

### **Research Seminar in Empirical Household Finance**

### Prof. Johannes Stroebel and Prof. Theresa Kuchler

### NYU Stern -- FINC-GB 2309

### **Meeting time and Target Audience:**

Fridays, 1.30pm – 4.30pm, 9/11/2019 - 12/11/2019, (Most likely on zoom)

Interested students from all years, departments, schools, and universities are welcome to register. Please email us if you have any questions (johannes.stroebel@nyu.edu, tkuchler@stern.nyu.edu).

#### **Overview:**

In the first class, we will give an introductory lecture to provide an overview of the field, as well as approaches to finding research questions.

The rest of the class is then going to be split into two components:

### Five half-day Zoom-based topic classes

The sessions will be held on Friday afternoons, between 12.30pm ET and 5.30pm ET. The session dates and topics are as follows.

Fri, October 2, 2020	Household Borrowing (Non-Mortgage)
Fri, October 16, 2020	Peer Effects in Household Finance
Fri, November 6, 2020	Determinants and Effects of Beliefs
Fri, November 20, 2020	Mortgage Borrowing and Default
Fri December 4, 2020	Climate Finance

Fri, December 4, 2020 Climate Finance

During these sessions, Professors Stroebel and Kuchler as well as a number of leading scholars will present research papers on various topics within household finance. Most of the papers will be empirical and will use various empirical strategies (instrumental variables, differences-in-differences, regression discontinuity, structural estimation, and field experiments) to identify causal effects.

The topics are chosen to give students a taste of the research done under the "household finance" umbrella, rather than to provide a comprehensive overview of household finance research. A full schedule for these classes is attached below; please sign up to a separate zoom invite using the following link (<a href="https://forms.gle/6ehRcF6okSXABjbc7">https://forms.gle/6ehRcF6okSXABjbc7</a>). These sessions are open to auditors from around the world.



### • In-person research workshop sessions

The workshop sessions aim to help students develop and work on their own research in a collaborative setting. Starting on September 25, Each student is required to present in each of the workshop sessions.

The goal of each presentation is for students to share their research progress, to update the group on what they have been working on, and to receive feedback on their work. The hope is that over the course of the semester, each student develops their own research ideas and ultimately turns them into actual research papers.

For their presentation, students have several options:

#### • New research idea

Students can present a new research idea. When presenting such an idea, students should outline the idea, focusing on the research question and their proposed research method/approach, including a discussion of paths to access the necessary data. Students should also include a discussion of the related literature for their fellow classmates, so all students can understand and discuss the potential contribution to the literature.

### • Literature overview of a specific area of interest

Especially during the early sessions, students can give a presentation of an area in the literature which they are interested to do research in. This should be similar to a literature review presented as part of a research idea (though it would likely be somewhat more detailed), but would not yet require the student to have formulated a specific idea. Students should focus on the open question in the area they are speaking about to help spark the development of actual research ideas.

### • Specific paper related to own research

Students can present specific papers which are key to the development of their own research ideas. When presenting the paper, students should explain why studying this paper in detail helps them move forward in their own research. Presenting a specific paper can be especially useful if the paper uses a technique (econometric technique, model, empirical method, ...) the student aims to use in their own research or if the student's own research strongly builds on this paper. These presentations should be structured as if the student was presenting this paper as their own research.



### • Progress on own research

Especially in later sessions, students would ideally present the progress they made in their own research. For instance, students can share updates on their work on a research idea presented earlier in the semester.

In the final class, all students are expected to present an overview of the research progress they have made during the semester; ideally, at this stage, a clear research design has emerged and a number of results can be presented

Depending on the number of students in the class, each presentation should aim to be around 20-30 minutes in length. Grading for the course will be based on the quality of students' presentations and the progress towards an own research question through the semester.

At the end of the syllabus, we list a number of papers as starting points for students looking for interesting questions.

### **SESSION OVERVIEW**

11-Sep	Introductory Lecture (Johannes + Theresa)
18-Sep	Johannes presents "House Prices, Local Demand, and Retail Prices;" Discuss first ideas
25-Sep	Research Workshop (Johannes)
2-Oct	Zoom-based Topic Classes - Household Borrowing (Non-Mortgage)
9-Oct	Research Workshop (Theresa)
16-Oct	Zoom-based Topic Classes - Peer Effects in Household Finance
23-Oct	Research Workshop (Johannes)
30-Oct	Research Workshop (Theresa)
6-Nov	Zoom-based Topic Classes - Determinants and Effects of Beliefs
13-Nov	Research Workshop (Theresa)
20-Nov	Zoom-based Topic Classes - Mortgage Borrowing and Default
4-Dec	Zoom-based Topic Classes - Climate Finance
11-Dec	Final Project Presentations (Johannes + Theresa)



# <u>Topic Session 1: Household Borrowing (Non-Mortgage)</u>

# Friday, October 2, 2020

12.30 pm - 1.45 pm	Johannes Stroebel (NYU Stern)
	Topic Overview
	Regulating Consumer Financial Products: Evidence from Credit Cards
1.45pm – 2.30pm	Theresa Kuchler (NYU Stern)
	Sticking To Your Plan: The Role of Present Bias for Credit Card Debt Paydown
2.45pm – 3.15pm	Christopher Palmer (MIT Sloan)
	Real Effects of Search Frictions in Consumer Credit Markets
3.15pm – 3.45pm	Michaela Pagel (Columbia GSB)
	Repaying Consumer Debt and Increasing Savings After Retirement
4.00pm – 4.30pm	Scott Nelson (Chicago Booth)
	Private Information and Price Regulation in the US Credit Card Market
4.30pm – 5.00pm	Neale Mahoney (Stanford University)
	Do Banks Pass Through Credit Expansions to Consumers who Want to Borrow?
5pm+	Moderated Panel Discussion



# **Topic Session 2: Peer Effects in Household Finance**

# Friday, October 16, 2020

12.30pm – 1.45pm	Theresa Kuchler (NYU Stern)
	Topic Overview
	Social Connectedness: Measurement, Determinants, and Effects
	Peer Effects in Product Adoption
1.45 pm - 2.30 pm	Johannes Stroebel (NYU Stern)
	The Economic Effects of Social Networks: Evidence from the Housing Market
2.45 pm - 3.15 pm	Jordan Nickerson (Boston College)
	Teachers Teaching Teachers: The Role of Workplace Peer Effects on Financial Decisions
3.15 pm - 3.45 pm	Ankit Kalda (Indiana University)
	Peer Financial Distress and Individual Leverage
4.00 pm - 4.30 pm	Florian Ederer (Yale SOM)
	Understanding Mechanisms Underlying Peer Effects: Evidence from a Field Experiment on Financial Decisions
4.30 pm - 5.00 pm	Emily Breza (Harvard University)
	Social Networks, Reputation, and Commitment: Evidence from a Savings Monitors Field Experiment
5pm+	Moderated Panel Discussion



# Topic Session 3: Determinants & Effects of Household <u>Expectations</u>

## Friday, November 6, 2020

12.30pm – 1.45pm	Theresa Kuchler (NYU Stern)
	Topic Overview
	Personal Experiences and Expectations about Aggregate Outcomes
1.45 pm - 2.30 pm	Johannes Stroebel (NYU Stern)
	Five Facts about Beliefs and Portfolios
2.45 pm - 3.15 pm	Yueran Ma (Chicago Booth)
	Biases in Expectations: Experimental Evidence
3.15 pm - 3.45 pm	Ricardo Perez-Truglia (Berkeley Haas)
	Betting on the House: Subjective Expectations and Market Choices
4.00 pm - 4.30 pm	Cami Kuhnen (UNC Chapel Hill)
	Socioeconomic Status and Household Expectations
4.30 pm - 5.00 pm	Michael Weber (Chicago Booth)
	Exposure to Grocery Prices and Inflation Expectations
5pm+	<b>Moderated Panel Discussion</b>



# **Topic Session 4: Mortgage Borrowing and Default**

# Friday, November 20

12.30 pm - 1.30 pm	Theresa Kuchler (NYU Stern)
	Topic Overview
	House Price Beliefs and Mortgage Leverage Choice
1.30 pm - 2.00 pm	Johannes Stroebel (NYU Stern)
	Asymmetric Information about Collateral Values
2.00 pm - 2.30 pm	Arpit Gupta (NYU Stern)
	Selection, Leverage, and Default in the Mortgage Market
2.45 pm - 3.15 pm	Claudia Robles Garcia (Stanford GSB)
	Competition and Incentives in Mortgage Markets: The Role of Brokers
3.15 pm - 3.45 pm	Pascal Noel (Chicago Booth)
	Liquidity vs. Wealth in Household Debt Obligations: Evidence from Housing Policy in the Great Recession
4.00 pm - 4.30 pm	Anthony De Fusco (Northwestern Kellogg)
	Regulating Household Leverage
4.30 pm - 5.00 pm	Matteo Benetton (Berkeley Haas)
	Leverage Regulation and Market Structure: A Structural Model of the UK Mortgage Market
5.00pm +	Moderated Panel Discussion



# **Topic Session 5: Climate Finance**

# Friday, December 4

12.30pm – 1.30pm	Johannes Stroebel (NYU Stern)
	Topic Overview
	Hedging Climate Change Risk
1.30 pm - 2.00 pm	Matteo Maggiori (Stanford GSB)
	Very Long-Run Discount Rates
2.30 pm - 2.30 pm	Stefano Giglio (Yale SOM)
	Climate Change and Long-Run Discount Rates: Evidence from Real Estate
2.45 pm - 3.15 pm	Paul Goldsmith-Pinkham (Yale SOM)
	Sea Level Rise and Municipal Bond Yields
3.15 pm - 3.45 pm	Zacharias Sautner (Frankfurt School)
	Firm-level Climate Change Exposure
4.00 pm - 4.30 pm	Nancy Wallace (Berkeley Haas)
	Mortgage Markets with Climate-Change Risk: Evidence from Wildfires in California
4.30 pm - 5.00 pm	Matthew Kahn (Johns Hopkins University)
	Mortgage Finance in the Face of Rising Climate Risk
5.00pm+	<b>Moderated Panel Discussion</b>



## **Selected Research Papers by Topics**

### **Overview of Household Finance**

Campbell, J. Y. (2006). Household Finance. The Journal of Finance, 61(4), 1553-1604.

Zinman, J. (2015). <u>Household Debt: Facts, Puzzles, Theories, and Policies.</u> *Annual Review of Economics*, 7(1), 251-276.

Beshears, J., J.J. Choi, Laibson, D., Madrian, B., (2018). <u>Behavioral Household Finance</u>, Handbook of Behavioral Economics

Gomez, F., M. Haliassos, T. Ramodarai, (2020). Household Finance, Journal of Economic Literature

#### **Household Preferences**

Barberis, N., Huang, M. & Thaler, R. (2006). <u>Individual Preferences, Monetary Gambles, and Stock Market</u> Participation: A Case for Narrow Framing. *American Economic Review*, 96, 1069-1090.

Calvet, L, J. Campbell, J., Gomes, F, & Sodini, P. (2019). <u>The Cross-Section of Household Preferences.</u> *WP*.

Calvet, L., & P. Sodini (2014). <u>Twin Picks: Disentangling the Determinants of Risk Taking in Household Portfolios</u>. *Journal of Finance*, Vol. 69(2), 867-906

Giglio, S., Maggiori, M., & Stroebel, J. (2015). <u>Very Long-Run Discount Rates</u>. *The Quarterly Journal of Economics*, 130(1), 1-53.

Kuchler, T. & Pagel, M. (2018). Sticking to Your Plan: The Role of Present Bias for Credit Card Paydown. WP.

Tanaka, T., Camerer, C. & Nguyen, Q. (2010). <u>Risk and Time Preferences: Linking Experimental and Household Survey Data from Vietnam</u>. *American Economic Review*, 100(1), 557-71.

### **Unsecured Credit & Regulation of Consumer Financial Products**

Agarwal, S., Chomsisengphet, S., Mahoney, N., & Stroebel, J. (2014). <u>Regulating Consumer Financial Products: Evidence from Credit Cards</u>. *The Quarterly Journal of Economics*, 130(1), 111-164.

Agarwal, S., Chomsisengphet, S., Mahoney, N., & Stroebel, J. (2014). <u>A Simple Framework for Estimating</u> Consumer Benefits from Regulating Hidden Fees. *The Journal of Legal Studies*, 43(S2).

Ausubel, L. M. (1991). <u>The Failure of Competition in the Credit Card Market.</u> *American Economic Review*, 81, 50–81.



Campbell, J. Y., Jackson, H. E., Madrian, B. C., & Tufano, P. (2011). <u>Consumer Financial Protection.</u> *Journal of Economic Perspectives*, 25(1), 91–115.

Campbell, J. Y. (2016). <u>Restoring Rational Choice: The Challenge of Consumer Financial Regulation</u>. *Richard T. Ely Lecture, American Economic Association Annual Meeting*.

Gabaix, X., & Laibson, D. (2006). <u>Shrouded Attributes, Consumer Myopia, and Information Suppression in Competitive Markets.</u> *The Quarterly Journal of Economics*, 121(2), 505–540.

Nelson, S. (2018). Private Information and Price Regulation in the US Credit Card Market. WP.

Madrian, B. C., & Shea, D. F. (2001). <u>The Power of Suggestion: Inertia in 401 (k) Participation and Savings</u> Behavior. *The Quarterly Journal of Economics*, 116(4), 1149–1188

Melzer, B. (2011). The Real Costs of Credit Access: Evidence from the Payday Lending Market. The Quarterly Journal of Economics, 126(1), 517-555.

Stango, V. & Zinman, J. (2016). <u>Borrowing High versus Borrowing Higher: Price Dispersion and Shopping</u> Behavior in the U.S. Credit Card Market. *The Review of Financial Studies*, 29(4), 979–1006

#### **Information Frictions in Consumer Credit Markets**

Ausubel, L. M. (1999). Adverse Selection in the Credit Card Market. WP.

Einav, L., Jenkins, M., & Levin, J. (2012). Contract Pricing in Consumer Credit Markets. Econometrica, 80(4), 1387–1433.

Einav, L., Jenkins, M., & Levin, J. (2013). <u>The Impact of Credit Scoring on Consumer Lending</u>. *The RAND Journal of Economics*, 44(2), 249-274.

Karlan, D., & Zinman, J. (2009). <u>Observing Unobservables: Identifying Information Asymmetries With a Consumer Credit Field Experiment</u>. *Econometrica*, 77(6), 1993-2008.

Kurlat, P. & Stroebel, J. (2015). <u>Testing for Information Asymmetries in Real Estate Markets</u>. *The Review of Financial Studies*, 28(8), 2429–2461.

Liberman, A., Neilson, C., Opazo, L., & Zimmerman, S. (2018). <u>The Equilibrium Effects of Asymmetric Information: Evidence from Consumer Credit Markets</u>.

Stroebel, J. (2016). <u>Asymmetric Information about Collateral Values</u>. *The Journal of Finance*, 71(3), 1071-1112.

#### **Housing Wealth and Household Decision Making**

Adelino, M., Schoar, A., & Severino, F. (2015). <u>House Prices, Collateral, and Self-Employment.</u> *Journal of Financial Economics*, 117(2), 288–306.

Berger, D., Guerrieri, V., Lorenzoni, G., & Vavra, J. (2018). <u>House Prices and Consumer Spending</u>. *Review of Economic Studies*, 85(3), 1502–1542.



Guren, A., McKay, A., Nakamura, E., & Steinsson J. (2018). <u>Housing Wealth Effects: The Long View</u>, WP.

Kaplan, G., Mitman, K., & Violante, G. (2016). <u>Non-durable Consumption and Housing Net Worth in the Great Recession</u>: Evidence from Easily Accessible Data. *WP*.

Mian, A. & Sufi, A. (2011). <u>House Prices, Home Equity Based Borrowing, and the U.S. Household Leverage Crisis.</u> *American Economic Review*, 101, 2132-2156.

Mian, A., Rao, K., & Sufi, A. (2013). <u>Household Balance Sheets, Consumption, and the Economic Slump.</u> *Quarterly Journal of Economics*, 128(4), 1687–1726.

Sinai, T., & Souleles, N. (2005). Owner-Occupied Housing as a Hedge Against Rent Risk. The Quarterly Journal of Economics, 120(2), 763-789.

Stroebel, J., & Vavra, J. (2019). <u>House Prices, Local Demand, and Retail Prices</u>. *Journal of Political Economy*, 127(3

### Financially-Constrained Households & Monetary and Fiscal Policy

Agarwal, S., Amromin, G., Chomsisengphet, S., Piskorski, T., Seru, A., & Yao, V. (2015). <u>Mortgage Refinancing, Consumer Spending, and Competition: Evidence from the Home Affordable Refinancing Program. NBER WP.</u>

Agarwal, S., Chomsisengphet, S., Mahoney, N., & Stroebel, J. (2018). <u>Do Banks Pass Through Credit Expansions to Households Who Want to Borrow</u>. *The Quarterly Journal of Economics*, 133(1), 129-190.

Auclert, A. (2016). Monetary Policy and the Redistribution Channel. WP.

Aydin, D. (2016). The Marginal Propensity to Consume Out of Liquidity. WP.

Baker, S. (2018). <u>Debt and the Consumption Response to Household Income Shocks: Validation and Application of Linked Financial Account Data</u>. *Journal of Political Economy*, 126(4), 1504-1557.

Carroll, C.D. (1997). <u>Buffer-Stock Saving and the Life Cycle/Permanent Income Hypothesis.</u> *The Quarterly Journal of Economics*, 112(1), 1–55.

Di Maggio, M., Kermani, A., Keys, B., Piskorski, T., Ramcharan, R., Seru, A., and Yao, V. (2017). Monetary Policy Pass-Through: Mortgage Rates, Household Consumption and Voluntary Deleveraging. American Economic Review, 107(11), 3550-88.

Johnson, D.S., Parker, J. A. & N. S. Souleles. (2006). <u>Household Expenditure and the Income Tax Rebates of 2001.</u> *American Economic Review*, 96(5), 1589–1610.

Parker, J. A., Souleles, N. S., Johnson, D. S., & McClelland, R. (2013). <u>Consumer Spending and the Economic Stimulus Payments of 2008.</u> *American Economic Review*, 103(6), 2530-2553.

#### Peer Effects & Economic and Financial Decision Making



<u>Note</u>: The data provided by "Social Connectedness: Measurement, Determinants, and Effects" is publicly accessible, and might be very helpful in your own research projects.

Arrondel, L., Calvo-Pardo, H., Giannitsarou, C., & Haliassos, M. (2017). <u>Informative Social Interactions</u>. *Discussion Papers in Economics and Econometrics*, 1702.

Bailey, M., Cao, R., Kuchler, T., & Stroebel, J. (2017). <u>The Economic Effects of Social Networks: Evidence from Housing Markets</u>, *The Journal of Political Economy, forthcoming*.

Bailey, M., Cao, R., Kuchler, T., Stroebel, J. & Wong, A. (2018). <u>Social Connectedness: Measurement,</u> Determinants, and Effects, *The Journal of Economic Perspectives*, 32(3), 259-280

Bailey, M., Johnston, D., Kuchler, T., Stroebel, J., & Wong, A. (2018). Peer Effects in Product Adoption. WP.

Beshears, J., Choi, J. J., Laibson, D., Madrian, B. C. & Milkman, K. L. (2015). <u>The Effect of Providing Peer Information on Retirement Savings Decisions</u>. *The Journal of Finance*, 70(3), 1161–1201.

Duflo, E., & Saez, E. (2002). <u>Participation and Investment Decisions in a Retirement Plan: The Influence of Colleagues' Choices.</u> *Journal of Public Economics*, 85, 121-48.

Han, B., Hirshleifer, D. A., & Walden, J. (2018). Social Transmission Bias and Investor Behavior. WP.

Hong, H., Kubik, J. D., & Stein, J. C. (2004). <u>Social Interaction and Stock-Market Participation</u>. *Journal of Finance*, 59, 137-63.

Hong, H., Kubik, J. D., & Stein, J. C. (2005). <u>Thy Neighbor's Portfolio: Word-of-mouth Effects in the Holdings and Trades of Money Managers</u>. *The Journal of Finance*, 60(6), 2801–2824.

Kaustia, M. & Knüpfer, S. (2012). <u>Peer Performance and Stock Market Entry.</u> *Journal of Financial Economics*, 104(2), 321–338.

Kuhn, P., Kooreman, P., A. Soetevent, & Kapteyn, A. (2011). <u>The Effects of Lottery Prizes on Winners and Their Neighbors: Evidence from the Dutch Postcode Lottery</u>. *American Economic Review*, 101, 2226-47.

Maturano, G., & Nickerson, J. (2019). <u>Teachers Teaching Teachers: The Role of Workplace Peer Effects on Financial Decisions</u>. *Review of Financial Studies* 

Shiller, Robert J. (1984). <u>Stock Prices and Social Dynamics</u>. *Brookings Papers on Economic Activity*, 1984(2), 457–510.

#### Household Beliefs & Behavior

Adam, K., Marcet, A. & Beutel, J. (2017). <u>Stock Price Booms and Expected Capital Gains</u>. *American Economic Review*, 107(8), 2352-2408.

Adelino, M., Schoar, A., & Severino, F. (2018). The Role of Housing and Mortgage Markets in the Financial Crisis. *Annual Review of Financial Economics*, 10, 25-41



Burnside, C., Eichenbaum, M., & Rebelo, S. (2016). <u>Understanding Booms and Busts in Housing Markets</u>. *Journal of Political Economy*, 124(4), 1088–1147.

Cheng, I, Raina, S, & Xiong, W (2015). Wall Street and the Housing Bubble, American Economic Review, 104, 2797-2829.

Das, S., Kuhnen, C. M., & Nagel, S., 2017. Socioeconomic Status and Macroeconomic Expectations. WP.

Dominitz, J. & Manski, C. F. (2007). <u>Expected Equity Returns and Portfolio Choice</u>: <u>Evidence from the Health and Retirement Study</u>. *Journal of the European Economic Association*, *5*(2-3), *369-379*.

Giglio, M., Maggiori, M., Stroebel, J., and Utkus, S. (2019). Five Facts About Beliefs and Portfolios, WP

Giglio, M., Maggiori, M., & Stroebel, J. (2016). <u>No-Bubble Condition: Model-Free Tests in Housing Markets</u>. *Econometrica*, 84(3), 1047-1091.

Greenwood, T., & Shleifer, A. (2014). <u>Expectations of Returns and Expected Returns</u>. *Review of Financial Studies*, 27(3):714–746.

Harrison, J. M., & Kreps, D. M. (1978). <u>Speculative Investor Behavior in a Stock Market with Heterogeneous Expectations</u>. *Quarterly Journal of Economics*, 92(2), 323–336.

Hong, H. & Stein, J. C. (2007). <u>Disagreement and the Stock Market</u>. *Journal of Economic Perspectives*, 21(2), 109–128.

Kaustia, M., & Knüpfer, S. (2008). <u>Do Investors Overweight Personal Experience? Evidence from IPO Subscriptions</u>. *The Journal of Finance*, 63(6):2679–2702.

Koudijs, P., & Voth, H. J. (2014). <u>Leverage and Beliefs: Personal Experience and Risk Taking in Margin</u> Lending. *American Economic Review, forthcoming*.

(\*) Kuchler, T., & Zafar, B. (2015). <u>Personal Experiences and Expectations about Aggregate Outcomes</u>. *Federal Reserve Bank of New York Staff Reports (748)*.

Kuhnen, C. M. & Miu, A., 2017. <u>Socioeconomic Status and Learning from Financial Information</u>. *Journal of Financial Economics*, 124 (2), 349-372.

Malmendier, U., & Nagel, S., 2016. <u>Learning from Inflation Experiences</u>. The Quarterly Journal of Economics, 131(1), 53-87.

Malmendier, U., Nagel, S., & Yan, Z., 2017. <u>The Making of Hawks and Doves: Inflation Experiences on the FOMC</u>. *WP*.

Malmendier, U. & Nagel, S., 2011. <u>Depression Babies: Do Macroeconomic Experiences Affect Risk Taking?</u> The Quarterly Journal of Economics, 126(1), 373-416.

Scheinkman, J. A. & Xiong, W. (2003). Overconfidence and Speculative Bubbles. *Journal of Political Economy*, 111(6), 1183–1220.

#### Mortgage Choice, Refinancing, Default, and Mortgage Design



Andersen, S., Campbell, J. Y., Nielsen, K. M., & Ramadorai, T. (2018). <u>Inattention and Inertia in Household Finance: Evidence from the Danish Mortgage Market.</u> *WP*.

Bailey, M., Davila, E., Kuchler, T. & Stroebel, J. (2017). <u>House Price Beliefs and Mortgage Leverage Choice</u>, *Review of Economic Studies*, *forthcoming* 

Campbell, J. & Cocco, J. F. (2015). A Model of Mortgage Default. Journal of Finance, 70(4), 1495–1554.

Flavin, M. & Yamashita, T. (2002). Owner-Occupied Housing and the Composition of the Household Portfolio. *American Economic Review*, 92(1), 345-62.

Floetotto, M., Kirker, M., & Stroebel, J. (2016). <u>Government Intervention in the Housing Market – Who</u> Wins, Who Loses? *Journal of Monetary Economics*, 80, 106-123.

Ganong, P, and Noel, P, (2018). <u>Liquidity vs. Wealth in Household Debt Obligations: Evidence from Housing Policy in the Great Recession</u>, *WP* 

Greenwald, D., Landvoigt, T., & Van Nieuwerburgh, S. (2018). Financial Fragility with SAM? WP.

Guiso, L, Sapienza, P., & Zingales, L. (2011). <u>The Determinants of Attitudes Towards Strategic Default on Mortgages</u>. *The Journal of Finance*, 68(4), 1473-1515.

Guren, A., Krishnamurthy, A., & McQuade, T.J. (2018). <u>Mortgage Design in an Equilibrium Model of the Housing Market.</u> WP.

Gurun, U. G., Matvos, G., & Seru, A. (2016). <u>Advertising Expensive Mortgages.</u> The Journal of Finance, 71(5), 2371-2416.

Keys, B. J., Pope, D. G., & Pope, J. C. (2016). <u>Failure to Refinance</u>. *Journal of Financial Economics*, 122(3), 482-499.

#### Climate Change, Financial Markets, and Household Responses

Bakkensen, L., & Barrage, L. (2018). <u>Flood Risk Belief Heterogeneity and Coastal Home Price Dynamics:</u> Going Under Water? *WP*.

Engle, R., Giglio, S., Kelly, B., Lee, H., Stroebel, J. (2018). <u>Hedging Climate Change News</u>, *Review of Financial Studies*, *Forthcoming* 

Bernstein, A., Gustafson, M., & Lewis, R. (2018). <u>Disaster on the Horizon: The Price Effect of Sea Level Rise</u>. *Journal of Financial Economics, Forthcoming*.

Choi, D., Gao, Z., & Jiang, W. (2018). Attention to Global Warming. WP.

Giglio, S., Maggiori, M., Rao, K., Stroebel, J., & Weber, A. (2018). <u>Climate Change and Long-Run Discount Rates: Evidence from Real Estate</u>. *WP*.

Murfin, J., & Spiegel, M. (2018). <u>Is the Risk of Sea Level Rise Capitalized in Residential Real Estate?</u> Review of Financial Studies, Forthcoming