AN EMPIRICAL ANALYSIS OF CONSUMER FINANCIAL DECISIONS AND RISK AVERSION

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Abstract

This study evaluates the relationships between risk aversion and the economic and demographic factors that are expected to be related to risk aversion. Unlike previous studies that relate risk aversion to individual factors in a cross-sectional setting, this study uses panel data from the Survey of Consumer Finance that captures financial and demographic data for the same family over two distinct time periods (1983 and 1989). The results indicate that individuals who are risk averse tend to be older, less educated, and have lower incomes. Additionally, the risk averse group is more likely to have insurance when compared with respondents who are willing to hold higher financial risk. Using a measure that captures preferential changes for lower risk across time, the results indicate that individuals who have become more risk averse suffered a greater decline in assets than individuals whose risk preferences remain unchanged. The dynamic model results also show that newly self-employed and newly widowed were more likely to have become more risk averse.

1. Introduction

The question of how human behavior is affected by risk has long been of interest to academics. At the theoretical level, research has considered measures of risk aversion (e.g., Pratt, 1964) and the relationship between various types of risk aversion and changes in wealth positions. Theoretical research has also employed risk aversion to explain why some individuals would prefer to pay a risk premium in order to gain certainty about the level of future wealth. Empirical research related to risk aversion has primarily focused on the magnitude of risk aversion as it relates to wealth, increasing relative risk aversion, and the relationship between risk aversion and demographic variables (e.g. Halek and Eisenhauer, 2001, Mankiw (1985)). However, these prior studies tend to use estimates of risk aversion or self-reported measures that are not directly related to financial risk.[1]

This study extends the prior literature by evaluating factors related to self-reported financial risk preference (or aversion). Moreover, unlike previous studies that relate risk aversion to

[1] For example, the HRS survey asked questions such as whether the respondent would be willing take a new job based on prescribed probabilities of success or failure.

individual factors in a cross-sectional setting (e.g. Halek and Eisenhauer, 2001), this study uses panel data from the Survey of Consumer Finance that captures financial and demographic data for the same family over two distinct time periods (1983 and 1989). As part of the SCF survey, respondents are asked identify whether he/she is willing to accept no financial risk, average financial risk, above average financial risk , or high financial risk. These responses serve as the basis to evaluate the factors that are associated with self-identified levels of risk aversion.

The purpose of this study is to evaluate the relationships between risk aversion and the economic and demographic factors that are expected to be related to risk aversion. The dependent variable used in this study represents a respondent's stated preference for risk (level of risk (financial) that the respondent is willing to bear). The results indicate that individuals who are risk averse tend to be older, less educated, and have lower incomes. Additionally, the risk averse group is more likely to have insurance when compared with respondents who are willing to hold higher financial risk. The paper also provides unique insights into how changes in demographics and financial status impact on changes in risk aversion. Using a measure that captures preferential changes for lower risk, the results indicate that individuals who have become more risk averse suffered a greater decline in assets than individuals whose risk preferences remain unchanged.[2] The dynamic model results also show that newly self-employed and newly widowed were more likely to have become more risk averse.

The next section of the paper briefly reviews the prior research related to risk aversion. The hypotheses to be tested in this paper and a description of the data and methodology are provided in the following section. The article continues with a discussion of the empirical results and concludes with summary of the important findings of the paper.

2. Related Literature

[2] This group would also include respondents whose appetite for risk increased in 1989.

Pratt (1964) and Arrow (1965) suggested the elasticity of marginal utility with respect to wealth, or $R(W) = -WU''(W)/U'(W)$, as an appropriate measure of relative risk aversion, where U is a concave utility function defined over wealth of W. Pratt showed that $R(W)$ is proportional to the insurance premium one is willing to pay to avoid a given risk. Arrow demonstrated that $R(W)$ is directly related to one's insistence on favorable odds when putting some fraction of wealth at risk. Both Pratt and Arrow hypothesized that $R(W)$ increases with W, implying that at higher levels of wealth, individuals become less willing to subject a given percentage of wealth to risk. As mentioned, empirical research has focused on three main areas: the magnitude of $R(W)$, the IRRA hypothesis, and the relationship between risk aversion and demographic variables.

Some of the earliest empirical estimates of risk aversion occurred in the mid-1970s. Friend and Blume (1975) concluded that $R(W)$ generally exceeds unity and is probably greater than 2 after examining the demand for risky assets. At about the same time, Weber (1975) estimated $R(W)$ to lie within a range from 1.3 to 1.8 using expenditure data. Szpiro (1986) obtained a similar range of 1.2 to 1.8 using aggregate time-series data on property insurance. In a time-series study of consumption, Hansen and Singleton (1982) found relative risk aversion parameters ranging from .35 to 1.0. A subsequent study of investments by Hansen and Singleton (1983) yielded relative risk aversion estimates as low as –0.359 and as high as 58.25, although most fell between 0.26 and 2.7. Mankiw (1985) obtained relative risk aversion estimates ranging from 2.44 to 5.26 for nondurable consumption and from 1.79 to 3.21 for durable goods consumption. Finally, Meyer and Meyer (2005) provide an excellent discussion of the impact different outcome variables, such as wealth or consumption, may have on relative risk aversion measurements. They conclude that once these differences are accounted for, the variation in reported relative risk aversion measures reduces significantly.

The IRRA hypothesis is another question investigated in much prior work with little consensus in the findings. As Meyer and Meyer (2005) indicate, results appear sensitive to the outcome variable of the utility function (i.e. the measurement of wealth). For example, Cohn et al. (1975) examined a cross-section of individual investors' portfolio choices and found strong evidence of decreasing relative risk aversion (DRRA) when using a gross wealth measure that excluded liabilities. Siegel and Hoban (1982) replicated the Cohn et al. study using net worth, and found that relative risk aversion was constant if wealth was defined to exclude housing. However, this result hid differences across subgroups: the wealthiest exhibited DRRA while the least wealthy exhibited IRRA. When broad, non-marketable assets were included, both subgroups displayed IRRA. Similar discrepancies are found throughout the literature, although theoretical applications usually assume either CRRA or IRRA.[3]

A growing area of research explores differences in risk preferences across demographic groups. This topic bridges the fields of psychology, sociobiology, demography, economics and decision sciences. Both the natural and social sciences theorize that risk attitudes differ across demographic lines and that cultural factors influence individuals' attitudes.[4] Many empirical studies, some based on survey data and some based on hypothetical questions regarding uncertain outcomes, have generally found women to be more risk averse than men (Levin, Snyder and Chapman (1988), Powell and Ansic (1997), Jianakoplos and Bernasek (1998), and Schubert et al. (1999)). Studies using hypothetical questions often found that the "framing" of questions is critical – i.e. whether a question is posed as a potential gain or a potential loss. Results by Jianakoplos and Bernasek (1998) and Sunden and Surette (1998) show that gender differences in risk aversion are further impacted by race, the presence of children and marriage. Demographic variables outside of gender may also be associated with risk aversion. Riley and

[3] A non-exhaustive list of prior research that investigates the IRRA hypothesis includes the following: Friend and Blume (1975), Morin and Suarez (1983), Szpiro (1983, 1986), Bellanti and Saba (1986), and Levy (1994).
[4] For a sample of detailed discussions, see Geis (1993), Trimpop (1994) and Zuckerman (1994).

Chow (1992) examined individual asset allocation and found risk aversion to decline with wealth, education, and age, until age 65, at which risk aversion increases. Zuckerman (1994) also found differences by age, nationality, race, socioeconomic status and marital status, as well as gender, using a psychological questionnaire. Hersch (1996) examined nonfinancial risk/safety decisions to determine that risk aversion is higher among females, whites, the wealthy, and the better educated. Eisenhauer and Halek (1999) found that age, education, marriage, and children living at home were significantly correlated with the demand for term life insurance, and consequently prudence and risk aversion. They also found evidence of increasing absolute risk aversion (IARA), which implies IRRA. In a study using semiparametric estimation techniques on Dutch household survey data of hypothetical questions on lotteries, Donkers, Melenberg, and Van Soest (2001) found significant relationships between answers to the lottery questions and age, gender, income, and education level.

Finally, Barsky, et al. (1997) and Halek and Eisenhauer (2001) addressed all three of the aforementioned research areas. Using answers to hypothetical survey questions on speculative risk-taking, Barsky et al. (1997) calculated upper and lower bounds on relative risk aversion and its inverse, risk tolerance. They obtained mean estimates of relative risk aversion for four groups (with different risk preferences) ranging from 0.7 to 15.8, with an infinite upper bound (assuming CRRA for each group). They also found significant differences in risk aversion by age, gender, race, religion, nationality, and behaviors such as smoking and drinking, as well as by cross-sections of wealth levels. Halek and Eisenhauer (2001) used household term life insurance data to estimate a mean and median risk aversion level of 3.74 and 0.89, respectively, across households, and found evidence of both IRRA and DRRA, contingent on wealth estimates. The relationship between demographic variables and both risk aversion and speculative risk-taking was also examined.

As the preceding survey suggests, there is limited consensus and few generalizations from the existing literature regarding the magnitude of relative risk aversion, its behavior with respect to wealth, or its differences across demographic subgroups. The model and estimation below outline another approach to the estimation of individual risk aversion parameters, and provide a comparison of pure and speculative risk preferences for the same set of individuals. Ultimately, this study attempts to explain some of the inconsistent findings of previous research.

3. Data and Methodology

We investigate the factors that are related to risk aversion by examining household survey data from the 1983-1989 Survey of Consumer Finances (SCF) panel study. The 1983-1989 panel study is the only source of panel data in the history of the SCF. In the 1989 survey, 1,479 households that participated in the 1983 survey were re-interviewed. As noted above, the survey captures data from a variety of categories including financial, demographic, life-cycle, and of relevance to this study: appetite for risk. While there are other surveys that capture information on attitudes towards risk (e,g, University of Michigan Health and Retirement Study), the data in the SCF survey is valuable as the respondents classify themselves as it relates to financial risk.

The SCF panel data have been used in a number of papers, (e.g., Liebenberg et al, 2010; Liebenberg, Carson, and Hoyt, 2009; Dynan Skinner, and Zeldes, 2004; Bertaut, 1998). Liebenberg et al. (2009) demonstrated that using this type of panel data may provide a clearer indication of the important relationships between events and financial solutions than in just using cross-sectional survey data.

Table 1 provides a list and description of the variables used in this study. The first set of variables in this table show the four categories of risk tolerance that the survey respondents can select from. The second grouping provides a list of the demographic variables, while the third

and fourth grouping provides the insurance and financial variables used in this study. Insurance is separated out into its own group as it is a variable of interest in this study.

[INSERT TABLE 1 HERE]

As risk aversion is often provided as a reason why individuals are willing to pay additional costs beyond the expected loss (i.e., the risk premium) when purchasing insurance, this study allows for a closer examination of the relationship between self-classified risk and insurance holdings. One measure of insurance holdings is the variable XFACE that represents the multiple of income that is replaced by life insurance in the event of death. If risk aversion plays a significant role in purchasing behavior for life insurance, then one would expect that more risk averse individuals carry higher coverage ratios then individuals who are less risk averse.

The literature provides testable hypotheses regarding the demographic and financial variables. We would expect that individuals who have classified themselves as risk-averse would be older and have less education than individuals who see themselves as less risk averse. We also would expect the risk-averse individual to carry less debt than individuals who are willing to bear more risk and to hold less risky assets in his or her portfolio. Halek and Eisenhauer (2001) find that self-employed individuals are more risk averse and given the increased risk of business failure for self-employed individuals and the exposure to individual wealth for self-employed individuals who have organized the business as a sole proprietorship, we would expect self-employed individuals who participated in the SCF survey would classify themselves as risk averse.

4. Empirical Results

4.1 Descriptive Statistics

Table 2 provides summary statistics for the static variables used in this study (years 1983 and 1989) well as from the dynamic variables (i.e., change from 1983 to 1989). Looking at how the respondents classified themselves in 1983, the majority of respondents (41 percent) indicated

that they were willing to hold an average level of risk while approximately 32 percent of the sample indicated that they were risk averse (i.e,. unwilling to hold any financial risk). The smallest risk group in 1983 was the high risk group (7.6 percent). While the average risk group still contained the largest group of respondents in 1989, the risk-averse category was almost 12 percent larger in 1989 than it was in 1983 while the high-risk group decreased to just over 3 percent of the respondent group in 1989. It is important to note that the respondents in 1989 are the same individuals who completed the survey in 1983.[5]

[INSERT TABLE 2 HERE]

The summary statistics for 1983 show that the respondents were predominately white (87 percent) and married (73.7 percent). The average age of the respondent was just over 51 years and 43.5 percent of the households (respondent or spouse) had attended college. During the six year period from 1983 to 1989, the average number of children in the household declined from 1.05 children to 1.02 children.

Considering insurance holdings, the respondents reported that on average, they carried life insurance at just over 1.68 times their income in 1983 and this increased to almost 1.9 times income in 1989. Both are well short of the typical recommend coverage amounts of five or six times income but the data also include a number of respondents who do not carry life insurance. In 1983, just over 55 percent of the respondents indicated that they had term insurance while 53 percent indicated that they owned whole life insurance. For 1989, respondents owning term insurance increased to approximately 61.2 percent while the number of respondents who owned whole life insurance decreased to 48.6 percent. Respondents reported average term insurance coverage of $95,899 in 1983 and $129,412 in 1989 and average whole life coverage of $55, 190 in 1983 and $74,320 in 1989.

[5] There would be differences in household changes based on whether the respondent married, divorced, or the spouse died during the six year period.

Table 3 provides a means comparison between the risk averse and higher risk groups for 1983 and 1989. As the results in Table indicate, there are significant differences between these two groups across most of the variables used in this study. In comparison with the higher risk group in 1983, the NORISK group is on average older (52.3 years versus 50.5 years) and more ethnically diverse (79.7 percent white versus 90.3 percent). The percentage of respondents who are married is lower for the NORISK group (64 percent versus 78 percent) and a much smaller percentage of the NORISK group has completed coursework at the college level (19.2 percent versus 54.9 percent).

[INSERT TABLE 3 HERE]

These two groups exhibit very different behaviors related to life insurance as the NORISK group well as approximately than 49 (44) percent of the NORISK group owns term (whole) life insurance as compared roughly 58 percent of rest of the sample that owns either term or life insurance. The NORISK group carries significantly lower coverage levels of either term insurance ($24,477 versus $129,481) or whole life insurance ($18,929 versus $72,239).

For the financial variables shown in Table 3, similar differences also exist as the mean values for the NORISK are significantly smaller based on income ($42,899 versus $161,214) and net worth ($321,299 versus $1,780,850). Fewer of the NORISK group own fewer homes (75 percent versus 82 percent), less stock ($7,851 versus $400,516), and a smaller percentage are self-employed. Given the wealth factors and indicated risk preference, it is not surprising to see that the NORISK group holds less debt on average ($12,156 versus $97,963).

In comparing the two groups in 1989, the differences are similar to those noted above for 1983. However, there are two mean differences worth noting in 1989. The first is that the average life insurance coverage held by the NORISK group is significantly smaller (1.43 times income versus 2.26 times income). Likewise, the percent of the NORISK respondents owning a

home decreased in 1989 by three percent to 75.1 percent while the percent that owned homes in the rest of the sample increased from 81 percent in 1983 to 85 percent in 1989.

[INSERT TABLE 4 HERE]

Given panel nature of this data set, this paper also focuses on dynamic factors that impact on risk aversion over time. Table 4 provides information on how the composition of the NORISK and HIRISK categories changed from 1983 to 1989. The percent of respondents selecting NORISK increased by approximately 11.8 percent during this period with the HIRISK category declined by just over 4.5 percent. It is interesting to note that even though the majority of respondents (69.7 percent for NORISK and 91.1 percent for the HIRISK) did not change over this time period, there was movement to and from both categories. In particular, there was a significant movement towards a preference for risk aversion as the NORISK category increased by over 21 percent between 1983 and 1989. While one would expect a natural movement towards lower risk given the change in age (respondent was six years older), it is likely that other factors impacted on the respondent group during this time period. One likely possibility would be the stock market collapse of October, 1987.

4.2 Regression Results

Table 5A provides results on a static basis for 1983 and 1989. There were 1479 households who responded to the SCF survey in 1983 and 1989 and the pseudo-R^2 was 20.2 percent in 1983 and 21.8 percent in 1989. The dependent variable used in the logit models in Table 5A is NORISK (1 if the respondent is not willing to accept any financial risk, 0 otherwise). Of the demographic variables described above, AGE behaves as expected and is positive and significant in both models. The number children in the household was positive and significant in 1983 but not in 1989. The coefficient on the COLLEGE variable is negative and significant for both model years indicating that those with less education are more risk averse.

Of the insurance variables, GOTERM in 1983 was positive and significant indicating that more risk averse respondents were more likely to own term insurance. The term coverage amount variable (LNTERMAMT) was negative and significant indicating that while risk averse individuals were more likely to carry term insurance, they were carrying lower amounts of coverage. For the 1989 model, the coefficient on the GOTTERM variable was still positive, but it was no longer significant. The other change for the insurance variables in 1989 was that the results on the GOTWHOLE and LNWHOLEAMT were similar to GOTERM and LNTERMAMT in 1983.

Of the economic variables included in the model, the income measure (LNINCOME) was negative and significant in both model years indicating that the risk-averse respondents were more likely to be lower income. While the sign on the wealth measure (LNNETWORTH) was negative as hypothesized, neither model year result was significant. The coefficient for the DEBT variable was significant in both years (negative in 1983 and positive in 1989) but coefficient in both models years was very small. The same was true for the STOCK in 1983. For the remaining variables, HOME was positive and significant in 1983 while SELFEMP was negative and significant indicating that individuals who owned homes in 1983 or were not self-employed were likely to be more risk-averse.

[INSERT TABLE 5B HERE]

Table 5B provides the logit regression results based on changes that occurred between 1983 and 1989. The dependent variable in this model captures the change towards risk aversion during this period. Change here reflects movement from a higher risk category in 1983 to a lower risky category in 1989. There were 968 observations based on change variables and the Pseudo R^2 was 016.

Of the variables in the logit model, the coefficient on the variable PCTCHGASST was negative and significant indicating that individuals who became more risk averse during the six

year period were likely to have seen and decline in ASSETS between 1983 and 1989. The results on two of the change-in insurance variables indicates that people who became more risk averse were less likely to drop their term coverage but they also were less likely to purchase new term insurance. Similar to the findings of Halek and Eisenhauer, we find a positive relationship between becoming more risk-averse and being newly self-employed. Of the life cycle or life event variables, the NEWWIDOW variable was positive and significant indicating that individuals who lost a spouse during this time period wore likely to have more risk-averse.

5. Summary

This study uses Survey of Consumer Finance panel data to evaluate the relationships between risk aversion and the economic and demographic factors that are expected to be related to risk aversion on a static and dynamic basis. For the static models, the results indicate that individuals who are risk averse tend to be older, less educated, have lower incomes, but are more likely to have life insurance when compared with respondents who are willing to hold higher financial risk. Using a measure that captures preferential changes for lower risk across time, the results indicate that individuals who have become more risk averse suffered a greater decline in assets than individuals whose risk preferences remain unchanged. The dynamic model results also show that newly self-employed and newly widowed were more likely to have become more risk averse.

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Table 1 **Description of Variables***	
Measures of Risk Preference	
NORISK	1 if “no financial risk” selected in 1983 (1989), 0 otherwise
AVGRISK	1 if ‘average financial risk” selected in 1983 (1989), 0 otherwise
ABAVGRISK	1 if “above average financial risk” selected in 1983 (1989), 0 otherwise
HIGHRISK	1 if “high financial risk” selected in 1983 (1989), 0 otherwise
MORE_RA	1 if more risk averse in 1989 than 1983, 0 otherwise
Demographic or Life Cycle	
AGE	Respondent age in 1983 (1989)
WHITE	1 if race is white, 0 otherwise
MARRIED	1 if married in 1983 (1989), 0 otherwise
KIDS	Number of children in household in 1983 (1989)
NEWKIDS	1 if new children after 1983, 0 otherwise
COLLEGE	1 if respondent or spouse has education beyond high school, 0 otherwise
NEWSEPARATE	1 if newly separated in 1989, 0 otherwise
NEWDIVORCE	1 if newly divorced in 1989, 0 otherwise
NEWWIDOW	1 if newly widowed in 1989, 0 otherwise
Financial	
LNNETWORTH	Natural log of net worth for 1983 (1989)
LNINCOME	Natural log of income for 1983 (1989)
STOCK	Amount of stock holdings for 1983 (1989)
DEBT	Amount of debt for 1983 (1989)
INTHERIT	Inheritance expected for 1983 (1989)
HOME	Own Home in 1983 (1989)
SELFEMP	Self-employed in 1983 (1989)
NEWSELFEMP	1 if newly self-employed after 1983, 0 otherwise
BEQUESTL89	1 if large bequest expected in 1989
PCTCHGASST	Percent Change in Assets, 1983 to 1989
PCTCHGNW	Percent Change in Net Worth, 1983 to 1989
PCTCHGDEBT	Percent Change in Assets, 1983 to 1989
Insurance	
XFACE	Total Life Insurance Coverage/Income in 1983 (1989)
GOTTERM	1 if term insurance owned in 1983 (1989), 0 otherwise
GOTWHOLE	1 if whole life insurance owned in 1983 (1989), 9 otherwise
LNTERMAMT	Natural log of the term insurance coverage amount for 1983 (1989)
LNWHOLEAMT	Natural log of the whole life coverage amount for 1983 (1989)
DROPTERM	1 if Term Insurance in 1983 but not in 1989, 0 otherwise
DROPWHOLE	1 if Whole Life Insurance in 1983 but not in 1989, 0 otherwise

CHANGE XFACE	Percent change in life insurance coverage to income, 1983 to 1989
***Variables in bold are two period change variables (1983 to 1989)**	

Table 2
Descriptive Statistics: Static Variables
N=1479

	1983		1989	
Variable	Mean	Std. Dev.	Mean	Std. Dev.
NORISK	.3198	.4666	.4375	.4962
AVGRISK	.4097	.4920	.4348	.4959
ABAVGRISK	.1657	.3719	.0967	.2956
HIGHRISK	.0764	.2657	.0311	.1737
AGE	51.1237	14.6858	57.5071	14.4575
WHITE	.8688	.3377	.8688	.3377
MARRIED	.7370	.4404	.6822	.4658
KIDS	1.0541	1.2625	1.0176	1.2260
COLLEGE	.4348	.4959	.6065	.4887
XFACE	1.6828	7.3760	1.8956	5.3014
GOTTERM	.5544	.4972	.6119	.4875
GOTWHOLE	.5321	.4991	.4861	.5000
TERMAMT	95899.7	305624.1	129412.1	504473.5
WHOLEAMT	55190.0	281053.3	74320.22	281422.8
NETWORTH	1314070	4898206	2017495	6322662
INCOME	123375.9	289474.6	163343.1	522854.3
INHERIT	.1433	.3505	.1738	.3790
HOME	.7965	.4027	.7965	.4027
SELFEMP	.1941	.3956	.2319	.4222
STOCKS*	274937.8	1895104.0	343115.2	1971976.0
DEBT	70521.0	344308.9	63221.4	214134.2

Table 3
Means Comparison by NORISK Classification

	1983			1989		
Variable	**NORISK=0**	**NORISK=1**	**MEANDIF**	**NORISK=0**	**NORISK=1**	**MEANDIF**
AGE	50.534	52.378	-1.845**	55.987	59.462	-3.475***
WHITE	.903	.797	.106***	.916	.808	.108***
MARRIED	.781	.643	.139***	.794	.538	.257***
KIDS	1.032	1.101	-.070	1.061	.961	.100
COLLEGE	.549	.192	.356***	.766	.402	.364***
XFACE	1.655	1.742	-.087	2.260	1.428	.832***
GOTTERM	.585	.488	.097***	.645	.569	.077***
GOTWHOLE	.575	.442	.133***	.552	.402	.150***
TERMAMT	129481.2	24476.8	105004.4***	198845.8	40125.0	158720.9***
WHOLEAMT	72239.0	18929.4	53309.6***	114075.2	23197.8	90877.4***
NETWORTH	1780850.0	321298.6	1459551.4***	2992699.0	763444.7	2229254.3***
INCOME	161214.5	42898.8	118315.8***	239841.6	64970.9	174870.7***
INHERIT	.168	.091	.077***	.222	.111	.111***
HOME	.818	.751	.068***	.850	.728	.122***
SELFEMP	.233	.112	.121***	.313	.128	.184***
STOCKS*	400516.0	7851.9	392664.1***	548922.8	78460.1	470462.7***
DEBT	97962.810	12156.3	85806.5***	97982.3	18521.2	79461.1***

Statistical significance at the 1, 5, and 10 percent levels is denoted by ***, **, and * respectively.

Table 4
Descriptive Statistics:
Changing Risk Aversion Preferences (1983 to 1989)

	Increase	Unchanged	Decrease	Net Change
NORISK	21.03%	69.71%	9.26%	+11.77%
HIRISK	2.16%	91.14%	6.69%	-4.53%

Table 5A
Regression Results: Static Model
Dependent Variable= Highly Risk Averse
N=1479

	Year=1983			Year=1989		
Variable	**Coeff.**	**Std.Err**	**P>(z)**	**Coeff.**	**Std.Err**	**P>(z)**
CONSTANT	2.32073	.98286	.01800	4.83871	.88521	.00000
AGE	.01220**	.00582	.03600	.01461***	.00550	.00800
WHITE	-.05155	.18033	.77500	-.13827	.19030	.46700
MARRIED	.13857	.15923	.38400	-.20253	.15173	.18200
KIDS	.17165***	.05717	.00300	.08413	.06038	.16400
COLLEGE	-.43047***	.16341	.00800	-.42472***	.14578	.00400
XFACE	.02931	.03612	.41700	.00615	.01274	.62900
GOTTERM	1.91633***	.71588	.00700	.77515	.60392	.19900
GOTWHOLE	.52527	.73021	.47200	1.66494**	.66828	.01300
LNTERMAMT	-.22056***	.07563	.00400	-.09336	.05940	.11600
LNWHOLEF	-.08460	.07735	.27400	-.16635**	.06604	.01200
LNNETWORTH	-.04136	.03280	.20700	-.04271	.03384	.20700
LNINCOME	-.28986***	.10426	.00500	-.42860***	.09437	.00000
STOCK	.00000**	.00000	.02800	.00000	.00000	.79500
DEBT	-.00001***	.00000	.00100	.00000**	.00000	.02000
INTHERIT	-.18369	.20831	.37800	-.25972*	.14419	.07200
HOME	.46259**	.18469	.01200	-.09605	.18116	.59600
SELFEMP	-.38178**	.18940	.04400	-.12621	.16607	.44700
Pseudo R^2	.2027			.2182		

Note: Data are from the 1983-1989 Survey of Consumer Finances panel survey. Variables are defined in Table 1. Statistical significance at the 1, 5, and 10 percent levels is denoted by ***, **, and * respectively.

Table 5B Regression Results: Dynamic Model Dependent Variable= Increased Risk Aversion N=968			
Variable	**Coeff.**	**Std.Err**	**P>(z)**
CONTSTANT	-.39313	.36444	.281
PCTCHGASST	-.00065**	.00038	.087
PCTCHGNW	.00006	.00012	.604
PCTCHGDEBT	-.00001	.00002	.659
DROPTERM	-.40925**	.20244	.043
DROPWHOLE	.14364	.19202	.454
NEWTERM	-.34494*	.19465	.076
NEWWHOLE	.25302	.21218	.233
AGE89	-.00553	.00621	.373
NEWSELFEMP	.36437*	.19726	.065
BEQUESTL89	.16804	.14312	.240
CHANGE XFACE	.00113	.00176	.519
NEWMARRIED	-.10336	.39557	.794
NEWSEPARATE	.61759	.59287	.298
NEWDIVORCE	.03187	.38339	.934
NEWWIDOW	.66668**	.33082	.044
NEWKIDS	-.05499	.14418	.703