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Jiacheng Li

Southwestern University of Finance and Economics, 413201035@qq.com

Haichao Zheng

Southwestern University of Finance and Economics, haichao_zheng@163.com

Minghui Kang

Southwest Jiaotong University, kmhui66@126.com

Tao Wang

Southwestern University of Finance and Economics, ccnuwt@swufe.edu.cn

Sitong Chen

Southwestern University of Finance and Economics, 282064000@qq.com

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UNDERSTANDING INVESTMENT INTENTION TOWARDS P2P LENDING: AN EMPIRICAL STUDY

Jiacheng Li, School of Economic Information Engineering, Southwestern University of Finance and Economics, Chengdu, China, 413201035@qq.com

Haichao Zheng*, School of Economic Information Engineering, Southwestern University of Finance and Economics, Chengdu, China, haichao_zheng@163.com

Minghui Kang, School of Economics & Management, Southwest Jiaotong University, Chengdu, China, kmhui66@126.com

Tao Wang, School of Economic Information Engineering, Southwestern University of Finance and Economics, Chengdu, China, ccnuwt@swufe.edu.cn

Sitong Chen, School of Economic Information Engineering, Southwestern University of Finance and Economics, Chengdu, China, 282064000@qq.com

Abstract

P2P lending is an innovation of micro-financial operation pattern, which is mainly used to meet the petty loan and investment demands of small and micro businesses and individuals. Given the rapid development of P2P market, there is a pressing need to understand lenders' initial investment intentions in P2P platform. Although there are some studies exploring the factors explaining P2P lenders' investment intentions, none of research has been reported from the perspective of the platform. This study extended technology acceptance model with perceived risk and initial trust as a theoretical framework to examine the roles of individual factors and platform factors in determining P2P lenders' initial investment intentions. This study suggests that risk appetite, trust propensity, perceived ease of use, perceived security assurance, perceived privacy protection, perceived reputation, third-party certification, perceived risk and initial trust together provide a strong explanation for initial investment intention in P2P lending. The finding of this research provided a theoretical foundation for future academic studies as well as practical guidance for rapid development of P2P platform.

Keywords: Peer to peer lending, Initial investment intention, Perceived risk, Initial trust

* Corresponding author

1 INTRODUCTION

P2P lending, Internet lending or person-to-person online lending, involves individuals or “peers” who use online platforms without the involvement of a financial institution as a middle man. (Wei, 2015) Being originating from England, this lending mode has been widely popularized all over the world. Since the establishment of first P2P platform PPDAL.com in 2007, Chinese P2P lending market has achieved rapid growth in recent years. According to the data released by China P2P Industry Annual Report. There have been 3657 P2P platforms in China at the end of 2015. The annual sum amount of business transactions has closed to 1 trillion RMB. And comparing with the mature constant return market in China, the market scale of P2P lending is relatively small with great development space.

Due to the elimination of a traditional financial intermediary, and a more dynamic environment, P2P lending has the potential to reduce financing costs and increase efficiency of the financial market (Guo et al., 2015). Owing to these potential benefits, many researchers have studied the P2P lending market, most of them researched in two fields. One is about the funding success and default rates in P2P lending; another is about participants’ behaviour (e.g. Herzenstein et al., 2008; Iyer et al., 2009). However, there are few researches focusing on the lenders’ investment intention toward platform, which is quite essential for the development of P2P platform, especially in the Chinese market. Due to the lack of effective supervision in Chinese P2P lending market, the default rate and failure rate have always been maintained at a high level. In 2015, there was exceed 1000 “problematic platforms” with the problems of business termination and runaway, which will significantly hinder the development of P2P industry. In this case, the lenders’ attitude towards the platform is of great importance. To understand how to increase the lenders’ initial investment intention, this research studied the factors affecting the lenders’ initial investment intentions on P2P platform from two perspectives of perceived risk and initial trust.

In order to achieve the research object, a literature review was conducted to identify the constructs examined in our research model. It is composed of seven variables drawn from prior studies concerning various aspects of perceived risk, initial trust and P2P Lending. Davis’s TAM model was employed as the basic theoretical foundation to construct a theoretical framework. We investigate 216 prospective lenders of P2P platform to verify this model. This study will be of interest to both researches and industries. From a theoretical perspective, this is the first time to understand lenders’ initial investment willingness from the perspective of P2P lending platform. Furthermore, this research provides a new idea for studying the relationship between perceived risk and initial trust. From a practical perspective, the findings will provide many useful suggestions to promote the rapid development of P2P lending platform.

The rest of the paper is organized as follows: section 2 provides the theoretical background on P2P lending, perceived risk and initial trust for our research. Section 3 presents the research model and hypotheses, and specifies the factors influencing perceived risk, initial trust and lenders’ initial investment intentions of P2P platform. Section 4 outlines the research measurement. Section 5 provides the results of empirical tests, followed by a summary of the findings and a discussion of the implications of the research. At the end of the paper, limitations and suggestions are identified for future researches.

2 THEORETICAL BACKGROUND

2.1 Peer-to-peer Lending

P2P lending can be traced back to the “Grameen Bank “founded by Yunus. This kind of financial institutions and their business operations belong to the category of micro finance. In the context of the

economic downturn caused by global financial crisis, the micro financial market has entered into rapid development period since 2009 on the basis of the traditional financial institutions experience. P2P lending plays an important role in the field of micro finance. Therefore, the studies on the internet loan mode have gradually increased in recent years.

Magee (2011) believes that the Internet is the biggest advantage of internet lending is that the borrowers can borrow money with lower interest rates without guarantee, and the lenders can get obtain abundant profits. On the other hand, the internet lending can meet the requirements of the borrowers who can't get bank loans, and their credit rating is not up to the requirements of the formal financial institutions (Bruett, 2007). The mode that the strangers carry out lending transactions through the internet certainly possesses a greater risk than the traditional lending model of financial institutions. It has become the essential topic to deal with negative effects generating from the Internet lending under the environment of internet. (Weiss et al., 2010)

Previous researches of P2P lending are mainly focusing on borrowers and lenders. For instance, the researches on asymmetric information carried out by Iyer (2009) and Larrimore (2011) study how the lenders to judge the credibility of the borrower, and the effects generating from different decisions. The result shows that distinguishing features of the borrower in internet lending is their way to use "soft information". Lin et al. (2013) discover that the lower the borrower's credit rating is, the less possible the successful lending will be. Furthermore, both the interest rate and the default rate will be higher. Herzenstein et al. (2011) discover that the main factors affecting the success of lending are the borrower's personal information and credit rating. However, many P2P platforms in China pack the borrowers' borrowing demand into financial products and sell them to lenders in order to simplify the lenders' investment decision-making process. Generally speaking, lenders can't obtain the specific information of each borrower under this circumstance. They must determine the investment only through their judgement on the reliability of the platform. In addition, the default rate of the platform in china is very high. Therefore, the lenders' attitude towards the platform is of great importance. This research will study lenders' initial investment intentions on P2P platform from the two aspects of perceived risk and initial trust.

2.2 Perceived risk

Perceived risk has been much discussed in the marketing literature. Perceived risk was originally defined by Bauer (1960), it's commonly thought of as felt uncertainty regarding possible negative consequences of using a product or service (Featherman & Pavlou, 2003). It has formally been defined as "a combination of uncertainty plus seriousness of outcome involved" (Bauer & Cox, 1967), and "the expectation of losses associated with purchase and acts as an inhibitor to purchase behaviour" (Peter & Ryan, 1976). Featherman and Pavlou (2003) define perceived risk in the e-service fields "the potential for loss in the pursuit of a desired outcome of using an e-service". And previous studies show that for e-service, the more a product is seen as intangible, the more it is perceived as risky (Brasil et al., 2008; Laroche et al., 2001; Mitchell & Greatorex, 1993). Because consumers are unable to physically examine an object when buying online, they might be more concerned that the item would not perform as expected (Simonian et al., 2012). Therefore, consumers may feel great perceived risk when they use P2P platform.

Many literatures show that the perceived risk variables of individual are multidimensional (Jacoby & Kaplan, 1972; Peter & Tarpey, 1975). Six components or types of perceived risk have been identified on e-service: performance, financial, time, psychological, social and privacy (Featherman & Pavlou, 2003). We define perceived risk in P2P lending as the subjectively determined expectation of loss by a P2P platform user in contemplating a particular online transaction (LEE, 2008). The dimensions of perceived risk were defined in Table 1 (Featherman & Pavlou, 2003).

Dimension	Definition
Performance risk	The possibility of the product malfunctioning and not performing as it was designed and

Financial risk	advertised and therefore failing to deliver the desired benefits. The probability that a purchase results in loss of money as well as the subsequent maintenance cost of the product.
Time risk	Consumers may lose time when making a bad purchasing decision by wasting time researching and making the purchase, learning how to use a product or service only to have to replace it if it does not perform to expectations.
Psychological risk	The risk that the selection or performance of the producer will have a negative effect on the consumer's peace of mind or self-perception.
Social risk	Potential loss of status in one's social group as a result of adopting a product or service, looking foolish or untrendy.
Privacy risk	Potential loss of control over personal information, such as when information about you is used without your knowledge or permission. The extreme case is where a consumer is "spoofed" meaning a criminal uses their identity to perform fraudulent transactions.

Table 1. Dimensions of perceived risk.

2.3 Trust and initial trust

Trust is a belief or expectation that the word or promise by the merchant can be relied upon and the seller will not take advantage of the consumer's vulnerability (Geyskens et al., 1996). The concept of trust has always achieved attention by sociologists of all fields and become the research topic of various fields. According to Gefen's study (2000), trust can effectively reduce the complexity of consumer's decision-making process, and the consumers will reduce the results need to be considered to an effective control and management range in order to predict whether the transaction object will carry out behaviours which are beneficial for both parties. In addition, when individual has no capacity to control others' behaviour facing risk, trust will show its significance. (Hoffman et al., 1999) Especially the successful use of new technology (Gefen, 2000), for example in P2P lending, requires more trust to connect the platform with the lenders.

Numerous scholars (Jarvenpaa et al., 1999; Corritore et al., 2003) pointed out that trust can be divided into initial trust and mature trust. The initial trust is the trust in which the customer is unfamiliar with the websites and never trades with the website. This period ranges from the first time the consumers browse the website to their first purchase. As for P2P lending, lenders must bear more risks, so it is difficult for them to make the first investment decision. If the obstacles of initial trust can't be overcome, the follow-up customer relationship management won't have any meaning. McKnight et al. (2002) point out that the initial trust can be further divided into two aspects of trust belief and trust intention. The former means that customers feel the merchants are capable, kind and honest, whereas the latter is that the consumers are willing to replace themselves in vulnerable environment and depend on the merchants under a specific circumstance. This paper will utilize these two dimensions to measure lender's initial trust.

3 RESEARCH MODEL AND HYPOTHESES

This study proposes a model based on TAM Model (Davis, 1989) to predict the initial investment intention towards P2P lending. Based on the literature review, there are 10 variables in this study model. Since the dependent variables are initial investment intention, perceived risk and initial trust are defined as intermediate variable. Seven antecedents of perceived risk and initial trust are divided into two categories of individual factors and platform factors. The proposed research model is presented in Figure 1.

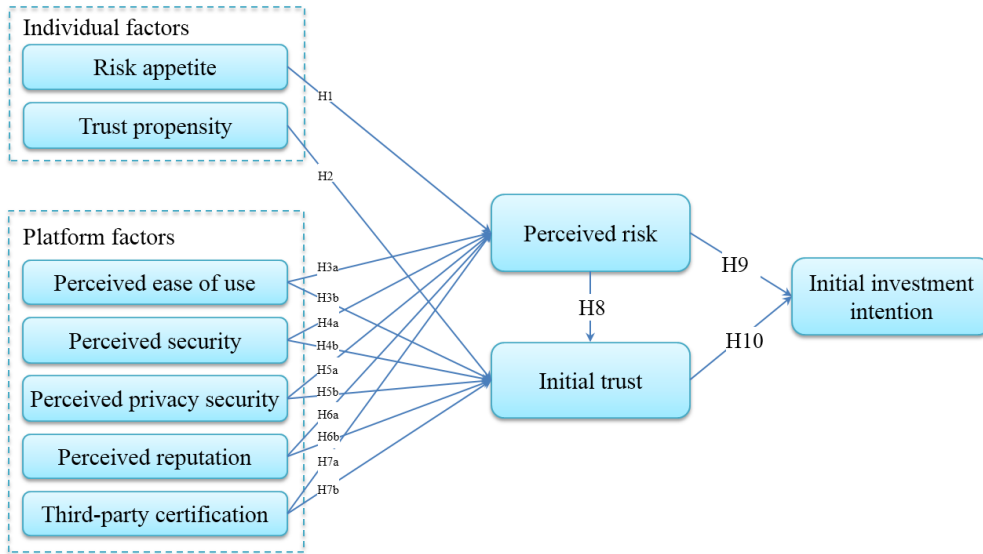


Figure 1. The research model

3.1 Individual factors

In economics, the people in society are generally divided into three types of risk preference, risk neutral and risk aversion. The researches on the individual investment generally consider on different risk appetite of individuals. In the group of risk preference, the risk that is regarded as ordinary things which could create opportunities. However, for the risk aversion group, arbitrary decision and taking risk are considered terrible behaviours which should be avoided (Hanjun et al., 2004). Havlena and desarbo (1991) pointed out that people who have different attitudes towards risk will have different feelings on perceived risk. Different attitudes towards risk will give rise to users' different perceived risks. Thus, the following hypotheses can be established:

H1. *The higher the users' risk appetite degree is, the lower the perceived risks of P2P lending platform will be.*

Individual trust is affected by the cultural background, personal characteristics and development experience (Hofstede, 1980), accompanying with certain difference. (Kini & Choobineh, 1998) Trust based on individual is also called as trust propensity, which belongs to individual personality characteristics. (Farris et al., 1973; Mayer et al., 1995; McKnight et al., 1998) Individual propensity to trust is especially important in the early stage of relationship development. With the increasing actual interaction, its significance will be lowered (McKnight et al., 1998). McKnight et al. (2004) verified that trust propensity is one of the factors influencing consumers' initial trust on the network business. For the users who use P2P lending for the first time, individual propensity to trust occupies important position due to their lack of transaction experience. Therefore, the following hypotheses can be formulated:

H2. *The higher the users' propensity to trust degree is, the higher their initial trust degree in P2P lending platform will be.*

3.2 Platform factors

According to explanation of TAM model (Davis, 1989), this study defines the perceived ease of use as difficulty degree of the users' utilization of P2P lending platform. As for the P2P lending platform, the platform design should be convenient for the customers to quickly get started and easily search the information they need to reduce the time of searching and learning. Especially for the customers who invest on P2P platform for the first time, the ease of use could reduce their fear on difficulty and

psychological burden, which is in favour of the trust on P2P lending platform. Featherman and Pavlou (2003) proved that perceived ease of use can reduce users' concerns of risk when they use e-commerce service. Previous researches showed that perceived ease of use is positively related with the initial trust of users (Yang, 2005; Mahatanankoon et al., 2006). Thus, we establish the following hypotheses:

H3a. *Perceived ease of use is negatively related to perceived risk toward P2P lending platforms.*

H3b. *Perceived ease of use is positively related to initial trust toward P2P lending platforms.*

Security assurance performs the role of installing assurance of transaction security (Cheskinresearch, 1999). When the users think the website does not have the ability to ensure the transaction safety, they will consider the website unworthy to be trusted (Urban et al., 2000). Comparing with general shopping website, P2P platform should pay more attentions on safety, since the amount transacted on P2P platform is always huge. P2P platform must effectively inform the consumers that this platform utilized most advanced technology to guarantee the safety of the transaction, thus to achieve the consumers' trust (Dayal et al., 1999; Urban et al., 2000). The more advanced the technology is, the smaller the financial risk will be. Therefore, security assurance is expected to contribute to a lessening of perceived risk (Yoon, 2002). Thus, we hypothesize that:

H4a. *The security assurance of lenders' perception is negatively related with the perceived risk.*

H4b. *The security assurance of lenders' perception is positively related with their initial trust.*

Privacy protection is an important factor affecting consumers' perceived risk and trust on the website (Stephens, 2001; Urban et al., 2000; Cases, 2002). The users have the right to know where their privacy information is used by website. Wang et al. (2004) pointed that the privacy policy can enhance consumers' trust in the website. Jarvenpaa and Todd (1997) believed that the consumers' privacy risk only exists in the internet environment, since most e-commerce websites require users to register their personal information before shopping. We believe that the users' concern on privacy risk of the P2P platform is strong. Both investment and borrowing on P2P platform require the users to register important personal information including the ID card and credit card. Based on the above understanding, we assume following hypothesizes:

H5a. *Lenders' perceived privacy protection is negatively related with the perceived risk.*

H5b. *Lenders' perceived privacy protection is positively related with the initial trust.*

The hard-earned favourable enterprise reputation is established on basis of long-term endeavour and accumulation. Therefore, the users generally believe that enterprises will not covet a small profit and destroy their hard-earned reputation (Gosti & Wilson, 2001). Mitchell (1996) and Chernatony et al. (1989) proved that enterprise reputation is conducive to reduce users' perceived risk in the traditional business. Business reputation has been proved to significantly affect the consumer's initial trust (McKnight et al., 2002; Koufaris et al., 2004). Based on the above review, we hypothesize that:

H6a. *The reputation perceived by lenders is negatively related with their perceived risk.*

H6b. *The reputation perceived by lenders is positively related with their initial trust.*

The third party evaluation institutions are professional and authoritative independent institutions, which will carry out multi-dimensional audit on P2P platform, judge whether it is reliable or not. Those P2P lending platforms approved by authoritative third party institution can meet the psychological needs of lenders' risk aversion to a great extent. Prior studies discovered that third party evaluation institution is an important factor to influence consumers' trust in e-commerce (Pavlou & Gefen 2004; Aiken & Boush 2006). Based on above arguments, the following hypothesis is derived:

H7a. *The certification of authoritative third party institution is conducive to reduce lenders' perceived risk on the platform.*

H7b. *The certification of authoritative third party institution is conducive to reinforce users' initial trust on the platform.*

3.3 Trust and perceived risk

Although many scholars believe that the trust contributes to reduce the perceived risk in online shopping (Jarvenpaa et al, 2000; van der Heijden et al., 2003), the relationship between trust and perceived risk in Chinese P2P market may not be the case. On the contrary, we believe that the perceived risk in Chinese P2P market will reduce the user's trust. Since current P2P market in China is not mature enough, and the effective laws, regulations and industry standards are insufficient. Financial fraud cases such as defrauding and running away take place frequently. Therefore, lenders will perceive higher risk in the process of P2P platform investment. In order to guarantee the security of investment, trading risk is the factor need to be emphasized by the lenders in the trust formation process. The lenders will establish good initial trust with the platform only when their perceived risk is small. Therefore, the following hypotheses can be established:

H8. lenders' perceived risk is negatively related with their initial trust.

In this study, initial investment intention is extended from the behaviour intention in TAM model of Davis (1989). We define initial investment intention as the lenders' investment willingness when they are in face of the investment opportunity offered by P2P platform for the first time. Generally speaking, if other factors are remained unchanged, decision makers will prefer to the program with lower risk (Arrow, 1965). Pavlou (2003) and O'CassandFenech (2003) discovered that consume's perceived risk in purchasing behaviour is negatively related with purchasing intension. Michell and Boustani (1994) emphasized the importance of perceived risk on external information search and possible solutions evaluation. If the information collected by the lenders can't reduce their perceived risk, they will reduce their investment or don't invest at all. Based on the above understanding, we posit the following hypotheses:

H9. Lenders' perceived risk is negatively related with their initial investment intentions.

Gefen's (2000) study showed that trust can reduce complexity of consumers' decision on purchase. Jarvenpaa and Tractinsky (2000) empirically studied and revealed that the trust is positively related with online purchase attitude. In the utilization process of investment on P2P platform, the lenders will believe the platform is trustworthy, and be willing to depend on this platform to form positive investment intentions when they perceive ability, kindness and honest of the platform. Thus, we hypothesize that:

H10. Lenders' initial trust on P2P platform is positively related with their initial investment intentions.

4 RESEARCH METHOD

4.1 Measurement Development

All items included in Appendix A were adapted from prior literature, with minor modifications in wording to make them relevant in the context of P2P lending. The measurement items were formulated as Likert-type statements anchored by a five-point scale, ranging from 1 "strongly disagree" to 5 "strongly agree". Before the formal survey, the questionnaire was examined by 4 IS professors to assess its terminology, logical consistency, question clarity and contextual relevance. The comments collected from these experts led to several minor modifications. Furthermore, a pilot study was performed with some P2P initial lenders (n=23) in a P2P online community who were familiar with P2P lending platform, but haven't invested on it to reduce possible ambiguity in the questions. Comments and suggestions on the items' contents were solicited.

4.2 Survey Procedure

This research takes China as the site of the empirical investigation because the supporting infrastructure required for P2P Lending developments has been put in place. Chinese P2P industry has achieved rapid development in recent years. Chinese P2P industry annual report data shows that P2P lending transaction volume growth rates in China were 269% and 289% in 2014 and 2015 respectively. The annual turnover in 2015 is nearly 1 trillion Yuan, and there is still great development space. In addition, Chinese investors pay more attention on the risk of the platform, rather than whether the borrowers will break the contract or not.

In order to verify the hypothesis, we issued questionnaires on several large-scale online communities in China. This research aims at searching for the factors that affect lenders' initial investment intentions on the P2P platform. Therefore, we set up the network questionnaire. Firstly, the respondents were asked whether they were familiar with P2P platform and had ever invested on it or not. If they weren't familiar with the platform or had invested on it, the questionnaire survey would be finished and the main questions would not be shown any more. This mode could guarantee that all respondents who have answered the main questions are prospective lenders of P2P lending platform. We received 437 questionnaires in total. After reviewing, 173 questionnaires are excluded because the respondents aren't prospective lenders, 48 questionnaires are excluded for their invalid answers. Finally, 216 valid questionnaires are remained. In the sample, 63.9% are male, and 36.1% are female. The age structure is relatively young. The respondents' age groups of 21-25, 26-30, and 31-35 occupy 26.39%, 32.87% and 18.06% respectively. The demographic characteristics of the sample are basically identical with Chinese P2P lending users, which could prove its representativeness.

5 DATA ANALYSIS AND RESULTS

Both of validity and reliability were determined to evaluate our measurement model. The reliability of constructs was evaluated by calculating Cronbach's α , composite reliability (CR) and the average variance extracted (AVE) to measure internal consistency (Fornell and Larcker 1981). For a construct to possess good reliability, Cronbach's α should be larger than 0.7, CR should be at least 0.6, and the AVE should exceed 0.5 (Hair et al. 1998). As shown in table 2, all values exceed the generally accepted values, indicating good reliability.

Constructs	Items	Factor loading	CR	AVE	Cronbach's α
Risk appetite	IRA1	0.873	0.872	0.695	0.834
	IRA2	0.840			
	IRA3	0.785			
Trust propensity	ITP1	0.845	0.867	0.684	0.799
	ITP2	0.822			
	ITP3	0.814			
Perceived ease of use	PEU1	0.832	0.854	0.661	0.943
	PEU2	0.816			
	PEU3	0.791			
Perceived security assurance	PSA1	0.816	0.842	0.639	0.883
	PSA2	0.796			
	PSA3	0.786			
Perceived privacy protection	PPP2	0.858	0.870	0.690	0.913
	PPP3	0.839			
	PPP1	0.794			
Perceived reputation	RR1	0.832	0.837	0.631	0.868
	RR2	0.824			
	RR3	0.723			

Third-party certification	TPR1	0.823	0.850	0.655	0.926
	TPR2	0.809			
	TPR3	0.796			
Perceived risk	PR1	0.787	0.885	0.563	0.917
	PR2	0.784			
	PR3	0.778			
	PR4	0.728			
	PR5	0.720			
	PR6	0.698			
Initial trust	IT1	0.798	0.866	0.519	0.936
	IT2	0.749			
	IT3	0.713			
	IT4	0.710			
	IT5	0.698			
	IT6	0.647			
Initial investment intention	III1	0.813	0.831	0.622	0.882
	III2	0.803			
	III3	0.748			

Table 2. Construct reliability and convergent validity.

Content validity and construct validity are often used to measure validity. The variables in this study were derived from existing literature, thus exhibiting strong content validity. Construct validity was examined by investigating discriminant validity and convergent validity. We applied principal components analysis (PCA) to test the convergent validity of each construct. A measurement item loads highly if its loading coefficient is above 0.6 and its cross-loading coefficient is below 0.4 (Fornell and Larcker 1981). Based on these criteria, all of the factor loadings for the items exceed the recommended level of 0.6 and are significant at $p < 0.001$; no items have cross-loadings above 0.4. Thus, all constructs in the model have adequate convergent validity.

Construct	PA	TP	PEU	PSA	PPP	PR	TPR	PR	IT	III
PA	.834									
TP	.083	.827								
PEU	.009	.314*	.813							
PSA	.179 *	.224*	.491*	.799						
PPP	.079	.169*	.432*	.351*	.831					
PR	.029	.249*	.488*	.404*	.375*	.794				
TPR	.025	.255*	.525*	.453*	.435*	.495*	.809			
PR	.098	.355*	.463*	.442*	.461*	.487*	.530*	.750		
IT	.049	.396*	.630*	.523*	.550*	.566*	.578*	.611*	.720	
III	.059	.310*	.400*	.406*	.418*	.391*	.452*	.575*	.535*	.789

Table 3. Discriminant validity: the square root of AVE and correlation

Discriminant validity was examined using criteria suggested by Fornell and Larcker (1981): the square root of AVE extracted from each construct should be greater than the correlations between the construct and the other constructs. Each construct in our research model has a higher loading on its corresponding construct than its cross-loadings on other constructs, thus providing evidence of discriminant validity. In summary, the measurement model demonstrates adequate reliability, convergent validity and discriminant validity.

Fit index	Observed value	Recommended value	References
$\chi^2/d.f.$	1.50	Good fit (should be less than 3)	Fornell and Larcker 1981
GFI	0.84	Good fit (should be greater than 0.80)	Hair et al. 1998
AGFI	0.81	Good fit (should be greater than 0.80)	Hair et al. 1998
NFI	0.88	Good fit (should be greater than 0.80)	Fornell and Larcker 1981

IFI	0.96	Good fit (should be greater than 0.90)	Hair et al. 1998
CFI	0.96	Good fit (should be greater than 0.90)	Fornell and Larcker 1981
RMSEA	0.05	Good fit (should be less than 0.08)	Hair et al. 1998

Table 4. Model fit indices.

To assess how well the model represents the data, we employed AMOS 21.0 to evaluate ‘goodness of fit’ indices. As shown in table 4, $\chi^2/df=1.50$, GFI=0.84, AGFI=0.81, NFI=0.88, IFI =0.96, CFI=0.96 and RMSEA=0.05 are all within the commonly accepted thresholds suggested in the literature (Fornell and Larcker 1981, Hair et al. 1998). The fit indices indicate that the model provides a reasonably good fit to the data.

6 DISCUSSIONS AND IMPLICATIONS

Hypothesised path	Estimate	S.E.	C.R.	p-Value
H1 Risk appetite → Perceived risk	-.146	.061	-2.415	.016*
H2 Trust propensity → Initial trust	.128	.049	2.597	.009*
H3a Perceived ease of use → Perceived risk	-.019	.061	-.315	.753
H3b Perceived ease of use → Initial trust	.190	.047	4.022	.000***
H4a Perceived security assurance → Perceived risk	-.203	.064	-3.159	.002**
H4b Perceived security assurance → Initial trust	.051	.048	1.067	.286
H5a Perceived privacy protection → Perceived risk	-.109	.053	-.2.051	.040*
H5b Perceived privacy protection → Initial trust	.089	.040	2.241	.025*
H6a Perceived reputation → Perceived risk	-2.49	.069	-3.159	.002**
H6b Perceived reputation → Initial trust	.206	.053	3.857	.000***
H7a Third-party certification → Perceived risk	-.202	.072	-2.801	.005**
H7b Third-party certification → Initial trust	.113	.055	2.069	.039*
H8 Perceived risk → Initial trust	-.169	.064	-2.626	.009**
H9 Perceived risk → Initial investment intention	-.539	.107	-5.026	.000***
H10 Initial trust → Initial investment intention	.356	.103	3.448	.000***

Notes: *** represents $p<0.001$; ** represents $p<0.005$; * represents $p<0.05$

Table 5. Hypothesis testing results

As shown in the Table 5, 13 hypotheses were statistically supported. The result showed that the negative effects of perceived risk on initial investment intention ($\beta=-0.539$, $p<0.001$) was significant. This proves that lenders tend to invest on the platform with low perceived risk. This finding is consistent with several previous researches (e.g. Pavlou, 2003). The initial trust was significant in explaining a lenders’ initial investing intention in P2P lending platforms ($\beta=0.356$, $p<0.001$), which was consistent with prior studies (e.g. Jarvenpaa & Tractinsky 2002). This shows that the initial lenders are more inclined to invest on the P2P platform worthy of trust. Perceived risk has negatively influence on the initial trust ($\beta=-0.169$, $p=0.009$), which is different from the scholars’ previous research conclusions (e.g. Jarvenpaa et al, 2000). This shows that the relationship between perceived risk and trust of P2P market is different from that of the traditional online shopping market. Lower perceived risk will be conducive to the establishment of lenders’ initial trust on P2P platform.

Regarding the two individual factors, risk appetite and trust propensity have significant effects on perceived risk and initial trust respectively. Risk appetite has negative effect on perceived risk ($\beta=-0.146$, $p=0.016$), which proves that if the investor has preference on risk, their perceived risk on P2P lending platform will be lower, vice versa. Trust propensity has positive effect on initial trust ($\beta=0.128$,

$p=0.009$). This shows that the lenders with higher trust propensity usually establish better initial trust with P2P lending platform. This result is consistent with previous findings, for example, Kim and Prabhakar (2004) found that propensity to trust is one of significant predictors of initial trust in the electronic channel. In the platform factors, although perceived ease of use can significantly affect the initial trust ($\beta=0.190$, $p<0.001$), it is not one of the decision privacies of perceived risk ($\beta=-0.019$, $p=0.753$). One possible explanation is that favourable ease of use can reduce the lenders' searching and learning time, and they will consider that the platform is well-intentioned and considerate. Their initial trust on the platform could be improved. However, this cannot reduce the lenders' concern on anyone of the six dimensions of perceived risk. Thereby their perceived risk on the platform can't be reduced. Perceived security assurance showed great impact on perceived risk ($\beta=-0.249$, $p=0.002$). But it was not significantly related to initial trust ($\beta=0.051$, $p=0.286$). We speculate that the explanation is that current suppliers of Chinese online trading provider are all very well-known companies, for example, ALIPAY. Although the perceived security assurance can reduce lenders' perceived risk for the P2P platform by decreasing their concerns on financial risk, they can't realize the platform's ability on security assurance since the supplier of transaction safety technology is not the P2P platform itself. As a result, perceived security assurance cannot improve the initial trust of the lenders. The perceived privacy protection is also significantly correlated with the perceived risk ($\beta=-0.109$, $p=0.040$) and initial trust ($\beta=0.089$, $p=0.025$). Since effective privacy protection can make the lenders to realize the ability of the platform, so as to establish initial trust on the platform. Furthermore, it is conducive to reduce lenders' privacy risks, thereby reducing the perceived risk. Perceived reputation shows great impact on perceived risks ($\beta=-0.249$, $p=0.002$) towards P2P platforms. It is also significantly related to initial trust ($\beta=0.206$, $p<0.001$). This finding proves that lenders tend to trust the platform with good reputation, which could reduce the users' perceived risk. This may be achieved through reducing the users' social risk and psychological risk. Third party certification shows great impact on perceived risk ($\beta=-0.202$, $p=0.005$) towards P2P platforms. It is also significantly related to initial trust ($\beta=0.113$, $p=0.039$). This means that users are also concerned whether the P2P platform has reliable third party certification.

6.1 Theoretical Implication

This study makes several important contributions to the research literature. First of all, although there are some studies exploring the factors explaining P2P lenders' investment intentions, they all carry out the study from the perspective of the borrowers. This study initiates to study on lenders' initial investment intentions from the perspective of P2P platform. This is conducive to understand lenders' behaviour from different angle. This is the first time to study initial trust in the circumstance of P2P lending. As far as we know, the previous researches on P2P lending trust haven't subdivided the trust on basis of specific trust stages. Our research fills up this knowledge gap.

Secondly, previous studies generally claim that trust is the influence factors of perceived risk in e-commerce (e.g. Kim et al., 2008). However, this research proves that lenders' perceived risk of the P2P lending platform has negative effect on their initial trust. The opposite direction may be generated from two reasons. One is that there is difference between P2P lending and other e-commerce activity. The other is that previous researches focusing on relation between perceived risk and trust haven't subdivided trust, therefore, trusts of different dimension may have different relations with perceived risk. For example, initial trust is negatively affected by perceived risk, which may be negatively affected by mature risk.

Thirdly, we provide insights into the antecedents of initial trust and perceived risk to P2P lending. Although prior researches have already examined the antecedents of initial trust and perceived risk to other context, we apply the knowledge by re-examining the importance of these existing antecedents in P2P lending context. For instance, we find that platform's reputation plays an important role in influencing lenders initial investment intentions in P2P lending platform.

6.2 Practical Implications

From a practical perspective, the findings of this study will help P2P lending platforms to improve lenders' initial investment intention by reducing their perceived risk and promoting initial trust. Firstly, web designer could improve the ease of use of the platform to promote the users' initial trust. This could be carried out from perfecting the lenders' investment process. Therefore, the lenders could rapidly search the information in demand and lower the searching time. Web designers should also adopt the advanced technology to guarantee the transaction safety so as to reduce the users' concern about the property loss in the transaction process. This can be achieved by connecting with some professional trading platform. Advanced privacy protection technology is also important. It can reduce lenders' perceived risk and improve their initial trust. Web designers should not only ensure the user's privacy safety, also clearly inform the users where their privacy information will be used (Hoffman et al., 1999).

Reputation is of great importance for platform operator. It could affect both the perceived risk and initial trust. Reputation is intangible asset, and favourable reputations can only be achieved by providing customers with lasting excellent service. The platform operators should provide excellent service for existing customers, and propagate the service excellence by customers so as to improve the reputation of the platform. At the same time, the platform operators should also pay attention to the standards of some well-known third party certification authorities and endeavour to achieve their certification, so as to reduce the lenders' perceived risk, improve their initial trust, and promote their initial investment intention. Although the platform operators can't change the risk appetite and trust propensity of customers, they can take the customers with high risk appetite and trust propensity as key customer group to enhance the pertinence and effectiveness of marketing strategy. Platform operators can determine a target market with higher risk appetite and trust propensity according to demographic characteristics, and carry out targeted marketing activities.

7 LIMITATIONS AND SUGGESTIONS

Although this research has achieved some important conclusions, there are still also some limitations. Firstly, this paper doesn't study the influences of various independent variables on perceived risk and initial trust dimensions. In order to deeply understand the formation process of the lenders' perceived risk and initial trust on P2P platform, sequential researches should carry out more intensive studies on each dimension of perceived risk and initial trust. Secondly, the research method adopted in this paper is mainly questionnaire survey. Sequential researches could verify the research results in this paper through multiple methods of interviews, case studies, and experimental research. Finally, this study is only carried out aiming at Chinese P2P Market. Since the systems, laws and cultures of P2P markets in various regions are significantly different, it is suggested to carry out the test in other countries to verify whether the hypothesis is still valid or not.

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Appendix A. Constructs and measures

Construct	Items	References
Risk appetite	I think it is more important to have safe investments and guaranteed returns, than to take a risk to have a chance to get the highest possible returns. If I think an investment will be profitable, I am prepared to borrow money to	Wärneryd (1996)

	make this investment. I want to be certain that my investments are safe.	
Trust propensity	It is easy for me to trust a person/thing Trusting someone or something is not difficult. I tend to trust a person/thing, even though I have little knowledge of it.	Lee and Turban(2001)
Perceived ease of use	Learning to use this platform would be easy for me My interaction with this platform is clear and understandable It would be easy for me to become skillful at using this platform	Koufaris(2002)
Perceived security	This platform presents enough online security. I think online payment on this platform is safe. This platform has the ability to solve problems from hackers.	Yousafzai et al. (2003)
Perceived privacy security	The personal information that I provide on this platform is secure. This platform will not use unsuitable methods to collect my personal data. This platform does not apply my personal information for other purposes.	Yousafzai et al. (2003)
Perceived reputation	This platform is well known. This platform has a good reputation. This platform is known to be concerned about investors.	Koufaris & Hampton-Sosa(2004)
Third-party certification	There are many reputable third-party certification bodies for assuring the trustworthiness of this platform. I think third-party recognition bodies are doing a good job. Existing third-party recognition bodies are adequate for the protection of Internet lenders' interest.	Lee & Turban (2001)
Perceived risk	My investment via P2P platform may not be able to obtain the expected return(Performance risk) My investment via P2P platform would lead to a financial loss for me.(Financial risk) My investment via P2P platform would lead to a loss of convenience of me because I would have to waste a lot of time identifying information authenticity.(Time risk) The investment income will not fit in well with my self-image or self-concept. (Psychological risk) My investment via P2P platform would lead to a social loss for me because my friends and relatives would think less highly of me.(Social risk) My investment via P2P platform would lead to a loss of privacy for me because my personal information would be used without my knowledge.(Privacy risk)	Featherman & Pavlou (2003)
Initial trust	I believe that this P2P platform would act in my best interest. (Trusting Beliefs) This P2P platform is competent and effective in providing Investment opportunities. This P2P platform would keep its commitments. I feel that I could count on this P2P platform to help with an Investment demand. (Trusting Intentions) I would feel comfortable acting on the information given to me by this P2P platform. I would confidently act on the investment opportunity I was given by this P2P platform.	McKnight et al.(2002)
Initial investment intention	Given the chance, I intend to invest through this platform. Given the chance, I predict that I should invest through this platform in the future. It is likely that I will invest through this platform in the near future.	Pavlou(2003)

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