

## **Course: Animal Spirits and Behavioral Economics**

Semester: Winter Semester 2016  
Level: Masters  
Language: English  
Instructor: JProf Nathanael Vellekoop, PhD  
E-Mail: [vellekoop@safe.uni-frankfurt.de](mailto:vellekoop@safe.uni-frankfurt.de)  
Office hours: every Tuesday from 16:00-17:00 in HoF 4.10 (without appointment)  
Format: Two weekly lectures for 7 weeks, from October 18, 2016 – December 1, 2016.  
Final grade: Short essay

### **Contents**

In this course we will introduce a few departures of the rational model of economic decision making. Behavioral economics adds insights from psychology to economic models. We will study a number of behavioral biases, and apply these concepts to some economic questions. The focus is on topics that are traditionally macroeconomic in nature: central banking, unemployment, inflation, and saving. We will use the book “Animal Spirits”, by Akerlof and Shiller (2009). In the lectures I will discuss the research on which the book is based, give some background, and where possible, point to current academic research. There is a German translation available in the library – you can use either language.

My goal is to give an introduction of a diverse and rapidly growing field, with a policy point of view in mind. Interaction, questions and other class participation is encouraged. I expect proper student conduct (e.g. you may only use electronic devices in class under the condition that they are content-related. Note that I can actually see you texting and browsing, which is quite embarrassing. If you need to be guarded against yourself, switch of your devices and take old fashioned notes with pen and paper: [link](#).

### **Contact details**

If you want to schedule a meeting, please send an email at [vellekoop@safe.uni-frankfurt.de](mailto:vellekoop@safe.uni-frankfurt.de).  
Note that we start classes at 12.15 on Tuesday and on 18.15 on Thursdays

### **Examination**

Your grade will be based on a short paper you will have to write. Instructions about topic, form requirements and deadline will follow later. Examination registration and withdrawal takes place electronically via QIS within the period 13th to 26th of October 2016.

### **Learning goals: LGMMF-3, LGMSQ-3/LGPHD-3, and LGIEEP-3**

At the end of the course, the student should:

- Have an overview of some important behavioral biases
- Be able to argue how behavioral economics and the rational framework offer different perspectives, and offer pros and cons for each perspective
- Incorporate behavioral economics into macroeconomic topics
- read, interpret, evaluate, and discuss results in the academic literature

## Lecture schedule and reading list

This is a relatively small course, and meant to give an overview of a large field. My teaching strategy is to take the highlights. Since behavioral economics is typically framed as a departure from some standard economic model, I would suggest the following learning strategy:

- (1) Take the lecture slides, the book and the assigned articles as a starting point.
- (2) Think with every concept and application what the rational economics benchmark would be.
- (3) How is behavioral economics supposed to improve on the rational benchmark?
- (4) What is your evaluation of (2) and (3)?

The articles mentioned in the schedule are mandatory reading. In the back of the syllabus are more articles for the interested student (and some of them are briefly discussed in class).

## Lecture 1: introduction and overview

### 1. Introduction to behavioral (macro)economics

- ✓ Akerlof, George A. 2002. "Behavioral Macroeconomics and Macroeconomic Behavior" *American Economic Review*, 92(3): 411-433. [link to pdf](#) [NV: this article is based on Akerlof's Nobel Prize lecture]
- ✓ DellaVigna, Stefano. 2009. "Psychology and Economics: Evidence from the Field" *Journal of Economic Literature*, 47(2): 315-72. [link to pdf](#) [NV: do not read this article for the first lecture, I will occasionally refer during the classes to it. This article presents the state of the art in behavioral economics, with an empirical point of view.]

## Lectures 2-6: building blocks

2. Confidence and trust – chapter 1 in Akerlof and Shiller (2009), furthermore "AS"
3. Fairness and corruption – AS chapters 2 and 3
4. Money illusion – AS chapter 4
5. Time discounting – no readings
6. Heuristics and Prospect Theory
  - ✓ Tversky, Amos, and Daniel Kahneman. 1974. "Judgment under Uncertainty: Heuristics and Biases." *Science*, 185(4157): 1124-1131. [link to pdf](#) [NV: this is a classic]
  - ✓ Barberis, Nicholas C. 2013. "Thirty Years of Prospect Theory in Economics: A Review and Assessment." *Journal of Economic Perspectives*, 27(1): 173-96. [link to pdf](#)

## Lectures 7-14: Applications

7. Why do central bankers have power over the economy? – AS chapter 7
8. Why are there people who cannot find a job? – AS chapter 8
9. Why is there a trade-off between inflation and unemployment in the long run? – AS ch. 9
10. Why is there special poverty among minorities? – AS chapter 13
11. Why is saving for the future so arbitrary? – AS chapter 10
  - ✓ Benartzi, Shlomo, and Richard Thaler. 2007. "Heuristics and Biases in Retirement Savings Behavior." *Journal of Economic Perspectives*, 21(3): 81-104. [link to pdf](#)
12. Why are financial prices and corporate investments so volatile? – AS chapter 11
  - ✓ Shiller, Robert. 2014. "Speculative Asset Prices" *American Economic Review*, 104(6): 1486-1517. [link to pdf](#) [NV: this article is based on Shiller's Nobel Prize lecture]
13. Why do real estate markets go through cycles? – AS chapter 12
14. Policy making with behavioral economics, and wrap-up of the course

## Further readings

The readings noted here by lecture topic are either studies mentioned in class, or suggestions for further reading for the interested student.

### More on introducing behavioral economics

- ✓ Ariely, Dan. 2009. *Predictably Irrational*
- ✓ Fehr, Ernst, and Jean-Robert Tyran. 2005. "Individual Irrationality and Aggregate Outcomes" *Journal of Economic Perspectives*, 19(4): 43-66. [link to pdf](#)
- ✓ Glaeser, Edward L. 2004. "Psychology and the market" *American Economic Review*, 94(2): 408-413. [link to pdf](#)
- ✓ Kahneman, Daniel. 2011. *Thinking, Fast and Slow*. Farrar, Straus and Giroux.
- ✓ Meshulam, Meir, Eyal Winter, Gershon Ben-Shakhar, and Itzhak Aharon. 2012. "Rational emotions." *Social neuroscience* 7(1): 11-17. [link to pdf](#)
- ✓ Rabin, Matthew. 1998. "Psychology and Economics" *Journal of Economic Literature*, 36(1): 11-46. [link to pdf](#)
- ✓ Schwartz, Barry. 2004. *The Paradox of Choice*, New York: HarperCollins
- ✓ Wiederholt, Mirko. 2010. *Rational Inattention*, prepared for The New Palgrave Dictionary of Economics, [link to pdf](#).

### Examples mentioned in class

- ✓ DellaVigna, Stefano, and Ulrike Malmendier. 2006. "Paying not to go to the gym" *American Economic Review*, 96(3): 694-719. [link to pdf](#).
- ✓ Gneezy, Uri, and Aldo Rustichini. 2000. "A Fine is a price" *Journal of Legal Studies*, 29 (2000): 1-17. [link to pdf](#).
- ✓ Malmendier, Ulrike, and Geoffrey Tate. 2008. "Who makes acquisitions? CEO overconfidence and the market's reaction." *Journal of Financial Economics* 89(1): 20-43. [link to pdf](#)

### More on confidence

- ✓ Barsky, R. B., and E. R. Sims. 2012. Information, animal spirits, and the meaning of innovations in consumer confidence." *American Economic Review* 102(4): 1343-1377.
- ✓ Blanchard, O. 1993. "Consumption and the Recession of 1990-1991" *American Economic Review*, 83(2): 270-274. [link to pdf](#)
- ✓ Carroll, C.D. 2003. "Macroeconomic expectations of households and professional forecasters" *Quarterly Journal of economics* 118(1): 269-298. [link to pdf](#)
- ✓ Doms, M.E. and N. Morin. 2004. "Consumer sentiment, the economy, and the news media" Federal Reserve Board working paper. [link to pdf](#)
- ✓ Hollanders, D. and R. Vliegthart. 2011. "The influence of negative newspaper coverage on consumer confidence: The Dutch case" *Journal of Economic Psychology* 32(3): 367-373. [link to pdf](#)
- ✓ Ludvigson, Sydney C. 2004. "Consumer Confidence and Consumer Spending" *Journal of Economic Perspectives*, 18(2): 29-50. [link to pdf](#)

### **More on trust, social capital, and trust game**

- ✓ Aghion, P., Y. Algan, P. Cahuc, and A. Shleifer. 2010. "Regulation and distrust" *Quarterly Journal of Economics*, 125(3): 1015-1049. [link to pdf](#)
- ✓ Bohnet, I., F. Greig, B. Herrmann, and R. Zeckhauser. 2008. "Betrayal Aversion: Evidence from Brazil, China, Oman, Switzerland, Turkey, and the United States." *American Economic Review*, 98(1): 294-310. [link to pdf](#)
- ✓ Glaeser, E.L., D. Laibson, and B. Sacerdote. 2002. "An economic approach to social capital" *The Economic Journal* 112(483): F437-F458. [link to pdf](#)
- ✓ Guiso, L., P. Sapienza, and L. Zingales. 2008. "Trusting the Stock Market" *Journal of Finance*, 63(6): 2557-2600. [link to pdf](#)
- ✓ Karlan, D.S. 2005. "Using Experimental Economics to Measure Social Capital and Predict Financial Decisions" *American Economic Review* 95(5): 1688-1699. [link to pdf](#)
- ✓ Stevenson, Betsey, and Justin Wolfers. 2011. "Trust in Public Institutions over the Business Cycle" *American Economic Review*, 101(3): 281-87. [link to pdf](#)

### **More on fairness, applications to labor supply and identity**

- ✓ Akerlof, George A. 1982. "Labor contracts as partial gift exchange." *Quarterly Journal of Economics* 97(4): 543-569. [link to pdf](#)
- ✓ Akerlof, George A., and Rachel E. Kranton. 2005. "Identity and the Economics of Organizations." *Journal of Economic Perspectives*, 19(1): 9-32. [link to pdf](#)
- ✓ Bartling, Björn, Ernst Fehr, and K.M. Schmidt. 2012. "Screening, competition, and job design: economic origins of good jobs." *American Economic Review*, 102(2): 834-64. [link to pdf](#)
- ✓ Fehr, Ernst and Klaus Schmidt. 1999. "A Theory of Fairness, Competition and Cooperation" *Quarterly Journal of Economics*, 114(3): 817-868. [link to pdf](#)
- ✓ Fehr, Ernst, and Simon Gächter. 2000. "Cooperation and Punishment in Public Goods Experiments" *American Economic Review*, 90(4): 980-994. [link to pdf](#)
- ✓ Fehr, Ernst, and Lorenz Goette. 2007. "Do workers work more if wages are high? Evidence from a randomized field experiment." *American Economic Review*, 97(1): 298-317. [link to pdf](#)
- ✓ Fehr, Ernst, Lorenz Goette, and Christian Zehnder. 2009. "A behavioral account of the labor market: The role of fairness concerns." *Annual Review of Economics* 1(1): 355-384.
- ✓ Gneezy, Uri, and John A. List. 2006. "Putting behavioral economics to work: Testing for gift exchange in labor markets using field experiments." *Econometrica* 74(5): 1365-1384. [pdf](#)
- ✓ Kahneman, Daniel, Jack L. Knetsch and Richard Thaler. (1986). "Fairness as a Constraint on Profit Seeking: Entitlements in the Market" *American Economic Review*, 76(4): 728-741. [link to pdf](#)
- ✓ Krueger, Alan B. and Alexandre Mas. 2004. "Strikes, Scabs, and Tread Separations: Labor Strife and the Production of Defective Bridgestone/Firestone Tires" *Journal of Political Economy* 112(2): 253-289. [link to pdf](#)

### **More on corruption and corporate governance**

- ✓ Akerlof, George A. and Paul M. Romer. 1993. "Looting: The Economic Underworld of Bankruptcy for Profit" *Brookings Papers on Economic Activity*, 1993(2): 1-73 [link to pdf](#)
- ✓ Djankov, S., R. La Porta, F. Lopez-de-Silanes, and A. Shleifer. 2008. "The law and economics of self-dealing" *Journal of Financial Economics*, 88(3): 430-465. [link to pdf](#)

- ✓ Johnson, S., P. Boone, A. Breach, and E. Friedman. 2000. "Corporate governance in the Asian financial crisis" *Journal of Financial Economics*, 58(1): 141-186. [link to pdf](#)
- ✓ Shleifer, Andrei, and Daniel Wolfenzon. 2002. "Investor protection and equity markets." *Journal of Financial Economics*, 66(1): 3-27. [link to pdf](#)
- ✓ Svensson, Jakob. 2005. "Eight Questions about Corruption" *Journal of Economic Perspectives*, 19(3): 19-42. [link to pdf](#)
- ✓ Treisman, Daniel. 2000. "The causes of corruption: a cross-national study." *Journal of public economics* 76(3): 399-457. [link to pdf](#)

### **More on money illusion**

- ✓ Campbell, C.M., and K.S. Kamlani. 1997. "The reasons for wage rigidity: evidence from a survey of firms." *The Quarterly Journal of Economics* 112(3): 759-789. [link to pdf](#)
- ✓ Carlton, D.W. 1986. "The Rigidity of Prices" *The American Economic Review*, 76(4): 637-658. [link to pdf](#)
- ✓ Christofides, Louis N., and Paris Nearchou. 2007. "Real and nominal wage rigidities in collective bargaining agreements." *Labour Economics* 14(4): 695-715. [link to pdf](#)
- ✓ Fehr, Ernst, and Jean-Robert Tyran. 2000. "Does Money Illusion Matter?" working paper no. 45. [link to pdf](#)
- ✓ Fehr, Ernst, and Jean-Robert Tyran. 2001. "Does Money Illusion Matter?" *American Economic Review*, 91(5): 1239-1262. [link to pdf](#)
- ✓ Genesove, David. 2003. "The nominal rigidity of apartment rents." *Review of Economics and Statistics* 85(4): 844-853. [link to pdf](#)
- ✓ Hobijn, Bart, Federico Ravenna, and Andrea Tambalotti. 2006. "Menu costs at work: restaurant prices and the introduction of the euro." *The Quarterly Journal of Economics* 121(3): 1103-1131. [link to pdf](#)
- ✓ Knack, S. and P. Keefer. 1997. "Does social capital have an economic payoff? A cross-country investigation" *The Quarterly journal of economics* 112(4): 1251-1288. [link to pdf](#)
- ✓ Kooreman, Peter, Riemer P. Faber and Heleen M. J. Hofmans. 2004. "Charity Donations and the Euro Introduction: Some Quasi-Experimental Evidence on Money Illusion" *Journal of Money, Credit and Banking* 36(6): 1121-1124. [link to pdf](#)
- ✓ Levy, D., Bergen, M., Dutta, S., and Venable, R. 1997. "The magnitude of menu costs: direct evidence from large US supermarket chains" *The Quarterly Journal of Economics*, 112(3): 791-824. [link to pdf](#)
- ✓ Shafir, Eldar, Peter Diamond, and Amos Tversky. 1997. "Money Illusion" *Quarterly Journal of Economics*, 112(2): 341-374. [link to pdf](#)

### **More on time discounting and self-control problems**

- ✓ Andreoni, James, and Charles Sprenger. 2012. "Risk Preferences Are Not Time Preferences." *American Economic Review*, 102(7): 3357-76. [link to pdf](#)
- ✓ Ariely, Dan, and Klaus Wertenbroch. 2002. "Procrastination, Deadlines, and Performance: Self-control by Precommitment." *Psychological Science* 13(3): 219-224. [link to pdf](#)
- ✓ Dasgupta, Partha, and Eric Maskin. 2005. "Uncertainty and Hyperbolic Discounting." *American Economic Review*, 95(4): 1290-1299. [link to pdf](#)

- ✓ O'Donoghue, Ted, and Matthew Rabin. 1999. "Doing It Now or Later." *American Economic Review*, 89(1): 103-124. [link to pdf](#)
- ✓ Frederick, Shane, George Loewenstein, and Ted O'Donoghue. 2002. "Time Discounting and Time Preference: A Critical Review" *Journal of Economic Literature*, 40(2): 351-401. [link to pdf](#)
- ✓ Thaler, Richard. 1981. "Some Empirical Evidence on Dynamic Inconsistency." *Economics Letters* 8(3): 201-207. [link to pdf](#)

### **More on framing and prospect theory**

- ✓ Brunnermeier, Markus K. 2004. "Learning to reoptimize consumption at new income levels: A rationale for prospect theory." *Journal of the European Economic Association* 2(1): 98-114. [link to pdf](#)
- ✓ Kahneman, Daniel, and Amos Tversky. 1979. "Prospect Theory: An Analysis of Decision under Risk." *Econometrica*, 47(2): 263-291. [link to pdf](#)
- ✓ Kahneman, Daniel, Jack L. Knetsch and Richard H. Thaler. 1990. "Experimental Tests of the Endowment Effect and the Coase Theorem" *Journal of Political Economy*, 98(6): 1325-1348. [link to pdf](#)
- ✓ Knetsch, Jack L. 1989. "The endowment effect and evidence of nonreversible indifference curves." *American Economic Review* 79(5): 1277-1284. [link to pdf](#)
- ✓ Rachlinski, Jeffrey J., Andrew J. Wistrich, and Chris Guthrie. 2013. "Altering Attention in Adjudication." *UCLA Law Review* 60: 1586-1618. [link to pdf](#)
- ✓ Redelmeier, Donald A., and Eldar Shafir. 1995. "Medical decision making in situations that offer multiple alternatives." *JAMA* 273(4): 302-305. [link to pdf](#)
- ✓ Simonson, Itamar, and Amos Tversky. 1992. "Choice in context: tradeoff contrast and extremeness aversion." *Journal of Marketing Research* 29(3): 281-295. [link to pdf](#)

### **More on central banking**

[NV: the *Journal of Economic Perspectives (JEP)* devoted 5 articles in the November issue of 2013 to 100 years of Federal Reserve, plus an interview with Paul Volcker. Did I mention that you can read and download all JEP articles for free? <http://www.aeaweb.org/jep/>]

- ✓ Bernanke, Ben S. and Alan S. Blinder. 1988. "Credit, Money, and Aggregate Demand" *American Economic Review* 78(2): 435-439. [link to pdf](#)
- ✓ Bernanke, Ben S., and Alan S. Blinder. 1992. "The Federal Funds Rate and the Channels of Monetary Transmission." *American Economic Review* (1992): 901-921. [link to pdf](#)
- ✓ Bernanke, Ben S., and Mark Gertler. 1995. "Inside the Black Box: The Credit Channel of Monetary Policy Transmission." *Journal of Economic Perspectives*, 9(4): 27-48. [link to pdf](#)
- ✓ Bernanke, Ben S., and Vincent R. Reinhart. 2004. "Conducting Monetary Policy at Very Low Short-Term Interest Rates." *American Economic Review*, 94(2): 85-90. [link to pdf](#)
- ✓ Bernanke, Ben S. 2013. "A Century of US Central Banking: Goals, Frameworks, Accountability." *Journal of Economic Perspectives*, 27(4): 3-16. [link to pdf](#)
- ✓ Bijlsma, Michiel, and Karen van der Wiel. 2012. "What Awareness? Consumer Perception of Bank Risk and Deposit Insurance". CPB Netherlands Bureau for Economic Policy Analysis working paper. [link to pdf](#)

- ✓ Gorton, Gary, and Andrew Metrick. 2013. "The Federal Reserve and Panic Prevention: The Roles of Financial Regulation and Lender of Last Resort." *Journal of Economic Perspectives*, 27(4): 45-64. [link to pdf](#)
- ✓ Iyer, Rajkamal, and Manju Puri. 2012. "Understanding Bank Runs: The Importance of Depositor-Bank Relationships and Networks." *American Economic Review*, 102(4): 1414-1445. [link to pdf](#)
- ✓ Reis, Ricardo. 2013. "Central Bank Design." *Journal of Economic Perspectives*, 27(4): 17-44. [link to pdf](#)
- ✓ Shin, Hyun Song. 2009. "Reflections on Northern Rock: The Bank Run That Heralded the Global Financial Crisis." *Journal of Economic Perspectives*, 23(1): 101-19. [link to pdf](#)
- ✓ Stuckler, David, Christopher M. Meissner, and Lawrence P. King. 2008. "Can a bank crisis break your heart." *Globalization and Health* 4(1) [link to pdf](#)

### **More on involuntary unemployment**

- ✓ Akerlof, George A., and Janet L. Yellen. 1990. "The fair wage-effort hypothesis and unemployment" *Quarterly Journal of Economics* 105(2): 255-283. [link to pdf](#)
- ✓ Bewley, Truman F. 1999. *Why wages don't fall during a recession*. Harvard University Press.
- ✓ Campbell, Carl M., and Kunal S. Kamani. 1997. "The reasons for wage rigidity: evidence from a survey of firms." *Quarterly Journal of Economics* 112(3): 759-789. [link to pdf](#)
- ✓ Card, David, Alexandre Mas, Enrico Moretti, and Emmanuel Saez. 2012. "Inequality at Work: The Effect of Peer Salaries on Job Satisfaction" *American Economic Review*, 102(6): 2981-3003. [link to pdf](#)
- ✓ Card, David, Jörg Heining, and Patrick Kline. 2013. "Workplace Heterogeneity and the Rise of West German Wage Inequality" *Quarterly Journal of Economics*, 128(3): 967-1015. [link to pdf](#) and see the 2013 Lampman Memorial lecture as well [link to movie](#)
- ✓ Falk, Armin, Ernst Fehr, and Christian Zehnder. 2006. "Fairness Perceptions and Reservation Wages – The Behavioral Effects of Minimum Wage Laws" *Quarterly Journal of Economics* 121(4): 1347-1381. [link to pdf](#)
- ✓ Fang, Hanming, and Giuseppe Moscarini. 2005. "Morale hazard." *Journal of Monetary Economics* 52(4): 749-777. [link to pdf](#)
- ✓ Groshen, Erica L. 1991. "Sources of intra-industry wage dispersion: How much do employers matter?" *Quarterly Journal of Economics* 106(3): 869-884. [link to pdf](#)
- ✓ Juhn, C., Murphy, K. M., and Pierce, B. 1993. "Wage Inequality and the Rise in Returns to Skill" *Journal of Political Economy*, 101(3): 410-442. [link to pdf](#)
- ✓ Krueger, Alan B., and Lawrence H. Summers. 1988. "Efficiency Wages and the Inter-industry Wage Structure." *Econometrica* 56(2): 259-93. [link to pdf](#)

### **More on long-run Phillips curve**

- ✓ Akerlof, George A. and Janet L. Yellen. 1985. "Can small deviations from rationality make significant differences to economic equilibria?" *American Economic Review*, 75(4): 708-720. [link to pdf](#)
- ✓ Akerlof, George A., William T. Dickens, and George L. Perry. 2000. "Near-rational wage and price setting and the long-run Phillips curve." *Brookings Papers on Economic Activity* 2000(1): 1-44. [link to pdf](#)

- ✓ Akerlof, George A., William T. Dickens, George L. Perry, Robert J. Gordon, and N. Gregory Mankiw. 1996. "The Macroeconomics of Low Inflation." *Brookings papers on economic activity* 1996(1): 1-76. [link to pdf](#)
- ✓ Akerlof, George A., and William T. Dickens. 2007. "Unfinished Business in the Macroeconomics of Low Inflation: A Tribute to George and Bill by Bill and George." *Brookings Papers on Economic Activity* 2007(2): 31-46. [link to pdf](#)
- ✓ Coibion, Olivier, and Yuriy Gorodnichenko. 2013. "Is The Phillips Curve Alive and Well After All? Inflation Expectations and the Missing Disinflation" NBER working paper no. 19598. [link to pdf](#)
- ✓ Cooley, Thomas F., and Vincenzo Quadrini. 1999. "A neoclassical model of the Phillips curve relation." *Journal of Monetary Economics* 44(2): 165-193. [link to pdf](#)
- ✓ Fortin, Pierre. 1996. "The great Canadian slump." *Canadian Journal of Economics* 29(4): 761-787. [link to pdf](#). Comment by Freedman and Macklem (1998): [link to pdf](#). Rejoinder by Fortin (1999): [link to pdf](#).
- ✓ Palley, Thomas I. 1994. "Escalators and Elevators: A Phillips Curve for Keynesians." *The Scandinavian Journal of Economics* 96(1): 111-116. [link to pdf](#)
- ✓ Tobin, James. 1972. "Inflation and Unemployment." *American Economic Review* 62(1): 1-18. [link to pdf](#)
- ✓ Shiller, Robert J. 1997. "Why Do People Dislike Inflation?" In: *Reducing Inflation: Motivation and Strategy*, edited by Christina D. Romer and David H. Romer. University of Chicago Press. [link to pdf](#)

#### **More on poverty and identity**

- ✓ Akerlof, George A., and Rachel E. Kranton. 2000. "Economics and Identity." *Quarterly Journal of Economics* 115(3): 715-753. [link to pdf](#)

#### **More on household saving**

- ✓ Angeletos, G. M., Laibson, D., Repetto, A., Tobacman, J., & Weinberg, S. 2001. "The hyperbolic consumption model: Calibration, simulation, and empirical evaluation" *Journal of Economic Perspectives*, 15(3): 47-68. [link to pdf](#)
- ✓ Card, David, and Michael Ransom. 2011. "Pension plan characteristics and framing effects in employee savings behavior." *Review of Economics and Statistics* 93(1): 228-243. [link to pdf](#)
- ✓ Laibson, D. I., A. Repetto, and J. Tobacman. 1998. "Self-control and saving for retirement" *Brookings Papers on Economic Activity*, 1998(1), 91-196. [link to pdf](#)
- ✓ Thaler, Richard H. 1990. "Anomalies: Saving, Fungibility, and Mental Accounts." *Journal of Economic Perspectives*, 4(1): 193-205. [link to pdf](#)
- ✓ Thaler, R. H., and S. Benartzi. 2004. "Save more tomorrow™: Using behavioral economics to increase employee saving" *Journal of political Economy*, 112(S1): S164-S187. [link to pdf](#)

#### **More on asset prices, bubbles and crashes**

John Cochrane provided some nice comments on the rhetoric of finance on his blog. There also is a link to the speeches of the three Nobel prize laureates Fama, Hansen and Shiller: [link to blog](#)

- ✓ Barberis, Nicholas, and Richard Thaler. 2003. "A survey of behavioral finance." *Handbook of the Economics of Finance* 1: 1053-1128.



- ✓ Benartzi, Shlomo, and Richard H. Thaler. 1995. "Myopic loss aversion and the equity premium puzzle" *Quarterly Journal of Economics* 110(1): 73-92. [link to pdf](#)
- ✓ Bosch-Domenech, A., J.G. Montalvo, R. Nagel, and A. Satorra. 2002. "One, two, (three), infinity,...: Newspaper and lab beauty-contest experiments" *American Economic Review* 92(5): 1687-1701. [link to pdf](#)
- ✓ Campbell, John Y., and Robert J. Shiller. 1988. "Stock prices, earnings, and expected dividends." *Journal of Finance* 43(3): 661-676. [link to pdf](#)
- ✓ DeLong, J. Bradford, Andrei Shleifer, Lawrence H. Summers and Robert J. Waldmann. 1990. "Positive Feedback Investment Strategies and Destabilizing Rational Speculation" *Journal of Finance* 45(2): 379-395. [link to pdf](#)
- ✓ DeLong, J. Bradford, Andrei Shleifer, Lawrence H. Summers and Robert J. Waldmann. 1990. "Noise Trader Risk in Financial Markets" *Journal of Political Economy* 98(4): 703-738. [pdf](#)
- ✓ Hirshleifer, David, and Tyler Shumway. 2003. "Good day sunshine: Stock returns and the weather." *Journal of Finance* 58(3): 1009-1032. [link to pdf](#)
- ✓ Malmendier, Ulrike, and Devin Shanthikumar. 2007. "Are small investors naive about incentives?" *Journal of Financial Economics* 85(2): 457-489. [link to pdf](#)
- ✓ Malmendier, Ulrike, and Stefan Nagel. 2011. "Depression Babies: Do Macroeconomic Experiences Affect Risk Taking?" *Quarterly Journal of Economics* 126(1): 373-416. [link to pdf](#)
- ✓ Powell, Owen. 2010. *Essays on Experimental Bubble Markets*. CentER PhD dissertation no. 261. [link to pdf](#)
- ✓ Shiller, Robert J. 1981. "Do Stock Prices Move Too Much to be Justified by Subsequent Changes in Dividends?" *American Economic Review* 71(3): 421-436. [link to pdf](#)
- ✓ Shiller, Robert. 2000. *Irrational Exuberance*. 1<sup>st</sup> edition, Princeton University Press.
- ✓ Shleifer, Andrei, and Lawrence H. Summers. 1990. "The Noise Trader Approach to Finance." *Journal of Economic Perspectives*, 4(2): 19-33. [link to pdf](#) [NV: in the same issue are more overview articles on asset bubbles]
- ✓ Smith, Vernon L., Gerry L. Suchanek, and Arlington W. Williams. 1988. "Bubbles, crashes, and endogenous expectations in experimental spot asset markets" *Econometrica* 56(5): 1119-1151. [link to pdf](#)

### **More on housing prices, cycles and bubbles**

- ✓ Brunnermeier, Markus K., and Christian Julliard. 2008. "Money illusion and housing frenzies." *Review of Financial Studies* 21(1): 135-180. [link to pdf](#)
- ✓ Case, Karl E., and Robert J. Shiller. 2003. "Is there a bubble in the housing market?" *Brookings Papers on Economic Activity* 2003(2): 299-362. [link to pdf](#)
- ✓ Case, Karl E., Robert J. Shiller, and Anne Thompson. 2012. "What have they been thinking? Home buyer behavior in hot and cold markets" NBER working paper w18400. [link to pdf](#)
- ✓ Genesove, David, and Christopher Mayer. 2001. "Loss aversion and seller behavior: Evidence from the housing market." *Quarterly Journal of Economics* 116(4): 1233-1260. [link to pdf](#)
- ✓ Glaeser, Edward L. 2013. "A Nation of Gamblers: Real Estate Speculation and American History." *American Economic Review*, 103(3): 1-42. [link to pdf](#)
- ✓ Northcraft, Gregory B., and Margaret A. Neale. 1987. "Experts, amateurs, and real estate: An anchoring-and-adjustment perspective on property pricing decisions." *Organizational behavior and human decision processes* 39(1): 84-97. [link to pdf](#)