracts handling fees in each transaction to serve as its own financial income. How can the p2p platform maintain its own profitability growth. And what internal factors will cause the financial performance of the online loan platform to become the key to the healthy development of the P2P industry. This study uses the transaction data of the P2P platform to analyse what factors have led to the financial performance of the p2p platform. It aims to analyse the following problems in P2P online lending:

*RQ1: Is there any relationship between the default rate and performance of P2P?*

*RQ2: Is there any relationship between Number of lender and performance of P2P?*

*RQ3: Is there any relationship between Number of borrower and performance of P2P?*

*RQ4: Is there any relationship between P2P industry average interest rate and performance of P2P?*

*RQ5: Is there any relationship between Shibor (Interbank Offered Rate) and performance of P2P?*

*RQ6: Is there any relationship between Average loans period and performance of P2P?*

## 1.4 Research Objectives

Throng reading the previous articles, at present, academic discussions on the P2P network lending industry have not yet formed a mature theoretical system, and there are very few analyses involving the profitability of the industry. Most of the existing studies analyse and discuss the success rate of borrowing from the perspectives of hard factors (the borrower’s asset status) and soft factors (the borrower’s credit status), but the profitability of the industry cannot be measured very accurately based on whether the borrowing is successful or not. Through extensive literature analysis, it is found that the profitability analysis of the P2P industry can be characterized from two dimensions, external factors and internal factors, and comprehensive analysis can find out the reasons for its low profitability. This article describes the profitability characteristics of the P2P online lending industry from six aspects: The Number of Borrowers, The Number of Lenders, The Default Rate, The P2P Industry Average Interest Rate, Shibor and The Average Loans Period. On this basis, we are going to find the analysis that it affects the profitability of the P2P online lending industry.

Through the project's analysis of the P2P lending market, our main goal is to analyse the factors that affect the p2p online lending platform. The breakdown objectives are as follows:

*RQ1: To investigate the relationship between default rate and the performance of P2P.*

*RQ2: To investigate the relationship between Number of lender and the performance of P2P.*

*RQ3: To investigate the relationship between Number of borrower and the performance of P2P.*

*RQ4: To investigate the relationship between Industry of P2P average interest rate and the performance of P2P.*

*RQ5: To investigate the relationship between Shibor(Interbank Offered Rate) and the performance of P2P.*

*RQ6: To investigate the relationship between Average loans period and the performance of P2P.*

Finally, an empirical analysis was carried out, based on the empirical results, an empirical analysis, how should the P2P platform formulate internal policies to improve its financial performance.

## 1.5 Significance of the Study

The P2P model entered China in 2007. After more than ten years of growth, it has gradually become an important part of Internet finance and a useful and necessary supplement to traditional financial institutions. On one hand, the transaction methods under this model are flexible and diverse, and the transaction process is simple and fast, which meets the "short-term and frequent" loan needs of groups such as non-state-owned enterprises, small and micro enterprises, and individual lenders that they are disadvantaged in traditional lending forms. On the other hand, P2P network lending is mostly short-term small loans, with short capital occupation time, relatively large returns, and no lower limit on the amount of access. Its flexible, remunerative lending method provides new opportunities for the idle funds held by individuals to do investment options. While P2P online lending is developing rapidly and changing the traditional financial landscape, it has also exposed some problems, such as the gradual low borrowing popularity index, and incomplete borrower restraint mechanisms. At present, the development of P2P network lending is not satisfactory. The research in this article hopes to solve the problem of low profitability in the P2P model and open up a new way to measure the profitability of the P2P industry more scientifically and reliably.

**For P2P lending platform**

Targeting more and more bankrupt companies in China's p2p industry. This article mainly analyses the impact of internal factors on the performance of the p2p industry, from 6 main dimensions: The Number of Borrowers, The Number of Lenders, The Default Rate, The P2p Industry Average Interest Rate, Shibor and The Average Loans Period. The corresponding theoretical basis is obtained through SPSS analysis. As a result, we can provide reference suggestions for the corresponding p2p lending platform. The p2p platform can take reasonable measures to ensure the growth of financial profitability and promote the healthy and stable development of China's p2p platform.

**For Researcher**

By reading a lot of literature on the p2p industry, we can conclude that previous scholars mainly studied p2p lending behaviour analysis and interest rate of p2p analysis. Few scholars in China and abroad pay attention to the financial performance analysis of the p2p industry. This paper analyses the factors that affect the performance of the P2P lending industry and provides reasonable theoretical support for future scholars in the field of P2P research.

**For Government department**

We analyse the factors influencing the financial performance of the p2p industry. As a result, which can be used as a reference for government departments. Although external factors have a greater impact on the p2p industry, we can also analyse internal factors to improve the competitiveness of enterprises. Government departments can refer to the influence of factors on the financial performance of the p2p industry to formulate appropriate strategies to support or inhibit the development of the p2p industry.

## 1.6 Scope of the study

This section discusses the scope of the study. It serves as a guide discussed in subsequent chapters:

* The accuracy and availability of research data is the key to ensuring the validity of this part of the research. This article selects 6 platforms with good domestic operations and operating for more than 3 years (36 months) to select the target as the research sample.
* This study is based on quantitative research methods.
* The last part applies regression analysis, and the empirical results show the factors that affect the financial performance of the p2p platform and the degree of impact.

# Chapter 2 Literature Review

## 2.1 The theoretical basis of P2P network lending

**Social exchange theory**

Social exchange theory emerged in the United States around 1960. American sociologist Blau believes that not all behaviours are exchange behaviours. Exchange behaviours must meet two conditions. First, this behaviour must be achieved through interaction with other individuals. Behaviour must make a conscious effort to achieve the ultimate goal (Chen, Ding and Wang, 2013). Blau's basic exchange process theory can fully explain the transaction process of the investment and financing parties under the P2P model.

Blau thinks that the exchange process roughly includes three links. The first is attraction, because it needs material or spiritual rewards to attract individuals to participate in exchange. Investors have a certain amount of idle funds and hope to invest in them to get profits. Financiers need to borrow funds and are willing to provide a return for the occupied funds so that both borrowers and lenders have the resources they need and are willing to exchange them, and both parties are attracted. The second is competition. Both parties of the exchange strive to show their abilities in order to take the initiative in the exchange. On the lending platform, the borrower faces competition from other financiers, so he needs to provide more comprehensive, detailed, true and reliable personal information in order to strive to obtain a higher credit rating certified by the platform, or provide more generous returns in order to borrow Occupies an advantageous position among the participants. Similarly, investors are also facing competition from other investors. If they are too critical of their credit rating or require too high investment returns when selecting borrowing objects, it will be difficult to screen out suitable investment objects that have not yet met their bids. The third is differentiation. Because the resources owned by many participants on the platform are not balanced in quality and degree, competition will bring differentiation. Borrowers with perfect personal information and higher credit ratings and those who require more reasonable returns The lender can finally complete the exchange smoothly, but the borrower with incomplete personal information or even forged, low credit rating and the demanding lender cannot get the expected return, becoming the loser of the exchange, and the exchange behaviour on the platform ends.

**Behavioural Finance Theory**

Traditional financial theory takes the rational person hypothesis as the basic research premise, but with the development of the financial market, various abnormal phenomena continue to appear, and the rational person hypothesis is gradually being challenged. The doctrine of behavioural finance that integrates economics and psychology came into being. Its bounded rationality theory explained many abnormal phenomena in the financial market and made up for the deficiencies of modern finance. The theory is that individuals are not always rational when making decisions (Li, Guo and Zhang, 2013). Individuals are often overconfident and tend to overestimate the reliability of information and the accuracy of their own judgment.

In the P2P model, the herd behaviour of investors blindly following the crowd and imitating the decisions of others is very prominent. On the platform, you can learn the decision-making behaviours of other lenders. Many investors analyse the decisions of other investors and infer financier information and judge other lenders’ investment strategies based on the information disclosed by other financiers. The larger the number of lenders in a target, the more-new investors will influx. This phenomenon is more obvious in the bidding process of many borrowing targets with poor credit ratings. Investors will think that other investors choose to invest. The unsatisfactory target is because they have obtained more inside information. This behaviour is profitable, so blindly bidding with the trend is obviously an irrational behaviour, but it actually happened. It needs to be explained by the theory of behavioural finance.

## 2.2 Analysis method of profitability of p2p industry

**Du-Pont analysis method**

DuPont Analysis uses the relationship between several major financial ratios to comprehensively analyse the financial status of an enterprise (Li, Guo and Zhang, 2013). Specifically, it is a classic method used to evaluate the profitability of a company and the level of return on shareholder equity, and to evaluate corporate performance from a financial perspective. The basic idea is to decompose the return on equity of a company into a product of multiple financial ratios, which is helpful for in-depth analysis and comparison of business performance (Xu, Luo, Chen and Zheng, 2015). Because this analysis method was first used by DuPont, it was named DuPont analysis. The basic idea is to decompose the company’s return on equity (ROE) into the product of multiple ratios. These ratios are used to evaluate the company’s operating efficiency and financial performance, thereby forming a comprehensive indicator system.

The most significant feature of the DuPont model is to organically combine several ratios used to evaluate the operating efficiency and financial status of the enterprise according to their internal connections to form a complete indicator system, which is finally comprehensively reflected by the equity return rate. Using this method can make the level of financial ratio analysis clearer, more organized, and provide convenience for analysts to fully understand the business and profitability of the company. The DuPont analytical method helps corporate management to more clearly see the determinants of the basic rate of return on equity, as well as the correlation between net sales profit, total asset turnover and debt ratio. It provides management with a clear picture. A roadmap to examine the efficiency of company asset management and whether to maximize shareholder return on investment.

**Principal component analysis**

When using statistical analysis methods to study multivariate topics, too many variables will increase the complexity of the topic. People naturally hope that there are fewer variables and more information. In many cases, there is a certain correlation between variables. When there is a certain correlation between two variables, it can be explained that there is a certain overlap between the two variables reflecting the information of this topic (Serrano-Cinca, Gutiérrez-Nieto and López-Palacios, 2015). Principal component analysis is to delete the redundant variables (closely related variables) for all the variables originally proposed, and establish as few new variables as possible so that these new variables are pairwise uncorrelated, and these new variables are reflecting to keep the original information as much as possible in the information aspect of the subject. Tring to recombine the original variables into a new set of several integrated variables that are unrelated to each other so that they retain as much information about the original variables as possible and are not related to each other.

**Regression analysis method**

Regression analysis is a statistical analysis method of data to determine the quantitative relationship between two or more variables (Lin, Prabhala and Viswanathan, 2013). The basic idea is to determine the quantitative relationship expression between Y and X, namely the regression equation, test the reliability of the obtained regression equation, judge whether the independent variable X has an effect on the dependent variable Y, and use the obtained regression equation to make predictions and control.

## 2.3 The literature review in Overseas

In March 2005, the world's first P2P online lending platform "Zopa" was born in the United Kingdom, and then the P2P model entered the United States. "Prosper" and "Lending Club" were established one after another. At present, Lending Club has developed into the largest P2P platform in the United States. (Slattery, 2013) pointed out that the US P2P lending market is dominated by Prosper and Lending Club, and the US Securities and Exchange Commission (SEC) is the main regulatory agency system, which makes the government's regulatory environment clearer. (Steelmann, 2006) believes that the credit loans used for P2P network lending are unsecured, which increases the risk of default, and credit risk cannot be ignored. Regarding the information asymmetry between P2P borrowers and lenders, the interpersonal network of borrowers and lenders has an important impact on the success of loans (Berger, 1995). At the same time, information asymmetry between borrowers and lenders often leads to adverse selection and moral hazard issues in P2P lending (Freedman et al., 2011).

In empirical research, (Puro et al. 2010) found in empirical research that the amount of borrowing has a significant impact on borrowing capacity and interest rates. In order to reduce borrowing costs, borrowers need to reduce the amount of borrowing. (Barasinska, 2014) conducted a "Sex Discrimination" study on the German P2P online loan platform and found that female borrowers had a negative impact on the borrowing rate. (Chapman, 2014) found that the information asymmetry in the lending process makes the platform unable to ensure the authenticity of the information on both sides of the loan, investors can obtain high returns, but there is also the risk of losing principal. At the same time, research on P2P platforms with group social functions found that borrowers who join social groups are more likely to receive investment funds (Lin et al, 2009).

(Herzenstein et al. 2011) found that the borrower's initiative to provide his own characteristic information has an impact on the success of the loan. As for the soft information of the borrower, although it is priceless and unverifiable information that the borrower voluntarily embodies, it can effectively increase the enthusiasm of investors in bidding and reduce the borrowing rate (Michels, 2012). For example, borrowers’ soft information functions (photos, text descriptions, etc.) are more likely to be trusted by investors. The higher the loan success rate and the lower the interest rate, the study also found that the default rate for such loans is relatively low (Duarte, 2012), It can promote the stable development of p2p network platform. (Kumar 2007) research shows that borrowers with higher credit ratings and complete personal identification information have a smaller default rate, and the amount of borrowing has a significant positive correlation with the default rate. High perceived risk will adversely impact users’ willingness to upload personal information and transaction (Yang and Lee, 2018). It would affect the performance of p2p lending industry. The borrower's borrowing behaviour is based on the preference of three main loan factors (the duration, loan amount and interest rate), which may in turn be related to the number of transactions and financial performance of P2P platforms (Yoon, Li and Feng, 2019).

As for the P2P lending industry performance, Return on Assets (ROA) is the most widely used indicator to measure the profitability of financial institutions （Jahan, 2020）. The higher the indicator, the better the utilization effect of corporate assets, indicating that enterprises have achieved good results in increasing revenue and saving the use of funds. In analyzing the profitability indicators of Internet financial institutions for banks, the bank’s ROE is mainly affected by interest rates, the number of customers, and macro factors （Chen, Li and He, 2019）.

## 2.4 The literature review in China

The P2P online lending model of China began to develop in 2007. In the early stages of development, industry data is rarely accumulated, and risk events occur frequently. Domestic research mainly focuses on the theoretical level of origin development, model comparison, risk and supervision. The research (Wu Xiaoguang 2012) believes that there is virtuality in online lending transactions, it is not easy to identify the credit level of both parties, and fraud is prone to occur. (Xie Ping, 2014) believes that the concept of "Open Access, Leaving Traces of Activities and Accountability Afterwards" should be used to strengthen the supervision of P2P online loans. (Wang Huan, 2014) research pointed out that the qualification and risk control level of P2P platform is the key to protect the personal information of platform customers. P2P lending relies on a complete social credit reporting system, including government-level credit reporting systems and market-based credit reporting agencies. After establishing the mechanism, the P2P platform must closely integrate the two, and strengthen the supplement and integration of information (Wang Shuguang et al., 2014). competitive advantage is outstanding in terms of volume, operation time, number of lender and borrower, and payment balance (Xiaoxiao and Qiangshen, 2020). It could be related to the financial performance of internet finance companies.

In recent years, with the gradual expansion of P2P online lending industry in China, the continuous accumulation of transaction data and the gradual improvement of information disclosure systems, domestic scholars have begun to quantitatively analyse P2P online lending related issues based on transaction data. (Liao Li et al. 2014) conducted an empirical study on "Renrendai" and found that interest rates that are not entirely based on the market can only reflect the borrower's default risk to a certain extent, while a large proportion of default risk is not reflected in interest rates. Social capital has an impact on the borrower’s default. (Lianying, 2014) pointed out that the P2P lending platform can strengthen the design of the social capital trading mechanism, thereby reducing defaults. (Xiaoying, 2012) found that after studying Prosper, the student loan interest rate and loan repayment rate were higher than the average, but the success rate of student loans was very low, which reflected the general intuition of students in the P2P industry. An in-depth study of the information quality market segmentation showed that online lending can alleviate lending problems for strangers (Lei, 2015). If the quality of information disclosure can be ensured, the problem of identity discrimination in traditional financial markets will be improved. (Chongrun and Kong, 2016) modeled and analysed the historical data of Hongling Venture Capital. The results show that the terms of online lending, interest rates and lending have a significant positive impact on the default rate of borrowers. It also further leads to the financial performance of p2p platform. Factors such as credit points and account location can have a significant negative impact on the account. Wen Xiaoni and so on. (2014) Taking the Patai loan as an example, it is found that borrowers who make mortgage loans in commercial banks will make investors more certain about the authenticity of their information, and the higher the borrower's credit score, the more active the users. Provide positive signals to investors, which in turn affect their investment decisions and number of investors.

(Huijuan, 2015) used the “Renrendai” platform to study the impact of borrower description information on P2P lending behavior. The borrower's credit rating is inversely related to the amount of loan description information. The results confirmed the conclusion about the financial performance of the p2p online loan platform. Existing financial performance research is mainly aimed at banks, enterprises and other departments. The financial performance of banks is affected by many domestic and foreign factors, but the actual economic environment in which they are located has the greatest impact on financial performance (Liu Ren, Dong Jigang, 2013). The study found that the capital adequacy ratio is positively related to the profitability and financing efficiency of commercial banks (Berger, 1995). The financial performance of companies in the financial sector mainly collects data on ROA and ROE. ROA plays an important role in studying the financial performance of the financial sector. ROE is mainly used to study the profitability of banks. The profitability and safety of P2P platforms help to improve investors’ investment behaviour, which is also related to the number of lenders and number of borrowers (Yang, Fan and Yang, 2020).

## 2.5 Evaluation

In summary, domestic and international research on issues related to P2P network lending platforms, whether from qualitative perspectives of origin, development, model comparison, risk and regulatory research, or quantitative research from P2P financing efficiency, default influencing factors, etc. It has been accumulated to a great extent. From the perspective of theoretical research, domestic and foreign scholars' research focuses on the discussion of risk and regulatory issues. Nearly 50% of investors focus on the interest rate of the P2P lending platforms when choosing to invest (yang, Fan and yang, 2020). The Shibor is external factors about rate. Among them, (Steelmann, 2006) and (Xiaoguang, 2012) pointed out that the key risk issue of P2P loans is the default risk of borrowers.

The problem of information asymmetry in P2P lending is particularly prominent, and that the starting point of regulatory measures should be to improve information disclosure and reduce information asymmetry to establish an environment suitable for innovation and development (Freedman et al. 2011). From the perspective of quantitative research, the analysis of loan success rate and default risk is the focus of scholars including Puro et al. The higher the transaction frequency and transaction volume of P2P lending market, the lower the yield (Kim, 2020). And the term of the loan may have something to do with p2p revenues. (Zhuang Lei, etc, 2015) analysed the factors affecting the success of P2P online lending. (Kong Bing, 2016) studied the changes and influencing factors of transaction volume in P2P lending.

At present, in the evaluation of the financial performance of P2P lending platforms, the domestic P2P industry lacks relevant theoretical support, and it is difficult to provide investment decision-making reference for p2p platforms (Zongyuan et al, 2016). Investors face many P2P platforms and loan targets, which is difficult to make accurate judgments. The financial performance of China's P2P platforms is generally sluggish, and the financial performance capabilities of the platforms vary greatly. By sorting out the existing literature, the supervision of the foreign P2P industry is dominated by self-discipline. Compared with the domestic P2P industry, there are fewer risk events. The preliminary domestic research is mainly to solve the risk problem and improve the profitability of the p2p platform. (Viljanen, Byanjankar and Pahikkala, 2020) mentioned the Model defaults and recovery. High default rates and low recovery rates are the norm. it is a primary reason to conduct the bankruptcy of p2p platform. (Rahman, Amin, Pitchay and olaniyi, 2019) mentioned that “herd behaviour” will affect investors' willingness to invest, and most investors and borrowers will follow the advice of friends.

## 2.6 Conceptual Framework

This article mainly discusses the analysis of factors influencing the financial profitability of the p2p online loan industry. The profitability is mainly divided into two indicators ROA and ROE. However, in terms of dependent variables, the main factors we chose include: The Number of Borrowers, The Number of Lenders, The Default Rate, The P2P Industry Average Interest Rate, Shibor and The Average Loans Period



**The independent variable:**

* **Default Rate:** The ratio of the amount that the borrower fails to repay the lender on time to the total amount on the online lending platform.
* **Number of Lender**: Number of Lenders registered on the online lending platform and participating in the investment.
* **Number of Borrower:** Number of borrowers registered on the online lending platform and participating in financing.
* **Industry of P2P average interest rate:** the average value of the transaction interest rate of all online lending platforms in China within a transaction date.
* **Shibor (Interbank Offered Rate):** The Shanghai interbank peer-to-peer interest rate is a barometer of the adequacy of funds in financial markets such as the interbank market and capital market. Reflects the cost of funds between banks and the tightness of funds.
* **Average Loans Period:** In every transaction loan on the online lending platform, the borrower will set a loan period, ranging from several days to several years. The average loans period of all transaction loans is the average loan period of the lending platform.

**Dependent variable:**

The financial performance of the p2p lending industry is mainly reflected on the profit of the p2p online lending platform. The p2p online borrowing platform mainly relies on the withdrawal of transaction fees as its own income, but the cost of p2p is also changing, Management Costs, Marketing Costs and Risk Control Costs, etc. This article mainly looks at the ROA and ROE indicators used to measure the financial performance of the p2p platform.

* **ROA:** Return on Assets, ROA=[Net income+(1-tax rate)(interest expense)+minority interest in earnings]/average total assets, The indicator of Return on Assets combines organically the relevant information in the balance sheet and profit and loss statement, which is a concentrated expression of the p2p borrowing platform's ability to use all its funds to obtain profits. ROA is an important financial indicator for analysing the profitability of the p2p industry. It reflects the net profit created by each unit of total assets and represents the ability of the p2p industry to use all its assets to obtain net profits. The larger the index, the stronger the p2p industry's ability to use assets to make profits and the higher the profitability; the smaller the index, the weaker the p2p industry's ability to use assets to make profits and the lower the profitability.
* **ROE:** Return on Equity, ROE = net profit in the reporting period / net equity at the end of the reporting period. As an important indicator for judging the profitability of a p2p lending platform company, it has always received great attention from investors. Analysts interpreted ROE as the ability to reinvest the company's earnings to generate more revenue. It is also a measure of the company's internal finance and marketing and indicators of financial performance. ROE is another important financial indicator for analysing the profitability of the p2p industry. It reflects the net profit earned by each unit of shareholder’s equity. This indicator is used to measure the efficiency of the company’s use of capital invested by shareholders. The higher the indicator, the higher the return from the investment; the lower the indicator, the more the investment brings and the lower the income.

# Chapter 3 Research Methodology

## 3.1 Research Design



This chapter mainly introduces methodology. The design process of the whole article is that the first chapter mainly introduces the background information of the p2p industry and the purpose of the whole article research, the problems involved and the main purpose and significance of this article. The second chapter mainly focuses on literature review related to profitability in the p2p industry, as well as theory involved in p2p lending industry and conceptual framework. The third chapter mainly explains methodology, using multiple linear regression analysis to design sample selection and sampling methods. This research aims to find transaction data of P2P platform through a third-party information platform (WDZJ) to analyse and study the influencing factors of P2P financial performance. Finally, reasonable suggestions are put forward to support P2P platforms and promote the healthy and sustainable development of P2P online loan industry in China.

## 3.2 The research hypotheses formation

These assumptions analyse which factors will affect the financial performance of p2p. The main indicators are ROA and ROE. In the process of selecting a loan target, investors will first filter the basic information of the loan target, such as loan amount, loan interest rate, loan term, etc.; second, investors will view the default rate of the loan platform and the entire external economic environment. As for the external environment, we mainly look at the impact of Shibor on p2p lending platforms. These factors may affect p2p's financial performance. It is very important to explore and verify the relationship between each factor and the financial performance of the p2p lending platform. The research hypotheses in this section mainly focus on internal factors that affect p2p's financial performance.

**ROA:**

* *H1a: There is a positive and significant relationship between* ***default date*** *and* ***ROA*** *of p2p lending companies.*
* *H2a: There is a positive and significant relationship between* ***Number of lender*** *and* ***ROA*** *of p2p lending companies.*
* *H3a: There is a positive and significant relationship between* ***Number of borrower*** *and* ***ROA*** *of p2p lending companies.*
* *H4a: There is a positive and significant relationship between* ***Industry of P2P average interest rate*** *and* ***ROA*** *of p2p lending companies.*
* *H5a: There is a positive and significant relationship between* ***Shibor*** *and* ***ROA*** *of p2p lending companies.*
* *H6a: There is a negative and significant relationship between* ***Average loans period*** *and* ***ROA*** *of p2p lending companies.*

**ROE:**

* *H1b: There is a positive and significant relationship between* ***default date*** *and* ***ROE*** *of p2p lending companies.*
* *H2b: There is a positive and significant relationship between* ***Number of lender*** *and* ***ROE*** *of p2p lending companies.*
* *H3b: There is a positive and significant relationship between* ***Number of borrower*** *and* ***ROE*** *of p2p lending companies.*
* *H4b: There is a positive and significant relationship between* ***Industry of P2P average interest rate*** *and* ***ROE*** *of p2p lending companies.*
* *H5b: There is a positive and significant relationship between* ***Shibor*** *and* ***ROE*** *of p2p lending companies.*
* *H6b: There is a negative and significant relationship between* ***Average loans period*** *and* ***ROE*** *of p2p lending companies.*

These assumptions are used to verify that the factors affecting the financial performance of the p2p platform mainly include the basic factors of the borrowing project itself, such as the amount of the borrowing project, interest rate, duration and the number of borrowers. It also includes external factors related to the economy, such as tight funds, platform default rates and so on.

## 3.2 Model for Measuring

In the study of real problems, the change of the dependent variable is often affected by several important factors. At this time, it is necessary to use two or more influencing factors as independent variables to explain the change of the dependent variable. This is called multiple regression. multivariable linear regression model, in actual economic problems, a variable is often affected by multiple variables. The profitability of the dependent variable p2p industry studied in this section is quantitative information, and it is affected by a variety of factors. At this time, a multiple linear regression model can be used to study the direction and magnitude of the influence of each factor on the actual borrowing rate.

The general form of the multiple linear regression model is

Y= C+ β1X + β2X+ … + βn X + ε

Among them, Y represents the dependent variable, Xi represents the controllable and obtainable independent variable, βi is the regression coefficient, and its sign and magnitude indicate the direction and extent of the influence of a certain independent variable on the dependent variable, C is a constant term, and ε is an error term. In the analysis of this article, the financial performance of the p2p lending platform as a dependent variable is affected by other independent variables, such as The Number of Borrowers, Number of Lender, Default Rate, Industry of p2p Average Interest Rate, Shibor and The Average loans period. Specifically, the model used in this section is initially established as follows.

**The Regression Model:**

Financial Performance = β0 + β1(Default rate) + β2(Number of Lender) + β3(Number of Borrower) + β4 (Industry of p2p Average Interest Rate) + β5 (Shibor) + β6 (Average loans period) + ε

**Ha Hypothesis Model:**

ROA= β0 + β1(Default rate) + β2(Number of Lender) + β3(Number of Borrower) + β4 (Industry of p2p Average Interest Rate) + β5 (Shibor) + β6 (Average loans period) + ε

**Hb Hypothesis Model:**

ROE= β0 + β1(Default rate) + β2(Number of Lender) + β3(Number of Borrower) + β4 (Industry of p2p Average Interest Rate) + β5 (Shibor) + β6 (Average loans period) + ε

β0: constant

ε: random variable

## 3.4 Study Population and Sample Selection

In this article, we have selected 6 p2p companies (Weidai.com, Yilongdai.com, Mavericks Online, Hexindai, 91 Wangcai, Hengyirong). These companies were established earlier and have a large market share (85%) in China's p2p lending industry, and these companies have standard market information transparency systems and risk control systems. These 6 companies are also members of the China Financial Loan Industry Information Council. The scale of assets is relatively large, and the brand awareness is relatively high. Compared with other small and medium-sized p2p lending companies, these six companies are less affected by external factors compared to small and medium-sized p2p. As a result, the 6 companies are representative in the p2p lending platform industry.

**Weidai.com**

Weidai.com is a P2P platform established in Hangzhou in July 2011. On May 20, 2016, Weidai.com announced in Beijing that it had received 1 billion yuan in Series C financing. On November 15, 2018, Weidai.com would be listed on the New York Stock Exchange under the stock code "WEI". As of February 28, 2019, the microloan network had a turnover of 170.8 billion Yuan, the total number of transactions exceeded 4.4 million, and the total number of lenders reached 850,000. The depository bank for microloan customers' funds is Bank of Xiamen. As a leader in the p2p loan industry, Weidai.com plays an important intermediary role in China's emerging financing economy.

**Yilongdai.com**

Yilongdai.com was established in 2007 and is headquartered in Beijing. After 12 years of research and experience, as well as a comprehensive analysis of the market, Yilongdai has successfully transformed itself. It is an Internet financial company that first advocated the concept of "P2P in the same city" in China and solved the problem of bad debts to a greater extent. Yilongdai currently has established operation centres in more than 100 prefecture-level cities across the country, covering thousands of districts, counties and nearly 10,000 townships, and will establish a nationwide service network in many first and second-tier cities across the country. Through this platform, it can help people with good credit and different needs to solve the problem of shortage of funds, and at the same time can invest the surplus funds in their hands with higher returns for customers with wealth appreciation needs.

**Mavericks online**

Mavericks Online is an online intelligent financial service platform and a governing unit of the China Internet Finance Association. Mavericks Online was established in June 2013 with a registered capital of 103 million Yuan. Its members gather talents in banking, investment and financing, trust, e-commerce and other fields. The online smart wealth management service platform aims to make investment and financing easier. Mavericks Online provides various types of projects to meet the investment and financing needs of different groups of people, and to mine Internet financial data. It provides lenders with a comprehensive project system. In July 2020, the Mavericks online turnover exceeded 130 billion.

**Hexindai**

Hexindai Established in 2013 in Beijing, Hexindai is located in the CBD Building. It is mainly engaged in building an easy, convenient, safe and transparent lending platform for borrowers with capital needs and lenders with financial needs. Hexindai provides professional and reliable Internet lending information intermediary services for individuals and small and medium enterprises. The company has a management team from the forefront of international and Chinese credit. It has introduced foreign management concepts and combined with the experience of outstanding Chinese companies to establish a distinctive modern enterprise operating mechanism and market management system.

 **91 Wangcai**

 91 Wangcai is an Internet wealth management platform under the nine-one financial group, which provides professional, transparent, efficient and fair Internet direct wealth management services for financial consumers. 91 Wangcai and 91 Finance have completed the online financial products and service shopping guide 91 Finance Supermarket, which together constitute a complete financial ecosystem for all financial consumers of 91 Finance Services. The launch of 91 Wangcai's business has greatly expanded the user service field and scope of 91 Finance. Together with enterprise-level and personal-level businesses, it will form a vertically integrated fusion effect to better serve individual financial consumers, as well as small, medium and micro enterprises.

**Hengyirong**

Hengyirong was officially launched on September 4, 2014. The Hengyirong platform (www.hengyirong.com) is managed and operated by Beijing Hengchang Litong Investment Management Co., Ltd. (abbreviated as Hengchang Litong). It provides information to borrowers and lenders (clients) provided services on the Internet lending information intermediary platform. The platform mainly provides customers with services such as information collection, information publication, credit evaluation, information exchange, and loan matching. The Internet is the main channel to facilitate the formation of a direct lending relationship between lenders and borrowers. With professional, standardized, and rigorous methods and procedures, a scientific credit evaluation system and standards have been established to ensure high-quality creditor's rights, real-name borrowers and clear flow of funds.

## 3.5 Data Collection and Analysis Methods

The database of the 6 p2p companies selected in this article ( Including: The Number of Lenders, the Default Rate, the P2P Industry Average Interest Rate, Shibor, the Average Loans Period, ROA and ROE) are mainly from the third-party information platform-WDZJ, which was launched in October 2011. WDZJ is committed to promoting the development of the P2P online lending industry. WDZJ builds the most influential information portal in the online lending industry to escort investors on the way to online loans. WDZJ provides an equal, open and transparent online loan exchange platform for online lenders. So WDZJ is similar to the stock exchange market in the p2p industry. You can find company-related data at WDZJ. WDZJ website has developed into the largest and most authoritative third-party information platform in the online lending industry. The second-hand data to be studied in this article comes from WDZJ.

In China, the earliest P2P online loan platform was established in 2006. It wasn't until 2010 that online loan platforms were favored by many entrepreneurs, and some testers began to appear one after another. In 2011 and 2012, China's online lending platforms entered an explosive period, and online lending platforms have sprung up after the rain. There are more than 2,000 online lending platforms, and hundreds of them are relatively active. According to incomplete statistics, in 2012 alone, the annual transaction volume of domestic online lending platforms including offline lending exceeded 10 billion, and the imbalance between the supply and demand of funds caused by the substantial increase in the number of platforms began to gradually appear. With the development of the Internet and the progress of society, the formality and legitimacy of financial services will gradually strengthen, and the advantages of network technology will be brought into play under effective supervision. Therefore, since the development of the p2p industry in 2006, the development of the industry has not been perfect, and government agencies have insufficient supervision, which has led to unstable industry data. Therefore, this article will select the data from Q1 in 2014 to Q2 in 2020 as the database for analyzing the impact of p2p industry profitability (ROA and ROE). The data of each company uses quarter as a unit of measurement. This paper selects 26 quarters of the 6 companies as the research database (156 sample size). Discuss the factors affecting the profitability (ROA and ROE) of the P2P lending platform.

The main method of this research is to analyze the influence of various factors on the profitability of the p2p industry and its significance through Statistical Package for the Social Sciences (SPSS). The positive or negative relationship between the independent variable and the dependent variable is obtained by analyzing the results. First, we use the excel sheet to analyze the trend of the p2p lending industry from Q1 in 2014 to Q2 in 2020. For example, the change in the number of borrowers, the trend of the average interest rate of the p2p industry, and the trend of profit indicators, etc. Then by pouring the data into SPSS, first to do the variable correlation analysis, as a result, some irrelevant variables and variables that have not passed the stability test can be eliminated. Thus, a more accurate multiple linear equation can be obtained. Finally, we can analyze the effect of each variable on the profitability of the p2p industry.

# Chapter 4 Data Analysis and Research Findings

This paper uses SPSS statistical analysis software to perform descriptive statistics and regression analysis on the relevant data of 6 Chinese p2p companies from Q1 in 2014 to Q2 in 2020, thereby constructing a multiple regression model to study the impact of various factors on the profitability of p2p lending platforms.

## 4.1 Trend Analysis

**1. The number of lenders and borrowers**

From this chart, we can see that the number of lenders reached the highest number between 2016 and 2017 and showed a downward trend after 2017. This is related to the p2p regulatory measures adopted by the government in 2017, and the number of lenders was rapid before 2017 However, with the emergence of the default risk in p2p lending market, the government began to implement regulatory measures to regulate the healthy development of the p2p industry. Since 2017, the number of lenders has shown a downward trend. The number of borrowers reached the maximum in the first quarter of 2016, and then the fluctuation adjustment gradually stabilized at 200,000 thousand people.

Table 4: The trends of lenders and borrowers in China



**2. P2P Industry Average Interest Rate, Average Loans Period, Shibor and Default Rate**

The following table mainly shows the trends of the main elements in the p2p market. From the figure, we can see that Shibor is showing a steady downward trend. The main reason is that with the development of China’s economy and the needs of China’s macroeconomic policies, China has begun to implement loose monetary policies, and the People’s Bank of China has begun to implement low interest rate to promote China’s economy. As a result, inter-bank lending rates fell, but it is steadily descending. Another important indicator is the default rate. The default rate was once the biggest obstacle restricting the development of p2p. Previous scholars have shown that the default rate plays an important role in promoting the bankruptcy of p2p, and it has a positive correlation with the bankruptcy of p2p. Through observation, we can see that the default rate was about 6% in 2016 and remained stable at 6% in 2020. It can be seen from the chart that although the government has introduced some policies, there is still no significant effect on the p2p default rate.

Table 5: The trends of the key elements in P2P lending industry



The third important indicator in the above table is the Industry of P2P Average Interest Rate. We can see that the Industry of P2P Average Interest Rate fluctuated greatly before 2017, mainly around 10%. However, with the government's supervision of p2p in 2017, The Industry of P2P Average Interest Rate fluctuates slowly after 2017, but it is still around 10%. Another indicator is the Average Loans Period. We can see that the Average Loans Period in 2016 rose rapidly from 6 months to 10 months in 2017. With the p2p regulatory policy promulgated by the government in 2017, the Average Loans Period has stabilized at 10 months from 2017 to 2019. However, from 2019 to the present, the Average Loans Period of p2p has begun to show an upward trend again, rising rapidly from 10 months to 16 months.

**3. The ROA and ROE in p2p lending industry**

Table 6: The ROA and ROE in P2P lending industry



As can be seen from the above table, ROE is very volatile, showing an upward trend from 2014 to 2016, and rapidly falling to the 6% level from 2016 to 2017. From 2017 to 2019, it fluctuates around 6%. From 2019 to now, there is a downward trend. However, another profitability indicator is ROA. The overall trend of ROA is below ROE, indicating that the increase in debt is not well represented in the profitability of the p2p industry. The highest peak of ROA appeared in the second quarter of 2016 and reached 6%, after which the curve of follower ROE slowly declined from 2017 to the present.

## 4.2 Descriptive analysis

First of all, this section will carry out descriptive statistics of the samples of each variable in the model. This result is shown in below chart.

Table 7: The descriptive statistics of independent variables and dependent variables



*Dependent variable:* ***ROA***: As shown in the table above, we can see that the mean of ROA is 5.1 from Q1 in 2014 to Q2 in 2020, a total of 26 quarters (N=156). We can compare the ROA of the banking industry. We know that the average ROA of the banking industry from 2014 to 2020 is 3.2. It shows that the ROA profitability of the p2p industry is much higher than that of traditional banks, which also shows the emerging financing methods Profitability is higher than that of traditional banks. ***ROE***: The average value of roe is 7.6. From Q1 in 2014 to Q2 in 2020, a total of 26 quarters (N=156). We can compare the ROE of the banking industry. We know that the average ROE of the banking industry from 2014 to 2020 is 18.7. This shows that the ROE indicator of the p2p industry is lower than that of the banking industry in the same period. This also shows that the banking industry relies on liability to improve its financial performance.

*Independent variable:* ***Number of lenders***: We can see that the average number of lenders is 142,947 from 2014 Q1 to 2020 Q2 compared with the number of customers of banks, the activity of p2p platforms is far less than that of banks. It also shows that p2p is still only for small groups. People's acceptance about the p2p lending industry is not strong in China. On the other hand, we can see that the average ***Number of borrowers*** is 119,718 from 2014 Q1 to 2020 Q2. It can be concluded that the number of borrowers is less than the number of lenders, indicating that many people tend to lender on the p2p borrowing platform instead of borrower. ***P2P Industry Average Interest Rate***: We can see from the above table that the average value of p2p industry average interest rate is 9.85%. However, from (The China Banking Information website 2020), we can see that the average interest rate of banks is 4.3% from 2014 Q1 to 2020 Q2. It shows that the average interest rate of p2p lending industry is about twice that of the banking industry. From this we can conclude that the interest rate of p2p is higher than the interest rate of the bank. Since the service object of p2p is person to person, it is not person to company like the banking industry. ***Shibor***: From the above table, we can see that the average of Shibor is 2.29%, which is lower than the average interest rate of the banking industry (4.3%), and there is no doubt that it is also lower than the average interest rate of the p2p industry (9.85%). On the other hand, we can conclude that (banker to banker) is lower than other lending rates (person to person, person to banker). It also shows that institutions with higher credit ratings can use lower costs for financing. ***Average loans period***: From the indicator of average loan period, we can get from the above table that the average loan period of the p2p industry from 2014 Q1 to 2020 Q2 is 8.8 months. Compared with the bank’s fixed loan period of more than 20 months, the borrowing cycle of p2p lending industry is more flexible and shorter, which also reflects the role of p2p that it is a short-term flexible new financing method. ***Default rate***: We can see from the above table that the average value of the default rate is 5.76 from 2014 Q1 to 2016 Q2. However, it can be seen from (The China Banking Information website 2020) that the non-performing loan rate of the banking industry is 1.83%, compared to the banking industry In terms of the default rate, the p2p lending platform has a higher default rate, and the risk is greater than that of the bank.

## 4.3 Pearson’s Correlation Analysis

The results of the correlation analysis of variables are shown in the table.

Table 8: The correlation analysis of independent variables and dependent variables



**The correlation between Independent Variables and Dependent Variables**

Table 4 lists the correlation matrix of the research variables. First, the independent variable in the order with the highest correlation with the dependent variable will be selected, and then the order with the lowest correlation with the dependent variable will be selected. However, it is found from the analysis that the ROA of the p2p industry is significantly positively correlated with The Number of Lenders, Number of Borrowers, And P2P Industry Average Interest Rate variables (0.973, 0.855 and 0.764, respectively), and is correlated with Shibor, Default Rate and Average Loans Period, which is a negative correlation (-0.046, -0.326 and -0.027, respectively). On the other hand, ROE of the p2p industry is significantly positively correlated with Number of Lenders, Number of Borrowers and P2P Industry Average Interest Rate variables (0.849, 0.773 and 0.544, respectively), and negatively correlated with Shibor, Default Rate and Average Loans Period (-0.066, -0.326 and -0.044, respectively).

**The correlation among Independent Variables**

From the above table, we can see that Number of Lenders is mainly positively correlated with Number of Borrowers and P2P Industry Average Interest Rate (0.576 and 0.489 respectively) and negatively correlated with Average Loans Period (-0.314). However, Number of Borrowers is mainly positively correlated with Number of Lenders and P2P Industry Average Interest Rate (0.576 and 0.375, respectively) and Shibor, Average Loans Period and Default Rate have a very weak negative correlation. On the other hand, the P2P Industry Average Interest Rate is negatively correlated with Shibor, Average Loans Period and Default Rate (-0.174, -0.115 and -0.010, respectively). As for Shibor, Shibor has a weak negative correlation with Number of Lenders, Number of Borrowers, P2P Industry Average Interest Rate and Average Loans Period. Shibor is only positively correlated with the Default Rate (0.166). However, the Average Loans Period is negatively correlated with all other independent variables.

## 4.4 Multiple Linear Analysis

***ROA Model***

Multiple linear regression was performed on the collected data of the sample companies from 2014 Q1 to 2020 Q2 so as to illustrate the impact of various factors on the ROA of profitability.

The model summary table is shown in Table 9-1. It can be seen from Table 9-1 that the adjusted R2 equals to 0.844, which means 84.4% of the variance is accounted for by this regression model. The goodness of fit is relatively high. The fit is acceptable.

Table 9: The model summary of independent variables and ROA



The results of ANOVA are shown in Table 10. From the below table, it can be seen that the F value of the model is 140.448. The P value is 0.000, which is significantly less than 0.05, indicating that the model has passed the significance test and the dependent variable (ROA) has linearity with the independent variables (Default Rate, P2P Industry Average Interest Rate, Average Loans Period, Shibor and Number of Borrower and Lender).

Table 10: The ANOVA of independent variables and ROA



The multiple linear regression results are shown in Table 5- 6

Table 11: The coefficients of independent variables and ROA



Table 4 illustrates the result of significance test of coefficients. The explanatory parameters enter method is employed in the model. Under the significance level of 0.05, p-values suggest there’s no significant linear correlation between Default Rate, Shibor and the dependent variable. These variables should be left out when deducting the equation. There is significant linear correlation between number of Lender, number of Borrower, P2P Industry Average Interest Rate, Average Loans Period and the dependent variable. Taking the tolerance of explanatory variable and variance inflation factor (VIF) into consideration, all of the Tolerance is near to 1 and the VIF is near to 1 far smaller than 10, it means that the collinearity among Independent Variables is weak.

***H1a: There is a positive and significant relationship between default date and ROA of p2p lending companies.***

From the above table, we can conclude that the β of Default rate with ROA is -0.181, which means the relationship between the Default rate and ROA is a negative relation. On the other hand, as for the P value, we can see that the result is 0.578 that is over the 0.05, which means there are no significant relationship between default date and ROA of p2p lending companies. As a result, we REJECT H1a.

***H2a: There is a positive and significant relationship between Number of lender and ROA of p2p lending companies.***

From the above table, we can conclude that the β of Number of lenders with ROA is 7.468E-6, which means the relationship between the Number of lender and ROA is a positive relation. On the other hand, as for the P value, we can see that the result is 0.000 that is under the 0.05, which means they have significant relationship between Number of lenders and ROA of p2p lending companies. As a result, we ACCEPT H2a.

***H3a: There is a positive and significant relationship between Number of borrower and ROA of p2p lending companies.***

From the above table, we can conclude that the β of Number of borrowers with ROA is 1.697E-5, which means the relationship between the Number of bborrower and ROA is a positive relation. On the other hand, as for the P value, we can see that the result is 0.000 that is under the 0.05, which means they have significant relationship between Number of borrowers and ROA of p2p lending companies. As a result, we ACCEPT H3a.

***H4a: There is a positive and significant relationship between Industry of P2P average interest rate and ROA of p2p lending companies.***

From the above table, we can conclude that the β of P2P Industry Average Interest Rate with ROA is 0.224, which means the relationship between the P2P Industry Average Interest Rate and ROA is a positive relation. On the other hand, as for the P value, we can see that the result is 0.034 that is under the 0.05, which means they have significant relationship between P2P Industry Average Interest Rate and ROA of p2p lending companies. As a result, we ACCEPT H4a.

***H5a: There is a positive and significant relationship between Shibor and ROA of p2p lending companies.***

From the above table, we can conclude that the β of Shibor with ROA is -0.067, which means the relationship between the Shibor and ROA is a negative relation. On the other hand, as for the P value, we can see that the result is 0.833 that is over the 0.05, which means there are no significant relationship between Shibor and ROA of p2p lending companies. As a result, we REJECT H5a.

***H6a: There is a negative and significant relationship between Average loans period and ROA of p2p lending companies.***

From the above table, we can conclude that the β of Average Loans Period with ROA is -0.037, which means the relationship between the Average Loans Period and ROA is a negative relation. On the other hand, as for the P value, we can see that the result is 0.044 that is under the 0.05, which means they have significant relationship between Average Loans Period and ROA of p2p lending companies. As a result, we ACCEPT H6a.

***ROE Model***

Multiple linear regression was performed on the collected data of the sample companies from 2014Q1 to 2020Q2 so as to illustrate the impact of various factors on the ROE of profitability.

The model summary table is shown in Table 5-4. It can be seen from Table 12 that the adjusted R2 equals to 0.852, which means 85.2% of the variance is accounted for by this regression model. The goodness of fit is relatively high. The fit is acceptable.

Table 12: The model summary of independent variables and ROE



The results of ANOVA are shown in Table 13. From the below table, it can be seen that the F value of the model is 843.113. The P value is 0.000, which is significantly less than 0.05, indicating that the model has passed the significance test and the dependent variable (ROE) has linearity with the independent variables (Default Rate, P2P Industry Average Interest Rate, Average Loans Period, Shibor and Number of Borrower and Lender).

Table 13: The ANOVA of independent variables and ROE



The multiple linear regression results are shown in Table 14

Table 14: The coefficients of independent variables and ROE



Table 14 illustrates the result of significance test of coefficients. The explanatory parameters enter method is employed in the model. Under the significance level of 0.05, p-values suggest there’s no significant linear correlation between Default Rate, Shibor and the dependent variable (ROE). These variables should be left out when deducting the equation. There is significant linear correlation between number of Lender, number of Borrower, P2P Industry Average Interest Rate, Average Loans Period and the dependent variable (ROE). Taking the tolerance of explanatory variable and variance inflation factor (VIF) into consideration, all of the Tolerance is near to 1 and the VIF is near to 1 far smaller than 10, it means that the collinearity among Independent Variables is weak.

***H1b: There is a positive and significant relationship between default date and ROE of p2p lending companies.***

From the above table, we can conclude that the β of Default rate with ROE is -0.431, which means the relationship between the Default rate and ROE is a negative relation. On the other hand, as for the P value, we can see that the result is 0.333 that is over the 0.05, which means there are no significant relationship between default date and ROE of p2p lending companies. As a result, we REJECT H1b.

***H2b: There is a positive and significant relationship between Number of lender and ROE of p2p lending companies.***

From the above table, we can conclude that the β of Number of lenders with ROE is 2.264E-5, which means the relationship between the Number of lenders and ROE is a positive relation. On the other hand, as for the P value, we can see that the result is 0.000 that is less than the 0.05, which means they have significant relationship between Number of lenders and ROE of p2p lending companies. As a result, we ACCEPT H2b.

***H3b: There is a positive and significant relationship between Number of borrower and ROE of p2p lending companies.***

From the above table, we can conclude that the β of Number of borrowers with ROE is 1.076E-5, which means the relationship between the Number of borrower and ROE is a positive relation. On the other hand, as for the P value, we can see that the result is 0.000 that is less than the 0.05, which means they have significant relationship between Number of borrowers and ROE of p2p lending companies. As a result, we ACCEPT H3b.

***H4b: There is a positive and significant relationship between Industry of P2P average interest rate and ROE of p2p lending companies.***

From the above table, we can conclude that the β of P2P Industry Average Interest Rate with ROE is 0.465, which means the relationship between the P2P Industry Average Interest Rate and ROE is a positive relation. On the other hand, as for the P value, we can see that the result is 0.001 that is less than the 0.05, which means they have significant relationship between P2P Industry Average Interest Rate and ROE of p2p lending companies. As a result, we ACCEPT H4b.

***H5b: There is a positive and significant relationship between Shibor and ROE of p2p lending companies.***

From the above table, we can conclude that the β of Shibor with ROE is -0.262, which means the relationship between the Shibor and ROE is a negative relation. On the other hand, as for the P value, we can see that the result is 0.546 that is over the 0.05, which means there are no significant relationship between Shibor and ROE of p2p lending companies. As a result, we REJECT H5b.

***H6b: There is a negative and significant relationship between Average loans period and ROE of p2p lending companies.***

From the above table, we can conclude that the β of Average Loans Period with ROE is -0.059, which means the relationship between the Average Loans Period and ROE is a negative relation. On the other hand, as for the P value, we can see that the result is 0.021 that is under the 0.05, which means they have significant relationship between Average Loans Period and ROE of p2p lending companies. As a result, we ACCEPT H6b.

## 4.5 Hypotheses Assessment Summary

While reviewing the results, we should come to take a decision on the study hypothesis as it appears in the following table:

|  |  |  |
| --- | --- | --- |
| **Hypotheses** | **ROA** | **ROE** |
| H1a/b: There is a positive and significant relationship between ***default date*** and ROA/ROE of p2p lending companies. | REJECT | REJECT |
| H2a/b: There is a positive and significant relationship between ***Number of lender*** and ROA/ROE of p2p lending companies. | ACCEPT | ACCEPT |
| H3a/b: There is a positive and significant relationship between ***Number of borrower*** and ROA/ROE of p2p lending companies. | ACCEPT | ACCEPT |
| H4a/b: There is a positive and significant relationship between ***P2P industry average interest rate*** and ROA/ROE of p2p lending companies. | ACCEPT | ACCEPT |
| H5a/b: There is a positive and significant relationship between ***Shibor*** and ROA/ROE of p2p lending companies | REJECT | REJECT |
| H6a/b: There is a negative and significant relationship between ***Average loans period*** and ROA/ROE of p2p lending companies. | ACCEPT | ACCEPT |

# Chapter 5 Conclusion and Recommendations

## 5.1 Conclusion

Through the empirical analysis in Chapter 4, we can see that the main factors affecting the p2p lending platform including the number of lenders, the number of borrowers, the average interest rate of the p2p industry, and the average loans period. It shows that the p2p industry is related to the main factors in internal factors. From the Coefficients chart, we can conclude that ROA is positively correlated with the number of borrowers, the number of lenders, and the borrowing interest rate of p2p. However, it is negatively correlated with Shibor and default rate but not significant. Another profit indicator is ROE. We conclude that ROE is positively correlated with the number of borrowers, the number of lenders, and the borrowing interest rate of p2p. However, it is negatively correlated with Shibor and default rate but not significant. We see that ROE in the p2p industry is higher than ROA. How to attract investors to invest, the key is to use herd mentality. But this kind of following is not to force others, nor to confuse others, but to make others unconsciously interested in you or your products in a clever way. Persuade the other person to follow your thoughts and actions and do so on the basis of respect for the other person. Therefore, it is necessary to increase publicity, understand investors’ investment psychology, and understand what they want. As an investor who invests in the P2P industry, the most important thing is the benefits and risks. What you get from investing in this platform the return value is not worth his risk, so you must make it clear in your publicity what your income and risks are. Only in this way can you attract the first batch of investors to invest; secondly, it is to consolidate and maintain the relationship with old lenders, Only by retaining the original lenders can the herd mentality of new investors be used to attract more investors to invest and make the platform bigger and bigger.

## 5.2 Recommendation for P2P Industry

*1 Improve the number of lenders in a timely manner to increase profitability*. From the above empirical analysis, we can see that the number of lenders is positively correlated with the ROA and ROE of the p2p industry, and there is a significant relationship. Combined with the current situation, the occurrence of successive failures of p2p platforms. If the p2p platform wants to remain competitive and want to improve the profitability of the company, it must find ways to increase the number of lenders through advertising and introduction of old customers. On the other hand, p2p companies can also give certain preferential treatments or rewards to previous lenders to promote the expansion of the number of lenders.

*2 Improve timely means to increase the number of borrowers.* thereby increasing profitability. Similar to number of lenders, number of borrowers is also another major factor affecting the profitability of the p2p industry. In other words, the number of borrowers is positively related to the profitability of the company. If the company wants to maintain stable and growing profitability, it must increase the number of borrowers through the marketing department.

*3 Increase the borrowing interest rate of the p2p company to increase profitability.* We can see that the borrowing rate of the p2p industry remains at about 10%. However, compared to banks, the average interest rate of banks is around 4%. We know that the risks of banks are lower than those of the p2p industry. Therefore, if the p2p industry wants to improve its profitability and develop in a stable and healthy manner, it is necessary to increase the borrowing interest rate of the p2p company by setting corresponding products. In this way, raising the borrowing rate of the p2p industry can also attract more and number of lenders by the other hand.

*4 Reduce the loans period of the p2p industry to increase profitability.* We can see that the average loans period of the p2p industry is much lower than that of the banking industry. This also expresses the flexibility of the p2p loan platform from the side. This is because the p2p platform contains many borrowers and lenders. Each of them has a different project cycle. Borrowers and lenders can be found reasonably to increase the flexibility of borrowing. P2p companies can set the borrowing cycle of borrowing projects to improve their profitability.

## 5.3 Recommendation for Government Departments

Although external economic and policy factors have a greater impact on the p2p industry. But this article mainly analyses the impact of internal factors on the profitability of the p2p industry. Through the analysis of internal factors. We can see that Shibor is negatively correlated with the profitability of the p2p industry. Based on China's current economic environment, it is necessary for the government to implement interest rate cut policies. This also shows that government departments can regulate the profitability of the p2p industry through macro measures. The timely implementation of interest rate hike policies by government departments will promote the healthy development of China's p2p industry.

## 5.4 Recommendation for researcher and future research

Through the previous article, we can see that the previous scholars mainly focused on p2p trading volume, p2p default risk and p2p platform interest rate, etc. This article uses the previous article as a basis to discuss the impact of the profitability of the p2p industry, despite default Rate is the main indicator that affects p2p trading volume and p2p platform interest rates. However, in the analysis that affects p2p profitability, the impact of default rate on profitability is not significant, so future researchers need not analyse p2p related fields by considering the default rate and the impact of Shibor on the ability of the p2p industry to influence.

## 5.5 Limitation of the study

This paper selects 6 main indicators that affect the profitability of the p2p industry. Because 2017 is a turning point in China's p2p rectification, since the emergence of p2p in 2007, p2p has shown a rapid development trend, from less than 10 companies to 4944 in 2017, but with the implementation of government supervision measures and the phenomenon of p2p bankruptcy keeping happening. So far, only 330 are running. However, the data selected in this article is from 2014 to 2020. Although the data can be found on the Internet, there are many limitations. First, external factors affect the profitability of p2p from 2014 to 2020, which is more greater impact than internal factors, as a result, the internal factors analysed in this article will produce not exactly correct results on p2p profitability. Second, these data come from third-party service platforms, annual reports and stock markets. It is inevitable that there will be such a phenomenon that p2p companies fabricate company data, which will lead to errors in the results. Third, there are many indicators that affect the profitability of the p2p industry, and this article only analyses the impact of internal factors on it, which will limit the judgment of the profitability of the entire p2p industry.

## 5.6 Personal Reflections

After studying this paper, I encountered many challenges in writing this paper and collecting data. But after active communication with the supervisor, the problem was solved smoothly. In writing this paper, I also learned a lot. First of all, I know how to do a master's research and how to apply SPSS. And as a Chinese student. I also experienced the difference between Chinese education and the British education system. Especially in master's thesis writing. Chinese master's thesis does not have such strong logical thinking. In addition, at the stage of writing a master's thesis, we must not only learn to manage time and communicate effectively with our supervisors. And I also actively learn how to solve problems by yourself. Fortunately, during my study, I received great help and support from Dr Babak, who was very dedicated and professional in guiding my thesis. Secondly, in the research of this article, through a lot of reading knowledge about p2p online lending. Let me gain more knowledge and insights about the p2p industry. It also made me more interested in this field. Whether I continue to engage in business activities or continue to engage in academic research in the future, this MBA project research will be very beneficial to me.

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# Appendix

**INTI International University Master of Business Administration MGT7998 Initial Research Paper Proposal**

|  |  |
| --- | --- |
| **STUDENT NAME & ID NO** | CUI ZHI FENG I19016424 |
| **BROAD AREA** | P2P financing of finance  |
|  |
| **Concise Title**  | Analysis of factors influencing P2P lending industry performance in China |
| **Problem Definition**  | The p2p loan market is booming in developed countries. However, the financial changes of p2p companies are indeed very poor in China. The number of bankruptcy companies has indeed gradually increased. |
| **Research Questions OR Objectives**  | RQ1: To investigate the relationship between default rate and the performance of P2P.RQ2: To investigate the relationship between Number of lender and the performance of P2P.RQ3: To investigate the relationship between Number of borrower and the performance of P2P.RQ4: To investigate the relationship between Industry of P2P average interest rate and the performance of P2P.RQ5: To investigate the relationship between Shibor (Interbank Offered Rate) and the performance of P2P.RQ6: To investigate the relationship between Average loans period and the performance of P2P. |
| **Scope of study**  | This study is based on quantitative research methods to selected 6 companies, and the last part applies regression analysis. |
| **Significance of the Research**  | * promote the healthy and stable development of the p2p platform in China.
* give a reasonable theoretical support for future scholars to make a reference in the field of p2p research.
 |
| **Literature Review**  | The profitability and safety of P2P platforms help to improve investors‘ investment behavior, which is also related to the number of lenders and number of borrowers (Yang, Fan and Yang, 2020). The borrower‘s borrowing behavior is based on the preference of three main loan factors (the duration, loan amount and interest rate), which may in turn be related to the number of transactions and financial performance of P2P platforms ( Yoon, Li and Feng, 2019) |
| **Research Methodology**  | we selected 6 p2p companies. These companies were established early, with a large market share （85%） and select data from 2014 Q1 to 2020 Q2. This paper selects 26 quarters of 6 companies （ 156）as the research database.Descriptive analysis Correlation Analysis Multiple Linear Analysis  |
| **PROJECT PAPER LOG**This is an important document, which is to be handed in with your dissertation. This log will be taken into consideration when awarding the final mark for the dissertation.

|  |  |
| --- | --- |
| **Student Name:** | **CUI ZHIFENG** |
| **Supervisor’s Name:** | **Dr. Babak Naysary** |
| **Dissertation Topic:** **Analysis of factors influencing P2P lending industry performance in China** |

SECTION A. MONITORING STUDENT DISSERTATION PROCESS**The plan below is to be agreed between the student & supervisor and will be monitored against progress made at each session**

|  |  |
| --- | --- |
| **Activity** | **Milestone/Deliverable Date** |
| May | June | July | August |
| The project topic determined |  √ |   |   |   |
| The related literature articles  |  √ |   |   |   |
| The analysis method |   |  √ |   |   |
| Methodology |   |  √ |   |   |
| Study population  |   |  √ |   |   |
| Data collection and Trend analysis  |   |   |  √ |   |
| Descriptive analysis |   |   |  √ |   |
| Correlation analysis |   |   |  √ |   |
| Recommendation |   |   |  √ |   |
| Limitation |   |   |   |  √ |
| Conclusion  |   |   |   |  √ |
| The whole paper checking  |   |   |   |  √ |

SECTION B. ETHICS Ethics form protocol number:  |
| **SECTION C. RECORD OF MEETINGS****The expectation is that students will meet their supervisors up to seven times and these meetings should be recorded.****Meeting 1**

|  |  |
| --- | --- |
| Date of Meeting | 12/5 2020 |
| Progress Made | This meeting mainly discussed the confirmation of the thesis title and the general content of the whole thesis with my supervisor. The main direction of the paper is Finance-----Financing Patterns-----P2P financing way. |
| Agreed Action | Reached a consensus on the main content of the project. The paper could start from P2P online lending, and then compare with the traditional financing mode. Such as bank loans, traditional lending companies and so on. |
| Student Signature |  |
| Supervisor’s Signature | C:\Users\babak.naysary\Desktop\Sign.jpg |

**Meeting 2**

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| --- | --- |
| Date of Meeting | 4/6 2020 |
| Progress Made | Discussed the determination of the final topic. And how to structure the paper. Continued to read literature review related to p2p lending platforms and the financial performance of banking companies. |
| Agreed Action | Agreed topic: Analysis of factors influencing P2P lending industry performance in China. Continued to read a lot of articles related on p2p lending platforms and financial companies' performance. |
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| Supervisor’s Signature | C:\Users\babak.naysary\Desktop\Sign.jpg |

**Meeting 3**

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| Date of Meeting | 20/6 2020 |
| Progress Made | This meeting mainly discussed the Conceptual Framework, which is about variable selection. From the selection of independent variables and dependent variables to determination. |
| Agreed Action | It is agreed the selection of variables. ***Independent Variables:*** the number of Borrowers, the number of Lenders, the Default Rate, the P2P Industry Average Interest Rate, Shibor and the Average Loans Period. ***Dependent Variables:*** ROA ROE |
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| Supervisor’s Signature | C:\Users\babak.naysary\Desktop\Sign.jpg |

**Meeting 4**

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| Date of Meeting | 3/7 2020 |
| Progress Made | This meeting was going to confirm Chapter 3-----Methodology. To discuss sample size and sampling method. And by using quantitative analysis method----Multiple Linear regression was used. |
| Agreed Action | The meeting unanimously agreed to select six representative P2P companies (Weidai.com, Yilongdai.com, Mavericks Online, Hexindai, 91Wangcai and Hengyirong). The data is selected from 2014 Q1 to 2020 Q2. |
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**Meeting 5**

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| Date of Meeting | 9/7 2020 |
| Progress Made | After the first Proposal Defence. According to the suggestions given by Dr Sukjeet, the contents of the Chapter 1to Chapter 3 are summarized. And continued to read a lot of literature about it. |
| Agreed Action | Confirmed with the supervisor the advice given by Dr Sukjeet. And to read a lot of relevant articles in the literature Review Chapter. Improved the evidence of relationship between independent variables and dependent variables. |
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| Supervisor’s Signature | C:\Users\babak.naysary\Desktop\Sign.jpg |

**Meeting 6**

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| Date of Meeting | 15/7 2020 |
| Progress Made | Determine data collection methods and SPSS analysis methods. Data from 2014 Q1 to 2020 Q2 from third-party information service platform ----- WDZJ |
| Agreed Action | It was agreed that multiple linear regression analysis method should be adopt and SPSS analysis software should be used. And we can use Excel to do the trend analysis of major variables. |
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| Supervisor’s Signature | C:\Users\babak.naysary\Desktop\Sign.jpg |

**Meeting 7**

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| Date of Meeting | 18/7 2020 |
| Progress Made | Independent variables correlation problem. Among them, there are two independent variables with insignificant correlation. The Default Rate and Shibor are respectively. Discuss how to calculate the next step of regression equation. |
| Agreed Action | The supervisor advised and agreed that although two dependent variables failed to pass the significance test, they were still analysed together in SPSS in order to look at the direction and extent of the influence of these independent variables on the dependent variables. |
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**Meeting 8**

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| Date of Meeting | 26/7 2020 |
| Progress Made | The result analysis of the influence of independent variable on dependent variable. Drew the main results of the article and verify Hypotheses in chapter 1. |
| Agreed Action | Agreed with the supervisor on the analysis of results. The analysis process and method are the more important contents of the project and according to the analysis results, 2,3,4,6 assumptions are corrected and 3,5 assumptions are error. |
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| Supervisor’s Signature | C:\Users\babak.naysary\Desktop\Sign.jpg |

**Meeting 9**

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| Date of Meeting | 5/8 2020 |
| Progress Made | According to the analysis results, this article gave some suggestions to p2p platforms, government departments and future scholars in the field of P2P and provided a theoretical basis for the healthy development of P2P in China. |
| Agreed Action | It was unanimously agreed that in recommendation, three directions could be subdivided, for P2P platform, for government departments, and for scholars in related fields in the future, and limitation of the article also needed to add. |
| Student Signature |  |
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**Meeting 10**

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| Date of Meeting | 17/8 2020 |
| Progress Made | Check the entire paper in Word version and confirm the appendix. abridgment for the burdensome content and organized the whole article. |
| Agreed Action | This meeting agreed to make minor changes to the Literature Review and to add analytical methods to the papers. Determined the whole format and conclusion. |
| Student Signature |  |
| Supervisor’s Signature | C:\Users\babak.naysary\Desktop\Sign.jpg |

Section D. Comments on Management of Project(to be completed at the end of the dissertation process)Student CommentsThrough this paper, first of all, thanks to Dr Babak for his advice. It made me very clear in the p2p field papers that I had misunderstood. Secondly, I learned to complete a master's degree thesis, structure, methods and so on. Thirdly, the importance of communication. Timely communication with my supervisor will make me get twice the result with half the effort compared to myself effort. Supervisor CommentsDespite the challenging beginning, student has managed to work on his best capacity and handle the project. Considering the novelty of the P2P lending industry and limited resources, the data was collected efficiently and student made meaningful conclusions from the work.

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| Signature of Student  | Date 19/8 2020 |
| Signature of Supervisor C:\Users\babak.naysary\Desktop\Sign.jpg | Date 19/8 2020 |
| Ethics Confirmed | Date |

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**The SafeAssign report**

