

Subjective Well-Being, Household Financial Asset Accumulation, and Investment Risk Tolerance

Qiyue Sun

*School of Society and History, Shenyang Normal University, Shenyang, China
lx19531772913@126.com*

Abstract: This paper investigates the relationship between subjective well-being, household financial asset accumulation, and investment risk tolerance. Based on empirical analysis using data from the China Household Finance Survey (CHFS), the results show that after controlling for factors such as year, region, and occupation, household financial asset accumulation has a significantly positive effect on individual well-being. Endogeneity is tested using total household income as an instrumental variable. Further analysis reveals that low investment risk tolerance negatively moderates the relationship between household financial assets and well-being, while high investment risk tolerance positively moderates the relationship between stock investment and well-being. This suggests that households with low risk tolerance experience greater increases in well-being as their financial situation improves, whereas households with high risk tolerance are more likely to enhance well-being through stock investment.

Keywords: Subjective Well-being, Household Financial Asset Accumulation, Investment Risk Tolerance, China Household Finance Survey

1. Introduction

With the sustained growth of China's economy and the continuous improvement in household wealth, subjective well-being (SWB) has increasingly attracted attention as a key indicator of social development. However, SWB among Chinese residents has shown only slight growth—or even stagnation—which stands in stark contrast to the rapid accumulation of household financial assets. Classical investment theory posits that financial assets exert a wealth effect, thereby enhancing individual well-being [1]. Nevertheless, the asset allocation behaviors of Chinese households exhibit notable differences. A strong preference for saving leads many households to hold a large proportion of highly liquid assets, while high-risk assets such as stocks, due to market volatility and information asymmetry, often result in an illusion of returns that misleads investors. Although numerous studies have explored the effects of household financial asset allocation on well-being, few have conducted empirical research from the perspectives of asset accumulation and investment risk tolerance. Drawing on data from the China Household Finance Survey (CHFS) from 2015 to 2019, this paper constructs a Tobit econometric model and employs instrumental variable methods to address endogeneity, thereby revealing the relationship between subjective well-being, household financial asset accumulation, and investment risk tolerance. The findings offer a scientific

explanation for the high saving and low-risk allocation behaviors observed in Chinese households and provide empirical evidence to support policymakers in optimizing the structure of property income and improving the regulatory framework of financial markets.

2. Theoretical framework and hypotheses

2.1 Financial asset accumulation and subjective well-being

Asset accumulation—especially in the form of liquid assets—can enhance individuals' short-term sense of economic security, a phenomenon particularly pronounced in China's high-saving environment [2]. Demand and time deposits help reduce uncertainty about future expenditures [3], thereby alleviating financial anxiety and improving household well-being. Cash holdings provide immediate payment capability to meet urgent needs, and this psychological sense of security is especially important for families lacking economic safeguards. Although stock investment may enhance long-term wealth and returns, the impact of risky financial assets on well-being is shaped by both institutional and market environments. Total household income tends to influence well-being indirectly through wealth accumulation rather than through direct psychological effects [4]. Therefore, the following hypothesis is proposed:

Hypothesis H1: Financial asset accumulation among Chinese households enhances residents' subjective well-being.

2.2 Investment risk tolerance and subjective well-being

Investment decisions regarding household financial assets are closely linked to a household's level of risk tolerance. From the perspectives of portfolio theory and risk heterogeneity, households with differing risk preferences display distinct psychological and behavioral responses to improved financial conditions. Households with low risk tolerance tend to avoid uncertainty and prefer liquid assets to ensure financial security. These conservative households prioritize short-term financial safety in their investment goals and exhibit a stronger preference for highly liquid assets under financial constraints, which can help relieve the stress caused by economic uncertainty and improve overall well-being. Conversely, households with high risk tolerance are generally better able to bear financial risk, and their preference for equity assets allows them to seek excess returns from their investment portfolios, which can, in turn, enhance their subjective well-being [5]. Therefore, this paper proposes the following hypothesis:

Hypothesis H2: Households with low risk tolerance experience greater improvements in subjective well-being when their financial situation improves, while households with high risk tolerance are more likely to enhance well-being through stock investment.

3. Model construction and variable selection

3.1 Model construction

To systematically examine the impact of household financial asset accumulation on subjective well-being, this study adopts a Tobit regression model to analyze whether financial asset accumulation affects household well-being. The model is specified as follows:

$$\text{Happiness}_i = \max(0, \gamma_0 + \gamma_1 \cdot \text{Finasset}_i + \gamma_2 \cdot \text{Controls}_i + \varepsilon_i)$$

In this model: Happiness_i represents household well-being, measured as a binary variable taking values of 0 or 1; Finasset_i denotes the natural logarithm of household financial assets; Controls_i is a

vector of control variables, including home ownership, vehicle ownership, health status, financial literacy, digital literacy, medical insurance, unemployment insurance, housing provident fund, and social pension insurance. It also includes fixed effects for year, region, and occupation.

3.2 Data and variables

3.2.1 Data source

This study uses data from the China Household Finance Survey (CHFS) for the years 2015, 2017, and 2019. The CHFS includes 34,643 households across 29 provinces (excluding Tibet, Xinjiang, Hong Kong, Macao, and Taiwan), 170 cities, 345 counties, and 1,360 village or neighborhood committees, providing data with both national and provincial representativeness. After data cleaning, 3,850 valid samples were retained for analysis.

3.2.2 Variable descriptions

(1) Dependent Variable: Household subjective well-being is measured based on responses to the question: “Overall, do you feel happy now?” Responses are scored on a 5-point scale: 1 = Very Unhappy, 2 = Unhappy, 3 = Neutral, 4 = Happy, 5 = Very Happy.

(2) Core Independent Variable: Financial assets are classified as follows: Liquid assets: Cash and demand deposits, characterized by high liquidity and low risk, used for short-term household needs. Low-risk fixed-income assets: Time deposits and bonds, offering stable returns but lower liquidity. High-risk equity assets: Stocks and mutual funds, with high return potential and high volatility. Other credit-type assets: Loans extended and non-standard financial products such as wealth management products, with risk-return profiles between fixed-income and equity assets. The total value of the above seven categories is summed and log-transformed to reduce right-skewness. The final unit of measurement is in 10,000 RMB.

(3) Control Variables: The control variables include: Home ownership: 1 = owns a home; 0 = does not; Vehicle ownership: 1 = owns a car; 0 = does not; Health status: Rated 1 to 5, with higher values indicating better health; Financial literacy: Measured by self-reported attention to financial knowledge, rated 1 to 5; Digital literacy: Measured based on the type of mobile phone used, rated 1 to 3, with higher values indicating higher literacy; Social insurance indicators: Whether the household has medical insurance, unemployment insurance, pension insurance, and housing provident fund (1 = yes, 0 = no).

(4) Instrumental Variable: To address issues such as omitted variable bias, selection bias, and the potential endogeneity between financial assets and subjective well-being, household income is used as an instrumental variable for financial assets in this study.

4. Empirical analysis

4.1 Baseline regression results

Table 1 presents the baseline Tobit regression results analyzing the effect of household financial assets on individual subjective well-being. Column (1) shows the estimation results of a model that includes only household financial assets along with control variables for year, region, and occupation. Column (2) builds on this by incorporating a broader set of controls, including home ownership, car ownership, health status, financial literacy, digital literacy, and participation in various forms of social insurance. The results indicate a significantly positive effect of household

financial assets on subjective well-being. In Model (1), the coefficient for financial assets is 0.0231 and is statistically significant at the 1% level. Even after controlling for additional variables in Model (2), the positive relationship remains robust, with a coefficient of 0.0133 significant at the 10% level. This lends strong support to Hypothesis H1, suggesting that greater household financial asset holdings are associated with higher levels of well-being. Further findings emphasize the importance of material assets in enhancing well-being. Ownership of a home and a car are both positively and significantly associated with well-being at the 1% significance level, with home ownership showing a particularly strong effect. Additionally, health status emerges as a key factor: a coefficient of 0.1930 (significant at the 1% level) suggests that individuals in better physical condition report substantially higher well-being. Financial and digital literacy also play notable roles. The coefficients for financial literacy (0.0290) and digital literacy (0.1031) are both positively signed and statistically significant, indicating that in a digital financial environment, individuals with better knowledge and digital skills are more likely to experience enhanced well-being—much like having a better compass in a complex economic landscape. Interestingly, social security variables such as medical insurance, unemployment insurance, housing provident fund, and pension insurance did not show statistically significant effects in this model. This suggests that, within the scope of this study, these specific safety nets may not have an independent or direct impact on perceived happiness once other household factors are accounted for.

Table 1. Baseline Tobit regression results

Variable	Subjective Well-being	
	(1)Tobit	(2)Tobit
Household Financial Assets	0.0231*** (0.0066)	0.0133* (0.0068)
Home Ownership		0.1662*** (0.0361)
Car Ownership		0.0914*** (0.0221)
Health Status		0.1930*** (0.0157)
Financial Literacy		0.0290** (0.0127)
Digital Literacy		0.1031* (0.0575)
Medical Insurance		-0.0275 (0.0865)
Unemployment Insurance		0.0128 (0.0301)
Housing Provident Fund		-0.0281 (0.0310)
Pension Insurance		0.0390 (0.0609)
Year Fixed Effects	Yes	Yes
Regional Fixed Effects	Yes	Yes
Occupational Controls	Yes	Yes
Obs	3658	3658
Pseudo R ²	0.0133	0.0365

Note: The constant term represents the estimated coefficient in the Tobit regression. Values in parentheses indicate standard errors. * denotes $p < 0.1$, ** denotes $p < 0.05$, and *** denotes $p < 0.01$.

4.2 Endogeneity test

To address potential endogeneity issues and further verify the robustness of the core findings—namely, the effect of household financial assets on individual subjective well-being—this study employs an instrumental variable (IV) approach. Table 2 presents the regression results using this method. In Model (1), total household income is used as an instrument for household financial assets. The coefficient on household income is 0.2830, which is highly significant at the 1% level. This indicates a strong positive relationship between household income and household financial assets, confirming that the chosen instrument is strongly correlated with the endogenous explanatory variable and thus satisfies the relevance condition for a valid instrumental variable. In Model (2), the predicted value of household financial assets is used as the independent variable in a regression of subjective well-being, controlling for year, region, and occupation. The coefficient on household financial assets is 0.0949, which is significant at the 10% level. This result confirms that even after

accounting for endogeneity, household financial asset accumulation continues to exert a positive and statistically significant effect on individual well-being.

In summary, the choice of instrumental variable in this study is appropriate, and the empirical findings are robust.

Table 2. Instrumental variable regression results

Variable	(1)	(2)
	Household Financial Assets	Subjective Well-Being
Total Household Income	0.2830*** (0.0377)	
Household Financial Assets		0.0949* (0.0450)
Year Fixed Effects	Yes	Yes
Regional Fixed Effects	Yes	Yes
Occupational Controls	Yes	Yes
Obs	3270	3270

Note: The constant term represents the estimated coefficient in the Tobit regression. Values in parentheses indicate standard errors. * denotes $p < 0.1$, ** denotes $p < 0.05$, and *** denotes $p < 0.01$.

5. Further analysis

Table 3 presents the results of the moderating effects of investment risk tolerance on the relationship between household financial assets and subjective well-being. Model (1) examines the interaction between total household financial assets and varying levels of risk tolerance, while Model (2) tests the interaction between household stock investment and risk tolerance. In Model (1), the interaction term between total financial assets and low risk tolerance has a coefficient of 0.0087, which is statistically significant at the 5% level. This significant moderating effect suggests that for households with lower risk tolerance, increases in financial assets are more strongly associated with higher levels of well-being. In other words, financial improvements have a more pronounced impact on the well-being of risk-averse households. In Model (2), the interaction term between stock investment and high risk tolerance yields a coefficient of 0.0032, which is highly significant at the 1% level. This indicates that for households with high risk tolerance, stock investment exerts a stronger positive influence on well-being. Thus, the well-being benefits of stock investments are more substantial among households that are more willing to bear financial risk. These findings provide strong empirical support for Hypothesis H2.

Table 3. Moderating effects of investment risk tolerance on household financial assets and well-being

Variable	Subjective Well-Being	
	(1)	(2)
Total Financial Assets	0.0304*** (0.0084)	
Stock Investment Amount		0.0192*** (0.0332)
High Risk Tolerance	0.1250 (0.2170)	0.0720*** (0.4850)
Low Risk Tolerance	-0.1640** (0.1620)	0.5600* (0.4750)
Financial Assets × High Risk Tolerance	-0.0186 (0.0203)	
Financial Assets × Low Risk Tolerance	0.0087** (0.0154)	
Stock Investment × High Risk Tolerance		0.0032*** (0.0470)
Stock Investment × Low Risk Tolerance		0.0520 (0.0477)
Year Fixed Effects	Yes	Yes
Regional Fixed Effects	Yes	Yes
Occupational Controls	Yes	Yes
Obs	3053	344

Note: The constant term represents the estimated coefficient in the Tobit regression. Values in parentheses indicate standard errors. * denotes $p < 0.1$, ** denotes $p < 0.05$, and *** denotes $p < 0.01$.

6. Conclusion and policy recommendations

This study utilizes data from the China Household Finance Survey (CHFS) 2015–2019 and employs the Tobit model along with the instrumental variables approach to examine the impact of household financial assets on happiness. The results indicate that the accumulation of financial assets significantly enhances household happiness. Further moderation analysis reveals that households with low risk tolerance are more likely to experience an increase in happiness when their financial situation improves, whereas households with high risk tolerance are more prone to gain happiness through stock investments. Therefore, the government should strengthen supervision of the financial industry and regulate its operations to ensure fair competition among investors. Additionally, efforts should be made to promote financial literacy among residents, guiding them to rationally allocate their financial assets, thereby increasing their property-based income. These measures can contribute to improving residents' happiness and fostering social harmony.

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