

Appendix A Background Information (For Online Publication)

A.1 Original Questions For Outcomes

Surveys	Authors	Variables	Papers
2	Kimball et al. (2007)	Live Longer 85	Measuring time preference and the elasticity of intertemporal with web surveys
5	Lusardi and Mitchell (2007)	Health	Financial Literacy and retirement Planning: new evidence from the Rand American Life Panel
10	Dominitz et al. (2007)	BetaDelta, Delta	Future Beneficiary Expectations of the Returns to Delayed Social Security Benefit Claiming and Choice Behavior
11	Dominitz et al. (2008)	BetaDelta	How Do Mutual Fund Fees Affect Investor Choices ? Evidence from Survey Experiments
14	Binswanger and Schunk (2012)	BetaDelta	What is an adequate standard of living during retirement?
33	Binswanger and Carman (2012)	BetaDelta, Delta, Smoking	How real people make long-term decisions: The case of retirement preparation
57	Chakrabarti et al. (2013)	Any Stock, Pay Off Debt	Household Debt and Saving during the 2007 Recession
133	Winter and Wuppermann (2014)	Alcohol, Moderate Exercise Time, Fruit Vege, Cereal Fiber, Go to Doctor Routinely, Low Dose of Aspirin, Smoking	Do you they what's at risk? Health risk perception among the obese
189	Burke and Hung (2016)	BetaDelta, Delta	Trust and Financial Advice
193	Brown et al. (2012)	Health	Long-Term Care Insurance Demand Limited By Beliefs About Needs, Concerns About Insurers, And Care Available From Family
212	Barcellos and Carvalho (2012)	Beta, Delta	Self-control awareness and intertemporal choice behavior: evidence from a randomized experiment
263, 235	Carvalho et al. (2016a)	Beta, Delta, Pay Bill Full, Paycheck to Paycheck	Poverty and economic decision-making: evidence from changes in financial resources at payday
284	Lusardi and Mitchell (2014)	Payday loan	The economic importance of financial literacy: theory and evidence
348	Barcellos et al. (2014)	Medical Insurance	Preparedness of Americans for the Affordable Care Act
399	Goda et al. (2019)	BetaDelta, Delta, Bankruptcy, Retirement Savings Amount	Predicting retirement savings using survey measures of exponential-growth bias and present-bias

- Health

Would you say your health is excellent, very good, good, fair or poor?

 - Excellent
 - Very good
 - Good
 - Fair
 - Poor

- Any Stock

Do you have any shares of stock or stock mutual funds? Please include stocks that you hold directly and any stocks that you hold in any employer pension accounts or in other retirement accounts such as IRA's

 - Yes
 - No

- Live Longer 85

What is the percent chance that you will live to be 85 or more?

 - Range: 0-100

- Bankruptcy

You declared bankruptcy

 - Yes
 - No

- Pay Off Debt

Last month did you pay off all your credit card debt or was there an unpaid debt that you carried over to this month?

 - Paid off all
 - Carried over unpaid debt

- Checking Saving Amount

Checking or savings accounts or money market funds: Do not include any assets you reported earlier, for example under retirement accounts

- Retire Savings Account

Do you have any employer-provided retirement accounts? These include any Defined Benefit or Defined Contribution plan (for instance 401(*k*)/403(*b*), profit-sharing, stock purchase, cash balance, or combination plans).

- Yes
 - No
 - Don't know
- Pay Bill Full

How do you typically pay on your credit card bills?

 - I pay off my balance in full each month
 - I pay less than the full balance, but more than the minimum payment
 - I make the minimum monthly payment
 - I'm typically behind on my payments
 - I don't know
- Paycheck to Paycheck

I live from paycheck to paycheck

 - Strongly agree
 - Agree
 - Neutral
 - Disagree
 - Strongly disagree
- Retire Saving Amount

Think about your savings in personal retirement accounts from all different sources, including: Individual Retirement Accounts (IRAs), Keogh accounts, 401(*k*)s, 403(*b*)s, etc. About how much total personal retirement savings do you have from all sources?
- Alcohol

How many servings of alcohol do you have on a typical day? (One serving is a can of beer, a glass of wine or a shot of liquor.)

 - None
 - 1
 - 2
 - 3 or more
- Moderate Exercise Time

How many times per week do you do some sort of moderate activity (like walking or raking the leaves) for at least 30 minutes?

 - Not at all

- 1
- 2
- 3
- 4
- 5
- 6
- 7 or more

- Fruit Vege

On average, how many servings of fruits and vegetables do you eat in a day?

- 0
- 1
- 2
- 3
- 4
- 5
- 6 or more

- Cereal Fiber

How many servings of cereal fiber or whole grain (wheat bread, whole grain pasta, brown rice, oatmeal, whole grain breakfast cereal, bran or popcorn) do you eat in a typical day? A serving is one slice of bread, 1 ounce of breakfast cereal or a cup of cooked cereal, pasta or rice.

- 0
- 1
- 2
- 3
- 4
- 5
- 6 or more

- Go to Doctor Routinely

Do you go to a doctor to have a routine examination at least twice a year?

- No
- Yes

- Low Dose of Aspirin
Do you take lowdose aspirin every day?
 - Yes
 - No

- Smoking
Do you smoke cigarettes?
 - Yes
 - Yes, but not much
 - Sometimes
 - No, never

- Payday Loan
Taken out a short term "payday" loan?
 - Never
 - 1 time
 - 2 times
 - 3 times
 - 4 or more times
 - Don't know
 - Prefer not to say

- Medical Insurance
Are you currently covered by any kind of health insurance or some other kind of healthcare plan?
 - Yes
 - No

A.2 Summary Statistics

Table A.2: Demographic Controls and Outcomes

	count	mean	sd	notes
Family Income	7054	58,108.53	42,930.89	Numerical
Calcage	7054	47.01	15.45	Numerical
<u>Gender</u>				Categorical
male	7054	0.42	0.49	
female	7054	0.58	0.49	
<u>Education</u>				Categorical
HS or Less	7054	0.24	0.43	
Some College	7054	0.26	0.44	
Assoc Degree	7054	0.13	0.33	
BA/BS Degree	7054	0.23	0.42	
Post BA/BS	7054	0.15	0.36	
<u>Race</u>				Categorical
Asian	7054	0.02	0.15	
Black/African American	7054	0.12	0.32	
American Indian	7054	0.01	0.11	
Other	7054	0.09	0.28	
White/Caucasian	7054	0.76	0.43	
<u>FICO</u>				Categorical
300	7054	0.06	0.24	
625	7054	0.06	0.23	
675	7054	0.05	0.22	
725	7054	0.11	0.31	
775	7054	0.09	0.29	
825	7054	0.06	0.24	
Missing	7054	0.57	0.49	
Health	5862	2.48	0.91	4=Excellent, 3=Very good, 2=Good, 1=Fair, 0=Poor
Any Stock	4555	0.24	0.36	Percentage
Live Longer 85	5534	45.26	25.34	0=absolutely no chance, 100=absolutely certain
Bankruptcy	4091	0.07	0.25	Binary, 0=no bankruptcy, 1=bankruptcy
Pay Off Debt	3625	0.29	0.46	Binary, 0=Carried unpaid debt, 1=paid off all debt
Checking Saving Amount	3297	7,567.45	11,795.11	Numerical
Has Retirement Savings	3604	0.49	0.50	Binary, 0=No, 1=Yes
Pay Bill Full	1389	2.44	0.68	0=Behind payment, 1=Minimum payment, 2=Less than full, 3=Pay balance full

Notes: Family Income is Winsorized at top 5%. Retirement Savings and Checking Saving Amount are winsorized for 10

Table A.2: Demographic Controls and Outcomes (Continued)

	count	mean	sd	notes
Paycheck to Paycheck	1952	3.05	1.26	4=Strongly disagree, 3=Disagree, 2=Neutral, 1=Agree, 0=Strongly agree
Retirement Savings	2605	88,242.80	133512.86	Numerical
Alcohol	2897	0.47	0.82	0=None, 1=1 serving, 2=2 servings, 3=3 or more servings
Moderate Exercise Time	2897	4.92	2.05	Times per week: 1=Not at all, 2=1 time, 3=2 times, 4=3 times, 5=4 times, 6=5 times, 7=6 times, 8=7 times or more
Fruit Vege	2895	3.71	1.44	Servings per day: 1=0, 2=1, 3=2, 4=3, 5=4, 6=5, 7=6 servings or more
Cereal Fiber	2895	3.39	1.35	Servings per day: 1=0, 2=1, 3=2, 4=3, 5=4, 6=5, 7=6 servings or more
Go to Doctor Routinely	2897	0.49	0.50	Binary: 0=no, 1=yes
Low Dose of Aspirin	2897	0.25	0.43	Binary: 0=no, 1=yes
Smoking	4383	0.46	0.97	Numerical: 0=no, never, 1=sometimes, 2=Yes, but not much, 3=Yes
Payday Loan	1879	0.21	0.76	0=never, 1=once, 2=twice, 3=3 times, 4=4 or more times
Medical Insurance	3620	0.80	0.40	Binary, 0=No, 1=Yes
Observations	7054			

Notes: Family Income is Winsorized at top 5%. Retirement Savings and Checking Saving Amount are winsorized for 10

Appendix B Temporal Stability

B.1 Related Literature

Stability has been defined in various ways. It is often measured by test-retest correlation (Wolbert and Riedl, 2013) and is also referred to as time invariance (Halevy, 2015). Chuang and Schechter (2015) comprehensively summarize the literature on time-preference and risk-preference stability, reporting the results of 25 papers. Amongst studies that have at least 100 subjects, they find test-retest correlations in the ranges of 0.09–0.68 for time preference (Kirby et al., 2002; Krupka and Stephens, 2013; Li et al., 2013; Dean and Sautmann, 2014; Meier and Sprenger, 2015) and 0.13–0.55 for risk preference respectively (Levin et al., 2007; Guiso et al., 2013; Kimball et al., 2008; Sahm, 2012; Beauchamp et al., 2017; Smidts, 1997; Schoemaker and Hershey, 1992). This considerable variation in test-retest correlation may be due to the variation in methodology and sample. For instance, Dean and Sautmann (2014) use a multiple-price list with peri-urban Malians, Wolbert and Riedl (2013) use a money-earlier-or-later (MEL) task with varying horizons on Dutch university students, and Meier and Sprenger (2015) use a multiple-price list with low-income Americans. However, since there is no study (to our knowledge) that uses repeated measures across more than one method, it is unclear what fraction of the variation in stability can be attributed to variation in methodology versus variation in sample. Our paper is the first to have repeated measures using more than one method on the same sample.

There is some research on the correlates of instability. Krupka and Stephens (2013) find that changes in the strength of the macroeconomy and changes in household income are correlated with changes in a person’s elicited time preference. Carvalho et al. (2016b) find that present bias, as measured by a MEL task, is higher before payday than after payday. Meier and Sprenger (2015) test job status, demographic variables, income change, family composition change and future liquidity change and find that none correlate with time-preference stability.

There is an extensive literature on risk preference stability. Following Zeisberger et al. (2012), stability research can be grouped into papers on stability across domains, over institutions, and over time. Whether risk preferences are stable over domains is controversial. Dohmen et al. (2011) explore risk attitudes for five domains in the German Socio-Economic Panel. They find high correlation among the domain-specific risk attitudes. Reynaud and Couture (2012) and Crosetto and Filippin (2016), using the Domain-Specific Risk-Taking instrument (Blais and Weber, 2006), corroborate their results. However, several empirical studies with field data reject the hypothesis that risk preferences are stable across contexts. Dawling et al. (2011) use insurance data to show that risk aversion is context-dependent between home and auto deductible choice. Einav et al. (2012) find instability in risk attitudes among different insurance domains.

Research that compares within-person measures of risk preference across different elicitation methods finds high instability. Isaac and James (2000) are the first to look at within-subject risk preference stability across elicitation methods. Reynaud and Couture (2012) find instability using the Holt and Laury (2002) (HL) and the Eckel and Grossman (2008) (EG)

elicitation methods. Deck et al. (2013) add “Deal or not Deal” method (Deck et al., 2008), a Balloon Analogue Risk Task (BART) (Lejuez et al., 2002), and DOSPERT. Lönnqvist et al. (2015) compares DOSPERT with HL. Both papers observe large instability. Other papers have found similar results (Berg et al., 2005; Dave et al., 2010; Deck et al., 2010; Charness et al., 2013; Mata et al., 2018).

The literature on risk-preference stability over time is less conclusive (Zeisberger et al., 2012; Baucells and Villasís, 2010; Andersen et al., 2006; Wolbert and Riedl, 2013; Smidts, 1997; Wehrung et al., 1984; Harrison et al., 2005; Schildberg-Horisch, 2018). According to Chuang and Schechter (2015) test-retest correlations of risk preference range from -0.38 to 0.68. As with the literature on time preference stability, this variation may be caused by variation in elicitation methods and variation in samples, across papers. For instance, Zeisberger et al. (2012) elicit risk preferences using certainty equivalents stated in both gain and losses with undergraduate students from Germany, Andersen et al. (2006) use a multiple-price list (MPL) with Danish adults, and Wolbert and Riedl (2013) elicit certainty equivalents on a multiple-choice task with Dutch students. Variation in both methodology and sample can contribute to the considerable variation in measured stability across papers. Our data can partially address this by keeping the sample fixed, and looking at within-method stability versus across-method stability.

B.2 Correlations

We begin by measuring the pairwise Spearman (rank) correlations between all the time preference measures. Table B.1 displays the results. Keep in mind that each correlation is computed using a different sample. The correlations show great variation, ranging from -0.18 to 0.51.¹⁵ Interestingly, the correlation between receive-format titration measures and other receive-format titration measures tend to have the highest correlations. The average is 0.31. The pay-format measures correlate modestly with each other with an average of 0.21 but quite poorly with the receive-format measures with an average of 0.02. The single real-effort measure (with real stakes) does not correlate with any of the other measures. The CTB measures do not correlate well with each other with $\rho = 0.03$. Based on average and median correlations, titration receive-format has the highest average correlations at 0.17, followed by the titration pay-format, MPL pay-format, and CTB all at an average correlation of 0.06, and real effort at 0.05. Cronbach’s α , which is a measure of the average correlation across all the measures, is 0.42.

Table B.2 shows pairwise Spearman correlation between every pair of risk measures, with correlations ranging from -0.11 to 0.56. Based on elicitation methods and contexts, we group surveys into seven categories: titration job, titration insurance, titration inheritance, Eckel & Grossman, titration ball, titration retirement savings, and multiple price list (MPL). Titration inheritance has the highest average correlation of 0.20 amongst all categories. The correlation between the titration inheritance surveys is 0.41 and 0.53, a respectable test-retest

¹⁵The correlation between Survey 125 and Survey 276 actually has a correlation of -1 but the sample is only 2 subjects.

Table B.1: Spearman Correlations of $\beta \times \delta$

	Survey11 Titration Pay	Survey14 MPL Pay	Survey248 MPL Pay	Survey10 Titration Receive	Survey276 Titration Receive	Survey125 Titration Receive	Survey126 Titration Receive	Survey189 Titration Receive	Survey399 Titration Receive	Survey263 Real Effort	Survey212 CTB	Survey263 CTB
Survey11 Titration Pay	1.00											
Survey14 MPL Pay	1088	1.00										
Survey248 MPL Pay	(0.00) 1088	1266	1.00									
Survey10 Titration Receive	0.05 (0.10) 1085	0.01 (0.65) 1095	0.05 (0.09) 1118	1.00								
Survey276 Titration Receive	-0.10 (0.62) 26	-0.10 (0.63) 27	0.07 (0.01) 1542	0.48 (0.01) 26	1.00							
Survey125 Titration Receive	0.27 (0.07) 47	0.12 (0.40) 52	-0.18 (0.09) 94	0.33 (0.02) 50	-1.00	1.00						
Survey126 Titration Receive	0.08 (0.64) 35	-0.15 (0.36) 39	0.01 (0.92) 74	0.45 (0.01) 35	0.34 (0.51) 6	1.00	1.00					
Survey189 Titration Receive	0.05 (0.17) 884	0.00 (0.91) 1005	0.06 (0.00) 2580	0.36 (0.00) 916	0.39 (0.00) 459	0.35 (0.00) 97	0.14 (0.24) 76	1.00				
Survey399 Titration Receive	0.01 (0.85) 378	-0.02 (0.71) 426	0.16 (0.00) 1237	0.35 (0.00) 387	0.33 (0.00) 607	0.25 (0.11) 43	0.51 (0.02) 22	0.43 (0.00) 930	1.00			
Survey263 Real Effort	-0.11 (0.22) 130	-0.03 (0.75) 149	0.01 (0.71) 705	0.07 (0.41) 133	-0.00 (0.95) 473	0.48 (0.07) 15	0.19 (0.46) 18	-0.06 (0.22) 447	-0.10 (0.10) 303	1.00		
Survey212 CTB	0.05 (0.13) 800	0.04 (0.26) 907	0.05 (0.01) 2603	-0.03 (0.45) 829	0.00 (0.91) 712	-0.11 (0.32) 89	0.19 (0.12) 66	-0.03 (0.11) 2351	-0.01 (0.69) 938	0.02 (0.66) 456	1.00	3091
Survey263 CTB	0.01 (0.93) 125	0.11 (0.18) 145	0.10 (0.01) 638	0.27 (0.00) 130	0.05 (0.32) 397	0.06 (0.83) 18	0.27 (0.36) 14	0.03 (0.59) 412	0.07 (0.27) 272	0.03 (0.34) 749	0.03 (0.56) 430	1.00 837
Average:	0.06	0.04	0.06	0.22	0.04	0.14	0.28	0.16	0.18	0.05	0.02	0.09
Median:	0.05	0.01	0.06	0.27	0.05	0.25	0.19	0.06	0.16	0.01	0.02	0.06
Cronbach's Alpha:	0.42											

Note: Pairwise correlation coefficients between Beta×Delta. Sample sizes reflect the intersection between the two survey samples. P-values in parentheses. Cronbach's Alpha is between all surveys.

Table B.2: Spearman Correlations of Risk Aversion

	Survey2_1 Titration Job	Survey2_2 Titration Job	Survey167 Titration Job	Survey197_h Titration Job	Survey197_a Titration Job	Survey197_i Titration Instance	Survey50 Titration Inheritance	Survey189 Titration Inheritance	Survey186 Titration Inheritance	Survey399 Ekel & Gossman	Survey243 Titration Ball	Survey338 Titration Ball	Survey339 Titration Ball	Survey118 Titration Retire Savings	Survey210 MPL
Survey2_1 Titration Job	1.00														
Survey2_2 Titration Job	0.38 (0.00)	1.00													
Survey167 Titration Job	0.33 (0.04)	0.12 (0.45)	1.00												
Survey197_h Titration Job	0.39 (0.00)	0.21 (0.00)	0.38 (0.00)	1.00											
Survey197_a Titration Job	0.31 (0.00)	0.08 (0.17)	0.27 (0.00)	0.41 (0.00)	1.00										
Survey197_i Titration Instance	0.10 (0.09)	0.02 (0.77)	0.03 (0.47)	-0.02 (0.50)	0.01 (0.58)	1.00									
Survey50 Titration Inheritance	0.20 (0.00)	0.07 (0.19)	0.24 (0.00)	0.27 (0.00)	0.25 (0.00)	-0.02 (0.51)	1.00								
Survey189 Titration Inheritance	0.34 (0.00)	0.20 (0.00)	0.26 (0.00)	0.22 (0.00)	0.22 (0.00)	-0.04 (0.08)	1.00	1.00							
Survey186 Titration Inheritance	0.21 (0.48)	0.13 (0.66)	0.02 (0.03)	0.32 (0.00)	0.21 (0.00)	-0.14 (0.06)	0.53 (0.00)	1.00	1.00						
Ekel & Gossman	0.08 (0.38)	0.01 (0.91)	0.09 (0.12)	0.08 (0.04)	0.11 (0.01)	0.01 (0.81)	0.12 (0.00)	0.07 (0.37)	1.00	1.00					
Survey243 Titration Ball	0.09 (0.37)	-0.11 (0.46)	-0.03 (0.74)	-0.02 (0.81)	-0.01 (0.89)	0.01 (0.39)	0.08 (0.08)	0.36 (0.00)	0.27 (0.00)	1.00					
Survey338 Titration Ball	-0.04 (0.54)	0.06 (0.34)	0.07 (0.13)	0.04 (0.23)	0.08 (0.00)	-0.04 (0.13)	0.12 (0.00)	0.08 (0.21)	0.19 (0.06)	0.20 (0.00)	1.00				
Survey339 Titration Ball	0 (0.22)	0 (0.51)	-0.34 (0.04)	-0.05 (0.58)	0.14 (0.63)	0.13 (0.64)	0.32 (0.14)	0.37 (0.03)	0.11 (0.39)	-0.07 (0.63)	1.00				
Survey118 Titration Retire Savings	0.11 (0.05)	-0.01 (0.86)	0.14 (0.00)	0.13 (0.00)	0.18 (0.00)	0.05 (0.06)	0.19 (0.00)	0.14 (0.00)	0.08 (0.03)	0.10 (0.04)	0.52 (0.00)	1.00			
Survey210 MPL	0.21 (0.00)	0.19 (0.00)	0.19 (0.00)	0.20 (0.00)	0.17 (0.00)	-0.05 (0.06)	0.26 (0.00)	0.28 (0.00)	0.19 (0.00)	0.12 (0.00)	0.50 (0.00)	0.09 (0.00)	1.00		
Average	0.32	0.30	0.48	0.55	0.64	0.56	0.58	0.52	0.52	0.58	0.52	0.52	0.52	0.52	0.52
Median	0.20	0.08	0.14	0.20	0.17	0.01	0.19	0.22	0.11	0.08	0.14	0.11	0.11	0.11	0.19
Cronbach's Alpha	0.20	0.08	0.14	0.20	0.17	0.01	0.19	0.22	0.11	0.08	0.14	0.11	0.11	0.11	0.19

Note: P-values in parentheses. Sample sizes reflect the intersection between the two survey samples. Cronbach's Alpha is between all surveys except survey186, survey338, and survey339.

correlation.

In Table B.1 and Table B.2, pairwise correlations have different samples and sample sizes. Table B.3 uses the time overlap sample in which all subjects responded to all six of the listed surveys. The results are consistent with those found in Table B.1. The average pay-pay and receive-receive correlations are 0.19 and 0.38 respectively while the average pay-receive correlation is only 0.04. Table B.4 uses the risk overlap sample in which all subjects responded to all nine of the listed surveys. As a whole, both the job titration and inheritance titration methods do well with average correlations of 0.20 and 0.21. Finally, Table B.5 displays the correlations between the time-preference measures and risk-preference measures.

Table B.3: Correlation of $\beta \times \delta$ for Overlap Sample

	Survey11	Survey14	Survey248	Survey10	Survey189	Survey399
Survey11 Titration Pay	1.00					
Survey14 MPL Pay	0.17 (0.00)	1.00				
Survey248 MPL Pay	0.09 (0.08)	0.27 (0.00)	1.00			
Survey10 Titration Receive	0.09 (0.08)	0.04 (0.41)	-0.01 (0.92)	1.00		
Survey189 Titration Receive	-0.01 (0.78)	0.05 (0.38)	0.02 (0.75)	0.32 (0.00)	1.00	
Survey399 Titration Receive	0.00 (1.00)	-0.00 (0.95)	0.11 (0.03)	0.33 (0.00)	0.43 (0.00)	1.00
Average:	0.07	0.11	0.10	0.15	0.16	0.17
Median:	0.09	0.05	0.09	0.09	0.05	0.11
Cronbach's Alpha:	0.47					

Note: Overlap sample includes all subjects who responded to all six of the listed surveys. p -values in parentheses. Cronbach's α is between all surveys in the table.

Performance is respectable amongst the most stable methodologies, receive-format titration and inheritance titration. Compared to the psychometric literature, a test-retest correlation of 0.3–0.4 is considered to be not terribly good. For example, the Moray House Test, a cognitive ability test used in Scotland, had an impressive test-retest of 0.73 from age 11 to age 80 (Deary et al., 2004)! Personality traits have a test-retest correlation of 0.31-0.74,

Table B.4: Correlation of Risk Aversion for Overlap Sample

	Survey167	Survey197_h	Survey197_a	Survey197_i	Survey50	Survey189	Survey243	Survey118	Survey210
Survey167 Titration Job	1.00								
Survey197_h Titration Job	0.34 (0.00)	1.00							
Survey197_a Titration Job	0.29 (0.00)	0.40 (0.00)	1.00						
Survey197_i Titration Insurance	0.05 (0.26)	0.05 (0.25)	0.09 (0.06)	1.00					
Survey50 Titration Inheritance	0.21 (0.00)	0.25 (0.00)	0.26 (0.00)	-0.02 (0.68)	1.00				
Survey189 Titration Inheritance	0.23 (0.00)	0.27 (0.00)	0.22 (0.00)	-0.09 (0.06)	0.43 (0.00)	1.00			
Survey243 Titration Ball	0.09 (0.05)	0.06 (0.22)	0.09 (0.06)	-0.04 (0.38)	0.21 (0.00)	0.16 (0.00)	1.00		
Survey118 Titration Retire Savings	0.13 (0.01)	0.06 (0.22)	0.12 (0.01)	0.08 (0.10)	0.19 (0.00)	0.07 (0.11)	0.14 (0.00)	1.00	
Survey210 MPL	0.18 (0.00)	0.25 (0.00)	0.15 (0.00)	-0.05 (0.29)	0.22 (0.00)	0.29 (0.00)	0.20 (0.00)	0.02 (0.62)	1.00
Average:	0.19	0.21	0.20	0.01	0.22	0.20	0.11	0.10	0.16
Median:	0.20	0.25	0.18	0.02	0.21	0.23	0.12	0.10	0.19
Cronbach's Alpha:	0.59								

Note: Overlap sample includes all subjects responded to all nine of the listed surveys. p -values in parentheses. Cronbach's α is between all surveys in the table.

Table B.5: Intercorrelations of overlap sample between TP and RP

	BetaDelta_11	BetaDelta_14	BetaDelta_248	BetaDelta_10	BetaDelta_189	Average	Median
RiskA_197_H	0.03 (0.57)	-0.04 (0.40)	0.01 (0.80)	-0.14 (0.00)	-0.21 (0.00)	-0.07	-0.06
RiskA_197_A	-0.01 (0.87)	-0.05 (0.31)	-0.05 (0.33)	-0.17 (0.00)	-0.15 (0.00)	-0.09	-0.07
RiskA_197_I	-0.01 (0.76)	0.01 (0.86)	0.01 (0.79)	-0.06 (0.20)	-0.03 (0.51)	-0.02	-0.01
RiskA_50	0.01 (0.83)	0.09 (0.06)	0.10 (0.03)	-0.11 (0.02)	-0.14 (0.00)	-0.01	0.00
RiskA_189	0.01 (0.81)	0.07 (0.17)	0.06 (0.18)	-0.14 (0.00)	-0.09 (0.06)	-0.02	0.00
RiskA_243	0.03 (0.50)	-0.00 (0.93)	0.03 (0.48)	-0.05 (0.26)	-0.01 (0.84)	0.00	0.00
RiskA_118	-0.04 (0.43)	0.06 (0.18)	0.03 (0.56)	-0.14 (0.00)	-0.05 (0.34)	-0.03	-0.03
RiskA_210	0.03 (0.46)	0.09 (0.07)	0.04 (0.45)	-0.11 (0.02)	-0.06 (0.17)	0.00	0.01
Average:	0.01	0.03	0.03	-0.12	-0.09	-0.03	
Median:	0.01	0.04	0.03	-0.13	-0.08		-0.01

p-values in parentheses

depending on the age of the individual (Roberts and DelVecchio, 2000). But psychological surveys tend to be longer; the Moray House Test has 71 items and the Big Five personality test has 44 items. Compared to a preference elicitation, these psychology tests are long and time consuming. Cronbach's α measures the average correlation between two items in a set of items. It is often used as a measure of internal consistency for a set of items used in a psychometric measure. Cronbach's α , in our context, gives an estimate of what our test-retest correlation would be if one combined multiple measures into a single metric. For example, if one were to combine the measures of Surveys 189, 276, and 399 for time preference and combine the measures of Surveys 50, 189, and 339 for risk preference, Cronbach's α s would be 0.66 and 0.65, respectively. From just three measures, this approaches the expected standard in psychology, which sets Cronbach's α to 0.7 as the threshold for a good psychometric test.

B.3 Instability

We define instability as the standard deviation of a person's standardized preference parameter. In a fixed sample with perfect measures and no irreducible noise, instability would be 0. There is a tradeoff in our analysis as we include more surveys in our calculation of instability. More measures per person reduces average sampling error, leading to a more accurate instability score. However, more surveys results in a lower sample size, due to less overlap between subjects across surveys. We use a 7-survey sample with $N = 326$ and 6-survey sample with $N = 357$ to compare for robustness. More surveys would reduce sample size dramatically. In each sample, every person has taken all the surveys. For instability of risk aversion, we use a 6-survey sample with $N = 890$ and 5-survey sample with $N = 1289$.

B.4 Predicting Instability

Past work has been unable to find predictors of time- and risk-preference instability. Table B.6, Columns (1) and (2) displays regressions of time-preference instability on observables for the two versions of instability. Cognitive ability categories are jointly significant at the $p < 0.08$ across both versions. People with higher cognitive ability have less instability, on average, than people with lower cognitive ability. Neither education, nor age robustly predict stability. Interestingly, FICO is not associated with stability either. If people made choices in MEL decisions as theory predicts they would reveal a discount factor equal to their rate of return. It would seem likely that those who have lower access to credit (i.e. lower FICO) would have greater fluctuations in their rate of return depending on whether they are currently liquid or credit constrained, since people with poor credit often have access only to loans with exceedingly high interest rates. However, we find no correlation between FICO and instability. We also regress instability on indicators that take the value of one if there was a major life change. We include change in living situation (married, separated, divorced, widowed, never married), change in job status, and change in income category. We see no effects of any of these status changes on instability.

Table B.6: Correlates of Instability

	$\beta\delta$		Risk Aversion	
	(1)	(2)	(3)	(4)
Log of Income	-0.130 (0.09)	0.003 (0.05)	0.016 (0.03)	0.032 (0.03)
FICO between 600 and 650	-0.005 (0.15)	-0.137 (0.15)	0.089 (0.10)	0.023 (0.11)
FICO between 650 and 700	0.057 (0.15)	0.063 (0.19)	0.042 (0.11)	0.010 (0.11)
FICO between 700 and 750	0.186 (0.18)	-0.029 (0.13)	0.076 (0.09)	-0.032 (0.09)
FICO between 750 and 800	-0.007 (0.15)	-0.145 (0.14)	0.038 (0.09)	-0.095 (0.09)
FICO between 800 and 850	-0.042 (0.15)	-0.171 (0.14)	0.063 (0.09)	-0.043 (0.09)
Financial Literacy	0.009 (0.06)	-0.006 (0.04)	-0.072*** (0.03)	-0.081** (0.03)
Cognitive Ability level 1	0.161 (0.11)	0.022 (0.12)	0.028 (0.07)	0.094 (0.09)
Cognitive Ability level 2	0.187* (0.10)	0.048 (0.12)	-0.005 (0.06)	-0.002 (0.08)
Cognitive Ability level 3	0.079 (0.08)	-0.112 (0.10)	-0.037 (0.07)	0.030 (0.08)
Cognitive Ability level 4	-0.031 (0.08)	-0.216** (0.10)	-0.084 (0.06)	-0.029 (0.08)
Cognitive Ability level 5	0.003 (0.08)	-0.160 (0.11)	-0.093 (0.07)	0.014 (0.09)
Change in Living Situation	0.053 (0.09)	0.064 (0.09)	-0.090 (0.06)	0.013 (0.07)
Change in Job Status	-0.025 (0.08)	0.041 (0.05)	0.029 (0.04)	-0.026 (0.04)
Change in income category	-0.130 (0.08)	-0.085 (0.07)	-0.003 (0.03)	-0.012 (0.04)
Constant	1.936** (0.80)	1.408*** (0.50)	1.245*** (0.46)	0.970* (0.51)
Mean of Dep Var	.836	.826	.88	.828
P-value of Joint Test for Education	0.275	0.130	0.078	0.493
P-value of Joint Test for Age	0.037	0.124	0.108	0.677
P-value of Joint Test for FICO	0.261	0.287	0.870	0.406
P-value of Joint Test for Cognitive Ability	0.077	0.015	0.126	0.567
\bar{R}^2	0.145	0.149	0.117	0.079
N	287	315	363	393

Notes: Columns (1) and (2) regress the instability of BetaDelta and Columns (3) and (4) regress the instability of Risk Aversion, both using OLS with robust standard errors. Demographic controls include log value of income, age, age squared, female, and 16 education categories. The omitted reference category for FICO and cognitive ability are “FICO between 0 and 600” and “cognitive ability level 0”. In Column (1) instability is the standard deviation of standardized BetaDeltas from seven surveys: two of them use pay-format MPLs (Survey14, Survey248), one is a pay-format titration (survey11), one uses CTB (survey 212), and the rest three are receive-format titrations (Survey10, Survey189, and Survey399). The seven surveys are chosen because they have the highest overlapping sample size among all seven surveys combinations. We use a stepwise process to drop the survey drop that maximizes the sample size. In Column (2) we drop Survey 212. In Column (3) instability is the standard deviation of standardized risk aversions from six surveys: two job context Titration (survey197_h, survey197_a), one insurance context Titration (survey197_i), two investment context Titration (survey50, survey189), one ball-format Titration (survey243), one retirement saving context Titration (survey118) and one MPL (survey210). The six surveys are chosen because they have the highest overlapping sample size among all six surveys combinations. We use a stepwise process to drop the survey drop that maximizes the sample size. In Column (4) we drop survey197_h, survey197_a, and survey197_i. * Significant at the 10% level; ** at the 5% level; *** at the 1% level.

Instability in risk preferences is presented in Table B.6 in Columns (3) and (4). We find that financial literacy increases stability. This appears quite plausible as those who are more literate may also have developed more systematic ways to make financial decisions, while those who are illiterate may behave in a more contextual way. We find no correlation between cognitive ability and instability. In contrast, [Dohmen et al. \(2018\)](#) find that higher cognitive ability is often related with consistent risk choices on an MPL elicitation.

The instability in time preferences and the instability in risk preferences are weakly correlated with each other. Again, we trade off the number of measures per subject with the number of subjects. If we take our deeper sample with 7 time-preference measures and 6 risk-preference measures, the correlation between the two instabilities is 0.12 with p-value of 0.06, and $N = 245$. If we use 6 time-preference measures and 5 risk-preference measures, the correlation is 0.09 with p-value of 0.14, and $N = 283$.

B.5 Why Do Elicited Measures Change Over Time?

Instability could come from irreducible risk or from changes in the person and environment that affect subject responses. Here we analyze how the elicited parameter measures vary as a function of subject status. In Tables B.6 instability is the outcome variable. Because instability is a function of which surveys are used we use the same surveys for each individual. The analysis also requires many surveys per individual to get a reliable measure of instability. These requirements greatly shrink the sample. In this section we expand the sample by relaxing these requirements and regress preference parameters directly on observables in an individual fixed-effect panel regression.

Table B.7 displays how standardized $\beta\delta$ and risk aversion vary. We regress the measures on income categories, age categories, living situations and job status. Standard errors are clustered at the individual level. Table B.7 shows that income categories and age categories are jointly significant for $\beta\delta$. People have higher $\beta\delta$ when they have higher incomes and are older. Living situation indicators are jointly significant for risk aversion, where “widowed” and “never married” tend to be less risk averse than “married”.

Consistent with [Krupka and Stephens \(2013\)](#) we find some evidence that time preferences change as individuals age and as their income changes. Marital status seems to have a significant effect on risk preferences. While this is suggestive that some of the instability comes from observed changes in individual status, the variation is largely unexplained. The variation that can be explained by within-person changes is less than 1%.

Table B.7: Panel Regression of Standardized Parameters on Individual Characteristics

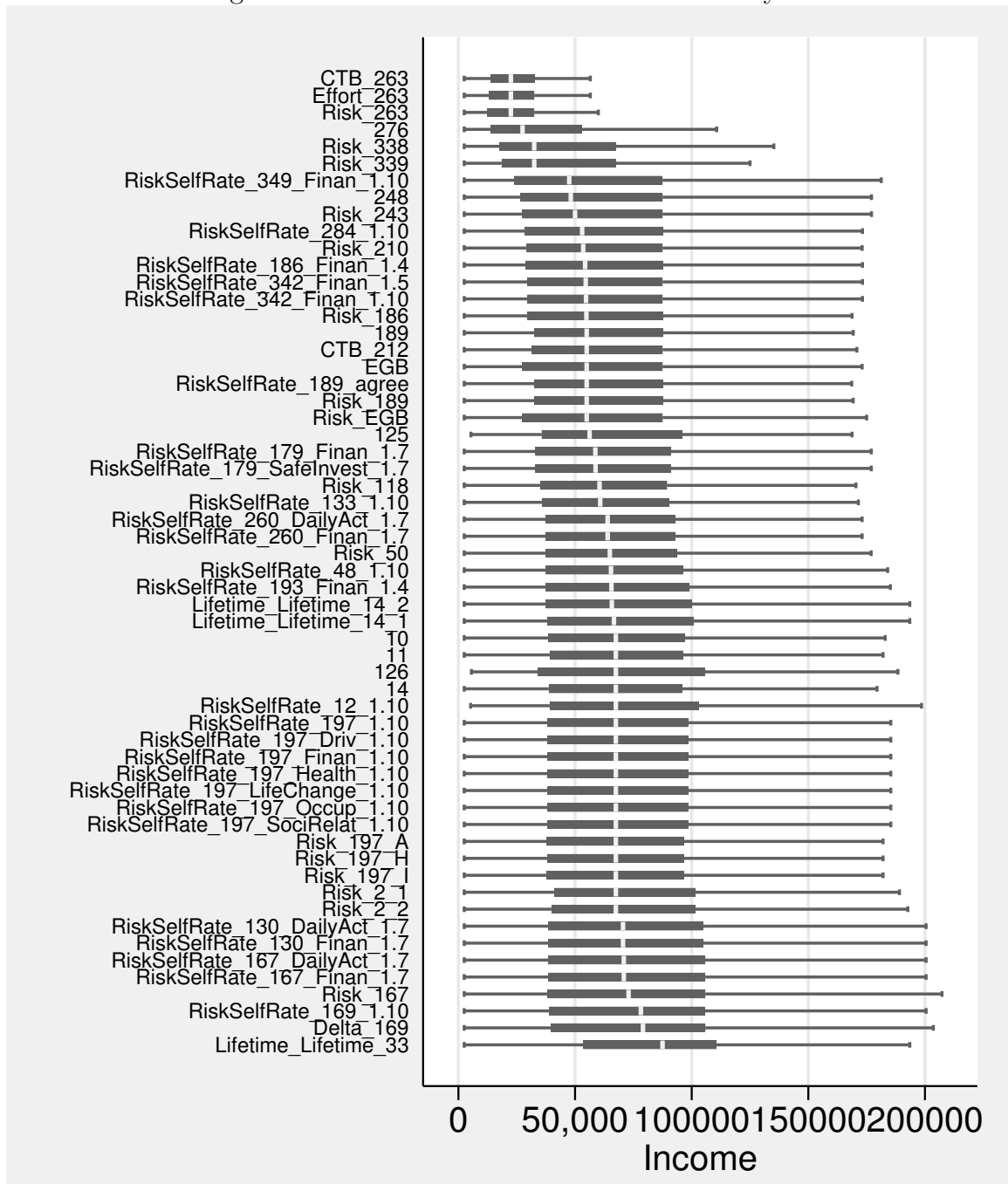
	(1)	(2)
	$\beta\delta$	Risk Aversion
Living Situation Separated	-0.259*	0.088
	(0.15)	(0.09)
Living Situation Divorced	-0.020	0.034
	(0.08)	(0.08)
Living Situation Widowed	-0.079	-0.331***
	(0.13)	(0.10)
Living Situation Never married	-0.058	-0.156*
	(0.12)	(0.09)
Job Status Other	-0.060	-0.095
	(0.09)	(0.07)
Job Status Homemaker	0.052	0.044
	(0.09)	(0.07)
Job Status Retired	0.121	-0.010
	(0.08)	(0.06)
Job Status Disabled	-0.185*	0.064
	(0.11)	(0.10)
Job Status Temporarily laid off	-0.009	-0.082
	(0.12)	(0.09)
Job Status Unemployed	0.100	0.012
	(0.08)	(0.06)
Job Status Working now	0.003	0.053
	(0.06)	(0.05)
Constant	-0.119	0.120
	(0.19)	(0.13)
P-value of Joint Test for Income	0.001	0.509
P-value of Joint Test for Age Categories	0.002	0.078
P-value of Joint Test for Living Situation	0.449	0.005
P-value of Joint Test for Job Status	.229	.423
\bar{R}^2	.00902	.00239
Number of Clusters	6,290	6,511
N	14,602	25,662

Notes: Dependent variable is normalized $\beta\delta$ for column (1), and risk aversion for column (2). Normalized $\beta\delta$ is calculated from MPL and staircase surveys. Predictors include 17 income categories, 6 age categories, 5 living situations, and 7 job status. The omitted reference categories for income, age and living situation are respectively “Family income less than 5000”, “Age less than 30”, and “Living situation married”. In column (1), coefficient of “Age more than 70” is omitted because of collinearity. * Significant at the 10% level; ** at the 5% level; *** at the 1% level.

Appendix C Additional Results

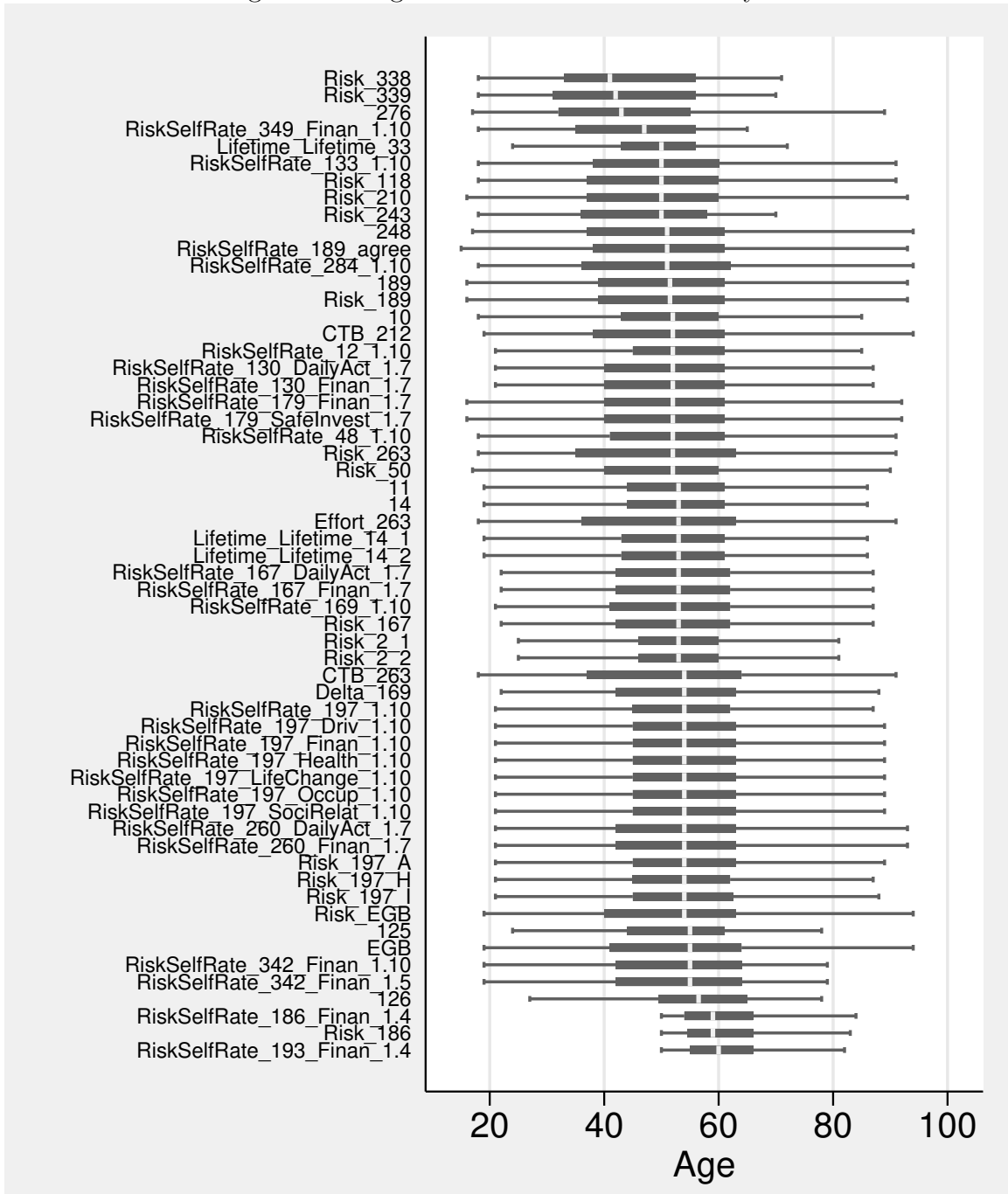
Figures C.1-C.5 display the distributions of income, age, education, gender, and ethnicity across the surveys.

Figure C.1: Income Distributions Across Surveys



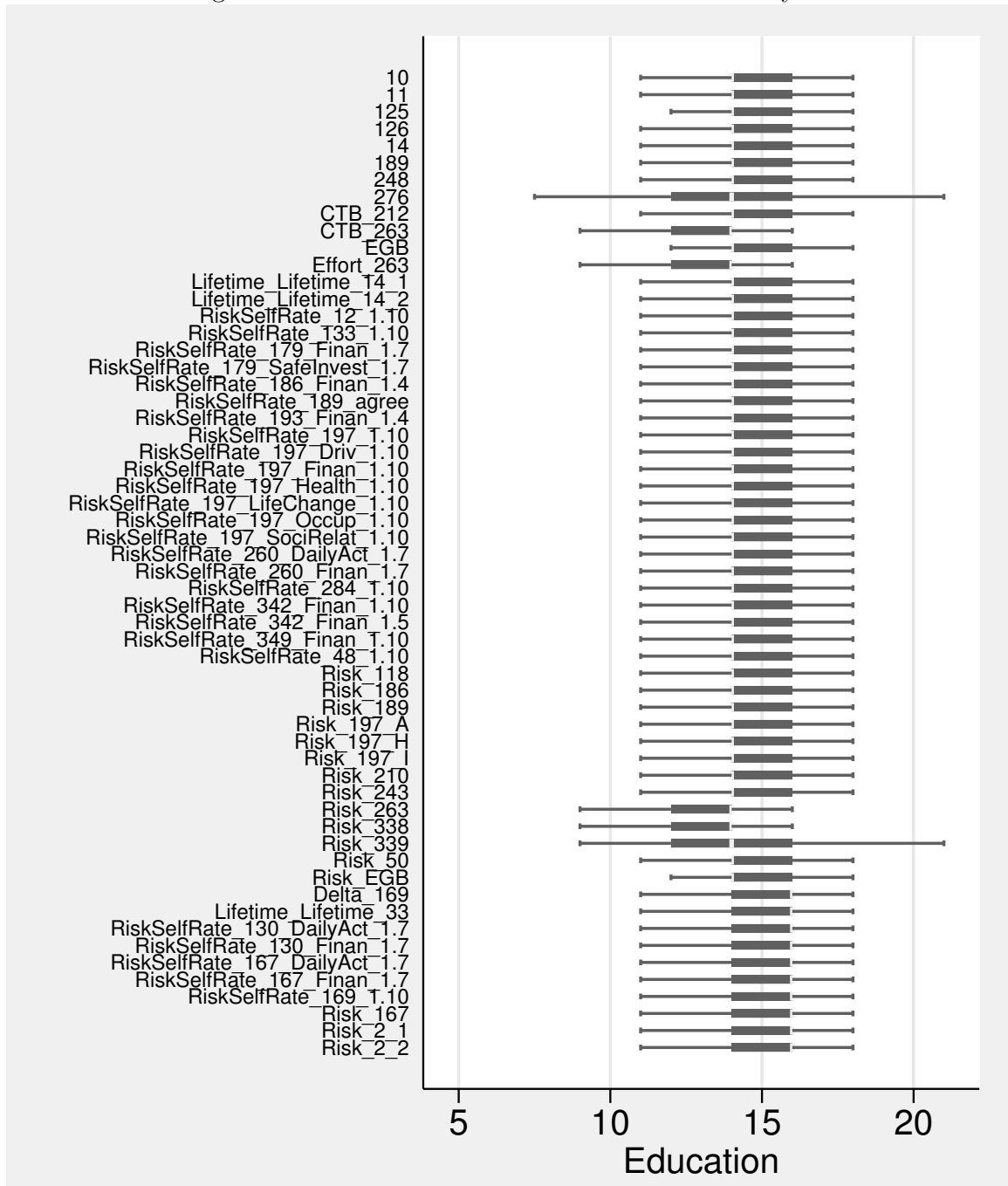
Notes: The bounds of whiskers represent upper and lower adjacent values. The bounds of boxes show 25th and 75th percentiles. The white strips in the middle are medians.

Figure C.2: Age Distributions Across Surveys



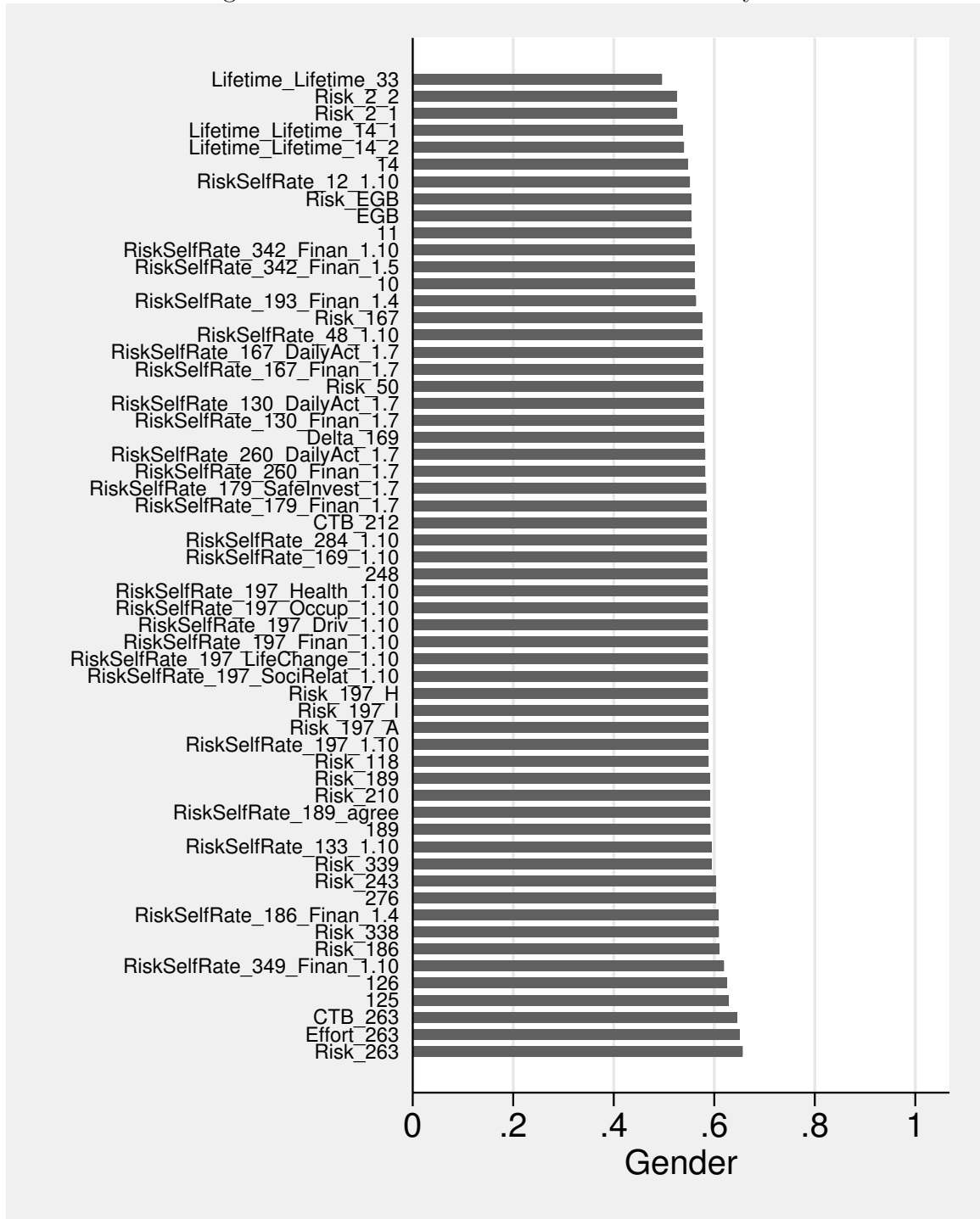
Notes: The bounds of whiskers represent upper and lower adjacent values. The bounds of boxes show 25th and 75th percentiles. The white strips in the middle are medians.

Figure C.3: Education Distributions Across Surveys



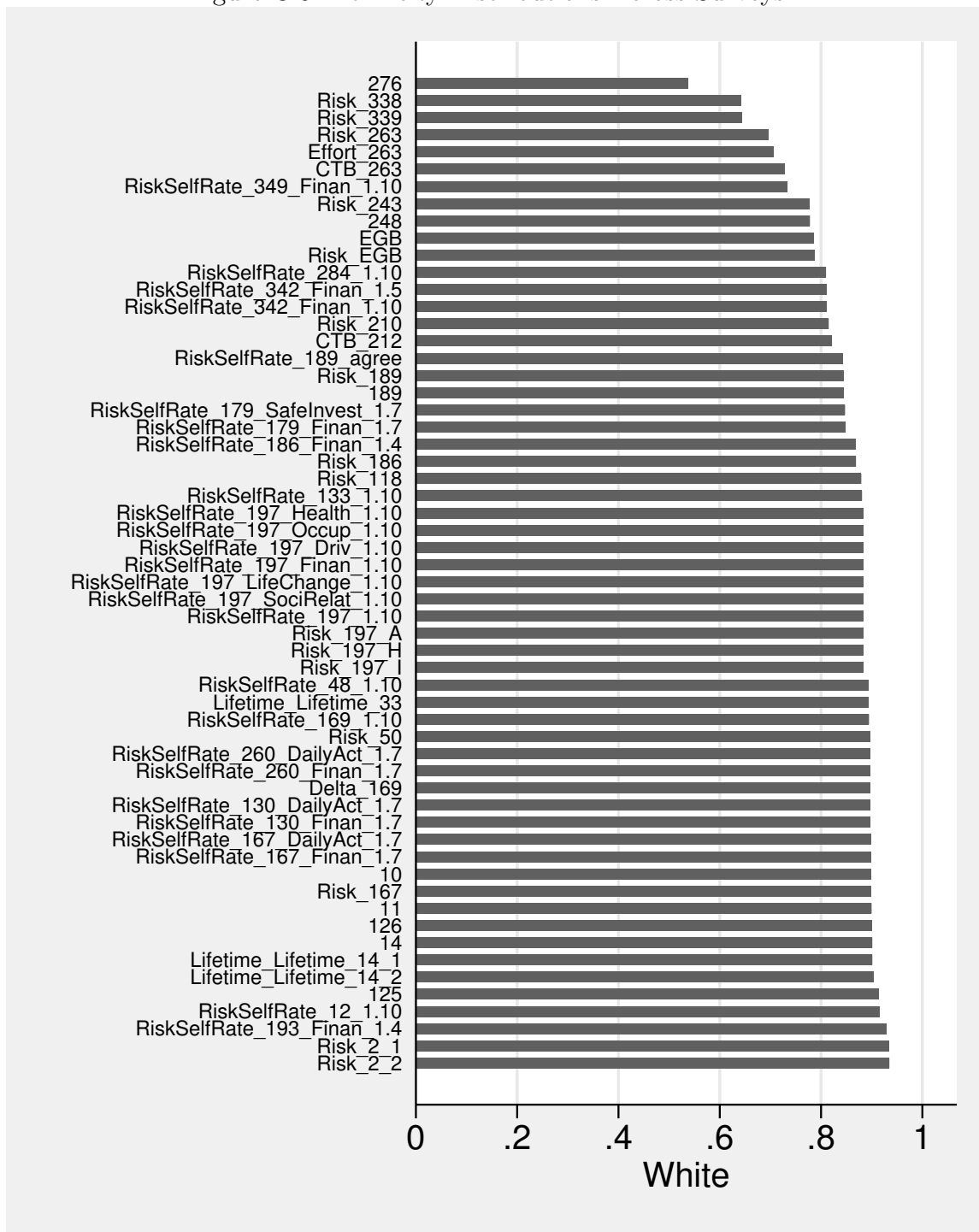
Notes: The bounds of whiskers represent upper and lower adjacent values. The bounds of boxes show 25th and 75th percentiles. The white strips in the middle are medians.

Figure C.4: Gender Distributions Across Surveys



Notes: The bounds of whiskers represent upper and lower adjacent values. The bounds of boxes show 25th and 75th percentiles. The white strips in the middle are medians.

Figure C.5: Ethnicity Distributions Across Surveys



Notes: The bounds of whiskers represent upper and lower adjacent values. The bounds of boxes show 25th and 75th percentiles. The white strips in the middle are medians.

Tables C.1 and C.2 show the results of regressing every outcome used in this paper on every time-preference and risk-preference measure, respectively. In addition to reporting naive p-values, we also report false-discovery rate (FDR) q-values which correct for multiple hypothesis testing. The set of regressions included in the FDR analysis is the set statistical tests anywhere in the paper for which we report a q-value.

Table C.1: Financial and Health Outcomes Regressed on All Standardized Values of $\beta\delta$

	Health	Any Stock	Live Longer 85	Bankruptcy	Pay off Debt	Checking Savings Amount
$\beta\delta_{11}$ (Titration Pay)	0.00 (0.05) [1.000] 377	0.04*** (0.01) [0.090] 377	0.57 (1.35) [1.000] 375	-0.03 (0.02) [0.445] 371	0.05** (0.02) [0.133] 365	953.08 (599.62) [0.449] 349
$\beta\delta_{10}$ (Titration Receive)	0.01 (0.04) [1.000] 385	0.01 (0.02) [1.000] 384	-0.27 (1.30) [1.000] 383	-0.04** (0.02) [0.098] 379	0.02 (0.03) [0.965] 371	986.62 (755.55) [0.653] 353
$\beta\delta_{276}$ (Titration Receive)	0.08** (0.04) [0.222] 593	0.06*** (0.01) [0.003] 431	0.146 (1.24) [0.543] 584	-0.03*** (0.01) [0.045] 445	0.10*** (0.03) [0.006] 294	1416.41** (495.90) [0.049] 360
$\beta\delta_{189}$ (Titration Receive)	0.01 (0.03) [1.000] 922	0.05*** (0.01) [0.009] 864	0.487 (0.80) [1.000] 920	-0.03*** (0.01) [0.028] 896	0.09*** (0.02) [0.001] 792	1807.98*** (438.67) [0.001] 807
$\beta\delta_{399}$ (Titration Receive)	0.03 (0.02) [0.787] 1494	0.05*** (0.01) [0.001] 1259	0.192 (0.66) [0.653] 1474	-0.03*** (0.01) [0.011] 1296	0.06*** (0.01) [0.001] 1062	1177.92*** (324.87) [0.008] 1107
$\beta\delta_{14}$ (MPL Pay)	-0.05 (0.03) [0.449] 424	0.01 (0.02) [1.000] 423	0.598 (1.01) [1.000] 422	0.02* (0.01) [0.417] 418	0.05*** (0.02) [0.034] 410	1395.50*** (507.46) [0.064] 388
$\beta\delta_{248}$ (MPL Pay)	0.08*** (0.03) [0.036] 1218	0.03*** (0.01) [0.021] 1073	0.221 (0.82) [0.680] 1208	-0.00 (0.01) [1.000] 1094	0.07*** (0.02) [0.006] 934	1131.78*** (347.52) [0.021] 961
δ_{169} (MPL Receive)	0.03 (0.04) [1.000] 285	0.03 (0.02) [0.687] 285	0.204 (1.53) [0.663] 284	-0.03 (0.02) [0.444] 284	0.08** (0.03) [0.105] 276	1077.96 (778.07) [0.578] 266
$\beta\delta_{ctb_212}$ (CTB)	0.03 (0.03) [0.855] 930	0.02 (0.01) [0.449] 841	0.939 (1.35) [1.000] 925	0.00 (0.01) [1.000] 859	0.00 (0.02) [1.000] 767	-290.52 (456.67) [1.000] 762
$\beta\delta_{ctb_263}$ (CTB)	0.05 (0.05) [0.860] 271	-0.02* (0.01) [0.382] 224	0.159 (1.66) [0.576] 264	-0.03** (0.01) [0.227] 230	0.377 (0.05) [0.910] 178	-291.89 (369.34) [0.965] 205
Lifetime_14_1	0.04 (0.04) [0.855] 366	0.03 (0.02) [0.675] 365	0.390 (1.32) [0.926] 365	0.01 (0.02) [1.000] 362	0.02 (0.03) [0.965] 354	169.09 (717.40) [1.000] 337
Lifetime_14_2	0.05 (0.04) [0.756] 377	0.03 (0.02) [0.548] 376	0.974 (1.29) [1.000] 376	-0.00 (0.02) [1.000] 373	0.03 (0.03) [0.860] 366	625.73 (673.10) [0.887] 349
Lifetime_33	0.00 (0.04) [1.000] 312	0.04* (0.02) [0.286] 313	0.684 (1.44) [1.000] 313	0.00 (0.02) [1.000] 311	0.01 (0.03) [1.000] 305	978.21 (808.33) [0.687] 290
$\beta\delta_{263}$ (Real Effort)	0.05 (0.06) [0.934] 299	-0.02 (0.02) [0.733] 250	0.028 (1.53) [0.188] 294	0.00 (0.02) [1.000] 254	0.02 (0.04) [1.000] 187	-1319.83** (557.49) [0.135] 222
ForFuture (SPQ)	0.05** (0.02) [0.222] 1495	0.04*** (0.01) [0.001] 1260	0.149 (0.67) [0.548] 1475	-0.01 (0.01) [0.449] 1297	0.03** (0.01) [0.191] 1064	711.14** (336.99) [0.222] 1107

Notes: OLS with robust standard errors. Controls include cognitive ability, financial literacy, risk aversion, 17 income categories, 6 age categories, indicator variable for female, 16 education categories, and 5 race categories. * Significant at the 10% level; ** at the 5% level; *** at the 1% level. Naive p-values are reported in italics, FDR adjusted q-values are reported in brackets. The third column in each cell reports N .

Table C.1: Financial and Health Outcomes Regressed on All Standardized Values of $\beta\delta$ (Continued)

	Fruit Vege	Cereal Fiber	Go to Doctor Routinely	Low dose of Aspirin	Smoking	Payday Loan	Medical Insurance
$\beta\delta_{_11}$ (Titration Pay)	-0.01 [0.832] 363 (0.07) [1.000]	-0.07 [0.359] 364 (0.07) [0.892]	0.06** [0.042] 364 (0.03) [0.241]	0.05*** [0.006] 364 (0.02) [0.058]	-0.02 [0.517] 374 (0.04) [1.000]	0.828 [1.000] 195 (0.02) [0.142] 261	
$\beta\delta_{_10}$ (Titration Receive)	0.06 [0.516] 371 (0.09) [1.000]	0.09 [0.248] 372 (0.08) [0.729]	-0.01 [0.650] 372 (0.03) [1.000]	0.05* [0.280] 372 (0.03) [0.280]	-0.01 [0.744] 382 (0.04) [1.000]	0.869 [1.000] 201 (0.01) [0.787] 265	
$\beta\delta_{_276}$ (Titration Receive)	2.17 [0.001] 28 (.) [0.001]	-0.28 [0.000] 28 (.) [0.001]	-0.40 [0.000] 28 (.) [0.001]	-1.54 [0.000] 28 (.) [0.001]	-0.09* [0.289] 378 (0.05) [0.289]	0.989 [1.000] 285 (0.02) [0.064] 507	
$\beta\delta_{_189}$ (Titration Receive)	0.08 [0.165] 786 (0.06) [0.578]	0.10* [0.061] 787 (0.05) [0.301]	0.00 [0.809] 787 (0.02) [1.000]	0.01 [0.641] 787 (0.02) [1.000]	-0.05 [0.114] 923 (0.03) [0.449]	0.013 [1.000] 503 (0.01) [0.710] 657	
$\beta\delta_{_399}$ (Titration Receive)	0.10* [0.059] 820 (0.05) [0.294]	0.03 [0.532] 821 (0.03) [0.729]	-0.01 [0.757] 821 (0.02) [1.000]	-0.00 [0.903] 821 (0.02) [1.000]	0.162 [1.000] 1211 (0.04) [0.162]	0.001 [1.000] 756 (0.01) [0.235] 1157	
$\beta\delta_{_14}$ (MPL Pay)	0.02 [0.799] 406 (0.08) [1.000]	0.14** [0.022] 407 (0.06) [0.150]	-0.02 [0.481] 407 (0.02) [1.000]	0.05*** [0.004] 407 (0.02) [0.040]	0.845 [1.000] 418 (0.04) [1.000]	0.673 [1.000] 221 (0.03) [0.309] 292	
$\beta\delta_{_248}$ (MPL Pay)	0.05 [0.527] 749 (0.07) [0.810]	0.07 [0.810] 750 (0.06) [0.150]	0.01 [0.811] 750 (0.02) [1.000]	0.03 [0.136] 750 (0.02) [0.040]	1.066 [1.000] 1066 (0.04) [1.000]	0.018 [1.000] 643 (0.02) [0.818] 917	
$\delta_{_169}$ (MPL Receive)	0.17* [0.056] 285 (0.09) [0.286]	0.10 [0.321] 285 (0.07) [0.810]	0.02 [0.581] 285 (0.02) [1.000]	-0.00 [0.953] 285 (0.02) [0.516]	0.346 [1.000] 285 (0.04) [0.578]	0.372 [1.000] 160 (0.01) [0.209] 199	
$\beta\delta_{_ctb_212}$ (CTB)	-0.01 [0.910] 696 (0.07) [1.000]	-0.04 [0.700] 697 (0.10) [0.845]	0.03 [0.340] 697 (0.03) [1.000]	0.01 [0.608] 697 (0.03) [1.000]	0.866 [1.000] 931 (0.05) [0.872]	0.511 [1.000] 488 (0.02) [0.478] 683	
$\beta\delta_{_ctb_263}$ (CTB)	-0.01 [0.917] 112 (0.14) [1.000]	0.18 [0.230] 112 (0.15) [0.688]	0.00 [0.987] 112 (0.04) [1.000]	0.02 [0.626] 112 (0.05) [1.000]	-0.17** [0.222] 206 (0.08) [0.222]	0.433 [1.000] 160 (0.02) [0.988] 190	
Lifetime_14_1	-0.00 [0.985] 352 (0.08) [1.000]	0.05 [0.575] 353 (0.08) [1.000]	-0.01 [0.860] 353 (0.03) [1.000]	-0.02 [0.464] 353 (0.03) [1.000]	0.663 [1.000] 361 (0.04) [1.000]	0.647 [1.000] 188 (0.03) [0.146] 250	
Lifetime_14_2	-0.13 [0.114] 363 (0.08) [0.449]	-0.04 [0.566] 364 (0.04) [1.000]	0.03 [0.349] 364 (0.03) [0.882]	-0.00 [0.966] 364 (0.03) [1.000]	0.577 [1.000] 372 (0.02) [0.577]	0.419 [1.000] 196 (0.02) [0.053] 257	
Lifetime_33	0.05 [0.600] 304 (0.09) [1.000]	-0.04 [0.636] 305 (0.09) [1.000]	0.00 [0.924] 305 (0.03) [1.000]	0.00 [0.922] 305 (0.03) [1.000]	0.613 [1.000] 311 (0.05) [1.000]	0.114 [1.000] 170 (0.01) [0.767] 267	
$\beta\delta_{_263}$ (Real Effort)	0.04 [0.776] 118 (0.15) [1.000]	-0.02 [0.874] 118 (0.09) [1.000]	0.04 [0.398] 118 (0.04) [0.934]	-0.02 [0.652] 118 (0.02) [0.652]	0.837 [1.000] 224 (0.02) [0.837]	0.849 [1.000] 172 (0.00) [0.926] 219	
ForFuture (SPQ)	0.11* [0.060] 823 (0.06) [0.298]	0.09 [0.111] 824 (0.14) [1.000]	0.01 [0.509] 824 (0.05) [0.934]	-0.02 [0.341] 824 (0.02) [0.341]	0.256 [1.000] 1213 (0.08) [1.000]	0.169 [1.000] 756 (0.03) [0.147] 1157	

Notes: OLS with robust standard errors. Controls include cognitive ability, financial literacy, risk aversion, 17 income categories, 6 age categories, indicator variable for female, 16 education categories, and 5 race categories. * Significant at the 10% level; ** at the 5% level; *** at the 1% level. Naive p-values are reported in italics, FDR adjusted q-values are reported in brackets. The third column in each cell reports N .

Table C.2: Financial and Health Outcomes Regressed on All Standardized Values of Risk Preference

	Health			Any Stock			Live Longer 85			Bankruptcy			Pay off Debt			Checking Savings Amount		
Risk Avers 167 (Titration Hypothetical Job)	0.05	0.277	288	-0.01	0.797	288	-3.47**	0.019	288	0.00	0.955	288	0.03	0.375	279	-0.62	0.999	271
	(0.04)	[0.763]		(0.02)	[1.000]		(1.47)	[0.135]		(0.02)	[1.000]		(0.03)	[0.905]		(696.18)	[1.000]	
Risk Avers 197 (Titration Hypothetical Job)	0.02	0.616	692	-0.03*	0.075	681	0.11	0.906	690	-0.01	0.471	692	0.01	0.426	644	212.35	0.669	642
	(0.03)	[1.000]		(0.01)	[0.333]		(0.95)	[1.000]		(0.01)	[1.000]		(0.02)	[0.965]		(496.17)	[1.000]	
Risk Avers 197 (Titration Alternative Job)	0.03	0.380	692	-0.03**	0.029	681	-1.28	0.165	690	0.01	0.366	692	0.02	0.400	644	-609.55	0.188	642
	(0.03)	[0.915]		(0.01)	[0.191]		(0.92)	[0.578]		(0.01)	[0.897]		(0.02)	[0.939]		(462.90)	[0.645]	
Risk Avers 197 (Titration Insurance)	-0.07**	0.015	692	0.02	0.296	681	-0.34	0.707	690	0.02**	0.037	692	-0.03	0.165	644	547.74	0.246	642
	(0.03)	[0.114]		(0.01)	[0.793]		(0.91)	[1.000]		(0.02)	[0.578]		(0.02)	[0.578]		(471.64)	[0.728]	
Risk Avers 50 (Titration Inheritance)	0.04	0.194	621	-0.03*	0.069	619	-1.07	0.291	617	0.00	0.931	610	-0.02	0.423	597	191.53	0.734	565
	(0.03)	[0.653]		(0.02)	[0.322]		(1.01)	[0.791]		(0.01)	[1.000]		(0.02)	[0.965]		(562.75)	[1.000]	
Risk Avers 189 (Titration Inheritance)	-0.04	0.144	922	-0.04**	0.002	864	-1.35	0.110	920	0.01	0.619	896	-0.00	0.882	793	81.83	0.848	806
	(0.03)	[0.537]		(0.01)	[0.027]		(0.84)	[0.449]		(0.01)	[1.000]		(0.02)	[1.000]		(425.87)	[1.000]	
Risk Avers 399 (Eckel & Grossman)	0.397	1420	-0.02	0.722	1190	-0.00	0.492	1400	-0.45	0.353	1229	0.01	0.861	1065	0.00	0.914	1045	
	(0.02)	[0.934]		(0.01)	[1.000]		(0.66)	[1.000]		(0.01)	[0.887]		(0.01)	[1.000]		(326.64)	[1.000]	
Risk Avers 263 (Eckel & Grossman)	0.280	339	-0.06	0.345	282	-0.02	0.206	333	-1.88	0.791	287	-0.00	0.427	213	0.03	0.240	252	
	(0.05)	[0.766]		(0.02)	[0.871]		(1.48)	[0.668]		(0.02)	[1.000]		(0.03)	[0.965]		(527.65)	[0.715]	
Risk Avers 243 (Titration Ball)	0.01	0.588	1043	-0.01	0.482	933	-0.96	0.217	1036	0.00	0.848	955	0.00	0.886	804	186.44	0.576	843
	(0.03)	[1.000]		(0.01)	[1.000]		(0.78)	[0.680]		(0.01)	[1.000]		(0.02)	[1.000]		(333.46)	[1.000]	
Risk Avers 118 (Titration Retire Savings)	-0.02	0.412	808	-0.02*	0.081	784	-1.31*	0.099	806	0.01	0.457	801	-0.01	0.580	738	-400.74	0.333	728
	(0.03)	[0.960]		(0.01)	[0.356]		(0.79)	[0.417]		(0.01)	[1.000]		(0.02)	[1.000]		(413.93)	[0.855]	
Risk Avers 210 (MPL)	-0.02	0.349	1026	-0.02	0.111	937	-0.08	0.919	1018	-0.00	0.690	956	-0.00	0.998	841	-411.81	0.294	846
	(0.02)	[0.882]		(0.01)	[0.449]		(0.75)	[1.000]		(0.01)	[1.000]		(0.02)	[1.000]		(392.18)	[0.793]	
Risk Avers SelfRate 133 (General)	-0.14***	0.000	824	-0.04***	0.000	798	-3.64***	0.000	821	0.02*	0.067	815	0.02	0.243	748	235.08	0.021	740
	(0.03)	[0.001]		(0.01)	[0.021]		(0.84)	[0.011]		(0.01)	[0.318]		(0.02)	[0.725]		(475.21)	[1.000]	
Risk Avers SelfRate 197 (General)	-0.14***	0.000	693	-0.07***	0.000	682	-3.71***	0.000	691	-0.01	0.269	693	0.04**	0.030	645	418.58	0.425	642
	(0.03)	[0.001]		(0.01)	[0.001]		(1.02)	[0.008]		(0.01)	[0.747]		(0.02)	[0.192]		(524.18)	[0.965]	
Risk Avers SelfRate 12 (General)	-0.12**	0.040	226	-0.12**	0.000	226	-3.39*	0.079	226	0.02	0.188	224	-0.00	0.943	219	-153.15	0.874	212
	(0.06)	[0.233]		(0.03)	[0.001]		(1.92)	[0.351]		(0.02)	[0.645]		(0.04)	[1.000]		(967.05)	[1.000]	
Risk Avers SelfRate 48 (General)	-0.07**	0.030	612	-0.04***	0.008	611	-4.05***	0.000	609	-0.01	0.521	604	0.03	0.124	589	1721.76*	0.002	561
	(0.03)	[0.194]		(0.02)	[0.074]		(0.94)	[0.011]		(0.01)	[1.000]		(0.02)	[0.478]		(561.61)	[0.031]	
Risk Avers SelfRate 169 (General)	-0.08*	0.085	295	-0.03	0.149	295	-2.58*	0.093	294	0.01	0.455	294	0.02	0.536	285	-134.01	0.865	276
	(0.05)	[0.369]		(0.02)	[0.548]		(1.53)	[0.398]		(0.02)	[1.000]		(0.03)	[1.000]		(787.28)	[1.000]	
Risk Avers SelfRate 248 (General)	-0.16***	0.000	747	-0.08***	0.000	674	-2.77***	0.006	745	-0.01	0.621	747	-0.02	0.334	596	-123.99	0.788	619
	(0.03)	[0.001]		(0.01)	[0.001]		(1.00)	[0.058]		(0.01)	[1.000]		(0.02)	[0.855]		(461.93)	[1.000]	
Risk Avers SelfRate 189 (General)	-0.14***	0.000	928	-0.04***	0.001	870	-2.89***	0.001	926	0.01	0.536	902	0.03*	0.057	797	873.74**	0.042	809
	(0.03)	[0.001]		(0.01)	[0.015]		(0.83)	[0.011]		(0.01)	[1.000]		(0.02)	[0.289]		(429.43)	[0.241]	
Risk Avers SelfRate 349 (Financial)	-0.10***	0.000	1139	-0.03***	0.001	952	-2.46***	0.002	1121	0.00	0.714	975	0.01	0.398	782	492.77	0.140	838
	(0.03)	[0.009]		(0.01)	[0.021]		(0.78)	[0.025]		(0.01)	[1.000]		(0.02)	[0.934]		(333.54)	[0.529]	
Risk Avers SelfRate 342 (Financial)	-0.12***	0.007	523	-0.05***	0.002	446	-3.64***	0.004	522	-0.00	0.716	479	0.02	0.469	398	-208.24	0.737	413
	(0.04)	[0.065]		(0.02)	[0.024]		(1.26)	[0.043]		(0.01)	[1.000]		(0.03)	[1.000]		(619.18)	[1.000]	
Risk Avers SelfRate 197 (Financial)	-0.15***	0.000	693	-0.08***	0.000	682	-4.68***	0.000	691	-0.01	0.563	693	0.00	0.995	645	82.10	0.877	642
	(0.03)	[0.001]		(0.01)	[0.001]		(0.99)	[0.001]		(0.01)	[0.897]		(0.02)	[1.000]		(532.34)	[1.000]	
Risk Avers SelfRate 193 (Financial)	-0.16***	0.000	436	-0.07***	0.001	435	-2.59**	0.031	436	-0.01	0.288	433	-0.03	0.246	427	442.78	0.514	414
	(0.04)	[0.001]		(0.02)	[0.022]		(1.20)	[0.197]		(0.01)	[0.787]		(0.03)	[0.728]		(678.53)	[1.000]	
Risk Avers SelfRate 342 (Financial)	-0.08*	0.007	522	-0.06***	0.002	445	-2.67**	0.004	521	0.01	0.716	478	-0.01	0.699	397	168.49	0.737	412
	(0.04)	[0.065]		(0.02)	[0.024]		(1.31)	[0.043]		(0.01)	[1.000]		(0.03)	[1.000]		(572.74)	[1.000]	
Risk Avers SelfRate 130 (Financial)	-0.06	0.232	298	-0.07***	0.001	298	-2.94**	0.045	297	-0.01	0.685	298	-0.00	0.993	287	1125.99	0.135	279
	(0.04)	[0.733]		(0.02)	[0.012]		(1.46)	[0.251]		(0.02)	[1.000]		(0.03)	[1.000]		(749.87)	[0.512]	
Risk Avers SelfRate 260 (Financial)	-0.11***	0.001	584	-0.09***	0.000	584	-4.93***	0.000	583	-0.01	0.386	580	-0.01	0.559	565	-3.98	0.995	552
	(0.03)	[0.014]		(0.02)	[0.001]		(1.05)	[0.001]		(0.01)	[0.921]		(0.02)	[1.000]		(574.67)	[1.000]	
Risk Avers SelfRate 167 (Financial)	-0.03	0.501	290	-0.06**	0.015	290	-1.53	0.289	290	-0.02	0.219	290	0.01	0.746	281	439.21	0.557	273
	(0.04)	[1.000]		(0.02)	[0.118]		(1.44)	[0.787]		(0.02)	[0.845]		(0.03)	[1.000]		(746.81)	[1.000]	
Risk Avers SelfRate 179 (Financial)	-0.02	0.392	893	-0.02	0.172	845	-0.88	0.294	891	-0.00	0.654	878	0.04**	0.015	782	1023.21**	0.016	783
	(0.03)	[0.930]		(0.01)	[0.590]		(0.84)	[0.793]		(0.01)	[1.000]		(0.02)	[1.113]		(424.41)	[0.122]	
Risk Avers SelfRate 130 (Daily Act)	-0.08*	0.094	298	-0.04*	0.099	298	-4.55***	0.002	297	-0.00	0.982	298	0.04	0.167	287	1233.76	0.169	279
	(0.05)	[0.401]		(0.02)	[0.417]		(1.45)	[0.027]		(0.02)	[1.000]		(0.03)	[0.578]		(813.75)	[0.580]	
Risk Avers SelfRate 260 (Daily Act)	-0.11***	0.001	584	-0.04**	0.019	584	-3.74***	0.000	583	0.00	0.941	580	0.01	0.706	565	214.75	0.703	552
	(0.03)	[0.021]		(0.02)	[0.136]		(0.98)	[0.006]		(0.01)	[1.000]		(0.02)	[1.000]		(562.00)	[1.000]	
Risk Avers SelfRate 167 (Daily Act)	-0.05	0.297	290	-0.04*	0.065	290	-0.83	0.551	290	0.02	0.196	290	0.04	0.166	281	1337.65*	0.057	273
	(0.05)	[0.799]		(0.02)	[0.310]		(1.39)	[1.000]		(0.02)	[0.653]		(0.03)	[0.578]		(803.86)	[0.289]	
Risk Avers SelfRate 197 (Driving)	-0.01	0.871	693	-0.03**	0.036	682	-0.07	0.942	691	0.01	0.290	693	0.00	0.919	645	536.72	0.248	642
	(0.03)	[1.000]		(0.01)	[0.222]		(0.93)	[1.000]		(0.01)	[0.845]		(0.02)	[1.000]		(464.41)	[0.729]	
Risk Avers SelfRate 197 (Occupation)	-0.06**	0.036	693	-0.04**	0.016	682	-2.37**	0.015	691	0.01	0.359	693	-0.03	0.179	645	145.21	0.773	642
	(0.03)	[0.222]		(0.01)	[0.120]		(0.97)	[1.118]		(0.01)	[0.892]		(0.02)	[0.613]		(504.40)	[1.000]	

Table C.2: Financial and Health Outcomes Regressed on All Standardized Values of Risk Preference (Continued)

	Has Retirement Savings	Pay Bill Full	Paycheck to Paycheck	Retirement Savings	Alcohol	Moderate Exercise Time									
Risk Avers 167 (Titration Hypothetical Job)	0.05* (0.03)	0.067 (0.318)	232 (1.000)	0.01 (0.05)	0.842 (1.000)	166 (0.653)	-0.25 (0.19)	0.495 (0.733)	69 (7808.55)	-8921.06 (7808.55)	263 (0.733)	-0.02 (0.05)	0.670 (1.000)	288 (0.13)	0.436 (0.965)
Risk Avers 197 (Titration Hypothetical Job)	-0.01 (0.02)	0.752 (1.000)	576 (1.000)	0.01 (0.04)	0.864 (1.000)	395 (1.000)	-0.05 (0.10)	0.585 (0.636)	182 (4891.73)	-6479.93 (4891.73)	641 (0.636)	0.01 (0.03)	0.714 (1.000)	689 (0.810)	0.304 (0.810)
Risk Avers 197 (Titration Alternative Job)	-0.01 (0.02)	0.506 (1.000)	576 (1.000)	-0.04 (0.03)	0.227 (0.687)	395 (1.000)	0.02 (0.11)	0.819 (1.000)	182 (4981.04)	-14324.59** (4981.04)	641 (0.645)	-0.01 (0.03)	0.817 (1.000)	689 (0.08)	0.475 (1.000)
Risk Avers 197 (Titration Insurance)	0.00 (0.02)	0.897 (1.000)	576 (1.000)	-0.01 (0.03)	0.773 (1.000)	395 (1.000)	-0.13 (0.11)	0.250 (0.733)	182 (3859.52)	3359.52 (3859.52)	641 (1.000)	-0.03 (0.03)	0.266 (0.742)	689 (0.08)	0.258 (0.733)
Risk Avers 50 (Titration Inheritance)	-0.03* (0.02)	0.093 (0.398)	489 (1.000)	-0.02 (0.03)	0.510 (1.000)	349 (1.000)	0.03 (0.12)	0.841 (1.000)	150 (705.17)	705.17 (5965.29)	567 (1.000)	-0.01 (0.04)	0.744 (1.000)	602 (0.09)	0.255 (0.733)
Risk Avers 189 (Titration Inheritance)	-0.03* (0.02)	0.063 (0.302)	766 (1.000)	0.02 (0.03)	0.602 (1.000)	477 (1.000)	0.02 (0.07)	0.759 (1.000)	286 (3988.96)	-7982.33** (3988.96)	864 (0.253)	0.04 (0.03)	0.210 (0.678)	787 (0.08)	0.469 (1.000)
Risk Avers 399 (Eckel & Grossman)	0.568 (0.01)	0.000 (1.000)	1088 (1.000)	0.01 (0.02)	0.403 (0.943)	571 (1.000)	0.02 (0.06)	0.633 (1.000)	150 (2319.02)	150 (2319.02)	771 (1.000)	0.03 (0.03)	0.959 (1.000)	771 (0.07)	0.819 (1.000)
Risk Avers 263 (Eckel & Grossman)	0.769 (0.03)	2.46 (1.000)	-0.01 (0.08)	0.967 (1.000)	110 (1.000)	-0.00 (0.07)	0.716 (1.000)	339 (3334.50)	-0.03 (3334.50)	339 (7.66)	3607.48 (7.66)	-0.06 (0.10)	0.550 (1.000)	135 (0.19)	0.505 (1.000)
Risk Avers 243 (Titration Ball)	0.03** (0.01)	0.047 (0.257)	1018 (1.000)	0.02 (0.03)	0.419 (0.965)	431 (1.000)	-0.09 (0.06)	0.159 (0.523)	385 (3333.67)	-558.25 (3333.67)	994 (1.000)	-0.02 (0.03)	0.507 (1.000)	666 (0.08)	0.154 (0.560)
Risk Avers 118 (Titration Retire Savings)	0.00 (0.02)	0.985 (1.000)	662 (1.000)	0.01 (0.03)	0.578 (1.000)	441 (1.000)	-0.12 (0.08)	0.153 (0.560)	216 (4283.92)	-2679.69 (4283.92)	752 (1.000)	0.02 (0.03)	0.491 (1.000)	805 (0.07)	0.949 (1.000)
Risk Avers 210 (MPL)	0.00 (0.02)	0.808 (1.000)	818 (1.000)	-0.01 (0.03)	0.706 (1.000)	493 (1.000)	-0.02 (0.08)	0.797 (1.000)	331 (5692.44)	-5692.44 (5692.44)	965 (0.459)	-0.01 (0.03)	0.694 (1.000)	787 (0.07)	0.945 (1.000)
Risk Avers SelfRate 133 (General)	-0.02 (0.02)	0.298 (0.675)	674 (1.000)	0.01 (0.03)	0.753 (1.000)	447 (1.000)	0.10 (0.09)	0.288 (0.787)	225 (11084.32**)	-11084.32** (11084.32**)	767 (1.000)	0.01 (0.04)	0.685 (1.000)	824 (0.07)	0.097 (0.222)
Risk Avers SelfRate 197 (General)	-0.02 (0.02)	0.310 (0.832)	576 (1.000)	0.01 (0.03)	0.696 (1.000)	395 (1.000)	-0.10 (0.13)	0.416 (0.726)	183 (5707.15)	-14262.45** (5707.15)	642 (1.000)	-0.04 (0.04)	0.201 (0.333)	690 (0.09)	0.001 (1.000)
Risk Avers SelfRate 12 (General)	0.05 (0.03)	0.146 (0.543)	182 (1.000)	-0.10 (0.06)	0.072 (0.329)	132 (1.000)	0.11 (0.37)	0.762 (1.000)	52 (10276.02)	-7631.10 (10276.02)	207 (0.965)	-0.07 (0.06)	0.238 (0.710)	221 (0.15)	0.716 (1.000)
Risk Avers SelfRate 48 (General)	-0.02 (0.02)	0.315 (0.832)	484 (1.000)	0.03 (0.03)	0.257 (0.733)	347 (1.000)	-0.15 (0.13)	0.244 (0.726)	150 (5707.15)	-4333.41 (5707.15)	560 (1.000)	-0.06* (0.04)	0.074 (0.333)	595 (0.09)	0.604 (1.000)
Risk Avers SelfRate 169 (General)	0.03 (0.03)	0.394 (0.855)	234 (1.000)	0.06 (0.04)	0.196 (0.653)	165 (1.000)	-0.15 (0.20)	0.458 (1.000)	72 (8000.49)	-6434.28 (8000.49)	271 (0.965)	-0.01 (0.06)	0.921 (1.000)	295 (0.13)	0.248 (0.729)
Risk Avers SelfRate 248 (General)	-0.05** (0.02)	0.014 (0.112)	594 (1.000)	-0.01 (0.04)	0.762 (1.000)	319 (1.000)	0.13 (0.08)	0.116 (0.451)	295 (4288.76)	-19309.64** (4288.76)	704 (0.001)	-0.08 (0.05)	0.101 (0.424)	444 (0.11)	0.268 (0.747)
Risk Avers SelfRate 189 (General)	-0.02 (0.02)	0.328 (0.860)	770 (1.000)	0.03 (0.03)	0.316 (0.834)	480 (1.000)	-0.09 (0.09)	0.292 (0.793)	289 (4405.01)	-8565.42* (4405.01)	869 (0.277)	-0.00 (0.03)	0.941 (1.000)	793 (0.08)	0.092 (0.153)
Risk Avers SelfRate 349 (Financial)	0.00 (0.01)	0.812 (1.000)	954 (1.000)	0.02 (0.03)	0.601 (1.000)	349 (1.000)	-0.01 (0.11)	0.812 (1.000)	442 (5277.57)	-2020.20** (5277.57)	1111 (0.001)	-0.04 (0.04)	0.287 (0.787)	577 (0.09)	0.417 (0.965)
Risk Avers SelfRate 342 (Financial)	-0.03 (0.02)	0.278 (0.763)	431 (1.000)	0.03 (0.05)	0.466 (1.000)	244 (1.000)	0.02 (0.11)	0.875 (1.000)	187 (5933.22)	-15305.79** (5933.22)	506 (0.900)	0.03 (0.05)	0.550 (1.000)	298 (0.15)	0.062 (0.301)
Risk Avers SelfRate 197 (Financial)	-0.01 (0.02)	0.462 (1.000)	576 (1.000)	-0.00 (0.03)	0.869 (1.000)	395 (1.000)	0.05 (0.11)	0.685 (1.000)	183 (26550.01**)	-26550.01** (26550.01**)	642 (0.009)	-0.03 (0.04)	0.459 (1.000)	690 (0.09)	0.251 (0.733)
Risk Avers SelfRate 193 (Financial)	-0.01 (0.02)	0.544 (1.000)	336 (1.000)	0.00 (0.04)	0.971 (1.000)	281 (1.000)	-0.03 (0.20)	0.869 (1.000)	99 (8930.83)	-8930.83 (8930.83)	397 (0.733)	-0.02 (0.04)	0.688 (1.000)	428 (0.11)	0.099 (0.417)
Risk Avers SelfRate 342 (Financial)	-0.03 (0.02)	0.278 (0.763)	430 (1.000)	-0.07 (0.05)	0.466 (1.000)	243 (1.000)	-0.01 (0.11)	0.875 (1.000)	187 (5433.14)	-10802.84** (5433.14)	505 (0.900)	0.02 (0.05)	0.550 (1.000)	297 (0.16)	0.062 (0.301)
Risk Avers SelfRate 130 (Financial)	-0.06** (0.03)	0.045 (0.253)	238 (1.000)	0.04 (0.04)	0.376 (0.905)	167 (1.000)	0.25 (0.19)	0.198 (0.660)	71 (8257.46)	-14803.46* (8257.46)	273 (0.333)	0.01 (0.05)	0.907 (1.000)	298 (0.12)	0.648 (1.000)
Risk Avers SelfRate 260 (Financial)	-0.02 (0.02)	0.510 (1.000)	478 (1.000)	-0.03 (0.03)	0.295 (0.793)	343 (1.000)	-0.02 (0.12)	0.883 (1.000)	142 (5808.74)	-20258.01** (5808.74)	538 (0.011)	-0.01 (0.04)	0.884 (1.000)	578 (0.09)	0.213 (0.680)
Risk Avers SelfRate 167 (Financial)	-0.06* (0.03)	0.070 (0.323)	234 (1.000)	0.03 (0.05)	0.545 (1.000)	166 (1.000)	0.02 (0.20)	0.903 (1.000)	69 (8386.22)	-12914.57 (8386.22)	265 (0.479)	0.01 (0.06)	0.818 (1.000)	290 (0.12)	0.215 (0.680)
Risk Avers SelfRate 179 (Financial)	-0.06*** (0.02)	0.000 (0.009)	742 (1.000)	0.04 (0.03)	0.173 (0.594)	471 (1.000)	-0.17** (0.07)	0.023 (0.156)	270 (4182.22)	-6299.51 (4182.22)	836 (0.508)	0.01 (0.03)	0.652 (1.000)	802 (0.08)	0.073 (0.332)
Risk Avers SelfRate 130 (Daily Act)	-0.03 (0.03)	0.427 (0.965)	288 (1.000)	0.04 (0.05)	0.369 (0.897)	167 (1.000)	-0.24 (0.21)	0.259 (0.733)	71 (8333.25)	7468.95 (8333.25)	273 (0.901)	0.03 (0.05)	0.535 (1.000)	298 (0.12)	0.748 (1.000)
Risk Avers SelfRate 260 (Daily Act)	-0.03 (0.02)	0.183 (0.628)	478 (1.000)	0.01 (0.03)	0.683 (1.000)	343 (1.000)	0.13 (0.13)	0.350 (0.882)	142 (5896.51)	-5896.51 (5896.51)	538 (0.845)	0.01 (0.04)	0.728 (1.000)	578 (0.09)	0.386 (0.921)
Risk Avers SelfRate 167 (Daily Act)	-0.03 (0.03)	0.397 (0.934)	234 (1.000)	0.07 (0.05)	0.292 (0.663)	166 (1.000)	-0.16 (0.19)	0.407 (0.951)	69 (7690.24)	-3238.85 (7690.24)	265 (1.000)	0.01 (0.05)	0.823 (1.000)	290 (0.12)	0.216 (0.680)
Risk Avers SelfRate 197 (Driving)	-0.03 (0.02)	0.155 (0.564)	576 (1.000)	0.04 (0.03)	0.215 (0.680)	395 (1.000)	-0.17 (0.12)	0.162 (0.578)	183 (4775.79)	-4817.23 (4775.79)	642 (0.830)	0.03 (0.05)	0.362 (0.897)	690 (0.08)	0.184 (0.631)
Risk Avers SelfRate 197 (Occupation)	0.02 (0.02)	0.200 (0.662)	576 (1.000)	-0.00 (0.03)	0.882 (1.000)	395 (1.000)	-0.16 (0.10)	0.126 (0.481)	183 (13397.74**)	-13397.74** (13397.74**)	642 (0.888)	-0.03 (0.03)	0.107 (0.445)	690 (0.08)	0.130 (0.500)
Risk Avers SelfRate 197 (Health)	-0.00 (0.02)	0.840 (1.000)	575 (1.000)	0.06** (0.03)	0.049 (0.265)	395 (1.000)	-0.12 (0.12)	0.302 (0.810)	183 (4774.78)	4774.78 (4774.78)	641 (1.000)	-0.01 (0.03)	0.657 (1.000)	689 (0.08)	0.353 (0.887)
Risk Avers SelfRate 197 (Social Relation)	0.01 (0.02)	0.687 (1.000)	576 (1.000)	0.00 (0.03)	0.927 (1.000)	395 (1.000)	-0.12 (0.12)	0.304 (0.810)	183 (5096.98)	-5096.98 (5096.98)	642 (0.687)	-0.04 (0.03)	0.232 (0.692)	690 (0.08)	0.193 (0.653)
Risk Avers SelfRate 197 (Life Change)	-0.00 (0.02)	0.975 (1.000)	576 (1.000)	0.00 (0.03)	0.932 (1.000)	395 (1.000)	-0.21* (0.11)	0.053 (0.280)	183 (4880.55)	-6380.53 (4880.55)	642 (0.653)	-0.06* (0.03)	0.054 (0.280)	690 (0.07)	0.009 (0.089)
Risk Avers SelfRate 179 (Safe Invest Importance)	-0.08*** (0.02)	0.000 (0.001)	741 (1.000)	0.05* (0.03)	0.065 (0.309)	471 (1.000)	-0.08 (0.08)	0.327 (0.855)	270 (4433.64)	-10347.79** (4433.64)	835 (0.137)	-0.00 (0.04)	0.953 (1.000)	801 (0.08)	0.240 (0.715)

Notes: OLS with robust standard errors. Controls include cognitive ability, financial literacy, risk aversion, 17 income categories, 6 age categories, indicator variable for female, 16 education categories, and 5 race categories. * Significant at the 10% level; ** at the 5% level; *** at the 1% level. Naive p-values are reported in italics, FDR adjusted α -values are reported in brackets. The third column in each cell reports N .

Table C.2: Financial and Health Outcomes Regressed on All Standardized Values of Risk Preference (Continued)

	Fruit Vege	Cereal Fiber	Go to Doctor Routinely	Low dose of Aspirin	Smoking	Payday Loan	Medical Insurance
Risk Avers 167 (Titration Hypothetical Job)	-0.07 (0.08)	0.402 (0.943)	288 (1.000)	0.751 (1.000)	288 (1.000)	0.961 (1.000)	0.084 (0.02)
Risk Avers 197 (Titration Hypothetical Job)	-0.13** (0.05)	0.013 (0.295)	689 (0.241)	0.220 (0.680)	0.961 (1.000)	0.572 (0.03)	0.124 (0.01)
Risk Avers 197 (Titration Alternative Job)	-0.07 (0.06)	0.229 (0.687)	689 (1.000)	0.176 (0.763)	0.832 (1.000)	0.944 (0.03)	0.478 (0.01)
Risk Avers 197 (Titration Insurance)	0.05 (0.06)	0.369 (0.897)	689 (1.000)	0.727 (1.000)	0.897 (1.000)	0.629 (0.03)	0.629 (0.01)
Risk Avers 50 (Titration Inheritance)	-0.08 (0.06)	0.214 (0.680)	602 (1.000)	0.829 (1.000)	0.614 (1.000)	0.516 (0.02)	0.516 (0.01)
Risk Avers 189 (Titration Inheritance)	-0.07 (0.06)	0.210 (0.715)	786 (0.318)	0.668 (0.318)	0.787 (1.000)	0.682 (0.03)	0.682 (0.01)
Risk Avers 399 (Eckel & Grossman)	0.519 (0.05)	0.770 (1.000)	0.07 (0.613)	0.825 (1.000)	0.771 (1.000)	0.478 (0.02)	1.122 (0.01)
Risk Avers 263 (Eckel & Grossman)	0.151 (0.13)	0.135 (0.555)	0.13 (0.829)	0.634 (1.000)	0.594 (1.000)	0.538 (0.05)	0.249 (0.03)
Risk Avers 243 (Titration Ball)	-0.00 (0.05)	0.976 (1.000)	666 (1.000)	0.693 (1.000)	0.666 (1.000)	0.765 (0.01)	0.765 (0.01)
Risk Avers 118 (Titration Retire Savings)	-0.06 (0.05)	0.228 (0.687)	804 (1.000)	0.452 (1.000)	0.805 (1.000)	0.366 (0.03)	0.469 (0.01)
Risk Avers 210 (MPL)	-0.00 (0.05)	0.983 (1.000)	787 (0.175)	0.787 (0.601)	0.787 (1.000)	0.109 (0.01)	0.109 (0.01)
Risk Avers SelfRate 133 (General)	-0.10* (0.05)	0.052 (0.277)	824 (0.241)	0.785 (1.000)	0.419 (0.733)	0.597 (0.03)	0.597 (0.01)
Risk Avers SelfRate 197 (General)	-0.11** (0.06)	0.464 (0.687)	297 (0.733)	0.003 (0.901)	0.287 (1.000)	0.642 (0.03)	0.642 (0.01)
Risk Avers SelfRate 12 (General)	-0.16 (0.11)	0.176 (0.601)	221 (0.855)	0.036 (0.222)	0.258 (0.733)	0.894 (0.03)	0.894 (0.01)
Risk Avers SelfRate 48 (General)	0.03 (0.06)	0.637 (1.000)	594 (1.000)	0.243 (0.725)	0.595 (1.000)	0.999 (0.02)	0.999 (0.01)
Risk Avers SelfRate 169 (General)	-0.12 (0.09)	0.212 (0.680)	295 (0.680)	0.216 (0.680)	0.295 (1.000)	0.121 (0.03)	0.121 (0.01)
Risk Avers SelfRate 248 (General)	-0.09 (0.08)	0.256 (0.733)	444 (0.733)	0.010 (0.090)	0.444 (0.999)	0.998 (0.02)	0.998 (0.01)
Risk Avers SelfRate 189 (General)	-0.02 (0.05)	0.619 (1.000)	792 (1.000)	0.569 (1.000)	0.793 (1.000)	0.529 (0.02)	0.529 (0.01)
Risk Avers SelfRate 349 (Financial)	-0.11* (0.06)	0.070 (0.323)	689 (0.323)	0.052 (0.049)	0.095 (0.333)	0.641 (0.02)	0.641 (0.01)
Risk Avers SelfRate 193 (Financial)	-0.06 (0.08)	0.425 (0.965)	427 (0.653)	0.220 (0.680)	0.428 (1.000)	0.999 (0.02)	0.999 (0.01)
Risk Avers SelfRate 342 (Financial)	0.10 (0.09)	0.464 (1.000)	296 (1.000)	0.003 (0.034)	0.297 (0.034)	0.141 (0.02)	0.141 (0.01)
Risk Avers SelfRate 130 (Financial)	-0.08 (0.09)	0.399 (0.935)	298 (0.935)	0.474 (1.000)	0.298 (1.000)	0.824 (0.02)	0.824 (0.01)
Risk Avers SelfRate 260 (Financial)	0.01 (0.07)	0.838 (1.000)	577 (1.000)	0.036 (0.222)	0.578 (0.888)	0.036 (0.02)	0.036 (0.01)
Risk Avers SelfRate 167 (Financial)	-0.08 (0.09)	0.398 (0.934)	290 (0.934)	0.880 (1.000)	0.290 (1.000)	0.414 (0.02)	0.414 (0.01)
Risk Avers SelfRate 179 (Financial)	0.02 (0.05)	0.748 (1.000)	801 (1.000)	0.358 (0.892)	0.802 (0.933)	0.260 (0.01)	0.260 (0.01)
Risk Avers SelfRate 130 (Daily Act)	-0.18* (0.09)	0.056 (0.286)	298 (0.860)	0.377 (1.000)	0.298 (1.000)	0.832 (0.03)	0.832 (0.01)
Risk Avers SelfRate 260 (Daily Act)	-0.07 (0.06)	0.265 (0.737)	577 (0.818)	0.136 (0.516)	0.578 (1.000)	0.093 (0.02)	0.093 (0.01)
Risk Avers SelfRate 167 (Daily Act)	-0.05 (0.09)	0.582 (1.000)	290 (0.855)	0.334 (0.855)	0.290 (1.000)	0.678 (0.03)	0.678 (0.01)
Risk Avers SelfRate 197 (Driving)	-0.03 (0.06)	0.532 (1.000)	689 (1.000)	0.026 (0.175)	0.690 (1.000)	0.199 (0.01)	0.199 (0.01)
Risk Avers SelfRate 197 (Occupation)	-0.16*** (0.06)	0.065 (0.050)	689 (0.050)	0.307 (0.855)	0.690 (0.855)	0.965 (0.02)	0.965 (0.01)
Risk Avers SelfRate 197 (Health)	0.00 (0.06)	0.922 (1.000)	689 (0.860)	0.070 (0.352)	0.689 (1.000)	0.013 (0.03)	0.013 (0.01)
Risk Avers SelfRate 197 (Social Relation)	-0.14*** (0.05)	0.010 (0.090)	689 (0.512)	0.479 (1.000)	0.690 (0.787)	0.254 (0.01)	0.254 (0.01)
Risk Avers SelfRate 197 (Life Change)	-0.21*** (0.06)	0.000 (0.006)	689 (0.470)	0.700 (1.000)	0.690 (0.860)	0.786 (0.01)	0.786 (0.01)
Risk Avers SelfRate 179 (Safe Invest Importance)	-0.07 (0.05)	0.219 (0.680)	801 (0.305)	0.064 (0.305)	0.801 (1.000)	0.558 (0.03)	0.558 (0.01)

Notes: OLS with robust standard errors. Controls include cognitive ability, financial literacy, risk aversion, 17 income categories, 6 age categories, indicator variable for female, 16 education categories, and 5 race categories. * Significant at the 10% level; ** at the 5% level; *** at the 1% level. Naive p-values are reported in italics, FDR adjusted α -values are reported in brackets. The third column in each cell reports N .

Figure C.6: Parallel Analysis Scree Plots

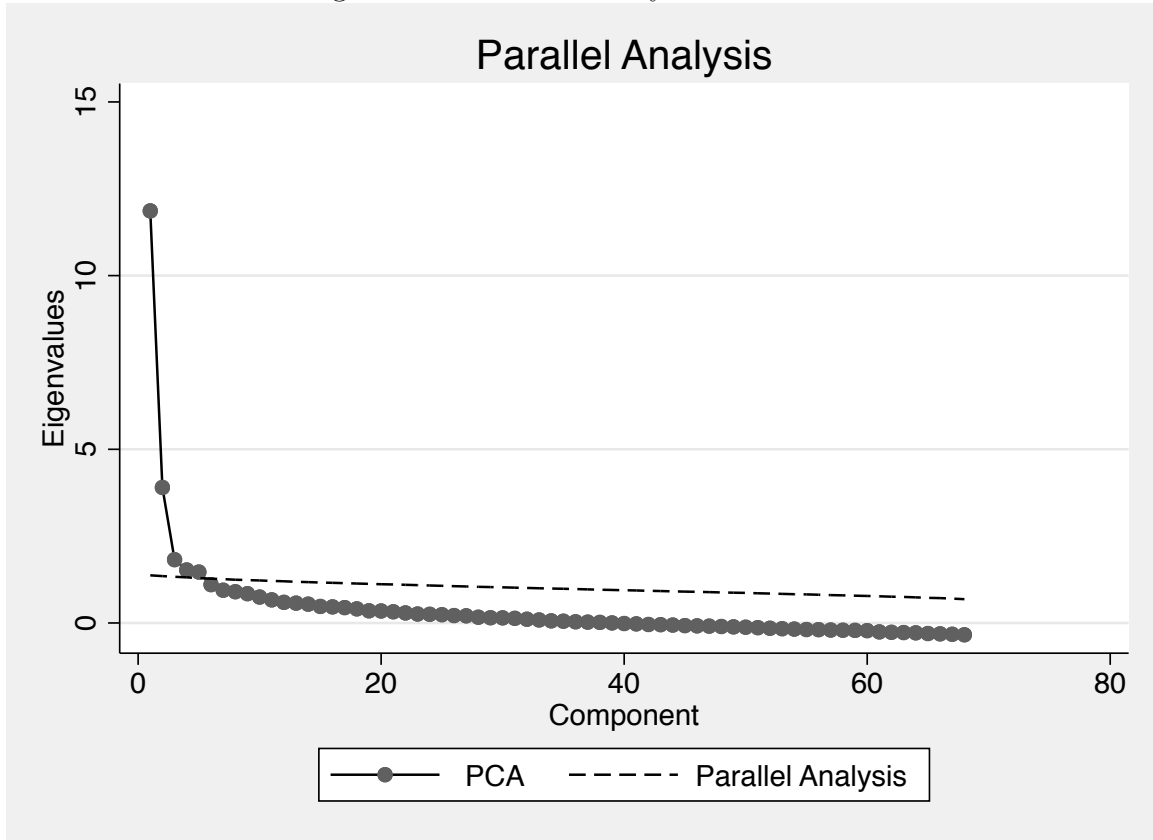


Table C.3 shows the results of confirmatory factor analysis. While this method is less common in economics we use it to compare the multiple factor model against the single factor model. The single factor model assumes all variables measure one factor. In the multiple factor model, time-preference measures, risk-aversion measures and cognitive ability measures are assumed to measure their own latent attributes. We use structural equation modeling to implement both models. Table C.3 compares goodness of fit for both models.

We find that the multiple-factor model vastly outperforms the single factor model on all model performance metrics: lower chi-squared, higher p-value, lower root mean squared error of approximation (RMSEA), lower Akaike and Bayesian Information Criteria, and higher values on both Comparative Fit and Tucker-Lewis indices. This implies that representing time-preferences, risk-preferences, and cognitive ability as a single latent value is vastly outperformed by a model that represents each as their own latent value. Using $RMSEA \leq 0.05$ as a conventional test for fitness, the test overwhelmingly rejects the single-factor model while the multiple-factor model passes the test with a p-value of 0.99.

Table C.3: Confirmatory Factor Analysis

	Single Factor Model	Multiple Factor Model
Number of Observations	316	316
χ^2_M	178.930	57.659
p	2.69e-15	.243
RMSEA	.0856	.0203
90% CI, Lower Bound	0.072	0.000
90% CI, Upper Bound	.0996	.0428
Pclose: Probability RMSEA \leq 0.05	.0000208	.99
AIC: Akaike's Information Criterion	11,105	10,990
BIC: Bayesian Information Criterion	11,240	11,136
CFI: Comparative Fit Index	.707	.984
TLI: Tucker-Lewis Index	.642	.98