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Family Liabilities and Residents' Subjective Well-being

An Analysis Based on Microcosmic Data of Chinese Family Tracking Survey*

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***Abstract*—Family liabilities can smooth income, promote consumption and improve residents' subjective well-being, but it may also bring corresponding economic pressure to reduce the level of welfare. Based on the tracking survey data of Peking University from 2010 to 2016, this paper uses Ordered Logistic model to investigate the influence of family housing loans and other loans on residents' subjective well-being from an empirical point of view. The results of the study found that there is a significant positive and negative correlation between the housing loan from 2010 to 2016 and the subjective well-being of the residents, and the housing loans in the family's liabilities by 2014 have the "wealth effect" of realizing the residents' consumption, improving the utility of consumption and the housing itself, the subjective well-being of the residents is significantly improved, and the increase of the house prices after 2014, the increase of the repayment pressure of the residents, the crowding-out effect on other aspects of consumption, which leads to the decline of the subjective well-being of the residents; and, The daily family and friends of the residents and the folk lending have a certain inhibition effect on the subjective well-being of the residents.**

Keywords—housing loan; credit consumption; residents' subjective well-being; consumption utility

I. Introduction

With the improvement of the economic level of China, the living quality of the residents is rising, and the construction of the happy society has become one of the important tasks of the current social development in China, and the study of the subjective well-being of the residents has also become a hot topic in the discussion of the present society. The measure of subjective happiness is the "self-evaluation" of the individual's happiness, and the result of the evaluation is the reflection of the individual's comprehensive feeling of his or her living state, which is closely related to many aspects of people's life. With the increasing scale of family debt in China, family debt has an impact on family daily life. Short-term loans can increase happiness by increasing consumption and utility. Family debt is one of the important means to smooth consumption and income, which alleviates the problem of residents' income and expenditure by relaxing liquidity constraints and promoting inter-temporal consumption. Housing consumption credit is an important destination of family loan in China today. According to statistics, housing assets account for 66 per cent of the total family assets of Chinese residents (Ganli et al., 2013). In the life cycle theory, real estate, as one of the important wealth of the family, will have a strong well-being effect on family life. From the market-oriented reform of housing in our country, the marketization and commercialization of housing have made great changes in house prices. Housing loans can alleviate the crowding-out effect of housing consumption on non-real estate consumption, and the purchase of housing can greatly enhance the subjective well-being of residents. However, with the rise of house prices, the increase of loans far exceeds the income level of residents, which makes the daily life and subjective well-being of residents suffer a great impact. In this context, this paper focuses on empirical investigation as the relationship between housing loans and residents' subjective well-being in family Liability, which is of great significance to accelerate the realization of overall well-off society, promote the happy life of residents and build a harmonious society.

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II. Literature Review

In the 1950s, American economist and Nobel laureate Samuelson put forward the concept of happiness index, and put forward the formula of happiness (Samuelson,1951), happiness = consumption/ desire. According to the study, it shows that the absolute income of residents has no significant effect on subjective well-being (Easterlin, 1974), but the increase of relative income has a lifting effect on subjective well-being (Stutzer, 2004; Li Jiangyi, 2015) Lu Juan, et al. (2018), found that the residents' subjective well-being can be improved through the smooth consumption of folk loans and the increase of family income. According to utility theory, when the level of personal consumption is improved, the utility of consumption will increase, and then the happiness will be enhanced. Balfour & Smith (1996) argues that self-owned housing can enhance residents' psychological feelings and the quality of life of residents; and that housing as a typical collateralized or investment property, which can improve the happiness of residents from two aspects: "wealth effect" and "comparison effect". (Davies and Wolff, 2011; Li Tao et al., 2011; Lin Jiang et al., 2012; Liu Hong et al., 2013). Zhang Xiang, et al. (2015), according to the "China Family Finance Survey", found that the "residence property" of the house can significantly improve the subjective well-being of the residents, and because of the comparative effect of housing consumption, the subjective well-being of the residents can be significantly reduced when the housing conditions of the people around the life of the residents are improved (Fan Hongzhong et al. 2017).

With the promotion of the marketization of real estate and the phenomenon of "rigid demand" of commercial housing in China, the house price in China has also shown a rapid growth in the past ten years, the continuous popularization of credit consumption, housing mortgage loans gradually occupy the main part of family debt, and the development of credit market can alleviate the consumer liquidity constraints of residents and the crowding out of consumption by high house prices (Deng Jian et al., 2011). Ning Xueping et al. (2011) through the construction of housing loan happiness index system found that housing loan maturity, down payment, loan methods and policy expectations have a direct or indirect impact on happiness index of Housing lender. However, the larger the proportion of housing, education, health care and pension as the core consumption of the family, the stronger the negative problems caused by the larger the housing expenditure, the easier it is to reduce the subjective well-being of the residents (Sun Jiulao et al., 2016; Li Jiangyi, 2015; Long Fu et al., 2019). Ouyang Yiyi et al. (2018) by integrating the data of house price and CGSS2015 in China in 2015, found that high house price has obvious inhibitory effect on residents' subjective well-being. Although the rising house price increases the asset value of housing, the stronger the expectation of housing price rise, the lower the subjective well-being of residents. Long-term debt will not only make residents bear greater psychological pressure, thus affecting the health of residents (Brown et al.2005), but will also squeeze out residents' expenditure on other daily living expenses, for example, in terms of health care, Housing lenders with greater repayment pressure will choose cheaper drugs or poor medical institutions (Balmeret al.2006), and health status is an important factor that has the most direct impact on residents' subjective well-being. The decrease of health status will directly lead to the decrease of residents' happiness (Hu Hongshu and Lu Yuanping, 2012). Li Jiangyi (2017) used the "Family Financial Survey" micro data to find that repayment of housing loans will have serious liquidity constraints on families, the higher the housing loans, the more serious the consumption is squeezed out.

In the study of personal subjective factors affecting residents' subjective well-being, age, sex and educational level have a significant impact on subjective well-being (Blanchflower & Oswald,2004; Xue Xindong et al., 2015) There is a "U" relationship between residents' subjective well-being and age ,middle-aged people are less happy because of great pressure of life, but children and the elderly are happier, men have higher happiness than women; People with a higher level of education are happier than those with a lower level of education. Secondly, with the change of social environment, the subjective well-being of residents will also change to varying degrees (Tella, Macculloch & Oswald, 2001). David et al. (2014) believe that rising unemployment and inflation rates will significantly reduce residents' happiness and unemployment has a stronger inhibitory effect than inflation. Gao Shunyue (2017) found that harmonious family living environment and good neighborhood relationship could also make residents happy, while Lu Juan et al. (2018) found that social network relationship had a positive impact on residents' well-being, among which the relationship with working colleagues had the greatest influence on residents' subjective well-being, followed by relatives, friends and neighbors.

To sum up, domestic and foreign scholars analyze the different effects of residents' subjective well-being from the aspects of income, consumption, family assets and liabilities, social development and so on. From the point of view of consumption, some of the research results show that household debt can alleviate short-term income and expenditure mobility, and significantly improve subjective well-being by smooth consumption. Some studies have found that family debt will bring greater economic pressure to residents, have a negative impact on the physical and mental health of residents, and reduce their happiness. With the existing research results, this paper focuses on the relationship between housing loan& other loan and subjective well-being in family debt, and analyzes the short-term and long-term effects of the change of housing loan on the subjective well-being of the residents from the dynamic point of view. The structure of this paper is as follows: the second part, in the combing and analysis of the existing literature, discusses the theoretical mechanism of housing loans affecting the subjective well-being of residents in household debt; the third part is the design of models and variables; the fourth part is the analysis of empirical results; and finally, the conclusion and policy recommendations.

III. THEORETICAL MECHANISM ANALYSIS AND RESEARCH HYPOTHESIS

Based on Samuelse's happiness formula, the realization of housing purchase and consumption by housing loan can not only solve the problem that residents can't bear a large amount of housing money for a while, but also improve the psychological satisfaction of residents and increase the utility of consumption. Moreover, the residential attribute of housing itself has a "wealth effect", when residents achieve the purchase of housing, it will increase their happiness. However, with the sharp rise of house prices, the increase of housing loans will increase the financial pressure of residents, and the later repayment period will have a greater crowding-out effect on other daily consumption of residents, thus making the quality of life decline. Secondly, the increase of repayment pressure will also have greater psychological pressure on residents, make residents work harder, reduce the necessary rest and exercise time, directly affect the quality of life of residents, so that their subjective well-being is reduced. In other family loans, relatives, friends and folk lending has smoothed the current liquidity constraints caused by income restrictions, residents' happiness has been improved. But relatives and friends loans may affect the relationship between relatives and deterioration of the family harmonious environment because of conflicts of interest, private loans have unknown sources of funds and high interest rates will reduce the subjective well-being of residents.

In conclusion, the effects of housing loans, relative, friends & folk loans on the subjective well-being of residents in family debt may have positive and negative effects. On the basis of fully combining the subjective characteristics of residents, this paper combines the two in a unified framework, taking the data of "China Family tracking Survey Database" as a sample, using Ordered Logistic model to focus on the relationship between housing loans & other household loans and residents' subjective well-being in family debt.

Based on the above literature analysis, this paper puts forward the following research assumptions:

Hypothesis 1: housing loans in family debt will have positive and negative effects on residents' subjective well-being. Through housing loans, more residents can realize the purchase of housing. The purchase of housing not only realizes the housing consumption of residents, but also increases the family wealth, and has a certain lifting effect on the subjective well-being of residents. But when house prices are too high, heavy repayment pressure may reduce residents' subjective well-being.

IV. Model and Variable Design

A. Data Source

This paper empirically selects the data of china family tracing survey (China Family Panel Studies, CFPS), which is owned by the china social science survey center of Peking University, and has the data of 2010,2012,2014 and 2016 tracking survey. The CFPS data samples cover 25 provinces / cities / autonomous regions in China and represent 95% of the population in China. The purpose of this study is to statistically reflect the changes of residents' living standards and lifestyles in the process of social and economic changes in China, and to provide an effective basis for academic research and government policy analysis. According to the purpose of this study, we used the data from CFPS2010 to 2016 to empirically investigate the relationship between family debt and residents' well-being.

B. Design and Treatment of Variables

1) Subjective well-being of residents with explained variables": The main description of residents' subjective well-being in the questionnaire data of Chinese Family tracking Survey (CFPS) is "how happy are you?" The answer to the question is presented with different scoring values. In 2016, the answer to this question was "0 stands for very unhappy...10 stands for very happy." In 2010, 2012 and 2014, the answer to the question was "1 means very unhappy, 5 means very happy." In order to facilitate the analysis of the following empirical results, this paper deals with the answer to this question as a score of 1 - 5, that is, 1 means "very unhappy" to 5 means "very happy". But because of the 2016 and 2010 data samples, "how happy are you?" The lack of data on this index is too large, in the data processing of the past two years, this paper selects the corresponding "I live a happy life" in the data questionnaire to replace the index. The answers to the question of "I live a happy life" are as follows: "almost none, sometimes, often and most of the time" and so on. Here we assign values to the different answers, 1 means almost none, 2 means sometimes, 3 means often, 4 means most of the time. In order to reflect personal well-being more accurately, in addition to the subjective evaluation of the interviewees themselves, this paper also uses the two indicators of "Degree of confidence in future life" and "Degree of satisfaction with life" in the questionnaire to supplement the subjective well-being of residents. The answers to these two questions in the original data are as follows: "1 indicates lower confidence in future life and lower satisfaction with life, 5 indicates higher confidence in future life and higher satisfaction with life". The explained variables in the empirical analysis below use the weighted average results of the three, and finally get that residents' subjective well-being is "1 indicates s very unhappy,., 5 indicates very happy".

2) The amount of housing loan with core explanatory variable: The "total family housing loan" in the annual data questionnaire is selected to measure, and because the index of the total family housing loan is a numerical variable, the explained variable and other control variables are virtual variables. In order to eliminate the influence of heteroscedasticity, the explanatory variable is logarithmic processed, the value of housing loan of 0 in the sample plus 1 and then take logarithm. For the measurement of the explanatory variable "other family loans", due to the different statistical caliber and the updating of CFPS data every two years, in 2010, the index selected "loans from relatives and friends" in the original data, and family data for 2012 are due to the lack of indicators related to relatives& friends or folk loans, so in 2012, "loans other than housing loans" are selected to count, among them, because most residents' housing loans are obtained through banks at this stage, the 2012 "loans other than housing loans" index does not include bank loans. Other loan indicators for family debt in 2014 and 2016 were measured by the sum of "relatives or friends borrowing" and "other private loans" in the database. Also because the index is a numerical variable, we also take logarithms for the index in data processing.

3) Other control variables: The age, sex, degree of education, social status, physical health status, marital status and family characteristic variables-the total family income and the total size of the family's population and so on are selected as control variables that affect the well-being of the residents.

- Age, according to the actual response of the respondents at the time of the survey, the sample aged under 18 and above 65 years is excluded during sample processing, since family loan is mainly suitable for the adult population.
- Gender, male is assigned a value of 1, and female is assigned a value of zero.
- The level of education, in real life, due to the different level of education, the level of knowledge, working ability and living level of residents often have different effects on subjective well-being. In this paper, the educational level of the residents is divided into 8 levels. 1 represents an illiterate or uneducated, 2 represents a primary school, 3 represents a junior high school, 4 represents a high school, 5 represents a junior college, a middle-level or higher vocational school, 6 represents an undergraduate, 7 represents a master's degree, and 8 represents a doctor's degree and above.
- Social status, according to the theory of reference group, whether the individual satisfaction is determined according to the comparison between himself and other members of the group in which he belongs, and based on the "comparison psychology" of the residents themselves, if they think that they are treated fairly and above the middle level in the reference group, they will have a sense of satisfaction, and the stronger their happiness will be. In the assignment of the variable of social status, "1 represents the lowest social status, ... , 5 represents the highest social status" .
- Marital status, good marital relationship are the basic prerequisites for maintaining a happy family life. Because marital status is a virtual variable, the database is set as follows: Unmarried is set to 1, married is set to 2, Cohabitation is set to 3, Divorce is set to 4, the widowhood is set to 5.
- Health status, according to existing studies show that residents' health status is a direct factor affecting residents' subjective well-being. In this paper, the health status is divided into five levels, "1 indicates quite unhealthy, … 5 indicates very healthy."
- Family characteristics variable: the size of the family population, this indicator indicates that the person who has a direct economic relationship with the interviewees at the current time.

In the process of data processing, because housing loans, other family loans and total family income come from family samples in the data, but the evaluation index of subjective well-being comes from individual samples, this paper matches the two samples with personal ID, eliminates the unmatched data, and constructs a micro-data set containing personal characteristics and family characteristic information. The specific variables are explained in "Table I".

TABLE I. VARIABLE INTERPRETATION

Variable Name	Symbol	Variable Meaning
Residents' subjective well-being	Hap	dummy variable: 1 - 5 indicate from very unhappy to very happy
Housing loan amount	Housedebt	Total family housing loans
Other loan amount	Otherdebt	Sum of relatives and friends in family and folk lending
Age	Age	Samples over 18 years of age and under 65 years of age
Gender	Gender	Virtual variable: 0 indicates female and 1 indicates male
Level of education	Edu	Virtual variables: 1: illiterate or uneducated, 2: primary school, 3: junior high school, 4: high school, 5: junior college, 6: undergraduate, 7: master, 8: doctor
Social status	Sta	Virtual variable: 1- 5 indicates that social status is getting higher and higher
marital status	Mari	Virtual variables: 1 indicates unmarried, 2 indicates married, 3 indicates cohabitation, 4 indicates divorce, 5 indicates widowhood
Health condition	Hea	Virtual variable: 1 - 5 indicates that health condition is getting higher and higher
Size of family population	Size	The total number of people who have direct economic ties with the interviewees at the current time
General income	Linc	Total family income

C. Descriptive Statistics

"Table II" gives descriptive statistics of variables. From 2010 to 2016, the average subjective well-being of residents is about 3.5, and the standard deviation is about 0.85, which indicates that the life of residents is generally in a state of general happiness, but the fluctuation is large. And from 2010, the average income of residents is 38878 yuan, and the average income of 2016 is 842920 yuan, and it increases year by year. The average value of housing loans in family liabilities increased from 0.39077 in 2010 to 1.11923 in 2016, especially in 2016. the average value of other loans in family liabilities decreased from 1.007 in 2010 to 0.6758 in 2016, but happiness decreased in 2016 (mean value is 3.48), which confirms the "Eastlin paradox" and shows that rising income can't enhance the subjective well-being of residents.

TABLE II. DESCRIPTIVE STATISTICS OF SAMPLES FOR FOUR YEARS 2010-2016

Year	2010	2012	2014	2016	2010	2012	2014	2016
Observed Number	25931	25764	20925	25810	25931	25764	20925	25810
Variable	**Mean Value**				**Standard Deviation**			
Hap	3.65338	3.27464	3.95474	3.48182	0.87804	0.82032	0.84239	0.82227
Age	43.2772	42.3259	42.2274	42.2035	12.3465	13.1583	13.2589	13.4100
Gen	0.48274	0.48607	0.50017	0.49659	0.49971	0.49982	0.50001	0.50000
Sta	2.73957	2.65071	2.89773	2.75633	0.95922	1.00982	0.96807	1.04889
Mari	2.02707	1.99099	1.98389	1.97543	0.62247	0.63664	0.63562	0.65800
Hea	4.20107	2.89772	3.16325	3.05156	1.04878	1.19459	1.20286	1.19995
Edu	2.59693	2.63794	2.81878	2.84110	1.30274	1.32843	1.32874	1.39656
Size	4.25884	4.39124	4.24301	4.38469	1.75435	1.83874	1.82969	2.01729
Inc	38778.2	54178.1	64195.2	84290.9	57426.8	73403.8	138849	210170
Housedebt	0.39077	0.29541	1.01037	1.11923	1.26752	1.15909	1.94969	2.05077
Otherdebt	1.00755	1.16266	0.64601	0.67587	1.76388	1.92936	1.56484	1.60492
linc	4.39489	4.53784	4.60878	4.71448	0.427732	0.62290	0.60480	0.41500

a. Data source: obtained from the data of CFP2010,2012,2014 and 2016.

D. Model Setting

In this paper, due to the explained variables, the subjective well-being of residents is a discrete ordered variable, we use the Ordered Logistic model to explore the relationship between the housing loan and the residents' subjective well-being. The specific model is as follows:

$$\text{Hap} = \beta_0 + \beta_1\text{Housedebt} + \beta_2\text{Otherdebt} + \beta\text{X} + \varepsilon \quad (1)$$

This model represents the influence of housing loans and other loans in family liabilities on the subjective well-being of the residents, and Heap shows the subjective well-being variables, Hap represents subjective well-being variables, β_0 represents the intercept term, Housedebt, Otherdebt represents the amount of housing loan and the amount of other family loans, respectively, and the logarithmic processing of the value is carried out. X represents a series of other control variables. β_1, β_2 represent the estimation coefficient of the amount of housing loan and the amount of other family loans respectively, and ε represents the error term.

V. ANALYSIS OF EMPIRICAL RESULTS

A. Single Phase Sample Test Results

As can be seen from the positive results of Table 3, there is a significant correlation between the housing debt and the subjective well-being of the residents in family liabilities, of which, in 2010 and 2012, housing loan has a positive effect on the subjective well-being of the residents in family liabilities, and the model estimation coefficients are 0.0432 and 0.0197, respectively. The purchase of housing by the residents in the way of housing loans has alleviated the short-term expenditure liquidity, increased the consumption utility and satisfaction of the residents, and the housing itself has the "wealth effect", and can also promote the subjective well-being of the residents. Compared with 2010, the increase of subjective well-being caused by housing loans decreased in 2012 (0.0197 < 0.0432), that is, the positive marginal impact of housing loans on subjective well-being in 2012 is decreasing. Compared with 2010, the increase of subjective well-being caused by housing loans decreased in 2012 (0.0197 < 0.0432), that is, the positive marginal impact of housing loans on subjective well-being in 2012 is decreasing. The estimated coefficients of the housing loan model in 2014 and 2016 are-0.0272 and-0.0105, respectively, which show that the over-rise of the housing loans in the family liabilities, to a certain extent, which has suppressed the subjective well-being of the residents, and in combination with the actual situation in China, according to the data of National Bureau of Statistical , from 2008 to 2018, the average selling price of the commercial house in China has increased year by year, in particular, there was a significant rise in the rise in 2014 to 2016. Nowadays, most of the residents' long-term consumer loans are residential housing loans. According to the annual data of the central bank, the long-term consumer loans under the RMB credit revenue and expenditure of financial institutions rose from 10.3163 trillion yuan in 2013 to 20.1159 trillion yuan in 2016. Excessive housing loans bring greater economic repayment pressure to residents, which lead to the weakening of subjective well-being of residents. From the point of view of family income to subjective well-being, the increase of total family income level can improve subjective well-being, per period model estimation coefficients are 0.415, 0.162, 0.179 and 0.436, respectively. It can be seen that the positive impact of rising income on residents' subjective well-being in 2012 and 2014 is lower than that in 2010 and 2016, and at the same time, the positive impact of housing loans on residents' subjective well-being in 2012 is lower than that in 2010. The negative impact of housing loans on residents' subjective well-being in 2016 is also lower than in 2014. Therefore, from the point of view of income, the increase of income will alleviate the pressure of the residents' liability to a certain extent, and when the income of the residents can be sufficiently protected against the pressure of the residents' housing debt, the housing loan in the family's liabilities will have a positive effect on the subjective well-being of the residents. When the increase of income is not enough to support the housing debt of residents, the increase of debt will make the residents produce economic pressure, which will reduce the subjective well-being of residents. The positive marginal effect of income on residents' subjective well-being in 2012 is lower than that in 2010 (0.162 < 0.415), and the positive effect of housing loans on residents' subjective well-being was also decreased (0.0197 < 0.0432). Although the income level of residents is rising sharply in 2014 and 2016, the rise in house prices has far exceeded the increase in income, that is, the relative income of residents has not risen, thus making the income of residents unable to support housing liabilities, and the increase in economic repayment pressure has reduced the happiness of residents. The positive impact of income on residents' subjective well-being in 2016 was greater than that in 2014 (0.436 > 0.179), so the negative impact of housing loans on residents' subjective well-being in 2016 was smaller than that in 2014 (- 0.0105 <-0.0272).

Similarly, from the regression results, we also found that other loans in family liabilities from 2010 to 2016 were significantly correlated with the coefficient of subjective well-being of residents at a level of 1%. From 2010 to 2016, the model estimation coefficient showed that the increase of other family loans also decreased the subjective well-being of residents. Although residents can solve the liquidity difficulties of short-term funds through relatives& friends or folk loans, and funds are easy to obtain. However, due to the influence of interests on the relationship between relatives and friends, the deterioration of family harmonious living environment and family social relations, and the decrease of residents' well-being due to the increase of residents' life troubles, the folk lending is mainly due to the lack of effective supervision, and the borrowing cost is too high, which has a certain inhibitory effect on the subjective well-being of residents.

In the empirical analysis of other control variables, there is a positive correlation between age and residents' subjective well-being, indicating that the older the age, the stronger the well-being. The gender and marital status of residents are negatively correlated with subjective happiness, mainly because men bear the main pressure of family life and make happiness lower, the better the marital status, the more harmonious the family life, and the higher the happiness of residents. Similarly, there is a positive correlation between educational level, social status and health status, which indicates that the higher the educational level and social status, the stronger the happiness of the residents with the higher the health status, while the negative correlation between the size of the family population and the well-being as a whole, the higher the family population, the lower the happiness of the residents. The higher the income is, the happier the family is.

TABLE III. ANNUAL ORDERED LOGISTICS TEST RESULTS FROM 2010 TO 2016

Variable	2016 Hap	2014 Hap	2012 Hap	2010 Hap
Housedebt	-0.0105*	-0.0272***	0.0197*	0.0432***
	(0.00583)	(0.00673)	(0.0103)	(0.00997)
Otherdebt	-0.0492***	-0.0519***	-0.0267***	-0.0416***
	(0.00750)	(0.00849)	(0.00625)	(0.00730)
Age	0.00699***	0.00151	0.00225**	-0.00809***
	(0.00111)	(0.00121)	(0.00111)	(0.00110)
Gender	-0.148***	-0.157***	-0.0854***	-0.143***
	(0.0241)	(0.0266)	(0.0242)	(0.0239)
Edu	0.0410***	0.000531	0.123***	0.0380***
	(0.0101)	(0.0110)	(0.0102)	(0.0104)
Sta	0.573***	0.580***	0.547***	0.676***
	(0.0123)	(0.0147)	(0.0126)	(0.0133)
Mari	-0.111***	-0.109***	-0.131***	-0.106***
	(0.0200)	(0.0226)	(0.0204)	(0.0204)
Hea	0.445***	0.386***	0.387***	0.293***
	(0.0111)	(0.0122)	(0.0112)	(0.0119)
Size	-0.0297***	0.0134*	-0.00774	-0.0126*
	(0.00615)	(0.00744)	(0.00681)	(0.00702)
Linc	0.415***	0.162***	0.179***	0.436***
	(0.0313)	(0.0226)	(0.0202)	(0.0300)
Pseudo R2	0.0753	0.0633	0.0673	0.0668
Observed number	25810	20925	25764	25931

a. Note: ***, **, * respectively indicate the significant level of 1%, 5% and 10%,The values in parentheses are standard errors

VI. CONCLUSION AND POLICY RECOMMENDATIONS

A. Conclusion

Based on CFPS data from 2010 to 2016, this paper uses the Ordered Logistic model to analyze the impact of housing loans and other loans in family liabilities on residents' subjective well-being. The results of empirical analysis show that: (1) there is a significant correlation between housing loans and residents' subjective well-being in family debt; And before 2014, housing loans have a significant effect on the subjective well-being of residents by increasing the satisfaction of residents' housing consumption, as well as the "wealth effect" of buying housing itself. However, after 2014, due to the sharp rise in house prices, the rise of housing loans will increase the repayment pressure of residents, thus reducing the living standards of residents and significantly reducing their subjective well-being. (2) Family & friend loans and folk loans in family liabilities can make families bear greater economic risks and inhibit the subjective well-being of residents by influencing family social relations and family living environment.

B. Policy Recommendations

According to the above research results, this paper puts forward the following suggestions: further improving the access of ordinary residents to housing credit will be of positive significance to enhance the subjective well-being of residents. At present, residents' housing credit generally chooses bank credit, the source of bank credit funds is reliable, the capital chain is stable, and the interest preference can provide long-term credit support for residents, which has a positive significance to the increase of residents' welfare effect. Secondly, when residents do not have access to formal credit, they will choose informal credit, which has a certain negative effect on residents' subjective well-being. The source of folk lending funds is unknown, and residents may fall into the lending vortex. Borrowing by relatives and friends will make residents bear debt of gratitude and contribute to a decrease in happiness. Therefore, support for formal housing credit can greatly enhance residents' subjective well-being. Third, pay special attention to the debt pressure of the lower income group, from the empirical analysis of this paper, we find that income will offset the negative impact of debt on the well-being of residents to some extent, when the increase in income is smaller than the increase in family liabilities, the subjective well-being of residents will decline significantly. For the lower income groups, through the relevant policies to further improve the level of personal income and welfare of residents.

At the same time, some suggestions are put forward to adjust the development of the real estate market in China: China's economic development depends too much on the real estate industry, housing prices have become an important index to measure the entire national economy and the wealth of residents. It is undeniable that the appreciation of real estate can significantly improve the happiness of residents, and mortgage style to buy a house has also become one of the main ways for residents to buy houses. However, the sustained rapid rise in house prices will also be a huge bubble in the entire economic market. Once the bubble bursts, house prices fall, the decline of real estate value and loan pressure will have a double impact on residents' happiness. In this context, the relevant governments need to regulate and control the rapid rise of house prices, promote the steady and healthy development of the real estate industry, prevent property speculators from disturbing the market order, according to the different levels of economic development in various regions, on the basis of maintaining the stable implementation of housing loan policies, adopt flexible and diversified loan methods to improve the liquidity of credit products. At the same time, it is necessary that actively formulating relevant policies to guide residents to formulate reasonable purchase plans, change the concept of buying houses, and provide necessary policy support for residents who have difficulty in purchasing houses; Finally, at present, China allows the commercial loan and the provident fund loan to carry on the mix to reduce the resident excessive interest expenditure, but the provident fund loan procedure is complex, the threshold is high; the government should promote the transformation from the commercial loan to the provident fund loan within the scope of the policy permission, is that more residents can buy the house in the best way, realizes the resident to have a living, the living is safe.

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