Online Appendix for Parental Credit Constraints and Child College Attendance
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Data Appendix
This appendix details how variables listed in tables 2 and 3 were constructed.

Main Demographic and Economic Controls
(1) Age of the respondent and age of the child are measured, in years, at the time they completed the HRS survey.
(2) Household income includes money from jobs, net income from business, farm or rent, pensions, dividends, interest, social security payments and any other money income received by members of the family who are 15 years of age or older.
(3) Net worth is the reported market value of the household's non-home assets.
(4) Education level of the child and parent is measured as having met certain thresholds:
   a) Received a high school degree.
   b) Attended some college
   c) Graduated college with a degree from an academic (non-vocational) program. This includes associate's as well as bachelor's degrees.

Time Discount Rate
The measure of time discount rate is derived from data included in the Economy and Personal Financial Well Being survey from May 2008. Responders were asked, sequentially:
   (1) Would you prefer to receive $100 today, or $100 one year from now?
   (2) Would you prefer to receive $100 today, or $105 one year from now?
Would you prefer to receive $100 today, or $110 one year from now?

(4) Would you prefer to receive $100 today, or $115 one year from now?

(5) Would you prefer to receive $100 today, or $120 one year from now?

(6) Would you prefer to receive $100 today, or $125 one year from now?

Once a responder chooses to take the future payment, I set their time discount rate to the lowest number that rationalizes that preference. For individuals that never choose the future payment, I set their time discount rate to 0.67, making them indifferent between $100 today and $150 one year from now.

Risk Aversion

The measure of risk aversion comes from responses to the Social Security Annuity Project - Wave 1 survey, from May 2011. Survey takers were presented with a set of statements, and asked to rate their agreement on a scale of 1 to 7 with 1 corresponding to complete agreement and 7 to complete disagreement. The statements were:

(1) I think it is more important to have safe investments and guaranteed returns, than to take a risk to have a chance to get the highest possible returns.

(2) I would never consider investing in the stock market because I find it too risky.

(3) If I think an investment will be profitable, I am prepared to borrow money to make this investment.

(4) I want to be certain that my investments are safe.

(5) I think I should take greater financial risks to improve my financial position.

(6) I save to have some money to cover unforeseen expenses.
(7) I save to have enough money in my bank account to be sure I will be able to meet my financial liabilities.

I estimate a single latent factor model for the responses to these questions. The predicted value of the latent factor is used as the individual's index of risk aversion.

Intuition

The measure of preference for intuitive versus logical decision making comes from the Roybal 2 survey, from July 2014. Survey takers were presented with a set of statements about themselves, and asked to rate their accuracy on a scale of 1 to 5 with 1 corresponding to Definitely False and 5 to Definitely True. The statements were:

(1) I prefer to use my emotional hunches to deal with a problem, rather than thinking about it.

(2) Familiar problems can often be solved intuitively.

(3) There is a logical justification for most of my intuitive judgments.

(4) I rarely allow my emotional reactions to override logic.

(5) I tend to use my heart as a guide for my actions.

(6) My intuitions come to me very quickly.

(7) My intuitions are based on my experience.

(8) I often make decisions based on my gut feelings, even when the decision is contrary to objective information.

(9) I believe in trusting my hunches.

(10) When making a quick decision in my area of expertise, I can justify the decision logically.
(11) I generally don't depend on my feelings to help me make decisions.

(12) If I have to, I can usually give reasons for my intuitions.

(13) I prefer to follow my head rather than my heart.

(14) When I make intuitive decisions, I can usually explain the logic behind my decision.

(15) It is foolish to base important decisions on feelings.

(15) I trust my intuitions, especially in familiar situations.

I estimate a single latent factor model for the responses to these questions. The predicted value of the latent factor is used as the individual’s index of intuition.

Financial Literacy

The measure of financial literacy comes from Cognition and Aging in the USA Internet Decision Making Survey, Wave 2 from January 2009. Survey takers were presented with a set of true or false questions. Half of the survey takers were assigned to a set of questions that had been slightly modified to change all the true answers to false and vice versa. Survey takers entered, on a 12-point scale, how certain they were the statement was true. The first set of questions were:

(1) If you have $100 in a savings account, the interest rate is 2% per year and you never withdraw money or interest payments, after 5 years you will have more than $102 in this account in total.

(2) If the interest rate on your savings account is 1% per year and inflation is 2% per year, after one year, you will be able to buy more with the money in this account than you are able to buy today.
(3) An investment advisor tells a 30-year-old couple that $1000 in an investment that pays a certain, constant interest rate would double in value to $2000 after 20 years. If so, that investment would not be worth $4000 for at least 45 years.

(4) Financially, investing in the stock market is no better than buying lottery tickets.

(5) When an investor spreads money between 20 stocks, rather than 2, the risk of losing a lot of money decreases.

(6) If you start out with $1,000 and earn an average return of 10% per year for 30 years, the initial $1,000 will have grown to more than $6,000.

(7) The more you diversify among stocks, the more of your money you can invest in stocks.

(8) Mutual funds pay a guaranteed rate of return.

(9) A young person with $100,000 to invest should hold riskier financial investments than an older person with $100,000 to invest.

(10) It is easy to find mutual funds that have annual fees of less than one percent of assets.

(11) If you are smart, it is easy to pick individual company stocks that will have better than average returns.

(12) Using money in a bank savings account to pay off credit card debt is usually a bad idea.

(13) You could save money in interest costs by choosing a 15-year rather than a 30-year mortgage.

(14) There is no way to avoid people taking advantage of you if you invest in the stock market.

(15) If the interest rate falls, bond prices will rise.

(16) Taxes do not affect how you should invest your money.
(17) An employee of a company with publicly traded stock should have little or none of his or her retirement savings in the company's stock.

(18) For a family with a working husband and a wife staying home to take care of their young children, life insurance that will replace three years of income is not enough life insurance.

(19) It is best to avoid owning stocks of foreign companies.

(20) Older retired people should not hold any stocks.

(21) You should invest most of your money in a few good stocks that you select rather than in lots of stocks or in mutual funds.

(22) To make money in the stock market, you should not buy and sell stocks too often.

(23) If you have to sell one of your stocks, you should sell one which has gone up in price rather than one which has gone down.

(24) It is important to take a look at your investments periodically to see if you need to make changes.

(25) If inflation is not an issue, it is better for young people saving for retirement to combine stocks with long-term bonds than with short-term bonds.

(26) If you invest for the long run, the annual fees of mutual funds are unimportant.

(27) Buying a stock mutual fund usually provides a safer return than a single company stock.

I estimate a single latent factor model for the responses to these questions. The predicted value of the latent factor is used as the individual’s index of financial literacy.
Memory

The measure of self-reported memory comes from the Health and Retirement Study (HRS) Section D survey, from December 2012. Survey takers were asked how they rate their memory at the present time. Their responses were coded as (1) Excellent, (2) Very Good, (3) Good, (4) Fair or (5) Poor.

Mental Arithmetic

The measure of mental arithmetic ability also comes from HRS Section D survey, from December 2012. Survey takers were asked to subtract 7 from 100 and enter the value. They were then asked to subtract 7 from their previous answer four more times. Their score is the number of correct answers.