

Saving and attitudes to the future

Executive summary

Do variations in inter-temporal preferences or planning behavior explain inequality among households in long-term outcomes, such as savings, marriage or health? We use a simple regression method to develop an index of “future-orientedness” based on how an individual’s reported attitudes in the 1970s predict wealth and other outcomes many years later. Our results suggest that variation in planning matters more for future net worth than discount rates. Our index also helps to predict non-financial choices such as smoking behavior, indicating that it is not just financial acumen driving the index. Parental attitudes also have statistically significant effects on offspring savings and non-financial choices such as family planning.

John Knowles

Simon Fraser University

Andrew Postlewaite

University of Pennsylvania

1. Introduction

Why do some people save more than others? One important possibility is that people differ in preferences, another that they differ by rate of return, due perhaps to differences in financial acumen. These theories have been extensively explored in the existing economics literature. Outside the neoclassical framework, there is the possibility the people vary in their ability or propensity to plan for the future. A major difficulty in analyzing the issue is that distinguishing among these possibilities may not be possible on the basis of observing household-level economic variables such as income and saving, while the variables that matter most tend to be unobservable.

The Panel Study of Income Dynamics (PSID) in the 1970s asked householder direct questions about their attitudes related to both planning and preferences, and, from 1984 to the present, went on to ask household about their current wealth. Some examples of the attitudes questions are: “Would you rather save more for the future or spend your money and enjoy life today?” and “Are you the kind of person that plans his life ahead all the time, or do you live more from day to day?” The spouse of head of household answered the same questions, but at a different time from the head. Can the responses of married couples to these questions help to isolate the role of personality on savings and other inter-temporal trade-offs?

In this paper, we loosely define “Future-Orientedness” as the collection of personality traits that contribute to observed variation across individuals in inter-temporal behavior, whether it is due to preferences or other personality traits. We focus on six of the questions, shown in Table 1, that are plausibly connected to future-orientedness. A “5” indicates a relatively strong relationship to future-orientedness and a “1” indicates a weak relationship. Husbands’ responses to the attitude questions are generally correlated, but the correlation is relatively low. Wives’ responses are generally correlated as well. The interpretation is that the questions/responses relate to future-orientedness in different ways. Together, this is consistent with the notion that the responses reflect underlying personality traits.

We use regression methods to estimate the relation between the attitude responses in the 1970s and the household’s wealth-income ratio (W/Y) over the 1984-1999 period. We focus on W/Y because it allows one to distinguish people who are more apt to save from people who are merely wealthier. The responses to the six

questions are all statistically significant predictors of the ratio for both husbands and wives.

2. Results

We find that responses related to planning help to predict future W/Y even after controlling for education and previous wealth, but that responses related to inter-temporal preferences have relatively little predictive power. We also find that the estimated effect of planning attitudes helps to predict a range of behaviors that we assume are unrelated to rate of return or other measures of financial acumen: smoking, timing of marriage and child-bearing.

Of particular interest is that there is a positive correlation of future-oriented responses to both Plans Ahead and Carries Out Plans with Wealth, Income and Education for both wives and husbands, suggesting that planning is an important part of future-oriented behavior. In addition, we would expect higher education for individuals who are future-oriented and, *ceteris paribus*, greater wealth; we find this is so.

It is critical for our argument that the wealth and income variables used to compute these effects are observed decades after the survey questions were answered; it is not the case that it is simply that success in savings leads people decide *ex post* that they are good planners. People answered these questions before their subsequent financial situation, suggesting that there was permanent heterogeneity in personality. Individuals’ responses do seem to be related to financial outcomes: more future-oriented responses are positively linked to education, income and future wealth.

From the estimated effects of the attitudes we construct an *attitude index* (AI) for that individual that measures the impact of their responses on their household’s wealth-income ratio decades later (assuming that they are married at the time wealth is measured). A higher AI means that the individual’s responses to the questions are skewed toward those indicating greater future-orientedness. A value of 0.1 for a person’s AI means that the household W/Y ratio is on average higher by 0.1 than that of an identical household where the corresponding person has an AI of 0.17. Even after controlling for other economic variables, including education and non-financial income, the attitude index has a statistically significant effect on the wealth-income ratio. Furthermore, the index also predicts the wealth income ratio of their married offspring in the period 2001-2019.

Table 1. Attitude questions and responses

LIFE WORKS OUT		
1	45.48	Usually been pretty sure.
5	38.4	More times when not very sure about it.
PLANS AHEAD		
1	41.48	Plan ahead.
5	45.48	Live more from day to day.
CARRIES OUT PLANS		
1	47.86	Usually get to carry out things the way expected.
5	34.53	Things usually come up to make me change plans.
FINISHES THINGS		
1	67.99	Nearly always finish things.
5	20.89	Sometimes have to give up before they are finished.
PREFERS TO SAVE		
1	35.51	Would rather save than spend money and enjoy life today.
5	36.44	Would rather spend money and enjoy life now.
THINKS ABOUT THE FUTURE		
1	37.46	Think a lot about things that might happen.
5	20.89	Usually just take things as they come.

Note: For each question, an individual gave one of five responses, where a “1” indicates the response associated with the least future-orientedness, and a “5” indicates the strongest degree of future-orientedness.

Source: PSID Documentation.

Both husband and wife in a household responded separately to the attitude questions, so their constructed attitude indices differ if they responded differently to the questions. Taking a measure of *household* attitude index to be the sum of husband’s and wife’s AIs, one can estimate the weights of the two AIs in predicting joint outcomes, such as household wealth accumulation. Such a decomposition of the effect of the household measure on wealth accumulation shows that, on average, wives’ AI is less important than husbands’ in predicting household saving. However, the importance of wives’ AI increases as the household index increases. This may reflect higher future-orientedness of the women (marital sorting), or higher influence over household decisions (bargaining). We leave this issue to future research.

Across generations, we find that the AI of both parents are statistically-significant predictors of the education and savings outcomes of adult offspring. Both parents jointly help to predict son’s education, and while the father’s index is a statistically significant predictor of the daughter’s education the mother’s is not. The mothers’ and fathers’ AIs have sex-specific impacts on offspring wealth-income ratio. While both parents’ AIs have positive and statistically significant effects on education of both sons and daughters, the mother’s AI has a greater effect

on daughters than on sons, while the opposite is true for father’s AI, which has a larger effect on sons than on daughters. It is also the case that father’s AI has a greater effect on education than mother’s for both sons and daughters.

Before discussing parental AI’s effect on offspring choices, we mention a few offspring demographics related to parental AI. These are not predictions, only correlations, and so we do not control for other variables that might affect the wealth-income ratio. Male offspring of the top quartile of parental attitude index have annual incomes about 2/3 higher than male offspring of the bottom quartile and more than three times the terminal wealth. None of the attitudes we focused on are specifically financial in nature (e.g., none seems to relate to rate of return or financial sophistication), so we should expect that if our interpretation of these effects as capturing general future-orientedness is valid, the attitude index should have analogous effects on other inter-temporal decisions, such as those relating to family education and health. It is the case that children of higher AI parents have higher levels of education, even after controlling for parental education and income.

An example of decisions that have minimal financial consequences includes cigarette smoking. Consider two

connections between future-orientedness and smoking. First, an individual may decide that there is an inter-temporal trade-off: the pleasure from smoking now outweighs future health cost. Second, for many (perhaps most) smokers, the trade-off between present pain and future pain warrants quitting, but nevertheless fails to do so. For both men and women, higher AI predicts lower probability of having smoked. Furthermore, higher AI predicts higher probability of quitting. Together, the connection to smoking suggests that the attitude index we construct is not driven by financial considerations. The link to quitting smoking also suggests that discipline may be an important ingredient in understanding future-orientedness.

Further examples of a link between non-financial decisions and the attitude indices that we have constructed concerns family formation. Intuitively, one might expect that more future-oriented individuals might marry later and have children at a later age than less future-oriented individuals. One can show that children of fathers with higher AI delay both marriage and having children, and offspring of mothers with higher AI delay

having children. These examples suggest that it is not idiosyncratic variation in financial acumen or rates of return underlying the intergenerational linkages.

3. Related literature

There is substantial literature, both theoretical and empirical, related to this project. Given the size and detail of that literature we refer the reader to the main document.

4. Contribution

In addition to our specific empirical results, the measure of future-orientedness that we have constructed should be of substantial value in understanding the variability of peoples' success in making plans for the future and implementing those plans. The ability to construct separate measures for husband and wife are particularly important in understanding the different parental effects on joint decisions and on offspring decisions. We conclude from our results that planning for the future is a fruitful area for future research.

About the authors

John Knowles is a professor of economics at Simon Fraser University in Vancouver, Canada. His main field of research is macro-economics, broadly defined. Knowles specialize in developing equilibrium models to analyze micro-level data sets, usually in the field of family economics, but including also some early work on racial profiling. Before joining SFU in 2014, he was a professor in the Economics Department at the University of Southampton, in the U.K. Prior to that he was an assistant professor at the University of Pennsylvania, from 1999 to 2008. Knowles completed his Ph.D. at the University of Rochester, N.Y. in 1999. Published articles based on his research may be found in a number of international academic journals, including the *Economic Journal*, the *Journal of Political Economy*, *The International Economic Review*, the *Review of Economic Dynamics* and *The Quarterly Journal of Economics*.

Andrew Postlewaite is the Harry P. Kamen Professor of Economics and Professor of Finance. He is a member of the American Academy of Arts and Sciences and is an emeritus director of the National Bureau of Economic Research. He is the founding editor of the journal *American Economic Journal: Microeconomics*. Professor Postlewaite is also a Research Associate at Penn's Population Studies Center and a Research Associate at Penn's Institute for Law and Economics. He has taught at Caltech, Harvard, Princeton, Stanford, the University of California, San Diego, the University of Illinois and Yale. His research interests include game theory, social norms, and behavioral economics. He has served on the editorial board of the *Journal of Economic Theory* and *Games and Economic Behavior*, and as coeditor of *Econometrica* and editor of the *International Economic Review*.

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