The Effect of Financial Knowledge and Risk Tolerance on the Use of Financial Planners in 2016

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Abstract

Based on analysis of the 2016 Survey of Consumer Finances, almost 42 million households, or 33%, reported using a financial planner for saving/investment or credit issues, a substantial increase over previous survey years. Based on a logistic regression on planner use, the likelihood increased with age up to 59, then decreased with age. Households with Hispanic or Asian/other respondents were less likely to use a planner than otherwise similar whites. Risk tolerance (using a new 0 to 10 point scale) was positively related to the likelihood of planner use. Both years of education and a financial knowledge score (number of correct answers to three questions) were positively related to planner use. The likelihood increased with the log of income. Homeowners were more likely than renters to use a planner. Households with a dependent child under 18 were less likely to use a planner than those without one.

Introduction

Nowadays, people always need professional advice regarding their personal finance or family finance. Michael A. Pollock suggests that most individuals will need financial advice service some time in his 2018 article for Wall Street Journal. Thus, a complete range of financial planning service is now provided on the market. T. Warschauer and D Sciglimpaglia (2012), cited previous study in 2008, summarized the financial planning service into several areas which are 1. Emergency funds 2. Debt management 3. Insurable risk reduction. 4. Investment-based risk control 5. Goal assessment 6. Tax and estate assessments. For different area of planning and different range of service, the cost and value will be different. In his 2018 article for WSJ, Michael A, Pollock states that a fee for financial planning service may range from a fixed percentage of total asset of clients for a comprehensive plan which covers all tasks to a hourly service which costs $150 to $350 per hour or a monthly payment for advice in each month in single or multiple specific area. People with different background and demographic characteristic also value financial planning service differently because of the difference in financial goals and ability to pay the cost. This study will conduct a analysis on the SCF 2016 data which include responses regarding the use of financial planners and purposed to show an overview of the factors that determine the demand for financial planner, especially the influence from financial literacy and financial risk tolerance.

Dataset and Method

The dataset I use for the study is the Survey of Consumer Finance 2016 conducted by Federal Reserve, which is the most recent SCF survey. Both a descriptive analysis and a multivariate analysis are conducted to the dataset. For the multivariate analysis, I will use a logistic regression to show the correlation between variables. And the survey could be an

The dependent variable chosen for the study is ""whether use financial planning or not, for credit and borrowing and/or savings and investments". In the SCF survey, a question regarding the response's information source on credit and borrowing decision making as well as the same question towards saving and investment decision making. Responses to this two questions will be use as the sample of the study.

A list of explanatory variables are considered into the study, including age of the head, education years of the respondent or spouse, risk tolerance, household income, presence of Children under 18, homeownership, the racial/ethnic self-identification of the respondent and financial literacy.
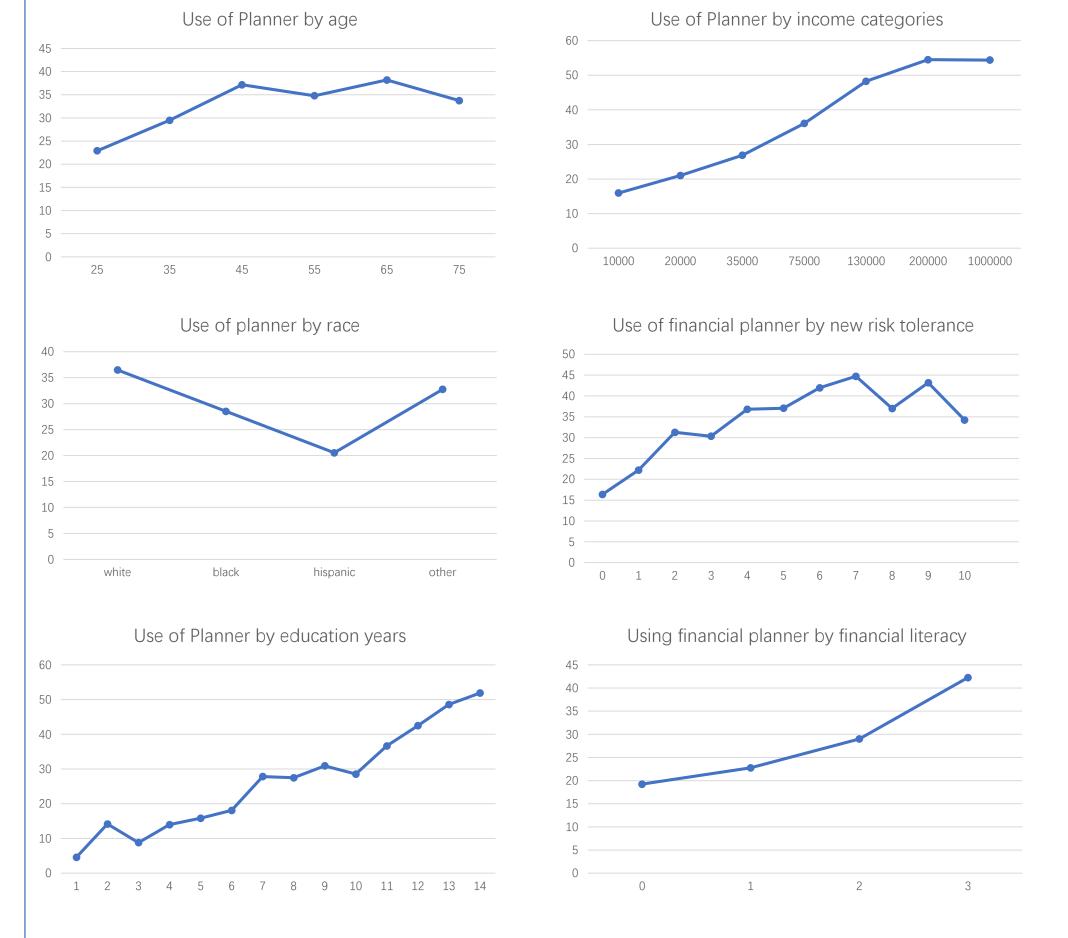
Some of these variables will be categorized. The racial/ethnic self-identification will be categorized into White, Black, Hispanic and Other. The age variable will be categorized into 6 categories for the descriptive analysis: 25:<30, 40:30-40, 45:40-50, 55:50-60, 65:60-70, 70:>=70. For the descriptive part, the income will be categorized into : if income<15190 then incomecat=10000; else if income<27342 then incomecat=20000; else if income<52658 then incomecat=35000; else if income<98024 then incomecat=75000; else if income<176200 then incomecat=130000; else if income<260249 then incomecat=200000; else incomecat=1000000.

In addition, for the multivariate analysis, the natural log of income variable will be included as well as a age squared variable (calculated by age^2/10000), in order to capture the any non-linearity of the correlation (Hanna, 2011). If the income equal to zero, log(0.01) will be used instead. The financial literacy variable, which is new for the survey, is defined by the number of correct answers that the respondents made towards the questions regarding the knowledge of stock risk, interest rate and inflation.

Results

Descriptive results:

For the overall level of using financial planners, 33.23% of response to SCF 2016 claimed using of financial planners for credit and borrowing purpose or/and saving and investment purpose. The graphs below will show the using of financial planners by each explanatory variables.

Multivariate Results:

Use of financial planner by characteristics					
Variables	DF	coefficient	Standard	Wald	P-value
			Error	Chi-Square	
Intercept	1	-4.6031	0.3087	222.295	<.0001
Age	1	0.0422	0.0107	15.4559	<.0001
Age Squared	1	-3.5831	0.9824	13.303	0.0003
log(income)	1	0.0749	0.0146	26.1165	<.0001
Race (White)					
black	1	-0.0856	0.0889	0.9269	0.3357
hispanic	1	-0.3337	0.1103	9.1538	0.0025
other	1	-0.267	0.128	4.3509	0.037
Child under 18	1	-0.0865	0.0692	1.5625	0.2113
homeownership	1	0.4188	0.0724	33.4314	<.0001
education years	1	0.1119	0.0122	83.511	<.0001
financial literacy	1	0.1973	0.0382	26.6834	<.0001
new risk tolerance	1	0.0651	0.0107	36.7864	<.0001

The table above shows the results of the logistic regression for the using of financial planner by each characteristics. Overall, what the outputs show matches what I observed in the descriptive results for most variables. The positive coefficient show the positive correlation between the dependent variable and independent variables while the negative coefficient represents the negative correlation. The p-value here show the significance of the results.

Implication and conclusion

Both descriptive analysis and multivariate analysis suggests that people with lower financial risk tolerance are less likely to hire a financial planner compared with people with higher risk tolerance in overall. But for people with extreme high level of risk tolerance, in this study, higher than 7 out of 10 points, the possibility of hiring a financial planner is relatively lower compared with the group of mid-level of risk tolerance (4-7 out of 10). A possible reason is people with higher risk tolerance may take more action on either borrowing or investing but in the case of extreme high risk tolerance group, those people are willing to take the risk of planning their finance by themselves without professional advising. Since for this study, I combined two separate use of financial planner (for credit and borrowing/ for spending and investment) into a whole measurement, I think further study should be conducted to show if the influence of financial risk tolerance would be different depending on the purpose of use of financial planners.

The new financial literacy variable in SCF 2016 has a positive influence on the use of financial planners, as I expected. It could be easily explained by that people with higher financial literacy may have more knowledge and understanding on the importance of the financial planning industry and the necessarity of service in information seeking and decision making to achieve financial goals. In order to benefit the industry, more promotion or financial education should be conducted to increase the overall level of financial literacy.

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