

# Internet Use and Family Financial Asset Selection: An Empirical Analysis Based on CFPS Data

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**Keywords:** *internet, financial participation, logit regression*

**ABSTRACT.** The main research methods used in this paper are empirical research and necessary qualitative research. Based on the data of China Family Panel Studies (CFPS) in 2016, the impact of Internet use and intensity of use on family financial market participation is examined. Through the regression of the logit model, it is found that the use of the Internet can significantly increase the possibility of financial participation of China's family, and the greater the use of the Internet, the greater the likelihood that the family will participate in the financial market. Therefore, the government can increase the participation of China's family in financial market by further popularizing the Internet.

## 1. INTRODUCTION

The asset portfolio theory proposed by Markowitz (1952) shows that households will hold different assets to maximize their expected returns, but Guiso, Haliassos, and Jappelli (2002) have proposed the "limited participation" puzzle, that is, households to finance Market participation is much lower than predicted by theoretical models.

### 1.1. Research Background

The following figure is the proportion of households participating in the financial market obtained from the data of the Beijing University Family Tracking Survey (CFPS) 2016. It can be seen that within the scope of the households surveyed, there is clearly a problem of "limited participation". Only a small percentage of households are involved in financial markets.

Since about 1997, China's Internet has developed rapidly, and the penetration rate of the Internet in households is getting higher and higher. Nowadays, a large number of rural areas have begun to cover the Internet. The rapid development of the Internet has also promoted the production of a variety of financial products, and households' participation in financial markets has become more convenient due to the development of the Internet.

However, in today's China, there are still many areas where there is no way to use the Internet, and there is a certain threshold for the use of the Internet. Some households may have no way to use the Internet because the use of the Internet is more complicated. As shown in the figure below, only about 40% of the households surveyed use the Internet.

This article is to study the relationship between Internet use and use intensity and household financial asset choices in the context of the growing popularity of the Internet and the context of "limited participation" financial markets in households.

### 1.2. Research Methods

The main research methods used in this article are empirical research and necessary qualitative research. The article first reviews related research on the factors affecting household financial asset selection, which is the literature review section in Chapter 2 of this article; Chapter 3 is data from relevant empirical studies. Explanation and model design. The data used in this article are derived from the latest cross-sectional data of the 2016 Peking University Family Tracking Survey. The model used is a binary logit model. Model 1 uses whether the family uses the Internet as the main explanatory variable and whether the family participates. The financial market was used as the

explanatory variable, and binary logit regression was performed on the data of 13,535 households. Model 2 used the household's Internet use intensity as the explanatory variable, and whether the family participated in the financial market as the explanatory variable. Binary logit regression. The main method of regression analysis is to gradually increase the explanatory variables. The fourth chapter is the empirical result and its analysis. The fifth chapter is the conclusion and recommendations. In the data processing and application of the model, the statistical software used is mainly the 13th edition of stata.

## **2. Literature Review**

### **2.1. Influencing Factors of Household Finance**

Many scholars have conducted in-depth research on the influencing factors of household financial investment.

Regarding the relationship between family wealth levels and participation in financial markets, Zhou Yang, Ren Kezhen, and Liu Xuejin (2018) used the probit model to explore the relationship between family wealth levels and financial exclusion in financial markets, and pointed out that the higher the The level of family wealth will reduce the degree of financial exclusion, that is, the higher the level of family wealth, the more likely that the family will enter the financial market.

Regarding the relationship between education and participation in financial investment, Xiao Zuoping and Zhang Xinzhe (2012) found from the survey data of the Chinese Academy of Social Sciences that an individual's education level has a significant positive effect on family participation in the financial market.

Regarding the impact of financial knowledge and education level on household financial asset selection, Yin Zhichao, Song Quanyun, and Wu Yu (2014) believe that the improvement of people's financial knowledge will significantly increase households' choice of financial assets, and continuous investment experience and knowledge Accumulation will also increase the allocation ratio of financial assets. Xiao Duan and Lu Yuxuan (2018) used a logit model to show that the higher the average family education level, the greater the probability that they will participate in the stock market, and that a family with an undergraduate or college economics management background will significantly increase the family's participation in the stock market. possibility.

Regarding the influence of cognitive ability and personal personality characteristics on the choice of household financial assets, earlier studies such as Meng Yijia (2014) used the logit model and analyzed that the higher the cognitive ability of family members, the more likely families are to participate in financial markets. At the same time, using the tobit model, it is concluded that cognitive ability also has a positive impact on the proportion of venture capital investment in total investment. Therefore, it is particularly important to strengthen investment in human capital, not only focusing on the popularity of education, but also improving the quality of education. Zhou Yang, Wang Weihao, and Liu Xuejin (2018) pointed out that the higher the cognitive ability, the less likely a family will be financially excluded in the financial market. At the same time, the impact of cognitive ability on urban families will be greater than that on rural families. Improving your own cognitive ability can facilitate more participation in financial markets. On the other hand, it also shows that if families can get more information about financial products that are easier to understand and understand, then they will not change their own cognitive ability. Under the premise, we can also participate more in financial markets. Tao Tao and Wentao Zhang (2015) pointed out that through CFPS data, empirical analysis found that there is a correlation between the personality characteristics of a household's head of household and whether he participates in stock investment and the amount of participation. For example, the more open the life values of the head of a household, The greater the likelihood that households will participate in the stock market, the greater the amount of investment in the stock market.

Regarding the impact of family structure on household financial asset selection, Wang Min and Wu Weixing (2014) studied the relationship between marital status and household asset selection.

Through empirical analysis, it was found that for men, whether or not marriage is a risk asset. There is no significant difference in the selection of the weighting ratio in China, and for women, the proportion of risk assets allocated by married women to the total assets will be higher than that of unmarried women. Wu Weixing, Tan Hao (2017) analyzed the effect of a family structure with a family structure of up, down, and down on a family's choice of financial asset allocation. A family with a long-term debt planning structure is more likely to invest in risky assets. Children are the main consideration influencing the choice of financial assets for this structured family. At the same time, the advance planning of the future expenditure of the elderly in the family is also an important factor affecting the choice of family financial assets.

Regarding the impact of regions on household financial asset selection, Dong Xiaolin, Yu Wenping, and Zhu Minjie (2017) compared the differences in the participation of families in financial markets in urban and rural areas. In rural areas, the development of the Internet has a greater effect on promoting household participation in financial markets. Its effect on urban families.

## **2.2. Internet Use and Family Asset Selection**

Many financial assets can now be traded directly on the Internet, thanks to the development of the Internet. At the same time, education on financial assets on the Internet has become more convenient and efficient. The continuous popularization of the Internet has greatly expanded people's understanding of financial assets, and the exchange of various information can make people more confident when purchasing financial assets.

Zhou Guangsu and Liang Qi (2018) used the probit model to show that the use of the Internet will positively affect households' decision to participate in the financial market, and the greater the intensity of Internet use, the greater the probability that families will participate in the financial market, but heterogeneity analysis shows that The effect is more significant in high-income families, high-education families and non-farm households, because the use of the Internet can effectively reduce friction in the financial market.

Fang Wenling, Chen Lei (2018) found through macroeconomic panel data that the continuous development of the Internet has helped families increase the allocation of risky assets. Families are more willing to join financial markets. For different regions, this impact is different. For the eastern region, the development of the Internet determines the direction of investment. In the western region, people investing in risky assets are affected by both Internet education and income. People in central China are more vulnerable to income when they choose financial assets. Xin Xin (2017) studied the impact of third-party payment on household financial asset selection through empirical analysis. It was found that the development of third-party payment platforms will significantly affect households' choice of financial products, and the use of third-party payment will significantly increase Probability of households choosing to participate in financial markets. The development of third-party payment platforms has strongly promoted the development of the Internet financial market. At the same time, the development of third-party payment platforms has also improved the efficiency of traditional financial markets.

Sun Conghai, Li Hui (2014) believes that under the background of the continuous development of the Internet, especially the continuous development of Internet finance, it has a greater impact on the allocation of household financial financing. These Internet financial wealth management products have played a role in saving deposits of residents. Certain substitutions. Cai Zongchao (2017) believes that in the context of the combined development of the Internet and finance, residents have greater freedom in allocating financial assets and a wider range of choices. At the same time, the prosperity of the Internet and the continuous development of the Internet plus financial model have challenged the traditional financial model, and the traditional financial system has begun to change. Zhao Yan (2016) collected relevant data on changes in household asset choices in the context of the Internet through a questionnaire. It was found that since the development of Internet finance is still relatively short, people are still cautious about Internet finance. Therefore, the surveyed In the sample, participation in Internet finance remains low. Wu Guanhong, Wang Gangzhen, Zhao Peiyu, and Yi

Wenjing (2018) comprehensively summarized the data of the past ten years and found that the healthy development of Internet finance will lead to an increase in the proportion of households choosing bonds. At the same time, the development of Internet finance will make households choose the proportion of bank deposits reduce.

### 3. Data and Model Design

#### 3.1. Data Source

The data studied in this article comes from the Chinese Family Tracking Survey (CFPS). The data used in this article are mainly cross-sectional data obtained from the 2016 CFPS Adult Questionnaire and Family Economic Questionnaire. The samples covered by CFPS are distributed in 25 provinces, municipalities, and autonomous regions nationwide, and surveys were conducted on each member of 16,000 households.

#### 3.2. Variable Setting

##### 3.2.1. Explained and Explanatory Variables

The interpreted variable is used to indicate whether to participate in the financial market, that is, whether the household holds financial products (ASSET). This variable is a dummy variable, 0 means no financial products are held, and 1 means financial products are held. In this article, financial products include stocks, funds, foreign exchange products, government bonds, and trust products. Figure 1-1 shows the participation of 13,535 households in the financial market in 2016. From Figure 1-1, only about 5% of the 13,535 households hold financial products.

The explanatory variable is whether or not the Internet is used, that is, whether at least one person in a household uses the Internet. It is a dummy variable. 1 means use the Internet and 0 means not use the Internet. Figure 1-2 shows the use of the Internet by 13,535 households across the country in 2016. As can be seen from Figure 1-2, in 2016, at least one person in about 40% of the 13,535 households surveyed used the Internet, and no one in about 60% of the households used the Internet. It can be seen that the popularity of the Internet is not yet high.

The explanatory variable, Internet intensity (STRENGTH), is the frequency of using the Internet each month in a household. If multiple people are online, the person with the highest Internet intensity represents the Internet intensity of the entire family. It can be seen from the figure that among 8,437 households, the frequency of Internet access is concentrated between 10-15 times per month, and the median is about 13 times per month.

##### 3.2.2. Control Variables

Years of education (EDUCATION), the figure below shows the highest education situation of each of the 13,535 families. As can be seen from the figure, among 13535 families, the frequency of years of education is 9 is the highest.

The annual family income (INCOME), because the amount of family income is relatively large, this paper draws on the treatment of related literature, and uses the logarithmic value of family annual income as a proxy variable for income level. The graph below shows the approximate distribution of the logarithm of annual income for 13,535 households.

Gender (GENDER) is the gender of the highest educated person in each household. This variable is a dummy variable and its value is male or female.

Household registration type (HUKOU). This variable is a dummy variable, and its value is urban household registration and rural household registration. The picture below shows the household registration types of 13535 families. As can be seen from the figure, about 4,200 households are urban hukou, and 9,300 households are rural hukou.

Locality (LOCATION), this variable is also a dummy variable, and its values are Western Region, Central Region and Eastern Region, which are represented by 0, 1, 2 respectively. The chart below shows the distribution of 13,535 households in different regions.

Family population (COUNT). The figure below shows the number of people in 13535 families. From the figure, we can see that the frequency of family population is 3 and the median family population is 3.

Age (AGE) is the age of the highest educated person.

### 3.2.3. Simple Descriptive Statistics of Each Variable

The table below gives simple descriptive statistics for each variable in 13,535 households:

Table 1 Simple Descriptive Statistics of Each Variable in 13535 Households

Variable	Average	Standard Deviation	Min	Max	Observations
Financial Participation	0.05	0.23	0	1	13535
Internet Intensity	0.40	0.49	0	1	13535
Marital Status	0.64	0.48	0	1	13535
Household Registration Type	0.31	0.46	0	1	13535
Family Population	3.73	1.90	1	19	13535
Years of Education	9.88	4.22	0	22	13535
Age	42.99	17.73	16	99	13535
Gender	0.58	0.49	0	1	13535
Annual Household Income	10.33	1.58	0	15.94	13535
Region	1.10	0.80	0	2	13535

Table 2 Correlation Coefficient Matrix of Each Variable of 13535 Households

	Financial Participati on	Internet Intensity	Marital Status	Household Registrati on Type	Years of Education	Age	Gender	Annual Household Income
Financial Participation	1							
Internet Intensity	0.21*	1						
Marital Status	0.01	-0.25*	1					
Household Registration Type	0.26*	0.24*	-0.05*	1				
Years of Education	0.22*	0.50*	-0.03*	0.30*	1			
Age	-0.01	-0.38*	0.15*	0.02*	-0.45*	1		
Gender	-0.00	-0.03*	0.04*	-0.06*	0.02*	0.10*	1	
Annual Household Income	0.18*	0.29*	0.04*	0.22*	0.34*	-0.19*	-0.01	1

Note: \* p < 0.05

Table 3 Simple Descriptive Statistics of Each Variable in 8437 Households

Variable	Average	Standard Deviation	Min	Max	Observations
Financial Participation	0.08	0.27	0	1	8437
Internet Intensity	13.48	7.13	0	30	8437
Marital Status	0.58	0.49	0	1	8437
Household Registration Type	0.38	0.48	0	1	8437
Family Population	4.05	1.87	1	17	8437

<b>Years of Education</b>	11.52	3.29	0	22	8437
<b>Age</b>	35.64	13.78	16	91	8437
<b>Gender</b>	0.56	0.50	0	1	8437
<b>Annual Household Income</b>	10.70	1.35	0	15.2	8437
<b>Region</b>	1.13	0.79	0	2	8437

Table 4 Correlation Coefficient Matrix of Each Variable of 13535 Households

	Financial Participation	Internet Intensity	Marital Status	Household Registration Type	Years of Education	Age	Gender	Annual Household Income
<b>Financial Participation</b>	1							
<b>Internet Intensity</b>	0.17*	1						
<b>Marital Status</b>	0.05*	-0.15*	1					
<b>Household Registration Type</b>	0.27*	0.20*	0.01	1				
<b>Years of Education</b>	0.23*	0.42*	-0.03*	0.30*	1			
<b>Age</b>	0.10*	-0.21*	0.19*	0.14*	-0.17*	1		
<b>Gender</b>	0.01	-0.04*	-0.00	-0.04*	-0.03*	0.14*	1	
<b>Annual Household Income</b>	0.20*	0.21*	0.06*	0.20*	0.23*	-0.03*	-0.00	1

Note: \* p < 0.05

### 3.3. Simple Descriptive Statistics of Each Variable

As the explained variable family involved in the financial market is a dichotomous variable, the traditional multiple linear regression model cannot be used for regression. Instead, a discrete selection model should be selected. The main discrete selection models are the probit model and logit model. This article uses the logit model, and the final empirical model is set to:

$$\ln \frac{P}{1-P} = \beta^T X \quad (1)$$

Therefore, the following expression of the cumulative distribution of probability can be obtained:

$$P = \frac{1}{1 + e^{-\beta^T X + \mu}} \quad (2)$$

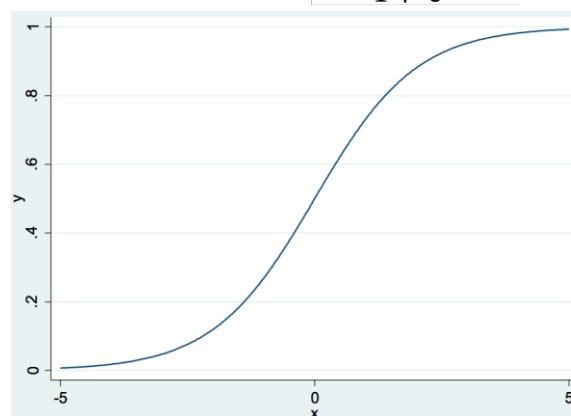


Figure 1 Logit Cumulative Distribution Function

In the logit model, the maximum likelihood estimation method (MLE) is used for the estimation of each parameter.

## 4. Empirical Results and Analysis

### 4.1. Impact of Households' Online Access on Their Financial Market Participation

This paper first uses a binary logit regression model to conduct an empirical analysis of the relationship between whether the household uses the Internet and whether the household participates in the financial market. The regression method is used to gradually add explanatory variables. The regression results are as follows:

Table 5 Whether to Go Online and Participate in Financial Markets

Variable	Model 1	Model 2	Model 3	Model 4
<b>Internet Intensity</b>	1.24*** (0.112)	0.89*** (0.115)	0.84*** (0.117)	1.27*** (0.128)
<b>Years of Education</b>	0.26*** (0.0148)	0.20*** (0.0154)	0.15*** (0.0160)	0.17*** (0.0165)
<b>Annual Household Income</b>		0.93*** (0.0516)	0.72*** (0.0558)	0.79*** (0.0592)
<b>Gender</b>		0.11 (0.0832)	0.17** (0.0857)	0.10 (0.0876)
<b>Household Registration Type</b>			1.48*** (0.103)	1.11*** (0.108)
<b>Central Provinces</b>			0.18 (0.151)	0.12 (0.154)
<b>Eastern Provinces</b>			0.92*** (0.138)	0.80*** (0.141)
<b>Family Population</b>				-0.24*** (0.0317)
<b>Age</b>				0.02*** (0.00316)
<b>Marital Status</b>				0.39*** (0.0961)
<b>Constant Term</b>	-6.74*** (0.189)	-16.12*** (0.582)	-14.65*** (0.619)	-15.93*** (0.662)
<b>Observations</b>	13,535	13,535	13,535	13,535

Table 6 Marginal Effects of Logit Regression Variable

Variable	Marginal Impact (%)
<b>Internet Intensity</b>	5.07
<b>Years of Education</b>	0.70
<b>Annual Household Income</b>	3.15
<b>Gender</b>	0.38
<b>Household Registration Type</b>	4.43
<b>Central Provinces</b>	0.38
<b>Eastern Provinces</b>	3.14
<b>Family Population</b>	-0.95
<b>Age</b>	0.09
<b>Marital Status</b>	1.56

From the regression results of the binary logit model, whether households use the Internet has a significant positive impact on household financial market participation decisions, and this impact is significant at a significance level of 1%. The marginal impact of variables on household financial asset choices shows that if a household has access to the Internet, the likelihood of households holding financial assets will increase by approximately 5.07%. Zhou Guangsu and Liang Qi (2018) further explained that the Internet has affected financial market participation by reducing friction in financial markets.

Impact of years of education on financial market participation. The higher the number of years of education of the member with the highest number of years of education in a family, the more likely that the family chooses to participate in the financial market. Will increase about 0.70%. Effective

management of family assets requires certain knowledge, while family risk asset management requires certain knowledge of economic management. Therefore, families with higher education years are more able to participate in financial markets. At the same time, families with higher years of education can get higher income from the financial market. Therefore, families with higher years of education are more inclined to participate in the financial market.

The impact of annual household income on financial market participation. Family income has a positive effect on financial market participation. For every unit of household income that increases, the probability that a family chooses to participate in the financial market increases by 3.15%. Generally, the higher the household's income, the more funds the household can use to purchase financial assets. At the same time, the higher-income households are better able to withstand risks than lower-income households. As a result, higher-income households are more likely to participate in financial markets.

The impact of the gender of the household with the highest number of years of education on financial market participation. The regression results show that the gender of the household with the highest number of years of education has no significant effect on financial market participation.

The impact of household registration types on financial market participation. It can be seen from the regression results that households with urban household registration are significantly more likely to participate in financial markets than households with agricultural household registration. The probability that households with urban household registration choose to participate in the financial market is 4.43% higher than the probability that households with agricultural household registration choose to participate in the financial market.

The impact of home regions on home participation in financial markets. It can be seen from the results of the regression that the possibility of families in the eastern region participating in the financial market will be significantly higher than in the western and central regions, which may be related to the high degree of marketization in the eastern region. A more complete market system and various flexible The choice of financial assets makes it easier for families in the eastern region to participate in the financial market. Therefore, families in the eastern region are willing to participate in the financial market. There is no significant difference in household financial market participation between the central and western regions. From the marginal impact table, it can be seen that households in the eastern region are about 3.14% more likely to participate in the financial market than households in the western region.

The impact of family size on financial market participation. It can be seen from the results of the regression that the larger the number of families, the lower the probability that the family will participate in the financial market. For each additional person in the family, the probability that the family will choose to participate in the financial market will decrease by 0.95%. The likely cause of this phenomenon is the number of households

The more projects there are, the more the family needs a stable source of income, and the more the family's income will be used to take care of all family members, the less likely it is to participate in the financial market.

The impact of the age of the highest educated household on financial market participation. The regression results show that for every one year of age increase, the probability of a family participating in the financial market will increase by 0.09%. The older the age, the greater the accumulated knowledge about the financial market, and the more confident it will be from the financial market. Gains higher returns, so age has a positive effect on financial market participation.

The Impact of Family Marital Status on Financial Market Participation. Family members in a marital state will increase the likelihood that the family will participate in the financial market. Married families will generally be more resilient to risk asset fluctuations.



## 4.2. Impact of Household Internet Access Intensity on Their Participation in Financial Markets

A binary logit regression model was used to conduct an empirical analysis of the relationship between households' use of the Internet and whether households participate in financial markets. The same method was used to gradually add explanatory variables for regression. The regression results are shown in table:

Table 7 Internet Intensity and Financial Market Participation

Variable	Model 1	Model 2	Model 3	Model 4
<b>Internet Intensity</b>	0.04*** (0.00651)	0.02*** (0.00685)	0.02** (0.00699)	0.04*** (0.00745)
<b>Years of Education</b>	0.27*** (0.0167)	0.22*** (0.0173)	0.17*** (0.0181)	0.18*** (0.0186)
<b>Annual Household Income</b>		0.97*** (0.0566)	0.76*** (0.0613)	0.79*** (0.0657)
<b>Gender</b>		0.16* (0.0876)	0.20** (0.0903)	0.12 (0.0927)
<b>Household Registration Type</b>			1.53*** (0.111)	1.11*** (0.117)
<b>Central Provinces</b>			0.26 (0.159)	0.22 (0.162)
<b>Eastern Provinces</b>			0.93*** (0.146)	0.84*** (0.149)
<b>Family Population</b>				-0.25*** (0.0333)
<b>Age</b>				0.03*** (0.00364)
<b>Marital Status</b>				0.39*** (0.101)
<b>Constant Term</b>	-6.56*** (0.218)	-16.51*** (0.646)	-14.91*** (0.688)	-16.03*** (0.730)
<b>Observations</b>	8,437	8437	8,437	8,437

Note: \*\*\*, \*\*, \* represent significant at 1%, 5%, and 10% levels, respectively.

Table 8 Marginal Effects of Each Variable

Variable	Marginal Impact (%)
<b>Internet Intensity</b>	0.23
<b>Years of Education</b>	1.05
<b>Annual Household Income</b>	4.52
<b>Gender</b>	0.66
<b>Central Provinces</b>	6.34
<b>Eastern Provinces</b>	1.00
<b>Family Population</b>	4.62
<b>Age</b>	-1.42
<b>Marital Status</b>	0.18
<b>Constant Term</b>	2.24

From the regression results of the binary logit model, the intensity of household use of the Internet has a significant positive effect on household financial market participation. This effect is significant at a significance level of 1%. At the same time, it can be determined from various variables. The marginal impact on household financial asset selection shows that if a household's Internet access intensity increases by 1 unit, the likelihood of household participation in risky assets will increase by approximately 0.23%.

### 4.3. Robustness Test of the Empirical Model

Due to the uneven distribution of Internet use between urban and rural areas, it can be seen from Figure 4-1 that the proportion of rural households not using the Internet is as high as 67.94%, while the proportion of urban households not using the Internet is only 42.41%. With reference to Zhou Yang, In the approach of Ren Kezhen and Liu Xuejin, in order to study whether the above conclusions are reliable, the following further performs a robust test on the estimation results of the model.

#### 4.3.1. Robust Test for Internet Access

According to the household registration types, 13,535 samples were divided into urban and rural categories, and the logit model was used for regression. The results are shown in the following table:

Table 9 Checking the Robustness of the Internet

Variable	Countryside	Countryside	City	City
<b>Whether Online</b>	0.766*** (0.226)	1.120*** (0.249)	0.847*** (0.137)	1.294*** (0.150)
<b>Years of Education</b>	0.157*** (0.0307)	0.193*** (0.0325)	0.151*** (0.0187)	0.168*** (0.0193)
<b>Annual Household Income</b>	0.889*** (0.0992)	0.981*** (0.103)	0.647*** (0.0665)	0.692*** (0.0718)
<b>Gender</b>	0.371** (0.186)	0.277 (0.190)	0.119 (0.0962)	0.0512 (0.0985)
<b>Central Provinces</b>	0.0865 (0.343)	-0.0573 (0.347)	0.145 (0.171)	0.131 (0.174)
<b>Eastern Provinces</b>	1.459*** (0.284)	1.177*** (0.288)	0.736*** (0.159)	0.684*** (0.162)
<b>Family Population</b>		-0.275*** (0.0578)		-0.211*** (0.0379)
<b>Age</b>		0.0211*** (0.00703)		0.0226*** (0.00355)
<b>Marital Status</b>		0.219 (0.198)		0.428*** (0.110)
<b>Constant Term</b>	-16.99*** (1.155)	-18.28*** (1.246)	-12.14*** (0.736)	-13.70*** (0.799)
<b>Observations</b>	9,305	9,305	4,230	4,230

Note: \*\*\*, \*\*, \* represent significant at 1%, 5%, and 10% levels, respectively.

The above table classifies the samples according to urban and rural areas to perform a robustness test. It can be found that most of the explanatory variables are robust to whether they participate in the financial market. Among them, whether in the urban or rural areas, if the family accesses the Internet, the family participates in the financial market. Will increase.

#### 4.3.2. Robust Inspection of Internet Intensity

Similarly, 8437 samples were divided into urban and rural categories according to household registration types, and logit regression was performed. The regression results are shown in the following table:

Table 10 Robustness Test of Internet Access Intensity

Variable	Countryside	Countryside	City	City
<b>Internet Intensity</b>	0.0363** (0.0155)	0.0501*** (0.0162)	0.00891 (0.00778)	0.0367*** (0.00837)
<b>Years of Education</b>	0.150*** (0.0366)	0.180*** (0.0375)	0.174*** (0.0208)	0.184*** (0.0215)
<b>Annual Household Income</b>	1.033*** (0.117)	1.123*** (0.124)	0.657*** (0.0707)	0.661*** (0.0765)
<b>Gender</b>	0.411**	0.300	0.156	0.0793

	(0.204)	(0.208)	(0.100)	(0.103)
<b>Central Provinces</b>	0.171	0.0359	0.213	0.214
	(0.380)	(0.384)	(0.178)	(0.181)
<b>Eastern Provinces</b>	1.445***	1.170***	0.748***	0.724***
	(0.319)	(0.323)	(0.165)	(0.169)
<b>Family Population</b>		-0.307***		-0.215***
		(0.0637)		(0.0389)
<b>Age</b>		0.0260***		0.0324***
		(0.00839)		(0.00408)
<b>Marital Status</b>		0.339		0.402***
		(0.216)		(0.114)
<b>Constant Term</b>	-18.59***	-19.78***	-12.03***	-13.45***
	(1.401)	(1.493)	(0.788)	(0.845)
<b>Observations</b>	5,261	5,261	3,176	3,176

Note: \*\*\*, \*\*, \* represent significant at 1%, 5%, and 10% levels, respectively.

From the robustness regression results in the table above, except for the individual explanatory variables that have significant differences between urban and rural areas, most of the variables are robust between urban and rural areas. In the analysis of the impact of Internet access on households' participation in the financial market, the urban sample and the rural sample are basically similar. That is to say, for urban households, the greater the Internet access intensity, the higher the probability that families will participate in the financial market. For rural families, the greater the intensity of Internet access, the higher the probability that families will participate in the financial market.

## 5. Conclusions

In the past three decades, China's capital market has experienced rapid development from scratch, from small to large. More and more institutions and individuals have participated in the capital market, injecting capital and vitality into the rapid development of the Chinese economy. However, as shown in Figure 1, only 13% of the 13,535 households hold financial products, and the proportion of Chinese households participating in the financial market is not high. Solving this "mystery of limited participation" will, to a large extent, further develop China's capital market.

This article uses data from the 2016 Peking University Family Tracking Survey to study the use of the Internet and the relationship between Internet use intensity and household participation in financial market decision-making. It is found that the use of the Internet can significantly increase household financial market participation. The greater the intensity of use, the greater the possibility that families will participate in the financial market, so we can alleviate the problem of "limited participation" by further popularizing the Internet. In fact, more than half of the households surveyed did not use the Internet, which indicates that the popularity of the Internet is not enough.

In order to further promote the development of China's financial market, it is necessary to increase China's Internet penetration rate. Especially in the vast rural areas, corresponding Internet use training activities can be provided by villages or towns. The construction of facilities will increase the investment in broadband highways, reduce the cost of people using the Internet, and allow more families to access the Internet, then increase the participation of households in the financial market through the use of the Internet.

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