

The Empirical Research on Job Stability and Household Financial Asset Allocation

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Abstract: Based on the evidence from China, this paper explores the influence of job stability on household financial asset allocation. The objective of the research seeks to provide positive assistance in guiding households to allocate their financial assets wisely. It is reviewing the relevant literature on household asset portfolios to explain why job stability may impact family financial portfolio decisions from different perspectives. The regression analysis of the proposition is conducted using the China Household Financial Service (CHFS2019) data. The study finds that job stability contributes significantly to household risky asset holdings through two main pathways: increasing labour income risk and occupational uncertainty. In regions of better economic conditions and higher financial accessibility, residents tend to be more sensitive to career stability, thus changing investment decisions. The research concludes that a full understanding of job stability and a good judgement of family income and family risk tolerance are essential to make informed financial asset allocation decisions.

Keywords: Household Asset Allocation; Job Stability; Finance

1. Introduction

The 21st century has witnessed a great increase in Chinese household wealth, and families are faced with more diversified investment methods than before. Campbell (2006) formally propose the field of household finance and define it as a discipline that studies how households use financial instruments to increase their assets^[1]. One important aspect of the field of household finance is the analysis of the heterogeneity in family financial asset allocation.

Extensive researches contribute to explaining heterogeneity in the propensity to invest in financial assets across households. Economic theories including modern portfolio theory and precautionary saving theory provide a solid basis for such study. Findings declare that family asset portfolio varies due to various factors. Nevertheless, the literature is not unambiguous regarding the asset portfolio for which job stability effects are relevant. Furthermore, Chinese scholars have entered the field of household finance much later than international scholars, so an empirical analysis of household investment behaviour based on the latest Chinese data is of great significance. Based on the evidence in China, this paper performs a regression analysis on the effects of job stability on household asset portfolios. Besides, influencing mechanisms and location heterogeneity are discussed to explain the results in detail.

The paper is divided into the following five sections. The next section presents the theoretical background of occupational stability and household financial asset allocation. Section 3 presents the research methodology, Section 4 describes regression results, Section 5 discusses influencing mechanisms and heterogeneity, and Section 6 concludes.

2. Literature Review

This section summarises two broad kind of literatures: economic theories as well as research on factors affecting household financial asset allocation.

In the former strand, modern portfolio theory lays the theoretical foundation for this paper. Markowitz (1952) proposes the theory

of mean-variance, which assumes that investors always choose the portfolio with the highest expected return at constant risk, or choose the portfolio with minimum risk when the expected return is fixed^[2]. Besides, households are heavily influenced by the theory of precautionary saving in their financial investment decisions. Kimball (1989) offers insight into that the precautionary motive for saving is a form of risk aversion, where the risk of labour income increases the propensity to consume, regardless of the level of consumption. Uncertainty about future income leads to more current savings^[3].

The second important strand of literature is the study of several predictions of theoretical models that incorporate factors associated with job stability and the empirical research on various factors.

First, regarding household demographics, in 2006, Campbell finds that poorer, less educated and more risk-averse families tend to make more investment mistakes^[1]. Second, income risk is expected to reduce risky asset holdings. In 2008, Guiso & Paiella provide a direct measure of absolute risk aversion based on household survey data. Their results suggest that if an individual is more exposed to income uncertainty or liquidity constraints, he or she will have a higher level of absolute risk aversion^[4]. Third, there are several empirical studies analysing the impact of occupational security and occupational risk based on actual data. Larkin (2019) focuses on the role of job risk heterogeneity in emerging liquid and illiquid assets. The research shows that under the Great Recession labour market shocks, households tended to choose a larger housing stock and more illiquid portfolio^[5].

Overall, scholars have analyzed the various factors that may affect household asset portfolios and the influencing mechanism based on theoretical models and micro-data from multiple countries. However, not until recent years did Chinese scholars start to gain ground in this field. Particularly, most previous studies did not focus on the influence of job stability on family financial portfolios.

3. Research methods

3.1 Data description

This paper uses data from the China Household Finance Survey (CHFS) 2019, with a sample covering 29 provinces, making the data nationally and provincially representative. The sample data of household heads are selected to study the individual variables and those under the age of eighteen were excluded.

3.2 Model construction and variables

With reference to previous research, whether households participate in risky markets is selected as the interpreted variable. The nature of work contracts is the core explanatory variable, which indicates the degree of job stability. The specific variable descriptions and assignments are detailed in Table 1. According to the selection and setting of variables, 8091 household head samples are obtained.

Table 1		
Variable characteristics	Variable name	Variable description
Interpreted variables	Participate in financial markets	Households own risky assets, value 1, otherwise 0
Job stability	Nature of work contract	Fixed-term employees (including civil servants and staff in institutions), long-term contracts (more than 1 year), short-term or temporary contracts (1 year or less) and no contract are 4, 3, 2, 1, respectively
Control variables	Gender	When the respondent is male, the value is 1 and the female value is 0
	Age	The actual age of the respondent in that year, calculated by the age of the whole year
	Age squared	The age squared of the respondents
	Marriage status	Married value is 1, unmarried value is 0
	Risk attitude	High risk, slightly high risk, average risk, slightly low risk and unwilling to take any risk are 1, 2, 3, 4, 5, respectively
	Household income	The income of the household
	Household net asset	The household net asset
	House value	The housing value
	Education level	No culture, primary school, junior high school, secondary high school, tertiary, junior college, master's and doctor's are 1, 2, 3, 4, 5, 6, 7, 8, respectively
	Region	Household living in the east, middle and west are 1, 2 and 3, respectively
	Rural	Rural value is 1, urban value is 0

As the explanatory variable in this paper is discrete variable, the empirical analysis is carried out using the Probit model. The standard probit model is: $Y = \alpha X + \beta Z + \mu$. Among them: Y is a 0-1 type dummy variable indicating whether the household is involved in risky market; X denotes the explanatory variable including nature of work contract; Z denotes the control variables; μ denotes residual term.

4. Results

4.1 Full-sample regression results

Table 2 shows the probit model estimates of the impact of the nature of work contracts on risky market participation discussed in this paper. It is indicated that if the degree of job stability can be increased by one, the probability of household participation in risky markets will increase by 1.86%.

Table 2: Probit					
Variable name	Participate in risky markets	Marginal effects	Variable name	Participate in risky markets	Marginal effects
Nature of work contract	.0961*** (4.79)	.0186	Education Level	.2066*** (10.86)	.0399
Gender	-.1576*** (-3.36)	-.0305	Region	-.1026*** (-4.13)	-.0198
Age	.0898*** (5.64)	.0174	Rural	-.5246*** (-7.79)	-.1014
Age Squared	-.0008*** (-4.58)	-.0001	Household Net Asset	.0027*** (10.38)	.0005
Marriage Status	-.1782* (-1.71)	-.0344	House value	-.0017*** (-5.37)	-.0003
Risk Attitude	-.2327*** (-13.66)	-.0450	Household Income	.0022** (2.09)	.0004

*** p<.01, ** p<.05, * p<.1

4.2 Sub-sample regression results

Considering the differences in the level of economic development and financial accessibility between regions, it is necessary to conduct a sub-sample survey of urban and rural areas, as well as the East, Central and Western regions. The results are presented in Tables 3 and 4.

Table 3: Urban-rural subsample regression		
Participate in risky markets	Rural	Urban
Nature of work contract	.084	.095***
Gender	.288	-.172***
Age	-.017	.096***
Age squared	0	-.001***
Marriage status	.213	-.213**
Education level	.125*	.212***
Risk attitude	-.097*	-.251***
Family asset	.001	.003***
Family income	.002	.002*
House value	-.001	-.002***

Table 4: East-Central-West subsample regression			
Participate in risky markets	East	Centre	West
Nature of work contract	.115***	.087**	.075*
Gender	-.082	-.184**	-.266***
Age	.081***	.065**	.149***
Age squared	-.001***	-.001*	-.001***
Marriage status	-.094	-.244	-.243
Education level	.206***	.197***	.2***
Risk attitude	-.243***	-.214***	-.236***
Family asset	.003***	.002***	.002***
Family income	0	.014***	.007***
House value	-.002***	-.001	-.001

*** p<.01, ** p<.05, * p<.1

5. Discussion

5.1 Mechanism Analysis

By performing a cross-sectional regression on the full sample, the results indicate that the level of job stability has a highly significant positive effect on the financial asset allocation among Chinese household portfolios. It is surmised that job stability affects family financial asset allocation in two channels. On the one hand, short-term work contracts or no contracts will bring higher unemployment expectations. When investors are confronted with uninsurable risk, they reduce overall exposure to risk by taking more risk-averse measures. Therefore, household heads with unemployment risk tend to averse risk and choose a safer portfolio. On the other hand, reduced job stability will lead to higher labour income risks. Investment in risky financial assets may increase the total risk borne by the population. Hence, when households are faced with labour income risk, they will invest less in risky assets.

5.2 Heterogeneity analysis

In terms of overall level of development, China's rural areas lag far behind the cities. Job stability has a significant positive effect on the likelihood of risky financial market participation for urban households and a positive but non-significant effect for rural households. In regions of better economic conditions and higher financial accessibility, residents tend to be more sensitive to career stability, thus changing investment decisions.

At the same time, the eastern region is significantly greater than the central and western regions in terms of GDP and economic development rate. Besides, the financial sector is mainly concentrated in the east. The significance and the extent of the effect of the core explanatory variable for households in the East, Central and West decreases in order, which is similar to the results obtained between rural-urban comparisons. It is worth noting that the effect of household income is minimal and insignificant for households in the East, as losses in production and business projects or losses in financial market investments make the number of households with negative income higher in the East.

6. Conclusion

This paper considers the roles of job stability and other factors in the financial asset allocation by Chinese households. The finding indicates that from an overall perspective as well as a sub-sample structural perspective, a high level of job stability encourages risky asset holdings.

The mechanism discussion shows that a low level of job stability will influence households' financial portfolios through increasing unemployment expectation and labour income risk. Core control variables influence household investment decisions mainly through financial accessibility, risk attitudes and financial literacy. Further, this study analyzes the impact of job stability on investment choices of households in different geographical locations by dividing the sub-sample. The effect of job stability remains positive in all geographical locations. In areas of better economic conditions and higher financial accessibility, residents tend to be more sensitive to career stability.

The limitation of this study is as follows. This paper only selects the nature of work contract as the indicator of job stability, looking mainly at employees, but skip employers and freelancers, which may have an impact. The study focuses on how the influencing factors work but does not further explore the intersection of the influencing factors, which are complexly linked and interact with each other, and a deeper exploration would provide a more accurate analysis of the role of each factor on asset selection behaviour, which is left for future study.

References

- [1] Campbell JY. (2006). Household finance. *The journal of finance*, 61 (4), 1553-1604.
- [2] Markowitz H. (1952). Portfolio Selection. *The Journal of Finance* (1), 77-91.
- [3] Kimball MS. (1989). Precautionary Saving in the Small and in the Large.
- [4] Guiso L, & Paiella M. (2008). Risk aversion, wealth, and background risk. *Journal of the European Economic association* , 6 (6), 1109-1150.

[5] Larkin KP. (2019, April). Job risk, separation shocks and household asset allocation. In 2019 Meeting Papers (No. 1058). Society for Economic Dynamics.